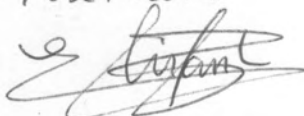


MARIA ELENA MIRANDA BANOS
Curriculum Vitae ai fini della pubblicazione

Place *Roma*
Date *07/02/2018*
Signature 

Part I – General Information

Full Name	Maria Elena MIRANDA BANOS
Spoken Languages	Spanish, English, Italian

Part II – Education

Type	Year	Institution	Notes (Degree, Experience,...)
University graduation	1995	University of Malaga, Spain	Bachelor degree in Biological Sciences, score 9.48/10
PhD	2001	University of Malaga, Spain	PhD in Biological Sciences, score 10/10, cum laude

Part III – Appointments

IIIA – Academic Appointments

Start	End	Institution	Position
12/1995	01/2001	University of Malaga, Spain	PhD student, Laboratory of Animal Physiology
05/2001	10/2002	University of Cambridge, UK	Research Associate, Dpt. of Anatomy
11/2002	12/2008	University of Cambridge, UK	Research Associate, Dpt. of Medicine
12/2008	present	Sapienza University of Rome, Italy	Assistant Professor (Ricercatore a tempo indeterminato SSD BIO/06) at Dpt. of Biology and Biotechnologies 'Charles Darwin'

IIIB – Other Appointments

Start	End	Institution	Position
07/2010	08/2010	Cambridge Institute for Medical Research, University of Cambridge	Visiting scientist
07/2011	08/2011	Cambridge Institute for Medical Research, University of Cambridge	Visiting scientist
07/2013	08/2013	Cambridge Institute for Medical Research, University of Cambridge	Visiting scientist
07/2014	08/2014	Cambridge Institute for Medical Research, University of Cambridge	Visiting scientist
07/2015	08/2015	Cambridge Institute for Medical Research, University of Cambridge	Visiting scientist
07/2016	08/2016	University College London, UK	Visiting scientist
07/2017	08/2017	University College London, UK	Visiting scientist

Part IV – Teaching experience

Year	Institution	Lecture/Course
1997-2000	University of Malaga, Spain	Practical classes to undergraduate students on Animal Physiology
2001-2008	University of Cambridge, UK	Supervision of undergraduate and PhD students
2009-present	Sapienza University of Rome, Italy	Supportive teaching activities for the Cell Biology and Neurobiology areas: seminars and examination of students
2011-present	Sapienza University of Rome, Italy	Lecturer (Titolare del corso) for the Cell Biology course (code 1034846), first year of the degree on Agro-industrial Biotechnologies (9 CFU, SSD BIO/06)
2009-present	Sapienza University of Rome, Italy	Board member of the PhD Course ‘Cell and Developmental Biology’
2009-present	Sapienza University of Rome, Italy	Supervisor of 6 Bachelor degree thesis, 6 Master degree theses and 2 PhD thesis

Students' evaluation of the teacher's performance for the Cell Biology course (code 1034846) in the degree 'Agro-Industrial Biotechnologies' (Opis) for the academic year 2016-2017, with 258 students who participated in the lessons and practicals and took the test. In a scale from 1 to 4 (where 1 indicates 'surely not', 2 indicates 'not rather than yes', 3 indicates 'yes rather than not' and 4 indicates 'surely yes') the indicators are all above level 3, coincident or above the average for the degree in Agro-Industrial Biotechnologies and for the Faculty of Sciences, as shown in the summary page attached at the end of this CV. The results for Opis 2013-14, 2014-15 and 2015-16 were very similar to those presented for 2016-17.

Part V - Society memberships, awards and honours

Year	Title
1996	Extraordinary award for degree in Biological Sciences, University of Malaga, Spain
1996-2000	PhD Fellowship from the Spanish Ministry of Education and Science
2008	American Society for Cell Biology membership
2011-present	Italian ABCD (Associazione Biologia Cellulare e del Differenziamento) membership
2016-present	Italian GEI (Gruppo Embriologico Italiano) membership

Part VI - Funding information [grants as PI-principal investigator or I-investigator]

