

Chris Angeloni

1775 W. Highland Ave., Apt 409

Chicago, IL 60660

(443) 915-6965

chris.angeloni@gmail.com

[Website](#)

Education & Training

Postdoctoral Researcher Neurobiology, Northwestern University April 2022-present
Advisor: Dr. Daniel Dombeck

Postdoctoral Researcher Neuroscience, University of Pennsylvania Jan 2022-March 2022
Advisor: Dr. Maria N. Geffen

PhD Psychology, University of Pennsylvania December 2022
Thesis: Perceptual consequences and neural mechanisms of auditory adaptation.
Advisor: Dr. Maria N. Geffen

B.S. Neuroscience, Lafayette College May 2012
Magna cum laude - GPA: 3.9

B.A. Studio Art, Lafayette College May 2012
Magna cum laude - GPA: 3.9

Research Experience

OIST Computational Neuroscience Course June 2018
Okinawa Institute of Science and Technology
Project: LIF circuit model of gain modulation.

KITP: Physics of Hearing Workshop June 2017
Kavli Institute at UC Santa Barbara

Research Analyst June 2012 - June 2014
Vanderbilt University
Advisor: Dr. Frank Tong

Neuroscience Honors Thesis/BCI Think-Tank May 2011 - May 2012
Lafayette College
Advisors: Dr. Lisa Gabel & Dr. Yih-Chuong Yu

Publications

Angeloni, C.F., Mlynarski, W., Williams, A.M., Wood, K.C., Garami, L., Hermundstad, A., Geffen, M.N. (2021). Cortical efficient coding shapes behavioral performance. *BioRxiv* 2021.08.11.455845. Under review.

Williams, A.M., **Angeloni, C.F.**, Geffen, M.N. (2021). Sound improves visual orientation coding in the primary visual cortex. *BioRxiv* 2021.08.03.454738. Under review.

Lesicko, A.M.H., **Angeloni, C.**, Blackwell, J.M., Di Biasi, M., Geffen, M.N. (2021). Cortico-fugal regulation of predictive coding. *BioRxiv* 2021.04.12.439188. Under review.

Wood, K. C., **Angeloni, C.**, Oxman, K., Clopath, C., & Geffen, M. N. (2020). Neuronal activity in sensory cortex predicts the specificity of learning. *bioRxiv* 2020.06.02.128702. Under review.

Betzel, R.F., Wood, K.C., **Angeloni, C.**, Geffen, M.N., Bassett, D.S. (2019). Stability of spontaneous, correlated activity in mouse auditory cortex. *PLOS Computational Biology* 15 (12), e1007360.

Angeloni C., Geffen M.N. (2018). Contextual modulation of sound in the auditory cortex. *Current Opinion in Neurobiology*, 49:8-15.

Lorenc, E.S., Pratte, M.S., **Angeloni, C.**, Tong, F. (2014). Expertise for upright faces improves the precision but not the capacity of visual working memory. *Attention, Perception, & Psychophysics*, 76(7):1975-84.

Angeloni, C., Salter, D., Corbit, V., Lorence, T., Yu, Y-C., & Gabel, L.A. (2012). P300-based brain-computer interface memory game to improve motivation and performance. *Proc. of Ann. NEBEC*, 38:35-36.

Professional Memberships

Society for Neuroscience	Jul 2013 - present
Vision Sciences Society	Feb 2013 - 2015

Honors & Awards

F31 DC016524 NRSA Predoctoral Ruth L. Kirschstein National Research Service Award, National Institute on Deafness and Other Communication Disorders, “ <i>The function of cortical gain adaptation in detecting sounds in noise.</i> ”	2017 - 2021
NSF GRFP Honorable Mention	April 2016
NSF IGERT Traineeship in Complex Scene Perception Training fellowship for interdisciplinary, computational research.	Aug 2014 - 2016
Rappolt '67 and Oeschle '57 Neuroscience Prize Awarded to an undergraduate senior based on scholarship in the classroom and laboratory and service to the major.	April 2012

Federal SMART Grant Federal grant awarded to high performing students in the natural sciences.	2010 - 2012
Lafayette Marquis Scholar Academic scholarship awarded based on merit.	2008 - 2012
Lafayette Dean's List Awarded for maintaining a cumulative GPA greater than 3.5.	2008 - 2012

Teaching Experience

Teaching assistant for CIS140: Introduction to Cognitive Science	Fall 2015
Teaching assistant for PSYC149: Cognitive Neuroscience	Spring 2016
Mentoring: Stamati Lliapis – undergraduate student, University of Pennsylvania Nitay Caspi – undergraduate student, University of Pennsylvania	2014 – 2017 2016

Public Engagement

<i>Science After Hours: 'Don't Try This at Home', Franklin Institute</i> Designed and presented demos of acoustical resonance.	2017
<i>Science After Hours: 'Nerd Olympics', Franklin Institute</i> Helped run an auditory illusion booth to teach young adults audition.	2015
<i>Brain Blast</i> Vanderbilt Health program for teaching children about neuroscience.	2013 – 2014
<i>TEDxLaf</i> Promoted and organized a TED-style talk series at Lafayette College to educate and inspire the public with science and art-related talks.	2011 – 2012
<i>O+ Festival Participant</i> Designed and installed original artwork for the O+ Festival, an event providing health care and awareness for artists.	2011

Skills

Methods: chronic and acute electrophysiology, optogenetics, operant behavioral training, probabilistic modelling, machine learning, general linear models, two-photon imaging, fMRI, EEG, eye tracking

Programming: MATLAB, Bash, Arduino, Python, R, HTML/CSS, JavaScript, OpenGL

Software: Kilosort2, phy, Brian2 simulator, PrairieLink, Plexon, Unity, Blender, SPSS, MS Office, Adobe Suite, FSL, Freesurfer, BrainVoyager

References

Dr. Maria Geffen, Associate Professor
Department of Neuroscience
University of Pennsylvania
3400 Spruce St., 5 Ravdin
Philadelphia, PA 19104
(215) 898-0782
mgeffen@pennmedicine.upenn.edu

Dr. David Brainard, RRL Professor of Psychology
Department of Psychology
University of Pennsylvania
3710 Hamilton Walk, 417 Goddard Labs
Philadelphia, PA 19104
(215) 573-7579
brainard@psych.upenn.edu

Dr. Yale Cohen, Professor
Department of Otorhinolaryngology
University of Pennsylvania School of Medicine
3400 Spruce, 5 Ravdin
Philadelphia, PA 19104
(215) 898-7504
ycohen@pennmedicine.upenn.edu