JAMES J. BONAIUTO, PHD
Postdoctoral Researcher
Institute of Cognitive Science, French National Center for Scientific Research (CNRS)

EDUCATION

Undergraduate:	BS, Computer Science, *Magna Cum Laude*
2004	Disciplines: Artificial Intelligence, Data Structures and Algorithms
	Drexel University, Philadelphia, PA

Graduate:	PhD, Neuroscience
2010	Disciplines: Computational Neuroscience
	Advisor: Michael A. Arbib
	University of Southern California, Los Angeles, CA

EMPLOYMENT

2010-2013	Postdoctoral Fellow, California Institute of Technology, Pasadena, CA
2013-2017	Research Associate, Department for Movement and Clinical Neurosciences / Wellcome Trust Centre for Neuroimaging, University College London, London, UK
2017-present	Honorary Research Associate, Department for Movement and Clinical Neurosciences, University College London, London, UK
2017-present	Postdoctoral Researcher, Institute of Cognitive Science, French National Center for Scientific Research (CNRS), Lyon, France

HONORS and AWARDS

1999-2004	A.J. Drexel Scholarship, Drexel Univ.
2000-2004	Drexel Univ. Dean's List
2004	Upsilon Pi Epsilon, Honor Society for Computing and Information Disciplines, Drexel Univ.
2004-2006	Joint Initiative Graduate Merit Fellowship, Univ. of Southern California
2008	Outstanding Teaching Assistant Award, Biology Department, Univ. of Southern California
2008-2009	Neuroscience Graduate Program Fellowship, Univ. of Southern California
2009	Poster competition, 2nd place, Neuroscience Department Retreat, Univ. of Southern California
2009	Outstanding Service Award, Neuroscience Graduate Program, Univ. of Southern California
2009	Travel Grant, Organization for Computational Neuroscience
2010-2012	Swartz Foundation Fellowship, Sloan-Swartz Center for Theoretical Neurobiology, California Institute of Technology
2011	Travel Grant, Society for the Neural Control of Movement
2011	Travel Grant, Icelandic Institute for Intelligent Machines
2017	Best Poster Award, NYC Neuromodulation, NYC

PROFESSIONAL ACTIVITIES

Administrative and Scientific Leadership Positions

2008-2009	Student member of Neuroscience Graduate Program curriculum, executive and advisement committees, Univ. of Southern California

2008-2009	President of the Neuroscience Graduate Organization, Univ. of Southern California
2011	Program Committee, Conference on Artificial General Intelligence, Mountain View, CA
2013-present	Review Editor, Frontiers in Evolutionary Psychology and Neuroscience
2017-present	Scientific Advisory Board, BrainBox Initiative

Journal Reviewing
Review statistics available at: https://publons.com/author/435256/james-bonaiuto#stats
Journal of Neurophysiology, Artificial Life, Psychological Review, Cognitive Processing, Current Zoology, Journal of Experimental Psychology, Cortex*,* PLOS One, Neuropsychologia*,* NeuroImage, Neuroscience & Biobehavioral Reviews, Nature Scientific Reports, Frontiers in Psychology, Neuroscience Research, Cerebral Cortex, European Journal of Neuroscience, Frontiers in Neuroscience, Neural Networks, IEEE International Conference on Development and Learning and on Epigenetic Robotics

Professional Societies

2009	Organization of Computational Neuroscience
2016	International Congress of Infant Studies
2011-present	Society of Neuroscience

RESEARCH
Statistics *(retrieved using Google Scholar on 24/10/2018)*
h-index: 15
i10-index: 21
Total citations: 806
Average citations per article: 26

Professional Educational Materials and Chapters in Books
1. Arbib M, **Bonaiuto JJ** (Eds.) (2016) <u>From Neuron to Cognition via Computational Neuroscience.</u> MIT Press.
2. **Bonaiuto JJ**, Arbib M (2016) "Linking models with empirical data: The Brain Operation Database", In: M Arbib, JJ Bonaiuto (Eds.), <u>From Neuron to Cognition via Computational Neuroscience.</u> MIT Press.
3. **Bonaiuto JJ** (2016) "Reach and grasp: Control, development and recognition", In: M Arbib, JJ Bonaiuto (Eds.), <u>From Neuron to Cognition via Computational Neuroscience.</u> MIT Press.
4. **Bonaiuto JJ** (2014) "Affordances and action recognition", In: K Ikeuchi (Ed.), <u>Computer Vision: A Reference Guide.</u> Springer.
5. **Bonaiuto JJ**, Thórisson KR (2007) "Towards a neurocognitive model of realtime turntaking in face-to-face dialogue", In: I Wachsmuth, M Lenzen, G Knoblich (Eds.), <u>Embodied Communication in Humans and Machines.</u> Oxford Univ. Press.
6. Kopp S, Wachsmuth I, **Bonaiuto JJ**, Arbib M (2007) "Imitation in embodied communication – from monkey mirror neurons to artificial humans", In: I Wachsmuth, M Lenzen, G Knoblich (Eds.), <u>Embodied Communication in Humans and Machines.</u> Oxford Univ. Press.