Year	Title	Program and role	Grant value
2000 - 2005	Strategies to prevent cirrhosis and dementia by blocking serpin polymerisation in vivo	MRC (UK) Programme Grant to D.A. Lomas - I	
2006 - 2008	Pathobiology of the serpinopathies	MRC (UK) Programme Grant to D.A. Lomas - I	
Call 2009	Ruolo del Reticolo Endoplasmatico in alterazioni funzionali di proteine neuronali implicate in patologie di tipo neurologico	Grant from Sapienza University of Rome, Italy - PI	Euro 13,000
07/2010 - 07/2011	Development of monoclonal antibodies to block the polymerisation of Z alpha-1 antitrypsin	Pilot and feasibility grant from the Alpha-1 Foundation, USA - co-PI	USD 40,000
Call 2010	Mechanisms of cell toxicity of neuroserpin polymers that cause the dementia FENIB	Grant from Sapienza University of Rome, Italy - PI	Euro 10,000

2010	Behavioural, biochemical and molecular characterisation of novel animal models of hyperphenylalaninemia: how phenylalanine leads to mental retardation.	Grant from Sapienza University of Rome for 'Macroarea 5', to Dott.ssa T. Pascucci - I	Euro 32,000
2011 - 2014	Handling and toxicity of polymerogenic mutants of the serpins within the endoplasmic reticulum	Under 40 Grant from the Pasteur Institute - Cenci Bolognetti Foundation, Rome - PI	Euro 90,000
Call 2011	ER quality control of neuronal proteins and protein misfolding diseases of the central nervous system	Grant from Sapienza University of Rome, Italy, to Dott.ssa A. De Jaco - I	Euro 12,000
11/2011 - 06/2015	The role of neuroserpin in familial encephalopathy with neuroserpin inclusion bodies (FENIB)	Grant from the Telethon Foundation, Italy - co-PI (Rome Unit PI)	Euro 140,400 (Rome Unit)
Call 2013	Characterisation of neuroserpin polymer toxicity in a new neuronal model of the dementia FENIB	Grant from Sapienza University of Rome, Italy - PI	Euro 7,000
Call 2014	Comparative analysis of the transcriptome in cells expressing wild type or mutant neuroserpin causing dementia FENIB	Grant from Sapienza University of Rome, Italy - PI	Euro 5,000
Call 2015	Uncovering new toxicity pathways in the neurodegenerative dementia FENIB	Grant from Sapienza University of Rome, Italy - PI	Euro 8,400
Call 2016	Cellular pathways activated by pathological accumulation of neuroserpin polymers in the dementia FENIB	Grant from Sapienza University of Rome, Italy - PI	Euro 15,000
Call 2017	Characterisation of oxidative stress and mitochondrial dysfunction due to neuroserpin polymers in the dementia FENIB	Grant from Sapienza University of Rome, Italy - PI	Euro 11,000
09/2017 - 08/2018	Dissecting immunomodulatory mechanisms of A1AT with function-neutralising monoclonal antibodies	Pilot and feasibility grant from the Alpha-1 Foundation (USA) - PI	USD 40,000
01/2018 - 12/2019	Cellular pathways involved in the toxicity of neuroserpin polymers that cause dementia FENIB	Pasteur Institute-Cenci Bolognetti Foundation, Italy - PI	Euro 40,000

Part VII – Research activities

Research fields and stages in qualified international institutions

Keywords	Institution and period	Brief Description
Subcommissural organ, ependymal gland, monoclonal antibodies	University of Malaga, Spain, 07/1992 to 05/2001 (undergraduate, graduate and PhD student) University of Clermont-1, Clermont-Ferrand (France), 05-07/1999 (research stage as PhD student) University Austral, Valdivia (Chile), 05-07/2000 (research stage as PhD student)	During my degree thesis and PhD thesis (1995 to 2001) I focussed my research on the characterisation of the glycoproteins secreted to the cerebrospinal fluid by the subcommissural organ, a conserved ependymal gland located in the roof of the third cerebral ventricle. As part of these studies, I purified the glycoproteins from cow brain tissue and produced a set of specific monoclonal antibodies used for further studies by immunocytochemistry and in vivo experiments.
Axon guidance, development of the nervous system, growth cone, <i>Xenopus laevis</i>	Dpt. of Anatomy, University of Cambridge, UK, 05/2001 to 10/2002	My first postdoctoral period in Cambridge (UK) (2001 to 2002) was dedicated to the study of the mechanisms of axon guidance during brain development, using the visual system of <i>Xenopus laevis</i> as model system. More specifically, we studied the responses of retinal ganglion cell growth cones to ephrin and Eph signalling molecules, and showed that these responses were modulated by intracellular levels of cyclic GMP and by endocytosis.

