

## 1. EDUCATION

### 1.1. Degrees

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| Sep 2015 – to date  | PhD in Cognitive Neuroscience and Neuroimaging, University of York, UK. Focused on hemispheric differences in semantic cognition using resting-state and task-based analysis methods applied to fMRI, [Supervised by Beth Jefferies and Jonathan Smallwood]. |
| Aug 2006 – Jan 2008 | M.Sc. in Psychology, Internship in Clinical Neuropsychology. National Autonomous University of Mexico (UNAM), Mexico City. G.P.A. 9.6. <i>Summa cum Laude</i> (Excellence Program Full Scholarship, 1 <sup>st</sup> in the class).                           |
| Aug 2000 – Jan 2005 | Bachelor's degree in Psychology, Anahuac Mayab University, Yucatan, Mexico. G.P.A. 9.7. <i>Summa cum Laude</i> (Academic Merits Full Scholarship, 1 <sup>st</sup> in the class).   |

## 2. PUBLICATIONS AND CONFERENCE PRESENTATIONS

### 2.1. Publications

- Gonzalez Alam, T., Murphy, C., Smallwood, J., & Jefferies, E. (2018). Meaningful inhibition: Exploring the role of meaning and modality in response inhibition. *NeuroImage*, 181(February), 108–119. <https://doi.org/10.1016/j.neuroimage.2018.06.074>
- Wang, X., Bernhardt, B. C., Karapanagiotidis, T., De Caso, I., Gonzalez Alam, T., Cotter, Z., ... Jefferies, E. (2018). The structural basis of semantic control: Evidence from individual differences in cortical thickness. *NeuroImage*, 181(July), 480–489. <https://doi.org/10.1016/j.neuroimage.2018.07.044>
- Gonzalez Alam, T., Karapanagiotidis, T., Smallwood, J., & Jefferies, E. (Under review). Degrees of Lateralisation in Semantic Cognition: Evidence from Intrinsic Connectivity.
- Teige, C., Cornelissen, P., Mollo, G., Gonzalez Alam, T., McCarty, K., Smallwood, J., & Jefferies, E. (Under review). Temporal lobe dissociations in semantic cognition: Oscillatory evidence for a process account of thematic and taxonomic differences.

### 2.2. Conference Presentations

#### 2.2.1. Posters

- Gonzalez Alam, T., Smallwood, J., & Jefferies, E. (2019, June). Hemispheric differences in connectivity in semantic sites and their contribution to cognition. Poster session presented at the Organization for Human Brain Mapping Annual Meeting, Rome, Italy.
- Gonzalez Alam, T., Smallwood, J., & Jefferies, E. (2019, January). Meaningful inhibition. Poster session presented at the Experimental Psychological Society Meeting in UCL, London.

Gonzalez Alam, T., Smallwood, J., & Jefferies, E. (2017, July). Meaningful inhibition: Evidence for visual ventral stream involvement when behavioural inhibition depends on stimulus meaning. Poster session presented at the International Conference for Cognitive Neuroscience (ICON17), Amsterdam, Netherlands.

### 2.2.2. Talks

Gonzalez Alam, T., Smallwood, J., & Jefferies, E. (2018, May). Meaningful inhibition: Exploring the role of meaning and modality in response inhibition. Seminar talk in the Department of Psychology, University of York, UK.

Gonzalez Alam, T., (2017, May). Hemispheric Differences in Semantic Cognition. Invited talk at the Psycholinguistics Research Group, University of York, UK.

## 3. EMPLOYMENT / PROFESSIONAL EXPERIENCE

2015 – To date: PhD Candidate under the supervision of Beth Jefferies (<https://goo.gl/s9eXdJ>) and Jonathan Smallwood (<https://goo.gl/ekpTVF>) at the University of York. I hold a scholarship from the Mexican Government for 4 years, ending in my expected submission date: 31/09/2019.

### 3.1. Research

2015 – 2019: Responsible for three studies during my PhD. Collaborated with data analysis and acquisition in several research projects for the Semantics and Mind-wandering labs, from which 2 publications are under review and 4 in preparation (first author in one, co-author in the rest).

