# Jenessa Seymour

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# **Curriculum Vitae**

# Jenessa Seymour

# **EMPLOYMENT**

**Visiting Assistant Professor of Psychology** 

Fall 2020-

Present Skidmor

Skidmore College

Psychology Department 2/3 course load

**Visiting Professor of Psychology** 

Fall 2019-Spring 2020

Western New England University

Psychology Department

4/4 course load

**Visiting Professor of Psychology** 

Fall 2018-Spring 2019

Mount Holyoke College

Psychology and Education Department

2/3 course load

Visiting Assistant Professor of Psychology and Neuroscience

Fall 2016-Spring 2018

Colgate University

Psychological and Brain Sciences Department

2/3 course load

Hired for 2016-17 academic year while completing dissertation, renewed for 2017-18

# **EDUCATION**

PhD in Neuroscience

Graduated May 2017

Advisor: Gabriele Gratton

University of Illinois at Urbana-Champaign (UIUC)

Dissertation Title: "Neural systems supporting enhanced peripheral visual attention in

deaf adults"

### BA in Psychology, summa cum laude

State University of New York College at Potsdam (SUNY Potsdam)

### **TEACHING**

# **Courses taught at Skidmore College:**

# Intro Psychological Science

Fall 2020

100 level requirement for psychology majors, and general education credit

Broad introduction to the field of psychology.

Taught online.

# Courses taught at Western New England University:

# Cognitive Psychology

Spring 2020

200 level elective for psychology majors.

Broad introduction to cognitive psychology.

# Statistics for Behavioral Sciences

Fall 2019 & Spring 2020

200 level requirement for psychology majors.

Provide foundational statistical knowledge, specifically aimed at behavioral research.

# Introduction to Psychology

Fall 2019

100 level requirement for psychology majors, and general education credit Broad introduction to the field of psychology.

# Disability Culture and Sensory Adaptation

Spring 2020

300 level elective for psychology and education majors.

Historical and modern overview of disability culture, focused on deaf, blind, amputees, and synesthetic individuals. Also covering the behavioral and neural adaptations seen in these populations.

# **Courses taught at Mount Holyoke College:**

#### **Independent Study**

Spring 2019

300 level elective for research assistants

Selected three students to analyze audiovisual data from a previous experiment.

### Psychology Laboratory: Cognition and Perception

Spring 2019

300 level to fulfill laboratory requirement.

Guide students through completion of group research projects related to sensory and perception psychology.

### Seminar: Sixth Sense

Fall 2018 & Spring 2019

300 level elective for psychology and neuroscience majors.

Discussion of recent literature on deafness, blindness, hallucinations, and synesthesia.

### Cognitive Psychology

Fall 2018 & Spring 2019

200 level requirement for psychology majors.

Broad introduction to cognitive psychology.

# **Courses taught at Colgate University:**

### Senior Thesis Research

Fall 2017 & Spring 2018

Supervision of three senior psychology and/or neuroscience majors for their senior thesis research projects.

# Topics in Psychology: Sixth Sense

Spring 2017 & Spring 2018

300 level elective for psychology and neuroscience majors.

Discussion of recent literature on deafness, blindness, hallucinations, and synesthesia.

### Cognitive Neuroscience

Fall 2016, Spring & Fall 2017

300 level for psychology and neuroscience majors.

Discussion of a broad range of recent literature in neuroscience, with a focus on human-subjects research.

### Core Scientific Perspectives: Mind, Body, & Health

Spring & Fall 2017

100 level requirement for all students, including non-science majors.

Basic introduction to scientific thinking as well as the intersection of media, culture, and science.

# **Human Cognition**

Fall 2016 & Spring 2018

200 level requirement for psychology majors.

Broad introduction to cognitive psychology.

# Courses taught at the University of Illinois at Urbana-Champaign:

# Experimental Techniques in Cellular Biology Lab

Spring 2016

Molecular and Cellular Biology Department

200 level lab requirement for cellular biology majors.

Introductory lab techniques for students entering the cellular biology track, such as running PCR and Western blots.