<p>Serpin, serpinopathies, protein conformational disease, protein folding, polymerisation, liver, lung, neurodegeneration, neuroserpin, alpha-1 antitrypsin, conformational antibodies</p>	<p>Dpt. of Medicine, University of Cambridge, UK, 11/2002 to 12/2008</p> <p>Dpt. of Biology and Biotechnologies 'Charles Darwin', Sapienza University of Rome</p> <p>July and August 2010, 2011, 2013, 2014 and 2015: Summer research stages at the Cambridge Institute for Medical Research, University of Cambridge (UK)</p> <p>July and August 2016 and 2017: Summer research stages at University College London (UK)</p>	<p>Since November 2002, first at the University of Cambridge (UK) and from 2009 at Sapienza University of Rome, my research has focussed in the field of protein misfolded diseases, particularly the serpinopathies, a group of human diseases caused by polymerisation and intracellular deposition of mutant variants of different serpin (serin protease inhibitors) proteins. We study the cell biology of the serpinopathies, focussing on the handling of serpin variants within the endoplasmic reticulum (ER) of cells: synthesis, folding, glycosylation, degradation, trafficking and secretion, as well as ER and cellular responses to the presence of polymers. As part of our research, we have produced a series of conformation-specific monoclonal antibodies against alpha-1 antitrypsin and neuroserpin, including antibodies specific to pathological polymers and antibodies able to accelerate or prevent the polymerisation of a disease causing variant of alpha-1 antitrypsin.</p>

Reviewer for international journals

Peer-review of manuscripts submitted to the following journals: Blood, Journal of Leukocyte Biology, Frontiers in Cellular Neuroscience, Scientific Reports

Part VIII – Summary of Scientific Achievements

Product type	Number	Data Base	Start	End
Papers [international]	51	Scopus	1997	2018
Papers [national]	-			
Books [scientific]	1	Scopus	1997	2018
Books [teaching]	-			

Total Impact factor (year of publication)	297.608
Total Citations	2312
Average Citations per Product	45.3
Hirsch (H) index	21
Normalized H index*	0.913

*H index divided by the academic seniority (23 years from Bachelor degree).

Comparative criteria for the present evaluation (criteri comparativi ai fini della valutazione, bando art. 1)

All values have been calculated using the database Scopus

Total number of publications	51
Hirsch index	21
H index in the last 10 years (2008-2018)	17
Total citations	2312
Citations of articles published in the last 10 years (2008-2018)	1633
Average citations per publication	45.3
Total impact factor (publication year)	297.608
Average impact factor per publication	5.835
Teaching experience	as detailed in part IV

Other scientific achievements

- Commercialisation of the monoclonal antibody 2C1 against pathological polymers of alpha-1 antitrypsin (Miranda et al, 2010, Hepatology) through Hycult Biotech (The Netherlands)
- Italian 'Abilitazione Scientifica Nazionale per Professore di Seconda Fascia' Bando 2012 (DD n. 222/2012).
- Since 2014, my bibliometric parameters exceed the three numerical thresholds set in 2012 by ANVUR to obtain the ASN for 'Professore di I Fascia' for the BIO/06 - 05/B2 sector.

Full list of publications

Present to 1997, including the impact factor corresponding to the year of publication (ISI Web of Knowledge) and the number of citations for each publication (Scopus).

Scopus ID: 8377905200

ORCID ID: 0000 0002 0586 8795

1 **Miranda E**, Ferrarotti I, Berardelli R, Laffranchi M, Cerea M, Gangemi F, Haq I, Ottaviani S, Lomas DA, Irving JA, Fra A (2017). The pathological Trento variant of alpha-1 antitrypsin (E75V) shows non-classical behaviour during polymerisation. *FEBS Journal*, 284(13):2110-2126
IF: 3.902 (2016)

doi: 10.1111/febs.14111

Citations: 0

2 Guadagno NA, **Miranda E** (2017). Editorial: Polymer toxicity in neurodegeneration FENIB. *Oncotarget*, 8(22):35490-35491

doi: 10.18632/oncotarget.17772

IF: 7.519 (2016)

Citations: 0

3 Guadagno NA, Moriconi C, Licursi V, D'Acunto E, Nisi P, Carucci N, De Jaco A, Cacci E, Negri R, Lupo G, **Miranda E** (2017). Neuroserpin polymers cause oxidative stress in a neuronal model of the dementia FENIB. *Neurobiology of Disease*, 103:32-44

doi:10.1016/j.nbd.2017.03.010

IF: 5.020 (2016)