Journal Articles
A full list of my journal publications can be found at

https://scholar.google.com/citations?hl=en&user=MInHANgAAAAJ&view_op=list_works&sortby=pubdate

* indicates shared first author

1. **Bonaiuto* JJ**, Little* SJ, Barnes GR, Bestmann S. Motor cortical beta transients delay movement initiation and track errors. bioRxiv doi: https://doi.org/10.1101/384370.

2. Rayson H, **Bonaiuto JJ**, Ferrari PF, Chakrabarti B, Murray L. Building blocks of joint attention: Sensitivity to having one's own gaze followed in early infancy. *Developmental Cognitive Neuroscience, under review.*

3. Tzovara A, Meyer SS, **Bonaiuto JJ**, Abivardi A, Dolan RJ, Barnes GR, Bach DR (2018) Neural oscillations in human hippocampus and amygdala during prediction of safety and threat. *Human Brain Mapping*, *under review.*

4. **Bonaiuto JJ**, Meyer SS, Little SJ, Rossiter HE, Callaghan MF, Dick F, Barnes GR, Bestmann S (2018) Lamina-specific cortical dynamics in human visual and sensorimotor cortices. bioRxiv doi: https://doi.org/10.1101/226274, *eLife,* e33977.

5. Little SJ, **Bonaiuto JJ**, Meyer SS, Lopez J, Bestmann S, Barnes GR (2018) Quantifying the performance of MEG source reconstruction using resting state data. bioRxiv doi: https://doi.org/10.1101/248252, *NeuroImage,* 181(1): 453-460.

6. Coudé G, Toschi G, Festante F, Bimbi M, **Bonaiuto JJ**, Ferrari PF (2018) Grasping neurons in the ventral premotor cortex of macaques are modulated by social goals. *Journal of Cognitive Neuroscience, in press.*

7. **Bonaiuto JJ**, Rossiter H, Meyer SS, Adams N, Little SJ, Callaghan MF, Dick F, Bestmann S, Barnes GR (2018) Non-invasive laminar inference with MEG: Comparison of methods and source inversion algorithms. bioRxiv doi: https://doi.org/10.1101/147215, *NeuroImage,* 167: 372-383.

8. Rayson H, **Bonaiuto JJ**, Ferrari PF, Murray L (2017) Early maternal mirroring predicts infant motor system activation during facial expression observation. *Scientific Reports*, 7: 11738.

9. Hannah R, Modi S, **Bonaiuto JJ**, Rothwell JC (2017) Enhanced biasing effect of prior knowledge on perceptual decision processes following continuous theta burst stimulation of motor cortex. *Clinical Neurophysiology*, 128(3): e95-e96.

10. Rayson H, Parsons C, Young K, Goodacre T, Kringelbach M, **Bonaiuto JJ**, McSorley E, Murray L (2017) Effects of Infant Cleft Lip on Adult Gaze and Perceptions of 'Cuteness'. *Cleft Palate-Craniofacial Journal,* 54(5): 562-570.

11. **Bonaiuto JJ**, de Berker A, Bestmann S (2016). Response repetition biases in human perceptual decisions are explained by activity decay in competitive attractor models. *eLife*, e20047.

12. Meyer SS, **Bonaiuto JJ**, Lim M, Rossiter H, Waters S, Bradbury D, Bestmann S, Brookes M, Callaghan MF, Weiskopf N, Barnes GR (2016). Flexible head-casts for high spatial precision MEG. *Journal of Neuroscience Methods*, 276(30): 38-45.

13. Lametti DR, Oostwoud Wijdenes L, **Bonaiuto JJ**, Bestmann S, Rothwell JC (2016) Cerebellar tDCS Dissociates the Timing of Perceptual Decisions from Perceptual Change in Speech. *Journal of Neurophysiology*, 116(5): 2023-2032.