#### Introduction to Statistics

Fall 2014 & Fall 2015

Psychology Department

100 level requirement for psychology majors, and open to other majors for a math requirement. Introductory statistics, tailored to the types of problems most relevant to behavioral sciences.

# Human Anatomy & Physiology I

Summer 2015

Molecular and Cellular Biology Department

300 level requirement for biology majors.

Served as a teaching assistant, grading and holding office hours as well as review sessions.

### Behavioral Neuroscience Lab

Spring 2015

Psychology Department

300 level required for some psychology majors and elective for others.

A combination of lectures on brain anatomy and development, anatomy labs and dissections, and mouse behavioral experiments.

### Experimental Techniques in Molecular Biology Lab

Fall 2013 & Spring 2014

Molecular and Cellular Biology Department

200 level requirement for molecular biology majors

Introductory lab techniques for students entering the molecular biology track, such as plating bacteria and running PCR.

#### RESEARCH

#### PUBLICATIONS IN PEER-REVIEWED JOURNALS

Seymour, J. L., Low, K. A., Maclin, E. L., Chiarelli, A. M., Mathewson, K. E., Fabiani, M., Gratton, G., & Dye, M. W. G. (2017). Reorganization of neural systems mediating peripheral visual selective attention in the deaf: An optical imaging study. *Hearing Research*, 343, 162-175.

Dye, M. W. G., Seymour, J. L., & Hauser, P. C. (2016). Response bias reveals enhanced attention to inferior visual field in signers of American Sign Language. *Experimental Brain Research*, 234, 1067-1076.

### **IN PROGRESS**

Seymour, J. L., Tankle, B., Johnson, M., & Ohlmann, C. (submitted). "In the zone": Athletes and video game players maintain peripheral visual performance in high distraction conditions. *Attention, Perception, & Psychophysics*.

Seymour, J.L. (in preparation). Unmasking of cross-modal inputs after adult sensory loss: A common mechanism for hallucination and functional plasticity.

Seymour, J.L. & Souther, D. (in preparation). Navigation via echolocation by blindfolded sighted adults.

### RESEARCH EXPERIENCE AND TRAINING

# **Graduate Research Assistant, Collaborative Project**

2012-2016

Cognitive Neuroimaging Lab, Beckman Institute for Advance Science & Technology, UIUC Advisers: Gabriele Gratton and Monica Fabiani

Cross-Modal Plasticity Lab, Speech and Hearing Department, UIUC

Advisor: Matthew W.G. Dye

I was the lead researcher on a major project using optical imaging techniques to examine the effects of deafness on peripheral visual abilities and auditory cortex activation. I was in charge of all aspects of the project, from the design and IRB approval stage through the final publication. I supervised undergraduate researchers and research assistants who aided in data collection. I also learned American Sign Language (ASL) in order to communicate with deaf participants. This project served as my dissertation work. The research was funded by the National Science Foundation (NSF) and the Center for Health, Aging, and Disability.

### **Graduate Research Assistant**

2011

Cognitive Neuroimaging Laboratory, Beckman Institute for Advance Science and Technology, UIUC

Advisors: Gabriele Gratton, Monica Fabiani, Kathy Low, Ed Maclin I aided in data collection for a large optical imaging study of aging and brain health. I was trained in the use of the fast optical imaging technique, pioneered by Gratton and Fabiani, in preparation for my dissertation work.

#### **Graduate Research Assistant**

Speech and Hearing Department, UIUC

Adviser: Aaron M. Johnson

I aided in data collection on a project examining how experience affects the vocal folds. We used rats as a model organism.

### STUDENT WORK

Johnson, M., Ohlmann, C., Tankle, B., & Seymour, J.L. (December 2017). The effects of video game playing and athletic training on peripheral visual performance. Poster presented at the *Senior Thesis Poster Session* at Colgate University, Hamilton, NY.

Tankle, B. & Seymour, J.L. (July, 2017). The effects of video game playing and athletic training on peripheral visual performance. Poster presented at the *Summer Research Poster Session* at Colgate University, Hamilton, NY.

### CONFERENCE PRESENTATIONS

#### **Talks and Invited Presentations**

Seymour, J. L. & Berteau, S. (2015). How to be a critical reader of neuroscience articles. Talk at the 8<sup>th</sup> Annual inter-Science of Learning Centers Conference, University of California San Diego, San Diego CA.

