TIAGO FLEMING OUTEIRO

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WORK
Instituto de Medicina Molecular
Cell and Molecular Neuroscience Unit
Av. Professor Egas Moniz
1649-028 Lisboa
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EDUCATION

4/99 – 7/04	**Ph.D. in Molecular and Cell Biology** Whitehead Institute for Biomedical Research, MIT, Cambridge, USA University of Chicago (UC), Chicago, USA
7/98-9/98	**Teaching Training ("Curso de Formação de Formadores")** Employment Institute (IEFP), Portugal
9/94-9/98	**B.S. in Biochemistry** Faculty of Sciences – University of Porto, Porto, Portugal

RESEARCH AND PROFESSIONAL EXPERIENCE

12/07 – present	**Auxiliar Professor,** Instituto de Fisiologia, Faculdade de Medicina da Universidade de Lisboa, Portugal
5/07 – 7/08	**Visiting Scientist**, Massachusetts General Hospital, Harvard Medical School, Boston, USA.
5/07 – present	**Principal Investigator**, Institute of Molecular Medicine, University of Lisbon, Portugal
11/05	**Co-Founder,** BioEPI Clinical and Translational Research Center, Taguspark, Portugal
6/04-5/07	**Postdoctoral Research Fellow;** advisor Dr. Brad Hyman, MGH – Harvard University, USA
6/04-9/04	**Consultant and Research Scientist,** FoldRx Pharmaceuticals, Inc, Cambridge, USA Ph.D. work was transferred to the start up company FoldRx Pharmaceuticals, Inc.
4/99 – 8/04	**Graduate Research;** advisor Dr. Susan Lindquist The Whitehead Institute for Biomedical Research, MIT, Cambridge, USA University of Chicago, Chicago, USA
11/98-4/99	**Graduate Research**; advisor Prof. M. J. Saraiva University of Porto/IBMC, Porto, Portugal
2/98-9/98	**Undergraduate Research;** advisor Prof. John Findlay University of Leeds, Leeds, UK
9/97–2/98	**Research Assistant;** Centro de Estudos da Paramiloidose, Hospital Geral de Santo Antonio, Porto, Portugal

HONORS AND AWARDS

10/10	**Research Grant** from the Michael J. Fox Foundation, USA.
3/09	**Junior Faculty Award,** AD/PD Meeting, Prague, Czech Republic
12/08	**EMBO Installation Grant,** EMBO
7/08	**Aging Research Prize,** Portuguese Society for Neuroscience and Pfizer
3/08	**Best Scientific Article in 2007,** Portuguese Society for Neuroscience
8/07	**Marie Curie International Reintegration Grant,** European Commission
7/07	**Research Talent Award from the Portuguese Government**
7/07	**Science Talent Award from the Portuguese Government**
6/07	**Research Grant** from the Michael J. Fox Foundation, USA.
6/07	**Research Award** from the Calouste Gulbenkian Foundation (FCG)
7/05	**Massachusetts Biomedical Research Corporation, Tosteson Award,** Postdoctoral Fellowship
1/03	**Scholarship** from the Calouste Gulbenkian Foundation (FCG)
1/99 - 03	**PhD Scholarship** from the Foundation for Science and Technology (Portugal)

2/98	**Erasmus Scholarship** from the European Union
5/03	**Young Investigator Award**, Gordon Research Conference on Triplet Repeat Disorders
5/01	**Young Investigator Award**, Gordon Research Conference on Triplet Repeat Disorders
11/00	**Prize from ICBAS**, 1st Place award, 94-98 class at the Biomedical Institute, Porto, Portugal
9/00	**Prize from the Engineer Antonio de Almeida Foundation**, 1st Place award 94-98 class in Biochemistry, Porto, Portugal

