

CV: Dr. Lucy Alba-Ferrara, Ph.D., MSc., LP.

Contact and personal details

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Nationality: Argentine/Spanish

Date of Birth: 04/09/1981

Current position

- Tenured Research Scientist at the National Scientific and Technical Research Council (CONICET). Argentina.
- Associate Professor of Clinical Neuropsychology. Faculty of Biomedical Science. Universidad Austral. Argentina.

Education

2011 PhD in Cognitive Neuroscience at Durham University, UK.

Thesis title: "Emotional prosody and auditory processing deficits in the schizophrenia spectrum". Under the supervision of Dr. Markus Hausmann and Dr. Susanne Weis.

2006 Master in Cognitive Neuropsychology at University College London, UK. Thesis title: "Interaction of Top down and Bottom-up processes in Auditory Speech Perception: Insights from fMRI". Under the supervision of Prof. Sophie Scott.

2004 Board Certification in Clinical Psychology (MSc), University of Buenos Aires, Argentina (First class degree).

1998 High School degree oriented toward Social Science.

Academic positions and clinical appointments

2013 – 2014 Postdoctoral Fellow at Stanford Research Institute (USA).
Topic: "Emotional processing and decision making in alcoholism".

2011 - 2013 Postdoctoral Fellow at University of South Florida (USA).
Topic: "Use of TMS and DBS in the treatment of addiction".

Researcher at the Department of Neurosurgery, Tampa General Hospital (USA).

2009 - 2011 Honorary researcher at Northumbria Tyne and Wear NHS foundation and Tees, Esk and Wear Valley NHS trust.

2006 - 2007 Research assistant at the Department of Epileptology, University of Bonn, Germany.

2002 - 2003 Trainee in Clinic of Schizophrenia at Hospital Jose T. Borda, Buenos Aires, Argentina.
Trainee in Clinical Psychology at Hospital Piñero, Buenos Aires, Argentina.

2001 - 2002 Research assistant, Laboratory of Experimental Psychology, University of Buenos Aires.

Honours and Awards

2008 Graduate School Scholarship prize, Faculty of Sciences, University of Durham Funding to finance doctoral degree.

2006 Marie Curie Fellowship for early-stage research training at University of Bonn. Project: "Brain plasticity in patients with medial temporal lobe epilepsy".

Financial support

2024

- Internal Research Grant Universidad Austral. "Physiological and Neurocognitive Mechanisms Underlying Problematic Alcohol Consumption". Role: PI
- Grant UNAJ Investiga. "Neural and cognitive risk and resilience factors in problem alcohol consumption." (Role: PI).

2023

- Grant RIDEE-PBA. "Study of efficacy and safety of cannabis in patients with refractory epilepsy. Quantification of plasma levels". Role: PI
- PICT GRF T1 1141. "Cognitive, emotional and neural mechanisms underlying problematic alcohol use". Role: PI

2022

- IP CIC PBA. "Brain bases of Impulsivity, risk behaviors and cognitive resilience factors in problem drinkers". Role: PI

2021

- Grant UNAJ Investiga. "Clinical use of the international lexical decision task for the study of language lateralization." (Role: PI).
- Grant PIP. "Syntactic complexity and working memory. Psychological and neurolinguistic evidence on sentence comprehension with long-distance dependencies" (Role: co-PI).

2019

Internal Research Grant Universidad Austral. "Mecanismos cerebrales de los fenómenos perceptivos anormales en el espectro de la esquizofrenia". Role: PI

2018

PUE 229 201801 00060 CO. "Investigación traslacional en el desarrollo de nuevas estrategias diagnósticas y terapéuticas para la epilepsia: registros intracerebrales de neuronas individuales e imágenes de resonancia". Role: Co-applicant.

2017

Durham International Fellowships for Research and Enterprise. Durham University (UK)

2016 (1593) PICT. The Ministry of Science, Technology and Productive Innovation (Argentina).

2015 (1787) PICT (young investigator) The Ministry of Science, Technology and Productive Innovation (Argentina).

2015 Start-up funding for new lab (ENyS - CONICET) Ministry of Science, Technology and Productive Innovation (Argentina)

2014 IBRO return home fellowship.

ISBRA travel grant to attend the ISBRA/RSoA Annual Meeting.

2013 USF Direction of Postdoctoral Affairs visiting scholar grant. Funding used for an internship in the Psychiatry Neuroimaging Laboratory at Brigham and Women's Hospital, Harvard University (USA).

Scholarship to attend the Y-Mind Sao Paulo Advanced Science School for prevention of mental disorders (Brazil).

