Curriculum Vitae - MARCH 2023



Maria José Braga Marques Ribeiro, PhD

University of Coimbra Coimbra Institute for Biomedical Imaging and Translational Research (CIBIT), ICNAS and Faculty of Medicine Azinhaga de Santa Comba, Celas, 3000-548 Coimbra, Portugal Tel: +351 915 234 593 | E-mail: mjribeiro [at] fmed.uc.pt <u>GoogleScholar</u> | ORCID: <u>0000-0001-6422-3279</u> Twitter: <u>@Ribeiro_neurosc</u> | Website: <u>neuroscience.pt</u>

PROFESSIONAL EXPERIENCE

- **2018-present** Research Associate (*Investigadora Doutorada de nível inicial*) at the Faculty of Medicine and Coimbra Institute for Biomedical Imaging and Translational Research (CIBIT), Institute of Nuclear Sciences Applied to Health (ICNAS) of the University of Coimbra, Portugal
- **2015-2018** FCT Postdoctoral Fellow at iCBR/IBILI, Faculty of Medicine, University of Coimbra, Portugal. Individual fellowship with reference SFRH/BPD/102188/2014. Supervisor: Professor Miguel Castelo-Branco. Project title: The ageing of neuromodulation and the slowdown of cognitive processing
- **2011-2014** Research Associate (*Investigadora Auxiliar Convidada*) at IBILI, Faculty of Medicine of the University of Coimbra. Three-year position funded by the QREN project "Do It: Desenvolvimento e Operacionalização da Investigação e Translação"
- **2007-2011** FCT Postdoctoral Fellow at IBILI, Faculty of Medicine, University of Coimbra, Portugal. Individual fellowship with reference SFRH/BPD/34392/2006. Supervisor: Professor Miguel Castelo-Branco. Project title: Mechanisms of disease underlying cognitive dysfunction in Neurofibromatosis type 1
- **2003-2006** Research Fellow at the School of Life Sciences of the University of Sussex, Brighton, UK. Postdoctoral contract funded by the Biotechnology and Biological Sciences Research Council. Supervisors: Professor Paul Benjamin and Professor Michael O'Shea. Project title: An integrated approach to long-term memory formation

EDUCATION

1998-2003 PhD in Neuroscience by the Graduate Division of Biology of the University of Sussex, Brighton, UK. Thesis: Molecular mechanisms of appetitive learning in the pond snail *Lymnaea stagnalis*. Supervisor: Professor Paul Benjamin; Co-supervisor: Professor George Kemenes

1996-1997 Advanced courses in Biology – 1st year of the Gulbenkian's PhD programme in Biology and Medicine.
 1992-1996 BSc degree in Physics by the Faculty of Sciences of the University of Porto, Portugal

COORDINATION AND PARTICIPATION IN SCIENTIFIC PROJECTS

AS PRINCIPAL INVESTIGATOR

- **2022-ongoing** A functional account of the noradrenergic system in healthy ageing and decision-making. FCT. Ref: EXPL/PSI-GER/0349/2021
- **2008-2012** Genetics and brain function in Neurofibromatosis type 1. Instituto de Investigação Interdisciplinar, University of Coimbra. Ref: III/14/2008

AS TEAM MEMBER

- **2012-2015** Translating the Inhibition Hypothesis in Neurofibromatosis Type 1 into the Human Disease.
- PI Professor Miguel Castelo-Branco. FCT Ref: PTDC/SAU-ORG/118380/2010
- **2009-2012** Vision and action processing in neurodevelopmental disorders: from disease mechanisms to new interventional strategies. PI Professor Miguel Castelo-Branco. FCT Ref: PIC/IC/82986/2007
- **2009-2013** Mechanisms of neurosensorial inhibition associated with the cognitive deficits in Neurofibromatosis type 1: psychophysics, neurophysiology and functional and structural neuroimaging.

PI - Professor Eduardo Silva. FCT Ref: PIC/IC/83155/2007

- **2003-2006** An integrated approach to long-term memory. Research Fellow at the School of Life Sciences of the University of Sussex, Brighton, UK. PI Professor Paul Benjamin. BBSRC
- **2002** Research Officer at the School of Life Sciences of the University of Sussex, Brighton, UK. PI Professor Paul Benjamin. BBSRC

OTHER MANAGING ROLES

2017-present	Founding member and coordinator of the <u>European Network of Postdoctoral Associations (ENPA</u>	<u>()</u>
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- 2015-present Coordinator of the Projects' Committee of the Postdocs@UC Forum
- 2015-2017 Elected Representative of CNC.IBILI Postdoctoral Researchers
- 2011-2015 Member of the coordinating committee of the Postdoc Forum PF2MUC

SUPERVISION AND GUIDANCE ACTIVITIES

PHD THESIS ADVISOR

Ongoing	Supervisor of PhD student Hicran Beşikci, in collaboration with the Faculty of Sport Sciences and Physical Education of the University of Coimbra
	Integrating cognitive and physical exercise to enhance brain arousal and improve cognitive function in older people with a focus on decision-making
Ongoing	Co-supervisor of PhD student Kaan AKALP, in collaboration with the Faculty of Sport Sciences and Physical Education of the University of Coimbra
	The mediating effects of aerobic and cognitive training on cognition and markers of neurogenesis and neuroinflammation in older persons with or without mild cognitive impairment
Ongoing	Co-supervisor of PhD student, Filipa Júlio. Faculty of Psychology, University of Coimbra
	Everyday Executive Function in Parkinson and Huntington Disease: a novel ecological approach
2009-16	Co-supervisor of PhD student, João Valente Duarte. FMUC
	The role of long-range neural oscillatory synchrony as a mechanism underlying perceptual coherence
	(concluded with distinction and praise)