Citations: 0

4 Motamedi-Shad N, Jagger AM, Liedtke M, Faull SV, Scott-Nanda A, Salvadori E, Wort JL, Kay CWM, Heyer-Chauhan N, **Miranda E**, Perez J, Ordóñez A, Haq I, Irving JA and Lomas DA (2016). An antibody that prevents serpin polymerisation acts via a novel allosteric site on helix I*. *Biochemical Journal*, 473(19):3269-3290

doi: 10.1042/BCJ20160159

IF: 3.797

Citations: 1

5 Fra A, Cosmi F, Ordoñez A, Berardelli R, Perez J, Guadagno NA, Corda L, Marciniak SJ, Lomas DA, **Miranda E** (2016). Polymers of Z alpha-1 antitrypsin are secreted in cell models of disease. *European Respiratory Journal*, 47(3):1005-1009

doi: 10.1183/13993003.00940-2015

IF: 10.569

Citations: 4

6 Saga G, Sessa F, Barbiroli A, Santambrogio C, Russo R, Sala M, Raccosta S, Martorana V, Caccia S, Noto R, Moriconi C, **Miranda E**, Grandori R, Manno M, Bolognesi M, Ricagno S (2016). Embelin binds to human neuroserpin and impairs its pathologic polymerisation. *Scientific Reports*, 6:18769

doi: 10.1038/srep18769

IF: 5.228

Citations: 4

7 Moriconi C, Ordoñez A, Lupo G, Goptu B, Irving JA, Noto R, Martorana V, Manno M, Timpano V, Guadagno NA, Dalton L, Marciniak SJ, Lomas DA, **Miranda E** (2015). Interactions between N-linked glycosylation and polymerisation of neuroserpin within the endoplasmic reticulum. *FEBS Journal*, 282(23):4565-4579

doi: 10.1111/febs.13517

IF: 4.237

Citations: 6

8 Ordóñez A, Pérez J, Tan L, Dickens JA, Motamedi-Shad N, Irving JA, Haq I, Ekeowa U, Marciniak SJ, **Miranda E**[§], Lomas DA[§] (2015). A single-chain variable fragment intrabody prevents intracellular polymerisation of Z alpha₁-antitrypsin while allowing its antiprotease activity. *The FASEB Journal*, 20(6):2667-2678

[§]Joint senior authors.

doi: 10.1096/fj.14-267351

IF: 5.299

Citations: 17

9 Irving JA, **Miranda E**, Haq I, Perez J, Kotov VR, Faull SV, Motamedi-Shad N, Lomas DA (2015). An antibody raised against a pathogenic serpin variant induces mutant-like behaviour in the wild-type protein. *The Biochemical Journal*, 468(1):99-108

doi: 10.1042/BJ20141569

IF: 3.562

Citations: 10

10 Preissler S, Chambers JE, Crespillo-Casado A, Avezov E, **Miranda E**, Perez J, Hendershot LM, Harding HP, Ron D (2015). Physiological modulation of BiP activity by trans-promoter engagement of the interdomain linker. *eLife*, 4:e08961

doi: 10.7554/eLife.08961

IF: 8.282

Citations: 13

11 Noto R, Randazzo L, Raccosta S, Caccia S, Moriconi C, **Miranda E**, Martorana V, Manno M (2015). The stability and activity of human neuroserpin are modulated by a salt bridge that stabilises the reactive centre loop. *Scientific Reports*, 5:13666

doi: 10.1038/srep13666

IF: 5.228

Citations: 1

12 Tan L, Perez J, Mela M, **Miranda E**, Burling KA, Rouhani FN, DeMeo DL, Haq I, Irving JA, Ordoñez A, Dickens JA, Brantly M, Marciniak SJ, Alexander GJM, Goptu B, Lomas DA (2015). Characterising the association of latency with alpha₁-antitrypsin polymerisation using a novel monoclonal antibody. *International Journal of Biochemistry and Cell Biology*, 58:81-91

