

**Andrew J. Peters**  
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[petersaj.github.io](https://petersaj.github.io)

## Education

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2010 – 2016	<b>Ph.D. Neuroscience</b> , University of California, San Diego, La Jolla CA
2006 – 2009	<b>B.S. Neuroscience &amp; Behavioral Biology</b> , Emory University, Atlanta GA
2005 – 2006	<b>Coursework for B.S.</b> , Rochester Institute of Technology, Rochester NY

## Research Experience

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2016 – Present	<b>Postdoctoral fellow</b> , University College London, Carandini & Harris Lab
2010 – 2016	<b>Ph.D. student</b> , University of California, San Diego, Komiyama Lab
2009 – 2010	<b>Postbaccalaureate IRTA Fellow</b> , NIMH/NIH, Leopold Lab
2008 – 2009	<b>Undergraduate researcher</b> , Emory University, Rainnie Lab
Summer 2008	<b>Summer intern</b> , Harvard University, Carey Lab
2006 – 2007	<b>Student Researcher</b> , Emory University, Sathian Lab
Summers 2006-7	<b>Summer Intern</b> , CureDM, Inc.

## Publications

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**Peters AJ**, Fabre JMJ, Steinmetz NA, Harris KD, Carandini M  
 Striatal activity topographically reflects cortical activity  
*Nature* (2021) [doi.org/10.1038/s41586-020-03166-8](https://doi.org/10.1038/s41586-020-03166-8)

Jacobs EAK, Steinmetz NA, **Peters AJ**, Carandini M, Harris KD  
 Cortical state fluctuations during sensory decision making.  
*Current Biology* (2020) [doi.org/10.1016/j.cub.2020.09.067](https://doi.org/10.1016/j.cub.2020.09.067)

Steinmetz NA, [and 33 others including **Peters AJ**]  
 Aberrant Cortical Activity in Multiple GCaMP6-Expressing Transgenic Mouse Lines.  
*eNeuro* (2017) [doi.org/10.1523/ENEURO.0207-17.2017](https://doi.org/10.1523/ENEURO.0207-17.2017)

**Peters AJ**, Lee J, Hedrick NG, O'Neil K, Komiyama T  
 Reorganization of corticospinal output during motor learning.  
*Nature Neuroscience* (2017) [doi.org/10.1038/nn.4596](https://doi.org/10.1038/nn.4596)

**Peters AJ**, Liu H, Komiyama T  
 Learning in the rodent motor cortex.  
*Annual Review of Neuroscience* (2017) [doi.org/10.1146/annurev-neuro-072116-031407](https://doi.org/10.1146/annurev-neuro-072116-031407)

Chen SX, Kim AN, **Peters AJ**, Komiyama T  
 Subtype-specific plasticity of inhibitory circuits in motor cortex during motor learning  
*Nature Neuroscience* (2015) [doi.org/10.1038/nn.4049](https://doi.org/10.1038/nn.4049)

**Peters AJ**, Chen SX, Komiyama T  
 Emergence of reproducible spatiotemporal activity during motor learning  
*Nature* (2014) [doi.org/10.1038/nature13235](https://doi.org/10.1038/nature13235)

Schmid MC, Schmiedt JT, **Peters AJ**, Saunders RC, Maier A, Leopold DA

Motion-sensitive responses in visual area V4 in the absence of primary visual cortex  
*Journal of Neuroscience* (2013) [doi.org/10.1523/JNEUROSCI.3923-13.2013](https://doi.org/10.1523/JNEUROSCI.3923-13.2013)

Kato HK, Gillet SN, **Peters AJ**, Isaacson JS, Komiyama T  
Parvalbumin-expressing interneurons linearly control olfactory bulb output  
*Neuron* (2013) [doi.org/10.1016/j.neuron.2013.08.036](https://doi.org/10.1016/j.neuron.2013.08.036)

Cox MA, Schmid MC, **Peters AJ**, Saunders RC, Leopold DA, Maier A  
Receptive field focus of visual area V4 neurons determines responses to illusory surfaces  
*PNAS* (2013) [doi.org/10.1073/pnas.1310806110](https://doi.org/10.1073/pnas.1310806110)

Schmid MC, Mrowka SW, Turchi J, Saunders RC, Wilke M, **Peters AJ**, Ye FQ, Leopold DA  
Blindsight depends on the lateral geniculate nucleus  
*Nature* (2010) [doi.org/10.1038/nature09179](https://doi.org/10.1038/nature09179)

Lacey S, **Peters A**, Sathian K  
Cross-modal object recognition is viewpoint-independent  
*PLoS ONE* (2007) [doi.org/10.1371/journal.pone.0000890](https://doi.org/10.1371/journal.pone.0000890)

## Grants

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2017 – 2019	HFSP Long-Term Postdoctoral Fellowship
2016 – 2018	EMBO Long-Term Postdoctoral Fellowship
2016	Newton International Postdoctoral Fellowship
2013 – 2015	Neuroplasticity of Aging Training Grant

## Awards

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2021	UCL Institute of Ophthalmology Research Excellence Award
2015	Leon Thal Award for Excellence in Graduate Research (UCSD)
2015	Best oral presentation, Kyoto University 13 <sup>th</sup> International Student Seminar
2014	Achievement Rewards for College Scientists (ARCS) scholarship
2013	Travel award to RIKEN BSI summer course, Wako, Japan
2009	Excellence in Undergraduate Educational Support Award (Emory University)
2008	Phi Beta Kappa membership
2007	Nu Rho Psi neuroscience honor society membership

## Invited Talks

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2021	Uchida Lab, Harvard University
2021	University of Oxford, Oxford, UK
2020	UCL Neuropixels course, London, UK.
2020	UC Santa Barbara, Santa Barbara, CA. (Cancelled due to Covid-19)
2020	Large-scale neuronal recordings: advances and challenges, Karolinska Institute, Stockholm, Sweden.
2018	EMBO Fellows' Meeting, Heidelberg, Germany.
2015	UCSD Neurosciences Graduate Program retreat, Lake Arrowhead, CA.
2015	Kyoto University 13 <sup>th</sup> International Student Seminar, Kyoto, Japan.
2014	Princeton University, Princeton, NJ.

## Teaching and Mentoring Experience

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2019 – present	<b>Postdoctoral mentor</b>
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Julie Fabre, Ph.D. student

- 2018                    **Student, EMBO Laboratory Leadership Course for Postdocs**  
Three-day course on best practices in leading a scientific team
- 2017-2020           **UCL Neuropixels Course assistant**  
Led small groups in learning to perform Neuropixels experiments
- 2011                   **Teaching Assistant, Graduate Cellular and Molecular Neuroscience**  
Led weekly review sessions
- 2010 – 2016        **Neuroscience Outreach**  
Present interactive neuroscience lecture and modules at high schools in the San Diego area
- 2007 – 2009        **Supplemental Instruction Leader**  
Tutored organic chemistry at Emory University in weekly group sessions and individually
- 2006 – 2009        **Volunteer Tutor at Avondale High School**  
Tutored high school students in science and math for help with classes and preparing for the science portion of the Georgia High School Graduation Test