14. Rayson H, **Bonaiuto JJ**, Ferrari PF, Murray L (2016) Mu desynchronization during observation and execution of facial expressions in 30-month-old children. *Developmental Cognitive Neuroscience*, 19: 279-287.

15. **Bonaiuto* JJ**, Hämmerer* D, Kleine-Flugge* M, Bestmann S (2016) Selective alteration of human value decisions with medial frontal tDCS is predicted by changes in attractor dynamics. *Scientific Reports*, 6.

16. Bestmann S, de Berker A, **Bonaiuto JJ** (2015) Understanding the behavioural consequences of noninvasive brain stimulation. *Trends in Cognitive Sciences*, 19(1): 13-20.
17. **Bonaiuto JJ**, Arbib MA (2015) Learning to grasp and extract affordances: the Integrated Learning of Grasps and Affordances (ILGA) model. *Biological Cybernetics*, 109(6): 639-669.
18. **Bonaiuto JJ**, Bestmann S (2015) Understanding the nonlinear physiological and behavioral effects of tDCS through computational neurostimulation. *Progress in Brain Research,* 222: 75-103.
19. **Bonaiuto* JJ**, Christopoulos* V, Andersen RA (2015) A biologically plausible computational theory for value integration and action selection in decisions with competing alternatives. *PLOS Computational Biology*, 11(3): e1004104.
20. Christopoulos V, **Bonaiuto JJ**, Kagan I, Andersen RA (2015) Inactivation of parietal reach region affects reaching but not saccade choices in internally-guided decisions. *Journal of Neuroscience*, 35(33): 11719-28.
21. Arbib MA, **Bonaiuto JJ**, Bornkessel-Schlesewsky I, Kemmerer D, MacWhinney B, Nielsen F, Oztop E (2014) Action and language mechanisms in the brain: Data, models and neuroinformatics. *Neuroinformatics (special issue on Action and Language)*, 12(1): 209-225*.*
22. Arbib MA, Plangprasopchok A, **Bonaiuto JJ**, Schuler R (2014) A neuroinformatics of brain modeling and its implementation in the Brain Operation Database BODB. *Neuroinformatics (special issue on Action and Language),* 12(1): 5-26*.*
23. **Bonaiuto JJ** (2014) Associative learning is necessary but not sufficient for mirror neuron development. *Behavioral and Brain Sciences,* 37(2): 194-195. Commentary on Cook, R., Bird, G., Catmur, C., Press, C., Heyes, C. "Mirror neurons: from origin to function".
24. **Bonaiuto JJ**, Arbib MA (2014) Modeling the BOLD correlates of competitive neural dynamics. *Neural Networks,* 49: 1-10.
25. Demiris Y, Aziz-Zadeh L, **Bonaiuto JJ** (2014) Information processing in the mirror neuron system in primates and machines. *Neuroinformatics (special issue on Action and Language),* 12(1): 63-91.
26. Arbib MA, **Bonaiuto JJ** (2012) Multiple levels of spatial organization: World graphs and spatial difference learning. *Adaptive Behavior,* 20(4): 287-303.
27. **Bonaiuto JJ**, Arbib MA (2010) Extending the mirror neuron system model, II: What did I just do? A new role for mirror neurons. *Biological Cybernetics*, 102(4): 341-359.
28. Arbib MA, **Bonaiuto JJ**, Jacobs S, Frey S (2008) Tool use and the distalization of the end-effector. *Psychological Research*, 73(4): 441-462.
29. Arbib MA, **Bonaiuto JJ** (2007) From grasping to complex imitation: Mirror systems on the evolutionary path to language. *Mind and Society* (special issue on *Language Evolution*), 7(1): 43-64.
30. **Bonaiuto JJ,** Rosta E, Arbib MA (2007) Extending the mirror neuron system model, I: Audible actions and invisible grasps. *Biological Cybernetics*, 96: 9-38.
31. **Bonaiuto JJ**, Itti L (2006) Using attention and spatial information for rapid facial recognition in video. *Image and Vision Computing*, 24(5): 557-563.

Papers in Progress
Bonaiuto* JJ, Little* SJ, Neymotin SA, Jones SR, Barnes GR, Bestmann S. Distinct deep and superficial cortical inputs cause beta bursts in human sensorimotor cortex.
Bunday KL, Betti S, **Bonaiuto JJ**, Lemon RN, Orban G, Davare M. Mapping connectivity between the premotor cortex and contralateral primary motor cortex.

Technological and Other Scientific Innovations

2008-2016   Developed the Brain Operation Database (BODB), a publicly available neuroinformatics system for documenting how computational models for cognitive or systems neuroscience are linked to the experimental data used to design and test them.