doi: 10.1016/j.biocel.2014.11.005

IF: 3.905

Citations: 8

- 13 Tan L, Dickens JA, Demeo DL, **Miranda E**, Perez J, Rashid ST, Day J, Ordoñez A, Marciniak SJ, Haq I, Barker AF, Campbell EJ, Eden E, McElvaney NG, Rennard SI, Sandhaus RA, Stocks JM, Stoller JK, Strange C, Turino G, Rouhani FN, Brantly M, Lomas DA (2014). Circulating polymers in alpha1-antitrypsin deficiency. *European Respiratory Journal*, 43(5): 1501-1504
doi: 10.1183/09031936.00111213
IF: 7.636
Citations: 21
- 14 Ljubic M, Rankov AD, Kojic S, **Miranda E**, Radojkovic D (2014). Functional analysis of novel alpha-1 antitrypsin variants G320R and V321F. *Molecular Biology Reports*, 41(9):6133-6141
doi: 10.1007/s11033-014-3492-z
IF: 2.024
Citations: 1
- 15 Roussel BD, Kruppa AJ, **Miranda E**, Crowther DC, Lomas DA, Marciniak SJ (2013). Endoplasmic reticulum dysfunction in neurological disease. *The Lancet Neurology*, 12(1):105-118
doi: 10.1016/S1474-4422(12)70238-7
IF: 21.823
Citations: 199
- 16 Ordoñez A, Snapp EL, Tan L, **Miranda E**, Marciniak SJ, Lomas DA (2013). Endoplasmic reticulum polymers impair luminal protein mobility and sensitise to cellular stress in alpha(1)-deficiency. *Hepatology*, 57(5):2049-2060
doi: 10.1002/hep.26173
IF: 11.190
Citations: 41
- 17 Schipanski A, Lange S, Segref A, Gutschmidt A, Lomas DA, **Miranda E**, Schweizer M, Hoppe T, Glatzel M (2013). A novel interaction between aging and ER overload in a protein conformational dementia. *Genetics*, 193(3):865-876
doi: 10.1534/genetics.112.149088
IF: 4.866
Citations: 15
- 18 Lupo G, Novorol C, Smith JR, Vallier L, **Miranda E**, Alexander M, Biagioni S, Pedersen RA, Harris WA (2013). Multiple roles of activin/nodal, bone morphogenetic protein, fibroblast growth factor and Wnt/beta-catenin signalling in the anterior neural patterning of adherent human embryonic stem cell cultures. *Open Biology*, 3(4):120167
doi: 10.1098/rsob.120167
IF: 4.556
Citations: 20
- 19 Fra AM, Gooptu B, Ferrarotti I, **Miranda E**, Scabini R, Ronzoni R, Benini F, Corda L, Medicina D, Luisetti M, Schiaffonati L (2012). Three new alpha1-antitrypsin deficiency variants help to define a C-terminal region regulating conformational change and polymerization. *Plos One*, 7(6):e38405
doi: 10.1371/journal.pone.0038405

IF: 3.730

Citations: 17

20 Schmid S, Koepke J, Dresel M, Hattesoehl A, Frenzel E, Perez J, Lomas D, **Miranda E**, Greulich T, Noeske S, Wencker M, Teschler H, Vogelmeier C, Janciauskiene S, Koczulla A (2012). The effects of weekly augmentation therapy in patients with PiZZ α 1-antitrypsin deficiency. *International Journal Chronic Obstructive Pulmonary Disease*, 7:687-696

doi: 10.2147/COPD.S34560

IF 2013: 2.732

Citations: 13

21 Yusa K, Rashid ST, Strick-Marchand H, Varela I, Liu PQ, Paschon DE, **Miranda E**, Ordóñez A, Hannan NR, Rouhani FJ, Darce S, Alexander G, Marciniak SJ, Fusaki N, Hasegawa M, Holmes MC, Di Santo JP, Lomas DA, Bradley A, Vallier L (2011). Targeted gene correction of alpha1-antitrypsin deficiency in induced pluripotent stem cells. *Nature*, 478(7369):391-394

doi: 10.1038/nature10424

IF: 36.280

Citations: 364

22 Morris H, Morgan MD, Wood AM, Smith SW, Ekeowa UI, Herrmann K, Holle JU, Guillevin L, Lomas DA, Perez J, Pusey CD, Salama AD, Stockley R, Wiczorek S, McKnight AJ, Maxwell AP, **Miranda E**, Williams J, Savage CO, Harper L (2011). ANCA-associated vasculitis is linked to carriage of the Z allele of alpha1-antitrypsin and its polymers. *Annals of the Rheumatic Diseases*, 70(10):1851-1856

