

Leo Scholl
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Seattle, WA <https://leoscholl.github.io>

PROFESSIONAL EXPERIENCE

Postdoctoral Researcher , Orsborn Lab University of Washington, Seattle WA	2020 – present
Teaching Assistant , Department of Cognitive Sciences University of California Irvine, Irvine CA	2014 – 2019
Scientist Intern , Protein Expression Group	2013
Scientist Intern , Biotherapeutics Group Boehringer Ingelheim, Ridgefield CT	2012

EDUCATION

Ph.D. in Psychology University of California, Irvine CA Title: Pulvinar contributions to visual cortical processing in the rat Advisor: David Lyon	2019
M.S. in Cognitive Neuroscience University of California, Irvine CA	2017
B.S. in Biological Sciences Carnegie Mellon University, Pittsburgh PA Minor: Computer Science	2014

PUBLICATIONS

Projections between visual cortex and lateral posterior nucleus in the rat. Scholl LR, Foik A, and Lyon DC. *Journal of Comparative Neurology*, 2020.

Motion processing in cortico-recipient zone of the lateral posterior nucleus. Foik A, Scholl LR, Lean GA, Hoang A, and Lyon DC. *Journal of Comparative Neurology*, *submitted*.

Pulvinar contributions to visual cortical processing in the rat. Scholl LR. (Doctoral dissertation). 2019.

Detailed visual cortical responses generated by retinal sheet transplants in rats with severe retinal degeneration. Foik A, Lean GA, Scholl LR, et al. *Journal of Neuroscience*, 2018.

Whole genome comparison of a large collection of mycobacteriophages reveals a continuum of phage genetic diversity. Pope WH, et al. *Elife*, 2015.

SUBMITTED ABSTRACTS

Comparison of single neuron responses between two rostral subdivisions in the rat pulvinar / lateral posterior thalamic nucleus. Foik AT, Scholl LR, et al. *Society for Neuroscience* 45. 2019

Restoration of visual cortical responses after retinal sheet transplantation in rats with retinal degeneration. Foik AT, Lean GA, Scholl LR, et al. *Society for Neuroscience* 42. 2016

DEPARTMENT PRESENTATIONS

Restoration of vision by retinal sheet transplants in rats with retinal degeneration. UC Irvine Department of Cognitive Science, 2016

UNPUBLISHED WORK

Experica: a distributed software system for closed loop vision experiments. Zhang L, Scholl LR, and Lyon DC.

New rabies virus variant for bi-directional optogenetic control. Scholl LR, Zhang L, and Lyon DC.

RESEARCH EXPERIENCE

University of California, Irvine

Irvine, CA

Graduate Student Researcher with Dr. David Lyon

2014 – 2019

- Designed and tested novel rabies virus variant for bi-directional optical control of neuronal activity in non-transgenic animals
- Discovered suppression of visual responses in the cortex following optogenetic pulvinar activation
- Identified weak thalamocortical projection from the pulvinar to primary visual cortex
- Measured receptive field properties of the pulvinar through subnucleus-specific *in vivo* recordings

- Created software to improve imaging and electrophysiology pipelines, speeding up experiment turnaround time and allowing increased focus on data analysis
- Contributed to the advancement of retinal sheet transplants as a treatment of blindness by demonstrating cortical visual processing in transplanted rats

Carnegie Mellon University

Pittsburgh, PA

Research Assistant with Dr. Tim Verstynen

2013 – 2014

- Managed psychophysics study addressing Bayesian learning in the context of response inhibition.

Student Researcher, Phage Genomics Research Lab

2011

- Correlated the presence of tRNA in several bacteriophages with their codon usage using data from GenBank.

Boehringer Ingelheim

Ridgefield, CT

Scientist Intern, Protein Expression Group

2013

- Optimized transfection yield of initial protein material for functional testing and characterization of new projects.

Scientist Intern, Biotherapeutics Group

2012

- Confirmed in vitro function of a receptor-Fc fusion protein, utilizing immunostaining techniques and flow cytometry.

LEADERSHIP EXPERIENCE

Guest Lecturer

UC Irvine Department of Cognitive Sciences

- Introduction to Psychology: Sensation and Perception 2016
- Abnormal Psychology: Schizophrenia and Psychotic disorders 2015

Cellist

UCI Orchestra, University of California, Irvine

2018 – 2019

University Orchestra, *Principal cello*, Carnegie Mellon University

2012 – 2014

Cambiando Quartet, Pittsburgh, PA

2011 – 2014

Pre-College Orchestra, *Principal cello*, The Juilliard School

2008 – 2010