MSC THESIS ADVISOR

Ongoing Sara Oliveira, Biomedical Engineering – in collaboration with Luís Rama and Ana Maria Teixeira, Faculty of Sport Sciences and Physical Education, University of Coimbra *The effect of exercise on noradrenergic activation in older adults* Ongoing Ana Marques, Biomedical Engineering – in collaboration with Davide Borra, University of Bologna and Marco Simões, Department of Informatics Engineering - University of Coimbra *Using the body to help predict the brain: integration of body and brain physiological signals to decode neural responses to objects.* 2021-23 Gonçalo Santos, Biomedical Eng. – in collaboration with Gabriel Costa, University of Coimbra *A study of cortical mechanisms for solving ambiguity using non-invasive human electrophysiology*

2021-22	Rogério Medeiros, Biomedical Engineering – in collaboration with Marco Simões and Paulo Carvalho,
	Department of Informatics Engineering - University of Coimbra
	Heart-brain interaction in visual perception (concluded)
2021-22	Guilherme Oliveira, Biomedical Engineering- in collaboration with Gabriel Costa University of Coimbra
	Decision in visual perception: cortical mechanisms in the interpretation of ambiguous visual stimuli
2020-22	Nuno Sousa, Engineering Physics, University of Coimbra
	Body-brain interactions in visual perception (concluded)
2019-20	Catarina Gomes, Biomedical Engineering, University of Coimbra.
	<u>Age-related Changes in Arousal Modulation during Perceptual Decision-making</u> (concluded)
2016-17	Andreia Verdade, Biomedical Engineering, University of Coimbra.
	<u>Motor excitability modulation during the delay period - a TMS and pupillometry study</u> (concluded)
2016-17	Lea Velez, Biomedical Engineering, University of Coimbra.
	Computational model of the effect of alpha oscillatory phase on the timing of neuronal activations and
	<u>resulting motor responses</u> (concluded)
2014-16	Inês Vaz, Biomedical Engineering, UC - in collaboration with Joana Cabral Oxford University.
	<u>Computational modelling of brain states</u> (concluded)
2014-15	António Almeida, Biomedical Eng, UC - in collaboration with Joana Cabral Oxford University.
	<u>Role of inter-hemispherical connections in resting-state functional connectivity</u> (concluded)
2013-14	Joana Paiva, Biomedical Engineering, University of Coimbra. (concluded)
	Predicting lapses in attention: a study of brain oscillations, neural synchrony and eye measures
2009-10	Otília Cardoso d'Almeida, Biomedical Engineering, University of Coimbra. (concluded)
	<u>A disease model to understand neural mechanisms of visual perception, Neurofibromatosis type 1</u>

INTERNATIONAL ERASMUS STUDENTS

2022	Francesca Aprile, Industrial Bioengineering, University of Naples Federico II, Italy
	Heart-brain interactions in ageing

UNDERGRADUATE RESEARCH PROJECTS

- **Ongoing** Bárbara Marques Rodrigues, Biomedical Engineering, FCTUC. *Magnetic resonance imaging of the human locus coeruleus in ageing.*
- **2022** Filipa Machado, Biomedical Engineering, FCTUC. *Brain-body interactions in visual perception*.
- **2022** Ana Sofia Monteiro, Biomedical Engineering, FCTUC. *Decision-making under uncertainty across the lifespan.*
- 2021-2023 Supervision of Biomedical Engineering students. Internships organized by the Institute of Electrical and Electronics Engineers (IEEE) program Colab Sessions
 - Dulce Travassos Effect of stimulus position on ambiguous motion perception (ongoing)
 - Ana Marques The effect of ageing on brain structure (2022)
 - Sara Oliveira Decision-making under uncertainty across the lifespan (2022)
 - Nuno Rodrigues Classification of visual evoked potentials according to image categories (2022)
 - Filipa Moreira *Decision-making under uncertainty (2021)*
 - Ana Gabriela Mendes *Modulation of cardiac cycle during decision-making (2021)*
- **2020** Supervision of Biology students, FCTUC Daniela Nunes and Simão Olaio. Research project: *Analysis of whitematter brainstem tracks using diffusion tensor imaging data*. Co-supervised by José Bourbon-Teles.

Since 2015 Collaboration in the annual supervision of international medical students within the scope of the exchange organized by the International Federation of Medical Student's Associations, involving discussion of ongoing scientific projects, and science demonstrations.

2017 Italian medical student, Maria Luisa Poli. *The effect of ageing on heart rate and heart rate variability*. Exchange organized by the International Federation of Medical Student's Associations.

- **2017** Research project of Biomedical Engineering student, FCTUC Gonçalo Duarte. *Analysis of heart rate and heart rate variability*.
- **2013** Research project of Biomedical Engineering student, FCTUC Joana Paiva. *Development of a psychophysical task to study lapses of attention*.
- **2005** Undergraduate research project at University of Sussex, Brighton, UK. Activation of MAPK in long-term memory formation following classical conditioning in Lymnaea stagnalis.

MEMBER OF MSC THESIS JURY

- **2021** Ana Rita Paulete Correia, Biomedical Engineering, FCTUC. Title: Assessing Emotional States from Biosignals in Autistic and Neurotypical Developed Individuals
- **2021** Ana Catarina Rocha Oliveira, Biomedical Engineering, FCTUC. Title: *Sleep-Awake cycle evaluation from longterm EEG data: assessing the impact in epilepsy seizure prediction*
- **2021** Mariana Isabel da Silva Tavares, Biomedical Engineering, FCTUC. Title: *EEG Epilepsy Seizure Prediction: the Post-Processing Stage as a Chronology*
- **2020** Manuel da Silva Santos, Biomedical Engineering, FCTUC. Title: *Brain signals of perceptual inference: the role of oscillations in interpreting ambiguous stimuli*
- **2019** Júlio Cordeiro Medeiros, Biomedical Engineering, FCTUC. Title: *Software code complexity assessment using EEG features: Towards a new software engineering paradigm using biofeedback*
- **2017** Mariana Cortesão, Biomedical Engineering, FCTUC. Title: A robust classifier for the automatic detection of transient events in sleep EEGs
- **2017** Daniel Tavares Ribeiro, Biomedical Engineering, FCTUC. Title: *Desenvolvimento de Sistemas para Recolha, Processamento e Análise de Sinal de EEG para deteção de Sonolência*
- **2014** Sara Santos, Biomedical Engineering, FCTUC. Title: *The role of the core and extended face networks in visual perception and high-level social cognition*
- **2014** Gilberto Silva, Biomedical Engineering, FCTUC. Title: A direct test of the binding by synchrony hypothesis in humans: the neural correlates of the coherent object perception
- 2012 Sónia Madeira Gomes, Medicine, FMUC. Title: Functional Localizers as a tool for clinical mapping
- **2011** Carlos Amaral, Biomedical Engineering, FCTUC. Title: *Decoding neuronal patterns resulting from visual responses to animations*
- **2011** Nuno Lopes, Biomedical Engineering, FCTUC. Title: *Monitorização cerebral inteligente durante a anestesia* (*MONIA*)
- **2011** André Santos, Biomedical Engineering, FCTUC. Title: *Visual-callosal white matter pathways in Neurofibromatosis type 1: a diffusion tensor imaging fiber tracking study*