doi: 10.1136/ard.2011.153569

IF: 8.727

Citations: 43

23 Rodríguez-González R, Millán M, Sobrino T, **Miranda E**, Brea D, Perez de la Ossa N, Blanco M, Pérez J, Dorado L, Castellanos M, Lomas DA, Moro MA, Dávalos A, Castillo J (2011). The natural tissue plasminogen activator inhibitor neuroserpin and acute ischemic stroke outcome. *Thrombosis and Haemostasis*, 105(3):421-429

doi: 10.1160/TH10-09-0621

IF: 5.044

Citations: 13

24 Rodriguez-Gonzalez R, Sobrino T, Rodriguez-Yanez M, Millan M, Brea D, **Miranda E**, Moldes O, Perez J, Lomas DA, Leira R, Dávalos A, Castillo J (2011). Association between neuroserpin and molecular markers of brain damage in patients with acute ischemic stroke. *Journal of Translational Medicine*, 9(1):58

doi: 10.1186/1479-5876-9-58

IF: 3.474

Citations: 17

25 Belorgey D, Irving JA, Ekeowa UI, Freeke J, Roussel BD, **Miranda E**, Perez J, Marciniak SJ, Crowther DC, Michel CH, Lomas DA (2011). Characterisation of serpin polymers in vitro and in vivo. *Methods*, 53(3):255-266

doi: 10.1016/j.ymeth.2010.11.008

IF: 4.011

Citations: 26

26 Chang YP; Mahadeva R, Patschull AO, Nobeli I, Ekeowa UI, McKay AR, Thalassinou K, Irving JA, Haq I, Nyong MP, Christodoulou J, Ordoñez A, **Miranda E**, Gooptu B (2011). Targeting serpins in high-throughput and structure-based drug design. *Methods in Enzymology*, 501:139-175
doi: 10.1016/B978-0-12-385950-1.00008-0

IF: 2.042

Citations: 11

27 Irving JA, Ekeowa UI, Belorgey D, Haq I, Gooptu B, **Miranda E**, Perez J, Roussel BD, Ordoñez A, Dalton LE, Thomas SE, Marciniak SJ, Parfrey H, Chilvers ER, Teckman JH, Alam S, Mahadeva R, Rashid ST, Vallier L, Lomas DA (2011). The serpinopathies: studying serpin polymerization *in vivo*. *Methods in Enzymology*, 501: 421-466
doi: 10.1016/B978-0-12-385950-1.00018-3

IF: 2.042

Citations: 18

28 Duvoix A, **Miranda E**, Perez J, Sorensen GL, Holmskov U, Trapnell BC, Madsen J, Clark HW, Edwards LD, Miller BE, Tal-Singer RM, Lomas DA (2011). Evaluation of full-length, cleaved and nitrosylated serum surfactant protein D as biomarkers for COPD. *COPD*, 8(2):79-95
doi: 10.3109/15412555.2011.558542

IF: 1.794

Citations: 9

29 **Miranda E**, Perez J, Ekeowa U, Hadzic N, Kalsheker N, Gooptu B, Portmann B, Belorgey D, Hill M, Chambers S, Teckman J, Alexander G, Marciniak S, Lomas D (2010). A novel monoclonal antibody to characterize pathogenic polymers in liver disease associated with alpha1-antitrypsin deficiency. *Hepatology*, 52(3):1078-1088
doi: 10.1002/hep.23760

IF: 10.885

Citations: 70

30 Ekeowa UI*, Freeke J*, **Miranda E***, Gooptu B, Bush MF, Pérez J, Teckman J, Robinson CV and Lomas DA. Defining the mechanism of polymerization in the serpinopathies (2010). *PNAS*, 107(40):17146-17151

*Joint first authors

doi: 10.1073/pnas.1004785107

IF: 9.771

Citations: 91

31 Rashid ST, Corbineau S, Hannan N, Marciniak SJ, **Miranda E**, Alexander G, Huang – Doran I, Ahrlund-Richter L, Skepper J, Griffin J, Semple R, Weber A, Lomas DA, Vallier L (2010). Modelling inherited metabolic disorders of the liver with human induced pluripotent stem cells. *Journal of Clinical Investigations*, 120(9):3127-3136
doi: 10.1172/JCI43122