2012 Guarantors of Brain travel grant, UK. Funding used for presenting at the 3rd biennial Schizophrenia International Research Conference (Italy).

2010 Grindley grant, Experimental Psychology Society, UK. Funding used to travel to Organization for

Human Brain Mapping Conference 2010

Small Research Grant, Experimental Psychology Society, UK. Project: "Investigating the "where" auditory pathway in schizophrenic patients with hallucinations". In collaboration with Prof. David Milner.

- 2009** Lab visit grant, Experimental Psychology Society, UK. Funding used to finance internship at the Mallinckrodt Institute of Radiology, Washington University at St. Louis, (USA).
- 2008** fMRI pump-priming fund, Department of Psychology, University of Durham. Project: "Disentangling theory of mind and emotion cue decoding: an fMRI study".

Lab visits and training courses

- 2015** Postgraduate course in Neuroanatomy. Hospital el Cruce. Buenos Aires, Argentina.
- 2013** Visiting scholar in "Magnetic Resonance Tractography" under the supervision of Prof. Martha Shenton. Psychiatry Neuroimaging Laboratory, Brigham and Women's Hospital, Harvard Medical School, Boston, MA, USA.
- 2009** Internship in "functional connectivity in the resting state" under the supervision of Prof. Marcus E. Raichle.
Department of Radiology, Washington University, St Louis Missouri, USA.
- 2008** Course of SPM at Durham University. Course instructor: Dr. Karsten Specht, University of Bergen, Norway.
Workshop of teaching and supporting learning at Durham University. Offered by the Graduate School at Durham University.
- Course of Brain Voyager software at University of Durham. Course instructor: Dr. Fabrizio Esposito, University of Maastricht, The Netherlands.
- Autumn school in Cognitive Neuroscience at University of Oxford.
- 2007** Course of Statistical Parametric Mapping at the Institute of Neurology, University College London. Course coordinator: Dr. Karl Friston.
- 2006** Course of Matlab at the Institute of Cognitive Neuroscience, University College London.

Publications

Published Articles

- Elizalde Acevedo, B., Agüero Vera, V., Oddo, S., De Anchorena, D., Mohr, C., Kochen, S., ... & **Alba-Ferrara, L.** (2024). Language lateralization in temporal lobe epilepsy: A behavioral screening tool for surgical planning. *Neuropsychology*.
- Vallejo-Azar, M. N., Arenaza, B., Elizalde Acevedo, B., **Alba-Ferrara, L.**, Samengo, I., Bendersky, M., & Gonzalez, P. N. (2024). Hemispheric asymmetries in cortical grey matter of gyri and sulci in modern human populations from South America. *Journal of Anatomy*, 244(5), 815-830.
- Bendersky, M., & **Alba-Ferrara, L.** (2024). Neuroanatomy of cognition. *Frontiers in Neuroanatomy*, 18, 1376610.
- Baudo, M. C., Villamil, F., Paolinelli, P. S., Domenech, N. C., Cervio, A., **Alba-Ferrara, L.**, & Bendersky, M. (2023). Frontal Aslant Tract (FAT) and its role in language: A journey through tractographies and dissections. *World Neurosurgery*. in press.
- Vallejo-Azar, M. N., **Alba-Ferrara, L.**, Bouzigues, A., Princich, J. P., Markov, M., Bendersky, M., & Gonzalez, P. N. (2023). Influence of accessory sulci of the frontoparietal operculum on gray matter quantification. *Frontiers in Neuroanatomy*, 16, 134.

Elizalde Acevedo, B. E., Olano, M. A., Bendersky, M., Kochen, S., Vera, V. A., Chambeaud, N., ... & **Alba-Ferrara, L.** (2022). Brain mapping of emotional prosody in patients with drug-resistant temporal epilepsy: An indicator of plasticity. *Cortex*, 153, 97-109.

Gonzalez Aguilar, MJ., Rodriguez Lopez de Osornio S., Lynch S., Mennella P., **Alba Ferrara L.**, (2021) Cognition, Emotion and Behaviour: Addressing the Relationship Between Executive Functions and Decision-Making. *Int J Neuropsy Beh Sci*, 2: 94-96

Bendersky, M., Lomlodjian, C., Abusamra, V., Elizalde Acevedo, B., Kochen, S. & **Alba-Ferrara, L.** (2021). Functional anatomy of idiomatic expressions. *Brain Topography*, 1-15.

Olano, M. A., Acevedo, B. E., Chambeaud, N., Acuña, A., Marcó, M., Kochen, S., & **Alba-Ferrara, L.** (2020). Emotional salience enhances intelligibility in adverse acoustic conditions. *Neuropsychologia*, 107580.

