

## EDUCATION

2019-22: Postdoc, École Normale Supérieure, Laboratoire des Systèmes Perceptifs ~ Pascal Mamassian

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

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

## RESEARCH

### **Lab visits/internships:**

Karl Gegenfurtner ~ 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 ~ University of Sydney (8 mo., 2014)

Simon Carlile ~ 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)

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## PREPRINTS

2021 Locke, S. M., Landy, M. S. & Mamassian, P. Suprathreshold perceptual decisions constrain models of confidence. *PsyArXiv*: <https://psyarxiv.com/p6395/>.

## PUBLICATIONS

2022 Rahnev, D., et al. Consensus goals for the field of visual metacognition. *Perspectives on Psychological Sciences*, (in press). <https://psyarxiv.com/z8v5x>.

2021 Locke, S. M. & Robinson, O. J. Affective bias through the lens of Signal Detection Theory. *Computational Psychiatry*, 5(1): 4-20. <http://doi.org/10.5334/cpsy.58>.

2020 Locke, S. M., Mamassian, P. & Landy, M. S. Performance monitoring for sensorimotor confidence: A visuomotor tracking study. *Cognition*, 205: 104396. <https://doi.org/10.1016/j.cognition.2020.104396>.

2020 Locke, S. M., Gafin-Cahn, E., Hosseinizadeh, N., Mamassian, P. & Landy, M. S. Priors and payoffs in confidence judgments. *Attention, Perception, & Psychophysics*, 82(6): 3158-3175. <https://doi.org/10.3758/s13414-020-02018-x>.

2017 Locke, S. M. & Landy, M. S. Temporal causal inference with stochastic audiovisual sequences. *PLoS ONE*, 12(9): e0183776. <https://doi.org/10.1371/journal.pone.0183776>.

2016 Alais, D., Locke, S. M., Leung, J., & Van der Burg, E. No Attentional capture from invisible flicker. *Scientific Reports*, 6: 29296. <https://doi.org/10.1038/srep29296>.

- 2016 Locke, S. M., Leung, J., & Carlile, S. Sensitivity to auditory velocity contrast. *Scientific Reports*, 6: 27725. <https://doi.org/10.1038/srep27725>.
- 2014 Feinkohl, A., Locke, S. M., Leung, J., & Carlile, S. The effect of velocity on auditory representational momentum. *Journal of the Acoustical Society of America*, 136: EL20. <https://doi.org/10.1121/1.4881318>.

## **TALKS**

- 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., Locke, S. M., Hosseinizadeh, 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 Locke, S. M. & 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**

- 2021 Ibrahim, L. F., Destais, C. A., Locke, S. M. & Robinson, O.J. Incorrect prior beliefs: A possible cause to negative affective bias in mood/anxiety disorders. *British Association for Psychopharmacology Meeting* held online.
- 2021 Destais, C. A., Ibrahim, L. F., Locke, S. M. & 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 Locke, S. M., Landy, M. S., & Mamassian, P. Sequential effects in confidence. *Vision Sciences Society Annual Meeting* in St. Pete Beach, FL.
- 2017 Locke, S. M., Landy, M. S., Mamassian, P. & Simoncelli, E. P. The temporal dynamics of metacognition in a continuous visuomotor task. *Annual Conference on Cognitive Computational Neuroscience* in New York, NY.
- 2017 Locke, S. M., 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.
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## **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*

\*online

## **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:**

Marissa Evans (ongoing, NYU)  
 Chiara Martolini (3 mo., IIT)

### **Masters Students:**

Isabel Lutkenherm (ongoing, UCL)  
 Layla Ibrahim (1 yr, UCL)  
 Constance Destais (1 yr, UCL)

### **Research Interns:**

Nadia Hosseini (6 mo., NYU)  
 Damaris Beutel (6 mo., NYU)

## **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

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## TECHNOLOGICAL SKILLS

<b>Languages:</b>	<b>:-</b>	<b>Packages:</b>
MATLAB	:-	Psychtoolbox, Eyelink
R	:-	RStan, Markdown
Python	:-	PsychoPy, Pandas, numPy
L <sup>A</sup> T <sub>E</sub> X	:-	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.