

2009

SCIENTIFIC
REPORT



© Biomedical Research Institute Sant Pau (IIB Sant Pau), 2010
Hospital de la Santa Creu i Sant Pau
Sant Antoni Maria Claret, 167
08025 Barcelona
Spain

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2009

SCIENTIFIC
REPORT



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PRESENTATION

Foreword



Jaume Kulisevsky
IIB Sant Pau Manager

I am proud to present the first Scientific Report of the Sant Pau Institute of Biomedical Research (IIB Sant Pau) and to share with you some of the many accomplishments of 2009. The IIB Sant Pau is an autonomous research centre that has developed within the Sant Pau Biomedical Campus in conjunction with several neighboring institutions, each with its own long, rich and diverse tradition of excellence in clinical research. Under the leadership of Sant Pau Hospital and in affiliation with the Autonomous University of Barcelona, a leading research university, the IIB Sant Pau is composed of the Catalan Center for Cardiovascular Research, the Puigvert Foundation, the Barcelona Public Health Agency, the Barcelona Tissue and Blood Bank, the Iberoamerican Cochrane Collaboration, and the primary care center 'EAP Sardenya'.

Since the very beginning of the project, I have had the privilege of working with forward-thinking scientists, trustees and administrators who enthusiastically shared the idea of a quantum leap by establishing a new kind of research center that was not simply the pooling of scientific resources and production. The philosophy behind the creation of the IIB Sant Pau is to construct a joint model in which the clinical and basic research support resources at the participating institutions should be strategically and cooperatively supported and facilitated by stable governing structures. The concept of "the Hospital as the center of research" was central to our efforts to create the IIB alliance and we believe this is an added value both for research and for the healthcare services provided to our population.

In May 2009 the signing of an agreement to create the new IIB Sant Pau formalized much previous spontaneous collaboration among our investigators. The center's mission is to serve as a stable common interface between our organizations and our researchers and to promote a shared culture in which all forms of clinical research can flourish.

Our mandate is to enhance bench-to-bedside research, train clinical investigators, increase clinical trial activity, support outcomes research and disease management, and promote the transfer of clinical research results to clinical practice. The joint project fosters an enriched environment that unites epidemiologists, healthcare service investigators, molecular and cell biologists and clinical scientists to lead research programs that will contribute to public health and to the development of new approaches to screening, prevention and treatment of complex human diseases.

The resources available to perform translational investigation are extensive and currently include the support services of its managing organ - the Sant Pau Institute of Research Foundation- and over 6,000 square meters of shared research space and infrastructure, with a staff of approximately 400 basic and clinical scientists grouped in 50 research groups that have been evaluated by an external scientific committee. This report encompasses their activity along with that of other associated research groups.

Despite the present difficulties in obtaining funding for science in general, scientists at IIB Sant

Pau were awarded several grants from public and private institutions in 2009 and generated high quality publications, building on our core strengths of scientific excellence and interdisciplinary collaboration. These grants and publications are further validation of the quality of the research on the IIB Sant Pau campus, research that shares the ultimate aim to benefit patients.

We are conscious of the complexity of performing high quality research in a clinical environment. Clinical research is time-consuming, demanding and expensive, and with current practice pressures, it can be an overwhelming task. Nevertheless, we firmly believe that clinical practice should be closely integrated with clinical research in order to increase the quality and provide more ethical and efficient health care. Although there is still much ground to cover to consolidate our model and to further involve our clinicians in research activity, we are committed to making the Sant Pau Campus a rewarding and challenging place to work that will continue to thrive through the leadership of the IIB Sant Pau alliance.

We hope this first scientific report gives a flavor of who we are and the kind of research that was undertaken at the IIB Sant Pau in 2009. I am delighted to take this moment to acknowledge the many significant accomplishments that have brought us this far. My thanks to faculty, staff, technicians and pre- and postdoctoral fellows for their dedication, hard work, and vision.

Jaume Kulisevsky, IIB Sant Pau Manager

Who we are



The Sant Pau Biomedical Research Institute (IIB Sant Pau) conducts research into basic, clinical and epidemiological medicine and healthcare services. Ten entities cooperate to perform high-level research into new techniques and processes aimed at improving the quality of life of patients.

IIB Sant Pau was founded on 27 May 2009 as an association of healthcare entities carrying out their own research. Stakeholders include the following:

- Fundació de Gestió Sanitària (FGS, Healthcare Management Foundation)
- Fundació Privada de l'Hospital de la Santa Creu i Sant Pau (Hospital de la Santa Creu i Sant Pau Private Foundation)
- Institut de Recerca de l'Hospital de la Santa Creu i Sant Pau (Hospital de la Santa Creu i Sant Pau Research Institute)
- Universitat Autònoma de Barcelona, Institut de l'envelliment (Autonomous University of Barcelona (UAB), Ageing Institute)
- Institut Català de Ciències Cardiovasculars (ICCC, Catalan Cardiovascular Disease Institute)
- Fundació Puigvert (Puigvert Foundation)
- Banc de Sang i Teixits (Blood and Tissue Bank)
- Asociación Colaboración Cochrane Iberoamericana - Centre Cochrane Iberoamericà (ACCIb – Iberoamerican Cochrane Centre)
- Equip d'Atenció Primària Barcelona - Sardenya (EAP, Sardenya Primary Health Care Center of Barcelona)
- Agència de Salut Pública de Barcelona (ASPB, Public Health Agency of Barcelona)

The institutions participating in IIB Sant Pau, which together form a natural alliance for historical and geographical proximity reasons, jointly implement research activities and cooperate in other scientific areas. The cooperation between these institutes represents a qualitative leap in terms of fostering translational research projects that bridge the gap between basic and clinical research.

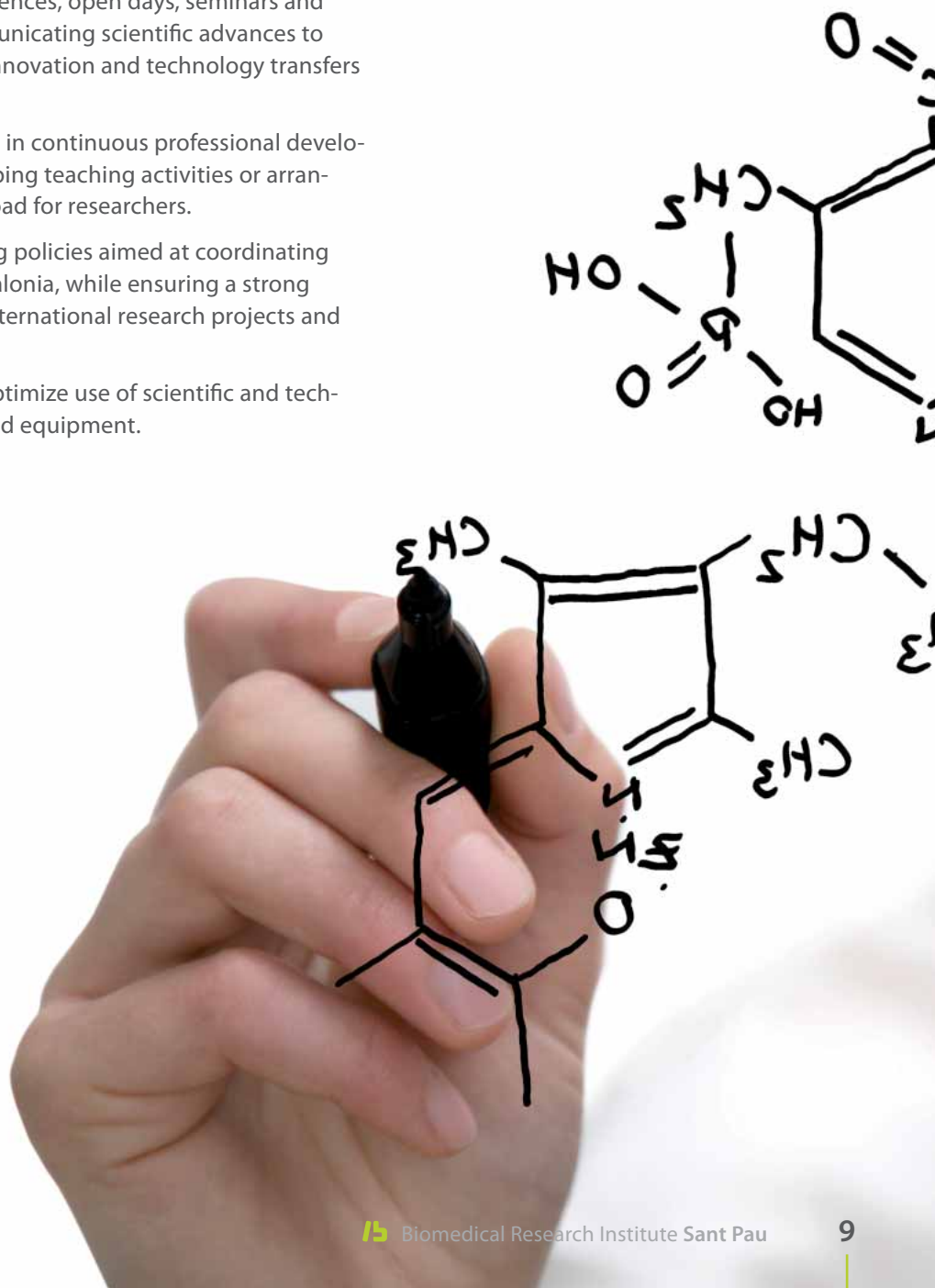
The knowledge developed in this kind of research is channelled to society by the application of discoveries to clinical practice and to healing patients. The most tangible benefits are the application of technology to health and the scientific communication of new knowledge. This research infrastructure also generates employment and spotlights Catalonia's contributions to biomedical research. Our success as a research centre translates to patient health.

Strategic objectives

The IIB Sant Pau's mission is to manage, promote, develop and communicate research into the health sciences.

To fulfil its mission, IIB Sant Pau has set itself a number of strategic objectives that guide its activities:

- To promote and consolidate relationships and knowledge exchanges between IIB Sant Pau researchers and with other public and private organizations, prioritizing the implementation of joint projects and the creation of multidisciplinary teams so as to strengthen alliances and implement translational research with a bearing on clinical activities.
- To organize courses, conferences, open days, seminars and workshops aimed at communicating scientific advances to society and at facilitating innovation and technology transfers to the productive sector.
- To organize and participate in continuous professional development, whether by developing teaching activities or arranging grant-aided stays abroad for researchers.
- To participate in developing policies aimed at coordinating biomedical research in Catalonia, while ensuring a strong presence in national and international research projects and networks of excellence.
- To acquire, maintain and optimize use of scientific and technological infrastructures and equipment.



Entities forming part of IIB Sant Pau



Healthcare Management Foundation

The Healthcare Management Foundation manages high-technology and specialist care hospitals performing care, teaching and research activities in the clinical, epidemiological and healthcare services fields. It offers accredited specialist and undergraduate health science training courses.



Hospital de la Santa Creu i Sant Pau Research Institute

The Hospital de la Santa Creu i Sant Pau Research Institute promotes, manages and communicates biomedical research conducted in Hospital de la Santa Creu i Sant Pau. It raises and manages funds and other resources for health science research in the basic, clinical, epidemiological and healthcare service fields.



Hospital de la Santa Creu i Sant Pau Private Foundation

This foundation, which owns Hospital de la Santa Creu i Sant Pau, is responsible for building, improving and maintaining buildings and premises used for medical care and associated and complementary activities.



Autonomous University of Barcelona. Ageing Institute

The Institut de l'Envel·liment of the UAB (IE-UAB) is a non-profit foundation governed by a board of trustees formed by the Universitat Autònoma de Barcelona, the Fundació Universitat Autònoma de Barcelona and the Agrupació Mútua del Comerç i de la Indústria. Its mission is to improve knowledge of different aspects related to aging with the aim of enhancing the quality of life of older people and promoting actions to contribute to adapt the society and people to challenges of the demographic changes.



Catalan Cardiovascular Disease Institute

The Catalan Cardiovascular Disease Institute performs basic and clinical research into cardiovascular and heart diseases. The fact that it competes successfully at the international level enables it to avail of the infrastructure necessary to transfer basic research to the development of therapies and diagnostic methods, which ultimately improves medical care for patients.

Puigvert Foundation

The Puigvert Foundation has the aim of deepening medical knowledge and perfecting medical techniques in the field of research and treatment of urinary and male reproductive system disorders and diseases. More specifically, it performs urology, nephrology and andrology research, focusing particularly on medical care, teaching, training and studies.



Blood and Tissue Bank

The Blood and Tissue Bank is a public healthcare body which carries out patient care, teaching and research activities in the blood transfusion and tissue bank fields.



ACCIB

This independent, not-for-profit organisation has as its main aim the promotion of medical practice based on the best available scientific evidence. To this end, it ensures that valid, useful, up-to-date and thoroughly reviewed information is made available for clinical and healthcare decision making.



Barcelona-Sardenya Primary Care Team

Part of the public healthcare system, the Barcelona-Sardenya Primary Care Team is a teaching and care centre that provides primary care services in its catchment area. It has its own research unit which performs clinical trials and epidemiology studies.



Public Health Agency of Barcelona

This autonomous body, created by the Barcelona Health Consortium, has as its main mission to analyse and monitor the health of the population of Barcelona with a view to improving health and preventing risk. It is also responsible for epidemiological surveillance and the provision of medical care to substance abusers. It has an excellent track record in the public health and applied research fields.



IIB Sant Pau scientific structure

The IIB Sant Pau has eight research areas that can be divided into 3 lines of investigation: vertical, transversal and associated groups.

The vertical line has five main areas of research:

- Cardiovascular diseases
- Genetic, metabolic and inflammatory diseases
- Haematological and oncological diseases
- Neurological and mental disorders
- Urology and experimental surgery

The transversal line consists of two areas:

- Epidemiology, public health and healthcare services
- Molecular, genomic, cellular and kinetic-dynamic bases for diseases and their treatment

Activities in these two lines complement and support research in the vertical line.





Vertical areas of research

Cardiovascular diseases

The incorporation of new technologies that facilitate molecular profiling and gene regulation has led to innovative research in heart disease. The wide range of diversity of the groups in this area gives research varied perspectives, whether developing or testing the effectiveness of new biomarkers, as in the investigation of metabolic and genetic basis of disease, or improving the range of results and possible applications in short-term therapies.



Genetic, metabolic and inflammatory diseases

Identifying the genes and mutations responsible for genetic diseases is an essential component in knowledge and understanding of the physiological basis of metabolic pathways and also in the development of new forms of treatment for common diseases affecting large proportions of the population.

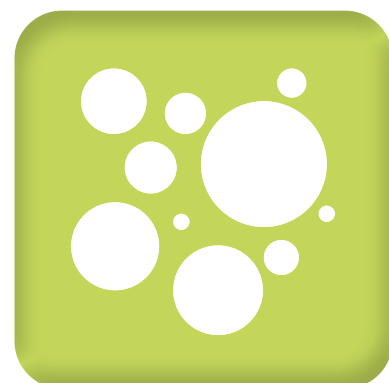
Diseases of this type include nutrition-related disorders, such as diabetes and obesity, and a large number of hereditary diseases, infectious diseases such as AIDS or tuberculosis, and rare diseases that, while not well-known, may have a devastating impact on those affected.



Haematological and oncological diseases

Research is conducted in a great many areas in this line, particularly head and neck, breast, ovary, colorectal and hematological cancers, among others. Investigation covers a wide range of fields, with disciplines including nanomedicine, new anticancer agents and predictive molecular markers, to name but a few.

Initiatives of specific relevance include the project GAIT (Genetic Analysis of Idiopathic Thrombophilia) - the world pioneer in the identification of genes influencing the risk of thromboembolic disease - , and the investigation of antitumor immunotherapy in animals and humans.





Neurological and mental disorders

This structure allows research in a broad range of disciplines. Besides the study of ageing and the most common neurodegenerative disorders such as Alzheimer and Parkinson, neurological research is also focused on stroke, neuroimmunology and neuromuscular diseases. Research in cognitive, affective, psychotic and personality disorders ranges from Identification and evaluation of new therapeutic targets to neurogenesis and the effects of deep brain stimulation. Research in this field has the support of the Drug Research Center, which assesses the effectiveness of new drugs and therapies in humans.



Urology and experimental surgery

The IIB promotes experimental surgery in the knowledge that it holds a promising future both as an independent research line and as a complement to general surgery. This interdisciplinary approach ensures valuable new insights, techniques and procedures that have high clinical relevance. Current areas of interest include the development of minimally invasive techniques and application of deep brain stimulation in different pathologies. The Puigvert Foundation is a leading centre in Spain for research of this type in the fields of andrology, urology and nephrology



Transversal areas of research

Epidemiology, public health and healthcare services

Research in Epidemiology and Public Health aims to determine the magnitude and distribution of public health problems and identify the determinants of these to evaluate the effectiveness and efficiency of interventions from both public policies and practices from prevention.

This area also aims to reduce patient risk and make health care safer, promoting evidence-based medical practice and ensuring the use of conscious, explicit and rational decision-making concerning patient care.

The result of such investigation is the development and dissemination of systematic reviews and the search for evidence in clinical trials that study the effects of interventions. Healthcare data are collected systematically and analysed to gain an overview of current and emerging trends and to help identify priority actions.

One specific branch of research in Epidemiology and Public Health is that which explicitly investigates social determinants of population health, disease, and wellbeing. This It requires attention to theories, concepts, and methods conducive to illuminate intimate links between individual-level measures and social properties.



Molecular, genomic, cellular and kinetic-dynamic bases for diseases and their treatment

This area focuses on the structure of proteins associated with neurodegenerative diseases and inflammatory processes, as well as the study of factors linked to the innate immune system.

Research is also performed in the area of osteoporosis, ageing-related macular degeneration and factors of the coagulation cascade closely linked to cardiovascular disease and hemophilia

Such studies are vital to the understanding and advancement of diseases of the heart, blood and nervous system, as well as in the fields of cancer and epidemiology. The development of new simulation models enables maximum use of data while performing clinical trials.



Associated Groups

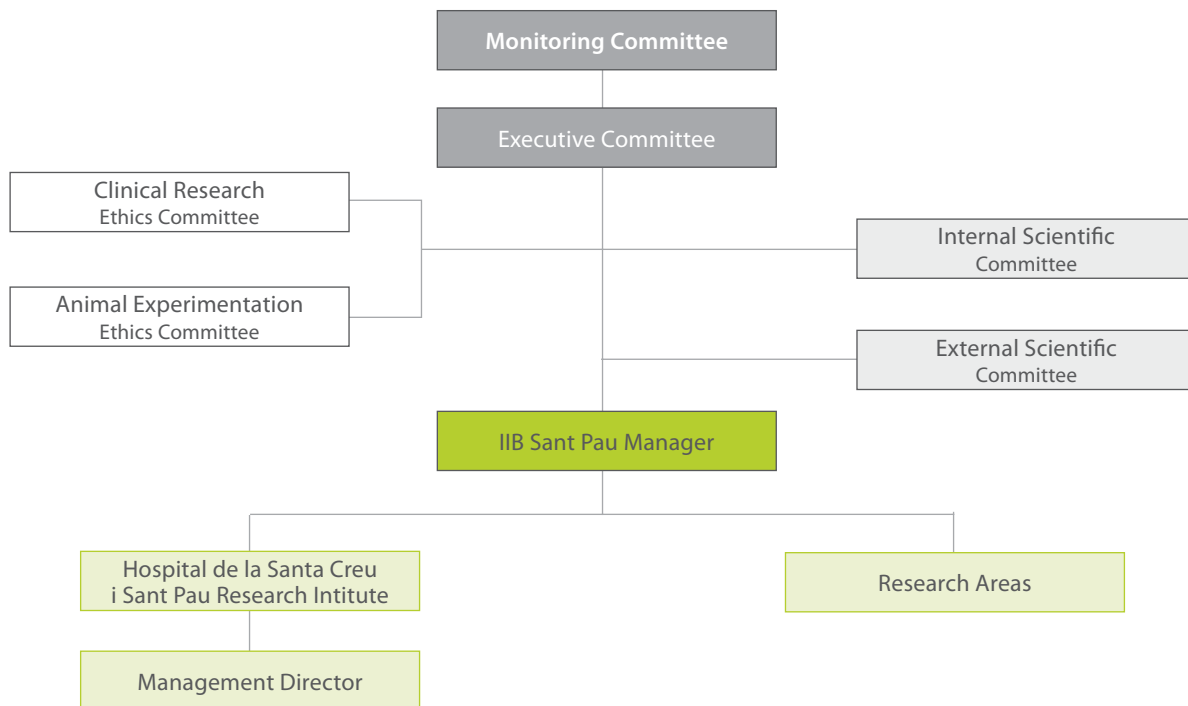


This area includes those groups that have not yet been accredited by the External Scientific Committee. Their production, therefore, is not included in the official figures of the IIB Sant Pau for 2009.

However, as an integral part of the IIB Sant Pau, their activities are also reflected in this annual report.



Organization chart



Monitoring Committee

Chair

Dr. Jordi Varela
Managing Director, Healthcare Management Foundation

Members

Dr. Jordi Bachs
Hospital de la Santa Creu i Sant Pau Private Foundation

Dr. Francesc Gòdia
Autonomous University of Barcelona

Dr. Lina Badimon
Catalan Cardiovascular Disease Consortium-Institute

Martí Masferrer
Puigvert Foundation

Dr. Ramon Pla Illa
Blood and Tissue Bank

Dr. Xavier Bonfill
Iberoamerican Cochrane Centre

Conrad Casas
Public Health Agency of Barcelona

Jaume Sellarès
Barcelona-Sardenya Primary Care Team

Dr. Jaume Kulisevsky
Hospital de la Santa Creu i Sant Pau Research Institute

Executive Committee

Chair

Dr. Jaume Kulisevsky
Manager, IIB Sant Pau

Representatives of associated entities

Dr. Jordi Sierra
Autonomous University of Barcelona

Dr. Ramón Mangues
Hospital de la Santa Creu i Sant Pau Research Institute

Dr. Xavier Bonfill
Iberoamerican Cochrane Centre

Dr. Manel Barbanoj
Healthcare Management Foundation

Dr. Salvador Benito
Hospital de la Santa Creu i Sant Pau Private Foundation

Dr. Lina Badimon
Catalan Cardiovascular Disease Consortium-Institute

Dr. Helena Isabal
Puigvert Foundation

Dr. Ricard Pujol
Blood and Tissue Bank

Dr. Carme Borrell
Public Health Agency of Barcelona

Dr. Carlos Brotons
Barcelona-Sardenya Primary Care Team

Internal Scientific Committee**Chair**

Dr. Jaume Kulisevsky
Manager, IIB Sant Pau

Vice-Chair

Dr. Antonio López Pousa
Chair, Clinical Research Ethics
Committee

4 members designated by the Manager of IIB Sant Pau

Dr. Antoni Salvà
Ageing Institute of the Autonomous University of Barcelona

Dr. Carlos Brotons
Barcelona-Sardenya Primary Care Team

Dr. Lina Badimon
Catalan Cardiovascular Disease Consortium-Institute

Dr. Silvia Mateu
Puigvert Foundation

2 members each representing IIB Sant Pau thematic areas**Cardiovascular diseases**

Dr. Jordi Ordóñez Llanos
Hospital de la Santa Creu i Sant Pau: Cardiovascular biochemistry

Dr. Luís Vila Navarro
Hospital de la Santa Creu i Sant Pau Research Institute: Vascular biology and inflammation

Genetic, metabolic, inflammatory and infectious diseases

Dr. Cándido Juárez Rubio
Hospital de la Santa Creu i Sant Pau: Inflammatory diseases

Dr. Carlos Guarner
Hospital de la Santa Creu i Sant Pau: Cirrhosis complications

Haematological and oncological diseases

Dr. Josep Nomdedéu Guinot
Hospital de la Santa Creu i Sant Pau: Haematological diagnosis

Dr. Jaime Prat de Losada
Hospital de la Santa Creu i Sant Pau: Molecular cancer pathology

Neurological, mental and ageing diseases

Dr. Víctor Pérez
Hospital de la Santa Creu i Sant Pau: Clinical psychiatry

Dr. Alberto Lleó
Hospital de la Santa Creu i Sant Pau Research Institute: Neurobiology of dementia

Uronephrology and Experimental Surgery

Dr. José Ballarín
Puigvert Foundation: Nephrology research

Dr. Manel Trias
Hospital de la Santa Creu i Sant Pau: General and digestive surgery

Epidemiology, Public Health and Healthcare Services

Dr. Gerard Urrútiá
Hospital de la Santa Creu i Sant Pau: Clinical epidemiology and healthcare services

Dr. Manel Nebot Adell
Public Health Agency of Barcelona: Evaluation of public health policies and programmes

Molecular, Genomic, Cellular and Kinetic-Dynamic Bases for Diseases and Treatments

Dr. Joan García
Blood and Tissue Bank: Generation of advanced treatments

Dr. José Manuel Soria Fernández
Hospital de la Santa Creu i Sant Pau Research Institute: Genomics and bioinformatics for genetically complex diseases

External Scientific Committee

Dr. José López-Barneo MD, PhD
Physiology professor
Institute of Biomedicine of Seville

Dr. Ángel María Carracedo Álvarez
Genomic medicine group researcher
Institute of Legal Medicine
Faculty of Medicine and Dentistry

Dr. Vicente Vicente García
Haematology group researcher-
Hospital General Universitario de Murcia
Faculty of Internal Medicine

Dr. José Palacios
Head of Pathology
Hospital Universitario Virgen del Rocío

Dr. Agustín Gómez de la Cámara
Clinical epidemiology group researcher
Hospital Universitario Doce de Octubre

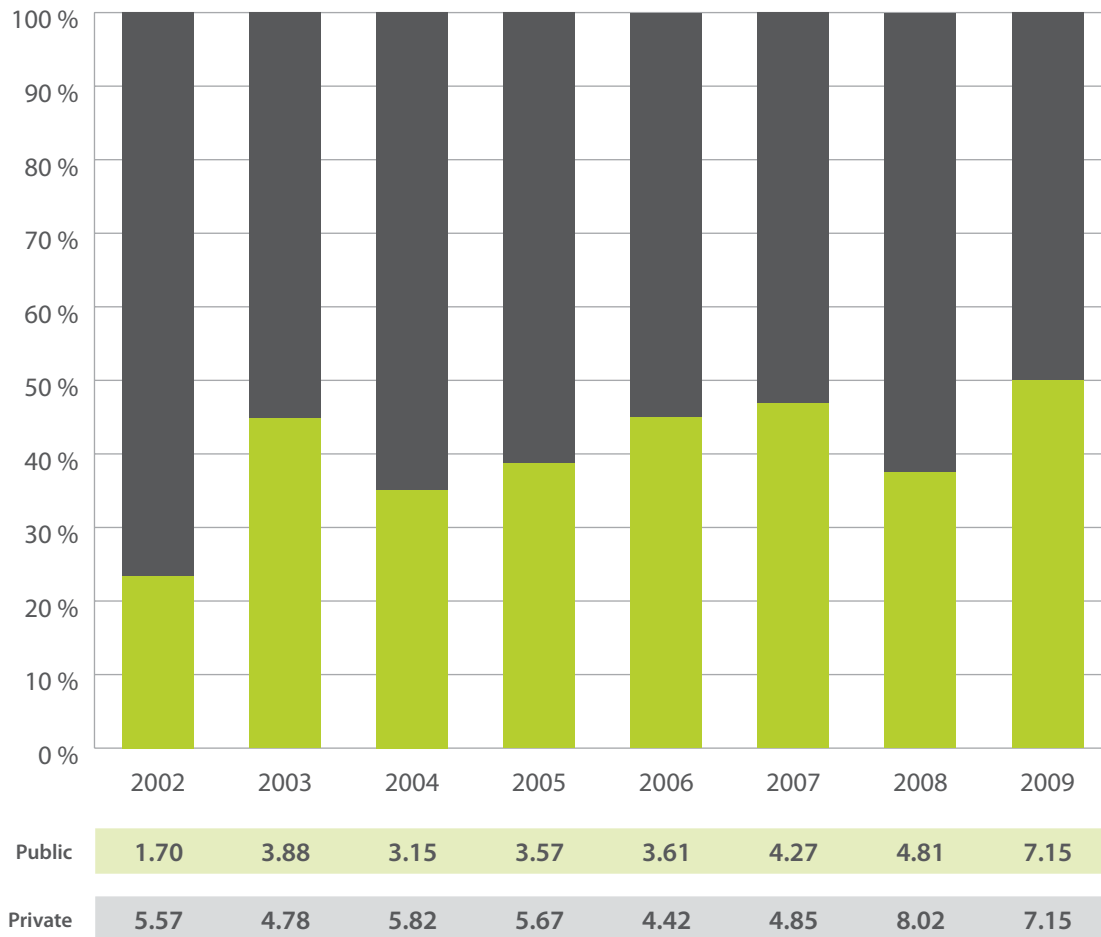
Dr. J.L. McGregor, PhD, Dr. BH
Director of Research 1cl, INSERM Unit 689,
Lariboisière Cardiovascular Research Centre

Dr. Jordi Alonso
Health Services Research Unit
Hospital del Mar-Municipal Institute for Medical Research

Dr. Guillem López Casanoves
Professor, Faculty of Economics and Business Sciences
Pompeu Fabra University

Economic status

Summary income public / private 2002-2009



**In millions of euros*

**Figures of the IIB Sant Pau managing organ: Sant Pau Research Intitute*

Balance sheet year ending 31 December 2009

<i>Income from activities</i>	11,220,909.08
<i>Services</i>	2,317,807.66
<i>Collaboration with partnerships and sponsors</i>	825,136.41
<i>Government grants</i>	7,224,154.17
<i>Other grants, donations and legacies</i>	914,676.41
<i>Repayment of grants, donations, etc</i>	-60,865.57
<i>Stocks and supplies</i>	-1,665,739.38
<i>Material and equipment for activities</i>	-1,665,739.38
<i>Other income</i>	37,10.,26
<i>Accessory income and management</i>	37,100,26
<i>Personnel expenditure</i>	-6,519,672.21
<i>Salaries</i>	-5,141,253.28
<i>Social security</i>	-1,378,418.93
<i>Other operating expenses</i>	-2,950,28.61
<i>External services</i>	-2,815,467.11
<i>Leases and rates</i>	-28,037.38
<i>Repairs and maintenance</i>	-93,725.11
<i>Freelance services</i>	-276,789.52
<i>Insurance</i>	-45,826.42
<i>Banking</i>	-50,682.37
<i>Sundry</i>	-526.52
<i>Other services</i>	-2,319,879.79
<i>Taxes</i>	-19,677.15
<i>Loss, deterioration and variation in provisions for operations</i>	5,653.31
<i>Other operating expenses</i>	-120,790.66
<i>Depreciation of fixed assets</i>	-804,074.21
<i>Grants, donations and bequests transferred to results</i>	747,014.78
<i>Other Results</i>	-198,646.92
<i>Incidental expenses</i>	-249,061.22
<i>Incidental Income</i>	50,414.30
Total	-133,390.21
<i>Financial income</i>	206,372.55
<i>Negotiable costs</i>	206,372.55
<i>Third parties</i>	206,372.55
<i>Financial expenditure</i>	-65,857.74
<i>For debts with third parties</i>	-65,857.74
<i>Exchange differences</i>	-7,124.60
Total	133,390.21
RESULTS BEFORE TAX	0.00
RESULTS FOR THE YEAR	0.00

Scientific activities results

To simplify the measurement of scientific activity, we have divided the results into five blocks of information:

- **Published papers:** This block shows the development of IIB Sant Pau in terms of impact factor. This bibliometric tool is the most widely used metric to gauge the relative importance of a scientific journal within its field, and secondarily it reflects the quality of the work published by our researchers.
- **Publications by area:** This section illustrates the scientific production in the different areas forming the IIB Sant Pau. It provides an overview of the strength in each knowledge area.
- **Publications by quartile:** In descriptive statistics, a quartile is any of the three values which divide the sorted data set into four equal parts, so that each part represents one fourth of the sampled population. In scientific journals, those in the first quartile (Q1) are the most relevant.
- **Research resources:** Here we list the institutions that support IIB Sant Pau and share the vision of research performed at our centre.
- **Doctoral theses:** This section reflects the potential of our younger staff and their ability to generate new ideas and drive new projects at the IIB Sant Pau.





Published papers

Production status



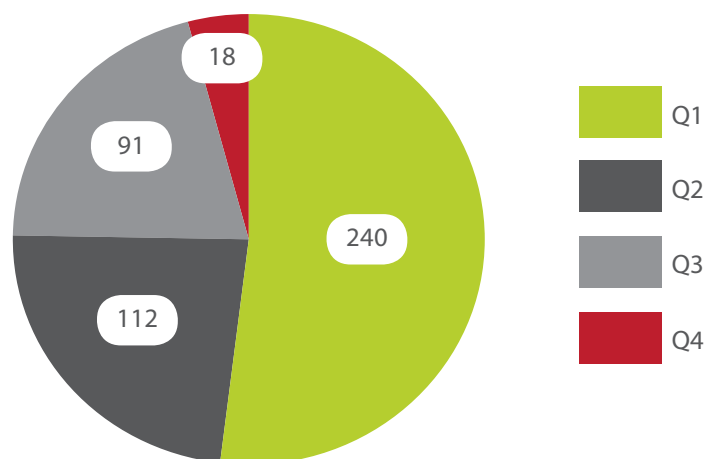
Publications	202	240	289	285	275	250	367	461
Impact Factor	595.94	819.35	1046.16	1040.62	1001.03	975.36	1722.76	2158.532
Average I.F.	2.95	3.41	3.59	3.65	3.64	3.9	4.69	4.68

Publications by area

Indexed publications



Publications by quartile



Research resources

Center	Active		Granted	
	2008	2009	2008	2009
AGAUR (Catalan Agency for University and Research Support Management)	8	0	0	11
EUROPEAN GRANTS	10	10	2	1
AMERICAN GRANTS	1	1	0	0
CIDEM (Innovation and Business Development Centre) - Catalan Government	0	1	1	0
CNIC (National Cardiovascular Research Centre)	1	1	0	0
COIB (Official College of Nurses)	2	2	0	2
FEA (Spanish Arteriosclerosis Society)	1	2	0	0
FIPSE (Foundation for AIDS Research and Prevention in Spain)	5	3	0	0
Genoma España (Spanish Genome Foundation)	1	1	1	0
La Caixa Foundation	1	0	0	0
TV3 Marathon Foundation	11	16	5	2
Mutua Madrileña Foundation	4	6	3	0
Spanish Ministry of Science and Innovation	6	8	6	1
Spanish Ministry of Science and Innovation – ISCIII (Carlos III Health Institute)	89	112	38	31
Spanish Ministry of Health and Social Policy	1	1	0	1
Spanish Ministry of Industry, Tourism and Commerce	0	0	0	2
SCFC Catalan Clinical Pharmacy Society)	1	1	0	0
SEOM (Spanish Medical Oncology Society)	0	0	0	1
SEPAR (Spanish Pneumology and Thoracic Surgery Society)	1	2	1	0
SERAM (Spanish Medical Radiology Society)	1	2	1	0
GEIS (Spanish Sarcoma Research Group)	0	0	0	1
	153	169	58	53

* Source: Sant Pau Research Institute

Research training

Center	Type of grant	Active		Granted	
		2008	2009	2008	2009
AGAUR (Catalan Agency for University and Research Support Management)	Renewals in the grant programme for training of researchers	5	5	2	2
	Study grants for outside Catalonia	0	1	1	0
	Support for doctoral theses in Catalan	0	1	1	0
	Study grants	0	1	1	0
Catalan Department of Health	Stabilisation agreement	5	5	0	0
	Stabilisation agreement for support technicians	0	1	1	0
Catalan General Directorate for Research	Programme i3 agreement	2	2	0	0
Spanish Ministry of Science and Innovation	Juan de la Cierva	2	1	0	0
	Ramon y Cajal	1	0	0	0
Spanish Ministry of Science and Innovation – ISCIII (Carlos III Health Institute)	Predocctoral grants for research training	2	4	3	2
	Miguel Servet contracts for SNS researchers	4	4	0	1
	Sara Borrell postdoctoral contracts for research training	2	3	1	1
	Rio Hortega post-training contracts for specialised healthcare personnel	10	7	3	1
	Contracts for support technicians in SNS research	3	3	0	1
		36	38	13	8

Doctoral theses

Institution	Candidate	Thesis title	Director(s)	Defended at
HSCSP	Cristina Bancells Bau	Atherogenic properties of electronegative LDL	José Luis Sánchez Quesada Sonia Benítez González	Autonomous University of Barcelona
HSCSP	Marta C. López	New mechanism of action of anti-thymocytic globulin in the rabbit: ex vivo expansion of human T regulator cells CD4+CD25+ FOXP3+.	Mohamed H. Sayegh, Cándido Juárez Rubio	Faculty of Medicine, Autonomous University of Barcelona
HSCSP	Cecilia González Santesteban	Characterization of the mutant CD8 glycoprotein responsible for familial CD8 deficiency. Study of other immunodeficiencies affecting cytotoxic T lymphocyte function.	Óscar de la Calle Martín	Faculty of Medicine, Autonomous University of Barcelona
IR-HSCSP	Miquel Àngel Pavón	Predicting response to induction chemotherapy with 5-FU and CDDP in patients with advanced squamous head and neck carcinoma. Implications of DNA repair mechanisms	Ramón Mangues Matilde Parreño	Department of Biochemistry and Molecular Biology and Faculty of Pharmacy, Autonomous University of Barcelona
HSCSP	Vicenç Martínez Vecina	Risk of appearance of 3rd and 4th neoplasms in patients with head and neck cancers	X. León M. Quer	Autonomous University of Barcelona
HSCSP	Albert Altès	Iron overload in haematopoietic transplant	Jordi Sierra, Montserrat Baiget	Department of Medicine, Autonomous University of Barcelona
HSCSP	José Soriano Pacheco	Markers related to major depression and dysthymia	Juan Luis Linares Fernández	Autonomous University of Barcelona -HSCSP

Institution	Candidate	Thesis title	Director(s)	Defended at
HSCSP	José Serrano Pariente	High-risk asthma. Characterization and identification of phenotypes involved	Vicente Plaza Joaquim Sanchís	HSCSP Teaching Unit - Autonomous University of Barcelona
HSCSP	Marta Poner Beltrán	Adjuvant radiotherapy in cancer of the biliary tract after radical intervention.	Ignasi Carrió	HSCSP
HSCSP	Jordi Marcé Nogué	A 3D fibre-based model adapted for computational biomechanical simulation of the helical ventricular myocardial band	Francesc Roure	School of Advanced Industrial Engineering of Barcelona
HSCSP	Jaume García-Barnes	Statistical models of the architecture and function of the left ventricle	Debora Gil	Computer Vision Centre, Autonomous University of Barcelona
HSCSP	Pablo Alonso Coello	Management of rectorrhagia in primary care: clinical practice guidelines and systematic reviews	Xavier Bonfill, Agustín Gómez de la Cámara	Autonomous University of Barcelona
ICCC	Paula Costales Vigil	Regulation of the LRP-1 receptor due to SREBP inscription factors. Implications in the atherosclerotic process	Vicenta Llorente-Cortés, Lina Badimon	Faculty of Biology, University of Barcelona
ICCC	Blanca Molins Monteyés	Mechanisms of thrombus formation in conditions of arterial flow: effect of C-reactive protein and Rosuvastatina	J. Martínez-González, Lina Badimon	University of Barcelona
ICCC	Javier Fernández Alcudia	Inhibition of lysyl oxidase by TNF-alpha and LDL in endothelial cells: role of the isoprenoid synthesis pathway	Cristina Rodríguez, José Martínez-González, Lina Badimon	University of Barcelona
ICCC	María González Díez	Cox-2 and PGI2 in CMLV: effects of bioactive components of HDL and olive oil	José Martínez-González, Cristina Rodríguez, Lina Badimon	University of Barcelona
ASPB	María José López Medina	Epidemiology of passive smoking in Spain and Europe	Manel Nebot	Autonomous University of Barcelona

Investigation support services

Sharing and pooling resources is an effective way to optimise funds and boost investigation. This is the main objective of the investigation support services, which are divided into two blocks:

Research support services: facilities and equipment that are not at the exclusive disposition of any specific research group but are shared among groups at all institutions within the IIB Sant Pau.

IIB Sant Pau has nine research support services:

- Clinical trial document management (AGDAC)
- Research institute management
- Author editing service
- Tumor bank
- Centre of drug investigation (CIM-Sant Pau)
- Isotopic zone
- Corporate communications and public relations
- Unit of quality, information systems and technological transfer
- Animal housing

Scientific and technical service platforms: support structures whose main aim is to manage, allocate and optimize the top-level research resources available to IIB Sant Pau. These platforms provide researchers with support and scientific/technical assessment, offering advice about selecting the most appropriate methods to prepare samples and planning optimal work flows for each objective. They also promote experimental development with equipment, infrastructure and specialized personnel.

IIB Sant Pau has six platforms:

- Genomic and Transcriptomic Platform
- Proteomic Platform
- Biobanks
- Microscopic and Immunohistochemical Platform
- Functional and cellular analysis platform
- Innovation platform





Research support services

Clinical Trial Document Management (AGDAC)

Coordinator:

M^a Teresa Mas Vilardell

Functions:

Manage and process all documents related to the experimental phase of clinical trials at Hospital de Sant Pau.

Facilities:

Several areas have been designed to conduct these functions:

- Head office and administration
- Data processing and management
- Meeting rooms for monitoring clinical trials
- Documentation files
- Cold room



Research institute management area

Coordinator:

Assistant Manager, Management Area: Hilda Herrero Bértora

Functions:

- Management of IR-IIB finances: manage accounts and fiscal matters; design, administer and control budget-related issues; manage and perform follow-up of economic and material resources.
- Management of requirements established by public bodies that provide funding: fulfil obligations entered into with government bodies and with official entities, regional and state; ensure compliance with policies concerning current fiscal, economic, labour and legal regulations, and with IR-IIB management policies.
- Administration and management of IR-IIB activity, providing management support for research groups in different areas; project management, HR, purchases, invoicing, control and follow up of projects, general administrative aspects, management of services (courses, travelling and continuing education).
- Design, elaboration, development and maintenance of information systems for each unit in the management area, both for IR-IIB and research group needs.





Author editing service

Coordinator:

Carolyn Newey

Functions:

- Revise, correct and edit manuscripts written in English for publication in international scientific journals and similar.
- Provide assistance for the preparation and delivery of audio-visual presentations, lectures, speeches, etc. in English for meetings, conferences and similar events.



Tumor bank

Coordinators:

Lluís Catasús i Cols / Iñigo Espinosa Mariscal

Functions:

- Create and maintain a collection of healthy and diseased tissue samples in optimal conditions for use in research projects that may include morphologic, phenotypic and molecular analysis. They may also be used on occasions in diagnosis.
- Guarantee quality of stored material by means of morphologic analysis of samples included in the bank, assuring anatomic-pathological correlation with the definitive diagnosis of the tissue.
- Supply (non-profit) material to research groups. Any investigator may apply for samples as long as the project meets current regulations and is scientifically, technically and ethically viable.

Equipment:

- 5 fast-freeze Histobath® apparatus (isopentan bath, stored at -50°C).
- Storage and cryopreservation systems: 2 freezers -80°C and 2 deposits of liquid nitrogen.
- 1 cryostat
- 1 tissue arrayer (Manual Tissue Arrayer)

Research support services

Centre of Drug Investigation (CIM-Sant Pau)

Coordinator: Manel-Josep Barbanoj Rodríguez

Functions:

Performance of clinical drug trials and/or clinical research in compliance with methodological, ethical and legal requirements in the context of international guidelines for Good Clinical Practice, concerning :

- Clinical trials that are not of therapeutic interest for participants (phase I, special populations, psychopathological investigation, biomarkers, proof of concept)
- Clinical trials in neuropsychopharmacology.
- Clinical trials in initial developmental phases.

Equipment:

To perform these trials there are three separate work areas:

Health care area:

- Admission zone
- 24 beds distributed in 4 units – trials in healthy volunteers and patients.
- 2 individual rooms for CNS studies
- Ambulatory zone
- 4 consulting rooms for complementary testing mainly related to CNS.
- 3 cubicles to evaluate psychomotor performance.

Logistic support area:

- Rest area for clinical trial participants; full bathrooms and kitchen
- Zones for preparation, centrifugation, and separating of biological samples
- Cold room
- Filing

Management, administration and data-processing area:

- Offices
- Zone for monitors
- IT equipment – for clinical trial activities of a non-experimental nature





Isotopic zone

Coordinator: Montserrat Ribas

Functions:

- Ensure compliance with current regulations concerning radiological protection in radioactive facilities at the disposal of the Research Institute

Facilities

The radioactive facility has :

- 1 storeroom for radioactive material
- 7 labs for handling material, one refrigerated
- 1 room for gamma and beta counters
- 1 storeroom for radioactive waste disposal
- 1 storeroom for radioactive waste
- 1 storeroom for radioactive liquid waste containers for controlled disposal
- Shielding accessories to work safely (table top shields, shielded containers, etc.).
- Radiation and contamination environment portable detectors.



Corporate communications and public relations

Coordinator: Josep Tardà

Functions:

- Provide a service to distribute news efficiently and generate positive media coverage.
- Respond to media enquiries.
- Establish IIB Sant Pau as a reliable source of information and expert opinion.
- Establish norms concerning graphics and linguistic style to achieve visual uniformity in all communication materials related to IIB Sant Pau.

Research support services

Unit of Quality, Information Systems and Technological Transfer

Coordinator: Jordi Virgili

Functions:

Quality unit

- Coordinate accreditation processes involving the Research Institute(RI): IIB Sant Pau.
- Write, update and distribute Standard Operating Procedure (SOP) related to the Quality Program.
- Establish mechanisms to evaluate Quality, Ethics and Good Scientific Practice guidelines.

Information systems

- Coordinate implementation of LOPD (data protection laws) concerning IIB personal data records.

Project Unit

- Undertake database management of commercial clinical trials.
- Manage RI insurance cover for recipients of grants, equipment, liability, etc
- Compile the statistical reports for different bodies

Technological transfer

- Act as point of reference in technological transfer activities at Sant Pau.
- Lend technical support to researchers at Sant Pau to obtain external funding.

Patents

- Provide technical support for applications for patents where the RI is title holder
- Manage files and contracts for patents involving Sant Pau investigators.
- Identify I+D groups and entities interested in the scientific and technological content to promote joint collaboration.

Clinical trials

- Lend technical support to the implementation of processes related to clinical trials where the Promotor is the IIB.
- Manage contracts of multicentric clinical trials where the IIB is the Promotor and insurances for clinical trials.



Grants

- Virgili, J. VIR-2008. Grants designed to encourage projects and technology assessment activities undertaken by entities of technology suppliers. VALCON08-2-0013. Amount: 15.000,00 €



Animal housing

Coordinator: M^a Antònia Rubio Caballero

Functions:

- Purchase and transport of animals from supply or breeding centres.
- Assessment and responsibility for the exportation and importation of animals to and from other supply centres around the world.
- Housing of animals received and later delivery to users once the period of quarantine is complete and when health requirements are met.
- Cleaning and disinfection of enclosures.
- Changing water, cleaning and disinfection of water bottles.
- Provision of food (following experimental protocol)
- Support for surgical interventions, anaesthesia and euthanasia.
- Provision of laboratory material and collection of samples.
- Monitoring mating, mating plugs, pregnant females and weaning
- Assessment of health and care.
- Expert assessment in welfare.
- Periodic health controls with sentinel screening in all rooms.
- Maintenance of supervision protocols
- Hygiene and healthcare protocols for facilities and teams.
- Waste elimination management
- Ongoing training in relation to animal housing protocols.
- Advice to all users in the development of investigation projects involving animals.

Equipment:

- 2 rooms for mice
- 1 room for rats
- 1 room for quarantine
- 1 wash room
- 1 clean storage facility
- 1 standard storeroom
- 1 operating room
- 1 treatment room

Scientific and technical service platforms

Genomic and transcriptomic platform

Coordinator: Elena Serrano

> GENOMIC LABORATORY

Functions:

Sequencing:

- Mutation analysis
- Identification of microorganisms

Fragment analysis:

- Instability of microsatellites
- Loss of heterozygosity in pathological processes
- Detection and genotyping of mutations
- Gene copy number quantification
- Methylation
- Polymorphism and disease associations

Equipment:

- ABI 3130xl sequencer

> TRANSCRIPTOMIC LABORATORY

- **Functions:**

Hybridization and analysis of Affymetrix microarrays:

- RNA and micro-RNA expression profiles in normal conditions, and in diseases and treatment
- Loss of heterozygosity, copy number analysis and genome-wide mutation detection
- Genome-wide linkage and association studies

Real time quantitative PCR (gene expression, allelic discrimination).

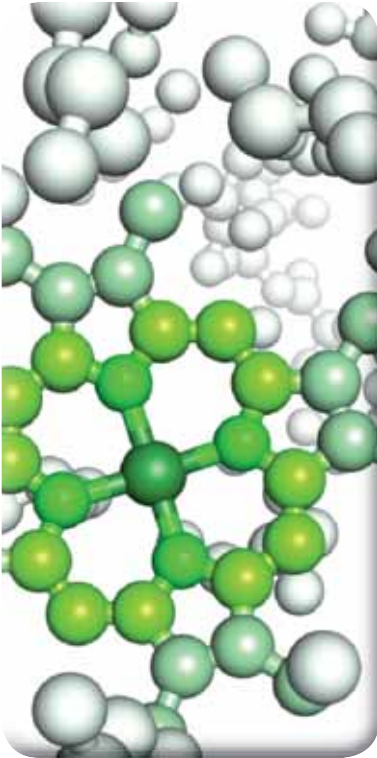
Nucleic acid quality assessment

Quantification of nucleic acids (Bioanalyzer, Nanodrop).

Equipment:

- Affymetrix array platform
- Bioanalyzer 2100
- Real-time quantitative PCR ABI Prism 7000 SDS





Proteomic platform

Coordinators: Rosa Antón / Silvia Pérez-Pujol

Functions:

- Analysis of mass spectrometry proteomics
- Identification of differentially expressed proteins in pathological conditions, treatments, etc
- Post-translational modifications
- Relative quantification of proteins in pathological conditions
- Analysis of volatile metabolites using gas mass spectrometry

Equipment:

- MALDI-TOF-TOF (Bruker)
- HPLC ion trap

Grants

- Sant Pau Research Institute. In vivo optical image equipment: IVIS Spectrum and Add-ins for the new laboratory. IF09/3651. Amount: **300.129,00 €**



Biobanks

Coordinator: Cristo Cámara

Functions:

- Sample collection and processing for the Biobank

Grants:

- Sant Pau Research Institute. Red de Biobancos 2009. RD09/0076/00081. Amount: **138.000,00 €**

Scientific and technical service platforms

Microscopic and immunohistochemical platform

Coordinator: María Madero

> IMMUNOHISTOCHEMICAL LABORATORY

Functions:

- Embedding tissues in paraffin blocks
- Cutting paraffin blocks with microtomy, automatic immunostaining
- Staining (Giemsa, hematoxylin-eosin)
- Image acquisition and analysis using high-resolution colour microscopy and specialized software

Equipment:

- Autostainer 48 (DAKO)

> MICROSCOPY LABORATORY

Functions:

Confocal microscopy in live and fixed cells:

- Immunofluorescence of 2 to 5 fluorochromes
- Reconstruction of 3D and 4D images
- Colocalization studies
- Inter- and intra-interactions (FRET and FLIM)
- Molecular diffusion times (FCS)
- Conventional fluorescence microscopy (immunofluorescence with one or two fluorochromes, FISH)

Equipment:

- Autostainer 48 (DAKO)

Innovation platform

Coordinator:

- Jaume Kulisevsky Bojarski

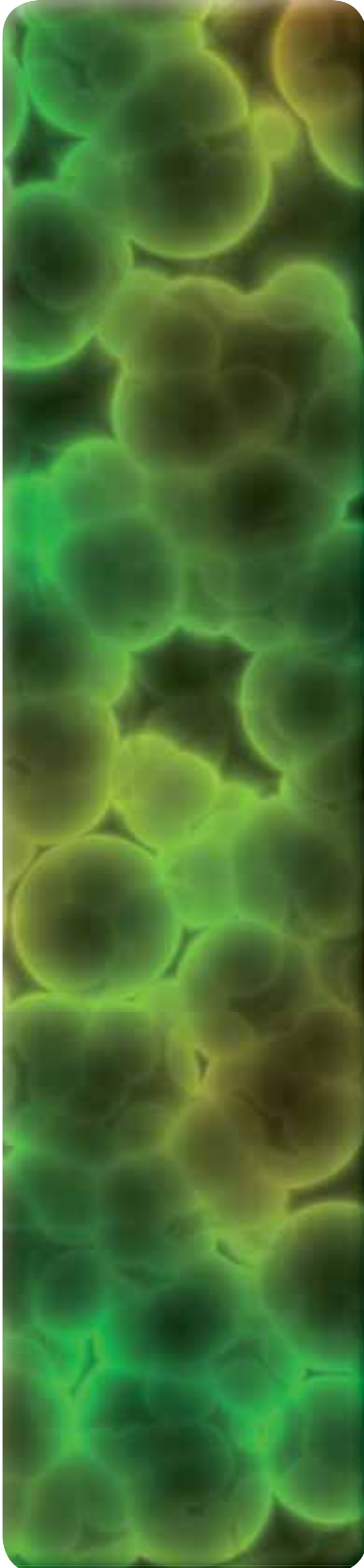
Functions:

- Identify the results of research projects that may have a commercial interest.
- Transform the knowledge generated by research into products that reach the patient and the market.

Grants:

- Sant Pau Research Institute. Red de Innovacion 2009. RD09/0077/00075. Amount: **123.414,00 €**
- Kulisevsky, J. Expert system integrating tele-assistance and telemedicine to prevent dependence and promote autonomy of the elderly in the home environment. E-HEALTH platform for healthy ageing. Avanza. TSI 020110-2009-444. Amount: **60,848.55 €**





Functional and cellular analysis platform

Coordinator: Marta Soler

> FLOW CYTOMETRY LABORATORY

Functions:

Conventional cytometry:

In homogenous (cell line) or heterogeneous (biological fluid) samples:

- Detection of the presence of proteins and determine cell populations (cell markers)
- Studies of signalling cascades (cell cycle, cell proliferation, apoptosis, intracellular calcium determination)
- Quantification of transfection efficiency
- Phenotype changes. Relative and absolute presence
- Production of mediators
- Detection of minority populations

Cell separator:

In subpopulations of separated cells:

- Microarrays
- Western blot
- Cell cultures
- RT-PCR

Equipment:

- FACSCalibur conventional flow cytometry
- Flow cytometry – cell sorter FACSAria

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AREA 1

Cardiovascular Diseases

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Heart Failure-Cardiac Regeneration (ICREC group)

TEAM



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Collaborators

Ariadna Echenique
Aida Lluçà

*Dr Bayés present address is at Germans Trias Hospital.

Main lines Of research

Heart failure

- Biomarkers.
- Sudden death.
- Electrical bioimpedance in heart failure and transplantation.

Cardiac regeneration:

- Immunology.
- Cardiac regeneration.
- Cardiac tissue engineering.

Grants

- Bayés-Genís, A. Support for re-search groups in Catalonia. Heart Failure-Cardiac Regeneration Group. 2009SGR 29. 03/07/2009. Amount: 48,880.00 €

Challenges

Heart failure

- Validate the clinical relevance of new biomarkers for possible inclusion in health care guidelines, as achieved for NTproBNP.
- Study the usefulness of prognostic stratification with multimarkers.
- Validate the prognostic score developed, include this in health care activity and evaluate its usefulness in therapeutic decision making.
- Characterize patients prone to sudden death during follow-up in an in-depth study.
- Study the usefulness of bioelectric impedance for heart failure diagnosis and monitoring.
- Develop a hydration index with clinical usefulness.
- Evaluate the usefulness of non-invasive measures to detect rejection.
- Cardiac regeneration:
 - Demonstration of efficacy of cells identified in epicardial fat in rat and pig models.
 - Study of alternative sources of stem cells: placenta, etc.
 - In vitro production of cardiac tissue for clinical use.
 - Cell therapy in heart failure patients who have had a myocardial infarction.


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INDEXED PUBLICATIONS
Article

- 01** Cygankiewicz I, Zareba W, Vázquez R, Bayés-Genís A, Pascual D, Macaya C, Almendral J, Fiol M, Bardají A, González-Juanatey JR, Nieto V, Valdés M, Cinca J, de Luna AB. Risk Stratification of Mortality in Patients With Heart Failure and Left Ventricular Ejection Fraction > 35%. *AMERICAN JOURNAL OF CARDIOLOGY*; 103(7):1003-1010. **I.F.: 3.575**
- 02** Januzzi JL, Bayés-Genís A. EVOLUTION OF AMINO-TERMINAL PRO-B TYPE NATRIURETIC PEPTIDE TESTING IN HEART FAILURE. *DRUG NEWS & PERSPECTIVES*; 22(5):267-273. **I.F.: 2.101**
- 03** Vázquez R, Bayés-Genís A, Cygankiewicz I, Pascual-Figal D, Grigorian-Shamagian L, Pavón, González-Juanatey JR, Cubero JM, Pastor L, Ordóñez-Llanos J, Cinca

- J, de Luna AB. The MUSIC Risk score: a simple method for predicting mortality in ambulatory patients with chronic heart failure. *EUROPEAN HEART JOURNAL*; 30(9):1088-1096. **I.F.: 9.800**
- 04** Pascual-Figal DA, Ordóñez-Llanos J, Torné PL, Vázquez R, Puig T, Valdés M, Cinca J, de Luna AB, Bayés-Genís A. Soluble ST2 for Predicting Sudden Cardiac Death in Patients With Chronic Heart Failure and Left Ventricular Systolic Dysfunction. *JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY*; 54(23):2174-2179. **I.F.: 12.535**
- 05** Muñoz-Gujosa C, Ginel A, Montiel J, Brosa V, Mirabet S, Bayés-Genís A, Padró JM. Orthotopic Heart Transplantation in Patients With Transposition of the Great Arteries. *REVISTA ESPAÑOLA DE CARDIOLOGIA*; 62(2):216-219. **I.F.: 2.746**

- 06** Labovsky V, Hofer EL, Feldman L, Fernández Vallone V, García Rivello H, Bayés-Genís A, Hernando Insúa A, Levin MJ, Chasseing NA. Cardiomyogenic differentiation of human bone marrow mesenchymal cells: Role of cardiac extract from neonatal rat cardiomyocytes. *DIFFERENTIATION*; 79(2):93-101. **I.F.: 3.311**

Letter

- 07** L. Nescolarde; J. Rosell-Ferrer; P. Gastelurrutia; A. Bayés-Genís; J. Calpe; R. Hernández. Comment on "Is bioelectrical impedance vector analysis of value in the elderly with malnutrition and impaired functionality?". *NUTRITION*; 25(3):370-371. **I.F.: 2.604**

*Total Impact Factor.
 **Average Impact Factor.

OTHER PUBLICATIONS

P. Bogóñez-Franco; R. Bragos; A. Bayés-Genís; J. Rosell-Ferrer. Implantable bioimpedance monitor using ZigBee. *CONF PROC IEEE ENG MED BIOL SOC*; 1:4868-71.

S. Roura; A. Bayés-Genís. Vascular dysfunction in idiopathic dilated cardiomyopathy. *NATURE REVIEWS CARDIOLOGY*; 6(9):590-598.



Clinical and Translational Cardiology

TEAM



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Clarissa Cola IR-HSCSP

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Laia Anglí IR-HSCSP

Main lines
Of research

- Cardiac electrophysiology and arrhythmias.
- Heart failure.
- Ischaemic heart disease.
- New diagnostic techniques.

Challenges

- Describe cardiac repolarization (T wave genesis) in the isolated perfused human heart (Langendorff).
- Develop new drugs to treat atrial fibrillation based on involvement of atrial receptors for adenosine.
- Set up basic research lines related to cardiac physiology in experimental models.
- Develop new diagnostic techniques for myocardial involvement using electrical impedance.

*TIF:217.768 **AIF: 12.09

Scientific production

INDEXED PUBLICATIONS

- 01 Chorro FJ, Trapero I, Such-Miquel L, Pelechano F, Mainar L, Cánoves J, Tormos A, Alberola A, Hove-Madsen L, Cinca J, Such L. Pharmacological modifications of the stretch-induced effects on ventricular fibrillation in perfused rabbit hearts. *AM J PHYSIOL-HEART C*; 297(5):H1860-H1869. **I.F.: 4.3572**
- 02 Nikus K, Pahlm O, Wagner G, Birnbaum Y, Cinca J, Clemmensen P, Eskola M, Fiol M, Goldwasser D, Gorgels A, Sclarovsky S, Stern S, Wellens H, Zareba W, de Luna AB. Electrocardiographic classification of acute coronary syndromes:

a review by a committee of the International Society for Holter and Non-Invasive Electrocardiology. *J ELECTROCARDIOL*; 43(2):91-103.

I.F.: 1.077

- 03 Hove-Madsen L, Echebarría B, Franco R, Cinca J. Remodelling of Gs-protein-coupled receptors in atrial fibrillation: a step beyond classical electrical remodelling. *NAT CLIN PRACT CARD*. **I.F.: 5.902**

- 04 Valgimigli M, Campo G, de Césare N, Meliga E, Vranckx P, Furgieri A, Angiolillo DJ, Sabatè M, Hamon M, Repetto A, Colangelo S, Brugaletta S, Parrinello G, Percoco. Intensifying platelet inhibition with tirofi-

ban in poor responders to aspirin, clopidogrel, or both agents undergoing elective coronary intervention: results from the double-blind, prospective, randomized Tailoring Treatment with Tirofiban in Patients Showing Resistance to Aspirin and/or Resistance to Clopidogrel study. *CIRCULATION*; 119(25):3215-3222. **I.F.: 14.816**

- 05 Brugaletta S, Burzotta F, Sabatè M. Zotarolimus for the treatment of coronary artery disease: pathophysiology, DES design, clinical evaluation and future perspective. *EXPERT OPIN PHARMACO*; 10(6):1047-1058. **I.F.: 2.018**

* Total Impact Factor.
** Average Impact Factor.



- 06** Jiménez-Quevedo P, Suzuki N, Corros C, Ferrer C, Angiolillo DJ, Alfonso F, Hernández-Antolín R, Bañuelos C, Escaned J, Fernández C, Costa M, Macaya C, Bass T, Sabaté M. Vessel shrinkage as a sign of atherosclerosis progression in type 2 diabetes: a serial intravascular ultrasound analysis. *DIABETES*; 58(1):209-214.
I.F.: 8.505
- 07** Belvís R, Tizzano EF, Martí-Fàbregas J, Leta RG, Baena M, Carreras F, Pons-Lladó G, Baiget M, Martí-Vilalta JL. Mutations in the NKX2-5 gene in patients with stroke and patent foramen ovale. *CLIN NEUROL NEUROSUR*; 111(7):574-578.
I.F.: 1.303
- 08** Everett TH, Lee KW, Wilson EE, Guerra JM, Varosy PD, Olgin JE. Safety profiles and lesion size of different radiofrequency ablation technologies: a comparison of large tip, open and closed irrigation catheters. *J CARDIOVASC ELECTROPHYSIOL*; 20(3):325-335.
I.F.: 3.703
- 09** Díaz JM, Gich I, Bonfill X, Solà R, Guirado L, Facundo C, Sainz Z, Puig T, Silva I, Ballarín J. Prevalence evolution and impact of cardiovascular risk factors on allograft and renal transplant patient survival. *TRANSPLANT PROC*; 41(6):2151-2155.
I.F.: 0.944
- 10** Barahona MJ, Sucunza N, Resmini E, Fernández-Real JM, Ricart W, Moreno-Navarrete JM, Puig T, Farréons J, Webb SM. Persistent body fat mass and inflammatory marker increases after long-term cure of Cushing's syndrome. *J CLIN ENDOCRINOL METAB*; 94(9):3365-3371.
I.F.: 6.202
- 11** Barahona MJ, Sucunza N, Resmini E, Fernández-Real J, Ricart W, Moreno J, Puig T, Wägner A, Rodríguez-Espinosa J, Farréons J, Webb S. Deleterious Effects of Glucocorticoid Replacement on Bone in Women after Long-Term Remission of Cushing's Syndrome. *J BONE MINER RES*; 24(11):1841-1846
I.F.: 6.043
- 12** Ricci RP, Quesada A, Almendral J, Arribas F, Wolpert C, Adragao P, Zoni-Berisso M, Navarro X, DeSanto T, Grammatico A, Santini M; DATAS study Investigators. Dual-chamber implantable cardioverter defibrillators reduce clinical adverse events related to atrial fibrillation when compared with single-chamber defibrillators: a subanalysis of the DATAS trial. *EUROPACE*; 11(5):587-593.
I.F.: 1.871
- 13** ACTIVE Investigators, Connolly SJ, Pogue J, Hart RG, Hohnloser SH, Pfeffer M, Chrolavicius S, Yusuf S. Effect of clopidogrel added to aspirin in patients with atrial fibrillation. *N ENGL J MED*; 360(20):2066-2078.
I.F.: 47.050
- 14** Hohnloser SH, Crijns HJ, van Eickels M, Gaudin C, Page RL, Torp-Pedersen C, Connolly SJ; ATHENA Investigators. Effect of dronedarone on cardiovascular events in atrial fibrillation. *N ENGL J MED*; 360(7):668-678.
I.F.: 47.050
- 15** Cygankiewicz I, Zareba W, Vázquez R, Bayés-Genís A, Pascual D, Macaya C, Almendral J, Fiol M, Bardají A, González-Juanatey JR, Nieto V, Valdés M, Cinca J, de Luna AB. Risk Stratification of Mortality in Patients With Heart Failure and Left Ventricular Ejection Fraction > 35%. *AMERICAN JOURNAL OF CARDIOLOGY*; 103(7):1003-1010.
I.F.: 3.575
- 16** Vázquez R, Bayés-Genís A, Cygankiewicz I, Pascual-Figal D, Grigorian-Shamagian L, Pavón, González-Juanatey JR, Cubero JM, Pastor L, Ordóñez-Llanos J, Cinca J, de Luna AB. The MUSIC Risk score: a simple method for predicting mortality in ambulatory patients with chronic heart failure. *EUROPEAN HEART JOURNAL*; 30(9):1088-1096.
I.F.: 9.800
- 17** Pascual-Figal DA, Ordóñez-Llanos J, Torné PL, Vázquez R, Puig T, Valdés M, Cinca J, de Luna AB, Bayés-Genís A. Soluble ST2 for Predicting Sudden Cardiac Death in Patients With Chronic Heart Failure and Left Ventricular Systolic Dysfunction. *JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY*; 54(23):2174-2179.
I.F.: 12.535
- 18** X. Borrás; P. Gallego; L. Monserrat. Update on Clinical Cardiology: Aortic Diseases, Hypertrophic Cardiomyopathy, and Prophylaxis of Infective Endocarditis. *REVISTA ESPAÑOLA DE CARDIOLOGIA*; 62:28-38.
I.F.: 2.746

OTHER PUBLICATIONS

Cola C, Yuste VM, Sabaté M. Left main coronary artery stenosis following surgical valve replacement: changing valvular into ischemic heart disease. *J INVASIVE CARDIOL*; 21(1):E9-11.

Permanyer E, Ginel A, Muñoz-Guijosa C, Padró JM. Right

atrium traumatic rupture presenting as chronic tamponade. *INTERACT CARDIOVASC THORAC SURG*; 9(4):748-9.

Clarissa Cola;Salvatore Brugaletta; Victoria Martín Yuste; Bieito Campos; Dominick J. Angiolillo;Manel Sabaté. Diabetes mellitus: a prothrombotic state implications for outcomes after coronary revascularization. *VASC HEALTH RISK MANAG*; 5(1):101-19.



Thrombosis and Haemostasis

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Main lines
Of research

- Investigation of new genes and functional polymorphisms involved in venous and arterial thrombosis. GAIT-1 and GAIT-2 projects.
- Investigation of new antithrombotic drugs: thrombin inhibitors, activated factor X, low molecular weight heparin with oral activity, among others.
- Biomarkers of prothrombotic states in patients under 55 years with venous thromboembolic disease, acute ischaemic stroke, or acute myocardial infarction.
- Introduction of the self-control/self-management model of oral anticoagulant treatment.

Challenges

- Complete recruitment of large families with thrombosis for the GAIT-2 project. The aim is to group 1,000 people who have developed thrombosis and have a negative thrombophilia workup.
- In new polymorphisms, study QTL detected in GAIT-1 families in relation to phenotypes of haemostasia with thrombosis risk (resistance to activated C protein, factor VIII, homocysteine, factor XII and others).
- Replicate the QTL related to thrombosis in GAIT-1 families with those detected in GAIT-2 families.
- Study new regions of the genome related to the variability of homocysteine levels, fibrinogen, Fc VIII, Fc XII and others, and apply results (functional polymorphisms) in cohorts of patients with venous and arterial thrombosis.
- Increase the present cohorts of patients with venous and arterial thrombosis.
- Continue collaboration with the network of cardiovascular patients RECAVA and with other European groups so as to apply GAIT project findings to cohorts of patients with venous and arterial thrombosis in Spain and other European countries.

Grants

- Fontcuberta, J. Support for Research Groups in Catalonia. Thrombosis and Haemostasis Group. 2009SGR 1147. Amount: 43.680,00 €



*TIF: 69.424 **AIF: 9.91

INDEXED PUBLICATIONS

- 01** Santamaria; A. Merino; O. Vinas; P. Arrizabalaga. Does medicine still show an unresolved discrimination against women? Experience in two European university hospitals. *JOURNAL OF MEDICAL ETHICS*; 35(2):104-106
I.F.: 1.206
- 02** R. M. Antonijoan; S. Rico; J. Martínez-González; M. Borrell; D. Valcárcel; J. Fontcuberta; M. J. Barbanoj. Comparative pharmacodynamic time-course of bemiparin and enoxaparin in healthy volunteers. *INTERNATIONAL JOURNAL OF CLINICAL PHARMACOLOGY AND THERAPEUTICS*; 47(12):726-732 **I.F.: 1.381**
- 03** Mälärstig; A. Buil; J.C. Souto; R. Clarke; F. Blanco-Vaca; J. Fontcuberta; J. Peden; M. Andersen; A. Silveira; S. Barlera; U. Seedorf; H.

- Watkins; L. Almasy; A. Hamsten; J.M. Soria. Identification of ZNF366 and PTPRD as novel determinants of plasma homocysteine in a family-based genome-wide association study. *BLOOD*; 114(7): 417-22
I.F.: 10.555
- 04** V. Roldán; A. Ordóñez; F. Martín; E. Zorio; J.M. Soria; A. Miñano; F. España; R. González-Conejero; J. Pineda; A. Estellés; J. Fontcuberta; V. Vicente; J. Corral. Antithrombin Cambridge II (A384S) supports a role for antithrombin deficiency in arterial thrombosis. *THROMBOSIS AND HAEMOSTASIS*; 101(3):483-486
I.F.: 4.451
- 05** J.M. Soria; S. Navarro; P. Medina; R. Souto; A. Buil; A. Estellés; J. Fontcuberta; F. España. Heritability of plasma concentrations of activated protein C in a Spanish population. *BLOOD COAGULATION & FI-*

BRINOLYSIS; 20(1):17-21
I.F.: 1.246

- 06** S. Schulman; C. Kearon; A.K. Kakkar; P. Mismetti; S. Schellong; H. Eriksson; D. Baanstra; J. Schnee; S.Z. Goldhaber; RE-COVER Study Group. Dabigatran versus Warfarin in the Treatment of Acute Venous Thromboembolism. *NEW ENGLAND JOURNAL OF MEDICINE*; 361(24):2342-2352
I.F.: 47.050

PROCEEDING PAPER

- 07** J. Martí-Fàbregas; J. Mateo. Old and New Anticoagulant Agents for the Prevention and Treatment of Patients with Ischemic Stroke. *CEREBROVASCULAR DISEASES*; 27: 111-119
I.F.: 3.535

*Total Impact Factor.
**Average Impact Factor.



Cardiovascular Biochemistry

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Main lines
Of research

- Mechanisms of atherogenicity in low density lipoproteins (LDL).
- Electronegative LDL, interaction with cells from atherosclerotic lesions.
- Vulnerability markers in atherosclerotic plaque: electronegative LDL, myeloperoxidase, phospholipase.
- New markers of acute cardiovascular disease: cardiac troponins, natriuretic peptides, [ST]-2.

Challenges

- Demonstrate that electronegative LDL is a marker of vulnerable atherosclerotic plaque.

Grants

- Ordóñez-Llanos, J. Support for Research Groups in Catalonia. Cardiovascular Biochemistry Group. 2009SGR 1205. Amount: 46,800.00 €
- Benítez, S. Study of the mechanisms involved in the inflammatory effects of LDL (-) in monocytes and the inhibitory role of HDL. PS09/00160. Amount: 46,982.00 €

Scientific production

INDEXED PUBLICATIONS

- 01 C.Bancells; S. Benítez;M. Jauhianen; J. Ordóñez-Llanos; P. T. Kovannen; S. Villegas;J. L. Sánchez-Quesada;K. Oorni. High binding affinity of electronegative LDL to human aortic proteoglycans depends on its aggregation level. JOURNAL OF LIPID RESEARCH; 50(3):446-455. I.F.: 4.917
- 02 Petrich W, Lewandrowski KB, Muhlestein JB, Hammond MEH, Januzzi JL, Lewandrowski EL, Pearson RR, Dolenko B, Haass M,

Hirschl MM, Frueh J, Koehler W, Mischler R, Moecks J, Somorjai R, Staib A, Ordóñez-Llanos J, Quarder O, Sylvén C, Werner G, Zerback R. Potential of mid-infrared spectroscopy to aid the triage of patients with acute chest pain. ANALYST; 134(6):1092-8. I.F.: 3.272

- 03 Vázquez R , Bayés-Genís A , Cygankiewicz I, Pascual-Figal D, Grigorian-Shamagian L, Pavón , González-Juanatey JR, Cubero JM , Pastor L, Ordóñez-Llanos J, Cinca J, de Luna AB. The MUSIC Risk score: a simple method for pre-

dicting mortality in ambulatory patients with chronic heart failure. EUROPEAN HEART JOURNAL; 30(9):1088-1096. I.F.: 9.800

- 04 Pascual-Figal DA, Ordóñez-Llanos J, Torné PL, Vázquez R, Puig T, Valdés M, Cinca J, de Luna AB, Bayés-Genís A . Soluble ST2 for Predicting Sudden Cardiac Death in Patients With Chronic Heart Failure and Left Ventricular Systolic Dysfunction. JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY; 54(23):2174-2179. I.F.: 12.535

* Total Impact Factor.
** Average Impact Factor.



Angiology, Vascular Biology and Inflammation

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Main lines
Of research

Cardiovascular research:

- Inflammatory mechanisms involved in vascular disorders.
- Genetic basis of vascular pathologies: atherothrombosis, aortic aneurisms, and chronic venous insufficiency.
- New, more effective targets. Research into pharmacologic targets for NSAIDs of cardiovascular interest.

Cancer research:

- Intense peritumoural inflammatory response as a therapeutic strategy in solid tumours.
- Role of PGE-synthase isoenzymes in head and neck squamous carcinoma, and in regulating gene expression in tumour relapse.

Challenges

- Our main challenge is to consolidate the group and strengthen our collaboration with other groups. To do so we need to incorporate more predoctoral researchers, establish collaborations with the industrial sector in order to develop new anti-inflammatory drugs based on the

inhibition of mPGES-1, and set up training programmes for clinical physicians with a strong interest in research.

Grants

- Vila, L. Microsomal PGE-synthase-1 as a new therapeutic target for abdominal aortic aneurysm (AAA). SAF2009/09598. Amount: 36,300.00 €

*TIF: 17.910 **AIF: 5.97

Scientific
Production

INDEXED PUBLICATIONS

ARTICLE

01 Vila L, Martínez-Pérez A, Camacho M, Buil A, Alcolea S, Pujol-Moix N, Soler M, Antón R, Souto JC, Fontcuberta J, Soria JM. Heritability of thromboxane A2 and prostaglandin E2 biosynthetic machinery in a spanish population. ARTERIOSCLER THROMB VASC BIOL.; 30(1):128-34.
I.F.: 7.235

02 Brú A, Souto JC, Alcolea S, Antón R, Remacha A, Camacho M, Soler M, Brú I, Porres A, Vila L. Tumour cell lines HT-29 and FaDu produce proinflammatory cytokines and activate neutrophils in vitro: possible applications for neutrophil-based antitumour treatment. MEDIAT INFLAMM; 8(1):74-98.
I.F.: 2.019

REVIEW

03 Souto JC, Vila L, Brú A. Polymorphonuclear neutrophils and cancer. Intense and sustained neutrophilia as a treatment against solid tumours. MED RES REV.
I.F.: 8.656

*Total Impact Factor.
**Average Impact Factor.



Molecular and Therapeutic Pathology of Ischaemic and Atherothrombotic Diseases

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Norma Rovira CIBER-OBN

**Main lines
Of research**

- Physiopathological role of LRP family proteins in chronic diseases.
- Identification and characterization of transcription factors and genetic targets. Role of HDL and LDL.
- Vascular impact of ischemia and angiogenesis in heart disease. Cellular therapy.

Awards

Prof. Lina Badimon:

- Joan Codina Altés Award from the Catalan Society of Cardiology.
- Full member Academic of the Royal Academy of Pharmacy of Catalonia.
- Honorary Member of the Spanish Artherosclerosis Society.

Grants

- Badimon, L. SAFE-T: Safer and faster evidence-based translation consortium under the EU Innovative Medicines Initiative - Joint Undertaking (IMI-JU).
- Badimon, L. ENCITE: The European Network for Cell Imaging and Tracking Expertise. European Commission within the 7th Framework Programme for Research.
- Badimon, L. Patología molecular i terapèutica de les malalties ateroscleròtiques i isquèmiques. Ajuts de suport als Grups de

Recerca de Catalunya (SGR) - SGR 2009-826

- Badimon, L. Prognostic factors of cardiovascular mortality and morbidity in a cohort of families with genetic diagnosis of familial hypercholesterolaemia. From hypercholesterolemia to atherosclerosis in hFH patients: Characterization and functional effects on resident vascular cells of plasma lipoproteins (HDL, LDL) and circulating microparticles. Financing of translational Research Projects. CNIC 08-2008.

Challenges

- Set up and maintain an NMR/PET platform, essential for the strategic development of this programme that requires the use of imaging techniques to evaluate the function of new targets for later therapeutic development. Nuclear magnetic resonance is needed to answer questions arising from myocardial perfusion.
- Broaden the experimental focus to include transgenic animal models with/without cardiovascular risk factors in order to proceed

to in-depth analysis of molecules involved in the modulation of new proteins.

- Maintain present relationships with collaborators and establish new multidisciplinary collaborations.
- Strengthen international funding for new Platform development apply to international bodies for financing once we have the platforms necessary to carry out the proposed activities.


INDEXED PUBLICATIONS

- 01** Durán, X; Vilahur, G; Badimon, L. Exogenous in vivo NO-donor treatment preserves p53 levels and protects vascular cells from apoptosis. *ATHEROSCLEROSIS*; 205:101-106
I.F.: 4.522
- 02** Slevin, M; Krupinski, J; Rovira, N; Turu, M; Luque, A; Baldellou, M; Sanfeliu, C; de Vera, N; Badimon, L. Identification of pro-angiogenic markers in blood vessels from stroked-affected brain tissue using laser-capture microdissection. *BMC GENOMICS*; 10:113
I.F.: 3.759
- 03** Rodríguez, C; Alcudia, JF; Martínez-González, J; Guadall, A; Raposo, B; Sánchez-Gómez, S; Badimon, L. Statins normalize vascular lysyl oxidase down-regulation induced by proatherogenic risk factors. *CARDIOVASCULAR RESEARCH*; 83(3):595-603
I.F.: 5.801
- 04** Font, MA; Fernández, A; Carvajal, A; Gámez, C; Badimon, L; Slevin, M; Krupinski, J. Imaging of early inflammation in low-to-moderate carotid stenosis by 18-FDG-PET. *FRONTIERS IN BIOSCIENCE*; 14: 3352-3360
I.F.: 3.736
- 05** Vilahur, G; Hernández-Vera, R; Molins, B; Casani, L; Durán, X; Padró, T; Badimon, L. Short-term myocardial ischemia induces cardiac modified C-reactive protein expression and proinflammatory gene (cyclooxygenase-2, monocyte chemoattractant protein-1, and tissue factor) upregulation in peripheral blood mononuclear cells. *JOURNAL OF THROMBOSIS AND HAE-*

MOSTASIS; 7(3):485-493
I.F.: 6.069

- 06** Camino-López, S; Badimon, L; González, A; Canals, D; Pena, E; Llorente-Cortés, V. Aggregated low density lipoprotein induces tissue factor by inhibiting sphingomyelinase activity in human vascular smooth muscle cells. *JOURNAL OF THROMBOSIS AND HAEMOSTASIS*; 7(12):2137-2146; 205(1):101-106
I.F.: 6.069

- 07** Martorell, L; Gentile, M; Rius, J; Rodríguez, C; Crespo, J; Badimon, L; Martínez-González, J. The Hypoxia-Inducible Factor 1/NOR-1 Axis Regulates the Survival Response of Endothelial Cells to Hypoxia. *MOLECULAR AND CELLULAR BIOLOGY*; 29(1):5828-5842; 7(12): 2137-2146
I.F.: 6.057

- 08** Vilahur G, Casani L, Peña E, Durán X, Juan-Babot O, Badimon L. Induction of RISK by HMG-CoA reductase inhibition affords cardioprotection after myocardial infarction. *ATHEROSCLEROSIS*; 206(1):95-101.
I.F.: 4.522

- 09** Slevin M, Turu MM, Rovira N, Luque A, Baldellou M, Krupinski J, Badimon L. Identification of a 'Snapshot' of co-expressed angiogenic markers in laser-dissected vessels from unstable carotid plaques with targeted arrays. *JOURNAL OF VASCULAR RESEARCH*; 47(4):323-335;
I.F.: 2.895

- 10** Alonso R, Mata N, Badimon L, Pérez-Jiménez F, Mata P on behalf of the Spanish Familial Hypercholesterolaemia Group* Prognostic factors of cardiovascular disease

***TIF: 68.234 **AIF: 4.873**

mortality and morbidity in a cohort of families with genetic diagnosis of familial hypercholesterolemia *Nature Reviews - Cardiology (CNIC Edition)*; 6 : 23-27

I.F.: 5.902

- 11** Slevin M, Matou-Nasri S, Luque A, Rovira N, Badimon L, Boluda S, Potempa L, Sanfeliu C, de Vera N, Krupinski J. Modified C-Reactive Protein is expressed by stroke neovessels and is a potent activator of angiogenesis in vitro. *BRAIN PATHOLOGY*. [Epub ahead of print]
I.F.: 5.903

- 12** Cimmino G, Ibáñez B, Vilahur G, Speidl WS, Fuster V, Badimon L, Badimon JJ Up-regulation of reverse cholesterol transport key players and rescue from global inflammation by ApoA-I Milano. *JOURNAL OF CELLULAR AND MOLECULAR MEDICINE*; [Epub ahead of print]; 13(9B):3226-3235
I.F.: 5.228

REVIEW

- 13** Rodríguez C, González-Díez M, Badimon L, Martínez-González J. Sphingosine-1-phosphate: A bioactive lipid that confers high-density lipoprotein with vasculoprotection mediated by nitric oxide and prostacyclin. *THROMBOSIS AND HAEMOSTASIS*; 101(4):665-673
I.F.: 4.451

- 14** Badimon L, Vilahur G, Padró T. Lipoproteins, Platelets and Atherothrombosis. *REVISTA ESPAÑOLA DE CARDIOLOGIA*; 62(10):1161-1178
I.F.: 2.746

*Total Impact Factor.

**Average Impact Factor.

OTHER PUBLICATIONS

Slevin M, Krupinski J, Badimon L. Controlling the angiogenic switch in developing atherosclerotic plaques: Possible targets for therapeutic intervention. *JOURNAL OF ANGIOGENESIS RESEARCH*; 1:4.

Luque A, Slevin M, Turu MM, Juan-Babot O, Badimon L, Krupinski J. CD105 positive neovessels are prevalent in early stage carotid lesions, and correlate with the grade in more advanced carotid and coronary plaques.

JOURNAL OF ANGIOGENESIS RESEARCH; 1:6.

Alcudia JF, Guadall A, Gentile M, Badimon L, Martínez-González J, Rodríguez C. La hipoxia induce la expresión de la lisil oxidasa (LOX) en células endoteliales. *CLÍNICA E INVESTIGACIÓN EN ARTERIOSCLEROSIS*; 21(6):273-80.

Badimon L. Fármacos antiagregantes plaquetarios. *FARMACOLOGIA CARDIOVASCULAR*

Edit. Tamargo J. Ed. Sociedad Española de Cardiología (Capítulo 13): 233-246.

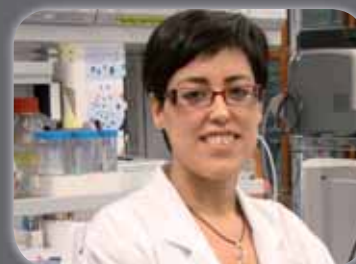
Badimon L, Padró T, Vilahur G. Abordaje Proteómico en Trombosis y Hemostasia. *Congresos de la Seth*. Ed. Sociedad Española de Trombosis y Hemostasia.

Peña Sendra E., Villaverde Grote CA, Badimon L. Fibrinógeno-fibrina y metaloproteinasas, de la hemostasia y la trombosis a la regulación molecular de la homeostasis de la pared vascular. *Congresos de la Seth*. Ed. Sociedad Española de Trombosis y Hemostasia; 12 (97-10): 12009



Inflammation and Vascular Remodelling

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Main lines Of research

- Inflammation and vascular remodelling. Regulation of vascular homeostasis by lysyl oxidase (LOX).
- Molecular and cellular mechanisms in atherosclerosis.
- Molecular basis of abdominal aortic aneurysm (AAA).

Grants

- Rodríguez, C. Mecanismos implicados en el control de la homeostasis vascular por la Lisil Oxidasa. Beca FEA/SEA 2009: Investigación Básica - SEA y FEA

Challenges

- Identify and characterize the components of MEX involved in the appearance, progression and complication of atherosclerosis and AAA.
- Characterize new cellular and molecular mechanisms in the modulation of ECM stability.
- Determine the role of LOX and other enzymes that modify MEX in the development of cardiovascular diseases such as atherosclerosis and AAA.
- Characterize the role of LOX in the control of vascular homeostasis and identify genes modulated by this enzyme in vascular cells.
- Identify new therapeutic targets, progression markers and biomarkers in atherosclerosis and AAA.

***TIF: 30.942 **AIF: 5.15**

Scientific production

INDEXED PUBLICATIONS

- 01** Orbe, J; Rodríguez, JA; Calvayrac, O; Rodríguez-Calvo, R; Rodríguez, C; Roncal, C; de Lizarrondo, SM; Barrenetxe, J; Reverter, JC; Martínez-González, J; Páramo, JA. Matrix metalloproteinase-10 is upregulated by thrombin in endothelial cells and increased in patients with enhanced thrombin generation. *ARTERIOSCLEROSIS THROMBOSIS AND VASCULAR BIOLOGY*; 29(12):2109-2116
I.F.: 7.235
- 02** Beltrán, AE; Briones, AM; García-Redondo, AB; Rodríguez, C; Miguel, M; Álvarez, Y; Alonso, MJ; Martínez-González, J; Salices, M. p38 MAPK contributes to angiotensin II-induced COX-2 expression in aortic fibroblasts from nor-

motensive and hypertensive rats. *JOURNAL OF HYPERTENSION*; 27(1):142-154

I.F.: 4.988

- 03** Rodríguez, C; Alcludia, JF; Martínez-González, J; Guadall, A; Raposo, B; Sánchez-Gómez, S; Badimon, L. Statins normalize vascular lysyl oxidase down-regulation induced by proatherogenic risk factors. *CARDIOVASCULAR RESEARCH*; 83(3):595-603
I.F.: 5.801

- 04** Martorell, L; Gentile, M; Rius, J; Rodríguez, C; Crespo, J; Badimon, L; Martínez-González, J. The Hypoxia-Inducible factor 1/NOR-1 axis regulates the survival response of endothelial cells to hypoxia. *MOLECULAR AND CELLULAR BIOLOGY*; 29(21):5828-5842
I.F.: 6.057

REVIEW

- 05** Rodríguez, C; Slevin, M; Rodríguez-Calvo, R; Kumar, S; Krupinski, J; Tejerina, T; Martínez-González, J. Modulation of endothelium and endothelial progenitor cell function by Low-Density Lipoproteins: Implications for vascular repair, angiogenesis and vasculogenesis. *PATHOBIOLOGY*; 76(1):11-22
I.F.: 2.410

- 06** Rodríguez, C; González-Díez, M; Badimon, L; Martínez-González, J. Sphingosine-1-phosphate: A bioactive lipid that confers high-density lipoprotein with vasculoprotection mediated by nitric oxide and prostacyclin. *THROMBOSIS AND HAEMOSTASIS*; 101(4):665-673
I.F.: 4.451

*Total Impact Factor.
**Average Impact Factor.



Biomarkers for Disease Status

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Mónica Barco ICCIC

Main lines Of research

- Identification of new biomarkers of atherothrombosis and ischaemic heart disease with potential use in diagnosis and prognosis, performing studies in cell cultures, animal models of cardiovascular disease and human samples of patients with coronary heart disease risk factors.

Awards

- Special Mention for the Best Communication presented at the 22nd National Conference of the Spanish Arteriosclerosis Society in 2009: Padró, Suades R, Badimon L. Activation of platelets with thrombin induces the liberation of microparticles rich in pro-atherosclerotic proteins.

Grants

- SAFE-T - Safer And Faster Evidence-based Translation consortium under the EU Innovative Medicines Initiative - Joint Undertaking (IMI-JU). Biobank leader (WP7).

Challenges

- Advance research aiming to identify and characterize new biomarkers of vascular injury, atherothrombotic disease and/or ischaemic, coronary and cerebrovascular syndromes using post-genomic techniques.
- Generate new information on potential soluble biomarkers (in serum, plasma) and in microparticles circulating in blood, as well as in blood and/or vascular cells, using proteomic techniques based on liquid chromatography and bidimensional electrophoresis, antibody array systems and mass spectrometry (MALDI-ToF/ToF; lineal ion trap).
- Validate biomarkers identified in the diagnosis and prognosis of cardiovascular and/or cerebrovascular disease using specific quantitative techniques (confocal microscope, ELISA, multiplex assays etc).
- Characterize molecular and functional mechanisms for which the selected biomarkers in cardiovascular pathology (biology of systems).
- Consolidate the Proteomic Platform.
- Lead and launch the BIOBANK for the SAFE-T European project.



***TIF: 29.961 **AIF: 5.99**

INDEXED PUBLICATIONS

- 01** Vilahur, G; Hernández-Vera, R; Molins, B; Casani, L; Durán, X; Padró, T; Badimon, L. Short-term myocardial ischemia induces cardiac modified C-reactive protein expression and proinflammatory gene (cyclooxygenase-2, monocyte chemoattractant protein-1, and tissue factor) upregulation in peripheral blood mononuclear cells. *J THROMB HAEMOST*; 7(3):485-93. **I.F.: 6.069**
- 02** Bieker R, Kessler T, Schwöppe C, Padró T, Persigehl T, Bremer C, Dreischalück J, Kolkmeier A, Hein-

del W, Mesters RM, Berdel WE. Infarction of tumor vessels by NGR-peptide-directed targeting of tissue factor: experimental results and first-in-man experience. *BLOOD*; 113(20):5019-27 **I.F.: 10.555**

- 03** Vilahur G, Casaní L, Peña E, Durán X, Juan-Babot O, Badimon L. Induction of RISK by HMG-CoA reductase inhibition affords cardioprotection after myocardial infarction. *ATHEROSCLEROSIS*; 206(1):95-101 **I.F.: 4.522**

- 04** Camino-López S, Badimon L, González A, Canals D, Peña E, Llo-

rente-Cortés. Aggregated LDL induces tissue factor by inhibiting sphingomyelinase activity in human vascular smooth muscle cells. *J THROMB HAEMOST*; 7(12):2137-46 **I.F.: 6.069**

REVIEW

- 05** Badimon, L; Vilahur, G; Padró, T. Lipoproteins, Platelets and Atherothrombosis. *REV ESP CARDIOL*; 62:1161-78. **I.F.: 2.746**

*Total Impact Factor.
**Average Impact Factor.

OTHER PUBLICATIONS

Badimon L, Padró T, Vilahur G. Abordaje Proteómico en Trombosis y Hemostasia. Conmemoración de la historia de la SETH en su 25 Congreso. Ed. Sociedad Española de Trombosis y Hemostasia; pp 255-259

Peña E, A-Villaverde C, Badimon L. Fibrinógeno-fibrina y metaloproteinasas, de la hemostasia y la trombosis a la regulación molecular de la homeostasis de la pared vascular. Conmemoración de la historia de la SETH

en su 25 Congreso. Ed. Sociedad Española de Trombosis y Hemostasia; pp 195-199



AREA 2

Genetic, metabolic and inflammatory diseases

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Genetic Diseases

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Main lines
Of research

- **Pharmacogenetics:** genetic determinants in drug-response profiles.
- **Monogenic muscular disorders:** dystrophinopathies, dysferlinopathies, limb girdle dystrophies. Myotonic dystrophy.
- **Hereditary breast/ovarian cancer.**
- **Motor neuron disorders:** pathogenic mechanisms during human development and validation of biological markers for therapeutic follow-up.
- **Monogenic blood disorders:** genetic determinants of haemochromatosis. Genetic and structural analysis of the factor VIII gene.

Grants

- Baiget, M. Support for Research Groups in Catalonia. Genetics in Neurological Diseases Group. 2009SGR 1299. Amount: 42,640.00 €

Challenges

- **Pharmacogenetics:**
 - Study of VEGF-related genes as pharmacogenetic markers for cancer treatment.
 - Analysis of metabolic folate pathway genes in therapeutic protocols.
- **Muscular dystrophies:**
 - Study of post-transcriptional regulation of the dystrophin gene using nonsense-mediated decay analysis in DNA from patients with Duchenne muscular dystrophy.
- **Hereditary breast/ovarian cancer:**
 - DNA studies to classify DNA variants found in the BRCA1 and BRCA2 genes as pathogenic or neutral.
 - Study of CTCs as prognostic markers of response to treatment, overall and disease-free survival in patients with locally advanced and disseminated breast cancer.
- **Hereditary motor neurone diseases:**
 - Development of organotypic cultures from bone marrow and muscle, and generation of iPS from fibroblasts or keratinocytes from patients.
 - Broadening the spectrum of study of motor neuron diseases such as bulbar and spinal muscular atrophy, distal muscular atrophies and amyotrophic lateral sclerosis.
- **Monogenic hereditary haematological diseases:**
 - Study of genetic factors in the appearance of inhibitors to treatment with factor VIII and in the variability of phenotypic expression in haemophilia A.



INDEXED PUBLICATIONS

- 01** A. Altés;V. Bach;A. Ruiz;A. Esteve;A. F. Remacha;M. P. Sardà;J. Féllez;M. Baiget. Does the SLC40A1 gene modify HFE-related haemochromatosis phenotypes? *ANNALS OF HEMATOLOGY*. 88(4):341-345
I.F.: 2.919
- 02** A. Altés;V. Bach;A. Ruiz;A. Esteve;J. Féllez;A. F. Remacha;M. P. Sardà;M. Baiget. Mutations in HAMP and HJV genes and their impact on expression of clinical hemochromatosis in a cohort of 100 Spanish patients homozygous for the C282Y mutation of HFE gene. *ANNALS OF HEMATOLOGY*; 88 (10): 951-955
I.F.: 2.919
- 03** N. Freixenet;A. Remacha;E. Berlanga;A. Caixas;O. Giménez-Palop;F. Blanco-Vaca;V. Bach;M. Baiget;Y. Sánchez;J. Féllez;J. M. González-Clemente. Serum soluble transferrin receptor concentrations are increased in central obesity. Results from a screening programme for hereditary hemochromatosis in men with hyperferritinemia. *CLINICA CHIMICA ACTA*; 400:111-116.
I.F.: 2.535
- 04** Alias;S. Bernal;P. Fuentes-Prior;M. J. Barceló;E. Also;R. Martínez-Hernández;F. J. Rodríguez-Álvarez;Y. Martín;E. Aller;E. Grau;A. Pecina;G. Antinolo;E. Galan;A. L. Rosa;M. Fernández-Burriel;S. Borrego;J. M. Millán;C. Hernández-Chico;M. Baiget;E. Tizzano. Mutation update of spinal muscular atrophy in Spain: molecular characterization of 745 unrelated patients and identification of four novel mutations in the SMN1 gene. *HUMAN GENETICS*; 125(1): 29-39
I.F.: 4.523
- 05** A. J. Ramsay;V. Quesada;M. Sánchez;C. Garabaya;M. P. Sardà;M. Baiget;A. Remacha;G. Velasco;C. López-Otín. Matrip-tase-2 mutations in iron-refractory iron deficiency anemia patients provide new insights into protease activation mechanisms. *HUMAN MOLECULAR GENETICS*; 18(19): 3673-3683
I.F.: 7.386
- 06** D. Valverde;I. Pereiro;E. Vallespin;C. Ayuso;S. Borrego;M. Baiget. Complexity of Phenotype-Genotype Correlations in Spanish Patients with RDH12 Mutations. *INVESTIGATIVE OPHTHALMOLOGY & VISUAL SCIENCE*; 50(3):1065-1068
I.F.: 3.431
- 07** R. Riveiro-Álvarez;M. J. Trujillo-Tiebas;A. Giménez-Pardo;M. García-Hoyos;M. A. López-Martínez;J. Aguirre-Lambán;B. García-Sandoval;S. V. F. del Pozo;D. Cantalapie-dra;A. Ávila-Fernández;M. Baiget;C. Ramos;C. Ayuso. Correlation of Genetic and Clinical Findings in Spanish Patients with X-linked Juvenile Retinoschisis. *INVESTIGATIVE OPHTHALMOLOGY & VISUAL SCIENCE*; 50(9):4342-4350
I.F.: 3.431
- 08** P. González-Pérez;P. Gallano;L. González-Quereda;E. Rivas-Infante;S. Teijeira;C. Navarro;J. Bautista-Lorite. Phenotypic variability in a Spanish family with a Caveolin-3 mutation. *JOURNAL OF THE NEUROLOGICAL SCIENCES*; 276:95-98
I.F.: 2.324
- 09** Hasanzad M, Azad M, Kahrizi K, Saffar BS, Nafisi S, Keyhanidou Z, Azimian M, Refah AA, Also E, Urtiz-berea JA, Tizzano EF, Najmabadi H. Carrier frequency of SMA by quantitative analysis of the SMN1 deletion in the Iranian population. *EUROPEAN JOURNAL OF NEUROLOGY*; 17(1):160-162
I.F.: 2.510
- 10** Infante M, Durán M, Lasa A, Acedo A, de la Hoya M, Esteban-Cardena E, Sanz DJ, Pérez-Cabornero L, Lastra E, Miner C, Velasco EA. Two founder BRCA2 mutations predispose to breast cancer in young women. *BREAST CANCER RES TREAT*.
I.F.: 4.696
- 11** R. Belvis;E. F. Tizzano;J. Martí-Fábregas;R. G. Leta;M. Baena;F. Carreras;G. Pons-Lladó;M. Baiget;J. L. Martí-Vilalta. Mutations in the NKX2-5 gene in patients with stroke and patent foramen ovale. *CLINICAL NEUROLOGY AND NEUROSURGERY*; 111(7):574-578
I.F.: 1.303
- 12** R. Martínez-Hernández;C. Soler-Botija;E. Also;L. Alias;L. Caselles;I. Gich;S. Bernal;E. F. Tizzano. The Developmental Pattern of Myotubes in Spinal Muscular Atrophy Indicates Prenatal Delay of Muscle Maturation. *JOURNAL OF NEUROPATHOLOGY AND EXPERIMENTAL NEUROLOGY*; 68(5):474-481
I.F.: 4.564
- 13** Paradas C, González-Quereda L, De Luna N, Gallardo E, García-Consuegra I, Gómez H, Cabello A, Illa I, Gallano P. A new phenotype of dysferlinopathy with congenital onset. *NEUROMUSCULAR DISORDERS*; 19(1):21-25
I.F.: 2.977
- 14** A. C. Antoniou;O. M. Sinilnikova;L. McGuffog;S. Healey;H. Nevanlinna;T. Heikkinen;J. Simard;A. B. Spurdle;J. Beesley;X. Q. Chen;S. L. Neuhausen;Y. C. Ding;F. J. Couch;X. S. Wang;Z. Fredericksen;P. Peter-longo;B. Peissel;B. Bonanni;A. Viel;L. Bernard;P. Radice;C. I. Szabo;L. Foretova;M. Zikan;K. Claes;M. H. Greene;P. L. Mai;G. Rennert;F. Lejbkovic;I. L. Andrulis;H. Ozelcik;G. Glendon;A. M. Gerdes;M. Thomassen;L. Sunde;M. A. Caligo;Y. Laitman;T. Kontorovich;S. Cohen;B. Kaufman;E. Dagan;R. G. Baruch;E. Friedman;K. Harbst;G. Barbany-Bustanza;J. Rantala;H. Ehrencrona;P. Karlsson;S. M. Domchek;K. L. Nathanson;A. Osorio;I. Blanco;A. Lasa;J. Benítez;U. Hamann;F. B. L. Hogervorst;M. A. Rookus;J. M. Collee;P. Devilee;M. J. Ligtenberg;R. B. van der Luijt;C. M. Aalfs;Q. Waisfisz;J. Wijnen;C. E. P. van Roozendaal;S. Peock;M. Cook;D. Frost;C. Oliver;R. Platte;D. G. Evans;F. Lalloo;R. Eeles;L. Izatt;R. Davidson;C. Chu;D. Eccles;T. Cole;S. Hodgson;A. K. Godwin;D. Stoppa-Lyonnet;B. Buecher;M. Leóne;B. Bressac-de Paillerets;A. Remenieras;O. Caron;G. M. Lenoir;N. Sevenet;M. Longy;S. F. Ferrer;F. Prieur;D. Goldgar;A. Mirón;E. M. John;S. S. Buys;M. B. Daly;J. L. Hopper;M. B. Terry;Y. Yassin;C. Singer, et al. Common variants in LSP1, 2q35 and 8q24 and breast cancer risk for BRCA1 and BRCA2 mutation carriers. *HUMAN MOLECULAR GENETICS*; 18(22):4442-4456
I.F.: 7.386

*Total Impact Factor.
**Average Impact Factor.

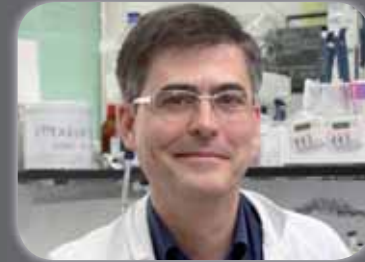
OTHER PUBLICATIONS

E. Tizzano. Spinal muscular atrophy during human development: where are the early pathogenic findings? *ADV EXP MED BIOL*; 652:225-35



Metabolic Bases of Cardiovascular Risk

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Main lines
Of research

- HDL and susceptibility to arteriosclerosis: modification of the relationship by metabolic disorders, genetic modification and drug intervention.
- Genetic determinants of metabolic factors of cardiovascular risk: dyslipidemia, type 2 diabetes, hyperhomocysteinemia.
- Positive health effects of phytosterols.
- Development, validation and application of new clinical laboratory methods in the field of metabolic and cardiovascular medicine.

Challenges

- Analyse the effects of diabetes mellitus in reverse cholesterol transport in vivo.
- Determine the pathogenic relevance of alterations in cholesterol metabolism in diabetic retinopathy.
- Evaluate whether the phytosterol inhibition of intestinal absorption of cholesterol influences macrophage-specific reverse transport in vivo.
- Evaluate the importance of liver lipase and endothelial lipase on macrophage-specific reverse cholesterol transport in vivo.
- Study anti-cancer mechanisms of phytosterol action in depth.
- Define the genes/polymorphisms in chromosome 3p related to type 2 diabetes
- Demonstrate the relationship of the four SNPs identified in the NNMT gene with homocysteine and thrombosis in a case-control study.
- Develop new molecular techniques to study hereditary hypolipemias (abetalipoproteinemia).

Grants

- Méndez, J. MIA 2009. Amount: 44,000.00 €
- Escolà, JC. Functional analysis of the antiatherogenic properties of HDL (in vivo macrophage reverse cholesterol transport and antioxidant capacity) in animal models of type 2 diabetes mellitus and arteriosclerosis. PS09/00178. Amount: 92,565.00 €



*TIF: 25.360 **AIF: 5.072

INDEXED PUBLICATIONS

ARTICLE

01 C. Rosales;B. K. Gillard;H. S. Courtney;F. Blanco-Vaca;H. J. Pownall. Apolipoprotein Modulation of Streptococcal Serum Opacity Factor Activity against Human Plasma High-Density Lipoproteins. *BIOCHEMISTRY*;48(33):8070-8076.
I.F.: 3.226

02 N. Freixenet;A. Remacha;E. Berlanga;A. Caixas;O. Giménez-Palop;F. Blanco-Vaca;V. Bach;M. Baiget;Y. Sánchez;J. Félez;J. M. González-Clemente. Serum soluble transferrin receptor concen-

trations are increased in central obesity. Results from a screening programme for hereditary hemochromatosis in men with hyperferritinemia. *CLINICA CHIMICA ACTA*; 400(39845):111-116.

I.F.: 2.535

03 Mälarstig A, Buil A, Souto JC, Clarke R, Blanco-Vaca F, Fontcuberta J, Peden J, Andersen M, Silveira A, Barlera S, Seedorf U, Watkins H, Almasy L, Hamsten A, Soria JM. Identification of ZNF366 and PTPRD as Novel Determinants of Plasma Homocysteine in a Family-based Genome-wide Association Study. *BLOOD*; 114(7):1417-22.

I.F.: 10.555

REVIEW

04 J. C. Escolà-Gil;N. Rotllán;J. Julve;F. Blanco-Vaca. In vivo macrophage-specific RCT and antioxidant and antiinflammatory HDL activity measurements: New tools for predicting HDL atheroprotection. *ATHEROSCLEROSIS*; 206(2):321-327.

I.F.: 4.522

05 L. Calpe-Berdiel;J. C. Escolà-Gil;F. Blanco-Vaca. New insights into the molecular actions of plant sterols and stanols in cholesterol metabolism. *ATHEROSCLEROSIS*; 203(1):18-31.

I.F.: 4.522

*Total Impact Factor.

**Average Impact Factor.

OTHER PUBLICATIONS

L. Calpe-Berdiel;J. Méndez-González; F. Blanco-Vaca;J. C. Escolà-Gil. Increased plasma levels of plant sterols and atherosclerosis: A controversial issue. *CURRENT ATHEROSCLEROSIS REPORTS*; 11(5):391-398.

N Rotllán, JC Escolà-Gil, Calpe-Berdiel L, Blanco-Vaca F. Efecto de la expresión de la PTEC, el gemfibrozilo y la rosiglitazona en el transporte inverso de colesterol desde macrófagos a heces in vivo. *CLÍNICA E INVESTIGACIÓN EN ARTERIOSCLEROSIS*; 21:232-239.

E. De Juan-Franco, A Pérez, V Ribas, JA Sánchez-Maldonado, F. Blanco-Vaca, J Ordóñez-Llanos, JL Sánchez-Quesada. Standardization of a method to evaluate the antioxidant capacity of high-density lipoproteins. *INTERNATIONAL JOURNAL OF BIOMEDICAL SCIENCE*; 5:402-410.



Inflammatory Diseases

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**Main lines
Of research**

- The role of the natural immune system in the development of autoimmune and inflammatory processes.
- Immunological response and clinical course in immunomodulator treatment.
- The role of autoantibodies, components of the adaptive immunity system, in the pathogenesis of autoimmune processes, and their use as diagnostic and prognostic markers in these diseases.
- Mechanisms involved in immunodeficiency.

Challenges

- Research into the role of innate immunity molecules in the development and control of inflammatory processes, in the appearance of autoimmune phenomena, immunodeficiencies, infections, cardiovascular diseases and development of tumours.
- Analysis of the evolution of immunological parameters and their correlation with clinical response to treatment with immunomodulators.
- Role of TLR and STAT signalling in inflammatory diseases.
- Involvement of STAT family of transcription factors in response to superantigens.
- Study of mechanisms implicated in immunodeficiency caused by alterations of the CD8a molecule.
- Effects of rituximab in immunological variables and their correlation with the clinical response in patients with inflammatory diseases.
- Role of perivascular adipocytes and TRL signalling pathways in the development of atherosclerosis.
- Inflammation and rejection in heart transplantation.
- Effects of immunobiological treatments on immunological variables.

Grants

- De la Calle, O. Redirection of T cell specificity against peptides of the WT1 tumour antigen restricted by HLA-A2. Translational preclinical study. 09/00310. Amount: **104,665.00 €**.
- Vidal, S. TLRs involvement in intestinal tumorigenesis: study of the inflammation mechanisms measured by TLRs in intestinal tumorigenesis. PS09/00132. Amount: **111,925.00 €**



INDEXED PUBLICATIONS

- 01** E. Cantó;E. Moga;E. Ricart;O. García-Bosch;E. García-Planella;C. Juárez;S. Vidal. MDP-Induced Selective Tolerance to TLR4 Ligands: Impairment in NOD2 Mutant Crohn's Disease Patients. *INFLAMMATORY BOWEL DISEASES*; 15(11):1686-1696.
I.F.: 4.643
- 02** M. Labrador-Horrillo;M. A. Martínez;A. Selva-Ocallaghan;J. F. Delgado;X. Martínez-Gómez;E. Trallero-Araguas;J. L. Rodríguez-Sánchez;M. Vilardell-Tarres. Anticyclic citrullinated peptide and anti-keratin antibodies in patients with idiopathic inflammatory myopathy. *RHEUMATOLOGY*; 48(6):676-679.
I.F.: 4.236
- 03** D. Middleton;F. González;M. Fernández-Vina;J. M. Tiercy;S. G. E. Marsh;M. Aubrey;M. G. Bicalho;A. Canossi;V. Carter;S. Cate;F. R. Guerini;P. Loiseau;M. Martinetti;M. E. Moraes;V. Morales;J. Perasaari;M. Setterholm;M. Sprague;S. Tavoularis; M. Torres;S. Vidal;C. Witt;G. Wohlwend;K. L. Yang. A bioinformatics approach to ascertaining the rarity of HLA alleles. *TISSUE ANTIGENS*; 74(6):480-485.
I.F.: 2.330
- 04** L. Martínez-Martínez;C. González-Santesteban;M. Agustí-Martí;E. Pérez-Ranz;O. de la Calle-Martín. A novel HLA-Cw*07 variant, HLA-Cw*0760, identified by sequence-based typing in a bone marrow donor. *TISSUE ANTIGENS*; 74(2):172-173.
I.F.: 2.330
- 05** Rojas-García R, Gallardo E, De Luna Salva N, Juárez C, Martínez-Hernández E, Díaz-Manera J, Carvajal A, Casasnovas C, Fages E, Povedano M, Valldeoriola F, Illa . Bulbar involvement in patients with antiganglioside antibodies against anti-neunac (alpha 2-3) Gal. *J NEUROL NEUROSURG PSYCHIATRY*. 2009 SEP 2. [EPUB AHEAD OF PRINT]; 13(2):180-1.
I.F.: 4.869
- 06** Briones J, Moga E, Espinósa I, Vergara C, Álvarez E, Villa J, Bordes R, Delgado J, Prat J, Sierra J. Bcl-10 protein highly correlates with the expression of phosphorylated p65 NF-kappaB in peripheral T-cell lymphomas and is associated with clinical outcome. *HISTOPATHOLOGY*; 54(4):478-8.
I.F.: 3.855
- 07** Álvarez E, Moga E, Barquinero J, Sierra J, Briones J. Dendritic and tumor cell fusions transduced with adenovirus encoding CD40L eradicate B-cell lymphoma and induce a Th17-type response. *GENE THER*; 17(4):469-477
I.F.: 4.745
- 08** Barnadas MA, Gelpí C, Martínez L, Curell R, Martíno R, Alomar A. Acquired bullous dermatosis associated with IgA multiple myeloma: a case report. *J CUTAN PATHOL*.
I.F.: 1.486
- 09** Barnadas MA, Curell R, Alomar A, Gelpí C. Paraneoplastic pemphigus with negative direct immunofluorescence in epidermis or mucosa but positive findings in adnexal structures. *J CUTAN PATHOL*; 36(1):34-38
I.F.: 1.486

*TIF: 25.360 **AIF: 5.072

*Total Impact Factor.
**Average Impact Factor.



Endocrinology, Diabetes and Nutrition

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Main lines Of research

- Endocrine gland neoplasms (endocrine oncology).
- Immunogenetics of diabetes mellitus.
- Therapeutic optimization in diabetes mellitus.
- Telemedical artificial pancreas.
- Prevention of obesity, diabetes, hyperlipidemia, complications of diabetes and cardiovascular risk.
- Primary and secondary hyperlipidemias.
- Endocrine disorders and pregnancy.
- Telemedicine and other new technologies applied to endocrine, metabolic and nutritional disorders.

Grants

- De Leiva, A. Investigate the predictive-diagnostic value of molecular markers that capture a genetic signature of poor prognosis in thyroid samples, and study their involvement in the tumor differentiation process. PS09/02286. Amount: **243,815.00 €**
- De Leiva, A. Support for Research Groups in Catalonia. Diabetes and Other Endocrine Disorders Group. 2009SGR 806. Amount: **47,840.00 €**

Challenges

Endocrine cancer:

- Study human thyrocyte cultures, developing and maintaining cell lines in cultures of healthy thyroid tissue, benign processes (adenoma), and differentiated, poorly differentiated and anaplastic epithelial carcinomas. Functional studies.
- Investigate whether the molecular mechanisms involved in the prognostic prediction (thyroid cytology) will help define new therapeutic targets for thyroid carcinoma of epithelial origin.

Immunogenetics of diabetes mellitus (DM):

- Research efficient prevention of DM in women with antecedents of gestational diabetes based on assessment of their pathogenic heterogeneity, characterizing the different types (autoimmune, LADA, type 2 prediabetes), through appropriate interventions (immunoregulation, behaviour modification and insulin sensitizers).
- Optimize DB therapy.
- Continue development of telemedicine and other new technologies applied to endocrine, metabolic and nutrition disorders.
- Fully develop the telemedical artificial pancreas developed by EDUAB-HSP and GBT-UPM, CIBER-BBN groups. Perform clinical trials in different groups (DM-1, DM-2, gestational diabetes, preconception diabetes, adults and children).
- Prevention of obesity, diabetes, hyperlipidemia, complications of diabetes and cardiovascular risk.
- Research into primary and secondary hyperlipidemias.
- Exploration and evaluation of the benefits of the PREDIRCAM platform for the prevention and optimal treatment of DM-2 and cardiometabolic risk, as well as the metabolic syndrome and hyperlipidemia secondary to DM.



*TIF: 28.611 **AIF: 4.08

INDEXED PUBLICATIONS

01 G. García-Sáez;M. E. Hernando;I. Martínez-Sarriegui;M. Rigla;V. Torralba;E. Brugués;A. de Leiva;E. J. Gómez. Architecture of a wireless Personal Assistant for telemedical diabetes care. INTERNATIONAL JOURNAL OF MEDICAL INFORMATICS; 78(6):391-403

I.F.: 3.126

02 E. Mato;M. Lucas;J. Petriz;R. Gomis;A. Novials Identification of a pancreatic stellate cell population with properties of progenitor cells: new role for stellate cells in the pancreas. BIOCHEMICAL JOURNAL; 421:181-191

I.F.: 5.155

03 W. Ricart;J. López;J. Mozas;A. Pericot; M. A. Sancho;N. González;M. Balsells;R. Luna;A. Cortázar;P.

Navarro;O. Ramírez;B. Flández;L. F. Pallardo;A. Hernández;J. Ampudia; J. M. Fernández-Real; I. Hernández-Aguado; R. Corcoy; Carpenter Spanish Grp Study Impact. Maternal glucose tolerance status influences the risk of macrosomia in male but not in female fetuses. JOURNAL OF EPIDEMIOLOGY AND COMMUNITY HEALTH; 63(1)64-6883

I.F.: 3.043

04 M. I. Hawa;C. Thivolet;D. Mauricio;I. Alemanno;E. Cipponeri; D. Collier; S. Hunter;R. Buzzetti;A. de Leiva;P. Pozzilli;R. D. G. Leslie;Lada Grp Action. Metabolic Syndrome and Autoimmune Diabetes: Action LADA 3. DIABETES CARE ; 32(1):160-164

I.F.: 6.718

05 J. Armengol;J. Vehi;M. A. Sainz;P. Herrero;E. R. Gelso SQualTrack: A

Tool for Robust Fault Detection. IEEE TRANSACTIONS ON SYSTEMS MAN AND CYBERNETICS PART B-CYBERNETICS; 39(2):475-488

I.F.: 3.007

06 M. Balsells;A. García-Patterson;I. Gich;R. Corcoy. Maternal and Fetal Outcome in Women with Type 2 Versus Type 1 Diabetes Mellitus: A Systematic Review and Metaanalysis. JOURNAL OF CLINICAL ENDOCRINOLOGY & METABOLISM.

I.F.: 6.202

07 J. J. Espinós-Gómez;R. Corcoy;J. Calaf. Prevalence and predictors of abnormal glucose metabolism in Mediterranean women with polycystic ovary syndrome. GYNECOLOGICAL ENDOCRINOLOGY.

I.F.: 1.360

*Total Impact Factor.

**Average Impact Factor.

OTHER PUBLICATIONS

Antonio Pérez Pérez; Pedro Conthe Gutiérrez; Manuel Aguilar Diosdado;

Vicente Bertomeu Martínez; Pedro Galdós Anuncibay; Gonzalo García de Casasola; Ramón Gomis de Barbarà; José Luis Palma Gamíz; Manuel

Puig Domingo; Ángel Sánchez Rodríguez. Hospital treatment of hyperglycemia. ENDOCRINOL NUTR.



Pituitary Gland Disorders

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CIBER-ER

Main lines Of research

- "Morbimortality, low grade inflammation and cardiovascular risk in patients with acromegaly or Cushing's syndrome" FIS PI05/0448.
- ERCUSYN: "European Registry on Cushing's syndrome". SANCO, EU Public Health Program: PHP A800200; www.ercusyn.eu.
- "Neuroradiological, neuropsychological and clinical study of endogenous hypercortisolism: comparison of Cushing's syndrome and chronic major depressive disorder" FIS 08/0302.
- Validation of psychological properties of specific questionnaires to evaluate health-related quality of life (HRQoL) in Cushing's syndrome and acromegaly.
- "Study of signal transduction of GH in muscle by gene expression in a C2C12 cell line stimulated with GH".

Grants

- Webb, SM; Bernal, J. Study of gh signal transduction in muscle by gene expression profiling of cell line c2c12 stimulated with gh. Intramural ciberer intra/09/747,1. Amount: 16,000.00 €
- Posadas, M; Webb, SM. Integrating rare disease databases of ciberer research groups in the register of rare diseases. Intramural ciberer intra/09/758,2. Amount: 14,000.00 €

Challenges

- Investigate the neuropsychological, neuroradiological and clinical correlation of patients with endogenous hypercortisolism (due to Cushing's syndrome or chronic major depressive disorder) or exogenous exposure to low-dose glucocorticoids (due to treatment of adrenal insufficiency or rheumatoid arthritis). Similar studies for acromegaly.
- Study gene expression in cultured muscle cells after exposure to GH, by means of microarrays.
- Validate psychological properties of questionnaires specifically developed to evaluate QoL in patients with Cushing's syndrome or acromegaly.
- Evaluate long-term morbidity and mortality in patients who have had Cushing's syndrome or acromegaly in the last 25 years.
- Analyse and update the European database of patients with Cushing's syndrome (ERCUSYN); 200 patients from 20 countries were included by the end of 2009.
- Conduct in vitro molecular analysis of operated pituitary adenomas in coordination with the Department of Biochemistry and Molecular Biology at the University of Córdoba (Spain).



*TIF: 33.785 **AIF: 5.63

INDEXED PUBLICATIONS

- 01** María-José Barahona; Nuria Sucunza; Eugenia Resmini; José-Manuel Fernández-Real; Wifredo Ricart; José-María Moreno-Navarrete; Teresa Puig; Ana M. Wagner; José Rodríguez-Espinosa; Jordi Farrérons; Susan M. Webb. Deleterious effects of glucocorticoid replacement on bone in women after long-term remission of Cushing's syndrome. *J BONE MINER RES*; 24(11):1841-6. **I.F.: 6.043**
- 02** Nuria Sucunza; M. José Barahona; Eugenia Resmini; José-Manuel Fernández-Real; Wifredo Ricart; Jordi Farrérons; José Rodríguez Espinosa; Ana-María Marín; Teresa Puig; Susan M. Webb. A Link between Bone Mineral Density and Serum Adiponectin and Visfatin Levels in Acromegaly. *JOURNAL OF CLINICAL ENDOCRINOLOGY & METABOLISM*; 94(10):3889-3896. **I.F.: 6.202**
- 03** S. M. Webb; C. J. Strasburger; D. J. Mo; M. L. Hartman; S. Melmed; H. Jung; W. F. Blum; A. F. Attanasio; C. C. S. Int Advisory Board Hypo. Changing Patterns of the Adult Growth Hormone Deficiency Diagnosis Documented in a Decade-Long Global Surveillance Database. *JOURNAL OF CLINICAL ENDOCRINOLOGY & METABOLISM*; 94(2):392-399. **I.F.: 6.202**
- 04** M.J. Barahona, N. Sucunza, E. Resmini, J.M. Fernández-Real, W. Ricart, J.M. Moreno, T. Puig, J. Farrérons, S.M. Webb. Persistent increase in body fat mass and inflammation despite long-term cured Cushing's syndrome. *J CLIN ENDOCRINOL METAB*; 94(9):3365-3371. **I.F.: 6.202**
- 05** J Ybarra, E Resmini, F Planas, F Navarro-López, J Pujadas, SM Webb, JMPou. Relationship between adiponectin and left atrial size in uncomplicated obese patients: adiponectin, a link between fat and heart. *OBESITY SURGERY*; 19(9):1324-1332. **I.F.: 2.934**
- 06** Durán-Prado M, Gahete MD, Martínez-Fuentes AJ, Luque RM, Quintero A, Webb SM, Benito-López P, Leal A, Schulz S, Gracia-Navarro F, Malagón MM, Castaño J. Identification and characterization of two novel truncated but functional isoforms of the somatostatin receptor subtype 5 differentially present in pituitary tumors. *J CLIN ENDOCRINOL METAB*; 94(7):2634-2643. **I.F.: 6.202**

*Total Impact Factor.
**Average Impact Factor.

OTHER PUBLICATIONS

Alicia Santos; Eugenia Resmini; María-Antonia Martínez; Camelia Martí; Juan Ybarra; Susan M. Webb. Quality of life in patients with pituitary tumors.

CURR OPIN ENDOCRINOL DIABETES OBES; 16(4):299-303.

Camelia Martí; Alicia Santos; Juan Ybarra; María Antonia Martínez; Eugenia Resmini; Olga Roig; Susan M.

Webb; M. José Barahona. Role of health-related quality of life in clinical practice: subjectivity in evidence. *ENDOCRINOL NUTR*; 56(6):331-6.



Digestive Diseases

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Main lines Of research

Experimental research:

- Experimental rat model of cirrhosis and ascites.
- Mechanisms and prevention of bacterial translocation in rats with cirrhosis.
- Experimental model of spontaneous and induced bacterial peritonitis: physiopathology and treatment.

Clinical investigation:

- Physiopathology, diagnosis, treatment and prevention of bac-

terial infections, ascites and hepatorenal syndrome in cirrhosis.

- Diagnosis and treatment of hepatic encephalopathy in cirrhosis.
- Physiopathology, diagnosis, treatment and prevention of digestive
- haemorrhage due to portal hypertension of non-varicose origin
- Chronic hepatitis B and C: diagnosis and treatment.
- Diagnosis and treatment of hepatocarcinoma.

- Physiopathology, diagnosis and treatment of intestinal inflammatory disease (inflammatory bowel disease).
- Polyps and colorectal cancer: epidemiology and early diagnosis.
- Diagnosis and treatment of acute pancreatitis.
- Prevention of acute pancreatitis post-ERCP.
- Chronic pancreatitis and pancreatic neoplasms: molecular studies, early detection and treatment.

Challenges

- Consolidate the CIBERehd research group studying complications in cirrhosis.
- Expand the hepatology research lab and develop new research.
- Consolidate the AGAUR research group on portal hypertension.
- Consolidate the line of research on pancreatic illnesses.
- Consolidate the line of research on inflammatory bowel disease.
- Consolidate the line of research on polyps and colon cancer.
- Develop a line of research on digestive endoscopy.

Grants

- Soriano, G. Relation of polymorphisms of toll-like receptors (TLR) TLR2, TLR4 and TLR9 with the incidence of infections, disease course and inflammatory response in patients with cirrhosis. PS09/00357. Amount: **68,365.00 €**



*TIF: 51.863 **AIF: 5.76

INDEXED PUBLICATIONS

- 01** Erhardt;K. Deterding;Y. Benhamou; M. Reiser;X. Forn;S. Pol;J. L. Calleja;S. Ross;H. C. Spangenberg;J. García-Somaniego;M. Fuchs;J. Enríquez;J. Wiegand;J. Stern;K. Wu;G. Kukolj;M. Marquis;P. Begu-lieu; G. Nehmiz;J. Steffgen;Bilb Study Grp. Safety, pharmacokinetics and antiviral effect of BILB 1941, a novel hepatitis C virus RNA polymerase inhibitor, after 5 days oral treatment. *ANTIVIRAL THERAPY*; 14(1):23-32.
I.F.: 4.322
- 02** Villanueva;C. Aracil;A. Colomo;J. M. López-Balaguér;M. Piqueras;B. González;X. Torras;C. Guarner;J. Balanzó. Clinical trial: a randomized controlled study on prevention of variceal rebleeding comparing nadolol plus ligation vs. hepatic venous pressure gradient-guided pharmacological therapy. *ALIMENTARY PHARMACOLOGY & THERAPEUTICS*; 29(4):397-408.
I.F.: 4.357
- 03** M. Manosa;A. L. S. Román;E. García-Planella; G. Bastida;J. Hinojosa; Y. González-Lama;H. Masnou;E. Doménech. Infliximab Rescue Therapy after Cyclosporin Failure in Steroid-Refractory Ulcerative Colitis. *DIGESTION*; 80(1):30-35.
I.F.: 1.770
- 04** Villanueva;C. Aracil;A. Colomo;V. Hernández-Gea; J. M. López-Balaguér; C. Álvarez-Urturi; X. Torras; J. Balanzó;C. Guarner. Acute Hemodynamic Response to beta-Blockers and Prediction of Long-term Outcome in Primary Prophylaxis of Variceal Bleeding. *GASTROENTEROLOGY*; 137(1):119-128.
I.F.: 12.899
- 05** J. C. García-Pagán;C. Villanueva;A. Albillos;R. Banares;R. Morillas;J. G. Abraldes;J. Bosch;Gr Spanish Variceal Bleeding Study. Nadolol plus isosorbide mononitrate alone or associated with band ligation in the prevention of recurrent bleeding: a multicentre randomised controlled trial. *GUT*; 58(8):1144-1150.
I.F.: 9.357
- 06** Lucena MI, Andrade RJ, Kaplovitz N, García-Cortés M, Fernández MC, Romero-Gómez M, Bruguera M, Hallal H, Robles-Díaz M, Rodríguez-González JF, Navarro JM, Sallieron J, Martínez-Odriozola P, Álvarez R, Borraz Y, Hidalgo R; Spanish Group for the study of drug-induced liver disease. Phenotypic characterization of idiosyncratic drug-induced liver injury: the influence of age and sex. *HEPATOLOGY*; 49(6):2001-9.
I.F.: 10.840
- 07** Navarro-Llavat M, Domènech E, Bernal I, Sánchez-Delgado J, Menterol JM, García-Planella E, Mañosa M, Cabré E, Gassull MA. Prospective, observational, cross-sectional study of intestinal infections among acutely active inflammatory bowel disease patients. *DIGESTION*; 80(1):25-29.
I.F.: 1.770
- 08** E. Cantó;E. Moga;E. Ricart;O. García-Bosch; E. García-Planella;C. Juárez; S. Vidal. MDP-Induced Selective Tolerance to TLR4 Ligands: Impairment in NOD2 Mutant Crohn's Disease Patients. *INFLAMMATORY BOWEL DISEASES*; 15(11):1686-1696.
I.F.: 4.643
- 09** E. M. Targarona;C. Gómez;R. Rovira;J. C. Pernas;C. Balagué;C. Guarner-Argente; S. Sainz;M. Trias. NOTES-Assisted Transvaginal Splenectomy: The Next Step in the Minimally Invasive Approach to the Spleen. *SURGICAL INNOVATION*; 16(3):218-222.
I.F.: 1.905

*Total Impact Factor.
**Average Impact Factor.

OTHER PUBLICATIONS

V. Hernández-Gea;C. García-Alba;G. Soriano;J. Pernas;A. Farré. Coexistence of superior mesenteric artery syndrome and phytobezoar. *GAS-*

TROENTEROLOGIA Y HEPATOLOGIA; 32(2):132-134.

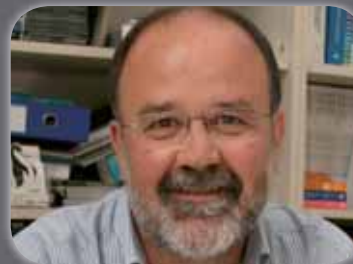
F. Viladrich. What approach should be adopted in patients with a first attack of acute pancreatitis with no

apparent etiology and negative transabdominal ultrasonographic findings? *GASTROENTEROLOGIA Y HEPATOLOGIA*; 32(3):167-168.



Microbiology and Infectious Diseases

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Main lines
Of research

CLINICAL MICROBIOLOGY UNIT

- Study of resistance mechanisms.
- Tuberculosis, epidemiology and antituberculosis resistance mechanisms.
- Molecular biology applications to infectious disease detection, taxonomy and epidemiology.
- Medical care projects.

HIV AND AIDS UNIT

- Medical care projects.
- Study of pathogenic mechanisms

altering body fat distribution.

- Study of metabolic disorders associated with antiretroviral treatment.
- Body composition changes.
- New antiretroviral drugs.
- Cardiovascular risk associated with antiretroviral treatment.
- Comorbid conditions associated with HIV-1 infection.
- Pharmacogenetics (toxicokinetics).
- Bacterial meningitis.

INFECTIOUS PATHOLOGY UNIT

- Restricted-use policies for anti-biotic and antimicrobial agents and suitable use of antimicrobial agents.
- Study of infections associated with foreign bodies (joint prostheses, catheters, cardiac prostheses and pacemakers).
- Study of infections due to multi-resistant microorganisms or requiring isolation.
- Tuberculosis.

Challenges

CLINICAL MICROBIOLOGY UNIT

Resistance mechanisms

- Study of increased resistance as a result of gene carrier-vector spread.
- Continuity of work in the context

of the Spanish Network for Research into Infectious Pathologies (REIPI), heading certain projects (e.g., epidemiology of the class C beta-lactamases in Spain) and cooperating with a project on the epidemiology of resistance to amoxicillin-clavulanic acid.

- Advancement of other research lines, whether in-house or in cooperation with other centres, leading to 3 doctoral theses.

Tuberculosis, epidemiology and antitubercular resistance mechanisms

- Prospective monitoring of primary



and acquired *Mycobacterium tuberculosis* resistance to first- and second-line drugs.

- Molecular detection of resistance using a molecular antibiogram.
- Study of the epidemiology and spread of resistant strains and assessment of the impact of immigration and the contribution of new *M. tuberculosis* families (Beijing, EAI, CAS).

Molecular biology applications to infectious disease detection, taxonomy and epidemiology

- Study of the usefulness of the 16S RNA gene for microbiological diagnosis and molecular identification.
- Genotype characterization of *Cryptosporidium* spp. oocysts from stool samples collected by the HSCSP microbiology service.

Medical care projects

- Continuing with the government health department agreement regarding the development of epidemiological surveillance support functions for nosocomial infections and flaccid paralysis.
- Study of mycoses in depth, especially invasive fusariosis and aspergillosis and respiratory tract viral infections in patients with onco-haematological diseases.
- Continuing with multicentre studies of HIV.
- Monitoring congenital infection in pregnant patients with Chagas disease.

HIV AND AIDS UNIT

Medical care projects

- Continuing with, expanding and, as appropriate, consolidating the care team for HIV-1 infected patients, consisting currently of 3 staff physicians, 4 grant-aided research assistants (including a Río Hortega-funded research assistant) and 2 nurses).
- Continuing with participation in multicentre projects (especially the AIDS network, Gesida, VACH, EuroSIDA and ART collaboration).
- Exploration of participation in clinical trials of new antiretroviral drugs.

- Increasing the number of HIV-1 infected patients attended to in our hospital (given current mortality rates, an estimated annual increase of 50 patients is required).

- Continuing with current clinical research and mixed basic-clinical research lines.

Pathogenic mechanisms altering body fat distribution

- Study of metabolism in pyrimidines and derivatives in the genesis of lipodystrophy associated with HIV-1 and antiretroviral treatment.
- Development of an animal (mouse) model of lipodystrophy.
- Development of in vitro models (adipocyte cultures) to study the adipose toxicity of antiretroviral drugs.
- Study of new manifestations of the lipodystrophy syndrome.
- Development of measurements for antiretroviral drug concentrations in adipose tissue.
- Exploration of the role of inflammation in the pathogenesis of lipodystrophy associated with HIV-1 and antiretroviral treatment.
- Metabolism of uridine and its role in the pathogenesis of lipodystrophy.

Metabolic disorders associated with antiretroviral treatment

- In vivo assessment of metabolic toxicity associated with antiretroviral treatment.
- Development of in vitro models (adipocyte cultures) to study the adipose toxicity of antiretroviral drugs.
- Study of contributing factors to hepatic steatosis in patients receiving antiretroviral treatment.
- Study of pathogenic role of FGF21 in insulin resistance in HIV-1-infected patients.
- Study of role of FABP4 in metabolic disorders associated with antiretroviral treatment.

Body composition

- Definition of normal fat distribution in the general population.
- Establishment of abnormal fat distribution patterns.

- Development of a definition of lipodystrophy associated with HIV-1 and antiretroviral treatment.

New antiretroviral drugs

- Clinical trials of new antiretroviral drugs (phases 2 and 3).
- Ritonavir and non-ritonavir pharmacokinetic potentiation of antiretroviral drugs.

Cardiovascular risk associated with antiretroviral treatment

- Establishment of a multicentre cardiovascular risk cohort.
- Study of antiretroviral treatment-dependent and non-treatment-dependent factors in multicentre cohorts.
- Development of in vitro models (adipose cultures) for the study of adipose toxicity for antiretroviral drugs.

Comorbid conditions associated with HIV-1 infection

- Study of ageing in different tissues associated with HIV-1 infection and antiretroviral treatment.
- Study of fragility in patients with HIV-1 infection and the role of HAART.
- Evaluation of the neurocognitive function in patients with HIV-1 infection with and without antiretroviral treatment.
- Participation in multicentre cohort studies to determine the incidence of specific comorbidities (cancer, HCV, cardiovascular disease, osteogenesis/osteoporosis): EuroSIDA, ART Collaboration, Gesida, VACH, etc.
- Treatment of HCV in patients with HIV-1 and its prognostic significance.

Pharmacogenetics (toxicogenetics)

- Role of enzyme polymorphism of the pyrimidine pathways in the pathogenesis of lipodystrophy.
- Role of enzyme polymorphism of the pyrimidine pathways in the pathogenesis of clinical toxicity (neuropathy, pancreatitis).
- Role of IL28B polymorphism in spontaneous clearance of HCV in the response to antiviral treatment based on interferon and ribavirin.



AREA 2

Genetic, metabolic and inflammatory diseases

Challenges

Bacterial meningitis

- Identification of prognostic factors in adult bacterial meningitis.
- Continuation with a cohort study of adult bacterial meningitis.
- Identification of factors intrinsic to the host in the pathogenesis and prognosis of adult bacterial meningitis and meningococcal disease.

INFECTIOUS PATHOLOGY UNIT

Restricted-use antibiotic and antimicrobial agent policies:

- Suitable use of antimicrobial agents:
 - a. To minimize the appearance of resistance.
 - b. To reduce cost.
 - c. To improve compliance with surgical prophylaxis (at the time

of administration).

Epidemic outbreaks and infections caused by multiresistant microorganisms and microorganisms requiring isolation:

- a. To study epidemiology for our hospital.
- b. To reduce incidence.
- c. To prevent/contain epidemic outbreaks in the hospital and to work with the microbiology department in epidemiology and molecular studies.

Infections associated with foreign bodies (joint prostheses, catheters, cardiac prostheses, pacemakers):

- a. To reduce incidence.
- b. To develop effective conservative treatment regimes.

Infections in transplant patients (heart, haemopoietic progenitors):

- a. To study current epidemiology.

- b. To assess the efficacy of prophylaxis and other preventive measures.

Tuberculosis:

- a. To cooperate in studies of resistance and in new treatment regimes for tuberculosis.

Other care projects:

1. To continue with the government health department agreement regarding the development of support functions as follows:
2. Epidemiological surveillance of nosocomial infections (VINCat).
3. Tuberculosis control: Barcelona-Dreta Tuberculosis Operations Committee (Coordinator: Dr. Sambeat).
4. New influenza control: Barcelona-Dreta Epidemiological Surveillance Operations Committee (Coordinator: López-Contreras).

Further information

CLINICAL MICROBIOLOGY UNIT

- The Microbiology Department website describes our care, teaching and research activities: <http://www.santpau.es/santpau/activitats/inicioMicrobiologia.htm>
- The Microbiology Department has an agreement with the Autonomous Government of Catalonia (Epidemiological Surveillance Department of the General Directorate for Public Health) regarding the epidemiological study of nosocomial outbreaks in Catalonia and the study of flaccid paralysis (included in the WHO poliomyelitis eradication programme).
- The Clinical Microbiology Research Group has been formally recognized as a research group by the Autonomous Government of Catalonia (2005SGR 00249 and 2009SGR01394).
- Member of the Barcelona Tuberculosis Research Unit (REUNI 1995).

- Part of the Spanish Network for Research into Infectious Pathologies (REIPI) subsidized by the Spanish Ministry of Health and Consumer Affairs (RD06/0008/0013).

HIV AND AIDS UNIT

- Part of the Spanish Network for Research into AIDS (RIS) subsidized by the Spanish Ministry of Health and Consumer Affairs.
- Part of the VACH cohort of 22 Spanish hospitals using the same computerized clinical records.
- Part of the EuroSIDA multi-cohort study of European patients.
- Part of the D:A:D multi-cohort study, which has generated vast amounts of data on heart disease in patients with HIV-1 infection.
- Part of ART Collaboration, composed of European and North American cohort studies of antiretroviral treatment.

- Group formally recognized by the Autonomous Government of Catalonia.

INFECTIOUS PATHOLOGY UNIT

- Coordination of the Barcelona-Dreta Tuberculosis Operations Committee (Coordinator: M. Antònia Sambeat).
- Coordination of the Barcelona-Dreta Epidemiological Surveillance Operations Committee (Coordinator: Joaquín López-Contreras).
- Clinical care group in the Spanish Network for Research into Infectious Pathologies (REIPI) (RD06/0008/007; coordinator: Mercè Gurguí). Investigators: Joaquín López-Contreras, Natividad de Benito, Virginia Pomar, Bet Quintana (ICU), M. Antònia Mangués (Pharmacy), Ana Coloma (Emergency), Albert Mauri (Emergency), M. Teresa Álvarez (Emergency).

Grants

- Navarro, F. Study of the prevalence and epidemiology of resistance to beta-lactamase measured by AMPC type plasmid beta-lactamases and carbapenemases in ente-

robacteria in Spain. PS09/00125. Amount: **82,280.00 €**

- Sánchez, F. Creation of a multilingual web-based device for

interactive continuing education for health professionals performing basic haematological tests. 2009-1-FR-LEO5-07397. Amount: **11,236.00 €**



*TIF: 284.312 **AIF: 4.98

INDEXED PUBLICATIONS

CLINICAL MICROBIOLOGY UNIT

- 01** A. Arias, C. Seral, F. Navarro, E. Miró, P. Coll, and F. J. Castillo. 2009. Plasmid-mediated QnrS2 determinant in an *Aeromonas caviae* isolate recovered from a patient with diarrhoea. *CLIN MICROBIOL INFECT*. On line
I.F.: 4.014
- 02** Borrell, S., M. Español, A. Orcau, G. Tudó, F. March, J. A. Caylà, J. M. Jansà, F. Alcaide, N. Martín-Casabona, M. Salvadó, J. A. Martínez, R. Vidal, F. Sánchez, N. Altet, P. Coll, and J. González-Martín. 2009. Factors associated with differences between conventional contact tracing and molecular epidemiology in study of tuberculosis transmission and analysis in the city of Barcelona, Spain. *J CLIN MICROBIOL*; 47:198-204.
I.F.: 4.162
- 03** Borrell, S., M. Español, A. Orcau, G. Tudó, F. March, J. A. Caylà, J. M. Jansà, F. Alcaide, N. Martín-Casabona, M. Salvadó, J. A. Martínez, R. Vidal, F. Sánchez, N. Altet, E. Rey, P. Coll, and J. González-Martín. 2009. Tuberculosis transmission patterns among Spanish-born and foreign-born populations in the city of Barcelona. *CLIN MICROBIOL INFECT*; on line
I.F.: 4.014
- 04** Borrell, S., N. Thorne, M. Español, C. Mortimer, A. Orcau, P. Coll, S. Gharbia, J. González-Martín, and C. Arnold. 2009. Comparison of four-colour IS6110-fAFLP with the classic IS6110-RFLP on the ability to detect recent transmission in the city of Barcelona, Spain. *TUBERCULOSIS (Edinb)*; 89:233-7.
I.F.: 2.536
- 05** Coelho, A., B. Mirelis, C. Alonso-Tarrés, M. N. Larrosa, E. Miró, R. C. Abad, R. M. Bartolomé, M. Castaner, G. Prats, J. R. Johnson, F. Navarro, and J. J. González-López. 2009. Detection of three stable genetic clones of CTX-M-15-producing *Klebsiella pneumoniae* in the Barcelona metropolitan area, Spain. *J ANTIMICROB CHEMOTHER*; 64:8 62-864.
I.F.: 4.352
- 06** Coll, P. 2009. Fármacos con actividad frente a *Mycobacterium tuberculosis*. *ENFERMEDADES INFECCIOSAS Y MICROBIOLOGÍA CLÍNICA*; 27:474-80.
I.F.: 1.393
- 07** Diestra, K., C. Juan, T. Curiao, B. Moya, E. Miró, J. Oteo, T. M. Coque, M. Pérez-Vázquez, J. Campos, R. Cantón, A. Oliver, and F. Navarro. 2009. Characterization of plasmids encoding blaESBL and surrounding genes in Spanish clinical isolates of *Escherichia coli* and *Klebsiella pneumoniae*. *J ANTIMICROB CHEMOTHER*; 63:60-6.
I.F.: 4.352
- 08** Hidalgo, A., R. Parody, R. Martino, F. Sánchez, T. Franquet, A. Giménez, and C. Blancas. 2009. Correlation between high-resolution computed tomography and galactomannan antigenemia in adult hematologic patients at risk for invasive aspergillosis. *EUR J RADIOL*; 71:55-60.
I.F.: 2.645
- 09** Martino, R., J. L. Pinana, R. Parody, D. Valcárcel, A. Sureda, S. Brunet, J. Briones, J. Delgado, F. Sánchez, N. Rabella, and J. Sierra. 2009. Lower respiratory tract respiratory virus infections increase the risk of invasive aspergillosis after a reduced-intensity allogeneic hematopoietic SCT. *BONE MARROW TRANSPLANT*; 44:749-56.
I.F.: 2.998
- 10** Oteo, J., K. Diestra, C. Juan, V. Bautista, A. Novais, M. Pérez-Vázquez, B. Moya, E. Miró, T. M. Coque, A. Oliver, R. Cantón, F. Navarro, and J. Campos. 2009. Extended-spectrum beta-lactamase-producing *Escherichia coli* in Spain belong to a large variety of multilocus sequence typing types, including ST10 complex/A, ST23 complex/A and ST131/B2. *INTERNATIONAL JOURNAL OF ANTIMICROBIAL AGENTS*; 34:173-6.
I.F.: 3.032
- 11** R. Parody, R. Martino, F. Sánchez, M. Subirà, A. Hidalgo, and J. Sierra. 2009. Predicting survival in adults with invasive aspergillosis during therapy for hematological malignancies or after hematopoietic stem cell transplantation: Single-center analysis and validation of the Seattle, French, and Strasbourg prognostic indexes. *AM J HEMATOL*; 84:571-8.
I.F.: 2.610
- 12** Piñana, J. L., R. Martino, P. Barba, N. Margall, M. C. Roig, D. Valcárcel, J. Sierra, and N. Rabella. 2009. Cytomegalovirus infection and disease after reduced intensity conditioning allogeneic stem cell transplantation: single-centre experience. *BONE MARROW TRANSPLANT*; 45:534-42.
I.F.: 2.998
- 13** Rodríguez-Baño, J., J. Alcalá, J. M. Cisneros, F. Grill, A. Oliver, J. P. Horcajada, T. Tórtola, B. Mirelis, G. Navarro, M. Cuenca, M. Esteve, C. Pena, A. C. Llanos, R. Cantón, and A. Pascual. 2009. *Escherichia coli* producing SHV-type extended-spectrum beta-lactamase is a significant cause of community-acquired infection. *J ANTIMICROB CHEMOTHER*; 63:781-4.
I.F.: 4.352
- 14** J. I. Vela, J. Díaz-Cascajosa, F. Sánchez, N. Roselló, and J. A. Buil. Management of endogenous cryptococcal endophthalmitis with voriconazole. *CAN J OPHTHALMOL*; 44:e61-2.
I.F.: 1.443

HIV AND AIDS UNIT

- 15** Crespo M, Ribera E, Suárez-Lozano I, Domingo P, Pedrol E, López-Aldeguer J, Muñoz A, Viladés C, Sánchez T, Viciano P, Teira R, García-Alcalde ML, Vergara A, Lozano F, Galindo MJ, Cosin J, Roca B, Terrón A, Geijo P, Vidal F, Garrido M; VACH Cohort Study Group. Effectiveness and safety of didanosine, lamivudine and efavirenz versus zidovudine, lamivudine and efavirenz for the initial treatment of HIV-infected patients from the Spanish VACH cohort. *J ANTIMICROB CHEMOTHER*; 63(1):189-196.
I.F.: 4.352
- 16** Podzamczar D, Olmo M, Sanz J, Boix V, Negro E, Knobel H, Domingo P, Pineda JA, Vilades C, Quero JH, Force L, Lahoz JG, Muñoz P, Llibre JM, Mariño A, Ortega E, Dalmau D, Gatell JM, Antón E, Sola J, Galindo MJ, Pedrol E, Sanz J, Lima JT, Flores J; NODy Study Group. Safety of Switching Nevirapine Twice Daily to Nevirapine Once Daily in Virologically Suppressed Patients. *J ACQUIR IMMUNE DEFIC SYNDR*; 50(4):390-396.
I.F.: 4.207
- 17** Mallolas J, Podzamczar D, Milinkovic A, Domingo P, Clotet B, Ribera E, Gutiérrez F, Knobel H, Cosin J, Ferrer E, Arranz JA, Roca V, Vidal F, Murillas J, Pich J, Pedrol E, Llibre JM, Dalmau D, García I,

*Total Impact Factor.
**Average Impact Factor.



- Aranda M, Cruceta A, Martínez E, Blanco JL, Lazzari ED, Gatell JM; and the ATAZIP Study Group. Efficacy and Safety of Switching From Boosted Lopinavir to Boosted Atazanavir in Patients With Virological Suppression Receiving a LPV/r-Containing HAART: The ATAZIP Study. *J ACQUIR IMMUNE DEFIC SYNDR*; 51(1):29-36.
I.F.: 4.207
- 18 Domingo P, Suárez-Lozano I, Torres F, Pomar V, Ribera E, Galindo MJ, Cosin J, García-Alcalde ML, Vidal F, López-Aldeguer J, Roca B, González J, Lozano F, Garrido M, the VACH Cohort Study Group. Bacterial meningitis in HIV-1-infected patients in the era of highly active antiretroviral therapy. *J ACQUIR IMMUNE DEFIC SYNDR*; 51(5):582-587.
I.F.: 4.207
- 19 Mothe B, Pérez I, Domingo P, Podzamczar D, Ribera E, Curran A, Viladés C, Vidal F, Dalmau D, Pedrol E, Negredo E, Moltó J, Paredes R, Pérez-Álvarez N, Gatell JM, Clotet B. HIV-1 Infection in Subjects Older than 70: A Multicenter Cross-Sectional Assessment in Catalonia, Spain. *CURR HIV RES*; 7(6):597-600.
I.F.: 1.978
- 20 Suárez-Lozano I, Vicián P, Lacalle JR, Teira R, Lozano F, López-Aldeguer J, Pedrol E, Domingo P, Cosin J, Roca B, Geijo P, Fuente B, Vergara A, Ribera E, Galindo MJ, Zapata A, Sánchez T, Vidal F, Muñoz-Sanz A, Muñoz-Sánchez J, Garrido M. The relationship between antiretroviral prescription patterns and treatment guidelines in treatment-naïve HIV-1 infected patients. *HIV MED*; 10(9):573-579.
I.F.: 2.878
- 21 Negredo E, Miró O, Rodríguez Santiago B, Garrabou G, Estany C, Masabeu A, Force L, Barrufet P, Cucurull J, Domingo P, Alonso C, Bonjoch A, Morén C, Pérez-Álvarez N, Clotet B, the MULTINEKA Study Group. Improvement of mitochondrial toxicity in patients on a nucleoside reverse transcriptase inhibitor-sparing strategy. Results from the MULTINEKA Study. *CLIN INFECT DIS*; 49(6):892-900.
I.F.: 8.195
- 22 Saumoy M, Veloso S, Alonso-Vilaverde C, Domingo P, Chacón MR, Miranda M, Auguet T, Aragonès G, Gutiérrez MM, Viladés C, Peraire J, Sirvent JJ, López-Dupla M, Aguilar C, Vendrell J, Olona M, Richart C, Vidal F, the HIV Lipodystrophy Study Group. PPARγ Pro12Ala polymorphism in HIV-1-infected patients with HAART-related lipodystrophy. *CURR HIV RES*; 7(5):533-540.
I.F.: 1.978
- 23 Santos JR, Llibre JM, Ferrer E, Domingo P, Imaz A, Moltó J, Martín-Iguacel R, Caum C, Podzamczar D, Clotet B. Efficacy and safety of switching from enfuvirtide to raltegravir in patients with virological suppression. *HIV CLIN TRIALS*; 10(6):432-438.
I.F.: 1.626
- 24 Llibre JM, Falcó V, Tural C, Negredo E, Pineda JA, Muñoz J, Ortega E, Videla S, Sirera G, Martínez E, Miralles C, Iribarren J, Galindo MJ, Domingo P, d'Arminio Monforte A, Miró JM, Clotet B. The changing face of HIV/AIDS in treated patients. *CURR HIV RES*; 7(4):365-377.
I.F.: 1.978
- 25 Moreno S, Miralles C, Negredo E, Domingo P, Estrada V, Gutiérrez F, Lozano F, Martínez E. Disorders of body fat distribution in HIV-1-infected patients. *AIDS REV*; 11(3):126-134.
I.F.: 3.786
- 26 Domingo P. Etravirina: un nuevo estándar de potencia y seguridad entre los no análogos de nucleósidos. *ENFERM INFECC MICROBIOL CLIN*; 27(2):1.
I.F.: 1.393
- 27 Domingo P. Posicionamiento de etravirina en el tratamiento antiretroviral de combinación. *ENFERM INFECC MICROBIOL CLIN*.
I.F.: 1.393
- 28 Panel de expertos de Gesida y Plan Nacional sobre el Sida. Recomendaciones from the GESIDA/Spanish AIDS Plan regarding antiretroviral treatment in adults with human immunodeficiency virus infection (update February 2009). *ENFERM INFECC MICROBIOL CLIN* 2009; 27(2):46-51.
I.F.: 1.393
- LETTER**
- 29 Villarroya F, Domingo P, Giral M. The importance of brown adipose tissue. *PPAR RES* 2009; 6:07902; 361(4):417-417.
I.F.: 50,017
- 30 Romero A, González V, Granell M, Matas L, Esteve A, Martró E, Rodrigo I, Pumarola T, Miró JM, Casanova A, Ferrer E, Tural C, del Romero J, Rodríguez C, Caballero E, Ribera E, Casabona J; Standardized Algorithm for Recent HIV Infections (AERIVIH) study group. Recently acquired HIV infection in Spain (2003-2005): introduction of the serological testing algorithm for recent HIV seroconversion. *SEX TRANSM INFECT*; 85(2):106-10.
I.F.: 2.175
- 31 Pérez-Elías MJ, Sánchez-Conde M, Soriano V, Mallolas J, Luque I, Rodríguez-Alcántara F; Fosamprenavir Expanded Access Program Group. Fosamprenavir (GW433908)/ritonavir in HIV-infected patients: efficacy and safety results from the Spanish Expanded Access Program. *ENFERM INFECC MICROBIOL CLIN*; 27(1):28-32.
I.F.: 1.393
- 32 Antiretroviral Therapy Cohort Collaboration (ART-CC), Mocroft A, Sterne JA, Egger M, May M, Grubar S, Furrer H, Sabin C, Fatkenheuer G, Justice A, Reiss P, d'Arminio Monforte A, Gill J, Hogg R, Bonnet F, Kitahata M, Staszewski S, Casabona J, Harris R, Saag M. Variable impact on mortality of AIDS-defining events diagnosed during combination antiretroviral therapy: not all AIDS-defining conditions are created equal. *CLIN INFECT DIS*; 48(8):1138-1151.
I.F.: 8.195
- 33 Peters L, Mocroft A, Soriano V, Rockstroh JK, Losso M, Valerio L, Aldins P, Reiss P, Ledergerber B, Lundgren JD; EuroSIDA Study Group. Hepatitis C virus coinfection does not influence the CD4 cell recovery in HIV-1-infected patients with maximum virologic suppression. *J ACQUIR IMMUNE DEFIC SYNDR*; 50:457-463.
I.F.: 4.207
- 34 Moltó J, Llibre JM, Ribera E, Mínguez C, del Río JS, Pedrol E, Vallecillo G, Cedeño S, Valle M, Miranda C, Negredo E, Clotet B; SQV-HEP Study Group. Saquinavir exposure in HIV-infected patients with chronic viral hepatitis. *J ANTIMICROB CHEMOTHER*; 63:992-7.
I.F.: 4.352
- 35 Sension M, Andrade Neto JL, Grin-sztejn B, Molina JM, Zavala I, González-García J, Donnelly A,



- Phiri P, Ledesma E, McGrath D; 067 Study Group. Improvement in lipid profiles in antiretroviral-experienced HIV-positive patients with hyperlipidemia after a switch to unboosted atazanavir. *J ACQUIR IMMUNE DEFIC SYNDR*; 51:153-62. **I.F.: 4.207**
- 36** Arribas JR, Delgado R, Arranz A, Muñoz R, Portilla J, Pasquau J, Pérez-Eliás MJ, Iribarren JA, Rubio R, Ocampo A, Sánchez-Conde M, Knobel H, Arazo P, Sanz J, López-Aldeguer J, Montes ML, Pulido F; OK04 Study Group. Lopinavir-ritonavir monotherapy versus lopinavir-ritonavir and 2 nucleosides for maintenance therapy of HIV: 96-week analysis. *J ACQUIR IMMUNE DEFIC SYNDR*; 51:147-52. **I.F.: 4.207**
- 37** Arrizabalaga J, Rodríguez-Alcántara F, Castañer JL, Ocampo A, Podzamczar D, Pulido F, Riera M, Sanz J, Pascual-Bernaldez M, Dal-Re R; EPI1109839 Study Group. Prevalence of HLA-B*5701 in HIV-infected patients in Spain (results of the EPI Study). *HIV CLIN TRIALS*; 10:48-51. **I.F.: 1.626**
- 38** Martínez E, Arranz JA, Podzamczar D, Loncá M, Sanz J, Barragán P, Ribera E, Knobel H, Roca V, Gutiérrez F, Blanco JL, Malloles J, Llibre JM, Clotet B, Dalmau D, Segura F, Arribas JR, Cosín J, Barrufet P, Casas E, Ferrer E, Curran A, González A, Pich J, Cruceta A, Arnaiz JA, Miró JM, Gatell JM; BICOMBO Study Team. A simplification trial switching from nucleoside reverse transcriptase inhibitors to once-daily fixed-dose abacavir/lamivudine or tenofovir/emtricitabine in HIV-1-infected patients with virological suppression. *J ACQUIR IMMUNE DEFIC SYNDR*; 51:290-7. **I.F.: 4.207**
- 39** Delaugerre C, Flandre P, Chaix ML, Ghosn J, Raffi F, Dellamonica P, Jaeger H, Shürmann D, Cohen-Codar I, Van PN, Norton M, Taburet AM, Delfraissy JF, Rouzioux C; MONARK Study Group. Protease inhibitor resistance analysis in the MONARK trial comparing first-line lopinavir-ritonavir monotherapy to lopinavir-ritonavir plus zidovudine and lamivudine triple therapy. *ANTIMICROB AGENTS CHEMOTHER*; 53:2934-9. **I.F.: 4.802**
- 40** Kesselring AM, Wit FW, Sabin CA, Lundgren JD, Gill MJ, Gatell JM, Rauch A, Montaner JS, de Wolf F, Reiss P, Mocroft A; Nevirapine Toxicity Multicohort Collaboration. Risk factors for treatment-limiting toxicities in patients starting nevirapine-containing antiretroviral therapy. *AIDS*; 23:1689-99. **I.F.: 4.207**
- 41** Molina JM, Ait-Khaled M, Rinaldi R, Penco G, Baril JG, Cauda R, Soriano V, Pialoux G, Wire MB, Lou Y, Givens N, Craig C, Nichols WG, Barbosa I, Yeo J; TRIAD Study Group. Fosamprenavir/ritonavir in advanced HIV disease (TRIAD): a randomized study of high-dose, dual-boosted or standard dose fosamprenavir/ritonavir in HIV-1-infected patients with antiretroviral resistance. *J ANTIMICROB CHEMOTHER*; 64:398-410. **I.F.: 4.352**
- 42** Cozzi-Lepri A, Phillips AN, Martínez-Picado J, Monforte A, Katlama C, Eg Hansen AB, Horban A, Bruun J, Clotet B, Lundgren JD; EuroSIDA Study Group. Rate of accumulation of thymidine analogue mutations in patients continuing to receive virologically failing regimens containing zidovudine or stavudine: implications for antiretroviral therapy programs in resource-limited settings. *J INFECT DIS*; 200:687-97. **I.F.: 5.865**
- 43** Katlama C, Haubrich R, Lalezari J, Lazzarin A, Madruga JV, Molina JM, Schechter M, Peeters M, Picchio G, Vingerhoets J, Woodfall B, De Smedt G; DUET-1, DUET-2 study groups. Efficacy and safety of etravirine in treatment-experienced, HIV-1 patients: pooled 48 week analysis of two randomized, controlled trials. *AIDS*; 23:2289-300. **I.F.: 4.909**
- 44** INSIGHT-ESPRIT Study Group; SILCAAT Scientific Committee, Abrams D, Lévy Y, Losso MH, Babiker A, Collins G, Cooper DA, Darbyshire J, Emery S, Fox L, Gordin F, Lane HC, Lundgren JD, Mitsuyasu R, Neaton JD, Phillips A, Routy JP, Tambussi G, Wentworth D. Interleukin-2 therapy in patients with HIV infection. *NEW ENGLAND JOURNAL OF MEDICINE*; 361(16):1548-1559. **I.F.: 47.050**
- INFECTIOUS PATHOLOGY UNIT**
- 45** Aguado JM, Torre-Cisneros J, Fortún J, Benito N, Meije Y, Doblás A, Muñoz P. [Consensus document for the management of tuberculosis in solid organ transplant recipients]. *ENFERM INFECC MICROBIOL CLIN*; 27(8):465-73. **I.F.: 1.393**
- 46** Aguado JM, Torre-Cisneros J, Fortún J, Benito N, Meije Y, Doblás A, Muñoz P. Tuberculosis in solid-organ transplant recipients: consensus statement of the group for the study of infection in transplant recipients (GESITRA) of the Spanish Society of Infectious Diseases and Clinical Microbiology. *CLIN INFECT DIS*; 48(9):1276-84. **I.F.: 8.195**
- 47** Bae IG, Federspiel JJ, Miró JM, Woods CW, Park L, Rybak MJ, Rude TH, Bradley S, Bukovski S, de la María CG, Kanj SS, Korman TM, Marco F, Murdoch DR, Plesiat P, Rodríguez-Creixems M, Reinbott P, Steed L, Tattevin P, Tripodi MF, Newton KL, Corey GR, Fowler VG Jr; International Collaboration on Endocarditis-Microbiology Investigator (N. Benito). Heterogeneous vancomycin-intermediate susceptibility phenotype in bloodstream methicillin-resistant *Staphylococcus aureus* isolates from an international cohort of patients with infective endocarditis: prevalence, genotype, and clinical significance. *J INFECT DIS*; 200(9):1355-66. **I.F.: 5.865**
- 48** Benito N, Miró JM, de Lazzari E, Cabell CH, del Rio A, Altclas J, Commerford P, Delahaye F, Dragulescu S, Giamarellou H, Habib G, Kamarulzaman A, Kumar AS, Naciovich FM, Suter F, Tribouilloy C, Venugopal K, Moreno A, Fowler VG Jr; ICE-PCS (International Collaboration on Endocarditis Prospective Cohort Study) Investigators. Health care-associated native valve endocarditis: importance of non-nosocomial acquisition. *ANN INTERN MED*; 150(9):586-94. **I.F.: 16.225**
- 49** Carnicer-Pont D, de Olalla PG, Caylà JA; AIDS Working Group (Appendix: Sambeat MA, Gurguí M). HIV infection late detection in AIDS patients of an European city with increased immigration since mid 1990s. *CURR HIV RES*; 7(2):237-43. **I.F.: 1.978**
- 50** Chu VH, Miró JM, Hoen B, Cabell CH, Pappas PA, Jones P, Stryjewski



ME, Anguera I, Braun S, Muñoz P, Commerford P, Tornos P, Francis J, Oyonarte M, Selton-Suty C, Morris AJ, Habib G, Almirante B, Sexton DJ, Corey GR, Fowler VG Jr; International Collaboration on Endocarditis-Prospective Cohort Study Group (N. Benito). Coagulase-negative staphylococcal prosthetic valve endocarditis--a contemporary update based on the International Collaboration on Endocarditis: prospective cohort study. *HEART*; 95(7):570-6.

I.F.: 5.385

51 Dorman SE, Johnson JL, Golberg S, Muzanye G, Padayatchi N, Bozeman L, Heiling CM, Bernardo J, Choudhri S, Grosset JH, Guy E, Guyadeen P, Leus MC, Maltas G, Menzies D, Nuermberger EL, Villarino M, Vernon A, Chaisson RE; Tuberculosis Trial Consortium (Appendix: M.A. Sambeat). Substitution of moxifloxacin for isoniazid during intensive phase treatment of pulmonary tuberculosis. *AM J RESPIR CRIT CARE MED*; 180(3):273-280.

I.F.: 10.689

52 Duránte-Mangoni E, Bradley S, Selton-Suty C, Tripodi MF, Barsic B, Bouza E, Cabell CH, Ramos AI, Fowler V Jr, Hoen B, Konečný P, Moreno A, Murdoch D, Pappas P, Sexton DJ, Spelman D, Tattevin P, Miró JM, van der Meer JT, Utili R; International Collaboration on Endocarditis Prospective Cohort Study Group (N. Benito). Current

features of infective endocarditis in elderly patients: results of the International Collaboration on Endocarditis Prospective Cohort Study. *ARCH INTERN MED*; 168(19):2095-103.

I.F.: 9.813

53 García-Goez JF, Linares L, Benito N, Cervera C, Cofán F, Ricart MJ, Navasa M, Pérez-Villa F, González J, Moreno A. Tuberculosis in solid organ transplant recipients at a tertiary hospital in the last 20 years in Barcelona, Spain. *TRANSPLANT PROC*; 41(6):2268-70.

I.F.: 0.944

54 Murdoch DR, Corey GR, Hoen B, Miró JM, Fowler VG Jr, Bayer AS, Karchmer AW, Olaison L, Pappas PA, Moreillon P, Chambers ST, Chu VH, Falcó V, Holland DJ, Jones P, Klein JL, Raymond NJ, Read KM, Tripodi MF, Utili R, Wang A, Woods CW, Cabell CH; International Collaboration on Endocarditis-Prospective Cohort Study (ICE-PCS) Investigators. Clinical presentation, etiology, and outcome of infective endocarditis in the 21st century: the International Collaboration on Endocarditis-Prospective Cohort Study. *ARCH INTERN MED*; 169(5):463-73.

I.F.: 9.813

55 Pomar V, Costa J. A 24 year-old man with fever and cutaneous rash. *MED CLIN (BARC)*; 133(3):100-6.

I.F.: 1.231

56 Renaud B, Labarere J, Coma E,

Santin A, Hayon J, Gurgui M, Camus N, Roupie E, Hemery F, Herve J, Salloum M, Fine MJ, Brun-Buisson C. Risk stratification of early admission to the intensive care unit of patients with no major criteria of severe community-acquired pneumonia: development of an international prediction rule. *CRIT CARE*; 13(2):R54.

I.F.: 4.931

57 Renaud B, Santin A, Coma E, Camus N, Van Pelt D, Hayon J, Gurgui M, Roupie E, Hervé J, Fine MJ, Brun-Buisson C, Labarère J. Association between timing of intensive care unit admission and outcomes for emergency department patients with community-acquired pneumonia. *CRIT CARE MED*; 37(11):2867-74.

I.F.: 6.373

58 Torre-Cisneros J, Doblás A, Aguado JM, San Juan R, Blanes M, Montejo M, Cervera C, Len O, Carratala J, Cisneros JM, Bou G, Muñoz P, Ramos A, Gurgui M, Borrell N, Fortún J, Moreno A, Gavalda J. Spanish Network for Research in Infectious Diseases. Tuberculosis after solid-organ transplant: incidence, risk factors, and clinical characteristics in the RESITRA (Spanish Network of Infection in Transplantation) cohort. *CLIN INFECT DIS*; 48(12):1657-65.

I.F.: 8.195

OTHER PUBLICATIONS

EDITORIAL MATERIAL

Benito N, Moreno-Camacho A. Chapter 5: Pulmonary Infections in HIV Patients in the Highly Active Antiretroviral Therapy Era. En: Agustí C, Torres A, editors. *Pulmonary Infection in the Immunocompromised Patient: Strategies for Management*. John Wiley & Sons Ltd; 2009. p. 117-141

Benito N, Marcos MA. Infecciones por coronavirus (excepto el síndrome respiratorio agudo grave). En: Farréras P, Rozman C, editores. *Medicina Interna*. 16ª ed. Madrid: Elsevier; 2009. p. 2514-2515.

Benito N, Marcos MA. Síndrome respiratorio agudo grave. En: Farréras P, Rozman C, editores. *Medicina Interna*. 16ª ed. Madrid: Elsevier; 2009. p. 2515-2517.

Benito N Colaborador en: Mensa J, Gatell JM, Martínez JA, Torres A, Vidal F, Serrano R, editores. *Terapéutica antimicrobiana*. Infecciones en urgencias. 3ª, 4ª ed. y ed. en prensa Barcelona: Editorial Antares; 2009.

Gurguí M, Codina MG, Tórtola MT, Martró E, Ausina V. Infecciones causadas por el virus de Epstein Barr. *Mononucleosis infecciosa en Farréras-Rozman Medicina Interna Decimosexta edición*. Barcelona. Elsevier España 2009; 2501-2507.

Gurguí M, Sánchez F. Principios generales del tratamiento de las enfermedades infecciosas. *Antifúngicos en Farréras-Rozman Medicina Interna Decimosexta edición*. Barcelona. Elsevier España 2009; 2226-2231.

Miró JM, Manzardo C, Benito N, Blanco JL, Alsina M y Vall M. Infecciones de transmisión sexual. En: Gatell JM, Clotet B, Podzamczar D, Miró JM, Mallolas J, editores. *Guía práctica del SIDA*. 9ª ed. Barcelona: Masson; 2009 (en prensa)

Sitges Serra A, Gurguí Ferrer M. Infecciones postoperatorias y post-traumáticas en Farréras-Rozman Medicina Interna Decimosexta edición. Barcelona. Elsevier España 2009; 2610-2614.



Multi-organ Damage

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Main lines
Of research

Bone metabolism and osteoporosis:

- Analysis of the genetic influence in osteoporosis by means of aggregation studies in families of 3 or more generations with a minimum of 15 members. Research on the influence of biological markers and the predictive capacity of whole body composition and bone mineral density of the hip and spine.
- Bone structure study with quantitative CT of hip and spine, analysing the contribution of trabecular and cortical components using HRCT.
- Study of biomechanical resistance of hip and spine with HRCT using the QCT PRO software package.
- Study of bone resistance using the hip structural analysis system and DXA in members of different families.

Hypertension and vascular risk:

- Comparison of haemodynamic and vascular effects of ARAII

+ diuretics vs. ARAII + calcium antagonists.

Clinical management, general internal medicine and geriatrics:

- Health care quality indexes (mortality, readmissions, etc). Prospective data have been collected over the last year. Some initial findings have been published and presented at congresses.

Rheumatology:

Rheumatoid arthritis

- Evaluation of lymphocyte (B) subpopulations and reactivation of disease after the depletion of B lymphocytes due to anti-CD20 (rituximab) treatment.
- Evaluation of innate immune and adaptive immune cell responses in rituximab treatment in the depletion and reactivation phases after depletion.
- Evaluation of serologic components in the reactivation of rheumatoid arthritis after reactivation with rituximab.

- Study of the LIRB1 polymorphisms in rheumatoid arthritis with absence of a shared epitope. Evaluation in the prognosis of rheumatoid arthritis.

- Pharmacokinetics of methotrexate in collaboration with Héctor Corominas and Montserrat Baiget.

Psoriasis

- Evaluation of enthesitis by ECO-Doppler. In collaboration with Lluís Puig and Carmen Moragues.

Scleroderma

- Patterns of capillaroscopy and correlation with auto-antibodies.

Gout

- The patient's perspective.

Other studies

- Study of biomarkers in biopsies of several joint disorders in collaboration with Frank Pessleer and Ralf Shumaker. Evaluation of C1q, antibodies anti-C1q, properdin and other auto-antibodies in relation to lupus nephropathy in collaboration with José Ballarín at the Puigvert Foundation.



Challenges

The core goal is to develop and coordinate research in several internal medicine areas.

More specifically our aims are as follows:

- To merge the hypertension and lipids departments in the HSCSP and create a vascular risk unit. Currently being considered as a

model that would enable us to work jointly with the hypertension unit of the Puigvert Foundation.

- To establish stable work relations between the bone metabolism and complex disease genomics units of the HSCSP and the bone metabolism unit of the Hospital del Mar-Municipal Institute for
- Medical Research (IMIM) and the Faculty of Biology of the University of Barcelona.
- To strengthen the ties between the rheumatology and immunology departments of the HSCSP regarding the study of immunological diseases.

*TIF: 87.057 **AIF: 3.95

Scientific production

INDEXED PUBLICATIONS

- 01 Esther Francia;Olga Torres;Ana Laiz;Domingo Ruiz; Ignasi Gich; Jordi Casademont. Ability of physiological parameters versus clinical categories to predict mortality on admission to an internal medicine ward. EUR J INTERN MED; 20(6):636-9. I.F.: 1.385
- 02 M. Bernardo;F. Canas;J. R. Banegas;J. Casademont; Y. Riesgo; C. Varela;Ricava Study Grp. Prevalence and awareness of cardiovascular risk factors in patients with schizophrenia: A cross-sectional study in a low cardiovascular disease risk geographical area. EUROPEAN PSYCHIATRY; 24(7):431-441. I.F.: 3.080
- 03 Marína Clopes;O. H. Torres Bonafonte;J. López-Contreras González;M. A. Sambeat Doménech; J. Casademont Pou. HCV-HIV coinfecting woman with exercise dyspnea of 6 months evolution. REV CLIN ESP; 209(9):451-3. I.F.: 0.584
- 04 O. Kohlmann;A. Roca-Cusachs;S. Laurent;R. E. Schmieder;R. R. Wenzel;R. Fogari. Fixed-dose manidipine/delapril versus losartan/hydrochlorothiazide in hypertensive patients with type 2 diabetes and microalbuminuria. ADVANCES IN THERAPY; 26(3):313-324. I.F.: 0.936
- 05 B. Renaud;J. Labarere;E. Coma;A. Santin;J. Hayon;M. Gurgui;N. Camus;E. Roupie;F. Hemery;J. Herve;M. Salloum;M. J. Fine;C. Brun-Buisson. Risk stratification of early admission to the intensive care unit of patients with no major criteria of severe community-acquired pneumonia: development of an international prediction rule. CRITICAL CARE; 13(2):. I.F.: 4.931
- 06 B. Renaud;A. Santin;E. Coma;N. Camus;D. Van Pelt;J. Hayon;M. Gurgui;E. Roupie;J. Herve;M. J. Fine;C. Brun-Buisson;J. Labarere. Association between timing of intensive care unit admission and outcomes for emergency department patients with community-acquired pneumonia. CRITICAL CARE MEDICINE; 37(11):2867-2874. I.F.: 6.373
- 07 M. Clopes;D. F. Agulló;J. López-Contreras;A. Roca. Arterial hypertension in patients treated with bevacizumab. MED CLIN (BARC); 133(9):360-361. I.F.: 1.231
- 08 N. Benito;J. M. Miró;E. de Lazzari;C. H. Cabell;A. del Rio;J. Altclas;P. Commerford;F. Delahaye;S. Dragulescu;H. Giamarellou;G. Habib;A. Kamarulzaman;A. S. Kumar;F. M. Nacinovich;F. Suter;C. Tribouilloy;K. Venugopal;A. Moreno;V. G. Fowler;Ice-Pcs Investigators. Health Care-Associated Native Valve Endocarditis: Importance of Non-nosocomial Acquisition. ANNALS OF INTERNAL MEDICINE; 150(9):586-595. I.F.: 16.225
- 09 J. M. Aguado;J. Torre-Cisneros;J. Fortun;N. Benito;Y. Meije;A. Doblas;P. Muñoz. Tuberculosis in Solid-Organ Transplant Recipients: Consensus Statement of the Group for the Study of Infection in Transplant Recipients (GESITRA) of the Spanish Society of Infectious Diseases and Clinical Microbiology. CLINICAL INFECTIOUS DISEASES; 48(9):1276-1284. I.F.: 8.195
- 10 J. M. Aguado;J. Torre-Cisneros;J. Fortun;N. Benito;Y. Meije;A. Doblas;P. Muñoz. Consensus document for the management of tuberculosis in solid organ transplant recipients. ENFERMEDADES INFECCIOSAS Y MICROBIOLOGÍA CLÍNICA; 27(8):465-473. I.F.: 1.393
- 11 Banegas JR, Messerli FH, Waeber B, Rodríguez-Artalejo F, de la Sierra A, Segura J, Roca-Cusachs A, Aranda P, Ruilope LM. Discrepancies between office and ambulatory blood pressure: clinical. AM J MED; 122(12):1136-1141. I.F.: 4.466
- 12 Marína Clopés I, Filella Agulló D, López-Contreras J, Roca A. [Arterial hypertension in patients treated with bevacizumab]. MED CLIN (BARC); 133(9):360-1. I.F.: 1.231
- 13 Armario P, Oliveras A, Hernández Del Rey R, Poch E, Larrouse M, Roca-Cusachs A, de la Sierra A. Prevalence of target organ damage and factors associated with cardiovascular events in subjects with refractory hypertension. MED CLIN (BARC); 133(4):127-31. I.F.: 1.231
- 14 Oliveras A, Armario P, Hernández-Del Rey R, Arroyo JA, Poch E, Larrouse M, Roca-Cusachs A, de la Sierra A. Urinary albumin excretion is associated with resistant hypertension. J Hum Hypertens; 24(1):27-33. I.F.: 2.289
- 15 Kohlmann O Jr, Roca-Cusachs A, Laurent S, Schmieder RE, Wenzel RR, Fogari R. Fixed-dose manidipine/delapril versus losartan/hydrochlorothiazide in hypertensive patients with type 2 diabetes and microalbuminuria. ADV THER; 26(3):313-24. I.F.: 0.936
- 16 Banegas JR, Jovell A, Abarca B, Aguilar Diosdado M, Aguilera L, Aranda P, Bertoméu V, Capilla P, Conthe P, De Álvaro F, Fernández-Pro A, Formiguera X, Frías J, Guerrero L, Llisterri JL, Lobos JM, Macías JF, Martín De Francisco AL,

*Total Impact Factor.
**Average Impact Factor.



- Millán J, Morales JC, Palomo V, Roca-Cusachs A, Román J, Sanchis C, Sarriá A, Segura J, De La Sierra A, Verde L, Zarco J, Ruilope LM. [Hypertension and health policy in Spain]. *MED CLIN (BARC)*; 132(6):222-9.
I.F.: 1,258
- 17 Eastell R, Nickelsen T, Marín F, Barker C, Hadji P, Farrérons J, Audran M, Boonen S, Brixen K, Gomes JM, Obermayer-Pietsch B, Avramidis A, Sigurdsson G, Glüer CC. Sequential treatment of severe postmenopausal osteoporosis after teriparatide: final results of the randomized, controlled European Study of Forsteo (EUROFORST). *J BONE MINER RES*; 24(4):726-36.
I.F.: 6.043
- 18 Recker RR, Marín F, Ish-Shalom S, Möricke R, Hawkins F, Kapetanios G, de la Peña MP, Kekow J, Farrérons J, Sanz B, Oertel H, Stepan J. Comparative effects of teriparatide and strontium ranelate on bone biopsies and biochemical markers of bone turnover in postmenopausal women with osteoporosis. *J BONE MINER RES*; 24(8):1358-68.
I.F.: 6.043
- 19 de la Sierra A, Roca-Cusachs J, Redon R, Marín M, Luque M, de la Figuera M, García-García L, Falkon C, Cenit Study Working Grp. Effectiveness and Tolerability of Fixed-Dose Combination Enalapril plus Nitrendipine in Hypertensive Patients Results of the 3-Month Observational, Post-Marketing, Multicentre, Prospective CENIT Study. *CLINICAL DRUG INVESTIGATION*; 29(7):459-469.
I.F.: 1.414
- 20 María-José Barahona; Nuria Sucunza; Eugenia Resmini; José-Manuel Fernández-Real; Wifredo Ricart; José-María Moreno-Navarrete; Teresa Puig; Ana M. Wagner; José Rodríguez-Espinosa; Jordi Farrérons; Susan M. Webb. Deleterious effects of glucocorticoid replacement on bone in women after long-term remission of Cushing's syndrome. *J BONE MINER RES*; 24(11):1841-6.
I.F.: 6.043
- 21 Nuria Sucunza; M. José Barahona; Eugenia Resmini; José-Manuel Fernández-Real; Wifredo Ricart; Jordi Farrérons; José Rodríguez-Espinosa; Ana-María Marín; Teresa Puig; Susan M. Webb. A Link between Bone Mineral Density and Serum Adiponectin and Visfatin Levels in Acromegaly. *JOURNAL OF CLINICAL ENDOCRINOLOGY & METABOLISM*; 94(10):3889-3896.
I.F.: 6.202
- 22 M.J. Barahona, N. Sucunza, E. Resmini, J.M. Fernández-Real, W. Ricart, J.M. Moreno, T. Puig, J. Farrérons, S.M. Webb. Persistent increase in body fat mass and inflammation despite long-term cured Cushing's syndrome. *J CLIN ENDOCRINOL METAB*; 94(9):3365-3371.
I.F.: 6.202
- 23 Casademont J. Insuficiencia cardíaca con función sistólica conservada: fisiopatología. *EUROPEAN PSYCHIATRY*; 2:11-4.
I.F.: 3.080

OTHER PUBLICATIONS

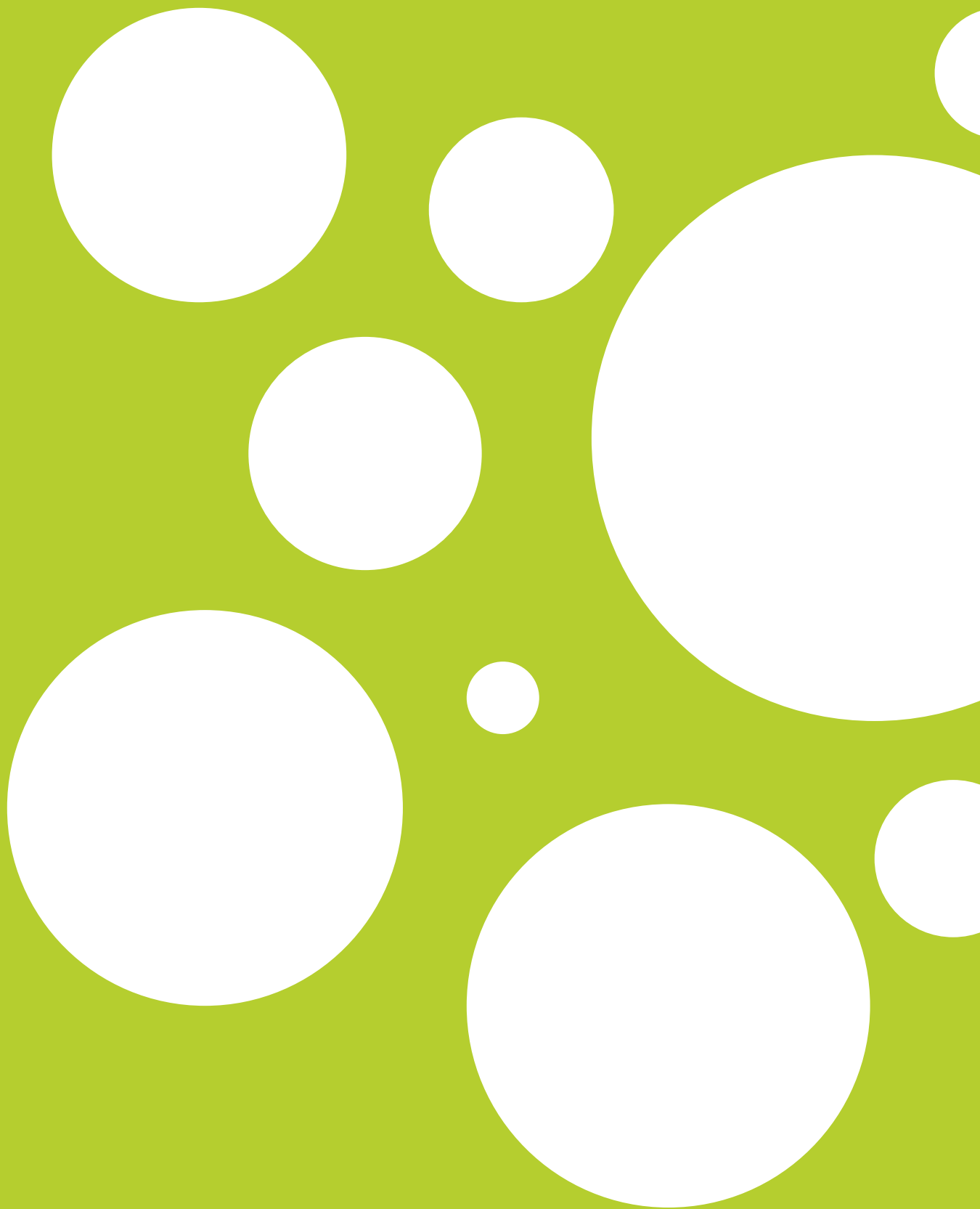
C. Farsang; L. Naditch-Brule; A. Avogaro; J. Ostergren; P. Verdecchia; A. Maggioni; P. van de Borne; R. Lins; A. Roca-Cusachs. Where Are We With the Management of Hypertension? From Science to Clinical Practice.

JOURNAL OF CLINICAL HYPERTENSION; 11(2):66-73.

Jordi Mascaró; Montse Barceló; Esther Francia; Olga Torres; Domingo Ruiz. Infections in the elderly patient. *REV ESP GERIATR GERONTOL*; 44(5):280-8

EDITORIAL MATERIAL

Porcel JM, Casademont J, Selva A, Capdevila JA (eds.). *Medicina Consultiva: Problemas médicos del paciente quirúrgico*. Ed. de la Universitat de Lleida 2009



AREA 3

Haematological and oncological diseases

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Clinical Oncology

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Main lines
Of research

Clinical research:

- Development of new therapeutic strategies.
- Studies to improve tumour staging.
- Studies to detect residual disease.

Translational research:

- Personalized anticancer therapy.
- Studies of predictive and prognostic molecular markers.

Challenges

- Consolidate clinical research into cancer.
- Foster translational research into cancer in cooperation with other internal and external research groups.
- Consolidate the bank of tumours, DNA and serum for patients with cancer diagnosed and treated in our hospital.
- Develop new early-stage drugs (phase 0/1 studies).

Grants

- Tibau, A. Biological markers predictive of response to primary chemotherapy with anthracyclines and taxanes in breast cancer. SEOM 2009. Amount: 10,000.00 €
- Ramón y Cajal Asensio, Teresa. Breast density, genetic susceptibility and breast cancer in women from high risk families (project DM-BRCA). PS09/01024. Amount: 45,980.00 €

*TIF: 102.180 **AIF: 10.21

Scientific
Production

INDEXED PUBLICATIONS

ARTICLE

01 J. M. Rosa-Rosa;G. Pita;M. Urioste; G. Llorca;J. Brunet;C. Lazaro;I. Blanco; T. R. Y. Cajal;O. Díez;M. de la Hoya;T. Caldes;M. I. Tejada;A. González-Neira;J. Benítez. Genome-wide Linkage Scan Reveals Three Putative Breast-Cancer-Susceptibility Loci. AMERICAN JOUR-

NAL OF HUMAN GENETICS; 84(2):115-122.
I.F.: 12.303

02 E. Aranda;M. Valladares;M. Martínez-Villacampa;M. Benavides;A. Gómez;B. Massutti;E. Marcuello;M. Constenla;J. C. Cámara; A. Carrato; R. Dueñas;M. Reboredo; M. Navarro; E. Díaz-Rubio. Randomized study of weekly irinotecan plus high-dose 5-fluorouracil (FUIRI)

versus biweekly irinotecan plus 5-fluorouracil/leucovorin (FOLFIRI) as first-line chemotherapy for patients with metastatic colorectal cancer: a Spanish Cooperative Group for the Treatment of Digestive Tumors Study. ANNALS OF ONCOLOGY; 20(2): 251-257.
I.F.: 5.647

03 Barnadas;M. Gil;S. González;I. Tus-

*Total Impact Factor.
**Average Impact Factor.



- quets; M. Muñoz; A. Arcusa; L. Prieto; M. Margeli-Vila; A. Moreno. Exemestane as primary treatment of oestrogen receptor-positive breast cancer in postmenopausal women: a phase II trial. BRITISH JOURNAL OF CANCER; 100(3):442-449.
I.F.: 4.346
- 04** G. von Minckwitz; M. Schwenkglenks; T. Skacel; G. H. Lyman; A. L. Pousa; P. Bacon; V. Easton; M. S. Aapro. Febrile neutropenia and related complications in breast cancer patients receiving pegfilgrastim primary prophylaxis versus current practice neutropaenia management: Results from an integrated analysis. EUROPEAN JOURNAL OF CANCER; 45(4):608-617.
I.F.: 4.121
- 05** M. Aapro; A. Barnadas; R. C. Leónard; M. Marangolo; M. Untch; L. Ukarma; H. U. Burger; A. Scherhag; B. Osterwalder. What is the impact of anti-thrombotic therapy and risk factors on the frequency of thrombovascular events in patients with metastatic breast cancer receiving epoetin beta?. EUROPEAN JOURNAL OF CANCER; 45(17):2984-2991.
I.F.: 4.121
- 06** D. Fortuny; J. Balmana; B. Grana; A. Torres; T. R. Y. Cajal; E. Darder; N. Gadea; A. Velasco; C. López; J. Sanz; C. Alonso; J. Brunet. Opinion about reproductive decision making among individuals undergoing BRCA1/2 genetic testing in a multicentre Spanish cohort. HUMAN REPRODUCTION; 24(4):1000-1006.
I.F.: 3.859
- 07** J. Maurel; A. López-Pousa; R. de las Penas; J. Fra; J. Martín; J. Cruz; A. Casado; A. Poveda; J. Martínez-Trufero; C. Balana; M. A. Gómez; R. Cubedo; O. Gallego; B. Rubio-Viqueira; J. Rubio; R. Andrés; I. Sevilla; J. J. de la Cruz; X. G. del Muro; J. M. Buesa. Efficacy of Sequential High-Dose Doxorubicin and Ifosfamide Compared With Standard-Dose Doxorubicin in Patients With Advanced Soft Tissue Sarcoma: An Open-Label Randomized Phase II Study of the Spanish Group for Research on Sarcomas. JOURNAL OF CLINICAL ONCOLOGY; 27(11):1893-1898.
I.F.: 17.793
- 08** Rosell R, Moran T, Queralt, Porta R, Cardenal F, Cams C, Majem M, López-Vivanco G, Massuti B, González-larriba JL, Isla D, Provencio M, Insa A. Screening for epidermal growth factor receptor mutations in lung cancer. NEW ENGLAND JOURNAL OF MEDICINE; 361(10):958-u38.
I.F.: 47.050

REVIEW

- 09** T. Monleón-Getino; A. Barnadas-Molins; M. Roset-Gamisans. Sequential designs and intermediate analysis in clinical research: size vs difficulty. MED CLIN (BARC); 132(11):437-442.
I.F.: 1.231
- 10** E. Lerma; A. Barnadas; J. Prat. Triple Negative Breast Carcinomas Similarities and Differences With Basal Like Carcinomas. APPLIED IMMUNOHISTOCHEMISTRY & MOLECULAR MORPHOLOGY; 17(6):483-494.
I.F.: 1.709

OTHER PUBLICATIONS

- Carrato; L. P. A. Rodríguez; A. R. Les-cure; Amcf de Tejerina; E. D. R. García; P. P. Segura; M. C. Figueiras; R. G. Carbonero; J. G. Codina; A. L. Hernández; J. P. M. Rey; M. M. Jiménez; J. I. M. Cámara; J. A. M. Nogueira; A. R. Domínguez; Seom Spanish Soc Med Oncology. Spanish Society of Medi-cal Oncology consensus for the use of haematopoietic colony-stimulating factors in cancer patients. CLINICAL & TRANSLATIONAL ONCOLOGY; 11(7):446-454.



Oncogenes and Antitumour Drugs

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Main lines Of research

- Study the role of oncogenes (K-ras, PI3K, B-Raf, Rac1, etc) in metastasis of colorectal cancer in humans and develop prognostic molecular markers
- Develop an inhibitor of focal adhesions as anticancer agent in acute myeloid leukaemia and non-Hodgkin B lymphoma and study its mechanism of action
- Develop molecular markers to predict response to genotoxic therapy in head and neck cancers.

Challenges

- Obtain funding for increased staffing (the provision of stable employment for 2 currently contracted researchers (e.g., FIS funding) and the employment of 2 part-time clinicians (e.g., FIS research intensification or post-residence contract funding) and 2 postdoctoral students).
- Foster the clinical translation of findings for each of the group's research lines by including, if possible, the use of molecular markers in clinical and therapeutic decision making regarding head and neck cancers, colorectal cancer, non-Hodgkin lymphoma and acute myeloid leukaemia.
- Foster the innovative aspects of the group's research lines, especially in nanomedicine and drug development, so as to develop 2 new projects with biopharmaceutical companies that generate at least 2 patents and ensure a financial return once established.
- Make the group more global by establishing closer ties with international contacts and groups and by participating in EU or US projects.
- Regroup in the IIB Sant Pau campus, as some members of this oncogenesis and antitumour group are located elsewhere.

Grants

- Mangués, R. Support for Research Groups in Catalonia. Oncogenesis and Antitumoral Group. 2009SGR 1437. Amount: 69,680.00 €
- Mangués, R. Improve metastatic efficacy in a human colorectal cancer model, and study the effect of the K-RAS oncogene in the transition of micro-A macro-metastasis. PS09/00965. Amount: 278,300.00 €
- Parreño Gómez, Matilde. Study of poor prognostic markers in head and neck squamous cell carcinomas and search for alternative therapies. PS09/00334. Amount: 183,315.00 €
- Parreño Gómez, Matilde. Study of poor prognostic markers in head



INDEXED PUBLICATIONS

- 01** E. Vázquez;N. Ferrer-Mirallas;R. Mangues;J. L. Corchero;S. Schwartz;A. Villaverde. Modular Protein Engineering in Emerging Cancer Therapies. *CURRENT PHARMACEUTICAL DESIGN*; 15(8):893-916.
I.F.: 4.414
- 02** S. Camino-López; L. Badimon; A. González; D. Canals; E. Pena; V. Llorente-Cortés. Aggregated low density lipoprotein induces tissue factor by inhibiting sphingomyelinase activity in human vascular smooth muscle cells. *JOURNAL OF THROMBOSIS AND HAEMOSTASIS*; 7(12):2137-2146.
I.F.: 6.069
- 03** Suárez-Gestal M, Calaza M, Diéguez-González R, Pérez-Pampín E, Pablos JL, Navarro F, Narváez J, Marengo JL, Herrero-Beaumont G, Fernández-Gutiérrez B, Lamas JR, de la Serna AR, Ortiz AM, Carreño L, Cañete JD, Cáliz R, Blanco FJ, Balsa A, Gómez-Reino JJ, González A. Rheumatoid arthritis does not share most of the newly identified systemic lupus erythematosus genetic factors. *ARTHRITIS RHEUM*; 60(9):2558-64.
I.F.: 7.332
- 04** Diéguez-González R, Akar S, Calaza M, González-Álvaro I, Fernández-Gutiérrez B, Lamas JR, de la Serna AR, Cáliz R, Blanco FJ, Pascual Salcedo D, Velloso ML, Pérez-Pampín E, Pablos JL, Navarro F, Narváez J, López-Longo FJ, Herrero-Beaumont G, Gómez-Reino JJ, González A. Lack of association with rheumatoid arthritis of selected polymorphisms in 4 candidate genes: CFH, CD209, eotaxin-3, and MHC2TA. *J RHEUMATOL*; 36(8):1590-5.
I.F.: 3.854
- 05** Diéguez-González R, Calaza M, Pérez-Pampín E, Balsa A, Blanco FJ, Cañete JD, Cáliz R, Carreño L, de la Serna AR, Fernández-Gutiérrez B, Ortiz AM, Herrero-Beaumont G, Pablos JL, Narvaez J, Navarro F, Marengo JL, Gómez-Reino JJ, González A. Analysis of TNFAIP3, a feedback inhibitor of nuclear factor-kappaB and the neighbor intergenic 6q23 region in rheumatoid arthritis susceptibility. *ARTHRITIS RES THER*; 11(2):R42.
I.F.: 4.271
- 06** Meulenbelt I, Chapman K, Diéguez-González R, Shi D, Tsezou A, Dai J, Malizos KN, Kloppenburg M, Carr A, Nakajima M, van der Breggen R, Lakenberg N, Gómez-Reino JJ, Jiang Q, Ikegawa S, González A, Loughlin J, Slagboom EP. Large replication study and meta-analyses of DVWA as an osteoarthritis susceptibility locus in European and Asian populations. *HUM MOL GENET*; 18(8):1518-23.
I.F.: 7.386
- 07** Diéguez-González R, Calaza M, Shi D, Meulenbelt I, Loughlin J, Tsezou A, Dai J, Malizos KN, Slagboom EP, Kloppenburg M, Chapman K, Jiang Q, Kremer D, Gómez-Reino JJ, Nakajima N, Ikegawa S, González A. Testing the druggable endothelial differentiation gene 2 knee osteoarthritis genetic factor for replication in a wide range of sample collections. *ANN RHEUM DIS*; 68(6):1017-21.
I.F.: 6.962
- 08** Diéguez-González R, Akar S, Calaza M, Pérez-Pampín E, Costas J, Torres M, Vicario JL, Velloso ML, Navarro F, Narvaez J, Joven B, Herrero-Beaumont G, González-Álvaro I, Fernández-Gutiérrez B, de la Serna AR, Carreño L, López-Longo J, Cáliz R, Collado-Escobar MD, Blanco FJ, Fernández-López C, Balsa A, Pascual-Salcedo D, Gómez-Reino JJ, González A. Genetic variation in the nuclear factor kappaB pathway in relation to susceptibility to rheumatoid arthritis. *ANN RHEUM DIS*; 68(4):579-83.
I.F.: 6.962

*TIF: 47.250 **AIF: 5.9

*Total Impact Factor.
**Average Impact Factor.



Haematological Diagnosis

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Main lines
Of research

Malignant haemopathies

- Diagnosis and morphological, immunophenotyping, cytogenetic and molecular characterization of malignant haemopathies, particularly acute leukaemias.
- Impact of biological characteristics in response to treatment.
- Studies of new treatments aimed at molecular targets using cell line models.

- Application of the genomic platform (microarrays) and proteomic platform to the diagnosis of malignant haemopathies.

Non-neoplastic haemopathies

- Diagnosis and characterization of thrombocytopenias, thrombocytopathies and other platelet pathologies, especially complex pathologies (of genetic, mixed or unknown origin) and including unusual presentations of common diseases.

- Study of the relationship between platelets and thrombotic phenomena, including clinical, diagnostic and therapeutic aspects.
- In the framework of the GAIT-2 (genetic analysis of idiopathic thrombophilia, phase 2) project, to seek new phenotypes that favour the development of thrombosis, specifically related to the structure and function of platelets and other blood cells.

Challenges

- Consolidate the functional structure of the group that characterizes haematological tumours and complex, rare and genetic non-neoplastic haematopathologies.
- Include the results of mass-analysis genomic and proteomic platforms in diagnostic algorithms and establish prognostic factors for haematological disorders, preferably complex or genetic neoplastic and

- non-neoplastic pathologies.
- Develop functional models: cell cultures and simple animal models.
- Consolidate cooperation with the GAIT-2 project, especially regarding platelet and other blood cell participation in the generation of thrombosis.
- Promote interaction with other hospital groups (clinical haemato-

logy, pathology, gastrointestinal, haemostasis and thrombosis, complex disease genomics) and with other centres in Spain and abroad, especially those with complementary technologies and groups with which stable links can be established.



INDEXED PUBLICATIONS

- 01** J. Delgado;G. Pratt;N. Phillips;J. Briones;C. Fegan;J. Nomdedeu;C. Pepper;A. Aventin;R. Ayats;S. Brunet; R. Martínez;D. Valcárcel;D. Milligan;J. Sierra. Beta(2)-microglobulin is a better predictor of treatment-free survival in patients with chronic lymphocytic leukaemia if adjusted according to glomerular filtration rate. BRITISH JOURNAL OF HAEMATOLOGY; 145(6):801-805.
I.F.: 4.597
- 02** M. Ferran;E. Bussaglia;X. Matias-Guiu;R. M. Pujol. Bilateral and symmetrical palmoplantar punctate keratoses in childhood: a possible clinical clue for an early diagnosis of PTEN hamartoma-tumour syndrome. CLINICAL AND EXPERIMENTAL DERMATOLOGY; 34(5): E28-E30.
I.F.: 1.550
- 03** D. Rossi;V. Spina;M. Cerri;S. Rasi;C. Deambrogli;L. De Paoli;L. Laurenti;R. Maffei;F. Forconi;F. Bertoni;E. Zucca;C. Agostinelli;A. Cabras;M. Lucioni;M. Martíni;M. Magni;S. Deaglio;M. Ladetto;J. F. Nomdedeu; C. Besson; A. Ramponi; V. Canzonieri;M. Paulli;R. Marasca ;L. M. Larocca;A. Carbone;S. A. Pileri;V. Gattei;G. Gaidano. Stereotyped B-Cell Receptor Is an Independent Risk Factor of Chronic Lymphocytic Leukemia Transformation to Richter Syndrome. CLINICAL CANCER RESEARCH; 15(13):4415-4422.
I.F.: 6.747
- 04** D. Cilloni;A. Renneville;F. Hermitte; R. K. Hills;S. Daly;J. V. Jovanovic;E. Gottardi;M. Fava;S. Schnittger;T. Weiss;B. Izzo;J. Nomdedeu;A. van der Heijden;B. A. van der Reijden;J. H. Jansen;V. H. J. van der Velden;H. Ommen; C. Preudhomme; G. Saglio; D. Grimwade. Real-Time Quantitative Polymerase Chain Reaction Detection of Minimal Residual Disease by Standardized WT1 Assay to Enhance Risk Stratification in Acute Myeloid Leukemia: A European LeukemiaNet Study. JOURNAL OF CLINICAL ONCOLOGY; 27(31):5195-5201.
I.F.: 17.793
- 05** A. Pérez-García;S. Brunet;J. J. Berlanga; M. Tormo;J. Nomdedeu; R. Guardia;J. M. Ribera;I. Heras;A. Llorente;M. Hoyos;J. Esteve;J. Besalduch;J. Bueno;J. Sierra;D. Gallardo;Estudio Grp Cooperativo El;Trata. CTLA-4 genotype and relapse incidence in patients with acute myeloid leukemia in first complete remission after induction chemotherapy. LEUKEMIA; 23(3):486-491.
I.F.: 8.296
- 06** Adriana Lasa;Maite Carricondo; Camino Estivill;Elena Bussaglia; Ignasi Gich;Salut Brunet;Anna Aventin;Jorge Sierra;José F. Nomdedeu. WT1 monitoring in core binding factor AML: Comparison with specific chimeric products. LEUKEMIA RESEARCH; 33(12):1643-1649.
I.F.: 2.358
- 07** Vila L, Martínez-Pérez A, Camacho M, Buil A, Alcolea S, Pujol-Moix N, Soler M, Antón R, Souto JC, Fontcuberta J, Soria JM. Heritability of thromboxane A2 and prostaglandin E2 biosynthetic machinery in a spanish population. ARTERIOSCLER THROMB VASC BIOL; 30(1):128-34.
I.F.: 7.235
- 08** Hernández-Ruiz L, Sáez-Benito A, Pujol-Moix N, Rodríguez-Martorell J, Ruiz F. Platelet inorganic polyphosphate decreases in patients with delta storage pool disease. J THROMB HEMOST; 7(2): 361-363
I.F.: 6.069
- 09** De Rocco D, Pujol-Moix N, Pecci A, Faletta F, Bozzi V, Balduini CL, Savoia A. Identification of the first duplication in MYH9-related disease: A hot spot for hot unequal crossing-over within exon 24 of the MYH9 gene. EUR J MED GENETICS; 52(4):191-194
I.F.: 1.568

*TIF: 56.213 **AIF: 6.24



Molecular Pathology of Cancer

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Main lines
Of research

- Pathogenic mechanisms of endometrial/ovarian cancer.
- Clinical application of prognostic factors in common cancers (endometrial, ovarian, breast, etc). Clinical application of tumour markers.
- Molecular biology of uterine and extra-uterine sarcomas.
- Identification and validation of therapeutic targets derived from previous studies.
- Breast cancer: mechanisms of response to chemotherapy

Challenges

- Progress as a productive translational gynaecological cancer research group capable of competing with other highly visible groups in Barcelona that publish regular articles in reputable journals and cooperate with other groups at the national and international levels.

*TIF: 64.647 **AIF: 4.3

Scientific production

INDEXED PUBLICATIONS

- Gallardo;J. Prat. Mullerian Adenocarcinoma A Clinicopathologic and Immunohistochemical Study of 55 Cases Challenging the Existence of Adenofibroma. AMERICAN JOURNAL OF SURGICAL PATHOLOGY; 33(2):278-288. I.F.: 4.062
- Jaime Prat. Subclassification of ovarian cancer based on pathology and genetics. EUR J CANCER; 45 Suppl 1:427-8. I.F.: 4.121
- J. Briones;E. Moga;I. Espinósa;C. Vergara;E. Álvarez;J. Villa;R. Bordes; J. Delgado;J. Prat;J. Sierra. Bcl-10 protein highly correlates with the expression of phosphorylated p65 NF-kappa B in peripheral T-cell lymphomas and is associated with clinical outcome. HISTOPATHOLOGY; 54(4):478-485. I.F.: 3.855
- Emanuela D'Ángelo;Luigi G. Spagnoli; Jaime Prat. Comparative clinicopathologic and immunohistochemical analysis of uterine sarcomas diagnosed using the World Health Organization classification system. HUMAN PATHOLOGY; 40(11):1571-1585. I.F.: 2.961
- J. Prat. FIGO staging for uterine sarcomas. INTERNATIONAL JOURNAL OF GYNECOLOGY & OBSTETRICS; 104(3):177-178. I.F.: 1.408
- H. Lee;D. A. Turbin;Y. C. V. Sung;I. Espinósa;K. Montgomery;M. van de Rijn;C. B. Gilks. A panel of antibodies to determine site of origin and malignancy in smooth muscle tumors. MODERN PATHOLOGY; 22(12):1519-1531. I.F.: 4.406
- L. Catasús;A. Gallardo;M. Cuatrecasas; J. Prat. Concomitant PI3K-AKT and p53 alterations in endometrial carcinomas are associated with poor prognosis. MODERN PATHOLOGY; 22(4):522-529. I.F.: 4.406
- Cuatrecasas M, Catasús L, Palacios J, Prat J. Transitional cell tumors of the ovary: a comparative clinicopathologic, immunohistochemical, and molecular genetic analysis of Brenner tumors and

*Total Impact Factor.
**Average Impact Factor.



- transitional cell carcinomas. AMERICAN JOURNAL OF SURGICAL PATHOLOGY; 33(4):556-567. I.F.: 4.062
- 09 Gilks CB, Prat J. Ovarian carcinoma pathology and genetics: recent advances. HUMAN PATHOLOGY; 40(9):1213-1223. I.F.: 2.961
- 10 Lerma E, Barnadas A, Prat J. Triple negative breast carcinomas: similarities and differences with basal like carcinomas. APPL IMMUNOHISTOCHEM MOL MORPHOL; 17(6):483-494. I.F.: 1.709
- 11 Chan KS, Espinosa I, Chao M, Wong D, Ailles L, Diehn M, Gill H, Presti J Jr, Chang HY, van de Rijn M, Shortliffe L, Weissman IL. Identification, molecular characterization, clinical prognosis, and therapeutic targeting of human bladder tumor-initiating cells. PROC NATL ACAD SCI U S A; 106(33):14016-21. I.F.: 9.432
- 12 Wright TM, Brannon AR, Gordan JD, Mikels AJ, Mitchell C, Chen S, Espinosa I, van de Rijn M, Pruthi R, Wallen E, Edwards L, Nusse R, Rathmell WK. Ror2, a developmentally regulated kinase, promotes tumor growth potential in renal cell carcinoma. ONCOGENE; 28(27):2513-2523. I.F.: 7.135
- 13 Espinosa I, Beck AH, Lee CH, Zhu S, Montgomery KD, Marinelli RJ, Ganjoo KN, Nielsen TO, Gilks CB, West RB, van de Rijn M. Coordinate expression of colony-stimulating factor-1 and colony-stimulating factor-1-related proteins is associated with poor prognosis in gynecological and nongynecological leiomyosarcoma. AM J PATHOL; 174(6):2347-2356. I.F.: 5.673
- 14 Beck AH, Espinosa I, Edris B, Li R, Montgomery K, Zhu S, Varma S, Marinelli RJ, van de Rijn M, West RB. The macrophage colony-stimulating factor 1 response signature in breast carcinoma. CLIN CANCER; 15(3):778-787. I.F.: 6.747
- 15 E. Lerma;A. Barnadas;J. Prat. Triple Negative Breast Carcinomas Similarities and Differences With Basal Like Carcinomas. APPLIED IMMUNOHISTOCHEMISTRY & MOLECULAR MORPHOLOGY; 17(6):483-494. I.F.: 1.709

OTHER PUBLICATIONS

Catasús L, Gallardo A, Prat J. Molecular genetics of endometrial carcinoma. DIAGNOSTIC HISTOPATHOLOGY.

Lee CH, Subramanian S, Beck AH, Espinosa I, Senz J, Zhu SX, Huntsman D, van de Rijn M, Gilks CB. MicroRNA

profiling of BRCA1/2 mutation-carrying and non-mutation-carrying high-grade serous carcinomas of ovary. PLOS ONE; 4(10):e7314.



Ear, Nose, Throat Cancer

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Main lines
Of research

- Genetic and molecular predictors of response to head and neck cancer: collaboration with the Oncogenesis and Antitumoural Agent Group.
- Molecular mechanisms of inflammation in head and neck cancer: collaboration with the inflammation laboratory.
- Nasosinal endoscopic surgery: innovations in skull base techniques.
- Internal ear: aspects related to severe deafness, cochlear implants and otoneurological surgery of tumours.

Challenges

- Promote clinical and translational research in the field of head and neck cancer with a database containing a very large series of head and neck cancers. We aim to study relevant clinical issues in depth (second-third neoplasms, staging concerns, prognostic factors, etc) and investigate translational aspects such as genetic and molecular predictors.

Grants

- Virós, D. MIA 2009. 2009 MIA. Amount: **44,000.00 €**
- Parreño, M. Estudio de marcadores de mal pronóstico en carcinoma escamoso de cabeza y cuello (cecc) y búsqueda de alternativas terapéuticas. FIS. PS09/00334. Amount: **183.315,00 €**

***TIF: 5.450 **AIF: 1.36**

Scientific production

INDEXED PUBLICATIONS

- 01** Xavier León; María del Prado Venegas; César Orús; Montserrat López; Jacinto García; Miquel Quer. Influence of the persistence of tobacco and alcohol use in the appearance of second neoplasm in patients with a head and neck cancer. A case-control study. *CANCER CAUSES & CONTROL*; 20(5):645-652.
I.F.: 3.199
- 02** M. Remacle; A. Hantzakos; H. Eckel; A.

- S. Evrard; P. J. Bradley; D. Chevalier; V. Djukic; M. de Vincentiis; G. Friedrich; J. Olofsson; G. Peretti; M. Quer; J. Werner. Endoscopic supraglottic laryngectomy: a proposal for a classification by the working committee on nomenclature, European Laryngological Society. *EUROPEAN ARCHIVES OF OTO-RHINO-LARYNGOLOGY*; 266(7):993-998.
I.F.: 1.167
- 03** Marañillo E, Vázquez T, Mirapeix RM, León X, McHanwell S, Rodri-

- guez-Niedenführ M, Quer M, Sañudo JR. Ceratocricoid muscle: and embryological and anatomical study. *CLINICAL ANATOMY*; 22(4):463-470.
I.F.: 1.084
- 04** J. R. Gras-Cabrerizo; J. R. Montserrat-Gili; X. León-Vintro; H. Massegur-Solench; J. M. de Vega; D. Virós-Porcuna. Treatment results for ethmoid sinus carcinoma. *JOURNAL OF LARYNGOLOGY AND OTOTOLOGY*; 123(10):1120-1124.
I.F.: 0.851

*Total Impact Factor.
**Average Impact Factor.

OTHER PUBLICATIONS

David Virós Porcuna; Inaki Zarrakonandia Andraca; Xavier León Vintro; Montserrat López Vilas; Jacinto García Lorenzo; Albert

Pujol Olmo; Miquel Quer Agustí. Combined endoscopic treatment for Zenker's diverticulum versus open approach; review of our experience. *ACTA OTORRINOLARYNGOLOGICA* ESP; 60(6):396-401.

Xavier León; Montserrat López; Jacinto García; Miquel Quer. Results of an organ conservation protocol in patients with locally advanced laryngeal tumours. *ACTA OTORRINOLARYNGOLOGICA* ESP; 60 (3): 176-85.



Oncology/Haematology Transplantation

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Main lines Of research

- Study of molecular and cellular physiopathology of haematological cancers, with emphasis on the role of focal adhesions in survival of acute myeloid leukaemia (AML) cells.
- Study of the prognostic value of clinical and biological aspects of these diseases.
- Design of new modalities of chemotherapy, biotherapy and drug treatment to target molecular mechanisms.
- Biological diagnosis and innovation in infectious complications related to immunodepression.
- New forms of haematopoietic stem-cell transplants.
- Cell therapy.
- Psychological intervention and quality of life in patients with haematological malignancies.

Awards

- Salut Brunet: Award for Professional Excellence in Biomedical Research received from the Council of Medical Colleges of Catalonia.

Challenges

- Molecular characterization of AML. Determination of the prognostic value of known genes and other genes of uncertain significance (in cooperation with the Haematology Laboratory).
- Animal modelling of leukaemia and lymphoma (in cooperation with the Oncogenesis and Antitumour Laboratory) so as to better understand the cell physiopathology of these diseases and to test new drugs (in cooperation with the oncogenesis and antitumour programme).
- Pharmacogenetics of haematological tumours: determination of the importance of polymorphisms in antitumour sensitivity and toxicity.
- Cell physiopathology and immunotherapy for lymphoproliferative diseases. Molecular characterization and prognostic significance. Evaluation of antitumour immunotherapy in animals and humans (in cooperation with the Immunology Department and the Blood and Tissue Bank).
- Genomic, proteomic and animal models of transplantation. Exploration of predictive indicators of complications, particularly in graft-versus-host disease and infections. Early therapeutic intervention. Establishment of an experimental mouse model.

Further Information

- Research group recognized by DURSI (Catalan Government Research Department).
- Participant in the ISCIII Cancer Centre Network (Dr. Sierra, coordinator of the myeloid neoplasm line).

Grants

- Sierra, J. Ajuts de suport als Grups de Recerca de Catalunya. Grup Hematologia Oncològica i Trasplantament. 2009SGR 1246. Amount: 46,800.00 €



INDEXED PUBLICATIONS

- 01 J. Delgado;G. Pratt;N. Phillips;J. Briones;C. Fegan;J. Nomdedeu;C. Pepper;A. Aventin;R. Ayats;S. Brunet;R. Martino;D. Valcárcel;D. Milligan;J. Sierra. Beta(2)-microglobulin is a better predictor of treatment-free survival in patients with chronic lymphocytic leukaemia if adjusted according to glomerular filtration rate. *BRITISH JOURNAL OF HAEMATOLOGY*; 145(6):801-805. I.F.: 4.597
- 02 J. Briones;E. Moga;I. Espinósa;C. Vergara;E. Álvarez;J. Villa;R. Bordes;J. Delgado;J. Prat;J. Sierra. Bcl-10 protein highly correlates with the expression of phosphorylated p65 NF-kappa B in peripheral T-cell lymphomas and is associated with clinical outcome. *HISTOPATHOLOGY*; 54(4):478-485. I.F.: 3.855
- 03 R. M. Antonijoan;S. Rico;J. Martínez-González;M. Borrell;D. Valcárcel;J. Fontcuberta;M. J. Barbanoj. Comparative pharmacodynamic time-course of buparinar and enoxaparin in healthy volunteers. *INTERNATIONAL JOURNAL OF CLINICAL PHARMACOLOGY AND THERAPEUTICS*; 47(12):726-732. I.F.: 1.381
- 04 Pérez-García;S. Brunet;J. J. Berlanga;M. Tormo;J. Nomdedeu;R. Guardia;J. M. Ribera;I. Heras;A. Llorente;M. Hoyos;J. Esteve;J. Besalduch;J. Bueno;J. Sierra;D. Gallardo;Estudio Grp Cooperativo El;Trata. CTLA-4 genotype and relapse incidence in patients with acute myeloid leukemia in first complete remission after induction chemotherapy. *LEUKEMIA*; 23(3):486-491. I.F.: 8.296
- 05 Adriana Lasa;Maite Carricondo;Camino Estivill;Elena Bussaglia;Ignasi Gich;Salut Brunet;Anna Aventin;Jorge Sierra;Josép F. Nomdedeu. WT1 monitoring in core binding factor AML: Comparison with specific chimeric products. *LEUKEMIA RESEARCH*; 33(12):1643-1649. I.F.: 2.358
- 06 C. Martínez;C. Solano;C. Ferra;A. Sampol;D. Valcárcel;J. A. Pérez-Simón;Transplantat Spanish Grp Stem Cell. Alemtuzumab as Treatment of Steroid-Refractory Acute Graft-versus-Host Disease: Results of a Phase II Study. *BIOLOGY OF BLOOD AND MARROW TRANSPLANTATION*; 15(5):639-642. I.F.: 3.149
- 07 R. Parody;R. Martino;F. Sánchez;M. Subirà;A. Hidalgo;J. Sierra. Predicting survival in adults with invasive aspergillosis during therapy for hematological malignancies or after hematopoietic stem cell transplantation: Single-center analysis and validation of the Seattle, French, and Strasbourg prognostic indexes. *AMERICAN JOURNAL OF HEMATOLOGY*; 84(9):571-578. I.F.: 2.610
- 08 J. Delgado;S. Pillai;N. Phillips;S. Brunet;G. Pratt;J. Briones;R. Lovell;R. Martino;J. Ewing;A. Sureda;D. W. Milligan;J. Sierra. Does reduced-intensity allogeneic transplantation confer a survival advantage to patients with poor prognosis chronic lymphocytic leukaemia? A case-control retrospective analysis. *ANNALS OF ONCOLOGY*; 20(12):2007-2012. I.F.: 5.647
- 09 Pere Barba;José Luis Pinana;David Valcárcel;Luis Querol;Rodrigo Martino;Anna Sureda;Javier Briones;Julio Delgado;Salut Brunet;Jorge Sierra. Early and late neurological complications after reduced-intensity conditioning allogeneic stem cell transplantation. *BIOLOGY OF BLOOD AND MARROW TRANSPLANTATION*; 15(11):1439-46. I.F.: 3.149
- 10 J. de la Rubia;P. Montesinos;R. Martino;I. Jarque;M. Rovira;L. Vázquez;J. López;M. Batlle;R. de la Camara;A. Julia;J. J. Lahuerta;G. Deben;J. Díaz;R. García;M. A. Sanz. Imipenem/Cilastatin with or without Glycopeptide as Initial Antibiotic Therapy for Recipients of Autologous Stem Cell Transplantation: Results of a Spanish Multicenter Study. *BIOLOGY OF BLOOD AND MARROW TRANSPLANTATION*; 15(4):512-516. I.F.: 3.149
- 11 J. L. Piñana;D. Valcárcel;P. Barba;E. Moreno;A. Sureda;M. Vega;J. Delgado;J. Briones;S. Brunet;J. Sierra. Study of Kidney Function Impairment after Reduced-Intensity Conditioning Allogeneic Hematopoietic Stem Cell Transplantation. A Single-Center Experience. *BIOLOGY OF BLOOD AND MARROW TRANSPLANTATION*; 15(1): 21-29. I.F.: 3.149
- 12 J. Delgado;D. W. Milligan;P. Dreger. Allogeneic hematopoietic cell transplantation for chronic lymphocytic leukemia: ready for prime time? *BLOOD*; 114(13):2581-2588. I.F.: 10.555
- 13 P. Montesinos;J. M. Bergua;E. Vellenga;C. Rayon;R. Parody;J. de la Serna;A. León;J. Esteve;G. Milone;G. Deben;C. Rivas;M. González;M. Tormo;J. Díaz-Mediavilla;J. D. González;S. Negri;E. Amutio;S. Brunet;B. Lowenberg;M. A. Sanz. Differentiation syndrome in patients with acute promyelocytic leukemia treated with all-trans retinoic acid and anthracycline chemotherapy: characteristics, outcome, and prognostic factors. *BLOOD*; 113(4):775-783. I.F.: 10.555
- 14 Julio Delgado;Javier Briones;Jorge Sierra. Emerging therapies for patients with advanced chronic lymphocytic leukaemia. *BLOOD REVIEWS*; 23(5):217-224. I.F.: 7.185
- 15 R. Martino;J. L. Pinana;R. Parody;D. Valcárcel;A. Sureda;S. Brunet;J. Briones;J. Delgado;F. Sánchez;N. Rabella;J. Sierra. Lower respiratory tract respiratory virus infections increase the risk of invasive aspergillosis after a reduced-intensity allogeneic hematopoietic SCT. *BONE MARROW TRANSPLANTATION*; 44(11):749-756. I.F.: 2.998
- 16 T. de Witte;R. Brand;A. van Biezen;G. Mufti;T. Ruutu;J. Finke;P. von dem Borne;A. Vitek;M. Delforge;P. Alessandrino;N. Harlakis;N. Russell;R. Martínez;L. Verdonck;N. Kroger;D. Niederwieser;Transplantat European Blood Marrow;C. L. W. Chronic Leukemia Working Party. Allogeneic stem cell transplantation for patients with refractory anaemia with matched related and unrelated donors: delay of the transplant is associated with inferior survival. *BRITISH JOURNAL OF HAEMATOLOGY*; 146(6):627-636. I.F.: 4.597
- 17 Avivi;S. Montoto;C. Canals;J. Maertens;H. Al-Ali;G. J. Mufti;J. Finke;A. Schattenberg;R. Fanin;J. J. Cornelissen;J. P. Vernant;N. Russell;Y. Beguin;K. Thomson;L. F. Verdonck;G. Kobbe;H. Tilly;G. Socie;A. Sureda;Ebmt Lymphoma Working

*Total Impact Factor.

**Average Impact Factor.



- Party. Matched unrelated donor stem cell transplant in 131 patients with follicular lymphoma: an analysis from the Lymphoma Working Party of the European Group for Blood and Marrow Transplantation. *BRITISH JOURNAL OF HAEMATOLOGY*; 147(5): 719-728.
I.F.: 4.597
- 18** de la Sierra;A. Roca-Cusachs;J. Redón;R. Marín;M. Luque;M. de la Figuera;M. García-García; L. Fal-kon; CENIT Study Working Grp. Effectiveness and Tolerability of Fixed-Dose Combination Enalapril plus Nitrendipine in Hypertensive Patients Results of the 3-Month Observational, Post-Marketing, Multicentre, Prospective CENIT Study. *CLINICAL DRUG INVESTIGATION*; 29(7):459-469.
I.F.: 1.414
- 19** David Valcárcel;Rodrigo Martínez; José L. Piñana;Jorge Sierra. Allogeneic stem cell transplantation after reduced-intensity conditioning for acute myeloid leukaemia: impact of chronic graft-versus-host disease. *CURR OPIN ONCOL*; 21 Suppl 1:535-7.
I.F.: 4.088
- 20** J. Delgado;A. Marco;E. Moreno;J. L. Piñana;D. Valcárcel;R. Martínez;J. Briones;A. Sureda;S. Brunet;J. Sierra. Reduced-intensity conditioning allogeneic hematopoietic cell transplantation using oral fludarabine as part of the conditioning regimen. *CYTOTHERAPY*; 11(3) : 356-361.
I.F.: 2.204
- 21** Hidalgo;R. Parody;R. Martínez;F. Sánchez;T. Franquet;A. Giménez;C. Blancas. Correlation between high-resolution computed tomography and galactomannan antigenemia in adult hematologic patients at risk for invasive aspergillosis. *EUROPEAN JOURNAL OF RADIOLOGY*; 71(1):55-60.
I.F.: 2.645
- 22** J. Briones. Emerging therapies for B-cell non-Hodgkin lymphoma. *EXPERT REVIEW OF ANTICANCER THERAPY*; 9(9):1305-1316.
I.F.: 2.493
- 23** P. Montesinos;J. Díaz-Mediavilla;G. Deben; V. Prates;M. Tormo;V. Rubio;I. Pérez; I. Fernández;M. Viguria; C. Rayon;J. González;J. de la Serna;J. Esteve; J. M. Bergua;C. Rivas;M. González;J. D. González;S. Negri;S. Brunet;B. Lowenberg;M. A. Sanz. Central nervous system involvement at first relapse in patients with acute promyelocytic leukemia treated with all-trans retinoic acid and anthracycline monotherapy without intrathecal prophylaxis. *HAEMATOLOGICA-THE HAEMATOLOGY JOURNAL*; 94(9):1242-1249.
I.F.: 6.416
- 24** S. P. Robinson;A. Sureda;C. Canals; N. Russell;D. Caballero;A. Bacigalupos; A. Iriondo; G. Cook;A. Pettitt;G. Socie; F. Bonifazi; A. Bosi; M. Michallet;E. Liakopoulou;J. Maertens;J. Passweg; F. Clarke;R. Martín;N. Schmitz;Ebmt. Reduced intensity conditioning allogeneic stem cell transplantation for Hodgkin's lymphoma: identification of prognostic factors predicting outcome. *HAEMATOLOGICA-THE HAEMATOLOGY JOURNAL*; 94(2):230-238.
I.F.: 6.416
- 25** J. Koreth;R. Schlenk;K. J. Kopecky; S. Honda;J. Sierra;B. J. Djulbegovic; M. Wadleigh; D. J. DeAngelo;R. M. Stone; H. Sakamaki; F. R. Appelbaum; H. Dohner;J. H. Antin; R. J. Soiffer;C. Cutler. Allogeneic Stem Cell Transplantation for Acute Myeloid Leukemia in First Complete Remission Systematic Review and Meta-analysis of Prospective Clinical Trials. *JAMA-JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION*; 301(22): 2349-2361.
I.F.: 28.899
- 26** S. Quijano;A. López;J. M. Sancho;C. Panizo;G. Deben;C. Castilla;J. A. García-Vela;A. Salar; N. Alonso-Vence;E. González-Barca;F. J. Peñalver; J. Plaza-Villa;M. Morado;J. García-Marco;J. Arias;J. Briones;S. Ferrer;J. Capote;C. Nicolás;A. Orfao. Identification of Leptomeningeal Disease in Aggressive B-Cell Non-Hodgkin's Lymphoma: Improved Sensitivity of Flow Cytometry. *JOURNAL OF CLINICAL ONCOLOGY*; 27(9):1462-1469.
I.F.: 17.793
- 27** R. E. Hayden;G. Pratt;N. J. Davies;F. L. Khanim; J. Birtwistle;J. Delgado; C. Pearce;T. Sant;M. T. Drayson;C. M. Bunce. Treatment of primary CLL cells with bezafibrate and medroxyprogesterone acetate induces apoptosis and represses the pro-proliferative signal of CD40-ligand, in part through increased 15d Delta(12,14) PGJ(2). *LEUKEMIA*; 23(2):292-304.
I.F.: 8.296
- 28** J. M. Vose;A. D. Ho;B. Coiffier;P. Corradini;I. Khouri;A. Sureda;K. Van Besien;J. Dipersio. Advances in mobilization for the optimization of autologous stem cell transplantation. *LEUKEMIA & LYMPHOMA*; 50(9):1412-1421.
I.F.: 2.397
- 29** Julia;L. Kovaleva;S. Loria;I. Alberca; F. Hernández;V. Sandoval; J. Sierra; A. Vidaller;J. Ayguasanos; M. Carretero. Clinical efficacy and safety of Flebogammadif((R)), a new high-purity human intravenous immunoglobulin, in adult patients with chronic idiopathic thrombocytopenic purpura. *TRANSFUSION MEDICINE*; 19(5): 260-268.
I.F.: 1.808
- 30** Rodrigues CA, Sanz G, Brunstein CG, Sanz J, Wagner JE, Renaud M, de Lima M,Cairo MS, Fürst S, Rio B, Dalley C, Carreras E, Harousseau JL, Mohty M, TaveiraD, Dreger P, Sureda A, Gluckman E, Rocha V. Analysis of risk factors for outcomes after unrelated cord blood transplantation in adults with lymphoid malignancies: a study by the Eurocord-Netcord and lymphoma working party of the European group for blood and marrow transplantation. *J CLIN ONCOL*; 27(2):256-263.
I.F.: 17.793
- 31** Balsalobre P, Díez-Martín JL, Re A, Michieli M, Ribera JM, Canals C, Rosselet A, Conde E, Varela R, Cwynarski K, Gabriel I, Genet P, Guillerm G, Allione B, Ferrant A, Biron P, Espigado I, Serrano D, Sureda A. Autologous Stem-Cell Transplantation in Patients With HIV-Related Lymphoma. *J CLIN ONCOL*; 27(13):2192-2198.
I.F.: 17.793
- 32** Cordonnier C, Labopin M, Chesnel V, Ribaud P, De La Cámara R, Martínez R, Ullmann AJ, Parkkali T, Locasciulli A, Yakouben K, Pauksens K, Einsele H, Niederwieser D, Apperley J, Ljungman P; Infectious Diseases Working Party of the European Group for Blood and Marrow Transplantation. Randomized Study of Early versus Late Immunization with Pneumococcal Conjugate Vaccine after Allogeneic Stem Cell Transplantation. *CLIN INFECT DIS*; 48(10):1392-1401.
I.F.: 8.195
- 33** Claviez A, Canals C, Dierickx D, Stein J, Badell I, Pession A, Mackinnon S, Slavin S, Dalle JH, Jurado Chacón M, Sarhan M, Wynn RF, Suttorp M, Dini G, Sureda A, Schmitz N. Allogeneic hematopoietic stem cell transplantation in children and adolescents with recurrent and refractory Hodgkin's lymphoma: an analysis of the European Group for Blood and



- Marrow Transplantation. BLOOD; 114(10):2060-2067.
I.F.: 10.555
- 34 Ljungman P, Bregni M, Brune M, Cornelissen J, Witte TD, Dini G, Einsele H, Gaspar HB, Gratwohl A, Passweg J, Peters C, Rocha V, Saccardi R, Schouten H, Sureda A, Tichelli A, Velardi A, Niederwieser D. Allogeneic and autologous transplantation for haematological diseases, solid tumours and immune disorders: current practice in Europe 2009. BONE MARROW TRANSPLANTATION; 45(2): 219-234.
I.F.: 2.998
- 35 Kyriakou C, Canals C, Finke J, Kobbé G, Harousseau JL, Kolb HJ, Novitzky N, Goldstone AH, Sureda A, Schmitz N. Allogeneic Stem Cell Transplantation Is Able to Induce Long-Term Remissions in Angioimmunoblastic T-Cell Lymphoma: A Retrospective Study From the Lymphoma Working Party of the European Group for Blood and Marrow Transplantation. J CLIN ONCOL; 27(24):3951-3958.
I.F.: 17.793
- 36 Gratwohl A, Stern M, Brand R, Apperley J, Baldomero H, de Witte T, Dini G, Rocha V, Passweg J, Sureda A, Tichelli A, Niederwieser D; Risk score for outcome after allogeneic hematopoietic stem cell transplantation: a Retrospective Analysis. CANCER; 115(20):4715-4726.
I.F.: 5.418
- 37 Bosch F, Abrisqueta P, Villamor N, Terol MJ, González-Barca E, Ferra C, Díaz MG, Abella E, Delgado J, Carbonell F, García Marco JA, Escoda L, Ferrer S, Monzó E, González Y, Estany C, Jarque I, Salamero O, Muntañola A, Montserrat E. Rituximab, Fludarabine, Cyclophosphamide, and Mitoxantrone a New, Highly Active Chemoimmunotherapy Regimen for Chronic Lymphocytic Leukemia. J CLIN ONCOL; 27(27):4578-84.
I.F.: 17.793
- 38 Gallardo D, de la Cámara R, Nieto JB, Espigado I, Iriando A, Jiménez-Velasco A, Vallejo C, Martín C, Caballero D, Brunet S, Serrano D, Solano C, Ribera JM, de la Rubia J, Carreras E. Is mobilized peripheral blood comparable with bone marrow as a source of hematopoietic stem cells for allogeneic transplantation from HLA-identical sibling donors? A case-control study. HAEMATOLOGICA; 94(9):1282-1288.
I.F.: 6.416
- 39 Vehreschild JJ, Sieniawski M, Reuter S, Arenz D, Reichert D, Maertens J, Böhme A, Silling G, Martino R, Maschmeyer G, Rüping MJ, Ullmann AJ, Cornely OA. Efficacy of caspofungin and itraconazole as secondary antifungal prophylaxis: analysis of data from a multinational case registry. INT J ANTIMICROB AGENTS; 34(5):446-450.
I.F.: 3.032
- 40 Paiva B, Vidriales MB, Mateo G, Pérez JJ, Montalbán MA, Sureda A, Montejano L, Gutiérrez NC, García de Coca A, de Las Heras N, Mateos MV, López-Berges MC, García-Boyeró R, Galende J, Hernández J, Palomera L, Carrera D, Martínez R, de la Rubia J, Martín A, González Y, Blade J, Lahuerta JJ, Orfao A, San Miguel JF. The persistence of immunophenotypically normal residual bone marrow plasma cells at diagnosis identifies a good prognostic subgroup of symptomatic multiple myeloma patients. BLOOD; 114(20):4369-4372.
I.F.: 10.555
- 41 Xicoy B, Ribera JM, Miralles P, Berenguer J, Rubio R, Mahillo B, Valencia ME, Abella E, López-Guillermo A, Sureda A, Morgades M, Navarro JT, Esteban H. Limited prognostic value of the International Prognostic Score in advanced stage human immunodeficiency virus infection-related Hodgkin lymphoma treated with the doxorubicin, bleomycin, vinblastine, and dacarbazine regimen. LEUK LYMPHOMA; 50(10):1718-1720.
I.F.: 2.397
- 42 Dougherty U, Cerasi D, Taylor I, Kocherginsky M, Tekin U, Badal S, Aluri L, Sehdev A, Cerda S, Mustafa R, Delgado J, Joséph L, Zhu H, Hart J, Threadgill D, Fichera A, Bissonnette M. Epidermal Growth Factor Receptor Is Required for Colonic Tumor Promotion by Dietary Fat in the Azoxymethane/Dextran Sulfate Sodium Model: Roles of Transforming Growth Factor- α and PTGS2. CLIN CANCER RES; 15(22):6780-6789.
I.F.: 6.747
- 43 Schmitz N, Sureda A, Dini G, Claviez A; on behalf of the Lymphoma and Pediatric Diseases Working Parties. Allogeneic transplantation for children and adolescents with Hodgkin lymphoma. BLOOD; 114(20): 4605-4606.
I.F.: 10.555

OTHER PUBLICATIONS

Piñana JL, Martínez R, Barba P, Margall N, Roig MC, Valcárcel D, Sierra J, Rabella N. Cytomegalovirus infection and disease after reduced intensity

conditioning allogeneic stem cell transplantation: single-centre experience. BONE MARROW TRANSPLANTATION; 37:S179-S179.

Julio Delgado;Laia Febrer;Diana Nieves;

Carne Pinol;Max Brosa. Cost-reduction analysis for oral versus intravenous fludarabine (Beneflur(R)) in Spain. FARM HOSP; 33(5):240-6.



Breast Cancer

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Main lines
Of research

- Pathogenic mechanisms of breast cancer.
- Identification and validation of therapeutic targets derived from previous studies.
- Mechanisms of response to chemotherapy treatment.

Challenges

- Progress as a breast cancer research group publishing regular articles and cooperating with other groups in our centre and at the national and international levels.

*TIF: 8.521 **AIF: 2.84

Scientific
Production

INDEXED PUBLICATIONS

ARTICLE

01 G. Peiró;S. Benlloch;L. Sánchez-Tejada;E. Adrover;E. Lerma;F. M. Peiró;J. Sánchez-Paya;F. I. Aranda
Low activation of Insulin-like Growth Factor 1-Receptor (IGF1R) is associated with local recurrence in early breast carcinoma. BREAST CANCER RESEARCH AND TREATMENT; 117(2):433-441
I.F.: 4.696

02 Pajares V, Torrego A, Puzo C, Lerma E, Gil De Bernabé MA, Franquet T.
Transbronchial Lung Biopsy Using Cryoprobes. ARCH BRONCONEU-MOL; 46(3):111-115
I.F.: 2.116

REVIEW

03 E. Lerma;A. Barnadas;J. Prat. Triple Negative Breast Carcinomas Similarities and Differences With Basal Like Carcinomas. APPLIED IMMUNOHISTOCHEMISTRY & MOLECULAR MORPHOLOGY; 17(6):483-494
I.F.: 1.709

*Total Impact Factor.
**Average Impact Factor.

OTHER PUBLICATIONS

Tibau A, Lerma E, Escuin D, Barnadas A. Her2, Topoisomerasa IIalfa y predicción de respuesta a la quimioterapia con Antraciclinas. TRANSLATIONAL ONCOLOGY REVIEWS.





AREA 4

Neurological and mental disorders

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Cerebral Vascular Diseases

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Main lines Of research

- Neurogenesis and neuro-repair after ischaemic stroke.
- Growth of haematoma in the acute phase of spontaneous brain haemorrhage.
- Endothelial progenitor cells in ischaemic stroke.
- Monitoring the effect of thrombolysis in acute ischaemic stroke.
- Benefit and risk of thrombolysis in acute ischaemic stroke.
- Beta-amyloid and cerebral haemorrhage: diagnostic and prognostic studies

Challenges

- Enhance cooperation with other groups in the framework of the Spanish Stroke Research Network (RETICS/RENEVAS) and also intrahospital cooperation (the Catalan Cardiovascular Disease Institute Català and the Haemostasis-Thrombosis Unit) and extra-hospital cooperation (with groups managed by Dr.García-Verdugo in Valencia, Dr. Arús at the Autonomous University of Barcelona and Dr. Anna Planas in Hospital Clínic). To obtain finance from the FIS and from regional authorities and private bodies.
- Increase the number of contracted and grant-aided researchers and professionally develop existing researchers.

Grants

- Delgado, R. Development of multi-scale, multiparametric optic monitoring to study acute cerebral ischemia: from an animal model to the patient. PS09/00557. Amount: 104,665.00€

***TIF: 20.567 **AIF: 3.42**

Scientific production

INDEXED PUBLICATIONS

- Slevin M, Sanfeliu C, Turu MM, Grau-Olivares M, Ferrer I, Boluda S, Martí-Fàbregas J, Kumar S, Kumar P, Krupinski J. B-cell translocation gene 2 is over-expressed in peri-infarct neurons after ischaemic stroke. *PATHOBIOLOGY*; 78(3):129-135. **I.F.: 2.410**
- Guimaraens-Martínez L, Vivas-Díaz E, Sola-Martínez T, Cuéllar-Sáenz H, Eva-Torres G, Martí-Fàbregas J, Soler-Singla L. Arterial recanalisation in acute stroke by means of a self-expanding stent. *REV NEUROL*; 48(10):555-556. **I.F.: 1.234**
- Pagola J, Ribó M, Álvarez-Sabín J, Rubiera M, Santamarina E, Maisterra O, Delgado-Mederos R, Ortega G, Quintana M, Molina CA. Thrombolysis in Anterior Versus Posterior Circulation Strokes: Timing of Recanalization, Ischemic Tolerance, and Other Differences. *J NEUROIMAGING*; Epub ahead of print. **I.F.: 1.538**
- Rubiera M, Ribó M, Santamarina E, Maisterra O, Delgado-Mederos R, Delgado P, Ortega G, Álvarez-Sabín J, Molina CA. Is it time to reassess the SITS-MOST criteria for thrombolysis?: A comparison of patients with and without SITS-MOST exclusion criteria. *STROKE*; 40(7):2568-71. **I.F.: 7.041**
- Pérez ES, Delgado-Mederos R, Rubiera M, Delgado P, Ribó M, Maisterra O, Ortega G, Álvarez-Sabín J, Molina CA. Transcranial duplex sonography for monitoring hyperacute intracerebral hemorrhage. *STROKE*; 40(3):987-90. **I.F.: 7.041**
- R. Belvis; E. F. Tizzano; J. Martí-Fàbregas; R. G. Leta; M. Baena; F. Carreras; G. Pons-Lladó; M. Baiget; J. L. Martí-Vilalta. Mutations in the NKX2-5 gene in patients with stroke and patent foramen ovale. *CLINICAL NEUROLOGY AND NEUROSURGERY*; 111(7):574-578. **I.F.: 1.303**

*Total Impact Factor. **Average Impact Factor.

OTHER PUBLICATIONS

Martí-Fàbregas J, Mateo J. Old and new anticoagulant agents for the prevention and treatment of patients with ischemic stroke. *CEREBROVASC DIS*.



Dementias

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Main lines
Of research

- Development and characterization of transgenic mouse models of Alzheimer's disease and other primary neurodegenerative dementias. Study of the mechanisms involved in the appearance of pathognomic lesions and neuronal death. Studies of new therapies able to modify the course of the disease, and having potential application in humans.
- Analysis of the gamma-secretase complex and study of the modulating effect of drugs such as NSAIDs and complex statins using advanced imaging techniques (live fluorescence imaging).
- Investigation of new genetic risk factors in Alzheimer's disease, Parkinson's disease, spinocerebellar ataxia and dystonias.
- Investigation of potential disease biomarkers.

*TIF: 19.018 **AIF: 4.75

Scientific production

INDEXED PUBLICATIONS

01 L. Sereno; M. Coma; M. Rodríguez; P. Sánchez-Ferrer; M. B. Sánchez; I. Gich; J. M. Agulló; M. Pérez; J. Ávila; C. Guardia-Laguarta; J. Clarimón; A. Lleó; T. Gómez-Isla. A novel GSK-3 beta inhibitor reduces Alzheimer's pathology and rescues neuronal loss in vivo. *NEUROBIOLOGY OF DISEASE*; 35(3): 359-367
I.F.: 4.518

02 J. Clarimón; L. Molina-Porcel; T. Gómez-Isla; R. Blesa; C. Guardia-Laguarta; A. González-Neira; M. Estorch; J. M. Grau; L. Barraquer; C. Roig; I. Ferrer; A.

Lleo. Early-Onset Familial Lewy Body Dementia With Extensive Tauopathy: A Clinical, Genetic, and Neuropathological Study. *JOURNAL OF NEUROPATHOLOGY AND EXPERIMENTAL NEUROLOGY*; 68(1):73-82
I.F.: 4.564

03 C. Guardia-Laguarta; M. Coma; M. Pera; J. Clarimón; L. Sereno; J. M. Agulló; L. Molina-Porcel; E. Gallardo; A. Deng; O. Berezovska; B. T. Hyman; R. Blesa; T. Gómez-Isla; A. Lleó. Mild cholesterol depletion reduces amyloid-beta production

by impairing APP trafficking to the cell surface. *JOURNAL OF NEUROCHEMISTRY*; 110(1):220-230
I.F.: 3.999

04 J. Clarimón; R. Djaldetti; A. Lleó; R. J. Guerreiro; J. L. Molinuevo; C. Paisán-Ruiz; T. Gómez-Isla; R. Blesa; A. Singleton; J. Hardy. Whole genome analysis in a consanguineous family with early onset Alzheimer's disease. *NEUROBIOLOGY OF AGING*; 30(12):1986-1991
I.F.: 5.937

*Total Impact Factor.
**Average Impact Factor.



Neuromuscular Diseases

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Main lines
Of research

Immune-mediated neuromuscular diseases:

- Immunopathogenesis studies, with characterization of new targets, and innate immunity studies in immune-mediated neuromuscular diseases.
- Analysis of the effect of new immuno-modulating therapies on functional aspects of immune system cells (response to ligands,

production of antibodies, etc).

Muscular dystrophy, dysferlinopathy and distal myopathies:

- Clinical characterization, new diagnostic tests for dysferlinopathy and distal myopathies, and study of molecular pathways involved in differentiation and molecular and functional interactions of dysferlin.
- Functional analysis of truncated forms of dysferlin with possible

therapeutic implications.

New therapies in genetic diseases:

- Allogeneic transplantation in mitochondrial neurogastrointestinal encephalopathy.
- Bone marrow transplant in dysferlinopathy (animal model).
- Advanced therapy with stem cells and mesoangioblasts.

Challenges

- Advance knowledge of the immunological mechanisms involved in the pathogenesis of immune-mediated neuromuscular diseases.
- Search for new antigens and development of diagnostic tests.
- Implement new diagnostic methods for muscular dystrophies resulting from dysferlinopathy and distal myopathies.

- Advance knowledge of the pathogenetic mechanisms involved in muscular dystrophy resulting from a dysferlin deficiency.
- Implement cell therapy in mouse models of muscular dystrophy using mesoangioblasts and bone marrow, to study possible applications in humans, and to study immune system response to cell therapy in mouse models

of human disease.

- Cleanroom access to manipulate cells for use in humans.
- Evaluate the effects of treatment with lithium in patients with amyotrophic lateral sclerosis.
- Evaluate the effects of treatment with vitamin D in carriers of a DYSF gene mutation.

Grants

- Gallardo, E. Support for Research Groups in Catalonia. Neuromuscular Disease Group. 2009SGR 1004. Amount: 43,680.00 €
- Illa, I. Immunological studies relevant to the development of

therapeutic strategies in neuromuscular disorders. PS09/01964. Amount: 611,655.00 €

- Querol, L. Contrato Río Hortega. CM09/00017. Amount: 21,600.00 €
- Gallardo, E. Physiopathogenic stu-

dy of muscular dystrophies caused by mutations in the DYSF gene by means of interactome analysis and signaling pathways in which dysferlin participates. PS09/01944. Amount: 140,965.00 €



INDEXED PUBLICATIONS

- 01** Rojas-García R, Gallardo E, De Luna N, Juárez C, Martínez-Hernández E, Carvajal A, Carlos C, Fages E, Davila-González P, Illa I. Bulbar involvement in patients with antiganglioside antibodies against anti-NeuNAc (alpha2-3)Gal. *J NEUROL NEUROSURG PSYCHIATRY*; 1(2):180-1
I.F.: 4.869
- 02** J. Díaz-Manera;R. Rojas-García;E. Gallardo;l. Illa. Response to methotrexate in a chronic inflammatory demyelinating polyradiculoneuropathy patient. *MUSCLE & NERVE*; 39(3):386-388.
I.F.: 2.287
- 03** J. Díaz-Manera;R. Rojas-García;l. Illa. Treatment strategies for myasthenia gravis. *EXPERT OPINION ON PHARMACOTHERAPY*; 10(8):1329-1342.
I.F.: 2.018
- 04** Berciano J, García A, Villagrà NT, González F, Ramón C, Illa I, Berciano MT, Lafarga M. Severe Guillain-Barré syndrome: sorting out the pathological hallmark in an electrophysiological axonal case. *J PERIPHER NERV SYST*; 14(1):54-63.
I.F.: 3.623
- 05** Guardia-Laguarta C, Coma M, Pera M, Clarimón J, Sereno L, Agulló JM, Molina-Porcel L, Gallardo E, Deng A, Bezovska O, Hyman BT, Blesa R, Gómez-Isla T, Lleó A. Mild cholesterol depletion reduces amyloid-beta production by impairing APP trafficking to the cell surface. *J NEUROCHEM*; 110(1):220-230
I.F.: 3.999
- 06** C De la Torre, I Illa, G Faulkner, L Soria, R Robles-Cedeño, R Domínguez-Perles, N. De Luna and E. Gallardo. Proteomics identification of differentially expressed proteins in the muscle of dysferlin myopathy patients. *PROTEOMICS CLINICAL APPLICATIONS*; 3(4):486-497.
I.F.: 1.875
- 07** Paradas C, González-Quereda L, De Luna N, Gallardo E, García-Consuegra I, Gómez H, Cabello A, Illa I, Gallano P. A new phenotype of dysferlinopathy with congenital onset. *NEUROMUSCULAR DISORD*; 19(1):21-25.
I.F.: 2.977

*TIF: 21.648 **AIF: 3.09

*Total Impact Factor.
**Average Impact Factor.



Parkinson's Disease and Movement Disorders

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Main lines
Of research

Cognitive impairment and behavioural dysfunctions in Parkinson's disease:

- Knowledge and detection of the neural correlates of cognitive performance in Parkinson's disease using neurophysiological techniques (event-related brain cognitive potentials) and structural and functional neuroimaging (voxel-based morphometry, cortical thickness and spectroscopy).
- Development of more sensitive

tools for cognitive and functional assessment in Parkinson's disease that will allow detection of subtle changes in cognitive performance and treatment response.

Essential tremor and other movement disorders:

- Molecular neuroimaging in essential tremor.
- Clinical, neurophysiological and neuroimaging assessment of patients with FXTAS (fragile X-associated tremor/ataxia syndrome).

- Physiological correlates and pharmacological approach to apathy in Parkinson's disease and other movement disorders.

Translational research - Parkinsonian animal models:

- Assessment of behavioural and cognitive modulations exerted by distinct antiparkinsonian drugs in murine models of Parkinson's disease with lesions in particular neurotransmitter systems (dopaminergic and noradrenergic lesions).

Challenges

Cognitive and behavioural dysfunctions in Parkinson's disease:

- Study and understanding of the neural substrates of cognitive impairment in Parkinson's disease so as to improve diagnostic and therapeutic approaches.
- Development of specific tools to assess and track cognitive changes in Parkinson's disease.

Essential tremor and other movement disorders:

- Genetic studies and genotype-phenotype correlations in essential tremor.
- Development of new therapeutic interventions in essential tremor.
- Neurochemical and structural neuroimaging studies on the pathophysiological bases of essential tremor.

Translational research - Animal models of Parkinsonism:

- Behavioural, physiological and pharmacological characterization of animal models of parkinsonism with combined dopaminergic and noradrenergic lesions.
- Physiopathology of motor, cognitive and behavioural complications linked to antiparkinsonian drugs in animal models of Parkinsonism.

Grants

- Kulisevsky, J. Cognitive and motor response associated to dopaminergic/serotonergic activity in an animal model of Parkinson's disease that contemplates the combined lesion of the compact

parts of the substantia nigra and the locus coeruleus. FIS. Amount: 42,592.00 €



INDEXED PUBLICATIONS

- 01** Olanow CW, Rascol O, Hauser R, Feigin PD, Jankovic J, Lang A, Langston W, Melamed E, Poewe W, Stocchi F, Tolosa E; ADAGIO Study Investigators. Collaborators: Bueri J, Garretto N, Gershanik O, Giannola R, Micheli F, Wolf E, Guttman M, Hobson D, Jog M, King D, Mendis T, Miyasaki J, Panisset M, Pourcher E, Rajput A, Ranawaya R, Tsui J, Césaró P, Damier P, Destee A, Durif F, Slaoui T, Tison F, Viallet F, Deuschl G, Gasser T, Ludolph A, Oehlwein C, Przuttek H, Reifschneider G, Schnitzler A, Trenkwalder C, Bokor M, Katona A, Lajtos J, Nikl J, Takats A, Valikovic A, Badarny S, Djaldetti R, Giladi N, Hassin S, Rabey JM, Reches A, Schwartz M, Wirguin I, Albanese A, Bentivoglio A, Bonuccelli U, Calzetti S, Comi G, Curatola L, Ferrarese C, Lamberti P, Marconi R, Martignoni E, Meo G, Ruggieri S, Stocchi F, Bomhof MA, Hovestadt A, Krul JM, Leenders KL, Cunha L, Ferreira J, Bajenaru OA, Carciumaru N, Bulbaca AC, Pascu I, Simu M, Calopa M, Fernandez Garc_a JM, Kulisevsky J, Linazasoro C, Miquel F, Posada IJ, Mart_MJ, Burn D, MacMahon D, Barker R, Allen N, Barbour P, Bertoni J, Bharucha K, Bose S, Drasby E, Elble R, Elmer L, Evans B, Factor S, Fernández H, Friedman J, Hull K, Golbe L, Goudreau J, Guttuso T, Hassan M, Hauser R, Hermanowicz N, Houser M, Hurtig H, Isaacson S, Jennings D, Kompoliti A, Morgan J, Murphy J, Nausieda P, Pahwa R, Parashos S, O'Suilleabhain P, Racette B, Reich S, Roberts J, Rothstein T, Sahay A, Saint-Hilaire M, Schiess M, Scott B, Shalhed J, Simuni T, Singer C, Smith R, Struck L, Sutton J, Swope D, Tagliati M, Tetrad J, Togasaki D, Watts R. A double-blind, delayedstart trial of rasagiline in Parkinson's disease. *N ENGL J MED*; 361(13):1268-1278. **I.F.: 47.050**
- 02** Grupo de Cirugía Funcional Sociedad Española de Neurocirugía (SENEC); Grupo de Trastornos del Movimiento Sociedad Española de Neurología (SEN). [Consensus statement on deep brain stimulation in Parkinson's disease]. *REV NEUROL*; 49(6):327-31. Spanish. PubMed PMID: 19728280. **I.F.: 1.234**
- 03** Pérez V, Marín C, Rubio A, Aguilar E, Barbanoj M, Kulisevsky J. Effect of the additional noradrenergic neurodegeneration to 6-OHDA-lesioned rats in levodopa-induced dyskinesias and in cognitive disturbances. *J NEURAL TRANSM*; 116(10):1257-66. Epub 2009 Aug 27. PubMed PMID: 19710996. **I.F.: 2.259**
- 04** Milà M, Madrigal I, Kulisevsky J, Pagonabarraga J, Gómez B, Sánchez A, Rodríguez-Revenga L. [Fragile X tremor ataxia syndrome (FXTAS): a new kind of spinocerebellar ataxia associated to fragile X syndrome premutation carriers]. *MED CLIN (BARC)*; 133(7):252-4. PubMed PMID: 19473671. **I.F.: 1.231**
- 05** Pérez V, Sosti V, Rubio A, Barbanoj M, Gich I, Rodríguez-Álvarez J, Kulisevsky J. Noradrenergic modulation of the motor response induced by long-term levodopa administration in Parkinsonian rats. *J NEURAL TRANSM*; 116(7):867-74. Epub 2009 May 26. PubMed PMID: 19468817. **I.F.: 2.259**
- 06** Rodríguez-Oroz MC, Lage PM, Sánchez-Mut J, Lamet I, Pagonabarraga J, Toledo JB, García-García D, Clavero P, Samaranch L, Irurzun C, Matsubara JM, Irigoien J, Bescós E, Kulisevsky J, Pérez-Tur J, Obeso JA. Homocysteine and cognitive impairment in Parkinson's disease: a biochemical, neuroimaging, and genetic study. *MOV DISORD*; 24(10):1437-44. PubMed PMID: 19452554. **I.F.: 4.014**
- 07** Volkmann J, Albanese A, Kulisevsky J, Tornqvist AL, Houeto JL, Pidoux B, Bonnet AM, Mendes A, Benabid AL, Fraix V, Van Blercom N, Xie J, Obeso J, Rodríguez-Oroz MC, Guridi J, Schnitzler A, Timmermann L, Gironell AA, Molet J, Pascual-Sedano B, Rehnrota S, Moro E, Lang AC, Lozano AM, Bentivoglio AR, Scerrati M, Contarino MF, Romito L, Janssens M, Agid Y. Long-term effects of pallidal or subthalamic deep brain stimulation on quality of life in Parkinson's disease. *MOV DISORD*; 24(8):1154-61. PubMed PMID: 19412954. **I.F.: 4.014**
- 08** Rodríguez-Revenga L, Madrigal I, Pagonabarraga J, Xunclà M, Badenas C, Kulisevsky J, Gómez B, Milà M. Penetrance of FMR1 premutation associated pathologies in fragile X syndrome families. *EUR J HUM GENET*; 17(10):1359-62. Epub 2009 Apr 15. PubMed PMID: 19367323. **I.F.: 3.564**
- 09** Kulisevsky J, Pagonabarraga J. Cognitive impairment in Parkinson's disease: tools for diagnosis and assessment. *MOV DISORD*; 24(8):1103-10. Review. PubMed PMID: 19353727. **I.F.: 4.014**
- 10** Kulisevsky J, Pagonabarraga J, Martínez-Corral M. Changes in artistic style and behaviour in Parkinson's disease: dopamine and creativity. *J NEUROL*; 256(5):816-9. Epub 2009 Feb 25. PubMed PMID: 19240966. **I.F.: 2.903**
- 11** Rodríguez-Blázquez C, Frades-Payo B, Forjaz MJ, de Pedro-Cuesta J, Martínez-Martín P; Longitudinal Parkinson's Disease Patient Study Group. Psychometric attributes of the Hospital Anxiety and Depression Scale in Parkinson's disease. *MOV DISORD*; 24(4):519-25. PubMed PMID: 19177496. **I.F.: 4.014**
- 12** Marshall VL, Reiningner CB, Marquardt M, Patterson J, Hadley DM, Oertel WH, Benamer HT, Kemp P, Burn D, Tolosa E, Kulisevsky J, Cunha L, Costa D, Booij J, Tatsch K, Chaudhuri KR, Ulm G, Pogarell O, Höffken H, Gerstner A, Grosset DG. Parkinson's disease is overdiagnosed clinically at baseline in diagnostically uncertain cases: a 3-year European multicenter study with repeat [123I] FP-CIT SPECT. *MOV DISORD*; 24(4):500-8. PubMed PMID: 19117369. **I.F.: 4.014**
- 13** Forjaz MJ, Rodríguez-Blázquez C, Martínez-Martín P; Longitudinal Parkinson's Disease Patient Study Group. Rasch analysis of the hospital anxiety and depression scale in Parkinson's disease. *MOV DISORD*; 24(4):526-32. PubMed PMID: 19097178. **I.F.: 4.014**
- 14** Cubo E, Martínez Martín P, González M, Frades B; miembros del grupo ELEP. [Impact of motor and non-motor symptoms on the direct costs of Parkinson's disease]. *NEUROLOGÍA*; 24(1):15-23. Spanish. PubMed PMID: 19003550. **I.F.: 0.596**
- 15** Martínez-Martín P, Rodríguez-Blázquez C, Forjaz MJ, de Pedro J; Spanish-American Longitudinal PD Patient Study Group. The Clinical Impression of Severity Index for Parkinson's Disease: international validation study. *MOV DISORD*; 24(2):211-7. PubMed PMID: 18973256. **I.F.: 4.014**

*Total Impact Factor.

**Average Impact Factor.

OTHER PUBLICATIONS

Belvis R, Pagonabarraga J, Kulisevsky J. Individual triptan selection in migraine attack therapy. *Recent Pat CNS DRUG DISCOV*. 2009 Jan;4(1):70-81. Review. PubMed PMID: 19149716.



Molecular Neuropharmacology

TEAM



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Main lines
Of research

- Molecular and behavioural characterization of opioid receptors during peripheral inflammation and/or neuropathy.
- The role of nitric oxide in the development and expression of neuropathic or inflammatory pain.
- The involvement of nitric oxide/GC/cGMP in the effects and expression of opioid and cannabinoid receptors during chronic pain.

Grants

- Pol, O. Study of new therapeutic targets in the treatment of chronic pain. PS09/00968. Amount: 67,155.00 €

Challenges

- Identify new therapeutic strategies in the treatment of chronic pain.
- Determine the main genes involved in the regulation of the inflammatory and/or nociceptive response induced by a peripheral inflammation and/or neuropathy.
- Study the role of nitric oxide in the development and expression of neuropathic pain in wild-type and knockout mice.
- Study nitric oxide/GC/GMPc system participation in the anti-inflammatory and antinociceptive effects of opioids and cannabinoids on chronic pain.
- Investigate the main modulation pathways for gene expression of opioid and cannabinoid receptors in inflammation and peripheral lesions in genetically modified animals.
- Study the transcription factors involved in the regulation of gene expression for opioid receptors in vitro: the role played by nitric oxide.
- Evaluate interaction between the signalling pathways for nitric oxide and other second messengers during inflammation and neuropathy.

Scientific
Production

INDEXED PUBLICATIONS

01 S. Leáñez;A. Hervera;O. Pol. Peripheral antinociceptive effects of mu- and delta-opioid receptor agonists in NOS2 and NOS1 knockout mice during chronic inflammatory

pain. EUROPEAN JOURNAL OF PHARMACOLOGY; 602(1):41-49.
I.F.: 2.585

02 A. Hervera;S. Leáñez;R. Negrete;O. Pol. The peripheral administration of a nitric oxide donor potentiates the local antinociceptive effects of

*TIF: 5.216 **AIF: 2.608

a DOR agonist during chronic inflammatory pain in mice. NAUNY-SCHMIEDEBERG ARCHIVES OF PHARMACOLOGY; 380(4):345-352.
I.F.: 2.631

*Total Impact Factor.
**Average Impact Factor.



Pharmacological Research in Humans

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Salvador Rico UAB

Main lines Of research

Clinical trials that offer no therapeutic benefits to volunteer participants:

- Phase I clinical trials (healthy volunteers) whose main objectives include: first-time-in-humans, safety and tolerability (local and systemic - dermatological, ophthalmological, vaginal), pharmacokinetics, bioavailability and bioequivalence (generic drugs), pharmacodynamics, interactions (drug-drug, drug-food), evaluation and characterization of biomarkers, proofs of concept, acceptability and preference studies.
- Follow-up studies in populations with same or different characteristics: the elderly, obese

volunteers, postmenopausal volunteers, patients with liver or kidney failure.

- Collaboration with clinical services to conduct phase II or phase III studies.

Neuro-physio-pharmacology of sleep/wake states:

- Investigate human brain activity in sleep and wakefulness, mechanisms involved in these two states, problems derived from sleep disturbances and possible interventions to treat these.
- Approach the phenomenon as a continuum, that is, that appropriate interpretation of the impact of a certain intervention,

whether pharmacological or not, should take into account the complementarity of evaluations performed during sleep and during wakefulness. The phenomenon under study cannot be evaluated without taking this interactivity into account: develop studies that consider the 24-hour day/night cycle.

- Use psychomotor performance tests, subjective evaluation scales, neurophysiologic recordings (quantitative EEG, evoked-sensorial potentials, and polysomnography), psychophysiological tests, and pupillometric tests and their interaction with transcranial magnetic stimulation (TMS) as evaluation tools.

Challenges

- Consolidate and strengthen leadership in this field in Spain, conserve relationships with the pharmaceutical industry on a national level, and strengthen and extend relations abroad with multinational enterprises and industries from other sectors.
- Broaden the range of questions to address in research projects along the lines of neuro-physio-pharmacology of sleep/wake states, not focusing only on pharmacotherapeutic objectives but also on physiopathologic objectives in related fields, such as dreams.
- Develop the performance of neurophysiologic recordings in ambulatory conditions, simplifying participation of volunteers but not lowering the quality of data obtained (non-negotiable element of their application as a research variable).
- Promote dissemination of our activity with a double objective: to return the knowledge generated to the society, and to demystify research in humans, bringing it closer to the community so as to foster participation in clinical trials (particularly in specific sectors of the populations, such as the elderly).
- Set up educational activities related to the two main research lines; i.e. subjects related to the application of good clinical practices (GCPs) in clinical research, and to the so-called "medicine of sleep" and its medical (pathology and treatment) and social (quality of life, prevention of accident risk) consequences.



INDEXED PUBLICATIONS

- 01** M. J. Barbanoj; M. R. Ballester; R. M. Antonijoan; M. Puntès; S. Gropper; B. Santos; C. Albet; A. Guglietta. A bioavailability/bioequivalence and pharmacokinetic study of two oral doses of torasemide (5 and 10 MG): prolonged-release versus the conventional formulation. *CLINICAL AND EXPERIMENTAL PHARMACOLOGY AND PHYSIOLOGY*; 36(5-6): 469-477. **I.F.: 1.936**
- 02** R. M. Antonijoan; S. Rico; J. Martínez-González; M. Borrell; D. Valcárcel; J. Fontcuberta; M. J. Barbanoj. Comparative pharmacodynamic time-course of bemiparin and enoxaparin in healthy volunteers. *INTERNATIONAL JOURNAL OF CLINICAL PHARMACOLOGY AND THERAPEUTICS*; 47(12):726-732. **I.F.: 1.381**
- 03** M. J. Barbanoj; M. R. Ballester; R. M. Antonijoan; I. Gich; P. Pelagio; S. Gropper; B. Santos; A. Guglietta. Comparison of repeated-dose pharmacokinetics of prolonged-release and immediate-release torasemide formulations in healthy young volunteers. *FUNDAMENTAL & CLINICAL PHARMACOLOGY*; 23(1):115-125. **I.F.: 2.372**
- 04** M. Balsells; A. García-Patterson; I. Gich; R. Corcoy. Maternal and Fetal Outcome in Women with Type 2 Versus Type 1 Diabetes Mellitus: A Systematic Review and Metaanalysis. *JOURNAL OF CLINICAL ENDOCRINOLOGY & METABOLISM*; 94(11):4284-4291. **I.F.: 6.202**
- 05** J. Jurado; J. Ybarra; P. Solanas; J. Caula; I. Gich; J. M. Pou; J. H. Romeo. Prevalence of cardiovascular disease and risk factors in a type 2 diabetic population of the North Catalonia diabetes study. *JOURNAL OF THE AMERICAN ACADEMY OF NURSE PRACTITIONERS*; 21(3):140-148. **I.F.: 0.907**
- 06** R. Martínez-Hernández; C. Soler-Botija; E. Also; L. Alias; L. Caselles; I. Gich; S. Bernal; E. F. Tizzano. The Developmental Pattern of Myotubes in Spinal Muscular Atrophy Indicates Prenatal Delay of Muscle Maturation. *JOURNAL OF NEUROPATHOLOGY AND EXPERIMENTAL NEUROLOGY*; 68(5):474-481. **I.F.: 4.564**
- 07** V. Pérez; C. Marín; A. Rubio; E. Aguilar; M. Barbanoj; J. Kulisevsky. Effect of the additional noradrenergic neurodegeneration to 6-OH-DA-lesioned rats in levodopa-induced dyskinesias and in cognitive disturbances. *JOURNAL OF NEURAL TRANSMISSION*; 116(10):1257-1266. **I.F.: 2.259**
- 08** L. Sereno; M. Coma; M. Rodríguez; P. Sánchez-Ferrer; M. B. Sánchez; I. Gich; J. M. Agulló; M. Pérez; J. Ávila; C. Guardia-Laguarta; J. Clarimón; A. Lleó; T. Gómez-Isla. A novel GSK-3 beta inhibitor reduces Alzheimer's pathology and rescues neuronal loss in vivo. *NEUROBIOLOGY OF DISEASE*; 35(3): 359-367. **I.F.: 4.518**
- 09** V. Pérez; V. Sosti; A. Rubio; M. Barbanoj; I. Gich; J. Rodríguez-Álvarez; J. Kulisevsky. Noradrenergic modulation of the motor response induced by long-term levodopa administration in Parkinsonian rats. *JOURNAL OF NEURAL TRANSMISSION*; 116(7):867-874. **I.F.: 2.259**
- 10** JF Alonso, MA Mañanas, S Romero, S Hoyer, J Riba, MJ Barbanoj. Drug effect on EEG connectivity assessed by linear and non-linear couplings. *HUMAN BRAIN MAPPING*; 31(3):487-497. **I.F.: 6.256**
- 11** S Romero, MA Mañanas, MJ Barbanoj. Influence of ocular filtering in EEG data on the assessment of drug-induced effects on the brain. *HUMAN BRAIN MAPPING*; 30(5):1470-1480. **I.F.: 6.256**
- 12** S Romero, MA Mañanas, MJ Barbanoj. Ocular reduction in EEG signals base on adaptative filtering, regression and blind source separation. *ANNALS OF BIOMEDICAL ENGINEERING*; 37(1):176-191. **I.F.: 2.409**

*Total Impact Factor.

**Average Impact Factor.

OTHER PUBLICATIONS

J. Soler; J. C. Pascual; T. Tiana; A. Cebrià; J. Barrachina; M. J. Campins; I. Gich; E. Álvarez; V. Pérez. Dialectical behaviour therapy skills training compared to standard group therapy in borderline personality disorder: A 3-month randomised controlled clinical trial. *BEHAVIOUR RESEARCH AND THERAPY*.

E. Granell; A. Hidalgo; A. Martínez; I. Gich; I. Bolívar; T. Franquet; A. Giménez; T. Alepuz. Evaluation of the quick diagnosis and treatment program for lung cancer. *RADIOLOGIA*.

S Rico, RM Antonijoan, MJ Barbanoj. Ebastine in the light of CONGA Recommendations for the development of third-generation antihistamines. *JOURNAL OF ASTHMA AND ALLERGY*.

MJ Barbanoj, RM Antonijoan, S Clos, EM Grasa, S Giménez. Nuevos hipnóticos, desde la perspectiva del farmacólogo. *VIGILIA-SUEÑO*.

MJ Barbanoj, J Kulisevsky. Una alianca estratègica amb compromís de futur: Partenariat Hospital de la Santa Creu i Sant Pau i Indústria Farmacèutica. *REFERENT: PAPERS DE LA FUNDACIÓ UNIÓ*.



Clinical Psychiatry

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Main lines Of research

- Psychotic disorders (first episodes)
- Affective disorders (major depression)
- Borderline personality disorders
- Mental health therapy

Challenges

- Foster research that reduces the healthcare, social and personal costs of mental illness by exploring areas such as epidemiology, etiopathogenesis, physiopathology, prevention and treatment.
- Foster research into mental health therapies.
- **Research into psychotic disorders:**
 - Neuroimaging studies in early psychotic episodes.
 - Study of environmental, biological and genetic factors in psychosis.
- Efficacy and effectiveness studies of anti-psychotic drugs.
- **Research into affective disorders:**
 - Identification and evaluation of new therapeutic targets in depression.
 - Neuroimaging studies in early psychotic episodes.
 - Biological and genetic markers in affective disorders.
 - Implementation of new therapeutic programmes, depression evaluation and social aspects of depression.
- **Research into personality disorders:**
 - Clinical trials regarding the usefulness of mixed treatment in patients with borderline personality disorder and validation of diagnostic instruments.
 - Genetic-neuroimaging studies of borderline personality disorder.



Grants

- Álvarez, E. Support for Research Groups in Catalonia. Clinical psychiatry group. 2009SGR 179. Amount: **42,640.00 €**
- Pérez, V. Deep brain stimulation: functional neuroimaging studies, stimulation parameters optimizing and new indications on affective disorders. PS09/00580. Amount: **92,565.00 €**
- Pascual, JC. Study of the neuro-cognitive rehabilitation effectiveness on personality disorders. PI09/90751. Amount: **57,838.00 €**
- Corripio, I. Glycine transporter 1 expression in patients with schizophrenia: A [11C]GSK931145 PET study. La Marató TV3 090531. Amount: **56,725.00 €**
- Pascual, JC. Psychometric properties of the Spanish version of the Borderline Symptom List. CIBERSAM Instrumental bank. Amount: **9,000.00 €**
- Soler, J. Psychometric properties of the Spanish version of the Clinically Useful Depression Outcome Scale (CUDOS). CIBERSAM Instrumental bank. Amount: **9,000.00 €**
- Pérez, V. Deep brain stimulation in patients with resistant major depressive disorder. Mechanisms of action, clinical and preclinical studies. Intramural CIBERSAM. Amount: **37,000.00 €**

Scientific production

INDEXED PUBLICATIONS

- 01 B. Arranz;L. San;N. Ramírez;R. M. Dueñas;V. Pérez;J. Salavert;I. Corripio;E. Álvarez. Clinical and serotonergic predictors of non-affective acute remitting psychosis in patients with a first-episode psychosis. ACTA PSYCHIATRICA SCANDINAVICA; 119(1):71-77. **I.F.: 3.733**
- 02 J. Soler;J. C. Pascual;T. Tiana;A. Cebria;J. Barrachina;M. J. Campins;I. Gich;E. Álvarez;V. Pérez. Dialectical behaviour therapy skills training compared to standard group therapy in borderline personality disorder: A 3-month randomised controlled clinical trial. BEHAVIOUR RESEARCH AND THERAPY; 47(5):353-358. **I.F.: 3.525**
- 03 María J. Portella;Javier de Diego-Adelino;Dolors Puigdemont;Rosario Pérez-Egea;Enric Álvarez; Francesc Artigas; Víctor Pérez. Pindolol augmentation enhances response outcomes in first depressive episodes. EUROPEAN NEUROPSYCHOPHARMACOLOGY; 19(7):516-519. **I.F.: 3.684**
- 04 Vidal;E. Gómez-Gil;M. Sans;M. J. Portella;M. Salamero;J. M. Piqué;J. Panes. The impact of anxiety and depression on relapse in patients with inflammatory bowel disease. MED CLIN (BARC); 132(8):298-302. **I.F.: 1.231**
- 05 M. Mur;M. J. Portella;A. Martínez-Arán;J. Pifarré;E. Vieta. Influence of Clinical and Neuropsychological Variables on the Psychosocial and Occupational Outcome of Remitted Bipolar Patients. PSYCHOPATHOLOGY; 42(3):148-156. **I.F.: 1.637**
- 06 Varnik;K. Kolves;J. Allik;E. Arensman; E. Aromaa;C. van Audenhove; J. H. Bouleauh;C. M. van der Feltz-Cornelis;G. Giupponi; R. Gusmao;M. Kopp;A. Marusic; M. Maxwell; H. Oskarsson;A. Palmer; C. Pull; A. Realo; T. Reisch;A. Schmidtke; V. P. Sola;L. Wittenburg; U. Hegerl. Gender issues in suicide rates, trends and methods among youths aged 15-24 in 15 European countries. JOURNAL OF AFFECTIVE DISORDERS; 113(3): 216-226. **I.F.: 3.763**
- 07 Puigdemont D, Portella MJ, Pérez-Egea R, de Diego-Adelino J, Gironell A, Molet J, Durán-Sindreu S, Álvarez E, Pérez V. Depressive Relapse After Initial Response to Subcallosal Cingulate Gyrus-Deep Brain Stimulation in a Patient with a Treatment-Resistant Depression: Electroconvulsive Therapy as a Feasible Strategy. BIOLOGICAL PSYCHIATRY; 66(5):e11-2. **I.F.: 8.926**
- 08 Catafau AM, Bullich S, Javier Fernández F, Gómez V, Llop J, Suárez M, Trampal C, Álvarez E, Corripio I, Pérez V, Grasa E, Parelada E, Mané A, Farré M, Pomarol-Clotet E, Sarró S, Del Moral E, Ramírez N, Salavert J, San L, Perich J. Within-subject comparison of striatal D2 receptor occupancy measurements using [123I]IBZM SPECT and [11C]Raclopride PET. NEUROIMAGE; 46(2):447-58. **I.F.: 5.739**
- 09 Ciudad A, Álvarez E, Bobes J, San L, Polavieja P, Gilaberte I. Remission in schizophrenia: results from a 1-year follow-up observational study. SCHIZOPHRENIA RESEARCH; 108(1):214-22. **I.F.: 4.458**
- 10 Guitart-Masip M, Pascual JC, Carmona S, Hoekzema E, Bergé D, Pérez V, Soler J, Soliva JC, Rovira M, Bulbena A, Vilarroya O. Neural correlates of impaired emotional discrimination in borderline personality disorder: An fMRI study. PROG NEUROPSYCHOPHARMACOL BIOL PSYCHIATRY; 33(8):1537-45. **I.F.: 2.823**
- 11 Portella MJ, De-Diego-Adelino J, Pérez-Egea R, Puigdemont D, Corripio I, Pascual JC, Soler J, Gómez-Anson B, Barbanoj M, Álvarez E, Pérez V. Neuroplasticity and depression: First Depressive Episodes Studies (FIDEs). EUROPEAN JOURNAL OF PSYCHIATRY; 23:140-146. **I.F.: 0.741**
- 12 Hegerl U, Wittenburg L, Gottlieb K, Arensman E, van Audenhove C, Bouleau JH, van der Feltz-Cornelis C, Gupponi G, Gusmao R, Kopp M, Löhr C, Marusic A, Maxwell M, Meise U, Oskarsson H, Pérez Sola V, Pull C, Tuulari J, Várnik A, European Alliance Against Depression Consortium. Focus on mental health care reforms in Europe: the European alliance against depression: a multilevel approach to the prevention of suicidal behavior. PSYCHIATRIC SERVICES; 60(5):596-599. **I.F.: 2.813**

*TIF: 42.332 **AIF: 3.25

*Total Impact Factor.
**Average Impact Factor.



Genetics in Neurodegenerative Diseases

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Main lines Of research

- **Genetics in presenile Alzheimer disease.** A multicentre project compiling genetic samples from over 200 presenile patients with Alzheimer (disease onset before 65 years), already giving rise to several international papers. A new project is now underway with these samples to investigate new genes involved in presenile forms without APP or presenilin gene mutations (FIS 529/766).
- **Genetic alterations in familial and sporadic Lewy body disease.** This line of investigation studies genetic alterations that may be related to dementias with familial and/or sporadic Lewy body disease. Several papers on results have been published to date. We are presently studying sporadic forms: we have

requested brain tissue samples from the Barcelona University Neurological Tissue Bank and we are recruiting Neurology Service Memory Clinic patients with a clinical probability of Lewy body dementia. Mutations in genes related to this illness have been ruled out in about 55 samples (half confirmed by pathological diagnosis). In samples without mutations we will study the genotype of the genome to detect possible presence of genomic anomalies associated with the disease.

- **Genetic risk factors of dementia in Parkinson disease.** In collaboration with the Movement Disorders Unit we are collecting samples from patients with Parkinson disease. All patients undergo specific tests

to detect dementia associated with the disorder. We will conduct sequencing of genes related to familial or sporadic Parkinson disease, and genetic variants in genes related to neurodegenerative dementias will be genotyped. The objective is to find genetic risk factors for dementia in patients with Parkinson.

- **Prevalence of mutations in genes related to amyotrophic lateral sclerosis (ALS).** In collaboration with the Neurology Service Neuro-muscular Nursing Unit we are creating a gene bank of patients with ALS in order to study mutations in genes that promote familial and sporadic forms of the disease.

Challenges

Genetic architecture of complex diseases caused by neurodegenerative processes:

- Research into familial aggregation for specific diseases to determine genetic links and clone new genes.
- Genetic association studies to establish genetic and genomic risk factors for different diseases.

- Study of the prevalence of genetic mutations in the Spanish population.
- Expansion of the genetic library already consisting of over 1,500 DNA samples.
- To continue to expand the DNA bank to achieve a numerous, well-characterized, homogenous sample of patients and their relatives.

This will provide invaluable potential for high-level genetic research into diseases of this nature.



Grants

- Martín, I. Supporting contract. CA09/00239. Amount: 10,500.00 €
- Clarimón, J. Genetics of synucleinopathies: a study of Parkinson - Parkinson with dementia and Lewy body dementia continuum. PS09/00098. Amount: 114,345.00 €

*TIF: 24.955 **AIF: 4.99

Scientific production

INDEXED PUBLICATIONS

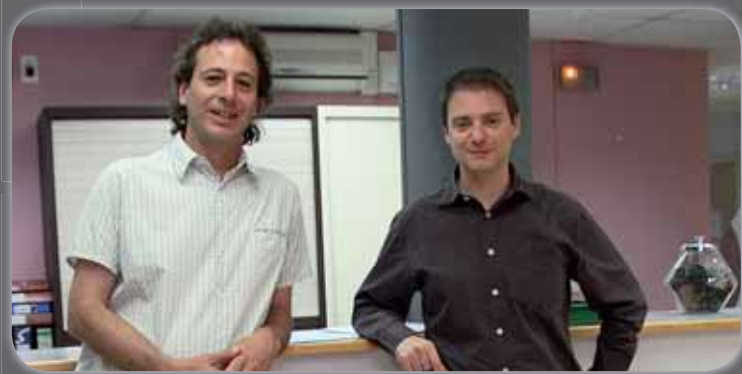
- 01 L. Sereno;M. Coma;M. Rodríguez;P. Sánchez-Ferrer;M. B. Sánchez;I. Gich;J. M. Agulló;M. Pérez;J. Ávila; C. Guardia-Laguarta;J. Clarimón;A. Lleó;T. Gómez-Isla. A novel GSK-3 beta inhibitor reduces Alzheimer's pathology and rescues neuronal loss in vivo. *Neurobiology of DISEASE*; 35(3):359-367. I.F.: 4.518
- 02 J. Clarimón;L. Molina-Porcel;T. Gómez-Isla; R. Blesa; C. Guardia-Laguarta; A. González-Neira; M. Estorch; J. M. Grau;L. Barraquer;C. Roig;I. Ferrer;A. Lleó. Early-Onset Familial Lewy Body Dementia With Extensive Tauopathy: A Clinical, Genetic, and Neuropathological Study. *JOURNAL OF NEUROPATHOLOGY AND EXPERIMENTAL NEUROLOGY*; 68(1):73-82. I.F.: 4.564
- 03 C. Guardia-Laguarta;M. Coma;M. Pera;J. Clarimón;L. Sereno;J. M. Agulló;L. Molina-Porcel; E. Gallardo; A. Deng;O. Berezovska;B. T. Hyman;R. Blesa;T. Gómez-Isla;A. Lleó. Mild cholesterol depletion reduces amyloid-beta production by impairing APP trafficking to the cell surface. *JOURNAL OF NEUROCHEMISTRY*; 110(1):220-230. I.F.: 3.999
- 04 J. Clarimón;R. Djaldetti;A. Lleó;R. J. Guerreiro;J. L. Molinuevo; C. Paisán-Ruiz; T. Gómez-Isla; R. Blesa; A. Singleton;J. Hardy. Whole genome analysis in a consanguineous family with early onset Alzheimer's disease. *NEURO BIOLOGY OF AGING*; 30 (12):1986-1991. I.F.: 5.937
- 05 K. Kalinderi, L. Fidani, Z. Katsarou, J. Clarimón, S. Bostantjopoulou, A. GSK3_ polymorphisms, MAPT H1 haplotype and Parkinson's disease in a Greek cohort. *NEUROBIOLOGY OF AGING*. I.F.: 5.937

*Total Impact Factor.
**Average Impact Factor.



Human Experimental Neuropsychopharmacology

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Main lines
Of research

General neuropsychopharmacology:

- Pharmacological modulation of the different neurotransmission systems so as to study the role of these systems in advanced cogni-

tive functions (executive control) and emotions (anxiety models). A number of research articles have already been published.

Neuropsychopharmacology of abused substances:

- Study of the effects on the central nervous system of psychodysleptic drugs such as ayahuasca, salvinorin A, dimethyltryptamine and THC.

Challenges

- Consolidate existing research lines and extend them through possible cooperation agreements with other groups and according to the growth of the group itself.
- Obtain recognition as an emerging group for the EXPERIMENTAL HUMAN NEUROPSY-

CHOPHARMACOLOGY group and to consolidate it.

- Obtain stable funding for the group and support in terms of technical staff.
- Communicate our activities.
- Maintain existing external coope-

ration agreements.

- Establish new cooperation agreements within the HSCSP Research Institute.

*TIF: 6.256 **AIF: 6.256

Scientific
Production

INDEXED PUBLICATIONS

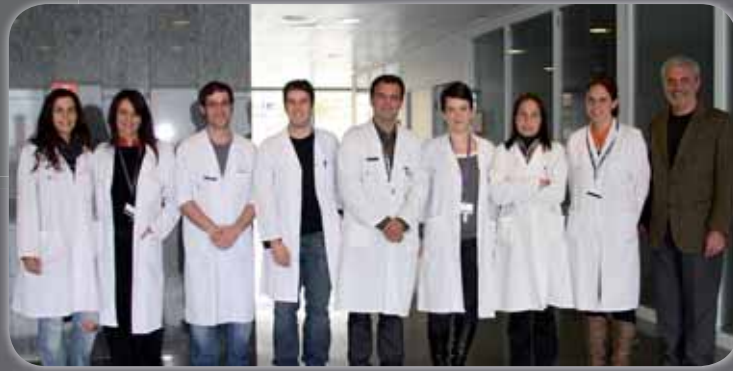
- 01 Carreiras M, Riba J, Vergara M, Heldmann M. & Münte T.F. Syllable congruency and word frequency effects on brain activation. HUMAN BRAIN MAPPING; 30:3079-3088
I.F.: 6.256

* Total Impact Factor.
** Average Impact Factor.



Neurobiology of Dementia

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Main lines Of research

- Identification of new biochemical markers in cerebrospinal fluid in Alzheimer disease and other neurodegenerative dementias.
- Integral molecular characterization of the gamma-secretase complex in Alzheimer disease.
- Interaction and synergic effects between the tau protein and alpha-synuclein in Lewy body disease.
- Role of progranulin and TDP-43 in frontotemporal dementia.
- Therapeutic implications of anti-inflammatory drugs and other gamma-secretase modulators in Alzheimer disease.

Challenges

- Maintain and increase scientific production and funding in the next 5 years.
- Develop a training plan for researchers entering the group while maintaining its translational nature.
- Establish new cooperation agreements that support applications for European and international projects.
- Establish links with technological innovation groups and companies to foster patent applications and set up contracts.
- Develop a national multicentre project on Alzheimer disease markers.

Grants

- Lleó, A. CIBERNED Area 5. Amount: 100,000.00 €

*TIF: 36.497 **AIF: 2.80

Scientific production

INDEXED PUBLICATIONS

- C. Guardia-Laguarta; M. Coma; M. Pera; J. Clarimón; L. Sereno; J. M. Agulló; L. Molina-Porcel; E. Gallardo; A. Deng; O. Berezovska; B. T. Hyman; R. Blesa; T. Gómez-Isla; A. Lleó. Mild cholesterol depletion reduces amyloid-beta production by impairing APP trafficking to the cell surface. *JOURNAL OF NEUROCHEMISTRY*; 110(1):220-230. **I.F.: 3.999**
- J. Clarimón; R. Djaldetti; A. Lleó; R. J. Guerreiro; J. L. Molinuevo; C. Paisan-Ruiz; T. Gómez-Isla; R. Blesa; A. Singleton; J. Hardy. Whole genome analysis in a consanguineous family with early onset Alzheimer's disease. *NEUROBIOLOGY OF AGING*; 30(12):1986-1991. **I.F.: 5.937**
- L. Sereno; M. Coma; M. Rodríguez; P. Sánchez-Ferrer; M. B. Sánchez; I. Gich; J. M. Agulló; M. Pérez; J. Ávila; C. Guardia-Laguarta; J. Clarimón; A. Lleó; T. Gómez-Isla. A novel GSK-3 beta inhibitor reduces Alzheimer's pathology and rescues neuronal loss in vivo. *NEUROBIOLOGY OF DISEASE*; 35(3): 359-367. **I.F.: 4.518**
- J. Clarimón; L. Molina-Porcel; T. Gómez-Isla; R. Blesa; C. Guardia-Laguarta; A. González-Neira; M. Estorch; J. M. Grau; L. Barraquer; C. Roig; I. Ferrer; A. Lleó. Early-Onset Familial Lewy Body Dementia With Extensive Tauopathy: A Clinical, Genetic, and Neuropathological Study. *JOURNAL OF NEUROPATHOLOGY AND EXPERIMENTAL*

*Total Impact Factor.
**Average Impact Factor.



NEUROLOGY; 68(1):73-82.

I.F.: 4.564

05 E. Buñill; A. Bartes; A. Moral; T. Casadevall; M. Codinachs; E. Zapater; J. C. Rovira; P. Roura; R. Oliva; R. Blesa. Genetic and environmental factors that may influence in the senile form of Alzheimer's disease: nested case control studies. NEUROLOGIA; 24(2):108-112.

I.F.: 0.596

06 E. Buñill; A. Bartes; A. Moral; T. Casadevall; M. Codinachs; E. Zapater; J. C. Rovira; P. Pérez; P. Roura; R. Blesa. Prevalence of cognitive deterioration in people over 80 years old: COGMANLLEU study. NEUROLOGIA; 24(2):102-107.

I.F.: 0.596

07 J. Pena-Casanova; R. Blesa; M. Aguilar; N. Gramunt-Fombuena; B. Gómez-Anson; R. Oliva; J. L. Molinuevo; A. Robles; M. S. Barquero; C. Antúnez; C. Martínez-Parra; A. Frank-García; M. Fernández; V. Alfonso; J. M. Sol; Neuronorma Study Team. Spanish Multicenter Normative Studies (NEURONORMA Project): Methods and Sample Characteristics. ARCHIVES OF CLINICAL NEUROPSYCHOLOGY; 24(4):307-319.

I.F.: 2.497

08 J. Pena-Casanova; S. Quinones-Ubeda; N. Gramunt-Fombuena; M. Aguilar; L. Casas; J. L. Molinuevo; A. Robles; D. Rodríguez; M. S. Barquero; C. Antúnez; C. Martínez-Parra; A. Frank-García; M. Fernández; A. Molano; V. Alfonso; J. M. Sol; R. Blesa; Neuronorma Study Team. Spanish Multicenter Normative Studies (NEURONORMA Project): Norms for Boston Naming Test and Token Test.

ARCHIVES OF CLINICAL NEUROPSYCHOLOGY; 24(4):343-354.

I.F.: 2.497

09 J. Pena-Casanova; N. Gramunt-Fombuena; S. Quinones-Ubeda; G. Sánchez-Benavides; M. Aguilar; D. Badenes; J. L. Molinuevo; A. Robles; M. S. Barquero; M. Payno; C. Antúnez; C. Martínez-Parra; A. Frank-García; M. Fernández; V. Alfonso; J. M. Sol; R. Blesa; Neuronorma Study Team. Spanish Multicenter Normative Studies (NEURONORMA Project): Norms for the Rey-Osterrieth Complex Figure (Copy and Memory), and Free and Cued Selective Reminding Test. ARCHIVES OF CLINICAL NEUROPSYCHOLOGY; 24(4):371-393.

I.F.: 2.497

10 J. Pena-Casanova; S. Quinones-Ubeda; N. Gramunt-Fombuena; M. Quintana; M. Aguilar; J. L. Molinuevo; M. Serradell; A. Robles; M. S. Barquero; M. Payno; C. Antúnez; C. Martínez-Parra; A. Frank-García; M. Fernández; V. Alfonso; J. M. Sol; R. Blesa; Neuronorma Study Team. Spanish Multicenter Normative Studies (NEURONORMA Project): Norms for the Stroop Color-Word Interference Test and the Tower of London-Drexel. ARCHIVES OF CLINICAL NEUROPSYCHOLOGY; 24(4):413-429.

I.F.: 2.497

11 J. Pena-Casanova; M. Quintana-Aparicio; S. Quinones-Ubeda; M. Aguilar; J. L. Molinuevo; M. Serradell; A. Robles; M. S. Barquero; C. Villanueva; C. Antúnez; C. Martínez-Parra; A. Frank-García; M. D. Aguilar; M. Fernández; V. Alfonso; J. M. Sol; R.

Blesa; Neuronorma Study Team. Spanish Multicenter Normative Studies (NEURONORMA Project): Norms for the Visual Object and Space Perception Battery-Abbreviated, and Judgment of Line Orientation. ARCHIVES OF CLINICAL NEUROPSYCHOLOGY; 24(4):355-370.

I.F.: 2.497

12 J. Pena-Casanova; S. Quinones-Ubeda; N. Gramunt-Fombuena; M. Quintana-Aparicio; M. Aguilar; D. Badenes; N. Cerulla; J. L. Molinuevo; E. Ruiz; A. Robles; M. S. Barquero; C. Antúnez; C. Martínez-Parra; A. Frank-García; M. Fernández; V. Alfonso; J. M. Sol; R. Blesa; Neuronorma Study Team. Spanish Multicenter Normative Studies (NEURONORMA Project): Norms for Verbal Fluency Tests. ARCHIVES OF CLINICAL NEUROPSYCHOLOGY; 24(4):395-411.

I.F.: 2.497

13 J. Pena-Casanova; S. Quinones-Ubeda; M. Quintana-Aparicio; M. Aguilar; D. Badenes; J. L. Molinuevo; L. Tornér; A. Robles; M. S. Barquero; C. Villanueva; C. Antúnez; C. Martínez-Parra; A. Frank-García; A. Sanz; M. Fernández; V. Alfonso; J. M. Sol; R. Blesa; Neuronorma Study Team. Spanish Multicenter Normative Studies (NEURONORMA Project): Norms for Verbal Span, Visuospatial Span, Letter and Number Sequencing, Trail Making Test, and Symbol Digit Modalities Test. ARCHIVES OF CLINICAL NEUROPSYCHOLOGY; 24(4):321-341.

I.F.: 2.497

OTHER PUBLICATIONS

Sánchez-Benavides G, Gómez-Ansón B, Molinuevo JL, Blesa R, Monte GC, Buschke H, Peña-Casanova. Medial Temporal Lobe Correlates of Memory Screening Measures in Normal Ageing, MCI, and AD. J GERIATR PSYCHIATRY NEUROL.



Neuroradiology

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Main lines
Of research

- Diagnostic markers for magnetic resonance imaging in neurosciences, particularly in neurodegenerative and psychiatric illnesses.
- Correlation of these markers with other types of markers, such as clinical, neuropsychological, genetic and biochemical markers.
- Use of information technologies in neuroimaging research.

Grants

- Gómez, B. Predicting response to cognitive behavior therapy in schizophrenic patients with persistent auditory hallucination using fMRI. Fundació Marató de TV3. Amount: 138.592,84 €

Scientific production

INDEXED PUBLICATIONS

- 01** Pugliese M, Carrasco JL, Gómez-Ansón B, Andrade C, Zamora A, Rodríguez MJ, Mascort J, Mahy N. Magnetic resonance imaging of cerebral involucional changes in dogs as markers of aging: An innovative tool adapted from a human visual rating scale. VET J. Epub ahead of print.
I.F.: 2.323
- 02** Rodríguez-Revenga L, Madrugal I, Pagonabarraga J, Xunclà M, Badasnas C, Kulisevsky J, Gómez B, Milà M. Penetrance of FMR1 premutation associated pathologies in fragile X syndrome families. EUR J HUM GENET; 17(10):1359-62.
I.F.: 3.564

- 03** Peña-Casanova J, Blesa R, Aguilar M, Gramunt-Fombuena N, Gómez-Ansón B, Oliva R, Molinuevo JL, Robles A, Barquero MS, Antúnez C, Martínez-Parra C, Frank-García A, Fernández M, Alfonso V, Sol JM; for the NEURONORMA Study Team. Spanish Multicenter Normative Studies (NEURONORMA Project): Methods and Sample Characteristics. ARCH CLIN NEUROPSYCHOL; 24(4):307-19.
I.F.: 2.497
- 04** Guevara M, Baccaro ME, Torre A, Gómez-Ansón B, Rios J, Torres F, Rami L, Monté-Rubio GC, Martín-Llahí M, Arroyo V, Ginès P. Hyponatremia is a risk factor of hepatic encephalopathy in patients with cirrhosis: a prospective study with time-dependent analysis. AM J

- GASTROENTEROL; 104(6):1382-9.
I.F.: 6.012
- 05** Rami L, Gómez-Ansón B, Monte GC, Bosch B, Sánchez-Valle R, Molinuevo JL. Voxel based morphometry features and follow-up of amnesic patients at high risk for Alzheimer's disease conversion. INT J GERIATR PSYCHIATRY; 24(8):875-84.
I.F.: 1.981
- 06** Gómez-Ansón B, Alegret M, Muñoz E, Monté GC, Alayrach E, Sánchez A, Boada M, Tolosa E. Prefrontal cortex volume reduction on MRI in pre-clinical Huntington's disease relates to visuomotor performance and CAG number. PARK REL DIS; 15(3):213-9.
I.F.: 2.406

*Total Impact Factor.
**Average Impact Factor.



Ageing Institute

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Main lines Of research

- Active ageing.
- Mobility, falls and exercise.
- Alzheimer disease and related disorders.
- Nutrition and feeding.
- Quality of life.
- Epidemiological clinical research.
- Long-term care services and dependence.
- Sociodemographic and epidemiological studies.
- Social policies and participation.

Challenges

Research area

- Develop in-house research projects in response to internal interests. Conduct ad-hoc research, developing projects through specific contracts with public and private institutions. Translate research findings into action.

Studies and consultancy area

- The scope of this area is to identify

and research problems related to public policy and organization of services, recommend appropriate measures and provide technical assistance to the application of these recommendations in the field of aging.

Participation and psycho-social area

- This area focuses on psychological and social aspects of aging, and par-

ticipation of the elderly. Specific studies and research are undertaken. In collaboration with the other areas we perform action research studies, and advise public and private entities about the design of products and services. We promote activities to increase participation levels of the elderly and other generations in the context of Active Aging.

Grants

- Chi Kung: new interventions for carers and persons with Alzheimer. Obra Social "Caixa Catalunya". Period: 2009-2010.
- IMSERSO agreement to follow up implementation of the Law of Dependency. Period: 2009.
- Barcelona, Friendly City for the Elderly. Barcelona City Hall. Period: 2009-2011
- Recycling for teams evaluating the Law of Dependency in Catalonia: PRODEP. Period: 2009.



INDEXED PUBLICATIONS

- 01 Gait speed at usual pace as a predictor of adverse outcomes in community-dwelling older people an International Academy on Nutrition and Aging (IANA) Task Force. Abellan van Kan G, Rolland Y, Andrieu S, Bauer J, Beauchet O, Bonnefoy M, Césari M, Donini LM, Gillette Guyonnet S, Inzitari M, Nourhashemi F, Onder G, Ritz P, Salva A, Visser M, Vellas B. *J NUTR HEALTH AGING*; 13(10):881-9. **I.F.: 1.712**
- 02 Weiser P, Becker T, Losert C, Alptekin K, Berti L, Burti L, Burton A, Der-novsek M, Dragomirecka E, Freidl M, Friedrich F, Genova A, Germanavicius A, Halis U, Henderson J, Hjorth P, Lai T, Larsen JI, Lech K, Lucas R, Marginean R, McDaid D, Mladenova M, Munk-Jorgensen P, Paziuc A, Paziuc P, Priebe S, Prot-Klinger K, Wancata J, Kilian R. European network for promoting the

- physical health of residents in psychiatric and social care facilities (HELPS): background, aims and methods. *BMC PUBLIC HEALTH*. 2009 Aug 28; 9(1):315 **I.F.: 2.223**
- 03 Coll-Planas, L. Comentario. Integrando dimensiones en la intervención con personas mayores. *GACETA SANITARIA*; 23(4):278-279 **I.F.: 1.172**
- 04 Salvà A, Coll-Planas L, Bruce S, De Groot L, Andrieu S, Abellán G, Vellas B. Nutritional Assessment of Residents in Long-Term Care Facilities (LTCFs): Recommendations of the Task Force on Nutrition and Ageing of the IAGG European Region and the IANA. *THE JOURNAL OF NUTRITION, HEALTH AND AGING*; 13(6):475-83. **I.F.: 1.712**
- 05 Salvà A, Andrieu S, Fernández E, Schiffrin EJ, Moulin J, Decarli B, Guigoz Y, Vellas B. Health and Nutri-

*TIF: 15.843 **AIF: 2.26

- tional Promotion Program for Patients with Dementia (NutriAlz Study): Design and Baseline Data. *THE JOURNAL OF NUTRITION, HEALTH AND AGING*; 13(6):529-37. **I.F.: 1.712**
- 06 Denkinger MD, Igl W, Coll-Planas L, Bleicher J, Nikolaus T, Jamour M. Evaluation of the short form of the late-life function and disability instrument in geriatric inpatients—validity, responsiveness, and sensitivity to change. *JOURNAL OF THE AMERICAN GERIATRICS SOCIETY*; 57(2):309-14. **I.F.: 3.656**
- 07 Denkinger MD, Igl W, Coll-Planas L, Nikolaus T, Bailer S, Bader A, Jamour M. Practicality, validity and sensitivity to change of fear of falling self-report in hospitalised elderly—a comparison of four instruments. *AGE AND AGEING*; 38(1):108-12. **I.F.: 3.656**

*Total Impact Factor.
**Average Impact Factor.

OTHER PUBLICATIONS

Antoni Salvà, Ejercicio físico y envejecimiento saludable en Retos de la nutrición en el siglo XXI ante el envejecimiento poblacional. Instituto Tomás Pascual, Universidad San Pablo CEU. Editorial IM&C Madrid 2009

Domènech, Sara; Coll, Laura; Salvà, Antoni. Informació i consells per a promoure l'activitat física en les persones grans: envelliment saludable. Barcelona : Institut de l'Envel·liment de la Universitat Autònoma de Barcelona, 2009

Gispert Magarolas R, Clot-Razquin G,

March J, Freitas A, Busquets E, Ruiz-Ramos M, Rivero, T. Prevalencia de la discapacidad en España por Comunidades Autónomas. el papel de los factores individuales y del entorno geográfico en su variabilidad. *REVISTA ESPAÑOLA DE SALUD PÚBLICA*; 83: 821-834



Addictive Behaviours

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Main lines Of research

Alcohol:

- Study of the usefulness of the EMCA, IRISA and SPECT scales with IBZM as possible predictors of outcome in alcohol-dependent patients during the first 12 weeks of recovery.
- Clinical study with escitalopram for treatment of depression and anxiety associated with alcoholism.
- Randomized, double-blind, parallel, placebo-controlled study on the efficacy of nalmefene in alcohol-dependent patients.

Cocaine:

- Evaluation of cocaine craving during hospitalization conditions.

Smoking:

- Multicentre, open, randomized clinical trial to measure the efficacy of proactive telephonic follow up as an aid to smoking cessation in comparison with in situ methods (PINO08/106/902).
- Multicentre interventional project on smoking in psychiatric patients. Treatment of tobacco smoking with varenicline in psychiatric patients (Code CEIC 08/158 OBS).

- Multicentre clinical trial to evaluate the dose-response relationship for the efficacy and safety of surinabant as an aid to help smokers quit (Sanofi-Aventis DRI6938.2).

Opiates:

- Patient satisfaction concerning maintenance treatment with opioid agonists.
- Satisfaction of the heroin-dependent patient regarding methadone, and the pharmacogenetics of this medication.

Challenges

- Achieve full integration in the Addictive Disorders Network rather than mere participation as an associated clinical group.
- Establish bidirectional links between clinical practice and investigation both to suggest hypotheses and to incorporate recent advances.
- Participate in controlled clinical trials on the treatment of addictive disorders.
- Develop clinical research studies into the perspective of patients with addictions.
- Integrate clinical research in routine medical practice to assess the effectiveness of procedures.
- Evaluate the validity and reliability of frequently used clinical evaluation procedures.
- Establish bidirectional connection between clinical practice and investigation both to suggest hypotheses and to incorporate recent advances.



Grants

- Pérez, J. Towards a valid and reliable evaluation of cocaine abstinence: psychometric properties of the Spanish version of the CSSA scale in patients with cocaine dependence and in patients on maintenance treatment for heroin and cocaine dependence. 2009/065. Amount: 16,000.00 €
- Pérez, J. Study of cases and controls to evaluate the association between satisfaction of the heroin-dependent patient and maintenance treatment with methadone and the pharmacogenetics of this drug. PS09/01072. Amount: 61,710.00 €
- Trujols, J. Perspective of patients with schizophrenia in the identification, prioritization and pragmatic variables of results: metasynthesis and systematic revision of evaluation studies on preferences E. PI09/90034. Amount: 12,100.00 €

*TIF: 4.29 **AIF: 2.14

Scientific Production

INDEXED PUBLICATIONS

- 01 J. P. de los Cobos;J. Trujols;E. Ribalta;C. Pinet. A typology of heroin-dependent patients based on their history of self-injurious behaviours. PSYCHIATRY RESEARCH; 167(39845):169-177. I.F.: 2.373
- 02 Trujols J, Iraurgi I. Political challenges in randomized controlled trials of heroin-assisted treatment for severe heroin addiction: a Spanish experience. CLIN TRIALS; 6(6):658-659. I.F.: 1.917

OTHER PUBLICATIONS

Castillo, II; J. T. Albet;J. M. Jiménez-Lerma;M. Landabaso. Reliability and validity of the Spanish adaptation of the brief form of the Cocaine Craving Questionnaire-Now (CCQ-N-10). ADICCIONES; 21(3):195-202.

*Total Impact Factor.
**Average Impact Factor.



AREA 5

*Uronephrology
and experimental surgery*

General and Digestive Surgery126

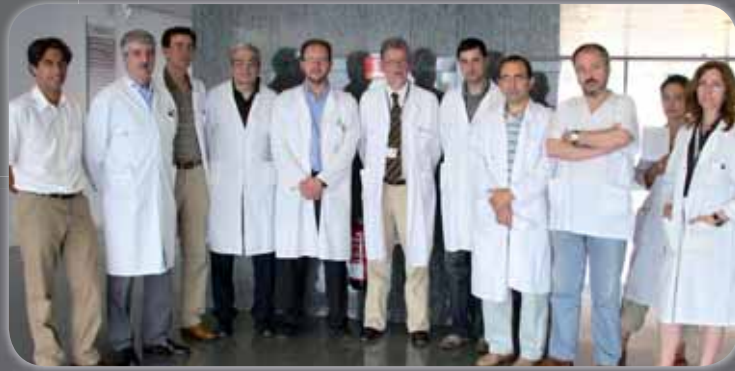
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General and Digestive Surgery

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Main lines
Of research

Gastrointestinal surgery:

- Application of laparoscopic surgery in diseases of the spleen.
- Application of laparoscopic surgery in disorders of the esophagogastric junction.
- Advanced application of colorectal laparoscopy.
- New stratification and treatment options in colorectal cancer.

Oncological and hepatobiliarypancreatic surgery:

- Surgery for liver metastasis in colorectal cancer.
- Development of diagnostic and therapeutic techniques in the global context of treatment for liver metastasis of colorectal carcinoma.
- Surgery for primary hepatic tumours: determination of efficient prognostic parameters for surgical resection of hepatocarcinoma, and likelihood of tumour recurrence after resection.
- Introduction of laparoscopic methodology in biliary lithiasis.
- Surgery for sarcomas: participation in GIST research through GEIS (Spanish Sarcoma Research Group) and other entities.
- Surgery for sarcomas: participation in the development and results of surgery for retroperitoneal tumours.

Emergency care:

- Collaborative project on clinical safety for the introduction of safe practices in polytraumatized patients.

Challenges

Gastrointestinal surgery:

- Design, develop and manage a dry laboratory for endoscopic surgery, creating a multifunctional research and teaching space to conduct applied technological research in minimally invasive surgery.

Hepatobiliarypancreatic surgery for cancer:

- Development of techniques to study liver volume and function
- Development of experimental studies on function and healing of

- bilio-intestinal sutures.
- Studies on the value of nutrition in patients undergoing aggressive surgery for highly debilitating cancer.
- Adequate stratification of GIST tumours in accordance with an anatomopathological classification
- Viability of surgical interventions considering the likelihood of disease recurrence.

Emergency surgery:

- Consolidation of a multidisciplinary

group for care in the polytraumatized patient.

Breast surgery:

- Technological innovations in surgery.
- Possible role of genetic studies in diagnosis and follow up

Endocrinal and cervical surgery:

- Technical innovations in surgery.



Grants

- Targarona, E. Prediction of the anatomopathological characteristics of the mesorectum for the laparoscopic approach to cancer

of the lower rectum based on preoperative pelvimetric and volumetric analysis after 3D reconstruction of the pelvis and

its content PS09/01437. Amount: **36,905.00 €**

Scientific production

INDEXED PUBLICATIONS

- 01** Targarona EM, Gómez C, Rovira R, Pernas JC, Balagué C, Guarner-Argente C, Sainz S, Trias M. NOTES-assisted transvaginal splenectomy: the next step in the minimally invasive approach to the spleen. *SURGICAL INNOVATION*; 16:218-22
I.F.: 1.905
- 02** Targarona, EM, Balagué, C, Martínez, C, Pallarés, L, Estalella, L, Trias, M. Single-Port Access: A Feasible Alternative to Conventional Laparoscopic Splenectomy. *SURGICAL INNOVATION*; 16(4):348-352
I.F.: 1.905
- 03** H. J. Bonjer;M. A. Cuesta;A. M. Lacy;E. Haglind;A. Furst;J. F. Lange;W. C. J.

Hop; M. Buunen;A. D'Hoore;K. Ingilis; P. Jess;O. Bulut;J. Rosenberg; Peiman;M. M. Christensen;I. Isalnieks; C. Jager;M. Kreis;J. Jeekel;E. van der Harst;Pplo Coenen;M. F. Gerhards;W. Bemelman; J. J. Jakimowicz;Y. E. A. van Riet;B. M. E. Hansson;C. Rosman;P. A. Neijenhuis; A. J. den Outer;E. M. Targarona; C. Balagué;S. Delgado;J. Lujan; F. J. G. Molina;S. Skullman;G. Kurlberg; Z. Lackberg;L. Pahlman;U. Kressner; P. Matthiessen;S. H. Kim; Color li Study Grp. *COLOR II - A randomized clinical trial comparing laparoscopic and open surgery for rectal cancer. DANISH MEDICAL BULLETIN*; 56(2):89-91
I.F.: 0.774

***TIF: 9.572 **AIF: 1.91**

- 04** Intento de autolisis. Caballero F, Prenafeta N, Gómez G, Permanyer E. *Medicina Clínica* Vol.133 Nº. 9 (12/09/09) *MEDCLIN(BARC)*.2009. doi:10.1016/j.medcli.2009.02.044
I.F.: 1.231
- 05** Solà M, Fraile M, Alberro JA, Ramos M, Fábregas R, Gubern J, Culell P, Vidal S, Solsona J, Moral A, Veloso E, Deulofeu P, Janer J, Ballester B, Puig P. Complete axillary lymph node dissection versus clinical follow-up in breast cancer patients with sentinel node micrometastases. An update of the multicenter trial. *AATRM 048/13/2000. EUROPEAN JOURNAL OF NUCLEAR MEDICINE & MOLECULAR IMAGING*; 36 (Supl 2): S370.
I.F.: 4.531

*Total Impact Factor.
**Average Impact Factor.

OTHER PUBLICATIONS

Marínello FG, Targarona EM, Balagué C, Monés J, Trías M. Surgical treatment of achalasia: Better than dilations?. *GASTROENTEROL HEPATOL*; [Epub ahead of print] Spanish.

Mocanu, S, Targarona, EM, Balagué, C, Trias, M. Trombosis de la vena cava: una complicación excepcional tras la esplenectomía laparoscópica. *CIR ESP*; 86:55-6.

Fdez Ananín, S, Monés, J, Aldeano Martín, A, Vergara, C, Targarona, EM. Carcinoma verrucoso esofágico: un diagnóstico problemático. *CIR ESP*; 85:181-2.

Rodríguez Santiago,J, Clameres, M, Roig-García, J, Asensio, JL, Toscazo, E, Feliu, X, Resa, JJ, Targarona, EM, Ibáñez-Aguirre, J, Del Olmo, M, Castell, J, Sanfeliu, G, Sánchez Cano, JJ, Gutiérrez, A, Ramón, JM, Arteaga, I, López Mozos, F, Vázquez, J, Vallejo, V. Cáncer gástrico por laparoscopia: análisis de los datos del registro nacional de cirugía gástrica laparoscópica *CIR ESP*; 85:280-6.

Targarona E, Balagué C, Martínez C, Pallarés L, Trias M. Laparoscopic fenestration of a splenic cyst using a single access technique. *CIR ESP*; Epub ahead of print.

Urdaneta G, Targarona EM, Martínez C, Trias M. Ileourethral fistula. *CIR ESP*; Epub ahead of print.

Parrilla P, Biondo S, Pera M, Ramírez P, Targarona EM, Donate A. Cirugía Española: the last changes for its coming of age. *CIR ESP*; 85:1-2.

Bollo,J, Carrilo,E, Lupu,I, Caballero,F, Trias, M. Perforación gástrica asociada a infección por cándida. *GASTROENTEROLHEPATOL*; doi:10.1016/j.gastrohep.2009.03.006

Moral A, Pérez JI, Abellán M, Rodríguez-Luppi C, Freixas N, Urdaneta GJ, Trias M. Monitorización del nervio recurrente laríngeo en la cirugía tiroidea. *CIR ESP*; 86 (Extra): 20.

Moral A, Pérez JI, Fernández Ananin S, Mocanu S, Rodríguez-Luppi C, Trias M. Vaciamiento ganglionar cervical asistido por neuromonitorización. *CIR ESP*; 86 (Extra): 36-37.

Colom C, Aulinas A, Pérez JI, Moral A, Chico A. Metástasis óseas como forma poco habitual de presentación de carcinoma folicular de tiroides. *ENDOCRINOLOGÍA Y NUTRICIÓN*; 56: 46-47.

Lupu I, Moral A, Pérez JI, Bollo J, Trias M. Hallazgo incidental de un cáncer papilar de tiroides metastásico durante la cirugía de un adenoma de paratiroides. *CIR ESP*; 86 (Extra): 36-37.

Fraile M, Solà M, Alberro JA, Ramos M, Fábregas R, Gubern JM, Culell P, Vidal S, Solsona J, Moral A, Veloso E, Deulofeu P, Janer J, Ballester B, Puig P, Acea B, Pablo JL, González F, Piñero A, Peñalva G, Serra C. Linfadenectomía completa frente a observación en pacientes con micrometástasis en el ganglio centinela por neoplasia de mama. Actualización del ensayo clínico multicéntrico *AATRM 048/13/2000.REVISTA DE SENOLOGÍA Y PATOLOGÍA MAMARIA*; 22 (Supl. 2): 50-73.



Neurosurgery

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Main lines
Of research

- Study of biomaterials.
- Tumour biology: gliomas, hypophys adenomas.
- Anatomy of the skull base.
- Clinical evaluation of neurostimulation techniques in different neurological entities (treatment-resistant depression and neuropathic pain).

Challenges

- Monitor, jointly with the psychiatric department, the clinical trial on the treatment of treatment-resistant depression using deep brain stimulation techniques.
 - Evaluate neurostimulation for other disorders: cluster headache.
 - Continue cooperating with research into gliomas:
 - Oncogenesis and Antitumour Group (GOA-HSCSP, PI, Dr. R. Mangues) in cooperation with the HSCSP Neurosurgery Department.
 - Cooperation with the Cardiovascular Research Institute (managed by Drs. J. Blanco and N. Rubio) investigating the development of antitumour cell therapy strategies in the treatment of malignant gliomas.
 - Continue working with the endocrinology group on hypophyseal tumour biology.
 - Study biomaterials and lumbar disc prostheses, a project currently in the theoretical study phase. European Commission Custom IMD project for the development of customized intervertebral disc implants. PI: Dr. Pau Clavel
 - Pursue anatomical studies to develop new surgical approaches to skull base tumours, in cooperation with a University of Barcelona-Hospital Clinic anatomy professor (a doctoral thesis is being prepared).
- Jointly with the neurology department, 2 multicentre clinical trial projects on cerebrovascular disease:
- Impact-24 study of the effects of stimulation of the sphenopalatine ganglion on cerebral perfusion in patients with CVA;
 - Clear III study of intraventricular fibrinolysis to treat cerebral intraventricular haemorrhaging.



*TIF: 3.699 **AIF: 1.23

INDEXED PUBLICATIONS

ARTICLE

01 C. de Quintana-Schmidt; R. Rodríguez-Rodríguez; J. Molet-Teixidó; P. Clavel-Larí; J. Català-Antúnez; P. Puerta-Roldán; G. Montes-Graciano; P. Tresserras-Ribó; F. Muñoz-Hernández; F. Bartumeus-Jene. Efectividad de las válvulas gravitacionales en la prevención del hiperdrenaje en pacientes

adultos con hidrocefalia. REV NEUROL 2009; 49(2):64-68.

I.F.: 1.234

REVIEW

02 C. de Quintana-Schmidt; R. Rodríguez-Rodríguez; P. Puerta-Roldán; R. Bartumeus-Jené. Neumoencephaly tension after registering intracranial pressure. REVISTA DE NEUROLOGÍA;

48(10): 545-546

I.F.: 1.234

03 Martínez-Salio A, Gómez de La Cámara A, Ribera M, Montero J, Blanco E, Collado A, Ferrero A, Molet J, Otero-Álvaro A, Gálvez R, Zamorano E, Peña A, Pardo J. Diagnóstico y tratamiento del dolor neuropático. Conferencia de consenso. MED CLIN (BARC); 133:629-636.

I.F.: 1.231

*Total Impact Factor.

**Average Impact Factor.

OTHER PUBLICATIONS

Book chapters:

Molet J. Dolor central. En: Aliaga L, Baños JE, de Barutell C, Molet J, Rodríguez de la Serna R. Tratamiento del dolor. Teoría y práctica. 3ª edición. Barcelona: Publicaciones Permanyer 2009. pp: 181- 183.

Molet J, Català E. Técnicas percutáneas de radiofrecuencia. En: Aliaga L, Baños JE, de Barutell C, Molet J, Rodríguez de la Serna R. Tratamiento del dolor. Teoría y práctica. 3ª edición. Barcelona: Publicaciones Permanyer 2009. pp: 189-190.

Molet J, Rodríguez R. Tratamiento quirúrgico de las neuralgias craneofaciales. En: Aliaga L, Baños JE, de Barutell C, Molet J, Rodríguez de la

Serna R. Tratamiento del dolor. Teoría y práctica. 3ª edición. Barcelona: Publicaciones Permanyer 2009. pp: 219-220.

Molet J. Técnicas de radiofrecuencia para el tratamiento del dolor de raquis. En: Aliaga L, Baños JE, de Barutell C, Molet J, Rodríguez de la Serna R. Tratamiento del dolor. Teoría y práctica. 3ª edición. Barcelona: Publicaciones Permanyer 2009. pp: 347- 349.

Molet J. Cordotomía y otros procedimientos. En: Aliaga L, Baños JE, de Barutell C, Molet J, Rodríguez de la Serna R. Tratamiento del dolor. Teoría y práctica. 3ª edición. Barcelona: Publicaciones Permanyer 2009. pp: 164-165.

Rodrigo R, Molet J. Técnicas ablativas no percutáneas. En: Aliaga L, Baños JE, de Barutell C, Molet J, Rodríguez de la Serna R. Tratamiento del dolor. Teoría y práctica. 3ª edición. Barcelona: Publicaciones Permanyer 2009. pp: 191.

Català E, Molet J, Rodríguez R. Técnicas de neuromodulación. En: Aliaga L, Baños JE, de Barutell C, Molet J, Rodríguez de la Serna R. Tratamiento del dolor. Teoría y práctica. 3ª edición. Barcelona: Publicaciones Permanyer 2009. pp: 192-195.

Nephrology

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Main lines Of research

- Proteomics applied to nephrology: in HTA and hypertension induced by anti-calceineurin agents.
- Hereditary kidney diseases: genetic and clinical studies in disorders such as polycystic kidneys, Alport's disorder, corticoid-resistant nephrotic syndrome.
- Glomerular disorders: molecular and clinical studies in disorders such as Sjögren's syndrome, membranous glomerulopathy, vasculitis with renal involvement.
- Kidney transplant: cardiovascular risk factors, chronic nephropathy of renal graft, pharmacogenetic studies, genomic studies.
- Chronic nephropathy and cardiovascular risk: studies of genetic damage in patients with chronic renal insufficiency, epidemiological studies, clinical studies in chronic renal insufficiency, hyperparathyroidism, renal osteodystrophy, hemodialysis techniques.

Challenges

- We aim to continue active projects in each sub-area, establish new lines, train professionals and increase collaboration with other national and international networks and groups. The goal is to increase collaboration in high-level research studies, and more importantly, to broaden our knowledge about kidney diseases so as to improve care of patients at the centre.

Further information

- The Service of Nephrology is developing translational research in the field of diagnosis and treatment of kidney diseases.
- Members of the multidisciplinary team (e.g. biologists, physicians, biochemists) conduct basic and clinical research in various areas of nephrology.

Grants

- Ballarín, J. Nephrology Research Group (Research group consolidated by AGAUR). 2009SGR 1116. Amount: **46,800.00 €**
- Ballarín, J. REDinEN. RD06/0016/0001. Amount: **28,800.00 €**
- Ars, E. Biobank Network. RD09/0076/00064. Amount: **34,500.00 €**
- Torra, R. "Clinical trial to evaluate the efficacy and safety of rapamycin in angiomyolipomas in patients with tuberous sclerosis" Project TRA-092. Amount: **204,000.00 €**
- Torra, R. "Implication of genetic variants and podocyte damage in primary nephrotic syndrome." PS09/01506. Amount: **145,200.00 €**



*TIF: 32.972 **AIF: 3.66

INDEXED PUBLICATIONS

Journal article

- 01** Santín, S; García-Maset, R; Ruiz, P; Giménez, I; Zamora, I; Pena, A; Madrid, A; Camacho, JA; Fraga, G; Sánchez-Moreno, A; Cobo, MA; Bernis, C; Ortiz, A; de Pablos, AL; Pintos, G; Justa, ML; Hidalgo-Barquero, E; Fernández-Llama, P; Ballarín, J; Ars, E; Torra, R; FSGS Spanish Study Grp. Nephryn mutations cause childhood- and adult-onset focal segmental glomerulosclerosis. *KIDNEY INTERNATIONAL*; 76(12): 1268-1276.
I.F.: 6,193
- 02** Santín, S; Ars, E; Rossetti, S; Salido, E; Silva, I; García-Maset, R; Giménez, I; Ruiz, P; Mendizábal, S; Nieto, JL; Pena, A; Camacho, JA; Fraga, G; Cobo, MA; Bernis, C; Ortiz, A; de Pablos, AL; Sánchez-Moreno, A; Pintos, G; Mirapeix, E; Fernández-Llama, P; Ballarín, J; Torra, R; FSGS Study Grp. TRPC6 mutational analysis in a large cohort of patients with focal segmental glomerulosclerosis. *NEPHROLOGY DIALYSIS TRANSPLANTATION*; 24(10):3089-3096
I.F.: 3,306
- 03** Guirado LI, Almenar L, Alonso A, Castroagudin JF, Hernández D, Morales JM, Usetti P, Varo E. Nefropatía crónica en trasplante no renal: prevención, diagnóstico precoz y manejo. *NEFROLOGIA*; 29: 1-13
I.F.: 0.533
- 04** Gross O, Borza DB, Anders HJ, Licht C, Weber M, Segerer S, Torra R, Gubler MC, Heidet I, Harvey S, Cosgrove D, Less G, Kashtan C, Gregory M, Savige J, Ding J, Thorne P, Abrahamson DR, Tryggvason K, Hudson B, Miner JH. Stem cell therapy for alport syndrome: the hope beyond the hype. *NEPHROL DIAL TRANSPLANT*; 24:731-734.
I.F.: 3.306
- 05** Hellin JL, Bech-serra JJ, Moctezuma S, Santin S, Madrid A, Vilalta R, Canals F, Torra R, Meseguer A, Nieto JL. Very low-molecular-mass fragments of albumin in the plasma of patients with focal segmental glomerulosclerosis. *AM J KIDNEY DIS*; 54: 871-880.
I.F.: 5.152
- 06** Pei Y, Obaji J, Dupuis A, Paterson AD, Magistroni R, Dicks E, Parfrey P, Cramer B, Coto E, Torra R, San Millán JL, Gibson R, Breuning M, Peters D, Ravine D. Unified criteria for ultrasonographic diagnosis of adpkd. *J AM SOC NEPHROL*; 20: 205-212.
I.F.: 7.689
- 07** Mengual L, Buset M, Ars E, Lozano JJ, Villavicencio H, Ribal MJ, Alcaraz A. DNA microarray expression profiling of bladder cancer allows identification of noninvasive diagnostic markers. *J UROL*; 182(2):741-8.
I.F.: 4.016

Review

- 08** Bover, J; Andrés, E; Lloret, MJ; Aguilar, A; Ballarín, J. Dietary and Pharmacological Control of Calcium and Phosphate Metabolism in Dialysis Patients. *BLOOD PURIFICATION*; 27(4): 369-386
I.F.: 1.893
- 09** Bover, J; Aguilar, A; Baas, JP; Reyes, J; Lloret, MJ; Farré, N; Olaya, M; Canal, C; Marco, H; Andrés, E; Trinidad, P; Ballarín, J. Calcimimetics in the chronic kidney disease-mineral and bone disorder. *INTERNATIONAL JOURNAL OF ARTIFICIAL ORGANS*; 32(2):108-121
I.F.: 1.417

*Total Impact Factor.

**Average Impact Factor.

OTHER PUBLICATIONS

- Bover, J, Farré, N, Andrés, E, Canal, C, Olaya, M, T. Alonso, M, Quílez, B, Ballarín, J. Update on the treatment of chronic kidney disease-mineral and bone disorder. *J REN CARE*; 35: 19-27



AREA T1

Epidemiology, public health and healthcare services

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Clinical Epidemiology and Healthcare Services

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Main lines
Of research

- Systematic reviews.
- Clinical practice guidelines.
- Evaluations of health services.
- Clinical trials (phase 3/4).
- Methodological research.

Areas of interest:

- Cancer.
- Perioperative medicine.
- Cardiovascular medicine.
- Public health.
- Low back pain.

Challenges

- Become a reference group in Spain and in Latin America regarding the preparation of systematic reviews on the effects of healthcare interventions, enhancing the group's capacity to provide technical and methodological support and increasing its scientific production in the framework of the Ibero-American Cochrane Network. The group is currently participating directly in the preparation of some 30 systematic reviews and is providing support to other reviews inspired by the Ibero-American Cochrane Network, expected to be published by the Cochrane Library (with an impact factor of 5.18) in the next 2 years.
- Promote greater use of scientific evidence and evidence-based medicine tools in clinical and healthcare decision making by means of stable

agreements with governmental, academic and scientific entities and institutions, thereby ensuring the ongoing development and dissemination of these tools and the implementation of training in their use. Apart from the activities mentioned, the group is currently preparing a new monthly electronic newsletter, commissioned by the Spanish Ministry of Health, called i-Salud addressed at patients and users of the national healthcare system. It is also developing 2 new clinical practice guidelines (menopause symptoms and community-acquired pneumonia) and a number of training activities regarding evidence-based medicine for 8 entities located around Spain.

- Become a reference group for independent applied clinical research that fosters relevant and scientifically

sound studies aimed at meeting the real needs of the national healthcare system, whether on its own initiative or through networked relationships with similar groups (CIBERESP, Cochrane Collaboration, Latin-American Clinical Epidemiology Network and other academic groups such as McMaster University in Canada). Apart from research studies already underway, the group is currently setting up clinical and epidemiological studies (phase 3/4 trials with non-commercial interests, research into healthcare services and results and studies of research methodologies) and will apply for additional public funding for new projects aimed at consolidating these research lines. One of these projects is a proposal to lead a European-level clinical research project in the perioperative medicine field.



Grants

- Bonfill, X. Support for Research Groups in Catalonia. Clinical Epidemiology Group and Healthcare Services. 2009SGR 786. Amount: **41,600.00 €**
- Bonfill, X. Coordinated multicenter study of the healthcare process and results observed in a cohort of patients with urological cancer (bladder and prostate). PS09/01204. Amount: **123,420.00 €**
- Martínez, MJ. Prevention of postoperative bleeding: Single-centre, randomized trial in four parallel treatment groups to evaluate the efficacy of fibrin sealant and tranexamic acid versus standard hemostatic treatment in patients undergoing total knee arthroplasty. TRA-081. Amount: **94,166.40 €**
- Urrútia, G. Factorial clinical trial of clonidine and aspirin in patients undergoing non-cardiac surgery and having a moderate to high risk of perioperative cardiac events (POISE-2 Study). TRA-061. Amount: **99,960.00 €**
- Martínez, MJ. Systematic review of efficacy and safety of acupuncture with needles for the treatment of gynecological disorders. PI09/90578. Amount: **9,680.00 €**
- Solà, I. Overview of interventions to improve health workers' compliance with safe practices. PI09/90862. Amount: **9,680.00 €**

Scientific production

INDEXED PUBLICATIONS

ARTICLE

- 01** V. Plaza; J. Bellido-Casado; P. Alonso-Coello; G. Rodrigo. Asthma Clinical Practice Guidelines: Advantages and Pitfalls. ARCHIVOS DE BRONCONEUMOLOGIA; 45:25-29. **I.F.: 2.116**
- 02** P. Alonso-Coello; I. Solà; R. Rotaeché; A. I. González; M. Marzo-Castillejo; A. Louro-González; R. Carrillo; P. Velázquez; G. García-Velasco; C. Calderón. Perceptions, attitudes and knowledge of evidence-based medicine in primary care in Spain: a study protocol. BMC HEALTH SERVICES RESEARCH; 9:80. **I.F.: 1.660**
- 03** M. A. Checa; P. Alonso-Coello; I. Solà; A. Robles; R. Carreras; J. Balasch. IVF/ICSI with or without preimplantation genetic screening for aneuploidy in couples without genetic disorders: a systematic review and meta-analysis. JOURNAL OF ASSISTED REPRODUCTION AND GENETICS; 26(5):273-283. **I.F.: 1.359**
- 04** G. Karthikeyan; R. A. Moncur; O. Levine; D. Heels-Ansdell; M. T. V. Chan; P. Alonso-Coello; S. Yusuf; D. Sessler; J. C. Villar; O. Berwanger; M. McQueen; A. Mathew; S. Hill; S. Gibson; C. Berry; H. M. Yeh; P. J. Devereaux. Is a Pre-Operative Brain Natriuretic Peptide or N-Terminal Pro-B-Type Natriuretic Peptide Measurement an Independent Predictor of Adverse Cardiovascular Outcomes Within 30 Days of Noncardiac Surgery? A Systematic Review and Meta-Analysis of Observational Studies. JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY; 54(17):1599-1606. **I.F.: 12.535**
- 05** D. Cherkin; F. M. Kovacs; P. Croft; J. Borkan; N. E. Foster; B. Oberg; G. Urrútia; J. Zamora; Foru Int Organizing Comm Ninth Int. The Ninth International Forum for Primary Care Research on Low Back Pain. SPINE; 34(3):304-307. **I.F.: 2.624**
- 06** M. J. Martínez-Zapata; A. Martí-Carvajal; I. Sola; I. Bolívar; J. A. Expósito; L. Rodríguez; J. García. Efficacy and safety of the use of autologous plasma rich in platelets for tissue regeneration: a systematic review. TRANSFUSION; 49(1):44-56. **I.F.: 2.982**
- 07** M. Briel; M. Lane; V. M. Montori; D. Bassler; P. Glasziou; G. Málaga; E. A. Akl; J. Ferreira-González; P. Alonso-Coello; G. Urrútia; R. Kunz; C. R. Culebro; S. A. da Silva; D. N. Flynn; M. B. Elamin; B. Strahm; M. H. Murad; B. Djulbegovic; N. K. J. Adhikari; E. J. Mills; F. Gwadrý-Sridhar; H. Kirpalani; H. P. Soares; N. O. Abu Elnour; J. J. You; P. J. Karanicolas; H. C. Bucher; J. F. Lampropoulos; A. J. Nordmann; K. E. A. Burns; S. M. Mulla; H. Raatz; A. Sood; J. Kaur; C. R. Bankhead; R. J. Mullan; K. A. Nerenberg; P. O. Vandvik; F. Coto-Yglesias; H. Schunemann; F. Tuche; P. P. M. Crispim; D. J. Cook; K. Lutz; C. M. Ribic; N. Vale; P. J. Erwin; R. Perera; Q. Zhou; D. Heels-Ansdell; T. Ramsay; S. D. Walter; G. H. Guyatt. Stopping randomized trials early for benefit: a protocol of the Study Of Trial Policy Of Interim Truncation-2 (STOPIT-2). TRIALS; 10:49. **I.F.: 2.020**
- 08** X. Sun; M. Briel; J. W. Busse; E. A. Akl; J. J. You; F. Mejza; M. Bala; N. Díaz-Granados; D. Bassler; D. Mertz; S. K. Srinathan; P. O. Vandvik; G. Málaga; M. Alshurafa; P. Dahm; P. Alonso-Coello; D. M. Heels-Ansdell; N. Bhatnagar; B. C. Johnston; L. Wang; S. D. Walter; D. G. Altman; G. H. Guyatt. Subgroup Analysis of Trials Is Rarely Easy (SATIRE): a study protocol for a systematic review to characterize the analysis, reporting, and claim of subgroup effects in randomized trials. TRIALS; 10:101. **I.F.: 2.020**
- 09** X. Castellsagué; T. Drudis; M. P. Canadas; A. Goncé; R. Ros; J. M. Pérez; M. J. Quintana; J. Muñoz; G. Albero; S. de Sanjosé; F. X. Bosch. Human Papillomavirus (HPV) infection in pregnant women and mother-to-child transmission of genital HPV genotypes: a prospective study in Spain. BMC INFECTIOUS DISEASES; 9:74. **I.F.: 2.550**
- 10** Esther Francia; Olga Torres; Ana Laiz; Domingo Ruiz; Ignasi Gich; Jordi Casademont. Ability of physiological parameters versus clinical categories to predict mortality on admission to an internal medicine ward. EUR J INTERN MED; 20(6):636-9. **I.F.: 1.385**
- 11** M. J. Barbanjo; M. R. Ballester; R. M. Antonijoan; I. Gich; P. Pelagio; S. Gropper; B. Santos; A. Guglietta. Comparison of repeated-dose pharmacokinetics of prolonged-release and immediate-release torasemide formulations in healthy young volunteers. FUNDAMENTAL & CLINICAL PHARMACOLOGY; 23(1):115-125. **I.F.: 2.372**
- 12** J. Jurado; J. Ybarra; P. Solanas; J. Caula; I. Gich; J. M. Pou; J. H. Romeo. Prevalence of cardiovascular disease and risk factors in a type 2

*TIF: 141.588 **AIF: 3.82

*Total Impact Factor.
**Average Impact Factor.



AREA T.1

Epidemiology, public health and healthcare services

- diabetic population of the North Catalonia diabetes study. *JOURNAL OF THE AMERICAN ACADEMY OF NURSE PRACTITIONERS*; 21(3):140-148.
I.F.: 0.907
- 13 Pascual-Figal DA, Ordóñez-Llanos J, Torné PL, Vázquez R, Puig T, Valdés M, Cinca J, de Luna AB, Bayés-Genís A. Soluble ST2 for Predicting Sudden Cardiac Death in Patients With Chronic Heart Failure and Left Ventricular Systolic Dysfunction. *JOURNAL OF THE AMERICAN COLLEGE OF CARDIOLOGY*; 54(23):2174-2179.
I.F.: 12.535
- 14 Díaz JM, Gich I, Bonfill X, Solà R, Guirado L, Facundo C, Sainz Z, Puig T, Silva I, Ballarín J. Prevalence evolution and impact of cardiovascular risk factors on allograft and renal transplant patient survival. *TRANSPLANT PROC*; 41(6):2151-2155.
I.F.: 0.944
- 15 Barahona MJ, Sucunza N, Resmini E, Fernández-Real JM, Ricart W, Moreno-Navarrete JM, Puig T, Farrérons J, Webb SM. Persistent body fat mass and inflammatory marker increases after long-term cure of Cushing's syndrome. *J CLIN ENDOCRINOL METAB*; 94(9):3365-3371.
I.F.: 6.202
- 16 Martínez-Pino I, Puig T, Quintana MJ, Solà J, Bonfill X. Prevalence of use of hormone replacement therapy in women participating in a breast cancer screening program. *MED CLIN (BARC)*; 134(10):439-442
I.F.: 1.231
- 17 Bolívar V, Plaza M, Llauger E, Amado P, Anton A, Espinosa L, Dominguez M, Fraga M, Freixas J, A. de la Fuente I, Liguere C, Medrano M, Peiro M, Pou J, Sanchis I, Solanes C, Valero P, Valverde P, Copd Proc Study Grp. Assessment of a primary and tertiary care integrated management model for chronic obstructive pulmonary disease. *BMC PUBLIC HEALTH*; 9:68
I.F.: 2.223
- 18 María-José Barahona; Nuria Sucunza; Eugenia Resmini; José-Manuel Fernández-Real; Wifredo Ricart; José-María Moreno-Navarrete; Teresa Puig; Ana M. Wagner; José Rodríguez-Espinosa; Jordi Farrérons; Susan M. Webb. Deleterious effects of glucocorticoid replacement on bone in women after long-term remission of Cushing's syndrome. *J BONE MINER RES*; 24(11):1841-6.
I.F.: 6.043
- 19 M. Balsells; A. García-Patterson; I. Gich; R. Corcoy. Maternal and Fetal Outcome in Women with Type 2 Versus Type 1 Diabetes Mellitus: A Systematic Review and Metaanalysis. *JOURNAL OF CLINICAL ENDOCRINOLOGY & METABOLISM*; 94(11):4284-4291.
I.F.: 6.202
- 20 V. Pérez; V. Sosti; A. Rubio; M. Barbanjo; I. Gich; J. Rodríguez-Álvarez; J. Kulisevsky. Noradrenergic modulation of the motor response induced by long-term levodopa administration in Parkinsonian rats. *JOURNAL OF NEURAL TRANSMISSION*; 116(7):867-874.
I.F.: 2.259
- 21 R. Martínez-Hernández; C. Soler-Botija; E. Also; L. Alias; L. Caselles; I. Gich; S. Bernal; E. F. Tizzano. The Developmental Pattern of Myotubes in Spinal Muscular Atrophy Indicates Prenatal Delay of Muscle Maturation. *JOURNAL OF NEUROPATHOLOGY AND EXPERIMENTAL NEUROLOGY*; 68(5):474-481.
I.F.: 4.564
- 22 L. Sereno; M. Coma; M. Rodríguez; P. Sánchez-Ferrer; M. B. Sánchez; I. Gich; J. M. Agulló; M. Pérez; J. Ávila; C. Guardia-Laguarta; J. Clarimón; A. Lleó; T. Gómez-Isla. A novel GSK-3 beta inhibitor reduces Alzheimer's pathology and rescues neuronal loss in vivo. *NEUROBIOLOGY OF DISEASE*; 35(3):359-367.
I.F.: 4.518
- 23 Nuria Sucunza; M. José Barahona; Eugenia Resmini; José-Manuel Fernández-Real; Wifredo Ricart; Jordi Farrérons; José Rodríguez Espinosa; Ana-María Marín; Teresa Puig; Susan M. Webb. A Link between Bone Mineral Density and Serum Adiponectin and Visfatin Levels in Acromegaly. *JOURNAL OF CLINICAL ENDOCRINOLOGY & METABOLISM*; 94(10): 3889-3896.
I.F.: 6.202
- 24 Adriana Lasa; Maite Carricondo; Camino Estivill; Elena Bussaglia; Ignasi Gich; Salut Brunet; Anna Aventin; Jorge Sierra; Josép F. Nomdedeu. WT1 monitoring in core binding factor AML: Comparison with specific chimeric products. *LEUKEMIA RESEARCH*; 33(12):1643-1649.
I.F.: 2.358
- 25 M. Delgado-Noguera; S. Tort; X. Bonfill; I. Gich; P. Alonso-Coello. Quality assessment of clinical practice guidelines for the prevention and treatment of childhood overweight and obesity. *EUROPEAN JOURNAL OF PEDIATRICS*; 168(7):789-799.
I.F.: 1.634
- 26 M. Sandoval; R. Font; M. Manos; M. Dicenta; M. J. Quintana; F. X. Bosch; X. Castellsagué. The role of vegetable and fruit consumption on survival and other habits following the diagnosis of oral cancer: a prospective study in Spain. *INTERNATIONAL JOURNAL OF ORAL AND MAXILLOFACIAL SURGERY*; 38(1):31-39.
I.F.: 1.709
- 27 Castelo-Branco C, Ciria-Recasens M, Cancelo-Hidalgo MJ, Palacios S, Haya-Palazuelos J, Carbonell-Abelló J, Blanch-Rubió J, Martínez-Zapata MJ, Manasanch J, Pérez-Edo L. Efficacy of osseihydroxyapatite complex compared with calcium carbonate to prevent bone loss: a meta-analysis. *MENOPAUSE*; 16(5):984-991.
I.F.: 3.082
- 28 Sala I, Roig C, Amador-Campos JA, García-Sánchez C, Rodríguez A, Díaz C, Gich I. Psychopathological symptoms in patients suffering from chronic cephalgia with or without fibromyalgia. *REV NEUROL*; 49(6):281-287.
I.F.: 1.234
- 29 Urrútia G, Bonfill X. Analysis of Spanish research about neck and back complaints (1992-2006). *MED CLIN (BARC)*; 135(5):215-221
I.F.: 1.231

REVIEW

- 30 Brozek JL, Akl EA, Alonso-Coello P, Lang D, Jaeschke R, Williams JW, Phillips B, Lelgemann M, Lethaby A, Bousquet J, Guyatt GH, Schünemann HJ; GRADE Working Group. Grading quality of evidence and strength of recommendations in clinical practice guidelines. Part 1 of 3. An overview of the GRADE approach and grading quality of evidence about interventions. *ALLERGY*; 64(5):669-677.
I.F.: 6.380
- 31 M. Roqué; I. Solà; M. Martín-Richard; J. J. López; X. Bonfill. Second-line chemotherapy in advanced and metastatic CRC. *COCHRANE DATABASE OF SYS-*



TEMATIC REVIEWS; (2):CD006875.
I.F.: 5.653

- 32 M. P. Álvarez;O. G. Rubio;X. B. Cosp;Y. A. Varela. Chemotherapy versus best supportive care for extensive small cell lung cancer. COCHRANE DATABASE OF SYSTEMATIC REVIEWS; 4:CD001990
I.F.: 5.653

- 33 M. B. Elamin;D. N. Flynn;D. Bassler;M. Briel;P. Alonso-Coello;P. J. Karanicolas;G. H. Guyatt;G. Málaga;T. A. Furukawa;R. Kunz;H. Schunemann;M. H. Murad;C. Barbui; A. Cipriani;V. M. Montori. Choice of data extraction tools for systematic reviews depends on resources and review complexity. JOURNAL OF CLINICAL EPIDEMIOLOGY; 62(5):506-510.
I.F.: 2.956

- 34 J. L. Brozek;E. A. Akl;P. Alonso-Coello;D. Lang;R. Jaeschke;J. W. Williams;B. Phillips;M. Lelgemann;A. Lethaby;J. Bousquet;G. H. Guyatt;H. J. Schunemann;Grade Working Grp. Grading quality of

evidence and strength of recommendations in clinical practice guidelines. ALLERGY; 64(5):669-677.

I.F.: 6.380

- 35 J. L. Brozek;E. A. Akl;R. Jaeschke;D. M. Lang;P. Bossuyt;P. Glasziou;M. Helfand;E. Ueffing;P. Alonso-Coello;J. Meerpohl;B. Phillips;A. R. Horvath;J. Bousquet;G. H. Guyatt;H. J. Schunemann;Grade Working Grp. Grading quality of evidence and strength of recommendations in clinical practice guidelines: Part 2 of 3. The GRADE approach to grading quality of evidence about diagnostic tests and strategies. ALLERGY; 64(8):1109-1116.
I.F.: 6.380

- 36 J. Martí-Carvajal;I. Solà;D. Lathyris;G. Salanti. Homocysteine lowering interventions for preventing cardiovascular events. COCHRANE DATABASE OF SYSTEMATIC REVIEWS; 4:CD006612
I.F.: 5.653

- 37 J. Martí-Carvajal;I. Solà;L. H. Agre-

da-Pérez. Treatment for avascular necrosis of bone in people with sickle cell disease (Review). COCHRANE DATABASE OF SYSTEMATIC REVIEWS; 3:CD004344
I.F.: 5.653

- 38 E. J. Carragee;R. A. Deyo;F. M. Kovacs;W. C. Peul;J. D. Lurie;G. Urrutia;T. P. Corbin;M. L. Schoene. Clinical Research Is the Spine Field a Mine Field?. SPINE; 34(5):423-430.
I.F.: 2.624

- 39 D. R. Comas;J. Álvarez-Sabín;A. G. Núñez;S. A. Castells;F. X. B. Pérez;P. A. García;E. A. Antón;E. M. Fernández;J. C. M. Canales;A. M. Ortiz;J. C. R. Calatayud;E. S. Velasco;I. S. Arnau;P. A. Coello. Primary and secondary prevention of stroke: A guideline. MED CLIN (BARC); 133(19):754-762.
I.F.: 1.231

OTHER PUBLICATIONS

P. Alonso-Coello;A. López;L. J. Pencille;V. M. Montori. Is Too Much Intervention Recommended in the ACP Osteoporosis Treatment Guidelines?. ANNALS OF INTERNAL MEDICINE; 150(4):285-286.

Ferreira-González;G. Permyer-Miralda;J. W. Busse;P. J. Devereaux;G. H. Guyatt;P. Alonso-Coello;V. M. Montori. Composite Outcomes Can Distort the Nature and Magnitude of Treatment Benefits in Clinical Trials. ANNALS OF INTERNAL MEDICINE; 150(8):566-567.

P. Alonso-Coello;J. Z. Romero;D. R. Comas;R. R. del Campo. Diagnostic yield in benign anal disease in primary care. ATENCION PRIMARIA; 41(10):582-583.

P. Alonso-Coello;C. Álvarez;P. Cruz;L. Torán;M. De Nadal;M. Martínez;P. Paniagua;A. Mases;G. Urrutia. Beta-blockers in patients undergoing non-cardiac surgery: implications of the POISE study. REV ESP ANESTESIOLOGIA REANIM; 56(4):232-8.

Granell E, Hidalgo A, Martínez A, Gich I, Bolívar I, Franquet T, Giménez A, Alepuz T. Evaluation of the quick diagnosis and treatment program for lung cancer. RADIOLOGÍA.

López García-Franco A, Alonso Coello P, del Cura González I, Ojuel Solsona J, Arribas Mir L, Fuentes Pujol M, Bailón Muñoz E, Gutiérrez Teira B, Iglesias Piñero MJ, Landa Goñi J; Grupo de la Mujer del PAPS. Should we change our attitude on postmenopausal hor-

mone replacement therapy? ATEN PRIMARIA.

Marzo M, Carrillo R, Mascort JJ, Alonso P, Mearin F, Ponce J, Ferrándiz J, Fernández M, Martínez G, Sáez M, Bonfill X, Piqué JM; Grupo de Trabajo de la GPC sobre ERGE. Management of patients with GERD. Clinical practice guideline. 2008 update. Clinical Practice Guideline Working Group on GERD. GASTROENTEROL HEPATOL.

Soler J, Pascual JC, Tiana T, Cebrià A, Barrachina J, Campins MJ, Gich I, Álvarez E, Pérez V. Dialectical behaviour therapy skills training compared to standard group therapy in borderline personality disorder: a 3-month randomised controlled clinical trial. BEHAV RES THER.



Evaluation of Public Health Policies and Programmes

TEAM



Coordinator
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Researchers

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Anna Pérez	ASPB		

Administrative staff

Gabriel León CIBERESP

Main lines
Of research

- Prevention and control of passive smoking.
- Studies evaluating the impact of interventions on lifestyles.
- Evaluation of public health programmes and services, including management, organization, results and impact.
- Evaluation of the effectiveness and impact of policies and programmes.
- 2009 MILESTONES: Main challenges that materialized in 2009.

Challenges

- Promote research on the evaluation of policies and programmes.
- Support the debate on conceptual and methodological aspects of results evaluation on prevention and health promotion.
- Consolidate the group's research, fostering less developed aspects such as financial assessment and the evaluation of health protection interventions.
- Develop a theoretical corpus of concepts, principles, methods and examples that contribute to filling the gap in under- and post-graduate teaching regarding the design and evaluation of risk prevention and health promotion interventions.

***TIF: 51.894 **AIF: 2.47**

Scientific production

INDEXED PUBLICATIONS

- 01** Fernández, E; Martínez, C; Fu, M; Martínez-Sánchez, JM; López, MJ; Invernizzi, G; Ouranou, A; Dautzenberg, B; Nebot, M. Second-hand smoke exposure in a sample of European hospitals. EUROPEAN RESPIRATORY JOURNAL; 34(1): 111-16
I.F.: 5.527
- 02** Santamarina-Rubio, E; Pérez, K; Ricart, I; Rodríguez-Sanz, M; Rodríguez-Martos, A; Brugal, MT; Borrell, C; Ariza, C; Díez, E; Beneyto,

VM; Nebot, M; Ramos, P; Suelves, JM. Substance use among road traffic casualties admitted to emergency departments. INJURY PREVENTION; 15(2):87-94
I.F.: 1.453

- 03** Ariza, C; Schiaffino, A; Pascual, JA; Twose, J; Nebot, M; Fernández, E. Exposure to environmental tobacco smoke and salivary cotinine concentration in a sample of students from Barcelona, Spain. MEDICINA CLINICA; 133(16):622-25
I.F.: 1.231

- 04** Martínez-Sánchez, JM; Fernández, E; Fu, M; Pérez-Ríos, M; López, MJ; Ariza, C; Pascual, JA; Schiaffino, A; Pérez-Ortuno, R; Salto, E; Nebot, M. Impact of the Spanish smoking law in smoker hospitality workers. NICOTINE & TOBACCO RESEARCH; 11(9):1099-106
I.F.: 2.557

- 05** Martínez-Sánchez, JM; Fernández, E; Fu, M; Pascual, JA; Ariza, C; Agudo, A; Borrás, JM; Schiaffino, A; Moncada, A; Jané, M; Salto, E; Nebot, M; Samet, JM; DCOT Study Invest. Assessment of exposure to

*Total Impact Factor.
**Average Impact Factor.



- secondhand smoke by questionnaire and salivary cotinine in the general population of Barcelona, Spain (2004-2005). *PREVENTIVE MEDICINE*; 48(3):218-23
I.F.: 3.172
- 06 Bayas, JM; Izquierdo, C; Ruiz, L; Sintés, X; Sousa, D; Celorrio, JM; Varona, W; Carratalà, J; Nebot, M; Batalla, J; Sugrañes, S; Manzur, A; Terren, A; García, C; Clemente, E; Rivera, S; Justo, I; Arévalo, A; Salles, L; Domínguez, A. Validity of self-reported pneumococcal vaccination status in the elderly in Spain. *VACCINE*; 27(34): 4560-64
I.F.: 3.616
- 07 Nebot M, López MJ, Ariza C, Pérez-Ríos M, Fu M, Schiaffino A, Muñoz G, Saltó E, Fernández E; Spanish Smoking Law Evaluation Group. Impact of the Spanish smoking law on exposure to secondhand smoke in offices and hospitality venues: before-and-after study. *ENVIRONMENTAL HEALTH PERSPECTIVES*; 117(3):344-347
I.F.: 6.191
- 08 Fu M, Martínez-Sánchez JM, Pérez-Ríos M, López MJ, Fernández E. A comparison of the Fagerström test for nicotine dependence and smoking prevalence across countries: updated data from Spain. *ADDICTION*; 104(2):326-327
I.F.: 3.842
- 09 Villalbí JR, Rodríguez-Sanz M, Villegas R, Borrell C. Changes in the population smoking patterns: Barcelona, 1983-2006. *MEDICINA CLÍNICA*; 132(11):414-419
I.F.: 1.231
- 10 Villalbí JR, Castillo A, Cleries M, Saltó E, Sánchez E, Martínez R, Tresserras R, Vela E; Barcelona Group. Acute myocardial infarction hospitalization statistics: apparent decline accompanying an increase in smoke-free areas. *REVISTA ESPAÑOLA DE CARDIOLOGÍA*. 62(7):812-815
I.F.: 2.746
- 11 Fu M, Valverde A, Ortega G, López MJ, Martínez-Sánchez JM, Martín C, Martínez C, Saltó E, Fernández E. Exposure to second-hand smoke in primary health care centres in Catalonia, Spain (2006). *ENVIRONMENTAL RESEARCH*; 109(6): 775-778
I.F.: 3.237
- 12 Fu M, Fernández E, Martínez-Sánchez JM, Pascual JA, Schiaffino A, Agudo A, Ariza C, Borràs JM, Samet JM; DCOT Study investigators. Salivary cotinine concentrations in daily smokers in Barcelona, Spain: a cross-sectional study. *BMC PUBLIC HEALTH*; 9:320
I.F.: 2.223
- 13 Martínez-Sánchez JM, Fu M, Pérez-Ríos M, López MJ, Moncada A, Fernández E; for the DCOT study investigators and the Spanish Smoking Law Evaluation Group. Comparing salivary cotinine concentration in non-smokers from the general population and hospitality workers in Spain. *EUROPEAN JOURNAL OF PUBLIC HEALTH*; 19(6): 662-664
I.F.: 2.313
- 14 Amaro, JH; Garcia-Altes, A; Lopez, MJ; Bartoll, X; Nebot, M; Ariza, C. Costbenefit analysis of a school-based smoking prevention program. *GACETA SANITARIA*; 23(4):311-314.
I.F.: 1.172
- 15 Fernández E, Fu M, Pascual JA, López MJ, Pérez-Ríos M, Schiaffino A, Martínez-Sánchez JM, Ariza C, Saltó E, Nebot M; and the Spanish Smoking Law Evaluation Group. Impact of the Spanish smoking law on exposure to second-hand smoke and respiratory health in hospitality workers: a cohort study. *PLOS ONE*; 4(1):e4244.
I.F.: 4.351
- 16 Galán I, López MJ. Three years with "Tobacco-control law": cleaner air but not clean enough. *GACETA SANITARIA*; 23(2):87-90.
I.F.: 1.172
- 17 Villalbí JR. Public health professionals and services: knowing, knowing what to do, and doing. *GACETA SANITARIA*; 23(1):14-15.
I.F.: 1.172
- 18 Junyent I, Villalbí JR, Ballestín M, Durán J, García-Rodríguez A, Penacho V. Quality evaluation in public health: the case of an animal shelter. *GACETA SANITARIA*; 23(5):440-443.
I.F.: 1.172
- 19 García-Altés A, Dalmau-Bueno A, Colls C, Mendivil J, Benet J, Mompart A, Torné E, Zara C, Borrell C, Brugulat P, Guarga A; por el Grupo de Análisis del Desempeño de los Servicios Sanitarios de Cataluña. Performance assessment of health services in Catalonia (Spain): Evaluation of initial results of the Catalan healthcare service project. *GACETA SANITARIA*; 23(5):465-472.
I.F.: 1.172
- 20 Villalbí JR. Primary care evaluation. *ATENCIÓN PRIMARIA* Villalbí JR, Baranda L, López MJ, Nebot M. El tabaco en los establecimientos de restauración y hostelería: estudio observacional en Barcelona, 2008. *GACETA SANITARIA*.
I.F.: 1.172
- 21 Martínez-Sánchez JM; Fu, M; Ariza, C; Lopez, MJ; Salto, E; Pascual, JA; Schiaffino, A; Borràs, JM; Peris, M; Agudo, A; Nebot, M; Fernandez, E; Nombre Investigadores Estudio DCOT. Optimal cut-point of salivary cotinine concentration to discriminate smoking status in the adult population in Barcelona. *GACETA SANITARIA*; 23(6):501-505
I.F.: 1.172



Transport and Health: Lesions and Mobility

TEAM



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Researchers
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Main lines Of research

- Study of traffic accident inequalities by sex, social class and area of residence: how to measure unequal risk exposure to traffic accidents.
 - Evaluation of road safety strategies in Spain: inequalities according to sex, age groups and geographical area.
 - Epidemiology of medullar lesions and head trauma in Spain 2000-2007.
- Participation in international projects:**
- Probability of admission.
 - Road Safety Data Collection, Transfer and Analysis (DACOTA).
 - European Safer Urban Motorcycling (ESUM).
- Social and spatial inequalities in terms of traffic safety.
- Projects in the planning and design phase:**
- Social inequalities in mobility in Spain.
 - Indicators of exposure to mobility and lesion risk.

Challenges

- Study lesion types and their severity according to accident configuration and the vehicles involved and to foster this kind of study in urban settings.
- Evaluate road safety policies and interventions.
- Develop exposure denominators for the calculation of indicators.
- Study motorized and non-motorized mobility and the impact on health.

Awards

- Award for the Best Oral Presentation by Young Researchers at the 27th Annual Meeting of the Spanish Epidemiology Society, Zaragoza 2009: Marta Olabarria for CAMINAR: Una actividad física integrada en la vida diaria.



INDEXED PUBLICATIONS

01 Pérez, K; Mari-Dell'Olmo, M; Borrell, C; Nebot, M; Villalbi, JR; Santamarina, E; Tobías, A. Road injuries and relaxed licensing requirements for driving light motorcycles in Spain: a time-series analysis. BULLETIN OF THE WORLD HEALTH ORGANIZATION; 87(7):497-504
I.F.: 5.302

02 Pérez, K; Santamarina-Rubio, E; Rodríguez-Martos, A; Brugal, MT; Ricart, I; Suelves, JM; de la Torre, R; Pujadas, M; Ariza, C; Díez, E; Nebot, M; Ramos, P; Beneyto, VM; Plasencia, A. Substance use among non-

fatally injured patients attended at emergency departments in Spain. DRUG AND ALCOHOL DEPENDENCE; 105(3):194-201

I.F.: 3.599

03 Santamarina-Rubio, E; Pérez, K; Ricart, I; Rodríguez-Sanz, M; Rodríguez-Martos, A; Brugal, MT; Borrell, C; Ariza, C; Díez, E; Beneyto, VM; Nebot, M; Ramos, P; Suelves, JM. Substance use among road traffic casualties admitted to emergency departments. INJURY PREVENTION; 15(2):87-94

I.F.: 1.453

***TIF: 12.698 **AIF: 2.53**

04 Novoa, AM; Perez, K; Borrell, C. Evidence-based effectiveness of road safety interventions: a literature review. GACETA SANITARIA; 23(6):553-553.

I.F.: 1.172

05 Perez, K. Red, yellow and green? Road safety in Spain during the first decade of the 21st century. GACETA SANITARIA; 23(5):359-361.

I.F.: 1.172

*Total Impact Factor.

**Average Impact Factor.



Transmissible Diseases

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Main lines
Of research

Application of the new technologies to tuberculosis (TB) control:

- Significant international diffusion has been achieved. Google Analytics offers a highly effective system for analysing website visits that enables us to assess the kind of users interested in our portal. In 2007 there were 13,429 visitors, 21% from Latin America.
- The main objective of TB Research Unit (UITB) is to produce scientific knowledge of relevance on the control, diagnosis, treatment and prevention of TB. From the visits and discussion forum comments, it is clear that we continue to play a key role in Spain and in Latin America.

Clinical trials for the prevention and treatment of tuberculosis:

- Our centre, which is the only such centre in Europe, is part of a network of international centres (in Canada, Brasil, South Africa and Uganda) associated with the Tuberculosis Trials Consortium of

the CDCs, promoting international involvement in laying the therapeutic and strategic bases for the treatment of TB and tubercular infection. Preliminary results have recently been presented at the ICAAC and other important international conferences (such as that of the American Thoracic Society). The article with definitive study data is pending publication.

- The research line launched aims to fix the bases for shortening treatment times for tubercular infection and, by extension, ensure compliance and control over the disease.

Community health workers' role in the control of communicable diseases:

- The experiment has been presented in TB and primary care conferences and workshops and in the Emerging Infectious Diseases and Ethnicity and Health journals (Rotterdam). The results of the comparative study were recently

presented as a thesis in fulfilment of the Master in Public Health of Pompeu Fabra University and the Autonomous University of Barcelona. An article is undergoing a final review before publication.

- The inclusion of community health workers has led to important changes in TB programme teams and has led to the creation of new TB consensus protocols. The Institute of Health Studies (IES) is developing, with sponsorship from the authorities, the first intercultural mediation course in the healthcare arena, in which we are participating as instructors and students. The concept of the community health worker has been included in the framework document of the Tuberculosis Prevention and Control Plan for Spain. The short- to medium-term objective is for community health workers to continue working with us and for these professionals to be included in other public health areas.



Challenges

- Investigate the transmission of hepatitis B in autochthonous and immigrant populations.
- Evaluate HIV screening programmes in gay saunas.
- Improve detection and research into causes of hepatitis C.
- Study legionella and TB outbreaks.

Grants

- Caylà, JA; Miró, JM. Continuation of clinical trials CDCs. CDC-EU Amount: **60,728.27 €**
- Caylà, JA. HIV-TB coinfection project. Euro TB Study TBNet.
- EU community health programme. Barcelona City Hall – Health Department. Amount: **186,000 €**

Scientific production

INDEXED PUBLICATIONS

- 01** Álvarez J, Domínguez A, Sabrià M, Ruiz L, Tornér N, Caylà JA, Barrabeig I, Sala MR, Godoy P, Camps N, Minguell S. Impact of the Legionella urinary antigen test on epidemiological trends in community outbreaks of legionellosis in Catalonia, Spain, 1190-2004. *INT J INFECT DIS*; 13(6):E365-E370
I.F.: 2.167
- 02** Borrell S, Español M, Orcau A, Tudó G, March F, Caylà JA et al. Factors associated with differences between conventional contact tracing and molecular epidemiology in study of tuberculosis transmission and analysis in the city of Barcelona, Spain. *J OF CLIN MICROBIOL*; 47(1):198-204
I.F.: 4.162
- 03** Borrell S, Thorne N, Español M, Mortimer C, Orcau A et al. Comparison of Four colour IS6110-fAFLP with the classic IS6110-RFLP on the ability to detect recent transmission in the city of Barcelona, Spain. *TUBERCULOSIS JOURNAL*; 89(3):233-237
I.F.: 2.536
- 04** Brown AE, Gifford RJ, Clewley JP, Kucherer C, Nasqyekuer B, Porter K and CASCADE collaboration (Caylà JA, García de Olalla P). Phylogenetic reconstruction of transmission events from individuals with acute HIV infection: toward more rigorous epidemiological definitions. *J INFECT DIS*
I.F.: 5.865
- 05** Domínguez A, Álvarez J, Sabria M, Carmona G, Tornér N, Oviedo M, Cayla J, Minguell S, Barrabeig I, Sala M, Godoy P, Camps N. Factors influencing the case-fatality rate of Legionnaires' disease. *INT J TUBERC LUNG DIS*; 13(3):407-412
I.F.: 2.548
- 06** Domínguez A, Broner S, Tornér N, Martínez A, Jansà JM, Álvarez J, Barrabeig I, Caylà JA, Godoy P, Minguell S, Camps N, Sala MR and Working Group for the Study Outbreaks of Acute Gastroenteritis in Catalonia (Orcau A, Rius C). Differential features of foodborne gastroenteritis outbreaks of known and unknown etiology. *J FOOD PROT*; 72(9):1958-1962
I.F.: 1.960
- 07** Domínguez A, Oviedo M, Tornér N, Carmona G, Costa J, Caylà J, Sala MR, Barrabeig I, Camps N, Minguell S, Álvarez J, Godoy P, Jansà JM; the Mumps Control Working Group of Catalonia. Mumps: A year of enhanced surveillance in Catalonia, Spain. *VACCINE*; 27(25-26):3492-3495
I.F.: 3.616
- 08** Dorman SE, Johnson JL, Goldberg S, Muzanye G, Padayatchi N, Bozeman L, and Tuberculosis Trials Consortium (Caylà JA, Sánchez, F, Moreno A, entre otros). Substitution of moxifloxacin for isoniazid during intensive phase treatment of pulmonary tuberculosis. *AM J RESPIR CRIT CARE MED*; 180(3):273-280
I.F.: 10.689
- 09** Moltó J, Llibre JM, Ribera E, Mínguez C, del Rio JS, Pedrol E, Vallecillo G, Cedeño S, Valle M, Miranda C, Negredo E, Clotet B; SQV-HEP Study Group (Sánchez F). Saquinavir exposure in HIV-infected patients with chronic viral hepatitis. *J ANTIMICROB CHEMOTHER*; 63(5):992-997
I.F.: 4.352
- 10** The HIV/TB Study Writing Group (Caylà JA). The HIV/TB Study Writing Group (Caylà JA). Mortality from HIV and TB coinfections is higher in Eastern Europe than in Western Europe and Argentina. *AIDS*; 23(18):2485-2495
I.F.: 4.909
- 11** Caylà, JA; Rodrigo, T; Ruiz-Manzano, J; Caminero, JA; Vidal, R; García, JM; Blanquer, R; Casals, M; Working Grp Completion TB Tuberculosis treatment adherence and fatality in Spain. *RESPIRATORY RESEARCH*; 10:121
I.F.: 3.127
- 12** Carnicer-Pont, D; de Olalla, PG; Cayla, JA; AIDS Working Grp. HIV Infection Late Detection in AIDS Patients of an European City with Increased Immigration Since Mid 1990s. *CURRENT HIV RESEARCH*; 7(2):237-243
I.F.: 1.978
- 13** Millet, JP; de Olalla, PG; Gascón, J; Prat, JGI; Trevino, B; Pinazo, MJ; Cabezós, J; Muñoz, J; Zarzuela, F; Cayla, JA Imported malaria among African immigrants: is there still a relationship between developed countries and their ex-colonies? *MALARIA JOURNAL*; 8:111
I.F.: 3.002
- 14** Millet, JP; Orcau, A; de Olalla, PG; Casals, M; Rius, C; Caylà, JA. Tuberculosis recurrence and its associated risk factors among successfully treated patients. *JOURNAL OF EPIDEMIOLOGY AND COMMUNITY HEALTH*; 63(10):799-804
I.F.: 3.043
- 15** Casals, M; Guzman, K; Cayla, JA. Mathematical Models Used in the Study of Infectious Diseases. *REVISTA ESPAÑOLA DE SALUD PUBLICA*; 83(5):689-695.
I.F.: 0.747
- 16** Cayla, JA. Media epidemics: considerations for public health. *GACETA SANITARIA*; 23(5)362-364
I.F.: 1.172
- 17** Godoy P, Domínguez A, Álvarez J, Camps N, Barrabeig I, Bartolomé

*TIF: 58.114 **AIF: 3.05

*Total Impact Factor.
**Average Impact Factor.



AREA T.1

Epidemiology, public health and healthcare services

R, Sala R, Ferre D, Pañella H, Torres J, Minguell S, Alsedà M, Pumares A y Grupo de Estudio de Gastroenteritis Víricas en Cataluña. Brote por norovirus en residencias y centros sanitarios en Cataluña (España). REV ESP SALUD PÚBLICA; 83(5):745-750.

I.F.: 0.747

18 Martín V, López JF, Núñez MG, Morís ML, Pérez R, Caylà JA. Infección por los virus de la hepatitis C y de la inmunodeficiencia humana y coinfección por ambos en el área de salud de León durante el período 1993-2004. REV ESP SALUD PÚBLICA.

I.F.: 0.747

19 Muñoz P, Orcau A, Caylà JA. Tuberculosis en Barcelona: modelo predictivo basado en series temporales. REV ESP SALUD PÚBLICA; 83(5):751-757

I.F.: 0.747

OTHER PUBLICATIONS

Antón JJ, Arroyo JM, Caminero JA, Caylà JA, Chaves F, da Silva A, et al. Documento de consenso para el control de la tuberculosis en las prisiones españolas. PUBLICACIÓN DE LA SOCIEDAD ESPAÑOLA DE SANIDAD PENITENCIARIA.

Caylà, JA. Media epidemics: considerations for public health. GACETA SANITARIA

Díaz A, Junquera ML, Esteban V, Martínez B, Pueyo I, Suárez J, Ureña JM, Varela JA, Vall M, del Romero J, Sanz I, Belda J, Boronat J, Gómez P, Gual F, Colomo C, López de Munain J, Balaguér J, Landa MC, Lezaun ME, Cámara MC, Fernández E, Bru FJ, Alastrue I, Ordoñana JR, de Armas C, Azpiri MA, Gómez L, Trullén J, Díez M; STI Study Group and EPI-VIH Group. HIV/STI co-infection among men who have sex with men in Spain. EURO SURVEILL.

Monedero I, Caminero JA. MDR-/XDR-TB management: what it was, current standards and what is ahead. EXPERT REVIEW OF RESPIRATORY MEDICINE.

Tortajada C, de Olalla PG, Pinto RM, Bosch A, Caylà J. Outbreak of hepatitis among men who have sex with men in Barcelona, Spain, September 2008 – March 2009. EURO SURVEILL



Health Inequalities

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Main lines of research

- Health inequalities according to social class in Spain and worldwide have been analysed in depth.
 - The main contributions of some of these studies lies in the exploitation of information at the census section level as the maximum disaggregation unit, and also at higher geographic aggregation levels, such as the neighbourhood, town and region. This enables an examination of both the individual and contextual effects of using multilevel techniques and Bayesian methods for geographic data.
- Gender inequalities in health:**
- Sexual division between productive and reproductive work (gender roles) and differences in male and female identities are the 2 main structural factors that generate gender inequalities in health.
- Social and political determinants of health and their impact on policy building and interventions:**
- Specifically, men and women experience different kinds of exposure and perceive and react differently to the same exposure. This, combined with the existence of gender bias in healthcare, explains the existence of gender inequalities in health, aspects that have been researched by members of this group. Unemployment and employment instability in the health arena have been analysed in terms of gender and class differences. A theoretical framework and explanatory charts have been developed to guide comprehension of the gender determinants that affect health.
 - This group has produced evidence of the macroeconomic determinants of health inequalities between countries. A society's wealth explains a significant proportion of health inequalities. Apart from economic reasons, social and political settings are very important in explaining inequalities.
 - In recent years, the group has also studied the impact of the political context on the health of the population, concluding that countries with better developed welfare states had better levels of health. An analysis of policies was one of the tools used from the perspective of both formulation and application in specific interventions.



Challenges

Study health inequalities according to different inequality axes:

- Date the group has essentially studied the social determinants of health separately in terms of social class and gender. We now aim to integrate these 2 axes and analyse inequalities among immigrants.
- In the last decade interest has grown into research into the impact of area of residence, especially smaller urbanized areas, on the health of the population. This explains why individual factors are not enough to explain diseases and poor health, as contextual factors regarding the area of residence (e.g., the unemployment rate) need to be taken into

account. Furthermore, the characteristics of the area of residence can contribute to socioeconomic and environmental inequalities in health. Finally, the study of health inequalities in smaller urbanized areas enables detection of areas for intervention. This research has recently been facilitated by the use of methods such as GIS and Bayesian hierarchical models of spatial epidemiology.

Study gender inequalities in health:

- This research line aims to further explore the theoretical framework and explanatory charts developed to guide comprehension of the gender determinants that affect health.

Study the social and political determinants of health and the impact on policy building and interventions:

- It is planned to continue studying the influence of policies on the health of populations and on social inequalities in health.

Study sex and reproductive inequalities in health:

- It is planned to establish a line of research to investigate the different aspects of sexual and reproductive health (sexuality, contraception, pregnancy, birth, miscarriage, abortion, birth rates, etc).

Grants

- Borrell, C. Evolution of socioeconomic inequalities in mortality in small areas of cities in Spain. Health care research fund. PI08/1488. Amount: **122,200.00 €**
- Borrell, C. Socioeconomic inequalities in mortality: evidence and policies in cities of Europe.

SANCO-European Union. INEQ-CITIES. Amount: **249,198.23 €**

- Pérez, G. Socioeconomic inequalities in pregnancy planning and use of anti-conceptives in adolescents and young adults in Spain.FIS.PI09/90424. Amount: **26, 620.00 €**

- Borrell, C. Socioeconomic inequalities in mental health and use of health services in Spain: a multilevel study. ETS. PI09/90676. Amount: **26,620.00 €**

***TIF: 68.986 **AIF: 2.09**

Scientific production

INDEXED PUBLICATIONS

- 01 Puigpinós, R; Borrell, C; Antunes, JLF; Azlor, E; Pasarín, MI; Serral, G; Pons-Vigues, M; Rodríguez-Sanz, M; Fernández, E. Trends in socioeconomic inequalities in cancer mortality in Barcelona: 1992-2003. BMC PUBLIC HEALTH; 9:35
I.F.: 2.223
- 02 Porta, M; Gasull, M; PuigDoménech, E; Rodríguez-Sanz, M; Pumarega, J; Rebato, C; Borrell, C. Sociodemographic factors influencing participation in the Barcelona Health Survey study on serum concentrations of persistent organic pollutants. CHEMOSPHERE; 76(2):216-25
I.F.: 3.253
- 03 Pizarro, V; Ferrer, M; Domingo-Salvany, A; Benach, J; Borrell, C; Pont, A; Schiaffino, A; Almansa, J; Tresserras, R; Alonso, J. The utilization of dental care services according to health insurance coverage in Catalonia (Spain). COMMUNITY DENTISTRY AND ORAL EPIDEMIOLOGY; 37(1):78-84
I.F.: 2.418

- 04 Borrell, C; Espelt, A; Rodríguez-Sanz, M; Burstrom, B; Muntaner, C; Pasarín, MI; Benach, J; Marinacci, C; Roskam, AJ; Schaap, M; Regidor, E; Costa, G; Santana, P; Deboosere, P; Kunst, A; Navarro, V. Analyzing differences in the magnitude of socioeconomic inequalities in self-perceived health by countries of different political tradition in europe. INTERNATIONAL JOURNAL OF HEALTH SERVICES; 39(2):321-41
I.F.: 0.977
- 05 Salvador, J; Cano-Serral, G; Rodríguez-Sanz, M; Lladónosa, A; Borrell, C. Inequalities in caesarean section: influence of the type of maternity care and social class in an area with a national health system. JOURNAL OF EPIDEMIOLOGY AND COMMUNITY HEALTH; 63(3):259-61
I.F.: 3.043
- 06 Van der Heydena, JHA; Schaap, MM; Kunst, AE; Esnaola, S; Borrell, C; Cox, B; Leinsalu, M; Stirbu, I; Kalediene, R; Deboosere, P; Mackenbach, JP; Van Oyen, H. Socioeconomic inequalities in lung cancer mortality in 16 European populations. LUNG CAN-

CER; 63(3):322-30
I.F.: 3.140

- 07 Villalbi, JR; Rodríguez-Sanz, M; Villegas, R; Borrell, C Changes in the population smoking patterns: Barcelona, 1983-2006. MEDICINA CLINICA; 132(11):414-19
I.F.: 1.231
- 08 Escurriol, V; Mari-Dell'Olmo, M; Rohlfs, I; Borrell, C; Chirlaque, MD; Buckland, G; Rodríguez, L; Sánchez, MJ; Amiano, P; Egues, N; Ros, E. Plant sterol intake and education level in the Spanish EPIC cohort. NUTRITION; 25:769-73
I.F.: 2.604
- 09 Muntaner, C; Borrell, C; Sola, J; Mari-Dell'Olmo, M; Chung, H; Rodríguez-Sanz, M; Benach, J; Noh, S. Capitalists, managers, professionals and mortality: Findings from the Barcelona Social Class and All Cause Mortality Longitudinal Study. SCANDINAVIAN JOURNAL OF PUBLIC HEALTH; 37(8):826-38
I.F.: 1.435
- 10 Duarte-Salles T, Pasarín MI, Borrell C, Rodríguez-Sanz M, Rajmil L, Ferrer

* Total Impact Factor.
** Average Impact Factor.



- M, Pellisé F, Balagué F. Social inequalities in health among adolescents in a large southern European city. *JOURNAL OF EPIDEMIOLOGY AND COMMUNITY HEALTH* I.F.: 3.043
- 11 Stirbu I, Kunst AE, Bopp M, Leinsalu M, Regidor E, Esnaola S, Costa G, Martikainen P, Borrell C, Kalediene R, Rychtarikova J, Artnik B, Deboosere P, Mackenbach JP. Educational inequalities in avoidable mortality in Europe. *JOURNAL OF EPIDEMIOLOGY AND COMMUNITY HEALTH*;16(2):146-159 I.F.: 3.043
- 12 Artazcoz L, Cortès I, Escribà-Agüir V, Cascant L, Villegas R. Understanding the relationship of long working hours with health status and health-related behaviours. *JOURNAL OF EPIDEMIOLOGY AND COMMUNITY HEALTH*;63(7):521-527 I.F.: 3.043
- 13 Giné-Garriga M, Guerra M, Manini TM, Mari-Dell'Olmo M, Pagès E, Unnithan VB. Measuring balance, lower extremity strength and gait in the elderly: Construct validation of an instrument. *ARCHIVES OF GERONTOLOGY AND GERIATRICS*; 51(2):199-204 I.F.: 1.360
- 14 Giné-Garriga M, Guerra M, Mari-Dell'Olmo M, Martín C, Unnithan VB. Sensitivity of a modified version of the 'timed get up and go' test to predict fall risk in the elderly: a pilot study. *ARCHIVES OF GERONTOLOGY AND GERIATRICS*. I.F.: 1.360
- 15 Bellmunt J, Macià F, Malmusi D, Llorente JA, Carles J, Lloreta J, Foro P, Gelabert A, Albanell J, Castells X. Impact of PSA implementation and combined radiation and hormonal therapy (RT+HT) on outcome of prostate cancer patients. *EUROPEAN JOURNAL OF CANCER*;45(16):2804-2809 F.I.: 4.121
- 16 Muntaner C, Borrell C, Espelt A, Rodríguez-Sanz M, Pasarín MI, Benach J, Navarro V. Politics or policies vs politics and policies: a comment on Lundberg. *INTERNATIONAL JOURNAL OF HEALTH SERVICES*; [Epub ahead of print] I.F.: 0.977
- 17 Cano-Serral, G; Azlor, E; Rodríguez-Sanz, M; Pasarín, MI; Martínez, JM; Puigpinos, R; Muntaner, C; Borrell, C. Socioeconomic inequalities in mortality in Barcelona: A study based on census tracts (MEDEA Project) *HEALTH & PLACE*;15(1):186-192 I.F.: 2.818
- 18 Maydana, E; Serral, G; Borrell, C. Socioeconomic inequalities and infant mortality in Bolivia. *REVISTA PANAMERICANA DE SALUD PUBLICA*; 25(5):401-410 I.F.: 0.994
- 19 Espelt A, Borrell C, Rodríguez-Sanz M, Muntaner C, Pasarín M, Benach J, Schaap M, Kunst A, Navarro V. Answer to the commentary: Politics and public health—some conceptual considerations concerning welfare state characteristics and public health outcomes. *INTERNATIONAL JOURNAL OF EPIDEMIOLOGY*; 39(2):630-632 I.F.: 5.262
- 20 Tarricone I, Atti AR, Salvatori F, Braca M, Ferrari S, Malmusi D, Berardi D. Psychotic symptoms and general health in a socially disadvantaged migrant community in Bologna. *THE INTERNATIONAL JOURNAL OF SOCIAL PSYCHIATRY*; 55(3):203-213 I.F.: 0.911
- 21 Loane M, Dolk H, Morris JK, a EURO-CAT Working Group. Maternal age-specific risk of non-chromosomal anomalies. *BRITISH JOURNAL OF OBSTETRICS AND GYNAECOLOGY*; 116(8):1111-1119 I.F.: 3.101
- 22 Pérez, K; Mari-Dell'Olmo, M; Bo-rrrell, C; Nebot, M; Villalbí, JR; San-tamarina, E; Tobías, A. Road injuries and relaxed licensing requirements for driving light motorcycles in Spain: a time-series analysis. *BULLETIN OF THE WORLD HEALTH ORGANIZATION*; 87(7): 497-504 I.F.: 5.302
- 23 Santamarina-Rubio, E; Pérez, K; Ricart, I; Rodríguez-Sanz, M; Rodríguez-Martos, A; Brugal, MT; Bo-rrrell, C; Ariza, C; Díez, E; Beneyto, VM; Nebot, M; Ramos, P; Suelves, JM. Substance use among road traffic casualties admitted to emergency departments. *INJURY PREVENTION*; 15(2):87-94 I.F.: 1.453
- 24 Novoa, AM; Perez, K; Borrell, C Evidence-based effectiveness of road safety interventions: a literature review. *GACETA SANITARIA*; 23(6): 553-553 I.F.: 1.172
- 25 Garcia-Altes, A; Dalmau-Bueno, A; Colls, C; Mendivil, J; Benet, J; Mompart, A; Torne, E; Zara, C; Borrell, C; Brugulat, P; Guarga, A; Grp Anal Desempeno Serv Sanitarios. Performance assessment of health services in Catalonia (Spain): Evaluation of initial results of the Catalan health-care service project. *GACETA SANITARIA*; 23(5):465-472. I.F.: 1.172
- 26 Font-Ribera, L; Perez, G; Espelt, A; Salvador, J; Borrell, C. Determinants of induced abortion delay. *GACETA SANITARIA*; 23(5):415-419. I.F.: 1.172
- 27 Borrell C, Artazcoz L. Policies to diminish the inequality in health in Spain: a few precisions]. *GACETA SANITARIA*; 23(3):254-254. I.F.: 1.172
- 28 Pérez G. La salud reproductiva y sexual en España. *GACETA SANITARIA*; 23(3):171-173. I.F.: 1.172
- 29 Hormigo Amaro J, García-Altés A, López MA, Bartoll X, Nebot M, Ariza C. Análisis de coste-beneficio de un programa de prevención del tabaquismo en escolares. *GACETA SANITARIA*; 23(4): 311-314 I.F.: 1.172
- 30 Oliva J, Perez G. Inmigración y Salud (editorial). *GAC SANIT*; 23 Suppl 1:1-3. I.F.: 1.172
- 31 Malmusi D, Perez G. Aborto legal en mujeres inmigradas en un entorno urbano. *GAC SANIT*; 23 Suppl 1:64-6. I.F.: 1.172
- 32 Ramos F, Perez G, Jané M, Prats R. Construcción de las curvas de referencia de peso al nacer por edad gestacional en Cataluña: métodos y desarrollo. *GAC SANIT*; 23(1):76-81. I.F.: 1.172

EDITORIAL

- 33 Borrell, C; Artazcoz, L; Pasarín, MI; Díez, E. Social inequalities in health and closing the gap in a generation. *JOURNAL OF PUBLIC HEALTH POLICY*; 30(2):189-94 I.F.: 1.326

OTHER PUBLICATIONS

Garne E, Loane M, Wellesley D, Barisic I, EUROCAT Working Group (Salvador J). Congenital hydronephrosis: Prenatal diagnosis and epidemiology in Europe. *JOURNAL OF PEDIATRIC UROLOGY*



Epidemiology Of Addictions

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Main lines of research

Epidemiology of drug use patterns:

- Study of variables such as socio-economic level, social network and violence as determinants of heroin use and associated health problems.
- Patterns of heroin and cocaine use, associated health problems and implications for health care services.
- Methadone treatment programmes, cost/effectiveness of auxiliary programmes and improvements in quality of life.
- Development and evaluation of new instruments for diagnosis and screening for alcohol-related problems.

Health problems associated to drug abuse:

Infections

- Prevalence and patterns of HIV/AIDS in Spain, especially among drug users.
- HTLV-1 and syringe users. Molecu-

lar epidemiology of HTLV-2.

- Prevalence of other infections related to injected-drug use and associated factors. Prevention policies.

Injuries

- Prevalence of abuse substances in individuals involved in traffic accidents and other accidents. Effectiveness of brief motivational interventions to reduce alcohol consumption in the injured who arrive at emergency rooms under the influence of alcohol but without alcoholic dependence.

Psychiatric comorbidity

- Psychiatric comorbidity in illegal drug users. Development of criteria for heroin and cocaine dependence for application in semi-structured questionnaires and similar in areas of mental health.

Impact of drug consumption in mortality

- Main causes of mortality among

drug users, (overdoses, AIDS, accidents, homicide, suicide, chronic liver disease, etc.). Mortality rates and life-expectancy estimates.

- Effects related to the route of heroin administration, and relationships between factors such as frequency of consumption, overdose, level of education and knowledge of causes of mortality.

Quality of life in drug users

- Factors determining decreased quality of life in active cocaine and heroin users.

Evaluation of health care policies

- Analysis of health care policies and differences in immigrant access to health care services in European cities.
- Evaluation of Spanish policy concerning legal and illegal drug consumption and its impact on the general population.



Challenges

Epidemiology and patterns of drug use

- Incidence and patterns of cocaine use.
- Incidence and patterns of heroin use.
- Prevalence of cocaine, heroin and alcohol.

Health problems associated to drug use

- Aggressive and violent attitudes and behavior in young cocaine users.
- Quality of life in users with psy-

chiatric comorbidity.

- Use of services among young heroin, cocaine and alcohol users.
- Factors associated with retention in treatment programmes for cocaine and alcohol addiction.
- Mortality and its determinants in cohorts of alcohol and cocaine dependent subjects.
- Factors associated to acute health problems following cocaine use.
- Analysis of differential social and health determinants among immi-

grants that use illegal drugs.

Evaluation of health policies

- Evaluation of supervised drug consumption rooms and other policies to reduce harm.
- Study of social inequalities in evaluating results and adherence to treatment.
- Evaluation of brief motivational intervention programmes as an alternative to disciplinary measures in teenagers who use psychoactive substances.

Scientific production

INDEXED PUBLICATIONS

- 01** Bravo, MJ; Royuela, L; De la Fuente, L; Brugal, MT; Barrio, G; Domingo-Salvany, A; Itinere Project Grp. Use of supervised injection facilities and injection risk behaviours among young drug injectors. *ADDITION*; 104(4):614-19
I.F.: 4.244
- 02** Luquero, FJ; Vallejo, F; de La Fuente, L; Toro, C; Brugal, MT; Bravo, MJ; Soriano, V; Barrio, G; Pulido, J; Project Itinere Grp. The role of injection versus socioeconomic factors in hepatitis A virus infection among young heroin users: Implications for vaccination policies. *VACCINE*; 27(20):2674-79
I.F.: 3.298
- 03** Pérez, K; Santamarina-Rubio, E; Rodríguez-Martos, A; Brugal, MT; Ricart, I; Suelves, JM; de la Torre, R; Pujadas, M; Ariza, C; Díez, E; Nebot, M; Ramos, P; Beneyto, VM; Plasencia, A. Substance use among non-fatally injured patients attended at emergency departments in Spain. *DRUG AND ALCOHOL DEPENDENCE*; 105(3):194-201
I.F.: 3.371
- 04** Santamarina-Rubio, E; Pérez, K; Ricart, I; Rodríguez-Sanz, M; Rodríguez-Martos, A; Brugal, MT; Borrell, C; Ariza, C; Díez, E; Beneyto, VM; Nebot, M; Ramos, P; Suelves, JM. Substance use among road traffic casualties admitted to emergency departments. *INJURY PREVENTION*; 15(2):87-94
I.F.: 1.837
- 05** Pulido, J; Brugal, MT; de la Fuente, L; Ballesta, R; Barrio, G; Bravo, MJ; Domingo-Salvany, A; Castellano, Y; Fernández, F; Grp Proyecto Itinere. Recruitment methodology and characteristics of a cohort of young regular cocaine users in three Spanish cities (the Itinere-cocaine Project). *GACETA SANITARIA*; 23(3):200-207
I.F.: 1.172
- 06** Bravo M.J.; Llorens, N; Barrio, G.; De la Fuente L; Brugal, M.T.; Santos, S. and ITINERE Project Group. Methadone maintenance treatment: a protective factor for cocaine injection in a street-recruited cohort of heroin users. *DRUG AND ALCOHOL DEPENDENCE*.
I.F.: 3.371
- 07** A. Dalmau-Bueno, A. García-Altés, M. Mari-Dell'Olmo, K. Pérez, A. Espelt, A. E. Kunst, and C. Borrell. Trends in socio-economic inequalities in cirrhosis mortality in an urban area of Southern Europe: A multilevel approach. *J EPIDEMIOLOGICAL COMMUNITY HEALTH*.
I.F.: 3.043
- 08** González-Zobl G, Carrillo-Santisteve P, Rodríguez-Martos A, Brugal MT. Emergencies in cannabis users in Barcelona, Spain. *MED CLIN (BARC)*.
I.F.: 1.231
- 09** Borrell C, Espelt A, Rodríguez-Sanz M, Burstrom B, Muntaner C, Pasarín MI, Benach J, Marinacci C, Roskam AJ, Schaap M, Regidor E, Costa G, Santana P, Deboosere P, Kunst A, Navarro V. Analyzing differences in the magnitude of socioeconomic inequalities in self-perceived health by countries of different political tradition in Europe. *INT J HEALTH SERV*; 39(2):321-41
I.F.: 0.977
- 10** González-Saiz, F; Domingo-Salvany, A; Barrio, G; Sánchez-Niubo, A; Brugal, MT; de la Fuente, L; Alonso, J; ITINERE Investigators. Severity of Dependence Scale as a Diagnostic Tool for Heroin and Cocaine Dependence. *EUROPEAN ADDICTION RESEARCH*; 15(2):87-93
I.F.: 1.233
- 11** Brugal, MT; Pulido, J; Toro, C; de la Fuente, L; Bravo, MJ; Ballesta, R; Soriano, V; Barrio, G; Vallejo, F; Domingo-Salvany, A; Castellano, Y; Project Itinere Grp. Injecting, Sexual Risk Behaviors and HIV Infection in Young Cocaine and Heroin Users in Spain. *EUROPEAN ADDICTION RESEARCH*; 15(3):171-178
I.F.: 1.233
- 12** Schaap MM, Kunst AE, Leinsalu M, Regidor E, Espelt A, Ekholm O et al. Female ever-smoking, education, emancipation and economic development in 19 European countries. *SOC SCI MED*; 68(7):1271-1278
I.F.: 2.71
- 13** Rodríguez-Martos A, Castellano Y. Web-based screening and advice for hazardous drinkers: use of a Spanish site. *DRUG ALCOHOL REV*; 28(1):54-59
I.F.: 1.646

*TIF: 26.323 **AIF: 2.19

*Total Impact Factor.
**Average Impact Factor.



Primary Care Research

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Main lines Of research

- Health related quality of life in patients with stroke.
- Cardiovascular risk factors in patients with stroke.
- Implementation of cardiovascular risk prevention guidelines in clinical practice.
- Systematic review of clinical practice guidelines for cardiovascular risk prevention.
- Systematic review of clinical practice guidelines for the management of osteoporosis.
- Relationship between the use of proton pump inhibitors and hip fractures.
- The effectiveness of home management for fragile patients.

Awards

- MEDES 2009 (Lilly Foundation) Honourable Mention for the Best Original Research Article: Brotons C, Falces C, Alegre J, Ballarín E, Casanovas J, Catà T, Martínez M, Moral I, Ortiz J, Pérez E, Rayó E, Recio J, Roig E, Vidal X. Ensayo clínico aleatorizado para evaluar la efectividad de una intervención domiciliaria en pacientes con insuficiencia cardíaca: estudio IC-DOM. Rev Esp Cardiol 2009; 62 (4): 400-8.

Challenges

- Enlarge the research team by linking up with other primary care centres associated with the ACEBA Family Medicine Teaching Unit.
- Work with other European institutions in implementing projects on risk prevention and health promotion in primary care settings.
- Work with other research teams in the IIB Sant Pau.

*TIF: 23.236 **AIF: 2.58

Scientific production

- 01** Lobos, JM; Royo-Bordonada, MA; Brotons, C; Alvarez-Sala, L; Armario, P; Maiques, A; Mauricio, D; Sans, S; Villar, F; Lizcano, A; Gil-Nunez, A; de Alvaro, F; Conthe, P; Luengo, E; del Rio, A; Rico, O; de Santiago, A; Vargas, MA; Martinez, M; Lizarbe, V. Guía Europea de prevención cardiovascular en la práctica clínica. Adaptación española del CEIPC 2008. NEUROLOGÍA; 24 (7): 465-84.
I.F.: 0.596
- 02** De Rivas Otero B, Permanyer-Miralda G, Brotons Cuixart C, Aznar Costa J, Sobreviela Blazquez E. Respuesta del autor: Estudio INCA: fallo cardíaco o riesgo vascular? ATEN PRIMARIA 2009; 41(12): 708-9.
I.F.: 0.437
- 03** Lobos JM, Royo-Bordonada MA, Brotons C, Alvarez-Sala L, Armario P, Maiques A et al. Comité Español Interdisciplinario para la prevención Cardiovascular. Guía Europea de prevención cardiovascular en la práctica clínica. Adaptación española del CEIPC 2008. REV CLIN ESP; 209 (6): 279-302.
I.F.: 0.584
- 04** Lobos Bejarano JM, Royo-Bordonada MA, Brotons C, Alvarez-Sala L, Armario P, Maiques A et al. Comité Español Interdisciplinario para la prevención Cardiovascular. Guía Europea de prevención cardiovascular en la práctica clínica. Adaptación española del CEIPC 2008. ATEN PRIMARIA 2009; 41(8): e1-463.e24
I.F.: 0.437
- 05** Waters D, Brotons C, Chiang CW, Ferrières J, Foody J, Jukema JW et al on behalf of the L-TAP 2 Investigators. The Lipid Treatment Assessment Project (L-TAP) 2: A Multinational Survey to Evaluate the

*Total Impact Factor.
**Average Impact Factor.



Proportion of Patients Achieving Low-Density Lipoprotein Cholesterol Goals. *CIRCULATION* 2009; 120 (1): 28-34.

I.F.: 14.816

06 Ferreira-González I, Permanyer G, Heras M, Ribera A, Marsal JR, Cascant P, Arós F, Bueno H, Sánchez PL, Cuñat J, Civeira E, Marrugat J. Soriano N como colaborador. Pronóstico y manejo de los pacientes con síndrome coronario agudo y enfermedad polivascular. *REV ESP CARDIOL*; 62 (9): 1012-21.

I.F.: 2.746

07 Brotons C, Falces C, Alegre J, Balarín E, Casanovas J, Catà T, Martínez M, Moral I, Ortiz J, Pérez E, Rayó E, Recio J, Roig E, Vidal X. Ensayo clínico aleatorizado para evaluar la efectividad de una intervención domiciliaria en pacientes con insuficiencia cardíaca: estudio IC-DOM. *REV ESP CARDIOL*; 62 (4): 400-8.

I.F.: 2.746

08 De Rivas Otero, Permanyer-Miralda g, Brotons Cuixart C, Aznar Costa J, Sobreviela Blázquez E. Perfil clínico y patrones de manejo en

los pacientes con insuficiencia cardíaca atendidos ambulatoriamente en España: estudio INCA (Estudio Insuficiencia Cardíaca). *ATEN PRIMARIA* 2009; 41(7): 394-401.

I.F.: 0.437

09 Brotons C. Podemos mejorar la implementación de las guías de práctica clínica? *ATEN PRIMARIA* 2009; (185): 246-7.

I.F.: 0.437

OTHER PUBLICATIONS

Brotons C, Soriano N. Prevención secundaria de la cardiopatía isquémica. *JANO*, 12 de junio de 2009. Nº. 1741: 35-39.

Ferreira-González I, Marsal JR, Mitjavila F, Parada A, Ribera A, Cascant P, Soriano N, Sánchez PI, Arós F, Heras M, Bueno H, Marrugat J, Civeira E, Permanyer-Miralda G. Patient registries of acute coronary syndrome: assessing or biasing the clinical real world data? *CIRC CARDIOVASC QUAL OUTCOMES*; 2(6): 540-7



AREA T.2

*Molecular, Genomic,
Cellular and Kinetic-Dynamic
Bases for Diseases
and their Treatment*

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Complex Disease Genomics

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**Main lines
Of research**

- Genetic epidemiology and bioinformatics. The Salambó project.

Complex disease genomics:

- Genetic analysis of idiopathic thrombophilia (GAIT).
- Genetic analysis of osteoporosis (GAO).
- Genetic determinants of diabetes type 2 in the Spanish population.

Pharmacogenomics:

- Macular degeneration associated with age (DMAE). Markers of genetic susceptibility and pharmacogenomics.

Challenges

- Consolidate the genetic epidemiology and bioinformatics research lines.
- Increase human and material resources so as to achieve the goals defined for different projects.
- Coordinate an international cardiovascular genomic project.
- Establish pharmacogenomic agreements with biopharmaceutical companies.

Grants

- Soria, JM. Support for Research Groups in Catalonia. Genomics and bioinformatics of complex genetic diseases. 2009SGR 1240. Amount: **41,600.00 €**

Awards

- Spanish Thrombosis and Haemostasis Society 25th Anniversary Award for the international cooperation project entitled

Genetic Analysis Linked to International Action on Thrombosis (Galia-Thromb).



*TIF: 21.404 **AIF: 4.28

INDEXED PUBLICATIONS

01 J. M. Soria. The Genetic Component of Disorders of Coagulation and Thrombosis. REVISTA ESPAÑOLA DE CARDIOLOGÍA; 58B-65B. I.F.: 2.746

02 Soria, JM; Navarro, S; Medina, P; Souto, R; Buil, A; Estellés, A; Fontcuberta, J; España, F. Heritability of plasma concentrations of activated protein C in a Spanish population. BLOOD COAGULATION & FIBRINOLYSIS; 20(1):17-21. I.F.: 1.246

03 Vanessa Roldán; Adriana Ordóñez;

Francisco Marín; Esther Zorio; José M. Soria; Antonia Miñano; Francisco España; Rocío González-Conejero; Javier Pineda; Amparo Estellés; Jordi Fontcuberta; Vicente Vicente; Javier Corral. Antithrombin Cambridge II (A384S) supports a role for antithrombin deficiency in arterial thrombosis. THROMB HAEMOST; 101(3):483-486.

I.F.: 4.451

04 Mälarstig A, Buil A, Souto JC, Clarke R, Blanco-Vaca F, Fontcuberta J, Peden J, Andersen M, Silveira A, Barlera S, Seedorf U, Wat-

kins H, Almasy L, Hamsten A, Soria JM. Identification of ZNF366 and PTPRD as Novel Determinants of Plasma Homocysteine in a Family-based Genome-wide Association Study. BLOOD; 114(7):1417-22.

I.F.: 10.555

05 Sabatér-Lleal M, Chillón M, Mordillo C, Martínez A, Gil E, Mateo J, Blangero J, Almasy L, Fontcuberta J, Soria JM. Combined Cis-Regulator Elements as Important Mechanism Affecting FXII Plasma Levels. THROMB RES (in press).

I.F.: 2.406

*Total Impact Factor.
**Average Impact Factor.

OTHER PUBLICATIONS

Journal Article Buil, A, Martínez-Pérez A, Perera-Lluna A, Rib L, Caminal P, Soria JM. A new gene-based association test for GWAS. BMC Proceedings 3 Suppl 7:S130, 2009

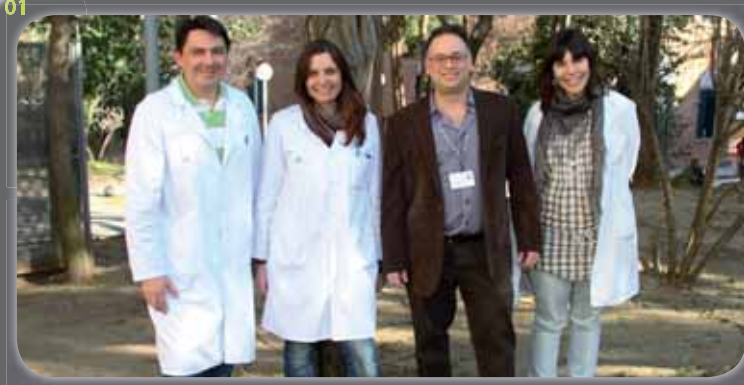


AREA T.2

Molecular, Genomic, Cellular and Kinetic-Dynamic Bases for Diseases and their Treatment

Molecular Bases of Disease

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Main lines
Of research

- General studies of structure and function, focusing at present on:
- Coagulation cascade factors, emphasizing processes for generating thrombin from the Va Va-Xa complex and thrombin interaction with physiological substrates (fac-

tors V/VIII and protease-activated receptors) and inhibitors.

- Proteins associated with neurodegenerative diseases (currently SMN, a protein directly associated with spinal muscular atrophy).
- Factors in the innate immune

system mediated by toll-like receptors and also linked to cancerigenic processes and, in particular, the role of the MyD88 adaptor protein.

Challenges

- Situate our research group in a priority position among the research lines of the HSCSP Research Institute and the IIB Sant Pau itself in which information on the structure of proteins is particularly relevant, including (but

not limited to) projects to identify new DNA mutations, polymorphisms and small deletions as causes or modulators of specific diseases. In particular, we aim to create and consolidate a spearheading international group to

study coagulation cascade factors and their impact on cardiovascular diseases and haemophilia.



*TIF: 22.285 **AIF: 4.45

INDEXED PUBLICATIONS

01 E. Mendoza-Barberá; M. A. Corral-Rodríguez; A. Soares-Schanoski; M. Velarde; S. Macieira; A. Messerschmidt; E. López-Collazo; P. Fuentes-Prior. Contribution of globular death domains and unstructured linkers to MyD88 IRAK-4 heterodimer formation: An explanation for the antagonistic activity of MyD88s. *BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS*; 380(1):183-187.

I.F.: 2.548

02 M. A. Corral-Rodríguez; S. Macedo-Ribeiro; P. J. B. Pereira; P. Fuentes-Prior. Tick-derived Kunitz-type inhibitors as antihemostatic factors. *INSECT BIOCHEMISTRY AND MO-*

LECULAR BIOLOGY; 39(9):579-595.
I.F.: 3.117

03 A. C. Tharp; M. Laha; P. Panizzi; M. W. Thompson; P. Fuentes-Prior; P. E. Bock. Plasminogen Substrate Recognition by the Streptokinase-Plasminogen Catalytic Complex Is Facilitated by Arg(253), Lys(256), and Lys(257) in the Streptokinase beta-Domain and Kringle 5 of the Substrate. *JOURNAL OF BIOLOGICAL CHEMISTRY*; 284(29):19511-19521.

I.F.: 5.328

04 C. del Fresno; F. García-Río; V. Gómez-Pina; A. Soares-Schanoski; I. Fernández-Ruiz; T. Jurado; T. Kajiji; C. Shu; E. Marín; A. G. del Arroyo; C. Prados; F. Arnalich; P. Fuentes-Prior; S. K. Biswas; E. López-Collazo.

Potent Phagocytic Activity with Impaired Antigen Presentation Identifying Lipopolysaccharide-Tolerant Human Monocytes: Demonstration in Isolated Monocytes from Cystic Fibrosis Patients. *JOURNAL OF IMMUNOLOGY*; 182(10):6494-6507.

I.F.: 5.646

05 F. García-Río; C. del Fresno; P. Fuentes-Prior; E. López-Collazo. Response to Comment on "Potent Phagocytic Activity with Impaired Antigen Presentation Identifying Lipopolysaccharide-Tolerant Human Monocytes: Demonstration in Isolated Monocytes from Cystic Fibrosis Patients". *JOURNAL OF IMMUNOLOGY*; 183(8):4831-4832.

I.F.: 5.646

^{*}Total Impact Factor.
^{**}Average Impact Factor.

OTHER PUBLICATIONS

F. García-Río; C. del Fresno; P. Fuentes-Prior; E. López-Collazo. Response to Comment on "Potent Phagocytic Ac-

tivity with Impaired Antigen Presentation Identifying Lipopolysaccharide-Tolerant Human Monocytes:

Demonstration in Isolated Monocytes from Cystic Fibrosis Patients". *JOURNAL OF IMMUNOLOGY*.



Pharmacokinetic/Pharmacodynamic Modelling and Simulation

TEAM



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Main lines
Of research

- Populational pharmacokinetic analysis aimed at establishing the pharmacokinetic characteristics of medical products and at differentiating and quantifying the degree of intra- and inter-individual variability.
- Continuous response analysis aimed at the analysis of effects (in the presence or absence of drugs) where the variable being evaluated changes values gradually.
- Non-continuous response analysis, for responses most frequently observed in clinical practice and including categorical responses and categorical survival, frequency and censored responses.
- Simulation of clinical trials and therapy applications, aimed at assisting with the planning of clinical trials from the perspectives of developing new drugs and of maximizing data yield and also aimed at studying the therapeutic application of narrow-therapeutic-margin drugs.

Challenges

- Obtain recognition as an emerging group for the PHARMACOKINETIC/PHARMACODYNAMIC MODELLING AND SIMULATION group.
- Maintain existing external cooperation agreements.
- Establish new cooperation agreements within the HSCSP Research Institute.
- Generate sufficient financial resources to maintain and expand the number of staff in the group.
- Communicate our activities.

Grants

- Valle, M. Effect of reduction of ritonavir boosting dose on plasma concentrations, and safety of atazanavir. TRA-076. Amount: 56,992.5 €
- Moltó, J., Valle, M. Pharmacological interactions between Echinacea sp. and darunavir/ritonavir. TRA-067/TRA-084. Amount: 31,365 €

Scientific
Production

INDEXED PUBLICATIONS

01 Moltó J , Llibre JM , Ribera E , Mínguez C , del Río JS, Pedrol E, Vallecillo G, Cedeno S, Valle , Miranda C, Negredo E, Clotet B. Saquinavir exposure in HIV-infected patients with chronic viral

***TIF: 4.352 **AIF: 4.352**

hepatitis. JOURNAL OF ANTIMICROBIAL CHEMOTHERAPY; 63(5): 992-997
I.F.: 4.352

*Total Impact Factor.
**Average Impact Factor.



AREA T.2

Molecular, Genomic, Cellular and Kinetic-Dynamic Bases for Diseases and their Treatment

Generation of Advanced Therapy Medicines

TEAM



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Luis Vidal	BST	Irene Oliver	BST		
Joaquim Vives	BST	Silvia Marín	BST		

Main lines Of research

- Bio-processing for cell and tissue production.
- Regeneration of locomotor systems.
- Stem cell therapy for the lymphohematopoietic system.
- Stem cell therapy for multiple sclerosis.

Challenges

- Create a section within the BST with the structure of a pharmaceutical enterprise and able to develop, assay, register and commercialize advanced therapeutic drugs.

Grants

- García, J. Extension of facilities for the production of stem-cell drugs for regenerative medicine. PLE2009-0092. Amount: 800,000.00 €
- García, J. REDONTAP (7th Programme within the EU Framework). FP7-NMP-2008-SMALL-. Amount: 408,000.00 €

Scientific Production

INDEXED PUBLICATIONS

01 Querol, S; Mufti, GJ; Marsh, SGE; Pagliuca, A; Little, AM; Shaw, BE; Jeffery, R; García, J; Goldman, JM; Madrigal, JA. Cord blood stem cells for hematopoietic stem cell trans-

plantation in the UK: how big should the bank be? HAEMATOLOGICA-THE HEMATOLOGY JOURNAL
I.F.: 5,978

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*Total Impact Factor.
**Average Impact Factor.



Associated Groups

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Emerging Processes in Prevalent Diseases

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Miquel Barcons	HSCSP	Daniel Fuster	HSCSP	Mireia Puig	HSCSP
Marta Blázquez	HSCSP	J.M. Guardiola	HSCSP	Nuria Ribas	HSCSP
Francisco Caballero	HSCSP	Sergio Herrera	HSCSP	Josep Ris	HSCSP
Noemí Cerdán	HSCSP	Leopoldo Higa	HSCSP	Miquel Santaló	HSCSP
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Main lines
Of research

Emerging processes in prevalent diseases

- The general objective is to study and analyse processes that are frequently observed in emergency departments so as to transfer the results to clinical practice and so provide better care to patients.

Clinical organization and management.

Mireia Puig and Josep Ris

- Patient safety and emergency service quality. PI: Maite Álvarez
- Nosocomial infection. PI: Albert Mauri
- Non-heart-beating donors. PI:

Francisco Caballero

Respiratory system disorders.

Salvador Benito

- Respiratory pattern analysis in the return to spontaneous breathing. PI: Ivan Díaz
- Ventilatory pattern analysis in heart failure. PI: Sergio Herrera
- Pneumonia in the emergency department. PI: Míriam Mateo

Cardiovascular system.

Miquel Santaló

- Acute coronary syndrome in elderly patients. PI: Josep Antoni Montiel

- Acute coronary syndrome in women. PI: Marta Blázquez
- Ultrasensitive markers in acute coronary syndrome. PI: Leopoldo Higa
- Complications in patients implanted with an ICD. PI: Olga Lanau
- Supraventricular arrhythmias. PI: Aitor Alquézar

Drug abuse-HIV.

- HCV in patients with HIV. PI: Josep M Guardiola
- Medical complications associated with drug abuse. PI: Daniel Fuster

***TIF: 4.535 **AIF: 1.51**

Scientific
Production

INDEXED PUBLICATIONS

01 Arizmendi C, Romero E, Alquézar R, Caminal P, Díaz I, Benito S, Giraldo BF. Data mining of patients on weaning trials from mechanical ventilation using cluster analysis and neural networks. IEEE ENG MED BIOL SOC; 1:4343-46.
I.F.: 1.081

02 Figueras J, Heras M, Baigorri F, Elosua R, Ferreira I, Santaló M. Catalan registry of ST elevation acute myocardial infarction. Comparison with former Catalan registries I and II from Catalonia, Spain. MED CLIN; 133:694-701.
I.F.: 1.231

03 I. Bolívar;V. Plaza;M. Llauger;E. Amado;P. A. Anton;A. Espinosa;L.

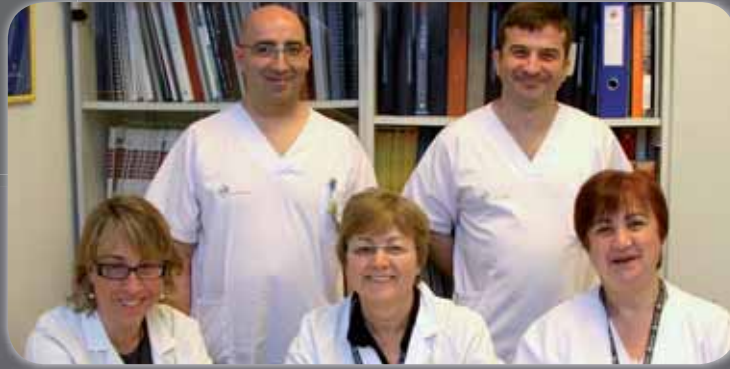
Domínguez;M. Fraga;M. Freixas;J. A. de la Fuente;I. Liguere;C. Medrano; M. Peiro;M. Pou;J. Sanchis;I. Solanes;C. Valero;P. Valverde;Copp Proc Study Grp. Assessment of a primary and tertiary care integrated management model for chronic obstructive pulmonary disease. BMC PUBLIC HEALTH.
I.F.: 2.223

*Total Impact Factor.
**Average Impact Factor.



Radiophysics and Radioprotection

TEAM



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Main lines
Of research

Outpatient radiotherapy:

- Characterization of different measurement systems for in vivo dosimetry.
- Validation of dose calculation algorithms for outpatient radiotherapy planning systems.

Biologic dosimetry

(in cooperation with the Autono-

mous University of Barcelona team led by Dr. María Rosa Caballín)

- Cytogenetic evaluation of the effects of amifostine used for radioprotection in radiotherapy.
- Cytogenetic evaluation of the relative biological efficacy of low-energy X-rays.

Challenges

- In vivo dosimetry in intensity-modulated radiotherapy techniques: 3D reconstruction of the dose administered to the patient.
- Skin dose studies of high-energy photons in outpatient radiotherapy.

Scientific
Production

INDEXED PUBLICATIONS

01 P. Rodríguez;J. F. Barquinero;A. Durán;M. R. Caballín;M. Ribas;L. Barrios. Cells bearing chromosome aberrations lacking one telomere are selectively blocked at the G2/M checkpoint. MUTA-

TION RESEARCH-FUNDAMENTAL AND MOLECULAR MECHANISMS OF MUTAGENESIS; 670(39845):53-58.

I.F.: 3.556

02 Durán;J. F. Barquinero;M. R. Caballín;M. Ribas;L. Barrios. Persis-

*TIF: 6.504 **AIF: 3.25

tence of Radiation-Induced Chromosome Aberrations in a Long-Term Cell Culture. RADIATION RESEARCH; 171(4):425-437.
I.F.: 2.948

*Total Impact Factor.
**Average Impact Factor.



Chronic Respiratory Diseases

TEAM



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M. Rosa Güell	HSCSP		
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		Laia García	HSCSP

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Jordi Giner	HSCSP
Fátima Morante	HSCSP
Meritxell Peiró	HSCSP
Montserrat Torrejón	HSCSP

Main lines
Of research

Asthma:

- Inflammatory and genetic exacerbation mechanisms in severe asthma.
- Role of the toll-like receptors.
- Changes in exhaled air temperature as a non-invasive measure of inflammation.
- Studies in education and allergies, meta-analysis and clinical practice guidelines.

COPD and respiratory failure:

- New techniques of weaning from home-based non-invasive ventilation and their viability.
- Correlation of lung function and imaging techniques in patients with neuromuscular disorders.
- Respiratory rehabilitation studies.

- Inflammatory mechanisms (PCR) and severity.
- Coordination between care levels (primary and hospital care) for COPD and aneurysm and COPD.

SAHS:

- Physiology and clinical, diagnostic and therapeutic consequences of SAHS.
- Obesity-hypoventilation syndrome.
- Airway inflammation and SAHS.

Bronchoscopy:

- Efficacy of Cryowave in obtaining lung biopsies from patients with interstitial disease.

Challenges

- Enhance basic research into obstructive respiratory diseases.
- Recruit young researchers to the team.
- Cooperate with other research groups and hospital departments in setting up research groups in a local multidisciplinary network and in other Spanish centres (inclusion in CIBERes) and European centres (joint studies).



Further Information

- GREC (Chronic Respiratory Disease Research Group) is a reference centre for pneumology research in Spain.
- The group draws together clinical and translational research into COPD-respiratory failure, asthma, SAHS and interstitial lung diseases in our centre.
- GREC participated in the now extinct RedRespira-ISCIi-RTIC-03/11.
- Some of GREC's members headed or participated in high-impact multicentre studies under the auspices of the integrated research programme of the Spanish Pneumology and Chest Surgery Society (SEPAR).
- GREC also participates in the CIBERres network.

Grants

- Giner, J Effectiveness of quality assurance methods of spirometry in primary care. PS09/00686. Amount: 52,635.00 €
- Pajares, V. Randomized study of diagnostic performance and safety of transbronchial lung biopsy with cryoprobes versus conventional forceps for diagnosis of diffuse lung diseases". SEPAR2009.
- Castillo, D. FARMAEPOC project. SEPAR2009

***TIF: 61.411 **AIF: 3.07**

Scientific production

INDEXED PUBLICATIONS

- Ana María Fortuna;Marco Balleza; Nuria Calaf;Mercedes González; Teresa Feixas;Pere Casán. Determining the alveolar component of nitric oxide in exhaled air: procedures and reference values for healthy persons. ARCH BRONCONEUMOL; 45(3):145-9. **I.F.: 2.116**
- Vicente Plaza;Jesús Bellido-Casado;Gustavo J. Rodrigo;Javier Solarte;Gema Rodríguez-Trigo; Ricardo Sepúlveda;Hugo Neffen; Miguel Perpiñá. Impact of preventive treatment with long-acting beta(2)-adrenergic agonists and inhaled corticosteroids on the morbidity and mortality of severe asthma exacerbations in 1543 patients. ARCH BRONCONEUMOL; 45(11):545-9. **I.F.: 2.116**
- Marco Balleza;Nuria Calaf;Teresa Feixas;Mercedes González;Daniel Antón;Pere J. Riu;Pere Casán. Measuring breathing pattern in patients with chronic obstructive pulmonary disease by electrical impedance tomography. ARCH BRONCONEUMOL; 45(7):320-4. **I.F.: 2.116**
- Bolíbar;V. Plaza;M. Llauger;E. Amado;P. A. Antón;A. Espinosa;L. Domínguez;M. Fraga;M. Freixas;J. A. de la Fuente;I. Liguere;C. Medrano; M. Peiro;M. Pou;J. Sanchís;I. Solanes;C. Valero;P. Valverde;COPD Proc Study Grp. Assessment of a primary and tertiary care integrated management model for chronic obstructive pulmonary disease. BMC PUBLIC HEALTH. **I.F.: 2.223**
- N. Salord;M. Mayos;R. Miralda;A. Pérez. Respiratory Sleep Disturbances in Patients Undergoing Gastric Bypass Surgery and Their Relation to Metabolic Syndrome. OBESITY SURGERY; 19(1):74-79. **I.F.: 2.934**
- D. Castillo;R. Guayta;J. Giner;F. Burgos;C. Capdevila;J. B. Soriano; M. Barau;P. Casán; Farmaepoc Grp. COPD case finding by spirometry in high-risk customers of urban community pharmacies: A pilot study. RESPIRATORY MEDICINE; 103(6):839-845. **I.F.: 2.331**
- L. M. S. Méndez;D. C. Villegas. Clinical Perspective by Means of ARCHIVOS. ARCHIVOS DE BRONCONEUMOLOGIA; 45(10):516-520. **I.F.: 2.116**
- G. J. Rodrigo;V. P. Moral;L. G. Marcos;J. A. Castro-Rodríguez. Safety of regular use of long-acting beta agonists as monotherapy or added to inhaled corticosteroids in asthma. A systematic review. PULMONARY PHARMACOLOGY & THERAPEUTICS; 22(1): 43709. **I.F.: 2.024**
- Badiola C, Badiella LI, Plaza V, Prieto L, Molina J, Villa JR and Cimas E. Women, severe asthma patients and subjects attended by primary care physicians are at higher risk of suffering from poorly controlled asthma. PRIM CARE RESPIR J; 18(4):294-299. **I.F.: 0.809**
- Rodrigo GJ, Castro-Rodríguez JA, Plaza V. Safety and efficacy of combined long-acting beta agonists and Inhaled corticosteroids versus long-acting beta agonists Monotherapy for stable COPD: a systematic review. CHEST; 138(4): 1029-1038. **I.F.: 6.360**
- Macedo P, Hew M, Torrego A, Jouneau S, Oates T, Durham A, Chung KF. Inflammatory biomarkers in airways of patients with severe asthma compared with non-severe asthma. CLIN EXP ALLERGY; 39(11):1668-76. **I.F.: 4.084**
- Macedo P, Saleh H, Torrego A, Arbery J, Mackay I, Durham SR, Chung KF. Postnasal drip and chronic cough: an open interventional study. RESPIR MED; 103(11): 1700-05. **I.F.: 2.331**
- Fitzpatrick AM, Teague WG, Holguin F, Yeh M, Brown LA and Severe Asthma Research Group and Program. Airway glutathione homeostasis is altered in children

*Total Impact Factor.
**Average Impact Factor.