- Topics: Semantic cognition; semantically-guided inhibition; large-scale networks interaction; lateralisation; individual differences in connectivity and their links to behaviour; automated large-scale meta-analysis and cognitive decoding
- Methods: behavioural analyses in Python, SPSS and R – including regression, correlation, ANOVA, dimensionality reduction, comparing means –; analyses of intrinsic connectivity in FSL and CONN; task-based fMRI analyses in FSL; automated meta-analyses and cognitive decoding using Neurosynth and Neurovault; reference management in Mendeley.
- Skills: MRI Operator training (Level 1, YNiC). Programming (Python, Bash, R, Matlab); version control (Git); statistical analyses including neuroimaging (FSL, CONN, SPM, MrVista, NIPYPE, ScikitLearn, SPSS, MVSP, Minitab); data handling (Pandas, SQL) and visualisation (Seaborn, Pyplot); task design (PsychoPy, E-Prime, Presentation, Direct RT).
- Courses: Introduction to the Linux Shell, Programming in Neuroimaging, Research, Design and Analysis in Neuroimaging, Advanced Research Methods. First Aid certification.

2018 – 2019, Asymmetries in semantic representations: we are examining differences in connectivity between left and right anterior temporal lobe to relate them to differences in participants' efficiency processing stimuli of diverse categories and modalities.

2016 – 2018, Lateralisation in Semantics: looked at intrinsic connectivity of key semantic cognition regions in LH and their RH homotopes, described their differences through cognitive decoding and explored whether they could predict behavioural performance on semantic tasks outside the scanner.

2015 – 2016, Meaningful inhibition: employed a combination of task-based and resting-state fMRI with large-scale automated meta-analyses and cognitive decoding to look at the neural bases of perceptual vs semantically guided inhibition in cognitive control.

2009 – 2015: Research Fellow, Department of Psychology, Universidad Anahuac Mayab, Yucatan, México. Founded and led the Clinical and Cognitive Neuropsychology Research Group as Principal Investigator. Proposed, designed and executed five research projects in neuropsychology (3 local, 2 national) focused on Semantics and Hemispheric Specialization for Language.

2013 – 2014: Research Internship, General Hospital of Mexico / Department of Psychology, National Autonomous University of Mexico (UNAM), México City. Worked on clinical assessment of hemispheric specialisation for language in the context of temporal lobectomy for pharmacologically intractable epilepsy.

2008 – 2009: Research Internship, International Centre for Neurological Restoration (Centro Internacional de Restauración Neurológica, CIREN). Havana, Cuba. Worked on neuropsychology of aphasia in the context of stroke.

### 3.2. Teaching

2015 – 2019, Graduate Teaching Assistant, delivered tutorials in the following strands after taking the Introduction to Teaching and Learning Course (University of York):

- Research Methods (2016 – 2018): Regression (linear, multiple), Correlation, PCA, one-way, two-ways, repeated measures and mixed design ANOVAs, Power Analysis (Dan Baker and Alex Wade).
- Language and Development: Language Genes (2017, for Silvia Gennari)
- Brain and Behaviour: Neuropsychology of Dementia (2017, for Beth Jefferies)
- Perception and Cognition: Hearing (2016, for Quentin Summerfield), Reasoning and Decision Making (2018, for Aidan Horner)

Provided support and facilitation in:

2018: MSc Course, Programming in Neuroimaging (Python, for Mark Hymers)

2018: Research Methods (Year 1), Introduction to SPSS (for Rob Stone)

2017: Helping students provide feedback effectively (for Sally Quinn).

2011 – 2015, Course leader in the following undergraduate courses, where the role required designing the course and its materials, planning and designing the assessments, lecturing, implementing the assessments, marking, tutoring and keeping records of the students:

2011 – 2015, *As Research Fellow, Department of Psychology, Anahuac Mayab University (Mexico):* Research Methods in Social Sciences, Statistics, Psychometrics, Development and Validation of Measurement Instruments. Language Development, Language Pathology, Neuropsychology of Learning, Neuropsychology of Learning Disorders.

Sep 2015 – Dec 2015, *As Visiting Lecturer, Marista University (Yucatan, Mexico):* Basic Cognitive Processes II.

2012 – 2013, *As Visiting Lecturer, Anahuac University (Mexico City South Campus):* Statistics for Social Science, Psychometrics.

2012 – 2013, *As Visiting Lecturer, Department of Psychology, Universidad Latina (Mexico City):* Introduction to Research Methods, Measurement and Assessment in Psychology, Computational Theory of the Mind, Psychological Diagnosis.

2009 – 2011, Course leader in the following undergraduate courses, where the role required delivering lectures, implementing assessments and marking in courses that were already designed:

2009 – 2011, *As Associate Lecturer, Anahuac Mayab University (Yucatan, Mexico):* Development and Validation of Measurement Instruments. Neuropsychology of Learning, Neuropsychology of Learning Disorders

Sep 2009 – Dec 2009, *As Assistant Lecturer, Universidad Latina (Mexico City, South Campus):* Anatomy & Physiology of the Nervous System (Laboratory-based)

2009 – 2015, Designed and taught 20+ workshops and qualification modules in the Department of Psychology (UNAM), the Mexican Association of Neuropsychology, the General Hospital of Mexico, and the School of Psychology of Anahuac Mayab University. Full list available upon request.