TEACHING

GRADUATE TEACHING

- Since 2011 Lecturer in the Biophysics course of the FMUC's Doctoral Programme for Health Sciences
- Since 2020 Lecturer in EIT Health Ageing PhD School, Advanced Imaging Methods in Neuroscience
- 2011-12 Lecturer in the Career course of the FMUC's Doctoral Programme for Health Sciences
- **2009-10** Lecturer in the course "Structure-function correlations in biomedicine: lessons from the nervous system" of the FMUC's Doctoral Programme for Health Sciences
- **2008-09** Lecturer in the Neurodevelopment course of the UC's Doctoral Programme in Psychology

UNDERGRADUATE TEACHING

Associate tutor at the Biology Department of the University of Sussex, Brighton, United Kingdom, teaching practical and tutorial classes on the following courses:

- 2006-07 Human Physiology Neuroscience and Behaviour
- 2004-05 Animal Behaviour Neuroscience and Behaviour Human Physiology
- 2000-01 Neuroscience Techniques Eukaryotic Genetics

SUMMER SCHOOLS

Since 2021 Lecturer at <u>CIBIT's Summer School</u> on neuroscience for undergraduate and master's students.

2012-13 Lecturer in the 1st International Summer School on Advances in Ophthalmic Optics and Optometry 'Learning Related Vision Problems', Aveiro 14-16 September 2012

ACTIVE PARTICIPATION IN THE COMMUNITY

COLLABORATION IN REVIEWING

AD HOC EVALUATION OF RESEARCH GRANTS

Member of the National Fellowships Committee for Graduate Women in Science (<u>www.gwis.org</u>), 2018. Referee for the Research Foundation - Flanders (FondsWetenschappelijkOnderzoek - Vlaanderen), 2014.

AD HOC REVIEWER

Journals: Neurobiology of Aging, Human Brain Mapping, Neuroscience Letters, Investigative Ophthalmology & Visual Science (IOVS), Clinical Neurophysiology, American Journal of Medical Genetics Part B: Neuropsychiatric Genetics, Biological Psychology, Brain Research, Games for Health Journal, The Journal of Integrative Neuroscience, Brazilian Journal of Medical and Biological Research, AIMS Neuroscience, Future Neurology, Brain Sciences and Clinical Ophthalmology.

Abstracts' referee for the Annual Meeting of the OHBM 2011, 2014 and 2017.

MEETINGS ORGANIZATION

- 2020 Co-organization of Researcher's Day @ University of Coimbra, 24th Nov 2020
- **2017** Member of the local organizing committee of the 7th Iberian Congress on Perception, July 6-7th, 2017, in Coimbra, Portugal
- **2016** Member of the organizing committee of the 6th CNC.IBILI Postdoc Forum Symposium: <u>Variability and</u> <u>adaptation in neurons and circuits</u>. Faculty of Medicine, University of Coimbra
- **2014-16** Member of the organizing committee of Wondrous Wednesdays | Postdoc Science Club informal scientific discussions between post-doctoral scientists of FMUC, CNC and IBILI, aiming at providing a platform for scientific growth.
- **2013** Member of the organizing committee of the 4th PF2MUC Symposium: Personalized Medicine: myth or reality? Faculty of Medicine, University of Coimbra

2013 Member of the organizing committee of the 3rd PF2MUC Symposium: Neurobiology of learning and memory Faculty of Medicine, University of Coimbra

SCIENCE OUTREACH

Regular participation in activities organized within the scope of *Brain Awareness Week* and *Science and Technology Week* - demonstrations of cognitive neuroscience techniques, including visits to schools and open labs.

- **Ongoing** Team member of funded project bringing science to primary school children, starting in Sep 2022 and running for two school years at the Escola Básica de Montes Claros in Coimbra.
- **2021** Participation in round table discussion and with recorded video about my science work aimed at children and adolescents within the scope of the <u>Multilingual kids review for OHBM 2021</u>

- **2020** Invited speaker at the <u>Women in Science and Technology: Breakthroughs & Current Figures</u>, organized by IEEE UC Student Branch
- 2018 Science demonstration at the Oliveira do Bairro's Science Festival
- **2018** Speaker at <u>2ª Edição da Semana Aberta da Escola de Educação Sénior</u>: presentation of study results for students of the Coimbra's University of Third Age, Instituto Humanus
- 2016 Invited speaker at ComceptCon 2016: Esmiuçar o Cérebro
- **2016** Vision workshop for 6th grade students at Agrupamento de Escolas Infante D. Pedro de Penela
- 2016 Mentor for The Junior Academy of the New York Academy of Sciences
- **2015** Coordination of an <u>advanced course on visual neuroscience</u> at the Instituto de Educação e Cidadania Mamarrosa, Oliveira do Bairro 7 weeks practical course for secondary school students
- 2014 "Vem Fazer Muita Ciência (Vem à FMUC)" Scientific Rail at FMUC for secondary school students
- **2013** Presentation of scientific results to hospital staff at the Centro de Desenvolvimento da Criança do Hospital Garcia de Orta
- 2012 Discover your brain activity for families at the Science Museum of the University of Coimbra
- **2010** Presentation of scientific results and ongoing study to patients and their families at the Portuguese Neurofibromatosis Patients' Association (APNF), Lisbon

