CHIARA CALDINELLI

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EDUCATION

PhD in Psychology   2018 - 2023
Trinity College Dublin
Thesis: Connectivity of executive control regions and its relation to function in adults and infants
Advisor: Rhodri Cusack

MSc in Cognitive Neuroscience and Clinical Neuropsychology   2012 - 2015
University of Padua
Thesis: Alterations in structural connectivity in memory tracts following perinatal brian injury in adults who
were born very preterm
Advisor: Patrizia Bisiacchi and Chiara Nosarti

BSc in Cognitive Science and Psychobiology   2009 - 2012
University of Padua
Thesis: Lateralized numerical abilities in the domestic chick (*Gallus gallus*): the case of ordinality
Advisor: Lucia Regolin

RESEARCH POSITIONS

Research Assistant   2017 - 2018
Cardiff University Brain research Imaging Centre   Cardiff University
'Characterising brain network differences during scene perception and memory in APOE-e4 carriers: multi-modal
imaging in ALSPAC'
Advisor: Kim Graham

Trainee in Child Neuropsychology   2016
Pediatric Neurology Ward   Besta Neurological Institute, Milan
Administer standardised tests, wrote reports and planned therapy to improve long-term outcomes. in December
2016 I qualified as a clinical psychologist in Italy
Advisor: Sara Bulgheroni

Research Assistant   2015 - 2016
Speech and Brain Research Group   University of Oxford
A DTI study of speech-related white matter tracts in patients with left-hemisphere stroke. In collaboration with
Richard Wise's group at Imperial College
Advisor: Kate Watkins

Research Assistant   2014 - 2015
Preterm Research Group   King's College London
The long-term outcomes of brain injury following very preterm birth using diffusion MRI (Spherical Deconvolu-
tion)
Advisor: Chiara Nosarti

Research Assistant   2008 - 2009
Comparative Psychology lab   University of Padua
Lateralized numerical abilities in the domestic chick (*Gallus gallus*): the case of ordinality
Advisor: Lucia Regolin

GRANTS AND AWARDS

Python Foundation   2019
To organise Python workshops at Trinity College Dublin. Amount: $2,169.93

Government of Ireland Postgraduate Scholarship   2018 - 2023
Ireland Research Council. Amount: €96,000

Postgraduate Scholarship   2018 - 2022
Trinity College Dublin - kindly declined. Amount: €54,000

Student and Postdoc OHBM SIG funding   2017
To organise events at OHBM annual meeting. Amount: €23,000

Erasmus grant for Erasmus Internship at University of Oxford   2015
To attend University of Oxford. Amount: €1,000

Guarantors of Brain grant   2015
To attend Annual Flux congress in Leiden, The Netherlands. Amount: €400

Erasmus grant for Erasmus Internship   2014
To attend King's College London. Amount: €3,000

Erasmus grant for Erasmus Study Exchange   2013
To attend the University of Warsaw. Amount: €600

PUBLICATIONS

Caldinelli, C., Cusack, R. (2022). The fronto-parietal network is not a flexible hub during naturalistic cognition. Human Brain Mapping, 43(2), 750-759. https://doi.org/10.1002/hbm.25684

Bielczyk, N. Z., Ando, A., Badhwar, A., **Caldinelli, C.**, Gao, M., Haugg, A., Hernandez, M., Ito K.L., Kessler, D., Lurie, D., Makary, M. M., Nikolaidis, A., Veldsman, M., Allen, C., Bankston, A., Bottenhorn, K. L., Braukmann, R., Calhoun, V., Cheplygina, V., Boffino, C. C., Ercan, E., Finc, K., Foo, H., Khatibi, A., La, C., Mehler, D. M. A., Narayanan, S., Poldrack, R. A., Raamana, P. R., Salo, T., Godard-Sebillotte, C., Uddin, L. Q., Valeriani, D., Valk, S. L., Walton, C. C., Ward, P. G. D, Yanes, J. A., Zhou, X., OHBM Student and Postdoc Special Interest Group. (2020). Effective self-management for early career researchers in the natural and life sciences. Neuron, 106(2), 212-217. https://doi.org/10.1016/j.neuron.2020.03.015

Bielczyk, N., Veldsman, M., Ando, A., **Caldinelli, C.**, Makary, M. M., Nikolaidis, A., Scelsi, M. A., Stefan, M., OHBM Student and Postdoc Special Interest Group, Badhwar, A. (2018). Establishing online mentorship for early career researchers: Lessons from the Organization for Human Brain Mapping International Mentoring Programme. European Journal of Neuroscience. https://doi.org/10.1111/ejn.14320

Caldinelli, C., Froudist-Walsh, S., Karolis, V., Tseng, J.C., Allin, M.P., Walshe, M., Cuddy, M., Murray, R.M., Nosarti, C. (2017) White matter alterations to cingulum and fornix following very preterm birth and their relationship with cognitive functions. NeuroImage: 150, 373–382. https://doi.org/10.1016/j.neuroimage.2017.02.026

Tseng, J.C, Froudist-Walsh, S., Brittain, P.J., Karolis, V., **Caldinelli, C.**, Kroll, J., J. Counsell, S.J., C.R. Williams, S.C.R., Murray, R.M., Nosarti, C. (2016) A Multimodal Imaging Study of Episodic Memory in Very Preterm Born Adults. Human Brain Mapping: 38(2), 644-655. https://doi.org/10.1002/hbm.2340

Froudist-Walsh S., Karolis, V., **Caldinelli, C.**, Brittain, P.J., Kroll, J., Rodriguez-Toscano, E., Tesse, M., Colquhoun, M., Howes, O., Dell'Acqua, F., Thiebaut de Schotten, M., Murray, R. M., Williams, S.C.R., Nosarti C. (2015). Very early brain damage leads to remodelling of the working memory system in adulthood; a combined fMRI/tractograpjy study. The Journal of Neuroscience, 35(48): 15787-15799. https://doi.org/10/1523/JNEURO SCI.47-14.2015

TALKS AND POSTERS

Caldinelli, C. Connectivity of the executive control network and its relation to function in adults and infants. Stanford University, February, 23 2023, oral presentation.