### **3.3. Curriculum Design**

2013 – 2015, Helped develop and design curricula for Psychopedagogy, a new undergraduate degree in Anahuac Mayab University's Department of Psychology, and for the Neuropsychology Practicum in Anahuac Mayab's Teaching Hospital.

### **3.4. Supervision**

2018 – to date: Statistics Tutor in the Maths Skills Centre of the University of York, providing university-wide support and help to students from Undergraduate to PhD with statistics questions.

2018: Trained and supervised ten undergraduate students in data collection for their dissertation.

2017 – 2018: Supervised a new PhD Graduate Teaching Assistant.

2016 – 2018: Mini-projects supervisor for 2<sup>nd</sup> year undergraduate students in Psychology in the Brain and Behaviour and Perception and Cognition strands. Supervised eighteen groups of six students each.

2009 – 2015: Supervised seventeen undergraduate dissertations as PI of the Cognitive and Clinical Neuropsychology Research Group, Department of Psychology, Anahuac Mayab University.

2011 – 2012: Supervised eight undergraduate students' clinical practice in Neuropsychology in Anahuac Mayab University Teaching Hospital

### **3.5. Public Engagement and Outreach**

2019 – Scientist in “I’m a Scientist, Get me Out of Here”, March 2019 edition (Perception Zone). This is an online activity where schools connect sixth-form students with scientists so they can ask questions online, via chat or forum, and they vote on their favourite scientist.

2003 – 2015, Founded, designed, executed and assessed the Goya Film Club Project, which started as a University Radio programme for making film culture accessible to everyone; secured funding and extended to a series of film clubs aimed at developing film culture in vulnerable populations.

2012, Wrote a book for the Secretary of Government and VIRAL (Mexico), detailing social dynamics in a high-risk neighbourhood (Tepito, Mexico).

### **3.6. Administration**

2018: Organising committee of Postgraduate Research Day, Department of Psychology, U. of York.

2016 – 2017: Organiser of weekly journal club for my research group.

2009 – 2015: Organised 3 regional and 2 national academic events and conferences (Mexico).

2012 – 2014: Helped create an interdisciplinary collegiate research body spanning Health Sciences to pool research strengths (Psychology, Medicine and Nutrition Science) as part of a faculty committee at Anahuac Mayab University (Yucatan, Mexico).

### **3.7. Clinical Work**

2013 – 2014, Founder, coordinator and practice supervisor for the Service of Clinical Neuropsychology at Anahuac Mayab University Teaching Hospital in Yucatan, Mexico.

2008 – 2009, Neuropsychology Intern at International Centre for Neurological Restoration, Havana, Cuba.

2006 – 2008, Neuropsychology Intern at General Hospital of Mexico, Mexico City ('06 – '07); National Institute of Neurology and Neurosurgery, Mexico City ('07 – '08).

Clinical Skills: Coordinating work in hospitals; clinical neuropsychology assessment and diagnosis; behavioural test batteries, standardised and ad hoc testing; neuropsychological rehabilitation.

## **4. GRANTS, SCHOLARSHIPS AND BURSARIES**

2019, May: Guarantors of Brain travel grant for attending OHBM in Rome. £600

2019, January: EPS travel grant for attending the January meeting. £175

2017, July: EPS travel grant for attending ICON 2017 conference in Amsterdam. £450

2015, September – 2019 September: National Council of Science and Technology (Mexico) full scholarship for PhD project “Interhemispheric Differences in Semantic Cognition”. £87,760

2008, January: National Autonomous University of Mexico Semester Abroad Academic Merit Scholarship for research / clinical Internship in CIREN (Havana, Cuba). £2,185

2006 September – 2008 September: National Council of Science and Technology (Mexico) full scholarship for M.Sc. / Clinical internship studies in Clinical Neuropsychology. £12,914

2000 September – 2005 January: Anahuac Mayab Academic Merits Full Scholarship. £24,797

## **5. PROFESSIONAL MEMBERSHIPS**

2019: Organization for Human Brain Mapping

2013: Full Member of the Academic Committee of the National Centre for Assessment in Higher Education in Mexico, tasked with designing items for the National Psychology Examination.

2011: Mexican Neuropsychological Association (Full member, responsible for the scientific committee and member of the Editorial board of *Revista Mexicana de Neuropsicología*).