PUBLICATIONS

	Year	Quartile (JCR)	Citations	Impact Factor year of publication
Reference			Google Scholar	
Ribeiro MJ, Castelo-Branco M.				
Slow fluctuations in ongoing brain activity decrease in amplitude	2022	01	1	0 1 4 0
with ageing yet their impact on task-related evoked responses is dissociable from behavior	2022	Q1	1	8.140
Elife;11:e75722. DOI: 10.7554/eLife.75722.				
Júlio F, Ribeiro MJ, Morgadinho A, Sousa M, van Asselen M, et al.				
Cognition, function and awareness of disease impact in early				
Parkinson's and Huntington's disease	2022	Q1	3	2.222
Disability and Rehabilitation Mar;44(6):921-939. Epub 2020 Jul 3.				
DOI: 10.1080/09638288.2020.1783001				
Ribeiro MJ, Castelo-Branco M.				
Neural correlates of anticipatory cardiac deceleration and its				
association with the speed of perceptual decision-making, in	2019	Q1	16	5.426
young and older adults.	2015	QI	10	5.420
Neuroimage. Jun 5;199:521-533.				
DOI: 10.1016/j.neuroimage.2019.06.004				
Ribeiro M.J. and Castelo-Branco M.				
Age-related differences in event-related potentials and pupillary	2010	04	0	
responses in cued reaction time tasks.	2019	Q1	9	4.454
Neurobiology of Aging. Vol. 73: 177-189				
DOI: 10.1016/j.neurobiolaging.2018.09.028 Júlio F, Ribeiro MJ, Patrício M, Malhão A, Pedrosa F, Gonçalves H,				
Simões M, van Asselen M, Simões MR, Castelo-Branco M,				
Januário C				
A Novel Ecological Approach Reveals Early Executive Function	2019	Q1	12	2.129
Impairments in Huntington's Disease	2015	Q.1	12	2.125
Frontiers in Psychology. Vol. 10: 585				
DOI: 10.3389/fpsyg.2019.00585				
Rodrigues, A.P., Rebola, J., Jorge, H., Ribeiro, M.J., Pereira, M.,				
Castelo-Branco., M. and van Asselen, M.				
Visual perception and reading: new clues to patterns of				
dysfunction across multiple visual channels in developmental	2017	Q1	16	3.388
dyslexia.				
Investigative Ophthalmology & Visual Science. Vol. 58: 309–317.				
DOI: 10.1167/iovs.16-20095				
Rodrigues A.P., Rebola J, Jorge H, Ribeiro MJ, Pereira M, Castelo-				
Branco M, van Asselen M.				
Evidence for a differential interference of noise in sub-lexical and	2017	Q3	2	1.796
lexical reading routes in healthy participants and dyslexics. Cogn Neuropsychol. Mar 29: 1-10.				
DOI: 10.1080/02643294.2017.1299001				
Ribeiro, M.J., Paiva, J.S., and Castelo-branco, M.				
Spontaneous fluctuations in sensory processing predict within-				
subject reaction time variability.	2016	Q1	24	3.209
Frontiers in Human Neuroscience. May 9; 10: 200.		~		
DOI: 10.3389/fnhum.2016.00200				
Silva, G., Ribeiro, M.J., Violante, I.R., Costa, G., Castelo-Branco, M.				
Peripheral attentional targets under covert attention lead to				
paradoxically enhanced alpha desynchronization in	2016	01	7	2.806
Neurofibromatosis Type 1.	2010	Q1	7	2.000
PLoS One. Feb 16; 11(2):e0148600.				
DOI: 10.1371/journal.pone.0148600				

Reference	Year	Quartile (JCR)	Citations Google Scholar	Impact Factor year of publication
Ribeiro M.J., Violante I.R., Edden R.A.E. and Castelo-Branco M. Abnormal relationship between GABA, neurophysiology and				
impulsive behavior in neurofibromatosis type 1.	2015	Q1	60	4.314
Cortex. Vol. 64: 194-208. DOI: 10.1016/j.cortex.2014.10.019				
Duarte, J. V., Ribeiro, M. J., Violante, I. R., Cunha, G., Silva E. and Castelo-Branco, M.				
Multivariate pattern analysis reveals subtle brain anomalies				
relevant to the cognitive phenotype in NF1.	2014	Q1	44	5.969
Human Brain Mapping. Jan; 35(1):89-106.				
DOI: 10.1002/hbm.22161				
Ribeiro, M. J., D'Almeida, O. C., Ramos, F., Saraiva, J., Silva E. and Castelo-Branco, M.				
Abnormal late visual responses and alpha oscillations in	2014	Q1	20	3.268
Neurofibromatosis type 1: a link to visual and attention deficits.				
Journal of Neurodevelopmental Disorders. Vol. 6(1): 4.				
Violante I.R., Ribeiro M.J., Edden R.A.E., Guimarães P., Bernardino				
I., Rebola J., Cunha G., Silva E and Castelo-Branco M.				
GABA deficit in the visual cortex of patients with NF1: genotype- phenotype correlations and functional impact.	2013	Q1	66	10.226
Brain. Vol. 136(Pt 3): 918-25.				
DOI: 10.1093/brain/aws368				
Violante IR, Ribeiro MJ, Silva E and Castelo-Branco M.				
Gyrification, cortical and subcortical morphometry in				
Neurofibromatosis type 1: an uneven profile of developmental	2013	Q1	41	3.705
abnormalities.				0.100
Journal of Neurodevelopmental Disorders. Vol. 5(3):3. DOI: 10.1186/1866-1955-5-3				
Violante IR, Ribeiro MJ, Cunha G, Bernardino I, Duarte JV, Ramos				
F, Saraiva J, Silva E, Castelo-Branco M				
Abnormal Brain Activation in Neurofibromatosis Type 1: A Link	2012	01	40	2 720
between Visual Processing and the Default Mode Network.	2012	Q1	42	3.730
PLoS One. Vol. 7(6):e38785. Epub 2012 Jun 18.				
DOI: 10.1371/journal.pone.0038785				
Ribeiro, M.J., Violante, I. R., Bernardino, I., Ramos, F., Saraiva, J., Reviriego, P., Upadhyaya, M., Silva, E. and Castelo-Branco, M.				
Abnormal achromatic and chromatic contrast sensitivity in				
Neurofibromatosis type 1.	2012	Q1	22	3.441
Investigative Ophthalmology & Visual Science. Vol. 53(1):287-93.				
DOI: 10.1167/iovs.11-8225				
Ribeiro, M. J. and Castelo-Branco, M.				
Psychophysical channels and ERP population responses in				
human visual cortex: area summation across chromatic and achromatic pathways.	2010	Q1	8	3.441
Vision Research, Vol. 50 №. 13, 1283-91.				
DOI: 10.1016/j.visres.2010.04.017				
Ribeiro M, Schofield M, Kemenes I, Benjamin PR, O'Shea M,				
Korneev SA.				
Atypical guanylyl cyclase from the pond snail Lymnaea stagnalis:	2010	Q1	10	3.215
cloning, sequence analysis and characterization of expression.				
Neuroscience, Vol. 165, 794–800. DOI: 10.1016/j.neuroscience.2009.11.008				
DOI: 10.1010/J.IIEUI05CIEIICE.2003.11.000				