Seymour, J. L. & Seymour, A. W. (2015). The effects of exercise on the brain. Talk at the *NYSUT Hudson Valley Leadership Summit for National Board Certified Teachers*, Kingston, NY.

Seymour, J. L., Fabiani, M., Gratton, G., Low, K., Mathewson, K., Maclin, E., Chiarelli, A., & Dye, M. W. G. (2014). The effects of deafness on vision and the brain. Invited press conference presentation at the *Society for Neuroscience Annual Meeting 2014, Washington D.C.* 

#### **Poster Presentations**

Seymour, J. L., Chiarelli, A., Fabiani, M., Gratton, G., Fletcher, M. A., Low, K., Maclin, E., Mathewson, K., & Dye, M. W. G. (November, 2014). Enhanced functional connectivity between V1 and multimodal cortex in congenitally, profoundly deaf adults revealed by time-lagged cross-correlation of the "fast" optical signal. Poster presented at the *Society for Neuroscience Annual Meeting 2014*, Washington D.C.

Seymour, J.L., Fabiani, M., Gratton, G., Low, K. A., Maclin, E., Mathewson, K., Chiarelli, A., and Dye, M.W.G. (March, 2014). Enhanced recruitment of RH auditory association cortex in the deaf predicts visual task performance. Poster presented at the 7th Annual inter-Science of Learning Centers Conference, University of Pittsburgh/Carnegie Mellon University, Pittsburgh, PA.

Seymour, J.L., Fabiani, M., Gratton, G., Low, K. A., Maclin, E., Mathewson, K., and Dye, M.W.G. (November, 2013). The effects of deafness on peripheral visual attention: an optical imaging study. Poster presented at the *Society for Neuroscience Annual Meeting 2013*, San Diego CA.

Seymour, J.L., Fabiani, M., Gratton, G., Low, K., Maclin, E., Mathewson, K., and Dye, M.W.G. (February, 2013). The effects of deafness on peripheral visual attention: an optical imaging study. Poster presented at the *6th Annual inter-Science of Learning Centers Conference*, Temple University, Philadelphia PA.

Seymour, J.L. (April, 2011). The effect of personality traits on perception of tempo. Poster presented at the *National Conference on Undergraduate Research 2011*, Ithaca College, Ithaca, NY.

Matt, S., Fleming, S. A., Nelson, N., Seymour, J. L., Center, E. G., & Traniello, I. M. (November, 2016). Science for incarcerated teens: A new horizon for STEM enrichment. Poster presented at the *Society for Neuroscience Annual Meeting 2016*, San Diego, CA.

Maclin, E.L., Seymour, J.L, Gratton, G., Fabiani, M., and Dye, M.W.G. (October, 2013). Peripheral visual attention in the congenitally deaf: an optical imaging study. Poster presented at the 53<sup>rd</sup> Annual Meeting of the Society for Psychophysiological Research, Florence, Italy.

### **SERVICE**

# Colgate University:

# **Host of Speak Easy: Science Meets Fiction**

2018

Invited alongside Dr. CJ Hauser of the English department to host a discussion on the representation of science in science fiction media, and the impacts this has on our society. The Speak Easy series at Colgate is intended to allow students and professors to communicate on equal footing in a casual setting, as well as an opportunity for professors to model responsible drinking behaviors around our students.

### Shaw Wellness Center brown bag lecture series, invited speaker

2017

Invited to speak in lecture series on student wellbeing. My talk was entitled "What is disability?" and involved a presentation of research in the field of sensation and perception, including my own research, and a broad discussion of why we label certain limitations as "disabilities" but consider others to be normal or even exceptional. We discussed what accommodations are available for different disabilities and reframed seeking accommodations as a form of empowerment.

### Combined course work across departments

2017

In my Core Scientific Perspectives course, assigned "Flowers for Algernon" for a discussion on intellectual disability. Dr. CJ Hauser's Fiction Writing Workshop class, in the English department, joined us for this discussion. This allowed for an integration of interdisciplinary perspectives on the story.