PROFESSIONAL ACTIVITIES

May 2009 – present	Member of the Scientific Advisory Board for the European Huntington's Disease Network
July 2008 – present	Contributing Editor, European Journal of Neuroscience
2007 – present	International Forum of Portuguese Researchers (FIIP) – Vice-President
2007	Expert evaluator – European Commission, Framework Program 7
2007	Organizer of the PENS Summer School on: "Molecular Mechanisms in Neurodegeneration", Ofir, Portugal.
2006	Expert evaluator – European Commission, Framework Program 6
2006	Organizer of FENS Symposium: "CAG Triplet Repeat Disorders", Vienna, Austria.
2004	Organizer of FEBS Course: "Neurodegeneration and Disease", Ofir, Portugal.
9/02 – 9/03	Organizer of the Boston Area Yeast Meeting, Boston, USA
1/02 -present	Portuguese American Post-Graduate Association (PAPS) – President/Chairman Co-organizer of IV, V, VI and VII Forum of PAPS.
9/02	Organizer and Participant University of Aveiro Center for Cell Biology Symposium - Novel Therapeutic Opportunities in Neurodegenerative Disease
10/02 - 04	Whitehead Institute Scientist – Partnership for Education with teachers from Massachusetts
1/02	Organizer - MIT European Career Fair (over 2500 participants)
12/01	Organizer and Participant - Science for the Non-scientist - MIT Museum

PUBLICATIONS

da Costa G, Guerreiro A, Correia CF, Gomes RJ, Freire A, Monteiro E, Barroso E, Coelho AV, Outeiro TF, Freire AP, Cordeiro C.	A non-invasive method based on saliva to characterize transthyretin in familial amyloidotic polyneuropathy patients using FT-ICR high-resolution MS. Proteomics Clin Appl. 2010 Jul;4(6-7):674-8. PubMed PMID: 21179887
Büttner S, Delay C, Franssens V, Bammens T, Ruli D, Zaunschirm S, de Oliveira RM, Outeiro TF, Madeo F, Buée L, Galas MC, Winderickx J.	Synphilin-1 enhances α-synuclein aggregation in yeast and contributes to cellular stress and cell death in a Sir2-dependent manner. PLoS One. 2010 Oct 27;5(10):e13700. PubMed PMID: 21060871
Tauber E, Miller-Fleming L, Mason RP, Kwan W, Clapp J, Butler NJ, Outeiro TF, Muchowski PJ, Giorgini F	Functional gene expression profiling in yeast implicates translational dysfunction in mutant huntingtin toxicity. J Biol Chem. 2010 Nov 2. [Epub ahead of print] PubMed PMID: 21044956.
Diógenes MJ, Outeiro TF	Neurotrophic Factors as a Protective Strategy in Parkinson's Disease. CNS Neurol Disord Drug Targets. 2010 Nov 12. [Epub ahead of print] PubMed PMID: 20942787.
Outeiro TF, Kazantsev AG	Drug Discovery for CNS Disorders: From Bench to Bedside. CNS Neurol Disord Drug Targets. 2010 Nov 12. [Epub ahead of print] PubMed PMID: 20942783.
de Oliveira RM, Pais TF, Outeiro TF	Sirtuins: common targets in aging and in neurodegeneration. Curr Drug Targets. 2010 Oct;11(10):1270-80. PubMed PMID:

	20840069.
Marques SC, Oliveira CR, Pereira CM, Outeiro TF.	Epigenetics in neurodegeneration: A new layer of complexity. Prog Neuropsychopharmacol Biol Psychiatry. 2010 Aug 22. [Epub ahead of print] PubMed PMID: 20736041.
de Oliveira RM, Pais TF, Outeiro TF.	Sirtuins: Common Targets in Aging and in Neurodegeneration. Curr Drug Targets. 2010 Jul 1. [Epub ahead of print] PubMed PMID: 20594174.
Tenreiro S, Outeiro TF.	Simple is good: yeast models of neurodegeneration. FEMS Yeast Res. 2010 May 20. [Epub ahead of print] PubMed PMID: 20579105.
Gonçalves SA, Matos JE, Outeiro TF.	Zooming into protein oligomerization in neurodegeneration using BiFC. Trends Biochem Sci. 2010 Jun 17. [Epub ahead of print] PubMed PMID: 20561791.
Marques SC, Oliveira CR, Outeiro TF, Pereira CM.	Alzheimer's Disease: The Quest to Understand Complexity. J Alzheimers Dis. 2010 Jun 16. [Epub ahead of print] PubMed PMID: 20555132.
Nakhjavani M, Morteza A, Khajeali L, Esteghamati A, Khalilzadeh O, Asgarani F, Outeiro TF.	Increased serum HSP70 levels are associated with the duration of diabetes. Cell Stress Chaperones. 2010 May 23. [Epub ahead of print] PubMed PMID: 20496051.
Miranda, HV, and Outeiro, TF	The sour side of neurodegenerative disorders: the effects of protein glycation. J Pathol. 2010 May;221(1):13-25. Review. PubMed PMID: 20186922.
Outeiro TF, Su LJ, Auluck PK, Yeger-Lotem E, Kritzer JA, Tardiff DF, Strathearn KE, Liu F, Cao S, Hamamichi S, Hill KJ, Caldwell KA, Bell GW, Fraenkel E, Cooper AA, Caldwell GA, McCaffery JM, Rochet JC, Lindquist S.	Compounds from an unbiased chemical screen reverse both ER-to-Golgi trafficking defects and mitochondrial dysfunction in Parkinson's disease models. Dis Model Mech. 2009 Dec 28.
Marques, O., Oliveira, RM., Moita, LF, and Outeiro, TF.	Sirtuins as a link between ageing and neurodegeneration, Neurodegenerative Diseases, 2009.
da Costa G, Gomes R, Correia CF, Freire A, Monteiro E, Martins A, Barroso E, Coelho AV, Outeiro TF, Ponces Freire A, Cordeiro C.	Identification and quantitative analysis of human transthyretin variants in human serum by Fourier transform ion-cyclotron resonance mass spectrometry. Amyloid. 2009 Dec;16(4):201-207.
Ferreira, J. and Outeiro, TF	Current and Future Therapeutic Strategies for Parkinson's Disease, Curr Pharm Des. 2009 Sep 15.
Outeiro, TF, Klucken, J, Bercury, K, Tetzlaff, J, Putcha, P, Oliveira, LM, Quintas, A, McLean, PJ, and Hyman, BT	Dopamine-Induced Conformational Changes in Alpha-Synuclein, PLoS One. 2009 Sep 4;4(9):e6906.
Outeiro, TF	From Mad Cows to Neurotic Yeast: Novel Molecular Approaches to Understand Neurodegeneration. Microsc Microanal. 2008 Sep;14 Suppl 3:105-6.
Mollenhauer B, Cullen V, Kahn I, Krastins B, Outeiro TF, Pepivani I, Ng J, Schulz-Schaeffer W, Kretzschmar HA, McLean PJ, Trenkwalder C, Sarracino DA, Vonsattel JP, Locascio JJ, El-Agnaf OM, Schlossmacher MG.	Direct quantification of CSF alpha-synuclein by ELISA and first cross-sectional study in patients with neurodegeneration. Exp Neurol. 2008 Jun 14. [Epub ahead of print]
Tetzlaff JE, Putcha P, Outeiro TF, Ivanov A, Berezovska O, Hyman BT, McLean PJ.	CHIP Targets Toxic {alpha}-Synuclein Oligomers for Degradation. J Biol Chem. 2008 Jun 27;283(26):17962-8. Epub 2008 Apr 24.
Outeiro, T.F., et al.	Formation of toxic oligomeric a-synuclein species in living cells, PloS ONE, 2008 Apr 2;3(4):e1867.
Outeiro, T.F. and Kazantsev, A.	Drug Targeting of α-Synuclein Oligomerization in Synucleinopathies, Perspectives in Medicinal Chemistry