2016-2018   Developed SensorimotorDB, a neuroinformatics system for organizing and visualizing neurophysiological and behavioral data, as well as running analyses through integration with R and Matlab. This system is currently in use in labs at the CNRS (Ferrari), University of Parma (Bonini), German Primate Center (Kagan), and University College London (Kraskov).

INVITED SEMINARS

2018   ***Invited Lectures*** SPM M/EEG Course, Wellcome Centre for Neuroimaging, University College London, London, UK
Organizers: H. Cagnan, V. Litvak
Invited Speaker BrainBox Initiative Conference, London, UK
Organizers: A. Thomas, T. Smreczak
Invited Lectures Department of Computer Science, Instituto Tecnológico Autónomo de México, Mexico City, Mexico
Organizers: Juan Salvador Marmol Yahya

2017   ***Invited Lecture Series*** Division of Systems Neuroscience, Tohoku University, Sendai, Japan
Organizers: K.I. Tsutsui
Invited Lecture Cognitive Neuroscience and Cognitive Neuropsychology, Birkbeck University of London, London, UK
Organizers: F. Dick
Invited Lecture tDCS Foundation Workshop, University College London / Rogue Resolutions, London, UK
Organizers: S. Bestmann, A. Thomas, T. Smreczak
Invited Seminar Institut des Sciences Cognitives, Centre National de la Recherche Scientifique, Lyon, France
Organizers: P.F. Ferrari
Invited Seminar Dipartimento di Medicina e Chirurgia, Universita di Parma, Parma, Italy
Organizers: L. Bonini
Invited Seminar Decision and Awareness Group, German Primate Center (DPZ), Goettingen, Germany
Organizers: I. Kagan

2016   ***Invited Speaker*** BrainBox Initiative Symposium, New York, NY
Organizers: A. Thomas, T. Smreczak
Invited Lecture tDCS Foundation Workshop, University College London / Rogue Resolutions, London, UK
Organizers: S. Bestmann, A. Thomas, T. Smreczak

2012   ***Invited Seminar*** Neuromorphic Engineering Summer School, Telluride, CO
Organizers: S. Bermudez i Badia, Bernardet, U.

2011   ***Invited Panel Presentation*** Neural Control of Movement, San Juan, Puerto Rico
Organizers: K. Thoroughman

2009   ***Invited Speaker*** Modeling Spatial Cognition Workshop, Air Force Research Laboratory, Scottsdale Arizona

Organizers: G. Gunzelmann
Invited Seminar Grenoble Institute of Technology, Grenoble, France
Organizers: C. Moulin-Frier
Invited Seminar Faculty of Technology and the Center of Excellence (CITEC), University of Bielefeld, Bielefeld, Germany
Organizers: S. Kopp, I. Wachsmuth
Invited Lecture Transcranial Magnetic Stimulation Course, University of Southern California, Los Angeles, CA
Organizers: B. Fisher
Invited Lecture Neural Models of Visually Guided Behavior, Computer Science Department, University of Southern California, Los Angeles, CA
Organizers: M.A. Arbib
Invited Lecture Brain Theory and Artificial Intelligence, Computer Science Department, University of Southern California, Los Angeles, CA
Organizers: M.A. Arbib

2008   ***Invited Seminar*** School of Information Technology and Electrical Engineering, University of Queensland, Brisbane, Australia
Organizers: J. Wiles

2006   ***Invited Speaker*** Embodied Communication II: An Integrated Perspective, Center for Interdisciplinary Research (ZiF), University of Bielefeld, Bielefeld, Germany
Organizers: I. Wachsmuth, M. Lenzen, G. Knoblich

2006   ***Invited Speaker*** Embodied Communication, Joint Action, Social Understanding, Center for Interdisciplinary Research (ZiF), University of Bielefeld, Bielefeld, Germany
Organizers: I. Wachsmuth, M. Lenzen, G. Knoblich

CONFERENCE PRESENTATIONS

2017   **Bonaiuto JJ,** Bestmann S, Barnes GR. Comparing methods for making laminar specific inference in MEG. MEG UK, Oxford, UK.

2016   **Bonaiuto JJ**, Arbib MA. Linking computational models to experimental data with the Brain Operation DataBase (BODB). Neuroinformatics, Reading, UK.
Bonaiuto JJ, Meyer S, Barnes GR, Bestmann S. Frequency and laminar specificity in action selection. MEG UK, York, UK.