# **Guest lecturer in Core Scientific Perspectives course**

2017

Invited by Dr. Hauser to speak in her course on the creation of surveys designed to assess public opinions of scientific developments.

### **Guest lecturer in Biopsychology course**

2016

Invited by Dr. Ragan to speak in her course about research on deafness and blindness.

Invited guest speaker 2016-2018

Organized for Dr. Berteau to speak on computational modeling in both my Human Cognition course and my Cognitive Neuroscience course on multiple occasions. During his campus visits I have also arranged lunches with Dr. Berteau for students to discuss his research and industry experience in a more casual setting.

# Organized "Food for Thought" Talk

2016

Created a new lecture series in the department open to all members of the Colgate community, attracting an inter-disciplinary audience of students and professors. Organized the first talk in the series by Dr. Stefan Berteau (Title: *Your Brain on Music: Novelty, Dopamine, and Computer Modeling*).

# University of Illinois at Urbana-Champaign:

**Secretary for the Neuroscience Student Organization (NSO)** 

2015-16

Elected to the position of secretary for the 2015-16 academic year.

Admissions Committee Member for Illinois Summer Neuroscience Institute (ISNI) 2015 ISNI is a week-long program held in the summer at UIUC which attracts undergraduates who are interested in neuroscience graduate programs and aims to give them experience in various neuroscience topics. It is particularly aimed at groups underrepresented in neuroscience. I served on the admissions committee with two other graduate students in my program.

**Assisted with ISNI** 2012, 2013 & 2015

Aided with the above described ISNI program over three summers

# **Assisted with Fast Optical Imaging Workshop**

2015

Ran a one hour workshop that taught attendees how to create the hand-made helmets we used in our optical imaging lab.

### **Assisted with Open House**

2011, 2012, & 2014

Aided with the annual open house week for prospective students.

# HONORS AND AWARDS

Research Council Discretionary Grant, Colgate University	2018
Colgate Student-Initiated Summer Fellowship, Colgate University	2017
Research Council Discretionary Grant, Colgate University	2017
Travel Award, National Science Foundation	2015
Awarded to attend the Temporal Dynamics of Learning Center's Bootcamp in San Diego, CA	
Neuroscience Program Summer Fellowship, UIUC	2014, 2015
Travel Award, National Science Foundation	2014
Awarded to attend the Society for Neuroscience Annual Meeting in Washington, D.C.	
Travel Award, National Science Foundation	2013
Awarded to attend the Society for Neuroscience Annual Meeting in San Diego, CA	
Neuroscience Program Fellowship, UIUC	2011-2012
Travel Award, Neuroscience Program UIUC	2011
Awarded to attend the Fast Optical Imaging Workshop at the Beckman Institute for Advanced	
Science and Technology, UIUC	
Honors Psychology Program, SUNY Potsdam	2009-2011
Advanced Honors Program, SUNY Potsdam	2010

### PROFESSIONAL MEMBERSHIPS

NSF Science of Learning Centers, Visual Language & Visual Learning
Society for Neuroscience
2011-2016
2013 & 2014

### **VOLUNTEER WORK**

Science Instructor 2015 & 2016

Champaign County Juvenile Detention Center

Joined a volunteer group of neuroscience and psychology students in giving weekly science lectures at the local juvenile detention center.

### REFERENCES

# Western New England University:

# Denine Northrup

Chair of the Psychology Department; Professor of Psychology 413-782-1392 denine.northrup@wne.edu

# **Mount Holyoke College:**

### Katherine Binder

Chair of Psychology & Education; William R. Kenan, Jr. Professor of Psychology 413-538-2105 kbinder@mtholyoke.edu

# **Colgate University:**

### Carrie F. Keating

Chair of the Department of Psychological and Brain Sciences; Professor of Psychology 315-228-7355 ckeating@colgate.edu

### Bruce Hansen

Coordinator of the Neuroscience Program; Associate Professor of Psychology and Neuroscience 315-228-7349 bchansen@colgate.edu

# University of Illinois at Urbana-Champaign:

Gabriele Gratton (My dissertation adviser) Professor of Psychology 217-244-1019 grattong@illinois.edu