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Fleming, L., Giorgini, F. and Outeiro, T.F.	Yeast as a model to study human neurodegenerative disorders, Biotechnology J., 2008. Mar;3(3):325-38.
*Grammatopoulos TN, *Outeiro TF, Hyman BT, Standaert DG.	Angiotensin II protects against alpha-synuclein toxicity and reduces protein aggregation in vitro. Biochem Biophys Res Commun. 2007 Sep 21; [Epub ahead of print]
Outeiro, T.F., et al.	Sirtuin 2 inhibition protects against a-synuclein toxicity in Parkinson's disease models, Science. 2007 Jul 7;317(5837):516-9.
Outeiro, T.F., Grammatopoulos, TN, Altmann, S., Amore, A., Standaert, D.G., Hyman, B.T., Kazantsev, A.G.	Pharmacological Inhibition of PARP-1 Reduces Alpha-Synuclein- and MPP+-Induced Cytotoxicity in Parkinson's Disease In Vitro Models, BBRC, 2007, Jun 8;357(3):596-602.
Outeiro, T.F. and Tetzlaff, J.	Mechanisms of Disease II – Cellular Protein Quality Control, Seminars in Pediatric Neurology, 2007 Mar;14(1):15-25.
St. Martin, J, Klucken, J., Outeiro, T.F., Nguyen, P., Keller-McGandy, C., Cantuti-Castelvetri, I., Grammatopoulos, T., Standaert, D., McLean, P.J. and Hyman, B.T.	Selevtive Dopaminergic Neuron Loss and Upregulation of Chaperone Protein mRNA in an Adeno-Associated Viral Vector Model of Parkinson's Disease, J. Neurochem, 2007 Mar;100(6):1449-57.
Outeiro TF, Klucken J, Strathearn KE, Liu F, Nguyen P, Rochet JC, Hyman BT, McLean PJ.	Small heat shock proteins protect against alpha-synuclein-induced toxicity and aggregation. Biochem Biophys Res Commun. 2006 Dec 22;351(3):631-8.
Klucken, J., Outeiro, T.F., Nguyen, P., McLean, P.J. and Hyman, B.T.	Detection of novel intracellular a-synuclein oligomeric species by fluorescence lifetime imaging, FASEB J., FASEB J. 2006 Oct;20(12):2050-7
Outeiro, T.F.	A bridge from Portugal to the States. Nature. 2006 Sep 7;443(7107):118.
Bodner, R., Outeiro, T.F., Altman, S., Maxwell, M.M., Cho, S. H., Hyman, B.T., McLean, P.J., Young, A.B., Housman, D. E. and Kazantsev, A. G.	Pharmacological promotion of inclusion formation: A therapeutic approach for Huntington's and Parkinson's disease, PNAS, 2006; 103 (11): 4246-4251
Outeiro, T.F. and Giorgini, F.	Yeast as a drug discovery platform in Huntington's and Parkinson's diseases, Biotecnol. J, 2006: 1(3): 258-269
Outeiro, T.F. and Muchowski, P.J.	Molecular genetics approaches in yeast to study amyloid diseases. J Mol Neurosci. 2004;23(1-2):49-60
Rochet JC, Outeiro TF, Conway KA, Ding TT, Volles MJ, Lashuel HA, Bieganski RM, Lindquist SL, Lansbury PT	Interactions Among alpha-Synuclein, Dopamine, and Biomembranes: Some Clues for Understanding Neurodegeneration in Parkinson's Disease. J Mol Neurosci. 2004;23(1-2):23-34
Derkatch, I., Uptain, S., Outeiro, T.F., Liebman, S. and Lindquist, S.	Effects of Q/N, polyQ and non-polyQ amyloids on the *de novo* formation of the [*PSI*$^{+}$] prion in yeast and aggregation of Sup35 *in vitro*, PNAS, 2004; 101(35) 12934-9.
Outeiro, T.F. and Lindquist	Yeast cells provide insight into alpha-synuclein biology and pathobiology. Science. 2003 Dec 5;302(5651):1772-5
Willingham, S, Outeiro, T.F., Devit, MJ, Lindquist, S and Muchowski, PJ	Yeast genes that enhance the toxicity of a mutant huntingtin fragment or alpha-synuclein. Science. 2003 Dec 5;302(5651):1769-72
Resende, CG, Outeiro, T.F., Sands, L, Lindquist, S and Tuite, M	Prion protein gene polymorphisms in Saccharomyces cerevisiae. Mol Microbiol. 2003 Aug;49(4):1005-17

BOOKS

Vaqueiro-Lopes, L. and Outeiro, T.F.	Synaptic dysfunction in Parkinson's disease: from protein misfolding to functional alterations, 2010.
Marques, S.C. F., Pereira, C.M.F., Outeiro, T.F.	Epigenetics and Neurodegeneration: A Connection Overlooked, Novascience, in press.
Gitler, A. and Outeiro, T.F.	Unravelling the Molecular Basis of Parkinson's Disease Using Yeast Models, 2010.
Outeiro, T.F., editor	Protein Misfolding in Biology and Disease, Research Signpost, Novascience 2009.