Reference	Year	Quartile (JCR)	Citations	Impact Factor year of publication
Ribeiro MJ, Straub V, Schofield MG, Picot J, Benjamin PR, O'Shea				
M and Korneev S.				
Characterization of NO-sensitive guanylyl cyclase: expression in				
an identified interneuron involved in NO-cGMP-dependent	2008	Q1	20	3.385
memory formation.				
European Journal of Neuroscience, Vol. 28, №. 6, 1157–1165.				
DOI: 10.1111/j.1460-9568.2008.06416.x				
Ribeiro MJ, Schofield MG, Kemenes I, O'Shea M, Kemenes G and				
Benjamin PR.	2005			
Activation of MAPK is necessary for long-term memory		Q1	61	4.142
consolidation following food-reward conditioning.				
Learning & Memory, Vol.12, No. 5, 538-45.				
Ribeiro MJ, Serfozo Z, Papp A, Kemenes I, O'Shea M, Yin JC,				
Benjamin PR and Kemenes G.				
Cyclic AMP response element-binding (CREB)-like proteins in a	2002	04	75	2 072
molluscan brain: cellular localization and learning-induced	2003	Q1	75	3.872
phosphorylation.				
European Journal of Neuroscience, Vol. 18, No. 5, 1223-34.				
DOI: 10.1046/j.1460-9568.2003.02856.x Sarmento S, Simeão Carvalho P, Glogarova M, Chaves MR, Nguyen				
HT and Ribeiro MJ. Dielectric, optical and TSM measurements on		98 Q2	12	1.443
semi-perfluoroferro- and antiferro-electric liquid crystals.	1998			
Liquid Crystals, Vol. 25, No. 3, 375-385.				
Simeão Carvalho P, Glogarova M, Chaves MR, Nguyen HT,				
Destrade C, Rouillon JC, Sarmento S and Ribeiro MJ.		6 Q2	10	
Polar phases in chiral thiobenzoate liquid crystals.	1996			1.472
Liquid Crystals. Vol. 21. No. 4. 511-521.				

Liquid Crystals, Vol. 21, No. 4, 511-521.

PEER-REVIEWED CONFERENCE PROCEEDINGS

- Georgieva, K., Georgieva, O., Georgieva, P., Ribeiro, M.J., Paiva, J.S. 2016. Regression Approach for Automatic Detection of Attention Lapses. IEEE 8th International Conference on Intelligent Systems (IS), Sofia, 2016, pp. 370-375.doi: 10.1109/IS.2016.7737447
- Duarte, J., Ribeiro, M., Violante, I., Cunha, G., Al-Rawi, M., Cunha, J.P., Castelo-Branco, M. 2011. **Multivariate pattern analysis of brain structure: A diagnostic tool for Neurofibromatosis type 1**. Bioengineering (ENBENG), 2011. 1st Portuguese Meeting in Bioengineering, vol., no., pp.1,4, 1-4 March 2011.

PREPRINTS

- Ribeiro MJ, Castelo-Branco M. 2021. Slow fluctuations in ongoing brain activity decrease in amplitude with ageing yet their impact on task-related evoked responses is dissociable from behaviour. bioRxiv 2021.11.18.467545; doi: https://doi.org/10.1101/2021.11.18.467545
- Ribeiro, M. J., Fonseca, A., Moura Ramos, M., Costa, M., Kilteni, K., Andersen, L. M., Harber-Aschan, L., Moscoso, J. A., Bagchi, S., European Network of Postdoctoral Associations. 2019. Postdoc X-ray in Europe 2017: Work conditions, productivity, institutional support and career outlooks. *bioRxiv* 523621v2; doi: https://doi.org/10.1101/523621

PUBLISHED DATASETS

Maria J. Ribeiro and Miguel Castelo-Branco (2021). EEG, ECG and pupil data from young and older adults: rest and auditory cued reaction time tasks. OpenNeuro. [Dataset] DOI: <u>10.18112/openneuro.ds003690.v1.0.0</u>