2014   **Bonaiuto JJ**, Bestmann S. Computational neurostimulation. Motor control and rehabilitation: A collaborative Johns Hopkins University – University College London meeting, Baltimore, MD.

2010   **Bonaiuto JJ**, Andersen RA. Synthetic Brain Imaging: A computational interface between electrophysiology and neuroimaging. *Sloan-Swartz Centers for Theoretical Neurobiology 2010 Meeting*, Yale University, New Haven, Connecticut.

2009   Arbib MA, **Bonaiuto JJ.** Tool use, end-effectors and the opportunistic versus stereotyped Assemblage of Motor Schemas. *IJCMM Workshop on Neurodynamics,* Atlanta, Georgia.

2006   Arbib MA, **Bonaiuto JJ**, Rosta E. The Mirror System Hypothesis: From a macaque-like mirror system to imitation, in *The Evolution of Language: Proceedings of the 6th International Conference (EVOLANG6)*, (A. Cangelosi, A.D.M. Smith, and K. Smith, Eds.), Singapore: World Scientific, pp. 3-10.

2005   **Bonaiuto JJ**, Itti L. Combining attention and recognition for rapid scene analysis. In**:** *Proc. International Workshop on Attention and Performance in Computer Vision (WAPCV'05), San Diego, California,* pp. 1-6.

POSTER PRESENTATIONS

2018   Heinzle J, Ihle SJ, **Bonaiuto JJ**, Bestmann S, Stephan KE, Barnes GR. Layer specific dynamic causal modelling of MEG data – a feasibility analysis based on simulations. *Organization for Human Brain Mapping*, Singapore.

Tzovara A, Meyer SS, **Bonaiuto JJ**, Abivardi A, Dolan RJ, Barnes GR, Bach DR. Reconstructing neural oscillations from the human hippocampus & amygdala using MEG. *Organization for Human Brain Mapping*, Singapore.

Meyer S, **Bonaiuto JJ**, Bush D, Bisby J, Burgess N, Barnes GR. Non-invasive imaging of traveling waves in human hippocampus. *International Conference on Biomagnetism*, Philadelphia, PA.

Bonaiuto JJ, Little S, Neymotin SA, Jones SR, Barnes GR, Bestmann S. Distinct deep and superficial cortical inputs cause beta bursts in human sensorimotor cortex. *Society for Neuroscience*, San Diego, CA.

Little S, **Bonaiuto JJ**, Barnes GR, Bestmann S. Beta burst rate and timing predicts action initiation and performance in human motor cortex. *Society for Neuroscience*, San Diego, CA.

2016   **Bonaiuto JJ**, de Berker A, Bestmann S. Biasing and predicting human choice behavior through computational neurostimulation. *NYC Neuromodulation*, New York, NY.

Bonaiuto JJ, Meyer S, Dick F, Barnes GR, Bestmann S. Laminar specificity of high and low frequency oscillations during action selection. *International Conference on Biomagnetism*, Seoul, South Korea.

Bonaiuto JJ, Arbib MA. Learning to grasp and extract affordances in infancy: The Integrated Learning of Grasps and Affordances (ILGA) model. *International Conference on Infant Studies*, New Orleans, LA.

Rayson H, **Bonaiuto JJ**, Murray L. Oscillatory correlates of sensitivity to attention mirroring in young infants. *International Conference on Infant Studies,* New Orleans, LA.

2015   Bestmann S, **Bonaiuto JJ.** A computational neurostimulation model of the nonlinear effects of tDCS. *Society for Neuroscience*, Chicago, IL.

Bonaiuto JJ, Bestmann S. A high resolution MEG study of predictive coding in action selection. *Society for Neuroscience*, Chicago, IL.

Lametti DR, Oostwoud Wijdenes L, **Bonaiuto JJ**, Bestmann S, Rothwell JC. Speech perceptual learning is not altered by transcranial direct current stimulation to the cerebellum. *Society for Neuroscience*, Chicago, IL.

Rayson H, **Bonaiuto JJ**, Ferrari PF, Murray L. Mu rhythm desynchronization during the observation of emotional and non-emotional facial expressions in 30-month-old infants. *Society for Neuroscience,* Chicago, IL.

2014   **Bonaiuto JJ**, de Berker A, Bestmann S. Predicting the behavioral impact of tDCS on perceptual decision making with computational neurostimulation. *Society for Neuroscience,* Washington, DC.