Outeiro, T.F. and Kazantsev, A.	Therapeutic Intervention in the Neurotoxicty of Misfolded Proteins, 2009.
Outeiro, T.F. and Hyman, B.T.	Protein Aggregation Disorders, *in* Neurobiology of Disease, 2006.
Singer, M., Outeiro, T.F. and Lindquist, S.	Thermotolerance, Metabolism and Development: The Many Flavors of Trehalose, *in* Food Biotechnology, 2005.

PATENTS

Outeiro, T.F., Lindquist, S., Labaudiniere, Fleming, J., R., Bulawa, C.	INHIBITION OF A-SYNUCLEIN TOXICITY. U.S. 60/787,113
Outeiro, T. F., and Lindquist, S.	YEAST ECTOPICALLY EXPRESSING ABNORMALLY PROCESSED PROTEINS AND USES THEREFOR
Outeiro, T.F., Krobitsch, S. and Lindquist, S.	YEAST AS A MODEL SYSTEM FOR NEURODEGENERATIVE DISEASE

SELECTED INVITED TALKS

January 2011	Lund University, Sweden
October 2010	University of Granada, Spain
September 2010	University of Aarhus, Denmark
August 2010	Istanbul Technical University, Turkey
February 2010	University of Gottingen, Germany
July 15, 2009	University of Ulm, Germany
July 13, 2009	European Society for Neurochemistry, Leipzig, Germany
July 11, 2009	Kopfklinic, Erlangen, Germany
June 4, 2009	Amsterdam, The Netherlands
May 12, 2009	Bilkent University, Turkey
March, 2009	University of Leuven, Belgium
December 5, 2008	University of Leicester, UK
November 2008	Instituto de Tecnologia Química e Biológica, Lisbon, Portugal
September 2008	EPFL, Lausanne, Switzerland
Febryary 27, 2008	From Mad Cows to Neurotic Yeast: Novel Strategies to Understand Neurodegeneration. Faculdade de Ciências de Lisboa, Portugal
February 20, 2008	Mad Cows, Neurotic Yeast, and Back to the Future. Fundação Calouste Gulbenkian
December 13, 2007	Unraveling the molecular mechanisms of neurodegeneration: From cells to drugs, Uppsala University, Sweden
November 22, 2007	Top Models: What are they teaching us about Parkinson's Disease. Neurodegenerative diseases: Science and the Mind. Faculty of Pharmacy, Lisbon, Portugal.
November 19, 2007	From Academia to Biotech: US and Portuguese Examples. Pharmaceutical Innovation: A New R&D Strategy in the EU. Viseu, Portugal.
October 26, 2007	Applied Biology Forum. University of Minho, Braga, Portugal.
October 16, 2007	Science and Technology in Portugal. Fórum Novas Fronteiras, Centro Cultural de Belém, Lisboa, Portugal. Promoted by and with the participation of the Prime Minister of Portugal.

SELECTED POSTGRADUATE TEACHING

January 2011	Neurodegenerative Diseases Course, Gulbenkian PhD Program for Medical Doctors.
December 2010	Master's/PhD in Neurosciences, Faculty of Medicine, Lisbon
June 2010	PhD Program, University of Coimbra
February 2010	Neurodegenerative Diseases Course, Gulbenkian PhD Program for Medical Doctors.
July 2009	PENS Summer School, Gunzburg, Germany
March 2009	ITQB PhD Program
February 2009	Neurodegenerative Diseases Course, Gulbenkian PhD Program for Medical Doctors.
January 2009	Protein Misfolding Course, GABBA PhD Program.

November 2008	Protein Misfolding in Biology and Disease, Master's Program in Neurosciences, Faculty of Medicine, Lisbon, Portugal.
February 2008	Secrets of the genome and biobanks of secrets, Center for Biomedical Law, University of Coimbra
January 2008	PhD Program, University of Coimbra
December 2007	Protein Misfolding in Synucleinopathies, Faculty of Sciences and Technology, Monte da Caparica, Portugal.
December 2007	Protein Misfolding in Biology and Disease, Master's Program in Neurosciences, Faculty of Medicine, Lisbon, Portugal.
July 2007	PENS Summer School, Ofir, Portugal.
July 2004	FEBS Summer School, Ofir, Portugal.