Curriculum Vitae - MARCH 2023

COMUNICATIONS

ORAL PRESENTATIONS

- IV Congresso Internacional do CINEICC, Universidade de Coimbra, March 30 April 1st, 2023. Maria J. Ribeiro, Nádia Canário, Hugo Quental, Miguel Castelo-Branco, Joshua Calder-Travis, Ruud L. van den Brink, Tobias H. Donner. Age-responses.related impairments in decision-making under uncertainty are associated with deficits in arousal (Accepted)
- 7th Iberian congress on perception, July 6 -7th, 2017 Coimbra, Portugal. Maria J. Ribeiro and Miguel Castelo-Branco. Decreased neural variability during auditory processing in healthy ageing: evidence from pupillography and EEG.
- From matter to mind, 2 December 2016, in Amsterdam, Netherlands. Maria J. Ribeiro. Alpha brain waves and the effect of flicker in film. *INVITED SPEAKER*
- 5th Annual Meeting of IBILI, December 2013 in Coimbra, Portugal. Maria J. Ribeiro, Inês R. Violante, Miguel Castelo-Branco. Neural correlates of response caution in children and adolescents
- 2013 NF conference. Monterey, California, USA. June 8-11 2013. Maria J. Ribeiro, Inês R. Violante, Miguel Castelo-Branco. **GABA deficits in patients with NF1: physiological implications.** *INVITED SPEAKER*
- XIII Reunião da Sociedade Portuguesa de Neurociências. Luso, Portugal. 30, 31 May and 1 June 2013. Maria J. Ribeiro, Inês R. Violante, Miguel Castelo-Branco. The electrophysiological signature of response caution.
- 15th European NF Meeting, September 6-9, 2012, Istanbul, Turkey. Maria J. Ribeiro, Inês R. Violante, Eduardo Silva and Miguel Castelo-Branco. **Neural correlates of impaired cognitive control in Neurofibromatosis type 1**
- ESMRMB 2012 Congress, October 2012, Lisbon, Portugal. Inês R. Violante, Maria J. Ribeiro, Richard A. E. Edden, Pedro Guimarães, Inês Bernardino, José Rebola, Gil Cunha, Eduardo Silva, Miguel Castelo-Branco. **Reduced GABA levels in the Human Visual Cortex challenges the over-inhibition model in Neurofibromatosis type 1** -*Awarded a Certificate of Merit by the Scientific Exhibition Jury*
- 18th Annual Meeting of the Organization for Human Brain Mapping. June 10-14, 2012, Beijing, China. I Violante, M Ribeiro, R Edden, I Bernardino, J Rebola, P Guimarães, G Cunha, E Silva, M Castelo-Branco. **Reduced GABA in the Visual Cortex of Patients with NF1 – A New Perspective on the Disease Mechanism.**
- FIRST-UCIII RESEARCHER FORUM. September 29, 2011, Coimbra, Portugal. Maria Ribeiro, Inês Violante, Inês Bernardino, Gil Cunha, Eduardo Silva, Miguel Castelo-Branco. Genetics and brain function in Neurofibromatosis type 1.
- IVth IBERIAN CONFERENCE ON PERCEPTION in July 6-8, 2011, Palma, Balearic Islands (Spain). M.J. Ribeiro, O. Cardoso,
 E. Silva & M. Castelo-Branco. Amplitude of alpha brain oscillations predicts detection of suprathreshold luminance changes.
- 2nd Annual Meeting of the IBILI December 2010 in Coimbra, Portugal. Maria J. Ribeiro, Inês Violante, Miguel Castelo-Branco. Abnormal brain oscillations in Neurofibromatosis type 1.
- 2nd Annual Meeting of the IBILI in December 2010, Coimbra, Portugal. Inês R. Violante, Maria J. Ribeiro, Gil Cunha, Inês Bernardino, João Duarte, Eduardo Silva, Miguel Castelo-Branco. Abnormal development of early visual areas in Neurofibromatosis type 1: an fMRI study.
- 14th European NF-meeting. Oslo, Norway. Sep 9-12 2010. M.J. Ribeiro, O.C. d'Almeida, J.V. Duarte and M. Castelo-Branco. Abnormal brain oscillations might underlie deficits in visual attention and motor control, in Neurofibromatosis type 1.
- 14th European NF-meeting. Oslo, Norway. Sep 9-12 2010. Inês R. Violante, Maria J. Ribeiro, Gil Cunha, Eduardo Silva, Miguel Castelo-Branco. Impaired activation of brain visual areas in NF1.

POSTER PRESENTATIONS

IV International Congress of CINEICC, University of Coimbra, Portugal. March 30 – April 1st, 2023. Sara F. Oliveira, Susana Mouga, Inês Bernardino, Carolina Sousa, Sofia Marcos, Ana Maria Teixeira, Luís M. Rama, Maria J.

Ribeiro. The effect of physical activity on pupil-linked arousal modulation during visual motion discrimination tasks. (Accepted)