Caldinelli, C. Connectivity of the executive control network and its relation to function in adults and infants. Yale University, April 24, 2023, oral presentation.

Caldinelli, C. and Cusack, R. The fronto-parietal network is not a flexible hub during naturalistic cognition. Neuroscience Ireland Annual Meeting, Sep 9-10, 2021, online poster presentation.

Caldinelli, C. and Cusack, R. The Fronto-Parietal Network Is Not a Flexible Hub During Naturalistic Cognition. OHBM Online Annual Meeting, June 21-25 2021. P: 1205

Caldinelli, C. and Cusack, R. Functionally Predictive Differences in Connectivity in the DLPFC are Present in Infants. OHBM Annual Meeting in Singapore, June 19-21 2018, Singapore. P: 1170

Caldinelli, C., Geranmayeh, F., Wise, R.J.S., Watkins, K. A DTI study of speech-related white matter tracts in patients with left-hemisphere stroke. Society for the Neurobiology of Language 2016 Annual Meeting, August 17-20. P: C41

Caldinelli, C.., Froudist-Walsh, S., Karolis, V., Brittain, P.J., Kroll, J., Tesse, M., Tseng, C., Nosarti, C. Alterations to Memory-Related White Matter Tracts in Adults Who Were Born Very Preterm. Organization for Human Brain Mapping meeting, Geneva, Switzerland, June 26-30, 2016, P: 3165

Caldinelli, C.., Froudist-Walsh, S., Karolis, V., Brittain, P.J., Kroll, J., Tesse, M., Tseng, C., Nosarti, C. Alterations to Memory-Related White Matter Tracts in Adults Who Were Born Very Preterm. Platform 2170—Neonatology: Neonatal Follow Up, Pediatric Academic Society meeting, Baltimore, 30 April-3 May 2016 (oral presentation)

Caldinelli, C.., Froudist-Walsh, S., Karolis, V., Tseng, C., Allin, M.P., Walshe, M., Cuddy, M., Murray, R.M., Nosarti, C. White matter tracts and memory abilities alterations following perinatal brain injury in adults who were born very preterm. Annual Flux congress, Leiden, The Netherlands, 17-19 September 2015, P-2-134

Caldinelli, C.., Froudist-Walsh, S., Karolis, V., Nosarti, C. Alterations in Structural Connectivity in Memory Tracts Following Perinatal Brain Injury in Young Adults Who Were Born Very Preterm. Pediatric Academic Society annual meeting, San Diego, 25-28 April 2015, E-PAS2015:4139.288

TEACHING

Graduate Teaching Assistant
2021 - 2022
School of Psychology
Trinity College Dublin
Led python-based lab sessions for the Research Methods (PSU22011) and Statistics (PSU202122) modules to allow Year 2 Psychology students to develop scientific research skills and perform parametric and non-parametric statistical analyses in a reproducible manner using Google Colab
Advisor: Rob Whelan

STUDENT ADVISEES

Emma Hudson, Trinity College Dublin
2020 - 2021
BSc Psychology Thesis - The effect of image complexity on infant curiosity: An investigation of the 'Goldilocks effect' through online testing

Emily Markey, Trinity College Dublin
2020 - 2021
BSc Psychology Thesis - Too fast, too slow, or just right: An investigation into 'the Goldilocks effect' of infant curiosity through stimulus speed

LEADERSHIP

Associate Editor
2018 - 2022
Journal of European Psychology Students
Served as an editor, invited reviewers and conducted reviews.

President
2018 - 2020
Neuroscience Society
Trinity College Dublin
Led the Neuroscience Committee to bring students and faculty members together along the broad spectrum of neuroscience via seminars presented by renowned academics and social events to bridge the gap between undergraduate and postgraduate students interested in neuroscience

Social Coordinator
2017 - 2019
Organization for Human Brain Mapping
Organized social events during the OHBM annual meetins in Singapore and Rome

TECHNICAL SKILLS

Neuroimaging Softwares: SPM, FSL, FreeSurfer, AFNI

Programming Languages: Python, Linux, Bash, R, MatLab, Java

PROFESSIONAL SERVICE

Reviewer   2015 - 2022
Ad hoc reviewer for Neuroimage and Developmental Cognitive Neuroscience

Scientific meetings organised
Python Workshop, various   2018-2020
Hackathon, Brainhack Ireland, 2-4 May   2018

EDUCATIONAL COURSES

Regression Module, Postgraduate Certificate in Statistics (ST7002)   2019
School of Statistics and Computer Science of Trinity College, Dublin

Visceral Mind   2018
Bangor University
Participated in a week-long summer school to deepen neuroanatomy knowledge by dissecting post mortem human
brains and patient studies

Clinical Neuroimaging and Radiological Neuroanatomy course   2018
National University of Ireland, Galway
Course designed to increase knowledge in neuroanatomy through medical imaging and post mortem dissection

7th IMPRS NeuroCom Summer School   2017
University College London
Course focused on computational modeling in cognitive neuroscience

Machine Learning Techniques for Neuroimaging Data   2017
Cardiff University
Coursed focused on machine learning applied to neuroimaging data