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ABREVIATURES

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amp	**ampicilina**
AMPc	**Adenosina 3',5'-monofosfat cíclica**
AP-1	***Activating protein 1***
AP-2	***Activating protein 2***
AR	**Receptor d'androgens**
ARE	**Element de resposta a androgens**
cDNA	**DNA complementari**
C/EBP	***CCAAT / Enhancer-binding protein***
Ci, μCi	**Curie, microcurie**
cpm	**contes per minut**
DBD	**Domini d'unió a DNA**
DBP	**Proteïna d'unió al lloc D del promotor de l'albúmina**
DEPC	**Dietilpirocarbonat**
DHT	**Dihidrotestosterona**
DNA	**Àcid desoxiribonucleic**
ER	**Receptor d'estrogens**
g, mg, μg, ng	**gram, mil.ligram, microgram, nanogram**
GH	**Hormona de creixement**
GR	**Receptor de glucocorticoides**
GRE	**Element de resposta a glucocorticoides**
GST	**Glutation-S-tranferasa**

h	**hores**
hAR	**Receptor d'androgens humà**
hGH	**Hormona de creixement humana**
HNF	***Hepatocyte nuclear factor***
HRE	**Element de resposta a hormona**
IGF-I	**Factor de creixement semblant a l'insulina tipus I**
IGF-I R	**Receptor d'IGF-I**
IGFBP	**Proteïnes d'unió a IGF**
kb	**kilobase**
kDa, Da	**kilodalton, Dalton**
kV, V	**kilovolt, Volt**
LBD	**Domini d'unió a lligand**
M, mM, μM	**Molar, mil·limolar, micromolar**
mA	**mil.liamper**
MAPKs	***Mitogen-activated protein kinases***
min	**minut**
mL, μL	**mil.lilitre, microlitre**
mm	**mil.límetre**
MR	**Receptor de mineralocorticoides**
mRNA	**Àcid ribonucleic missatger**
N	**Normal**
nm	**nanòmetre**
nº	**número**
o/n	**overnight**
ORF	**Pauta oberta de lectura**

ºC	**Graus centígrads**
pb	**parell de bases**
PCR	**Reacció en cadena de la polimerasa**
PCT (S1 i S2)	**Túbul contornejat proximal (Segment 1 i 2)**
PKA	**Proteïna quinasa A**
PKC	**Proteïna quinasa C**
PM	**Pes molecular**
pmol	**picomol**
PR (S3)	**Part recta de túbul proximal renal (Segment 3)**
PR	**Receptor de progesterona**
PRL	**Prolactina**
RAR	**Receptor d'àcid retinoic**
rAR	**Receptor d'androgens de rata**
RNA	**Àcid ribonucleic**
rpm	**revolucions per minut**
RT	**Transcripció inversa**
RXRα	**Receptor tipus α de l'àcid 9-cis-retinoic**
seg	**segon**
Sp1	***Selective promoter factor 1***
T	**Testosterona**
TAFs	**Factors associats a TBP**
TBP	***TATA-binding protein***
TIFs	**Factors intermitjos de transcripció**
TR	**Receptors d'hormona tiroïdal**
TRβ	**Receptor tipus β d'hormona tiroïdal**

TRE	**Element de resposta a hormona tiroïdal**
TSH	**Tirotropina**
T_3	**3, 5, 3'-triiodotironina**
T_4	**3, 5, 3', 5'-tetraiodotironina**
U	**Unitat enzimàtica**
v	**volum**
v/v	**relació volum/volum**
VDR	**Receptor de vitamina D**
w/v	**relació pes/volum**
μF	**Microfreqüència**
μm	**micròmetre**
Ω	**om**

AGRAÏMENTS

Si ets capaç de fê un munt de tots els guanys arreu

i jugar-te'ls a cara i creu,

i perdre, i altre cop partir de l'esperança

i de res més, i sense ni un sospir de recança;

si ets capaç de forçâ el teu cor

i els teus nervis i cada fibra

a servî el teu moment, ni que et sembli que han mort

fa temps, i persistir, quan res en tu no vibra

sinó la Voluntat que els diu: <<Aguanta fort!>>

Ruyard Kippling

Traducció: Carles Riba

En l'acabament d'aquest treball que ha suposat la meva dedicació completa durant quatre anys, vull agraïr els ànims i les forces que moltes persones m'han oferit per tal que arribés el dia de poder defensar orgullosament aquesta tesi doctoral. Per aquesta raó acabaré aquestes últimes pàgines amb l'agraïment i el record de tothom qui ha participat amb les seves paraules de suport en la realització del treball presentat.

En l'àmbit professional, haig d'agraïr la direcció i suport de la meva directora de tesi, Anna Meseguer, i l'ajuda, suport i discussions científiques de tots els companys del laboratori 2 de la planta 14. Qui podrà oblidar tots els bons moments que hem viscut entre pipetes!. En la meva nova feina em resulta difícil no haver de preguntar a la Cristina (Cris per a la seva germana) si la dilució és correcta, o no poder empipar a l'Olga i a la Cristines (Aresté i

Puche), veïnes de la 'poiata' del darrere, o esquivar les puntes que provenien disparades de la 'poiata' del davant, Maya no treballis amb tantes ganes, oh, i les preguntes interesantíssimes d'en Joan, una persona inolvidable a l'igual que la seva música, i no em deixaré a en Lluís, sempre amable i correcte. També vull agraïr la simpatia i ajuda de totes les altres persones amb les que he compartit la meva estada en la planta 14, laboratoris 16 i 14 i laboratori d'oncologia. No oblidaré tampoc els consells i l'ajuda d'en Nour, que et brindava en tot moment, ni tampoc l'amistat i ajuda de l'Anna Menoyo, que va ser molt important en aquells moments. No us puc dir altra cosa que moltes gràcies a tots!.

Qui ha pensat el més fondo, estima el més vivent,
entén l'excelsa joventut qui ha mirat el món,
i els savis s'inclinen a la fi
sovint davant de la bellesa.

Versos de *Sokrates und Alcibiades de Hölderlin*

Però, també hi ha participat molta més gent que no és del mateix àmbit laboral, com per exemple, tot el grup de persones de Manlleu i Torelló que feien el mateix recorregut que jo per arribar a la feina, és a dir la gent del tren!. Gràcies per haver fet que un trajecte llarg i a vegades engoixant es convertís en agradable i enyorable.

Per últim, vull dedicar aquest treball a les persones que indiscutiblament sense el seu

ajut incansable i comprensió no hagués pogut ser realitat.

Dedico aquesta tesi doctoral als meus pares, Ramón i Montserrat, i al meu company, Xevi. Espero que sempre us pugui tenir al meu costat, tal i com hi heu estat en tots els moments, tant bons com dolents. Moltes gràcies!.

¿La branca que et suporta
no sentirà quan fugis
una buidor d'enyorança?
Com et diré que el teu cant
m'omple les mans d'aigua-llum,
i sóc tan pur com la veu d'un infant
i tan greu i lleuger com la tarda.
Si jo et tingués, ocell,
tindria el secret de les coses,
perquè ara tot és el teu cant
i la teva presència,
fràgil,
damunt la branca.

Miquel Martí i Pol