AGUSTIN PEREZ SANTANGELO

Buenos Aires, Argentina
agusantangelo@gmail.com

Personal website: 2exp3.netlify.app
Code repositories: github.com/2exp3

EDUCATION

Ph. D. in Biology (Neuroscience), University of Buenos Aires, 2016-present day.
University Degree in Molecular Biology and Biotechnology (Licenciatura), University of Buenos Aires, 2006-2013.

RESEARCH INTESTS

Cognitive Neuroscience; Human Behavior; Decision-Making; Evidence-Based Policymaking; Computational Models; Bayesian Inference.

RESEARCH
Ph.D. Candidate, 2016-present day
· Concentrations: Decision-making, Computational Modeling of Cognition and Behavior, Emotions, Physiology.
· Thesis: *"Cognitive effects of context on human decision-making".*
· Advisors: Mariano Sigman, Ph.D., Maria Juliana Leone, Ph.D.
 Laboratorio de Neurociencia, Torcuato Di Tella University.

Laboratory Technician, 2015-2016
· Concentrations: Molecular Markers, Genetic Profiling, Degraded DNA.
· Research and development project: *"Design of long ssDNA polynucleotides to amplify STRs loci in degraded DNA samples".*
· Advisors: M.Sc. Martin Mautner.
 Biodynamics S.R.L.

Undergraduate Research Assistant, 2011-2013
· Concentrations: Behavior, Circadian Rhythms, Genetics, Neural Pathways.
· Undergraduate research project: "*Molecular Pathways of Circadian Behavior in D. Melanogaster".*
· Advisor: Maria Fernanda Ceriani, Ph.D.
 Behavioral Genetics Laboratory, Fundación Instituto Leloir.

PUBLICATIONS
· Perez Santangelo, A., & Solovey, G. (2020). "*Running Online Behavioral Experiments Using R: Implementation of a Response-Time Decision Making Task as an R-Shiny App*". In review.
 https://doi.org/10.31234/osf.io/nuxdg (preprint).
· Perez Santangelo, A.; Ludwig, C.; Navajas, J.; Sigman, M.; Leone, M.J. (2020). *"Music changes the policy of human decision-making".* In review.

- Hermida, M. J.; <u>Perez Santangelo, A.</u>; Calero, C.I.; Goizueta, C.; Espinosa, M.; Sigman, M. (2020). *"Learning-by-teaching approach improves children and parent's dengue knowledge"*. In press.
- Mautner, M. E.; <u>Santangelo, A. P.</u>; Bielsa, R. M. C.; Sala, A.; Ginart, S.; Corach, D. (2017). *"Using long ssDNA polynucleotides to amplify STRs loci in degraded DNA samples"*. PloS ONE 12(11), e0187190
- Beckwith E. J.; Gorostiza, E. A.; Berni, J.; Rezával, C.; <u>Perez-Santangelo, A.</u> et al. (2013) *"Circadian Period Integrates Network Information Through Activation of the BMP Signaling Pathway"*. PLoS Biology 11(12): e1001733.

RELEVANT SKILLS

- Proficient in R (including Shiny and R Markdown) and extensive programming experience with MATLAB and Python, for the implementation of experimental paradigms and data collection, analysis, visualization, and communication.
- Vast experience in statistical analysis and modelling (including multi-level and non-linear models) in both frequentist and Bayesian frameworks (with R).
- Advanced knowledge of MS Excel and MS PowerPoint.
- Competent in HTML, JavaScript, and CSS.
- Extensive experience in audio, image, and video edition software (Cubase, Adobe Illustrator, Adobe Premiere, Sony Vegas, SoundForge, Adobe LightRoom).
- Fluent in Spanish (first language) and English (IELTS Academic overall score: 8); basic Portuguese and French.

EMPLOYMENT HISTORY

Applied statistics consultant, 2019-present day, Freelance.
- Data analysis for [MundoSano](), and several collaborations with academics where I apply bespoke statistical methodology to answer specific questions.

Lead laboratory technician, 2008-2016, Molecular Biology Laboratory, Biodynamics S.R.L.
- In charge of all the steps involved in production, quality assurance, and research and development of new molecular-biology techniques (which crystallized in a published peer-reviewed paper).

TEACHING EXPERIENCE

Professor, 2015-present day, National University of *"Tres de Febrero"*. Course: Chess & Science.
- I provide an academic overview of chess both as a subject and as an experimental paradigm to answer more general scientific questions.
- Audience is generally around 30-40 people with widely diverse backgrounds (e.g., chess, scientific, educational) which requires fine-tuning of communication and didactic strategies to assure everyone understands all main concepts but also retain the attention of those who already have prior knowledge.
- Material and content are generated and updated frequently, with weekly evaluations to consolidate new concepts and grading through a final evaluation.

Teacher, 2016-2017, *"Santa Teresita del Niño Jesus"* High School, Course: Science.

·   I taught in English to first-year high-school students about physical, chemical and biological processes both in the classroom and in the lab.

GRANTS AND PRIZES

·   Runner-up, Shiny-app contest, 2021.
·   Fee waiver, Neuromatch Academy, 2020.
·   International Travel Grant, International Brain Research Organization (IBRO), 2019.
·   Fee waiver and travel grant, HelloBio - European Neuroscience Conference for Doctoral Students (ENCODS), 2019.
·   Doctoral Scholarship, National Scientific and Technical Research Council, 2016.
·   *Sarmiento* Scholarship for undergraduate students, University of Buenos Aires, 2007.

CERTIFICATIONS

·   *"Neuromatch Academy interactive track and project completion",* Neuromatch 2020 (online summer-school).
·   *"Protecting Human Research Participants",* Certification Number 2935136, NIH (online course).

RELEVANT COMPLETED COURSES

·   Decision-Making: Cognitive and statistical modelling with R. Faculty of Exact and Natural Sciences (FCEN), University of Buenos Aires (UBA), 2020.
·   Statistical Rethinking: A Bayesian Course. Virtual, 2020
·   Neuromatch Academy: modelling neuroscience phenomena with Python. Virtual, 2020.
·   Econometrics. FCEN, UBA, 2019.
·   Network Science. FCEN, UBA, 2019.
·   Applied Statistics: General and Generalized Linear Mixed Models. FCEN, UBA, 2018.
·   Data Science with R: Statistical Bases. FCEN, UBA, 2017.