IF: 14.152

Citations: 321

- 32 Kröger H, **Miranda E**, MacLeod I, Pérez J, Crowther DC, Marciniak SJ and Lomas DA (2009). ERAD and autophagy cooperate to degrade polymerogenic mutant serpins. *Journal of Biological Chemistry*, 284(34):22793-22802
doi: 10.1074/jbc.M109.027102
IF: 5.328
Citations: 72
- 33 Davies MJ, **Miranda E**, Marciniak SJ, Kaufman RJ, Römisch K and Lomas DA (2009). Neuroserpin polymers activate NF- κ B by a calcium signalling pathway that is independent of the unfolded protein response. *Journal of Biological Chemistry*: 284(27):18202-18209
doi: 10.1074/jbc.M109.010744
IF: 5.328
Citations: 44
- 34 Gooptu B, **Miranda E**, Nobeli I, Mallya M, Purkiss A, Leigh Brown SC, Summers C, Phillips RL, Lomas DA, Barrett TE (2009). Crystallographic and cellular characterisation of two mutations stabilising the native fold of alpha1-antitrypsin: implications for rational drug design. *Journal of Molecular Biology*: 387(4):857-868
doi: 10.1016/j.jmb.2009.01.069
IF: 3.871
Citations: 29
- 35 Medicina D, Montani N, Tiberio L, Fra AM, Corda L, **Miranda E**, Pezzini A, Bonetti F, Ferrarotti I, Facchetti F and Schiaffonati L (2009). Molecular characterization of the new defective Pbrescia alpha1-antitrypsin allele. *Human Mutation*, 30(8):E771-E781
doi: 10.1002/humu.21043
IF: 6.887
Citations: 12
- 36 Ekeowa UI, Gooptu B, Belorgey D, Hägglöf P, Karlsson-Li S, **Miranda E**, Pérez J, MacLeod I, Kroger H, Marciniak SJ, Crowther DC and Lomas DA (2009). Alpha1-antitrypsin deficiency, chronic obstructive pulmonary disease and the serpinopathies. *Clinical Science*: 116(12): 837-850
doi: 10.1042/CS20080484
IF: 3.982
Citations: 40
- 37 **Miranda E**, MacLeod I, Davis MJ, Pérez J, Römisch K, Crowther D and Lomas DA (2008). The intracellular accumulation of polymeric neuroserpin explains the severity of the dementia FENIB. *Human Molecular Genetics*: 17(11):1527-1539
doi: 10.1093/hmg/ddn041
IF: 7.249
Citations: 62
- 38 Nielsen HM, Minthon L, Londos E, Blennow K, **Miranda E**, Perez J, Crowther DC, Lomas DA and Janciauskiene SM (2007). Plasma and cerebrospinal fluid serpins in Alzheimer's disease and dementia with Lewy bodies. *Neurology*: 69(16):1569-1579
doi: 10.1212/01.wnl.0000271077.82508.a0
IF: 6.014

Citations: 57

39 Kennedy S, van Diepen A, van den Hurk C, Coates LC, Lee TW, Ostrovsky LL, **Miranda E**, Perez J, Davies MJ, Lomas DA, Dunbar PR and Birch NP (2007). Expression of the serine protease inhibitor neuroserpin in cells of the human myeloid lineage. *Thrombosis and Haemostasis*: 97(3): 394-399

PMID: 17334506

IF: 3.501

Citations: 16

40 **Miranda E** and Lomas DA (2006). Neuroserpin: a serpin to think about. *Cellular and Molecular Life Sciences* :63(6):709-722

doi: 10.1007/s00018-005-5077-4

IF: 4.655

Citations: 90

41 Hoyo-Becerra C, Lopez-Avalos MD, Perez J, **Miranda E**, Rojas-Rios P, Fernandez-Llebrez P, Grondona JM (2006). Continuous delivery of a monoclonal antibody against Reissner's fiber into CSF reveals CSF-soluble material immunorelated to the subcommissural organ in early chick embryos. *Cell and Tissue Research*: 326:771-786

doi: 10.1007/s00441-006-0231-3

IF: 2.580

Citations: 9

42 Crowther DC, Kinghorn KJ, **Miranda E**, Page R, Curry JA, Duthie F, Gubb D, Lomas DA (2005). Intra-neuronal A-beta, non-amyloid aggregates and neurodegeneration in a Drosophila model of Alzheimer's disease. *Neuroscience*: 132:123-135

doi: 10.1016/j.neuroscience.2004.12.025

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