# **EDUCATION**

2019-22: Postdoc, École Normale Supérieure, Laboratoire des Systèmes Perceptifs  $\sim$  Pascal Mamassian

2014-19: PhD, New York University, Cognition & Perception Program  $\sim$  Michael S. Landy

2010-13: Bachelor of Science, University of Sydney, physiology & psychology

### RESEARCH

# Lab visits/internships:

Karl Gegenfurtner  $\sim$  Justus-Liebig Universität Giessen, (1 mo., 2021)

Pascal Mamassian ~ École Normale Supérieure (3 mo., 2017)

Alex Holcombe ~ University of Sydney (8 mo., 2014)

David Alais  $\sim$  University of Sydney (8 mo., 2014)

Simon Carlile  $\sim$  University of Sydney (2.5 yr., 2011-13)

# **External Collaborators:**

Oliver J. Robinson (UCL) Monica Gori (IIT)

# **FUNDING**

2019-21 Fyssen Post-Doctoral Fellowship, Fondation Fyssen – (60,000 EUR)

2014-19 Henry M. MacCracken Fellowship, New York University – (tuition + 125,000 USD)

2014-17 Frank Knox Memorial Fellowship (declined), Harvard University – (tuition + 80,000 USD)

2010-13 Access Scholarship (financial & geographic disadvantage), University of Sydney – (24,000 AUD)

2010-13 National Scholarship, University of Sydney – (20,000 AUD)

# **PUBLICATIONS**

- 2022 <u>Locke, S. M.</u>, Landy, M. S. & Mamassian, P. Suprathreshold perceptual decisions constrain models of confidence. *PLoS Computational Biology:* (in press).
- 2022 Rahnev, D., et al. Consensus goals for the field of visual metacognition. *Perspectives on Psychological Sciences*, (in press).
- 2021 Locke, S. M. & Robinson, O. J. Affective bias through the lens of Signal Detection Theory. *Computational Psychiatry*, 5(1): 4-20.
- 2020 <u>Locke, S. M.</u>, Mamassian, P. & Landy, M. S. Performance monitoring for sensorimotor confidence: A visuomotor tracking study. *Cognition*, 205: 104396.
- 2020 Locke, S. M., Gafin-Cahn, E., Hosseinizaveh, N., Mamassian, P. & Landy, M. S. Priors and payoffs in confidence judgments. *Attention, Perception, & Psychophysics*, 82(6): 3158-3175.
- 2017 <u>Locke, S. M.</u> & Landy, M. S. Temporal causal inference with stochastic audiovisual sequences. PLoSO(NE, 12(9)): e0183776.
- 2016 Alais, D., Locke, S. M., Leung, J., & Van der Burg, E. No Attentional capture from invisible flicker. Scientific  $\overline{Reports}$ , 6: 29296.
- 2016 Locke, S. M., Leung, J., & Carlile, S. Sensitivity to auditory velocity contrast. *Scientific Reports*, 6: 27725.
- 2014 Feinkohl, A., Locke, S. M., Leung, J., & Carlile, S. The effect of velocity on auditory representational momentum.

# **TALKS**

2022 Locke, S. M. & Mamassian, P. Confidence leak and its affect on appearance. *Perceptual Metacognition Satellite Meeting* in Amsterdam, Netherlands.

- 2022 <u>Locke, S. M.</u>, Martolini, C., Lunghi, C., Cappagli, G., Gori, M., & Mamassian, P. Movement-induced biases in auditory spatial perception. *International Multisensory Research Forum* in Ulm, Germany.
- 2022 <u>Locke, S. M.</u>, Landy, M. S., & Mamassian, P. Performance Monitoring for Sensorimotor Confidence. *International Conference of Cognitive Neuroscience* in Helsinki, Finland.
- 2022 Evans, M.H., Locke, S. M., & Landy, M. S. Prospective and Retrospective Cues for Sensorimotor Confidence in a Reaching Task. *Vision Sciences Society Annual Meeting* in St. Pete Beach, FL.
- 2021 Locke, S. M., Mamassian, P., & Landy, M. S. Sensorimotor confidence. *UCL Decision-Making in Voluntary Action Workshop* in London, UK.
- 2018 Gaffin-Cahn, E., <u>Locke, S. M.</u>, Hosseinizaveh, N., Mamassian, P., & Landy, M. S. Assessing the role of rewards and priors on confidence judgments. *Vision Sciences Society Annual Meeting* in St. Pete Beach, FL.
- 2016 <u>Locke, S. M.</u> & Landy, M. S. Spatiotemporal factors in audiovisual rate-discrimination. Invited talk at the Department of Psychology, University of Sydney, Australia.
- 2015 Carlile, S., Leung, J., Locke, S. M., & Burgess, M. Hearing motion in motion. *Acoustical Society of America Annual Meeting* in Pittsburgh, PA.
- 2014 Locke, S. M., Feinkohl, A., Leung, J., & Carlile, S. The auditory representational momentum effect.

  11th Australasian Auditory Neuroscience Workshop in Adelaide, Australia.

