

# Experimental Psychology MS Program

www.shu.edu/ms-psych

# Preparing Students for Ph.D. Programs and Research-Intensive Jobs

# **Why Seton Hall?**

- Degree concentrations in:
  - Behavioral Neuroscience
  - Cognitive Neuroscience
  - Behavioral Sciences
  - Data Visualization and Analysis
- Individualized one-on-one research training and mentoring
- State-of-the-art research facilities, including animal and eye-tracking laboratories
- Research-intensive, thesis-based degree
- <u>Faculty expertise</u> in behavioral neuroscience, developmental, cognitive, social, cultural, and clinical psychology.
- Optional specialist certificate in <u>Data Visualization and Analysis</u>.

# **Program Overview**

All students complete 36 hours of coursework, or 3 classes per semester, for two years. Our program is organized like most doctoral programs with a small number of graduate students who work one-on-one with faculty. All students begin working with a faculty member by the end of their first semester. Students pursuing a thesis degree develop a thesis proposal in their second semester, and collect data and defend their thesis by the end of their second year. Students pursuing the non-thesis degree work in one or more faculty laboratories as part of their research coursework, developing skills in data collection, data management and analysis. This work culminates either in a literature review or data visualization project at the end of their second year. The non-thesis option with the Data Visualization and Analysis concentration leads to conferral of the MS, plus the specialist certificate in Data Visualization and Analysis. See below for additional information for all options.

# What Our Graduates Do

Recent graduates have been admitted to Ph.D. programs in Integrative Neuroscience, Behavioral Neuroscience, Cognitive Science, Perception and Cognition, Social Psychology, and Communication at schools such as Brandeis University, the University of Florida, Northwestern University, SUNY Stony Brook, Rutgers University, the University of Medicine and Dentistry of New Jersey, New York University, American University, Temple University, University of California (Davis), University of California (Los Angeles), University of Oregon, Ohio State University and the University of Connecticut. Other recent graduates have used their Master's degree to pursue research positions in the pharmaceutical industry and to teach at the community college level. See below for additional information on our recent graduates.

# **Admissions Deadline and Requirements**

- Applications are evaluated on a rolling basis. For maximal consideration for graduate assistantships, apply in late winter/early spring. Space permitting, applications continue to be evaluated up to July 1.
- Admittance requirements:
  - Official transcripts of all previous academic work. Minimum requirements:
    - Bachelor's degree with a minimum of 18 credits of Psychology coursework.
    - Minimum 3.0 undergraduate GPA.
    - Required undergraduate courses: Introduction to Psychology, Psychological Statistics, and Psychological Research Methods (by the time of enrollment).
    - Students considering the Behavioral Neuroscience concentration must have completed a course in Biological Psychology or its equivalent.
  - Official scores from the Graduate Record Examination (GRE).
    - We have no hard-and-fast minimums for GREs scores, but the average GRE scores of students enrolled in recent years has been in the 60<sup>th</sup> to 70<sup>th</sup> percentiles for Verbal and for Analytical Writing, and the 40<sup>th</sup> to 60<sup>th</sup> percentiles for Quantitative.
  - Personal statement/statement of academic interests
    - A statement of 500 to 700 words that indicates your qualifications for the program, your research interests as related to research interests of the current faculty, an indication of one or more of the faculty members in the department with whom you would be interested in working with for research, and your career goals. To the extent that you can provide detail on how your research interests match those of one or more of the faculty members in the Psychology Department at Seton Hall, it will improve the attractiveness of your application.
  - Three letters of recommendation from individuals familiar with your academic and research abilities
  - o CV or resume
  - For international applicants whose first language is not English we require the TOEFL (school code is 2811).
- Apply online: <a href="https://www.shu.edu/graduate-affairs/apply.cfm">https://www.shu.edu/graduate-affairs/apply.cfm</a>

# <u>Funding</u>

- After acceptance into the MS program, all students submitting complete applications late winter/early spring are automatically given first-round consideration for a limited number of scholarships and teaching and research assistantships offered by the Department of Psychology. These in-department assistantships cover half of the recipient's tuition and provide a modest stipend. Students who are funded in their first year are renewed the following year provided that they perform satisfactorily in their coursework and in their assistantship. Second-rounds of department funding decisions may be made at the end of May and beginning of July.
- All accepted students are encouraged to apply for assistantships offered in other units at Seton Hall (some of these offer full tuition coverage and a larger stipend than the department is able to offer). These openings are posted on a rolling basis in the Seton Hall <u>Assistantship database</u> (select "View Open Positions" for Students). Psychology MS students have a strong track record of successfully securing assistantships in Nursing, The Institute of NeuroImmunology and Pharmacology, and in Mathematics, to name a few.

# **Our Faculty Research Specialties**

Faculty members and their research interests are listed below, ordered by sub-field. For more information, see <u>faculty profiles</u>.

# **BEHAVIORAL NEUROSCIENCE**

- Dr. Amy S. Hunter <u>amy.hunter@shu.edu</u>
   REM sleep and learning, spatial memory
- