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ABSTRACT: From the late 19th century, some of the physicians settled in Algeria and teachers at the School of Medicine of Algiers sought to map the extent of malaria in order to propose prophylactic measures against a disease that was widespread in the countryside of the colony. When the fight against malaria was organized in Algeria at the beginning of the 20th century, under the joint direction of the General Government and the Pasteur Institute, the

Institute researchers needed to gather various types of data for determining epidemic indexes and preparing action programmes. The so-called «colonization physicians», responsible for delivering healthcare to colonials and natives in rural districts since the 1850s, appeared to be appropriate collaborators with the administration in the campaigns. The organizers of these campaigns also worked with *agents quininisateurs* (quinine distributors) and those involved in anti-larval measures, as well as with agencies responsible for roads and bridges and for water services, among others. However, there were soon repeated calls for them to be trained in the new bacteriology techniques. Advanced courses were also proposed to allow these practitioners to act as true and effective agents of the anti-malarial service, such as the 34-day course organized in 1932 by the Pasteur Institute of Algeria.

### **Double trouble: French colonialism in Morocco and the early history of the Pasteur Institutes of Tangier and Casablanca (1895-1932)**

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1.—Introduction. 2.—The original split. 3.—Stillborn: the creation of the Pasteur Institute of Tangier. 4.—Every lab for itself. 5.—A failed convergence: the creation of the Pasteur Institute of Casablanca. 6.—Conclusion.

**ABSTRACT:** Morocco was the last North African country in which a Pasteur institute was created, nearly two decades later than in Tunisia and Algeria. In fact, two institutes were opened, the first in Tangier in 1913 and the second in Casablanca in 1932. This duplication, far from being a measure of success, was the material expression of the troubles Pastorianism had experienced in getting a solid foothold in the country since the late 19th century. These problems partly derived from the pre-existence of a modest Spanish-Moroccan bacteriological tradition, developed since the late 1880s within the framework of the Sanitary Council and Hygiene Commission of Tangier, and partly from the uncoordinated nature of the initiatives launched from Paris and Algiers. Although a Pasteur Institute was finally established, with Paul Remlinger as director, the failure of France to impose its colonial rule over the whole country, symbolized by the establishment of an international regime in Tangier, resulted in the creation of a second centre in Casablanca. While elucidating many hitherto unclear facts about the entangled origins of both institutes, the author points to the solidity of the previously independent Moroccan state as a major factor behind the troubled translation of Pastorianism to Morocco. Systematically dismissed or downplayed by colonial and postcolonial historiography, this solidity disrupted the French takeover of the country and therefore Pastorian expectations.

### **The Pasteur Institutes of Maghreb: divided memories, transversal history**

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**ABSTRACT:** The choice of the expression «History of the Maghreb Pasteur institutes» is suggestive of a post-colonial approach and raises questions about the shared future of those centres. The author offers a comparative view of the past of the Institutes in Tunis, Algiers and Casablanca, relying on recent research in social sciences and the development of oral history. The Institutes were created separately at different times but more or less followed a single model linking research, production, and teaching. Fighting infectious diseases was part of the colonial heritage, but it was above all the promise of modernisation linked to participation in the Pastorian Revolution that explains why the three Institutes never discontinued their activities in the three Southern Mediterranean capitals. At the turn of the 21th century, the Pasteur Institutes of the Maghreb, in common with the mother Institute in Paris, were faced by new challenges in a changing political and epidemiological context. The International Pasteur Institutes Network was formally established in 2003. What is the future of the Maghreb Institutes? Will they form a separate entity? And what links will they create with the rest of the world, especially the Arab World? These questions are both scientific and political.

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**Art in the service of science: artistic antecedents for the total representation of the landscape in Alexander von Humboldt**

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**ABSTRACT:** This study addresses the contribution of Alexander von Humboldt to the natural representation that is situated between scientific vision and artistic sentiment. Humboldt is considered as the creator of a «scientific art», i.e., artistic representation in the service of science. This iconographic representation of botanic and zoological specimens, and above all of the material remains of Pre-Hispanic cultures and their artistic expression provided a new image of America that had previously been heavily dominated by European fantasy. This paper describes his criteria for developing what he called scientific art and explores his theory of the total representation of nature. Finally, it reflects on the artistic references that Humboldt was able to incorporate into his representation system and their influence on his theoretical program.

**Antoni de Martí i Franquès, an isolated genius? The arrival of Lamarckism in Barcelona in the first half of the 19th century**

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in Catalonia in the first half of the 19th century. 6.—Martí and the Lamarckism in Barcelona. 7.—Conclusion.

**ABSTRACT:** Although Antoni de Martí i Franquès spent most of his life in small towns far from scientific institutions, he was not an isolated genius. In fact, he was an active contributor to the Academies in Barcelona, to which he presented five scientific reports, and he collaborated with the most prominent scientists in the city and maintained correspondence with many others. He was especially renowned in Catalonia for his activities, but he was also well known in Spain and to some extent in the rest of Europe. His research led him to defend ideas on the transformation of organisms, spontaneous generation and the antiquity of the earth that very often contradicted orthodox positions of the Spanish Catholic Church, and he published very few scientific papers due to fear of its reaction. Nevertheless, he disseminated his research and conclusions to close colleagues and friends. His acceptance of proposals very close to the evolutionism of Lamarck were decisive in the spread of these ideas among other authors in Barcelona in the first half of the 19th century, including the naturalist Agustí Yáñez and the printer Bergnes de las Casas.

### **Experts, chemistry and medicine: Antonio Casares (1812-1888), José Salgado (1811-1890) and the controversy around the analysis of Carratraca Spa waters**

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**ABSTRACT:** This article studies a scientific controversy on the chemical analysis of Carratraca Spa water and discusses the shaping of the scientific authority of two mid-19th century Spanish experts in mineral waters: Antonio Casares, professor of chemistry at the University of Santiago, and Jose Salgado, medical director of the Spa. It considers the resources employed by the two experts in the dispute and shows that much of the scientific controversy involved not only technical issues but also numerous economic, social and personal interests of the participants. Besides addressing the role played by both experts in the controversy, the article reports on the participation of other stakeholders with different levels of expertise. Their involvement in the dispute was reflected in specialized media, medical reports, special issues, chemical treatises, and specialized articles as well as in the general press. Finally, the article shows that discussions on analytical methods, instrument use or results interpretation also involved consideration of other issues, such as the training and skills of experts and their privileges, prerogatives and scientific authority, which affected the development and ending of the controversy.

**The professional identity of the practicante: the case of Aragon, 1857-1936**

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1.—Introduction. 2.—The journals, source for the study of professional self-definition. 3.—The *practicante*, sole assistant of the physician. 4.—The practicante, antithesis of the nurse. 5.—The rural practicante, image of professionalism. 6.—Strategies for the consolidation of a clear public identity. 7.—Conclusions.

ABSTRACT: The objective of this study was to reconstruct the professional identity of the *practicante* (male assistant in medicine and surgery) by analyzing three professional journals of this collective in Zaragoza (Aragón). The discourse of practicante on their profession insists that they were the only assistants for physicians with technical qualities. This affirmation constituted a key element in shaping their identity, contributing in turn to establish the moral and social legitimization of *practicantes* and their professional authority. This was constructed in counterpoint to the profile, qualifications and gender identity of the other professional healthcare assistant, the nurse. Despite achieving a clear discourse on their professional identity and developing certain professional infrastructures through the work of institutions and key figures, *practicantes* were not able to consolidate a collective project of upward social mobility that would improve their status and enhance social recognition of the profession. This led to the construction of a group identity that was largely characterized by apathy, frustration and disunion, elements that eventually weakened the profession.

**Rafael Vilar Fiol (1885-1971) and the attempt to found a dental school in Valencia before the Civil War**

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1.—Introduction 2.—The development of medical specialities and the professionalization of dentistry in Spain. 3.—The scientific, academic and professional career of Rafael Vilar Fiol. 4.—The frustrated attempt to found a dentistry school in the University of Valencia (1931-1932). 5.—Towards a new medical-surgical speciality: the Spanish Association of Stomatology. 6.—Final reflections.

ABSTRACT: During the first third of the 20th century, the dental profession in Spain was disputed by several groups of healthcare professionals, including surgery practitioners and dental technicians. The most intense conflict was between dentists and stomatologists. In the case of Valencia, this struggle became apparent in the attempt to create a dental school during the first Spanish Republican period. This project was supported by the Faculty of Medicine and by the local authorities but was not implemented due to the special interests of practicing dentists and the School of Dentistry in the Central University of Madrid. The institutionalization of dentistry in Valencia was limited to the teaching of an isolated subject in the Faculty of Medicine, preventing the adoption of a university model that would have encouraged the consolidation

of the dental profession in all its aspects, not solely in terms of improvements in dental care. Opposition to the project was largely based on a campaign to discredit its main promoter, Rafael Fiol Vilar (1885-1971). This Valencian doctor and dentist is virtually unknown by historians, but he had an excellent academic background and an extraordinary international projection for that time. He may have been ignored because of his exile after the Spanish Civil War and the failure of his project for the University of Valencia.

### **Expertise, accidents and hernias in the context of the right to health, Colombia 1915-1946**

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1.—Introduction. 2.—Medical-legal deontology of work accidents. 3.—Are hernias work accidents? 4.—Conclusions.

**ABSTRACT:** For most physicians, the assessment of disability in cases of work accident or occupational disease is very relative matter, and clinical judgments are subjective and unsatisfactory in legal settings. Work accident legislation gives them the task of deciding on any causal links between accident and disease and indicating any economic compensation that should be awarded. They must therefore reach beyond their scientific knowledge to understand the multitude of social factors that underlie these problems in the world of work. In this article, we analyze Colombian sources from the first half of the 20th century on the physiology of labor, fatigue, professional risk, work accidents, occupational diseases, among other issues. The aim is to advance understanding of how the field of medical knowledge established an ethical approach for experts in cases of occupational accidents, focusing on hernias, typical misfortunes of the world of work.

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