- with severe asthma: evidence for oxidative stress. *J ALLERGY CLIN IMMUNOL*; 123(1):146-152.
I.F.: 9.165
- 14** I.Solanes, R. Güell, P.Casán, C. Sotomayor, A. González, T. Feixas, M. González. Duration of pulmonary rehabilitation to achieve a plateau in quality of life and walk test in COPD. *RESPIRATORY MEDICINE*; 103(5):722-728.
I.F.: 2.331
- 15** Mota S, Güell R, Barreiro E, Casán P, Gea J, Sanchís J. Relationship between expiratory muscle dysfunction and dynamic hyperinflation in advanced chronic obstructive pulmonary disease. *ARCH BRONCONEUMOL*; 45(10):487-95.
I.F.: 2.116
- 16** M. Broeders, J. Sanchís, M. Levy, GH Crompton, R Dekhuljzen. The ADMIT series – Issues in inhalation therapy. 2. Improving technique and clinical effectiveness. *PRIM CAR RESPIR J*; 18(2):76-82.
I.F.: 1.2
- 17** Barbé F, Durán cantolla J, Capote F, de la Peña M, Chiner E, Masa JF, González M, Marín JM, García del Rio F, Díaz de Aauri J, Terán J, Mayos M, Nmonasterio C, del Campo F, Gómez S, Sánchez de la Torre M, Martínez M, Monserrat J. Long-Term Effect of Continuous Positive Airway Pressure in Hypertensive Patients With Sleep Apnea. *AM J RESPIR CRIT CARE MED*; **I.F.: 10.689**
- 18** Sarmiento Méndez LM, Castillo Villegas D. La clínica vista a través de Archivos. *ARCH BRONCONEUMOL*.
I.F.: 2.116
- 19** Carrera, Miguel; Marín, José M; Antón, Antonio; Chiner, Eusebi; Alonso, María L; Masa, Juan F; Marrades, Ramón; Sala, Ernest; Carrizo, Santiago; Giner, Jordi; Gómez-Merino, Elia; Terán, Joaquín; Disdier, Carlos; Agustí, Alvar G N; Barbé, Ferran. A controlled trial of noninvasive ventilation for chronic obstructive pulmonary disease exacerbations. *JOURNAL OF CRITICAL CARE*; 24(3):473.e7-14.
I.F.: 2.127
- 20** V. Plaza; J. Bellido-Casado; P. Alonso-Coello; G. Rodrigo. Asthma Clinical Practice Guidelines: Advantages and Pitfalls. *ARCHIVOS DE BRONCONEUMOLOGIA*; 45:25-29.
I.F.: 2.116

OTHER PUBLICATIONS

G. J. Rodrigo; V. Plaza; H. Neffen; G. Levy; M. Perpiñá. Relationship between the characteristics of hospitalised acute asthma patients and the severity of their asthma. A case-control study. *ALLERGOLOGIA ET IMMUNOPATHOLOGIA*; 37(5):225-229.

G. J. Rodrigo; V. Plaza; J. Bellido-Casado; H. Neffen; M. T. Bazus; G. Levy; J. Armengol. The study of severe asthma in Latin America and Spain

(1994-2004): characteristics of patients hospitalized with acute severe asthma. *JORNAL BRASILEIRO DE PNEUMOLOGIA*; 35(7):635-644.

J Bellido-Casado, GJ Rodrigo, J Salas, C Torres, G Rodríguez-Trigo, R Sepúlveda, FJ Cosano, E Martínez-Moragón y V Plaza. Morbimortalidad de la agudización grave de asma y prescripción de corticosteroides inhalados en Latinoamérica y España (1994-2004): Proyecto EAGLE. *REV ESP ASMA* 2009;1:6-13.

Demoly P, Paggiaro P.L., Plaza V., Bolge SC., Kannan H., Sohler B., Adamek L. Virchow C. Prevalence of Asthma Control Among Adults in France, Germany, Italy, Spain and U.K. *EUR RESPIR REV* 2009;18:105-12.

Gustavo J. Rodrigo, Hugo Neffen, Luis J. Nannini, Luis Piñeyro, Ricardo Gené, Vicente Plaza. Hospitalizaciones por asma aguda durante el período 1994-2004 en Argentina y Uruguay: El estudio EAGLE. *REV AM MED RESP*; 9:42-8.



Paediatrics

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Jerónimo Ferrés	HSCSP	M ^a José García	HSCSP
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Gemma Ginovart	HSCSP		

Collaborators

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Marta García	Fundació Villavechia
Juan Ramis	Fundació Villavechia

Main lines
Of research

- Acute lymphoblastic leukaemia: Study of the TEL-AML1 sub-population. Study of the sub-population of children with Down syndrome. Post-chemotherapy sequelae: kidney function studies of patients undergoing chemotherapy with high doses of methotrexate.
- Erythropoietin as an alternative to transfusion in paediatrics.
- "Denosumab for giant-cell bone tumours. Phase 2 multicentre study.
- Chronic functional constipation: Treatment with PEG.
- Celiac disease: Atypical forms and

lymphocyte sub-populations in the intestinal mucosa.

- Prevention of staphylococcal septicaemia: Phase 2b/3 multicentre, randomized, double-blind, placebo-controlled study to evaluate the efficacy and safety of injectable pagibaximab in newborn infants with very low birth weights."

Neonatology:

- Prospective multicentre study of infants with very low body weight (<1500 g). Database called SEN 1500 aimed at collecting and disseminating information on the epidemiological situation of infants with very low body weight.

Under the auspices of the Spanish Neonatology Society. Morbidity and mortality studies and follow-up at the age of 2 years.

- National and European prospective studies of exogenous surfactant treatment of respiratory distress in premature infants. EURONEONET.
- Prospective multicentre studies of RSV infection in ex-premature infants in Spain. IRIS Group (Infant Respiratory Infection by RSV).
- Clinical application of peritoneal drainage in the treatment of enterocolitis in infants.

Challenges

- Transplant haematopoietic progenitor cells from alternative donors.
- Make pre-implant genetic diagnoses.
- Transplant haematopoietic progenitor cells in congenital immunodeficiencies.
- Transplant haematopoietic progenitor cells in congenital metabolic

pathologies.

- Research congenital immunodeficiencies.
- Research Fanconi anaemia (group recognized by the UAB).
- Apply adaptive cell immunotherapy for tumours.
- Implement the phase 2 trial: Anti-

angiogenic factor applicability to paediatric tumours.

Neonatology:

- Intervention in post-asphyxia neuronal damage in asphyctic infants by applying therapeutic hypothermia (in the context of a Catalan network).



Further Information

- Principal investigator and coordinator of the Spanish Group for the Diagnosis and Treatment of Leukaemias and Lymphomas in Children: Dr. Badell
- Principal investigator and coordinator of the Spanish Group for Bone Marrow Transplants in Children: Dr. Badell

Awards

- Research award from the Catalan Down Syndrome Society: Down syndrome: Evolution of acute lymphoblastic leukaemia with the LAL/SHOP-99 and SHOP-2005 protocols. Investigators: Marta García Bernal and Isabel Badell.
- Award for the Best Oral Presentation at the 21st Annual Meeting of the Spanish Paediatric Dermatology Group: Neonatal

erythrodermia. Presentation of the Omenn syndrome. In cooperation with the Dermatology Department. Drs. Isabel Badell, Sonia Brió and Eduard Carreras.

- "Translational research into the Ewing family of tumours: Identification of molecular prognostic markers and new therapy approaches". Grant from the Spanish Cancer Association.

***TIF: 30.530 **AIF: 4.36**

Scientific Production

INDEXED PUBLICATIONS

- 01** S. Santín;R. García-Maset;P. Ruiz;I. Giménez;I. Zamora;A. Pena;A. Madrid;J. A. Camacho;G. Fraga;A. Sánchez-Moreno;M. A. Cobo;C. Bernis;A. Ortiz;A. L. de Pablos;G. Pintos;M. L. Justa;E. Hidalgo-Barquero;P. Fernández-Llama;J. Ballarín;E. Ars;R. Torra;Fsgs Spanish Study Grp. Nephirin mutations cause childhood- and adult-onset focal segmental glomerulosclerosis. *KIDNEY INTERNATIONAL*; 76(12):1268-1276. **I.F.: 6.193**
- 02** S. Santín;E. Ars;S. Rossetti;E. Salido;I. Silva;R. García-Maset;I. Giménez;P. Ruiz;S. Mendizábal;J. L. Nieto;A. Pena;J. A. Camacho;G. Fraga;M. A. Cobo;C. Bernis;A. Ortiz;A. L. de Pablos;A. Sánchez-Moreno;G. Pintos;E. Mirapeix;P. Fernández-Llama;J. Ballarín;R. Torra;Fsgs Study Grp. TRPC6 mutational analysis in a large cohort of patients with focal segmental glomerulosclerosis. *NEPHROLOGY DIALYSIS TRANSPLANTATION*; 24(10):3089-3096. **I.F.: 3.306**

- 03** Muñoz A, Díaz-Heredia C, Badell I, Bureo E, Gómez P, Martínez A, Verdeguer A, Pérez-Hurtado JM, Fernández-Delgado R, González-Vicent M, Maldonado MS. Allogeneic stem cell transplantation for myelodysplastic syndromes in children: a report from the Spanish Working Party for Blood and Marrow Transplantation in Children (GETMON). *PEDIATR HEMATOLOGY ONCOL*; 26(5):345-55. **I.F.: 0.794**
- 04** Claviez A, Canals C, Dierickx D, Stein J, Badell I, Pession A, Mackinnon S, Slavin S, Dalle JH, Chacón MJ, Sarhan M, Wynn RF, Suttorp M, Dini G, Sureda A, Schmitz N; Lymphoma and Pediatric Diseases Working Parties. Allogeneic hematopoietic stem cell transplantation in children and adolescents with recurrent and refractory Hodgkin lymphoma: an analysis of the European Group for Blood and Marrow Transplantation. *BLOOD*; 114(10):2060-7. **I.F.: 10.555**
- 05** Jacome A, Navarro S, Rio P, Yañez RM, González-Murillo A, Lozano ML, Lamana ML, Sevilla J, Olive T,

Díaz-Heredia C, Badell I, Estella J, Madero L, Guenechea G, Casado J, Segovia JC, Bueren JA. Lentiviral-mediated genetic correction of hematopoietic and mesenchymal progenitor cells from Fanconi anemia patients. *MOLECULAR THERAPY*; 17(6):1083-92. **I.F.: 6.239**

- 06** A. Julia;L. Kovaleva;S. Loria;I. Alberca; F. Hernández;V. Sandoval;J. Sierra;A. Vidaller;J. Ayguasanosa; M. Carretero. Clinical efficacy and safety of Flebogammadif(R), a new high-purity human intravenous immunoglobulin, in adult patients with chronic idiopathic thrombocytopenic purpura. *TRANSFUSION MEDICINE*; 19(5): 260-268. **I.F.: 1.808**
- 07** H. Colom;R. Farré;D. Soy;C. Peraire; J. M. Cendrós;N. Pardo;M. Torrent;J. Domènech;M. A. Mangues. Population Pharmacokinetics of High-Dose Methotrexate After Intravenous Administration in Pediatric Patients With Osteosarcoma. *THERAPEUTIC DRUG MONITORING*; 31(1):76-85. **I.F.: 2.429**

*Total Impact Factor.
**Average Impact Factor.

OTHER PUBLICATIONS

J. J. G. García;I. M. Martínez;V. T. S. de la Maza;A. S. Suárez;L. M. de la Rosa;F. J. T. Casanova;V. S. Barberan;E. C.

Rupérez;P. J. A. Minagorre;A. C. Baeza;J. S. Costas;J. N. Amat;C. L. Cubells;Seup Grp Trabajo Trauma Craneal. Registry of mild craniocerebral trauma: Multicentre study from

the Spanish Association of Pediatric emergencies. *ANALES DE PEDIATRIA*; 71(1):31-37.



Ophthalmology

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Main lines Of research

- Exploration of the physiopathological and genetic bases that condition the pathological development of wet age-related macular degeneration and response to treatment with anti-VEGF.
- Optimization of the functional rehabilitation of patients after cataract surgery using multifocal intramuscular lens, and evaluation of vision quality in terms of parameters such as visual acuity, sensitivity to contrast and aberrometry.
- Ocular repercussions of allogeneic medullary transplants and evaluation of the different clinical manifestations and response to treatment in graft-versus-host disease.
- Therapeutic action of anti-VEGF in macular oedema refractory to conventional treatments using bevacizumab in repeated intravitreal injections.

Scientific Production

INDEXED PUBLICATIONS

01 M. M. Honrado;Z. del Campo;J. A. Buil A. Case of Necrotizing Scleritis Resulting From Pseudomonas aeruginosa. CORNEA; 28(9):1065-1066
F.I.: 2.106

*TIF: 5.023 **AIF: 2.51
02 R. Medel;T. Alonso;J. I. Vela;M. Calatayud;L. Bisbe;J. García-Arumí. Conjunctival cytology in floppy eyelid syndrome: objective assessment of the outcome of surgery. BRITISH JOURNAL OF OPHTHALMOLOGY; 93(4):513-517
F.I.: 2.917

*Total Impact Factor.
**Average Impact Factor.

Challenges

- Consolidate the research team and ensure continuity in research activities.
- Become a reference group in research into macular pathologies, focusing on age-related macular degeneration and vasculopathic and inflammatory macular oedema.
- Develop research lines regarding ophthalmologic pathologies of the anterior pole associated with systemic disease and regarding functional rehabilitation of patients after cataract surgery.

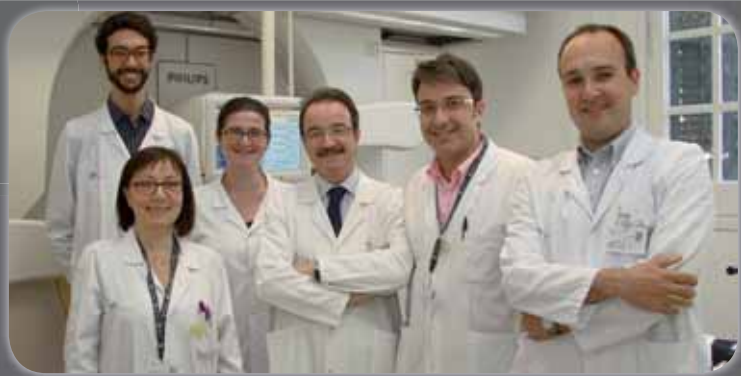
Grants

- Buil, JA. Development of a new thulium laser for medical and surgical applications. PI09/90048. Amount: 9.317,00 €



Nuclear Medicine

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HSCSP

Main lines
Of research

Oncology:

- Design of new diagnostic methods based on identifying and visualizing molecular targets from metabolic mechanisms, receptor systems, hypoxia, angiogenesis and apoptosis.
- Development of new applications for sentinel ganglion and radio-guided surgery models.

Cardiovascular research:

- New methods for non-invasive assessment of ischaemic heart disease and heart failure.
- Cardiovascular functional studies.
- New methods for assessing cardiac innervation and determining applications.

Functional neuroimaging:

- Development of new functional imaging methods for evaluating neurodegenerative diseases whether or not they involve dementia (Parkinson, Parkinson-Plus, Alzheimer and DCL).
- Dopaminergic system studies using IBZM and Datscan.

Challenges

- Introduce new technologies to clinical research. Imaging techniques are evolving very rapidly towards multimodal systems that integrate biological, molecular, anatomical and functional information in a single examination. The group aims to include these technologies, mainly PET/CT and PET/MR, in its own and the hospital's research activities.

New molecular imaging techniques:

- Date the group has developed pre-clinical and clinical molecular imaging models using SPECT and conventional nuclear medicine technologies. In the next 5 years, the group plans to develop new hybrid molecular imaging technologies, mainly PET/CT and PET/MR.

PET imaging biomarkers:

- The group uses radioactive tracers to view in vivo diagnostic and therapeutic targets. In the next 5 years, the group plans to develop new PET radioactive tracers to be used as biomarkers in new imaging techniques.



*TIF: 17.529 **AIF: 3.50

INDEXED PUBLICATIONS

01 A. Flotats;I. Carrió. Radionuclide noninvasive evaluation of heart failure beyond left ventricular function assessment. JOURNAL OF NUCLEAR CARDIOLOGY; 16(2):304-315.
I.F.: 2.777

02 MacManus M, Nestle U, Rosenzweig KE, Carrió I, Messa C, Belohlavek O, Danna M, Inoue T, Deniaud-Alexandre E, Schipani S, Watanabe N, Dondi M, Jeremic B. Use of PET and PET/CT for Radiation Therapy Planning. RADIOTHER ONCOL; 91(1):85-94.
I.F.: 4.343

03 Agostini D, Carrió I, Verberne HJ. How to use myocardial 123I-MIBG scintigraphy in chronic heart failure. EUR J NUCL MED MOL IMAGING; 36(4):555-559.
I.F.: 4.531

04 I. Carrió. Key role of nuclear medicine in bringing imaging biomarkers into clinical practice. EUR J NUCL MED MOL IMAGING; 36(12):1937-9.
I.F.: 4.531

05 Fernández CA, Puig-Domingo M, Lomeña F, Estorch M, Camacho V, Bittini AL, Marazuela M, Santamaría J, Castro J, Martínez de Icaya P, Moraga I, Martín T, Megía A, Porta M, Mauricio D, Halperin I. Effec-

tiveness of retinoic acid treatment for redifferentiation of thyroid cancer in relation to recovery of radioiodine uptake. J ENDOCRINOL INVEST ; 32(3):228-233.
I.F.: 1.347

*Total Impact Factor.

**Average Impact Factor.

OTHER PUBLICATIONS

A. Flotats;I. Carrió. SPECT Imaging of Cardioneuronal Dysfunction. CURRENT IMAGING CARDIOVASCULAR REPORTS.

JR García, M Soler, MA Blanch, I Ramírez, E Riera, P Lozano, I Carrió.

PET/TAC con 11C-Colina y 18F-FDG en pacientes con elevación de PSA tras tratamiento radical de un cancer de próstata. REV ESP MED NUCL.

Flotats A, Hidalgo A, Hasbak P, Leta R. Cardiac SPECT-CT and PET-CT imaging. CURRENT MEDICAL IMAGING REVIEWS.

A. Flotats;I. Carrió. The role of nuclear medicine technique in evaluating electrophysiology in diabetic hearts especially with I-123-MIBG cardiac SPECT imaging. MINERVA ENDOCRINOLOGICA; 34(3):263-271.



Intensive Medicine

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Main lines Of research

- Acute respiratory failure and artificial ventilation.
- Non-invasive ventilation.
- New ventilation alternatives: adjusted ventilation assistance (NAVA).
- Prone decubitus in acute respiratory distress syndrome.
- Withdrawal of artificial ventilation.
- Expert ventilation systems.

- Sound and artificial ventilation.
- Active and early mobilization of critically ill patients.

New biomarkers for critically ill patients:

- BNP in weaning from mechanical ventilation.
- Use of the NGAL protein in kidney prognosis for critically ill patients.
- Strict control of glycaemia in

critically ill patients.

- Prophylaxis of acute gastric mucosa lesions in critically ill patients.
- Haemodynamic effects of different antithermic drugs in critically ill patients.
- Influence of a change in position from supine to prone decubitus on intra-abdominal pressure.

Challenges

- Advance knowledge in new areas relevant to critical illnesses, such as: infections, cardiovascular disorders, endocrinological disorders, acute kidney failure and extrarenal depuration techniques, sedation, neuro/myopathy in critical patients, post ICU functional

and cognitive alterations.

- Launch a study of the NGAL protein for kidney prognosis in critical patients. To study the usefulness of NGAL as a biomarker in different situations that affect critical patients (endovenous con-

trast administration, nephrotoxic drug administration, change from supine to prone decubitus, etc).



INDEXED PUBLICATIONS

01 A. T. Fraticelli;F. Lellouche;E. L'Her;S. Taille;J. Mancebo;L. Brochard. Physiological effects of different interfaces during noninvasive ventilation for acute respiratory failure. CRITICAL CARE MEDICINE; 37(3):939-945.

I.F.: 6.373

02 M. Antonelli;E. Azoulay;M. Bonten; J. Chastre;G. Citerio;G. Conti;D. De Backer;F. Lemaire;H. Gerlach;J. Groeneveld;G. Hedenstierna;D. Macrae;J. Mancebo;S. M. Maggiore; A. Mebazaa;P. Metnitz;J. Pugin;J. Wernerman;H. B. Zhang. Year in review in Intensive Care Medicine, 2008: I. Brain injury and neurology, renal failure and endocrinology, metabolism and nutrition, sepsis, infections and pneumonia. INTENSIVE CARE MEDICINE; 35(1):30-44.

I.F.: 5.168

03 M. Antonelli;E. Azoulay;M. Bonten; J. Chastre;G. Citerio;G. Conti;D. De Backer;F. Lemaire;H. Gerlach;J. Groeneveld;G. Hedenstierna;D. Macrae; J. Mancebo;S. M. Maggiore; A. Mebazaa;P. Metnitz;J. Pugin; J. Wernerman;H. B. Zhang. Year in review in Intensive Care Medicine, 2008: II. Experimental, acute respiratory failure and ARDS, mechanical ventilation and endotracheal intubation. INTENSIVE CARE MEDICINE; 35(2):215-231.

I.F.: 5.168

04 M. Antonelli;E. Azoulay;M. Bonten; J. Chastre;G. Citerio;G. Conti;D. De Backer;F. Lemaire;H. Gerlach;J. Groeneveld;G. Hedenstierna;D. Macrae;J. Mancebo;S. M. Maggiore; A. Mebazaa;P. Metnitz;J. Pugin; J. Wernerman;H. B. Zhang. Year in review in Intensive Care Medicine, 2008: III. Paediatrics, Ethics, outcome research and critical care organization, sedation, pharma-

cology and miscellanea. INTENSIVE CARE MEDICINE; 35(3):405-416.

I.F.: 5.168

05 P. Taccone;A. Pesenti;R. Latini;F. Polli;F. Vagginelli;C. Mietto;L. Caspani;F. Raimondi;G. Bordone;G. Iapichino;J. Mancebo;C. Guerin;L. Ayzac;L. Blanch;R. Fumagalli;G. Tognoni;L. Gattinoni;I. I. Study Grp Prone-Supine. Prone Positioning in Patients With Moderate and Severe Acute Respiratory Distress Syndrome A Randomized Controlled Trial. JAMA-JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION; 302(18):1977-1984.

I.F.: 28.899

06 Vargas F, Thille A, Lyazidi A, Roche F, Brochard L. Helmet with specific setting versus facemask for noninvasive ventilation. CRITICAL CARE MEDICINE; 37(6):1921-8.

I.F.: 6.373

*Total Impact Factor.
**Average Impact Factor.

*TIF: 57.149 **AIF: 9.52



Pharmacy

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Main lines Of research

- Pharmaceutical care.
- Artificial nutrition.
- Oncohaematology.
- Independent clinical trials.

Challenges

- Evaluate the impact on effectiveness and safety of pharmacological treatments in different pharmaceutical care programmes: clinical pharmacokinetics, health education for outpatients, medicine reconciliation and identification and prevention of medication-related problems.
- Evaluate the impact of artificial nutrition on the clinical evolution of patients.
- Study the stability of cytostatics in different conditions of use.
- Predict response to anti-tumour treatment in a number of tumoural processes.
- Develop focal adhesion inhibitors, e.g., antitumour agents.
- Actively cooperate in independent clinical trials performed in the HSCSP.

Scientific Production

INDEXED PUBLICATIONS

- 01 H. Colom; R. Farré; D. Soy; C. Peraire; J. M. Cendros; N. Pardo; M. Torrent; J. Domenech; M. A. Mangués. Population Pharmacokinetics of High-Dose Methotrexate After Intravenous administration in Pediatric Patients With Osteosarcoma. THERAPEUTIC DRUG MONITORING; 31(1):76-85.
I.F.: 2.429

*TIF: 2.429 **AIF: 2.429

Awards

- 3rd Esteve Award (institutional category) of the Spanish General Council of Official Pharmaceutical Colleges: Unidos por la Atención al Paciente (health education and pharmacotherapeutic monitoring programme in an outpatients unit).

*Total Impact Factor.
**Average Impact Factor.



OTHER PUBLICATIONS

Silva-Castro MM, Tuneu L, Faus MJ. Revisión sistemática sobre la implantación y la evaluación del seguimiento Farmacoterapéutico en pacientes hospitalizados. *Farm Hosp* (in press). Manuscript Number: FH-D-09-00026R1.

Nebot Giralt A, Espejo Guerrero J, Lozano Baudet P, Eroles Baena S-Tuneu Valls L. Evaluación del grado de satisfacción con la dispensación en una unidad de pacientes externos en una farmacia de

hospital. *PHARM CARE*; 11:3.

Jiménez-Pernett J, García Gutiérrez JF, Bermúdez-Tamayo C, Silva-Castro MM, Tuneu L. Evaluación de sitios web con información sobre medicamentos. *ATENC PRIMARIA*; 41(7): 360-366.

Nescolarde L, Gastelurrutia P, Calpe J, Hernández R, Bayés-Genís A, Rosell-Ferrer J. Comment on "Is bioelectrical impedance vector analysis of value in the elderly with malnutrition and impaired functionality?" *NUTRITION*; 3:370.

Book chapters

Mangues MA. Monitorización de niveles plasmáticos. A *MEDIMECUM*. Guía de Terapia Farmacológica. Edition 2009. Madrid. Edited by Villa Alcázar LF, Adis International. Madrid.

R Farré. Fármacos y patología renal. En MT González y JM Mallafré. *Nefrología. Conceptos básicos en atención primaria*. Marge. Medica Books. Barcelona 2009: 167-180. ISBN: 978-84-92442-44-7.



Dermatology

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Main lines
Of research

- New psoriasis treatments: efficacy study of Enbrel at different doses.
- Medical treatment options for vascular tumours.
- Psychopathological studies of patients with chronic dermatological disorders.

Awards

- Award for the Best Oral Presentation at the Annual Meeting of the Spanish Paediatric Dermatology Group: Neonatal erythrodermia. Presentation of the Omenn syndrome in 2 siblings. E.Vilarrasa, E.Baselga, A.Vicente, S.Brió, E.Carreras, L.Martínez-Martínez, C.González, E.Roé, A.López, V.Ruíz, M.A.González, A.Alomar, I.Badell, O. De la Calle.
- 2nd National Photodynamic Therapy Photography Competition, 1st prize. J.R. Garcés

Challenges

- Conduct studies on quality of life for patient with dermatological disorders.

***TIF: 35.962 **AIF: 2.99**

Scientific
Production

INDEXED PUBLICATIONS

ARTICLE

01 X. García-Navarro;J. R. Garcés;E. Baselga;A. Alomar. Linear Poro-keratosis Excellent Response to Photodynamic Therapy. ARCHIVES OF DERMATOLOGY; 145(5):526-527. **I.F.: 4.760**

02 D. Barco;E. Baselga;M. Alegre;R. Curell;A. Alomar. Successful Treatment of Eccrine Angioma-tous Hamartoma With Botulinum

Toxin. ARCHIVES OF DERMATOL-OGY; 145(3):241-243.

I.F.: 4.760

03 F. Corella;J. Dalmau;E. Roe;X. García-Navarro;A. Alomar. Cutaneous vasculitis associated with gemcitabine therapy. CLINICAL AND EXPERIMENTAL DERMATOL-OGY; 34(1):97-99. **I.F.: 1.550**

04 L. Puig;E. Roe;X. García-Navarro;F. Corella;A. Alomar. Efalizumab treatment of psoriasis vulgaris: a cohort study in outpatient clini-

cal practice. CLINICAL AND EXPERIMENTAL DERMATOLOGY; 34(4):469-475. **I.F.: 1.550**

05 J. R. Garcés;A. Guedes;M. Alegre; A. Alomar. Double Mucosal and Myocutaneous Island Flap: A One-Stage Reconstruction for Full-Thickness Lower Eyelid Defect. DERMATOLOGIC SURGERY; 35(5):779-785. **I.F.: 2.343**

06 J. P. Ortonne;S. Chimenti;T. Luger; L. Puig;F. Reid;R. M. Trueb. Scalp

*Total Impact Factor.
**Average Impact Factor.



psoriasis: European consensus on grading and treatment algorithm. *JOURNAL OF THE EUROPEAN ACADEMY OF DERMATOLOGY AND VENEREOLOGY*; 23(12): 1435-1444.

I.F.: 2.787

- 07** F. Gallardo; MP. García-Muret; O. Servitje; T. Estrach; L. Bielsa; A. Salar; E. Abella; C. Barranco; RM. Pujol. Cutaneous Lymphomas showing prominent granulomatous component: clinicopathological features in a series of 16 cases. *JOURNAL OF THE EUROPEAN ACADEMY OF DERMATOLOGY AND VENEREOLOGY*; 23(6):639-47.

I.F.: 2.787

- 08** MA. Barnadas; IM. Borrell; C. Vallvé; I. Gich; A. Alomar. Antiphos-

pholipids in leukocytoclastic vasculitis. *JOURNAL OF INVESTIGATIVE DERMATOLOGY*.

I.F.: 5.543

- 09** MA. Barnadas; MV. Rubiales; MJ. González; L. Puig; E. Baselga; RM. Pujol; A. Alomar; C. Gelpí. Enzyme-linked immunosorbent assay (ELISA) and indirect immunofluorescence testing in a bullous pemphigoid and pemphigoid gestationis. *INTERNATIONAL JOURNAL OF DERMATOLOGY*; 47(12):1245-49.

I.F.: 1.117

- 10** E. Roe;M. A. Barnadas;P. Bergua;F. Sancho;L. Matas;R. Paredes;J. Pujol; A. Alomar. Ano-genital granulomatosis treated with ciprofloxacin. *JOURNAL OF THE EUROPEAN ACADEMY OF DERMATOLOGY*

AND VENEREOLOGY; 23(1):90-90.

I.F.: 2.787

Editorial

- 11** E. Serra-Baldrich;C. Rincón;A. Guedes; M. J. Tribó;D. Barco;A. Alomar. Allergic contact dermatitis to methyl gentisate. *CONTACT DERMATITIS*; 60(4):225-U45.

I.F.: 3.635

- 12** J. R. Garcés;A. Guedes;M. Alegre; A. Alomar. Bilobed Flap for Full-Thickness Nasal Defect: A Common Flap for an Uncommon Indication. *DERMATOLOGIC SURGERY*; 35(9):1385-1388.

I.F.: 2.343

OTHER PUBLICATIONS

M. P. García-Muret;R. M. Pujol. Assessment of the scientific impact of presentations at Spanish National Dermatology and Venereology Congresses from 2000 through 2003. *ACTAS DERMOSIFILIOGR*; 100(1):38-45.

G. Martín-Ezquerria;A. Fernández-Casado;D. Barco;A. Jucgla;N. Juanpere-Rodero;J. M. Manresa;L. M. S. de Almeida;J. L. Rodríguez-Peralto;H. Kutzner;L. Cerroni;C. Barranco;J. Lloreta;L. Requena;R. M. Pujol. *Treponeema pallidum* distribution patterns in mucocutaneous lesions of primary and secondary syphilis: an immunohistochemical and ultrastructural study. *HUMAN PATHOLOGY*; 40(5):624-630.

L. Puig; JM. Carrascosa; E. Daudén; JL. Sánchez-Carazo; C. Ferrandiz; M. Sánchez-Regaña; M. García-Bustinduy; X. Bordas; JC. Moreno; JM. Herranz; S. Laguarda; V. García-Patos. Grupo Español de Psoriasis de la Academia Española de Dermatología y Venereología. (Spanish evidence-based guidelines on the treatment of moderate-to-severe psoriasis with biologic agents). *ACTAS DERMOSIFILIOGR*

García-Díez; L. Puig; J. Ortiz; A. Blanco. Validity of a telephone survey for determining the prevalence of atopic dermatitis and its seasonal variation in Spain. *ACTAS DERMOSIFILIOGR*

L. Puig; E. Sáez; MJ. Lozano; X. Bordas; JM. Carrascosa; F. Gallardo; J. Luelmo; M. Sánchez-Regaña; M. Alsina; V. García-Patos. Reactions to infliximab

infusions in dermatologic patients; consensus statement and treatment protocol. Working Group of the Grupo Español de Psoriasis de la AEDV. *ACTAS DERMOSIFILIOGR*

P. Mercader; E. Serra-Baldrich; A. Alomar. Contact Dermatitis to dimethylfumarate in armchairs. *ALLERGY*

F. Guibal; L. Iversen; L. Puig; R. Strohal; P. Williams. Identifying the biologic closest to the ideal to treat chronic plaque psoriasis in different clinical scenarios: using a pilot multi-attribute decision model as a decision-support aid. *CURRENT MEDICINE RESEARCH OPINION*



Anaesthesiology

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Mª Mercè Genové	HSCSP	Jordi Miralles	HSCSP		
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Main lines
Of research

Critical analysis of new clinical technologies:

- Critical evaluation of new systems of perioperative cardiac output monitoring.
- Inhalation sedation with Anesthetic-Conserving Device (AnaConDa) in patients under postoperative mechanical ventilation.
- New systems to monitor deep anaesthesia and brain oxygen.
- Application of high field NMR and tools for its analysis to evaluate brain alterations in patients with chronic pain compared to patients with acute pain and control groups.

Rationalizing the use of perioperative blood derivatives:

- Prediction of the transfusion risk in heart surgery.
- Perioperative reduction of bleeding in orthopaedic surgery.

- Use of thromboelastography in postoperative cardiac surgery bleeding.
- Critical evaluation of reliability of point-of-care systems in management of perioperative hematology.

Perioperative epidemiology:

- Pain chronification after inguinal hernia surgery, hysterectomy and thoracotomy. Analysis of predictive factors and study of genetic polymorphisms. GENDOLCAT study.
- Study of the perioperative cardiovascular risk (vision).
- POISE II study.
- Glucovision study.

New approaches in health care services:

- Transbronchial cryobiopsies.
- Efficacy of the clinical process for

femur fracture.

Physiology, pharmacology and anesthetic techniques:

- Intraoperative respiratory physiology.
- Epidural corticotherapy in radicular lumbar pain. Evaluation of the collateral effects of epidural steroids. Triamcinolone compared to methylprednisolone.
- Anesthesia with nitrogen: effect on animal well-being and quality of results in a porcine model.
- Optimization of animal well-being and quality of results in anesthesia with carbon dioxide in pigs and sheep.
- Efficacy and safety of levosimendan in refractory cardiac failure after surgery.
- Learning curve and performance of echography-guided locoregional anesthesia techniques in



ambulatory surgery.

- Perioperative management of patients candidate to hyperthermic chemotherapy in peritoneal surgery.

Continuing education:

- "Common resources for interactive training of intensive care staff at all levels (critical), 2005". Distance learning programme

(uk/06/b/f/pp-162_512). Leonardo da Vinci European Programme.

Challenges

- Critical analysis of new clinical technologies.
- Rationalization of perioperative transfusions.
- Promotion of perioperative epidemiology.
- Development of new systems of health care services.
- Clinical and preclinical research in physiology, pharmacology and anesthesia techniques.
- Foster continuing education.

OTHER PUBLICATIONS

J. I. Casas;M. A. Gil de Bernabé;M. B. Martín;M. T. Rivilla. Anesthesia in interventional neuroradiology. REV ESP ANESTESIOLOGIA REANIM.

R. González-Rodríguez;B. Martín-Huerta;M. Rodríguez Prieto;J. Galán Serrano. Catheterization of an anatomic variant of the femoral vein under ultrasound guidance. REV ESP ANESTESIOLOGIA REANIM.

L. Durán;V. Moral;M. Basora;M. J. Colomina;J. V. Llau;C. A. Sánchez;S. Silva;M. Vila. Epidemiological study of preoperative anaemia in surgical oncology patients in Spain. RECIRON Study. CIRUGIA ESPANOLA.

María Teresa Santeularia Vergés; Ele-

na Català Puigbó;Mercè Genové Cortada;Miren Revuelta Rizo;María Victoria Moral García. New trends in the treatment of post-operative pain in general and gastrointestinal surgery. CIR ESP; 86(2):61-62.

P. Alonso-Coello;C. Álvarez;P. Cruz;L. Toran;M. De Nadal;M. Martínez;P. Paniagua;A. Mases;G. Urrutia. Beta-blockers in patients undergoing noncardiac surgery: implications of the POISE study. REV ESP ANESTESIOLOGIA REANIM.

P. Paniagua; A. Pérez. Repercussions and management of perioperative hyperglycemia in cardiac surgery. REV ESP ANESTESIOLOGIA REANIM.

Mulier JP, García M, Dillemans B. Pathophysiology of obesity. Impact

on laparoscopy. ACTA ANESTH BELG; 60:149-153.

Català E, Ferrándiz M, Lorente L, Landaluze Z, Genové M. Uso de opioides en el dolor crónico no maligno. FMC;16(9): 570-5.

Català E, Moral García MV. Dolor agudo postoperatorio. La necesidad de su correcto tratamiento. CIR ESP; 86(2):61-62.

E. Català; M. Ferrándiz. Neuralgia postherpética en: tratamiento del dolor. Teoría y práctica. 3ª edición. Coord: L. Aliaga; JE. Baños; C. De Barutell; J. Molet; A. Rodríguez de la Serna. PUBLICACIONES PERMANYER SL. BARCELONA;177-180.



Cardiac Imaging

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Main lines Of research

- Participation in the development of clinical follow-up registers that determine the diagnostic value and cost-benefit of new cardiac imaging techniques.
- Modelling of electromechanical activation and cardiac ventricular function.

Non-invasive coronarography via multidetector CT:

- Validation of the technique.

- Development of software to characterize and quantify lesions.
- Studies of clinical usefulness in primary prevention.

Magnetic cardioresonance:

- Quantification of myocardial perfusion in ischaemic heart disease.
- Myocardial tagging study of heart mechanics.
- Optimization of diffusion tensor

sequences for the identification of myocardial fibres.

- Development of 3D sequences for viewing intra-vascular flow direction.

Challenges

- Non-invasive coronarography via multidetector CT: to consolidate use in clinical practice by improving viewing and quantification tools that confirm its diagnostic value for cardiology.
- Magnetic cardioresonance: to advance physiopathological knowledge of ischaemic heart disease, myocardiopathies and heart failure.

- To explore and understand heart mechanics functioning and to study ventricular functioning.
- To computer-model cardiac ventricular functioning.
- To perfect cardiac imaging diagnostic techniques so that cardiovascular disease diagnosis is entirely bloodless.

Grants

- Advanced computerized technologies for the health sector (CARE4ME-Cooperative Advanced Research for Medical Efficiency). TSI-020400-2009-83. Amount: 19,790.00 €



*TIF: 6.882 **AIF: 1.72

INDEXED PUBLICATIONS

- 01 Vicens Martí; Francesc Carreras; Sandra Pujadas; José M. Domínguez De Rozas. Transient left ventricular basal ballooning "inverted" Tako-tsubo. CLIN CARDIOL; 32(7): E20-1.
I.F.: 1.602
- 02 R. Belvis; E. F. Tizzano; J. Martí-Fábregas; R. G. Leta; M. Baena; F. Carreras; G. Pons-Lladó; M. Baiget;

J. L. Martí-Vilalta. Mutations in the NKX2-5 gene in patients with stroke and patent foramen ovale. CLINICAL NEUROLOGY AND NEUROSURGERY; 111(7):574-578.
I.F.: 1.303

- 03 A. J. Barros; M. A. Blázquez; R. Leta; S. Pujadas; X. Alomar; G. Pons-Lladó. Noninvasive coronary angiography using multidetector computed tomography in patients with suspected coronary

artery disease and a non-diagnostic exercise treadmill test result. MED CLIN (BARC); 132(17): 661-664.

I.F.: 1.231

- 04 S. Pujadas; J. Sánchez-Rubio; J. G. Galache; F. Carreras. Myocardial Cleft: An Anatomical Anomaly to Bear in Mind. REVISTA ESPAÑOLA DE CARDIOLOGIA; 62(7):831-833.
I.F.: 2.746

*Total Impact Factor.

**Average Impact Factor.

OTHER PUBLICATIONS

Dourado R, Barros A, Leta R, Pons-Lladó G. Left ventricular cleft diagnosed by computed tomography. REV PORT CARDIOL; 28(2):223-4.



Organ Donor Coordination

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Main lines
Of research

- Electronic allocation and control of organs and tissues for transplantation purposes.
- Semiautomatic and automatic corneal endothelium control.

Challenges

Cornea transplants:

- Screening criteria for donor and cornea selection. Systemic and ocular bacterial and mycotic infection in the donor and repercussions for the acceptor. Endothelial quality of donors with cancer.

Osteo-tendinous tissue transplants:

- Screening criteria for donor and osteo-tendinous tissue selection. Systemic bacterial and mycotic infection in the donor and the tissue and repercussions for the acceptor.

Aged organ donors:

- Long-term actuarial survival of patient and graft in liver and kidney transplants.
- Organ and tissue donation and transplantation training courses for students, technicians and specialists. Obtaining, processing and transplanting organs (heart, lungs, liver, pancreas, intestines and kidneys) and tissues (ocular, osteo-tendinous, cardiovascular and skin).

OTHER PUBLICATIONS

Eduard Permanyer;Antonino Ginel;Christian Muñoz-Guijosa;Josep María Padró. Right atrium traumatic rupture presenting as chronic tamponade. INTERACT CARDIOVASC THORAC SURG.



Plastic Surgery

TEAM



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Main lines
Of research

- Application of imaging techniques for the preoperative study of perforators. In collaboration with the Radiodiagnostic Service at Clínica Creu Blanca.
- Anatomical studies of perforator variability in the following regions: internal mammary artery, descending genicular artery, and inferior epigastric system. In colla-

poration with the Department of Human Anatomy at the Universitat de Barcelona.

- Research Project financed by BIOMET: "Application of growth factors in tissue regeneration in surgery of the irradiated head and neck". Principal Investigator: Dr. Jaume Masià.
- Clinical trial agreement with the

Research Institut at Sant Pau Hospital: "Double-blind, placebo-controlled, intra-patient study to evaluate the efficacy of Juvista (avotermin) together with scar correction surgery for deforming scars". PAREXEL International, Madrid.

Challenges

- Develop an optimal technique to preoperatively locate the most suitable perforator vessels for each microsurgical flap.
- Determine the most suitable area of tissue to raise a flap with a perforator of the internal mammary artery for head and neck recons-

truction.

- Comparative study of results of scar healing and tissue regeneration in a surgical model submitted to previous irradiation.

***TIF: 1.284 **AIF: 0.642**

Scientific
Production

INDEXED PUBLICATIONS

01 Masià J, Kosutic D, Cervelli D, Clavero JA, Monill JM, Pons G. In Search of the Ideal Method in Perforator Mapping: Noncontrast Magnetic Resonance Imaging. J RECONSTR MICROSURG; 26(1):29-35
I.F.: 0.642

02 Masià J, Kosutic D, Clavero JA, Larrañaga J, Vives L, Pons G. Preoperative Computed Tomographic Angiogram for Deep Inferior Epigastric Artery Perforator Flap Breast Reconstruction. J RECONSTR MICROSURG; 26(1):21-8
I.F.: 0.642

*Total Impact Factor.
**Average Impact Factor.



Palliative Care

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Main lines Of research

- Symptom evaluation and control: pain, dyspnoea, cognitive failure, complex situations.
- End-of-life ethical issues: sedation, expression of a desire for death and euthanasia.
- Psychosocial care for patients and families: adaptation to the terminal situation, grief, spiritual needs.
- Training in palliative care: training needs and outcomes.

CHALLENGES

- Psychosocial care for patients and families.
- Counselling and hospital sensitization.
- Quality evaluation and control.
- Symptom evaluation and control.
- Integrated care: analysis and care of end-of-life emotional, social and spiritual dimensions and adequate ethical reflection in decision making.

***TIF: 0.57 **AIF: 0.19**

Scientific Production

INDEXED PUBLICATIONS

01 Fariñas O, Güell E, Prada M, Pascual A. Valoración del dolor en el paciente oncológico. DOLOR; 24: 7-13.
I.F.: 0.19

02 Pascual A, Güell E, Fariñas O. Avances en el tratamiento del dolor oncológico. DOLOR; 24: 14-20.
I.F.: 0.19

03 Güell E, Fariñas O, Ramos A, Solís R, Pascual A. Dolor oncológico en una Unidad de Cuidados Paliativos. DOLOR; 24: 21-27.
I.F.: 0.19

*Total Impact Factor.
**Average Impact Factor.



Andrology

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Main lines
Of research

Infertility and preimplantation genetic diagnosis

- We are presently developing a project on the genetic causes of cryptorchidism in humans. Besides, we have been awarded a FIS grant for a project on genetic alterations of the Y chromosome. Results from both projects may have clinical implications. Members of the service also collaborate in external FIS projects (with the University of

Barcelona, Vall d'Hebron) studying genetic anomalies, spermatogenesis and preimplantation genetic diagnosis.

Male Sexual Dysfunction

- As a referral centre it is essential to extend investigation into the mechanisms that trigger endothelial damage and erectile dysfunction so as to develop new treatment strategies.

- We are presently developing an animal model of erectile dysfunction (cavernous nerve injury in rats). This will later allow research on the mechanisms of endothelial damage and erectile dysfunction in different situations, substances and/or surgeries, with a focus on identifying preventive strategies and transferring results to research in humans.

Challenges

- The strategic plan is to develop basic and clinical research projects in andrology for the period 2009-2012, with emphasis on translational research to the clinical arena.

Grants

- Krausz, C. Genetic doses in the AZF region of the Y chromosome: clinical consequences and genetic expression profile in sperm cells PI 08/1138. Amount: 48,642.00 €

*TIF: 2.727 **AIF: 2.727

INDEXED PUBLICATIONS

- 01 Rajmil O, Arrus J, Fernández M, Sarquella J, Ruiz-Castañé E, Blasco A. Sensory changes after surgical correction of penile curvature. INT J IMPOT RES; 21:366-371.
I.F.: 2.727

OTHER PUBLICATIONS

J. Sarquella, JM. Santillana, H. Vilavicencio, E. Ruiz-Castañé. Hipogonadismo secundario a tratamiento con Zolpidem. ACTAS DE LA FUNDACIÓN PUIGVERT 2009; Número 4 volum 28.

*Total Impact Factor.
**Average Impact Factor.

Scientific
Production



Urology

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Yolanda Arce Fundació Puigvert

Nursing Research

Anna María Ramírez Fundació Puigvert

Main lines
Of research

Tissue Engineering:

- Application in urological oncology and congenital urogenital malformations. In 2002 we began this line of research focusing on vesicular reconstruction. The endpoints have high clinical translational potential as the objective is organ procurement for genitourinary reconstruction, especially in urology pediatrics.

New techniques (surgical techniques and healthcare products):

- Application in urological oncology and benign urogenital pathology

(e.g. incontinence, benign hyperplasia of the prostate, lithiasis).

- The Puigvert Foundation is a referral centre for treatment of urological disorders. It performs a high number of studies, particularly at a clinical level, aiming to determine the best techniques for diagnosis and treatment of these disorders.

Genetics (diagnostic and prognostic markers):

- Application in urological oncology. In 2003, when the molecular biology lab was set up, the ob-

jective was to identify diagnostic and prognostic markers of urological cancers. Results from this line of study led to a patent in cancer of the bladder. We are now developing studies on the prostate. Besides our own work we collaborate with other centres and universities and with biotechnology labs (Progenika, Oryzon, Neocodex) to develop new diagnostic and prognostic markers in blood, urine and tissues that will optimize patient management in oncology.

Challenges

- The Service of Urology has a multidisciplinary team of professionals who develop translational research in the field of diagnosis and treatment of urological disorders.
- To further our knowledge about kidney disorders and thereby improve health care for patients

we seek to continue active projects, develop new lines of investigation, increase the number of international publications, train professionals and increase collaboration with hospital and university groups inside and outside our centre.



Awards

Silver cytoscopy award for the best communication for the video:

Optimization of robot-assisted anatomic radical prostatectomy and conservation of neurovascular bundles.

Authors: H Villavicencio, LI Gausà, JA Peña, A Rosales, J Palou

21st National Meeting of Lithiasis, Endourology and Urological Laparoscopy,

Cadiz.

Award for the best video:

Role of robotic-assisted surgery in pyeloureteral restenosis

Authors: A. Bujons, J. Caffaratti, J.M. Garat, H. Villavicencio

48th Congress of the Spanish Society of Pediatric Surgery,

Sevilla.

Award for best poster:

Prognostic factors for recurrence and progression in T1G3 bladder cancer treated with BCG: CIS in the prostatic urethra and gender.

Authors: G. Urdaneta, J. Palou, R. Sysvester, O. Rodríguez, J. Huguet, R. Parada, F. Algaba, H. Villavicencio

12th International Course of Urology "Winds of Change"

Zaragoza.

First prize for the best audiovisual communication:

Optimization of robot-assisted radical prostatectomy and conservation of neurovascular bundles.

Author: H. Villavicencio

74th National Congress of Urology, Valencia.

Second prize for the best publication in "Actas urológicas españolas" 2008:

Complex reconstructive surgery of cervical-urethra sclerosis after radical prostatectomy, following endoscopic failure.

Authors: JM Gaya, J Palou, P Arañó, J Caparrós, H Villavicencio.

Actas Urol Esp. 2008;32(7):752-755

74th National Congress of Urology,

Valencia.

Third Prize for the Best Video:

Combined laparoscopic and conservative open surgery approach in complex renal mass.

Authors: J Palou, JM Gaya, R Sagristá, A Rosales, M Oliveira, O Rodríguez, H Villavicencio.

74th National Congress of Urology, Valencia.

Award for the best surgical technique:

Joan Fígols Award for the best surgical technique for the video El DIT or Endoscopic Finger. First experience in laparoscopic radical prostatectomy in humans.

Authors: JA. Peña, JM. Santillana, E. Cordeiro, A. Domínguez, A. Breda, JM Gaya, LI. Gausa, O. Rodríguez, S. Esquena, M. Cosentino, JL. González, S. Montmany, E. Laporte, A. Rosales, J. Palou, H. Villavicencio.

15th Symposium of the Catalan Society of Urology,

Terrassa.

*TIF: 42.052 **AIF: 3.82

Scientific production

INDEXED PUBLICATIONS

01 Arce J, Angerri O, Caffaratti J, Garat JM, Villavicencio H. Efficiency of endoscopic for vesico-ureteric reflux in adults. BJU INT; 103:71-74.

I.F.: 2.865

02 Beemster, P. Trías, I. Ten kate, F, Algaba, F. Wijkstra, H. De la Rosette, J. Laguna, P. The diagnostic yield of immediate postcryoablation biopsies of small renal masses. J ENDOUROLOGY; 23:1203-1207.

I.F.: 1.754

03 Català, V. Solà, M. Samaniego, J. Martí, T. Huguet, J. Palou, J. De la Torre, P. Ct findings in urinary diversion after radical cystectomy: postsurgical anatomy and Complications. RADIOGRAPHICS; 29: 461-467.

I.F.: 2.747

04 Garat JM, Caffaratti J, Angerri, O. Bujons, A. Villavicencio, H. Kidney transplants in patients with blad-

der augmentation: correlation and evolution. INT UROL NEPHROL; 41: 1-5.

I.F.: 1.053

05 Kümmerlin IP, Smedts F, Ten kate F, Horn T, Algaba F, Trias I, Wijkstra H, De la Rosette J. Cytological punctures in the diagnosis of renal tumours: a study on accuracy and reproducibility EUR UROL; 55: 187-198.

I.F.: 7.667

06 Kümmerlin, I. Ten kate, F JW Smedts, F. Horn, T. Algaba, F. Trias, I. De la Rosette, J. Laguna, P. Diagnostic problems in the subtyping of renal tumors encountered by five pathologists. PATHOL RES PRACT; 205: 27-34.

I.F.: 1.219

07 Mengual, I. Burset, M. Ars, E. Lozano, JJ. Villavicencio, H. Ribal, M.J. Alcaraz, A. DNA microarray expression profiling of bladder cancer allows identification of noninvasive diagnostic markers.

J UROL; 182: 741-748.

I.F.: 4.016

08 Osterlinck W, Sylvester R, Kaasinen E, Bohle A, Palou J. EAU Guidelines on non-muscle-invasive urothelial carcinoma of the bladder (replica). EUR UROL; 55: e17-e18

I.F.: 7.667

09 Palou J, Algaba F, Vera I, Rodríguez Faba O, Villavicencio H, Sánchez-Carbayo M. Protein expression patterns of erzin are predictors of progression in T1G3 bladder tumours treated with nonmaintenance bacillus calmette-guerin. EUR UROL; 56: 829-836.

I.F.: 7.667

10 Palou, J. Rodríguez-Rubio, F. Millán, F. Algaba, F. Rodríguez Faba, O. Huguet, J. Villavicencio, H. Recurrence at three months and high-grade recurrence as prognostic factor of Progression in multivariate analysis of T1G2

*Total Impact Factor.

**Average Impact Factor.



bladder tumors. UROLOGY; 73: 1313-1317

I.F.: 2.365

11 Schito GC, Naber KG, Botto H,

Palou J, Mazzei T, Gualco L, Marchese A. The aresc study: an international survey on the antimicrobial resistance of pathogens involved in uncomplicated uri-

nary tract infections. INT J ANTI-MICROB AGENTS; 34: 407-413.

I.F.: 3.032

OTHER PUBLICATIONS

Garat JM. In memoriam: Rafael Gosálbez, MD. J PEDIATR UROL 2009, 5: 334-335.

Babjuk M, Oosterlinck W, Sylvester R, Kaasinen E, Böhle A, Palou J. Guía clínica del carcinoma urotelial no músculo invasivo de la Asociación Europea de Urología. ACTAS UROL ESP 2009, 33: 361-371.

Gaya JM, Peña JA, Pascual M, Caparrós J, Palou J, Villavicencio H. Carcinoma escamoso de uretra metastásico. ACTAS UROL ESP 2009, 33: 712-716.

Gutiérrez C, Rodríguez F, Errando C, Araño P, Villavicencio H. Estenosis uretral en la mujer: etiología, diagnóstico y tratamiento. ACTAS UROL ESP 2009, 33: 794-800.

Millán F, Gracia S, Jiménez R, Serrano M, Rousaud F, Sánchez-Martín F, Angerri O, Martínez R, Villavicencio H. Análisis de las aguas embotelladas y de grifo españolas y de las implicaciones de su consumo en la litiasis urinaria. ACTAS UROL ESP 2009, 33: 778-793.

Millán F. Guía para el análisis crítico de ensayos clínicos en urología. ACTAS UROL ESP 2009, 33: 654-666.

Monllau V, Rosales A, Rodríguez F, Esquena S, Villavicencio H. Nefrectomía parcial laparoscópica en riñón transplantado. ACTAS UROL ESP 2009, 33: 83-85.

Palou J, Gaya JM, Gausà LI, Sánchez-Martín F, Rosales A, Rodríguez Faba O, Villavicencio H. Cistoprostectomía radical robótica: análisis oncológico y funcional. ACTAS UROL ESP 2009, 33: 759-766.

Pascual M, Segarra J, Català V, Pozuelo I, Millán F, Villavicencio H. Suboclusión intestinal tras laparoscopia. ACTAS UROL ESP 2009, 33: 838-838.

Rodríguez Faba O, Rosales A, Salvador J, Palou J, Ruiz-Tagle D, Cordeiro E, Villavicencio H. Crioterapia renal laparoscópica: experiencia inicial. ACTAS UROL ESP 2009, 33: 982-987.

Rosales A, Salvador J, Rodríguez Faba O, Peña A, Gaya JM, Parada R, Esquena S, Domínguez A, Palou J, Villavicencio H. Límites de la cirugía laparoscópica en el tratamiento del tumor renal. ACTAS UROL ESP 2009, 33: 550-561.

Sánchez-Martín F, Millán F, Villavicencio H. La iniciativa Open Acces (OAI) en la literatura científica. ACTAS UROL ESP 2009, 33: 732-740.

Segarra J, Ascaso H, Millán F, Gracia S, Arce Y, Villavicencio H. Litiasis vesical secundaria a migración de un fragmento óseo. ACTAS UROL ESP 33 (6): 654-666.

Villavicencio H, Esquena S, Salvador J, De Graeve N, Gómez JJ, Escovar P, Palou J. Prostectomía radical robótica: análisis después de 100 casos en la Fundació Puigvert. ACTAS UROL ESP 2009, 33: 24-29.

Egevad I, Algaba F, Berney DM, Boccon-Gibod I, Griffiths DF, López Beltrán A, Mikuz G, Varma M, Montironi R. The european network of uropathology: a novel mechanism for communication between pathologists. ANAL QUANT CYTOL HISTOL; 31: 90-95.

Antonio Cubilla, Alcides Chau, Elsa Velásquez, Ferran Algaba, Gustavo Ayala. Developments in the pathology of penile cancer. In Penile Cancer. International Consultation. Editors: Antonio Carlos L. Pompeo, Chris F. Heyns, Paul Abrams. Committee 2 pp-15-34.

Societe International d'Urologie (SIU). CTP Book Printers, Cape Town, South Africa 2009. SBN : 978-0-620-44542-9.

Pascual M, Palou J, Rosales A, Rodríguez F, Urdaneta G, Peña JA, Rodríguez O, Gaya JM, Villavicencio H. Aproximació teapèutica a la recurrència local de càncer renal. Annals d'Urologia 2009;4-6.

Pozuelo I, Palou J, Huguet J, Alberola J, Ruiz-Tagle D, Urdaneta F, Salas F, De la Torre P, Villavicencio H. Tram urinari superior després de cistectomia: dilema diagnòstic i terapèutic. ANNALS D'UROLOGIA 2009;10-12.

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