- IV International Congress of CINEICC, University of Coimbra, Portugal. March 30 April 1st, 2023. Ana Marques, Nuno Sousa, Rogério Medeiros, Filipa Machado, Nuno Rodrigues, Davide Borra, Marco Simões, Maria J. Ribeiro.
 Integration of body and brain signals to decode neural responses to objects. (Accepted)
- International Conference for Cognitive Neuroscience (ICON), Helsinki, Finland. May, 18th-22nd, 2022. Maria J. Ribeiro, Miguel Castelo-Branco. <u>The importance of considering ongoing brain activity when studying evoked</u> <u>responses in the EEG and pupil signals</u>.
- XVII Meeting of the Portuguese Society for Neuroscience. Coimbra, Portugal. 1-3 December 2021. Maria J. Ribeiro, Miguel Castelo-Branco. Brain signal variability in ageing: the impact of reduced slow activity fluctuations on task-evoked responses and behaviour.
- FENS Regional Meeting, Belgrade, Serbia, July 2019. Maria J. Ribeiro, Miguel Castelo-Branco. <u>Pupil responses suggest</u> reduced noradrenergic activation and impaired uncertainty representation in older adults.
- Ageing: models, mechanisms and therapies, Coimbra, Portugal, June 2019. Maria J. Ribeiro, Miguel Castelo-Branco. The brain-heart axis and its association with the slowdown of cognitive processing in older adults.
- 13th International Conference for Cognitive Neuroscience, Amsterdam, The Netherlands, August 2017. Maria J. Ribeiro, Miguel Castelo-Branco. **The noradrenergic system and its relationship with cortical processing.**
- XV Meeting of the Portuguese Society for Neuroscience, Braga, Portugal, May 2017. Maria J. Ribeiro, Miguel Castelo-Branco. Impaired noradrenergic modulation in healthy ageing: evidence from pupillography and electroencephalography.
- The 5thChampalimaud Neuroscience Symposium. Lisbon, Portugal, September 2016. Maria J. Ribeiro, Miguel Castelo-Branco. Noradrenergic modulation of reaction time is task dependent.
- 7th Annual Meeting of IBILI. Coimbra, Portugal, December 2015. Maria J. Ribeiro, Miguel Castelo-Branco. Noradrenaline, pupil diameter, and reactions speed.
- Neuroscience 2015. Society for Neuroscience Meeting. Chicago, USA, 2015. Maria J. Ribeiro, Joana S. Paiva, Miguel Castelo-branco. Fluctuations in processing time are reflected in the shape of early visual evoked potentials
- IEEE-CIS Workshop. Lisbon, Portugal. November 2014. Krasimira Georgieva, Petia Georgieva, Maria Ribeiro. Automatic Detection of Attention Lapses using EEG signals
- 9th FENS Forum of Neuroscience. Milan, Italy. 5-9 July, 2014. Maria J. Ribeiro, Inês R. Violante, Miguel Castelo-Branco. Impulsive response styles are associated with impairments in response preparation and response evaluation.
- 5th Annual Meeting of IBILI. Coimbra, Portugal. 12-13 December, 2013. Inês R. Violante, Maria J. Ribeiro, Miguel Castelo-Branco. Functional Connectivity in Neurofibromatosis type 1.
- 2013 NF conference. Monterey, California, USA. June 8-11 2013. Inês R. Violante, Maria J. Ribeiro, Miguel Castelo-Branco. **Disrupted thalamocortical connectivity in NF1.**
- Neuroscience 2012, Society for Neuroscience Annual Meeting. New Orleans, USA. 13-17 October 2012. Maria Ribeiro, Inês Violante, Eduardo Silva, Miguel Castelo-Branco. The relation between GABA levels and visually-induced neural activation in a neurodevelopmental disorder characterized by dysfunctional GABAergic neurotransmission, NF1.
- 15th European NF-meeting. Istanbul, Turkey. Sep 6-9 2012. Inês R. Violante, Maria J. Ribeiro, Richard A. E. Edden, Pedro Guimarães, Inês Bernardino, José Rebola, Gil Cunha, Eduardo Silva, Miguel Castelo-Branco. GABA levels are reduced in the visual cortex of children with NF1.
- 15th European NF-meeting. Istanbul, Turkey. Sep 6-9 2012. Inês R. Violante, Maria J. Ribeiro, Miguel Castelo-Branco. Cortical and subcortical contributions to altered brain morphology in Neurofibromatosis type 1
- 18th Annual Meeting of the Organization for Human Brain Mapping. June 10-14, 2012, Beijing, China. I Violante, M Ribeiro, I Bernardino, G Cunha, E Silva, M Castelo-Branco. **Regional brain volume increases relate to cognitive function in Neurofibromatosis type 1.**
- 3rd Annual Meeting of the IBILI, December 2011, Coimbra, Portugal. Maria José Ribeiro, Miguel Castelo-Branco. Deficits in sustained attention might relate to higher inter-trial variability of alpha brain oscillations.

- 3rd Annual Meeting of the IBILI, December 2011, Coimbra, Portugal. J. Duarte; M. Ribeiro; I. Violante; G. Cunha; E. Silva; M. Castelo-Branco. Multivariate pattern analysis of multi-site brain structural data in neurofibromatosis type 1.
- 3rd Annual Meeting of the IBILI, December 2011, Coimbra, Portugal. I.R. Violante; M.J. Ribeiro; R. Edde; I. Bernardino;
 J. Rebola; P. Guimaraes; G. Cunha; E. Silva; M. Castelo-Branco. GABA concentration is reduced in the visual cortex of patients with neurofibromatosis type 1 a new perspective on the disease mechanism.