#### **POSTERS**

- 2022 Locke, S. M., Goettker, A., Gegenfurtner, K.R., & Mamassian, P. Sensorimotor Confidence for Tracking Eye Movements. *Vision Sciences Society Annual Meeting* in St. Pete Beach, FL
- 2021 Ibrahim, L. F., Destais, C. A., <u>Locke, S. M.</u>, & Robinson, O.J. Incorrect prior beliefs: A possible cause to negative affective bias in mood/anxiety disorders. *British Association for Psychopharma-cology Meeting* held online.
- 2021 Destais, C. A., Ibrahim, L. F., <u>Locke, S. M.</u>, & Robinson, O.J. Investigating accuracy maximisation as a possible cause for negative affective bias in mood disorders. *British Association for Psychopharmacology Meeting* held online and the *Harvard Women in Psychology's Annual Trends in Psychology Summit* held online.
- 2018 <u>Locke, S. M.</u>, Landy, M. S., & Mamassian, P. Sequential effects in confidence. *Vision Sciences Society Annual Meeting* in St. Pete Beach, FL.
- 2017 <u>Locke, S. M.</u>, Landy, M. S., Mamassian, P. & Simoncelli, E. P. The temporal dynamics of metacognition in a continuous visuomotor task. *Annual Conference on Cognitive Computational Neu*roscience in New York, NY.
- 2017 <u>Locke, S. M.</u>, Landy, M. S., Mamassian, P. & Simoncelli, E. P. Dynamic visual localization with moving dot clouds. *Vision Sciences Society Annual Meeting* in St. Pete Beach, FL.
- 2016 Locke, S. M., & Landy, M. S. Spatiotemporal factors in audiovisual rate-discrimination. Vision Sciences Society Annual Meeting in St. Pete Beach, FL and Collaborative Research in Computational Neuroscience Conference in Paris, France.
- 2015 Locke, S. M., Leung, J., & Carlile, S. Perceiving velocity changes in auditory motion. Association

for Research in Otolaryngology 38th Midwinter Meeting in Baltimore, MD.

2013 Locke, S. M., Feinkohl, A., Leung, J., & Carlile, S. The auditory representational momentum effect.

The 4th UWS Sensory Neuroscience Symposium in Sydney, Australia and The Bosch Institute Young Investigators Symposium in Sydney, Australia.

# **DISTINCTIONS**

- 2018 Student Sentators Council's Travel Grant, New York University
- 2016 Dean's Student Travel Grant, GSAS, New York University
- 2014 Engberg Fellowship, Department of Psychology, New York University
- 2014 Dean's Supplementary Fellowship Grant, Department of Psychology, New York University
- 2013 University Medal, University of Sydney
- 2013 Colin Dunlop Prize in Physiology, School of Medical Sciences, University of Sydney
- 2012 Summer Vacation Scholarship, School of Medical Sciences, University of Sydney
- 2012 YE Knight Neuroscience Essay Prize, School of Medical Sciences, University of Sydney
- 2012 Top Student Prize in Perception (PSYC3013), School of Psychology, University of Sydney
- 2011 Summer Research Scholarship, School of Medical Sciences, University of Sydney
- 2008 Long Tan Leadership and Teamwork Award, Australian Defence Force

## **TEACHING**

- 2021 Teaching Assistant\*, Graduate level, UCL/PSL:- Summer School: Consciousness & Metacognition
- 2020 Instructor\*, Graduate level, ENS:- Practical Modelling Skills Workshop
- 2020 Guest Lecturer\*, Graduate level, NYU (Fall):- Psychophysics: Practical Modelling Skills
- 2018 Instructor, Undergraduate level, NYU (Summer):- Perception
- 2017 Guest Lecturer, Graduate level, NYU (Fall):- Psychophysics Implementing Model Comparison
- 2017 Teaching Assistant, Undergraduate level, NYU (Fall):- Perception

# MENTORING & OUTREACH

- 2017-21 Mentor, 1000 Girls 1000 Futures Program (high school), New York Academy of Sciences
- 2021 Interviewee, Women in Science Instagram Campaign, Singapore Girl-Up, UN Foundation
- 2017-18 Volunteer science advocate (young children, general public), Brainy, Society for Neuroscience
- 2018 Volunteer academic tutor (middle/high school), Harlem StreetSquash
- 2013 Mentor, Faculty of Science Peer Program (first year undergrads), University of Sydney
- 2013 Volunteer, Great Australian Byte Science Outreach Program (high school), University of Sydney

# PhD Students:Masters Students:Research Interns:Marissa Evans (ongoing, NYU)Isabel Lutkenherm (ongoing, UCL)Nadia Hosseini (6 mo., NYU)Chiara Martolini (3 mo., IIT)Layla Ibrahim (1 yr, UCL)Damaris Beutel (6 mo., NYU)Constance Destais (1 yr, UCL)

 $<sup>*</sup>_{online}$ 

# **SERVICE**

2020-22 Organiser, Confidence Journal Club, LSP, ENS

2020-22 Manager, LSP lab Twitter Account, LSP, ENS

2021 Organiser, New Ideas in Confidence and Uncertainty Workshop (online), LSP, ENS

2017-18 Organiser, Beer & Co.(de) peer-programming events, Psychology Department, NYU

2018 Officer, NYU CogCollective student organisation, Graduate School of Arts & Science, NYU

2010 Officer, social events at International House (university residence), University of Sydney

Peer Reviewer for: PNAS, Psychonomic Bulletin & Review, Perception

Current Organisations: Vision Sciences Society, New York Academy of Sciences

# TECHNOLOGICAL SKILLS

Languages: :- Packages:

MATLAB :- Psychtoolbox, Eyelink R :- RStan, Markdown

Python :- PsychoPy, Pandas, numPy LATEX :- Tikz, Pgfplots, Beamer

Level: advanced, intermediate, basic.

#### MISC.

Graduate Courses Completed: Perception, Visual Neuroscience, Cognitive Neuroscience, Neuroeconomics and Decision-making, MathTools for Cognitive Science and Neuroscience, Psychophysics, Bayesian Data Analysis, Neuroanatomy. GPA 4.0.