Gonzalez Aguilar, M. J., & **Alba Ferrara, L.** (2020). CSIS: Proposal for a New Combined Screening Interpretation Score for Patients with Mild Cognitive Impairment. *Experimental Aging Research*, 1-9

Vallejo Azar, M. N., Bouzigues, A., **Alba Ferrara, L.**, González, P. & Bendersky, M. (2019). Asimetrías en el patrón surcal del opérculo frontoparietal. *Revista Argentina de Anatomía Online*, 10(3), 130-136.

Bertella, M. A., Grebe, M. P., Dalbosco, M. S., & **Alba-Ferrara, L.** (2018). Funciones ejecutivas, pobreza y estimulación cognitiva: un andamiaje para futuras intervenciones. *Avances en Psicología*, 26(1), 33-40.

Alba-Ferrara, L., Kochen, S., & Hausmann, M. (2018). Emotional Prosody Processing in Epilepsy: Some Insights on Brain Reorganization. *Frontiers in human neuroscience*, 12, 92.

Alba-Ferrara, L., Müller-Oehring, E. M., Sullivan, E. V., Pfefferbaum, A., & Schulte, T. (2015). Brain responses to emotional salience and reward in alcohol use disorder. *Brain imaging and behavior*, 1-11.

Alba-Ferrara, L., de Erausquin, G. A., Hirnstein, M., Weis, S., & Hausmann, M. (2013). Emotional prosody modulates attention in schizophrenia patients with hallucinations. *Front Hum Neurosci*, 7, 59.

Alba-Ferrara, L. M., & de Erausquin, G. A. (2013). What does anisotropy measure? Insights from increased and decreased anisotropy in selective fiber tracts in schizophrenia. *Front Integr Neurosci*, 7, 9.

Alba-Ferrara, Lucia M.; Fernandez, Francisco; de Erausquin, Gabriel A. (2012) The Use of Neuromodulation in the Treatment of Cocaine Dependence. *Addictive Disorders & Their Treatment*. doi: 10.1097/ADT.0b013e31827b5a2c

Alba-Ferrara, Lucia M.; Fernandez, Francisco; Salas, Ramiro; de Erausquin, Gabriel A. (2013) Transcranial Magnetic Stimulation and Deep Brain Stimulation in the Treatment of Alcohol Dependence. *Addictive Disorders & Their Treatment*. doi: 10.1097/ADT.0b013e31829cf047

Alba-Ferrara, L., Weis, S., Damjanovic, L., Rowett, M., & Hausmann, M. (2012). Voice identity recognition failure in schizophrenia patients. *The journal of nervous and mental disease*, 200(9).

Alba-Ferrara, L., Fernyhough, C., Weis, S., Mitchell, R. L., & Hausmann, M. (2012). Contributions of emotional prosody comprehension deficits to the formation of auditory verbal hallucinations in schizophrenia. *ClinPsychol Rev*, 32(4), 244-250.

Alba-Ferrara, L., A. Ellison, and R.L. Mitchell, Decoding emotional prosody: Resolving differences in functional neuroanatomy from fMRI and lesion studies using TMS. *Brain Stimul*, 2012. 5(3): p. 347-53.

Alba-Ferrara, L., Hausmann, M., Mitchell, R. L., & Weis, S. (2011). The neural correlates of emotional prosody comprehension: disentangling simple from complex emotion. *PLoS ONE*, 6, e28701.

Rosburg, T., Ludowig, E., Dumpelmann, M., **Alba-Ferrara, L.**, Urbach, H., & Elger, C. E. (2010). The effect of face inversion on intracranial and scalp recordings of event-related potentials. *Psychophysiology*, 47, 147-157.

Published whole books

Alba-Ferrara, L. (editor) "Transcranial Magnetic Stimulation: Methods, Clinical Uses and Effects on the Brain" (2013). Nova Science Publishers, NY. -ISBN-13: 978-1626186798

Alba-Ferrara, L. "Emotional Prosody Processing in the Schizophrenia Spectrum".(2013). Scholar's Press, Saarbrücken, Germany - ISBN-13: 978-3-639-51535-0

Postdoctoral Fellow Supervision

Dr. Bautista Elizalde Acevedo, CONICET-Universidad Austral

Graduate student supervisión

Bautista Elizalde Acevedo, PhD candidate at CONICET-Universidad Austral (2019-2024)

Ana Paula Colombini, PhD candidate CONICET, (2024 – currently)

Mauro Henri, MSc., candidate Universidad Nacional Arturo Jauretche (2024 – currently)