Hammerer D, Klein-Flugge M, **Bonaiuto JJ**, Bikson M, Bestmann S. Transcranial direct current stimulation over ventro-medial prefrontal cortex changes human value-based decision making: A computational neurostimulation study. *Society for Neuroscience*, Washington, DC.

2013	**Bonaiuto JJ**, Christopoulos VN, Andersen RA. Integration of dynamic neural fields and an optimal control framework for action-based decision making. *Society for the Neural Control of Movement (NCM)*, San Juan, Puerto Rico.
	Christopoulos VN, **Bonaiuto JJ**, Andersen RA. Neural and behavioral mechanisms of action selection in value-based decisions: A computational approach. *Society for Neuroscience*, San Diego, CA.
	Christopoulos VN, Schrater PR, **Bonaiuto JJ**, Andersen RA An optimal control framework for action-based decision making. *Society for the Neural Control of Movement (NCM)*, San Juan, Puerto Rico.
2012	Aflalo T, **Bonaiuto JJ**, Andersen RA. Localizing Signals for Neuroprosthetic Control. *Society for Neuroscience*, New Orleans, LA.
	Bonaiuto JJ, Andersen RA Modeling the BOLD correlates of competitive neural dynamics. *Sloan-Swartz Centers for Theoretical Neurobiology 2012 Meeting,* University of San Diego, San Diego, CA.
	Bonaiuto JJ, Andersen RA, Arbib MA The macaque mirror system. Sally and Anne meet the monkey. *Mirror Neurons: New Frontiers 20 Years After Their Discovery,* Erice, Sicily.
	Bonaiuto JJ, Kagan I, Andersen RA. Competition and cooperation in a computational model of spatial decision-making and neglect. *Society for Neuroscience*, New Orleans, LA.
	Christopoulos VN, **Bonaiuto JJ**, Kagan I, Andersen RA. Parietal Reach Region (PRR) inactivation causes deficits in reach target selection. *Society for Neuroscience*, New Orleans, LA.
2011	**Bonaiuto JJ**, Arbib MA. Modeling the influence of movement observation on motor learning. *Society for the Neural Control of Movement (NCM)*, San Juan, Puerto Rico.
	Bonaiuto JJ, Kagan I, Andersen RA. Synthetic brain imaging on a computational model of interhemispheric interactions during spatial decision-making. *Society for Neuroscience,* Washington, D.C.
2009	**Bonaiuto, JJ**, Arbib MA. Synthetic brain imaging on a spiking neural model of parieto-frontal interactions in reaching. *Computational Neuroscience Meeting*, Berlin, Germany.
2007	**Bonaiuto JJ**, Arbib MA. Augmented competitive queuing for flexible action scheduling. *Computational Cognitive Neuroscience Conference (CCNC)*, San Diego, CA.
2006	Han CE, Tretriluxana J, **Bonaiuto JJ,** Schweighofer N, Winstein CJ, Arbib MA. Differences in cognitive strategy and grasp latency may affect variability for lateralized reach-to-gasp actions. *Society for Neuroscience*, Atlanta, GA, Abstract 440.18.
2005	**Bonaiuto JJ**, Rosta E, Arbib MA. Recognizing invisible actions. *Modeling Natural Action Selection (MNAS),* Edinburgh, Scotland.

TEACHING and SUPERVISION
Courses Taught

2009	Teaching Assistant in "Organismal Biology and Evolution". Undergraduate course (Instructor: P. Lum), Department of Biology (BISC 120), University of Southern California, Los Angeles, CA

2008	Teaching Assistant in "Cell Biology and Physiology". Undergraduate course (Instructor: A. Herrera), Department of Biology (BISC 220), University of Southern California, Los Angeles, CA
2007	Co-Instructor in "Matlab Programming". Graduate course, Neuroscience Graduate Program, University of Southern California, Los Angeles, CA
2006-2007	Teaching Assistant in "Neurobiology". Undergraduate course (Instructor: M. Quick), Department of Biology (BISC 421), University of Southern California, Los Angeles, CA

Student Supervision
1. Isabella Varsavsky. *Assessing the effects of tDCS on perceptual learning.* Co-supervised MSc thesis in Brain and Mind Science with Dr. Sven Bestmann, Institute of Neurology, University College London, 2016-2017.
2. Jeff Inglis. *Investigating the Mechanisms by which tDCS Influences Synaptic Plasticity and Human Behaviour: A Computational Neurostimulation Model.* Co-supervised MSc thesis in Cognitive and Clinical Neuroscience with Dr. Sven Bestmann, Institute of Neurology, University College London. 2015-2017.