Awarded the Best 2013 Scientific Paper on Clinical Research from FMUC

- 3rd Annual Meeting of the IBILI, December 2011, Coimbra, Portugal. Andre Santos; N.F.Lori; I. Violante; M. Ribeiro; E. Silva; M. Castelo-Branco. Visual-callosal white matter pathways in neurofibromatosis type 1: a diffusion tensor imaging fiber tracking (dti-ft) study.
- Champalimaud Neuroscience Symposium. 18-21, Lisbon, Portugal. 18-21 September 2011. Ribeiro MJ, d'Almeida OC, Silva E, Castelo-Branco M. The electrophysiological signature of momentary lapses of attention
- Champalimaud Neuroscience Symposium. 18-21, Lisbon, Portugal. 18-21 September 2011. Violante IV, Ribeiro MJ, Bernardino I, Duarte J, Silva E, Castelo-Branco M. Cortical thickness abnormalities in children with neurofibromatosis type 1
- 17th Annual Meeting of the Organization for Human Brain Mapping. Quebec City, Canada. June 26-30, 2011. Ines Violante, Maria Ribeiro, André Santos, Nicolás Lori, Eduardo Silva, Miguel Castelo-Branco. **Structural and functional development of early visual cortical areas: an fMRI and DTI study.**
- 17th Annual Meeting of the Organization for Human Brain Mapping. Quebec City, Canada. June 26-30, 2011. Nicolás Lori, Maria Ribeiro, Inês Violante, Miguel Castelo-Branco. **Comparing Diffusion Tensor Imaging in Neurofibromatosis type I vs. Normal Children and Adults**
- XII Meeting of the Portuguese Society for Neurosciences. Lisbon, Portugal. 26-28 May 2011. Maria José Ribeiro, Inês Ribeiro Violante, João Valente Duarte, Inês Bernardino, Gil Cunha, Fabiana Ramos, Jorge Saraiva, Eduardo Silva, Miguel Castelo-Branco. Functional and structural deficits in neurofibromatosis type 1, a neurodevelopmental disorder characterized by enhanced neural inhibition.
- VII Seminário Da Sociedade De Pediatria Do Neurodesenvolvimento. Porto, Portugal. January 2011. Maria J. Ribeiro, Inês R. Violante, Otília C. d'Almeida, Fabiana Ramos, Jorge Saraiva, Eduardo Silva, Miguel Castelo-Branco. Neurofibromatosis type 1 children present brain oscillations with abnormally high amplitude.
- 14th European NF-meeting. Oslo, Norway. Sep 9-12 2010. João Duarte, Maria Ribeiro, Mohammed Al-Rawi, Inês Violante, João Paulo Cunha, Miguel Castelo-Branco. **T1-weighted MR images distinguish NF1 patients from controls and reveal specific anatomical differences: a pattern classification approach.**
- 2nd Annual Meeting of the IBILI in December 2010 in Coimbra, Portugal. M.J. Ribeiro, I.R. Violante, F. Ramos, J. Saraiva,
 E. Silva, M. Castelo-Branco. Contrast sensitivity deficits are associated with history of academic failure in adults with Neurofibromatosis type 1 (NF1).
- 2nd Annual Meeting of the IBILI, December 2010, Coimbra, Portugal. I. Violante, M. J. Ribeiro, G. Cunha, E. Silva and M. Castelo-Branco. **Dorsal Stream Development in Low-level Visual Areas: an fMRI Study.**
- 2nd Annual Meeting of the IBILI, December 2010, Coimbra, Portugal. J. Duarte, M. Ribeiro, I. Violante, M.S. Al-Rawi, J.P.S. Cunha, M. Castelo-Branco. Machine learning and multivariate pattern recognition techniques identify multiple brain areas of abnormal structure in Neurofibromatosis type 1.
- 2nd Annual Meeting of the IBILI in December 2010 in Coimbra, Portugal. Nicolás F. Lori, Maria Ribeiro, Inês Violante, Miguel Castelo-Branco. **Diffusion Tensor Imaging in NF1 versus Normal for both Children and Adults.**
- 7th FENS Forum of European Neuroscience. Amsterdam, Netherlands. July 3-7, 2010. FENS Abstr., vol.5, 081.37. I. Violante, M. Ribeiro, G. Cunha, E. Silva & M. Castelo-Branco. 2010. Differential dorsal versus ventral stream impairment in a neurodevelopmental disorder characterized by enhanced GABAergic neurotransmission: Neurofibromatosis type 1.
- 7th FENS Forum of European Neuroscience. Amsterdam, Netherlands. July 3-7, 2010. FENS Abstr. vol 5, 081.24 M. J. Ribeiro, O. C. D'Almeida, J. V. Duarte & M. Castelo-Branco. 2010. Abnormally high amplitude of brain oscillations in a neurodevelopmental disorder characterized by enhanced GABAergic transmission: neurofibromatosis type 1.

Curriculum Vitae - MARCH 2023

- 16th Annual Meeting of the Organization for Human Brain Mapping. Barcelona, Spain. June 6-10, 2010. I. Violante, M. J. Ribeiro, G. Cunha, E. Silva and M. Castelo-Branco. 2010. Abnormal physiology and maturation of the dorsal stream pathway in Neurofibromatosis type 1.
- 16th Annual Meeting of the Organization for Human Brain Mapping. Barcelona, Spain. June 6-10, 2010. João Duarte, Maria Ribeiro, Nicolas Lori, FredericoLourenço and Miguel Castelo-Branco. 2010. Support Vector Machine-Based Classification of Neurofibromatosis Type 1 from Structural MR Scans.
- 1st Annual Meeting of IBILI. Coimbra, Portugal. December 11-13, 2009. I.R. Violante, M.J. Ribeiro, G. Cunha, E. Silva, M. Castelo-Branco. 2009. Neural correlates of abnormal visual processing in Neurofibromatosis Type I.
- 20th Symposium of the International Colour Vision Society. Braga, Portugal. July 2009. M.J. Ribeiro and M. Castelo Branco. 2009. Comparison of the contrast and size response functions of the magno-, parvo- and koniocellular pathways in human visual cortex.
- 2009 NF Conference. Portland, Oregon, USA. June 2009. M.J. Ribeiro, I.R. Violante, I.S. Bernardino, F. Ramos, J. Saraiva, G. Spurlock, M. Upadhyaya, E. Silva, M. Castelo-Branco. 2009. Children with Neurofibromatosis type 1 show contrast sensitivity deficits compatible with abnormal inhibitory transmission in visual brain areas.
- Society for Neuroscience, 38th Annual Meeting. Washington, D.C., USA. November 2008. M.J. Ribeiro and M. Castelo Branco. 2008. Comparison of the contrast and size response functions of the magno-, parvo- and koniocellular pathways in human visual cortex.
- British Neuroscience Association 18th National Meeting. Brighton, U.K. April 2005. Ribeiro, M. J., Kemenes, G., Benjamin, P. R. **The role of MAPK in appetitive conditioning**
- Society for Neuroscience, 31st Annual Meeting. San Diego, USA. November 2001. Ribeiro, M. J., Kemenes, G., Benjamin, P. R. **MAPK: necessity and activation in appetitive conditioning**
- Society for Neuroscience, 30th Annual Meeting. New Orleans, USA. November 2000. Ribeiro, M. J.; Kemenes, G.; Benjamin, P. R. What molecular pathways play a role in appetitive learning?
- FENS, Forum of European Neuroscience, 2000. Brighton, U.K. June 2000. Ribeiro, M. J.; Kemenes, G.; Benjamin, P. R. Do MAP kinase and the transcription factors CREB and C/EBP play a role in appetitive learning?
- Euresco Neural Mechanisms of Learning and Memory: Retrieval of the Trace. Granada, Spain. May 2000. Ribeiro, M. J.; Kemenes, G.; Benjamin, P. R. **Do MAP kinase and the transcription factors CREB and C/EBP play a role in appetitive learning?**
- Cold Spring Harbor Laboratory Learning & Memory Meeting. Cold Spring Harbor, USA. April 1999. Ribeiro, M. J.; Kemenes, G.; Benjamin, P. R. **CREB and C/EBP-like immunoreactivity in the CNS of** *L. stagnalis*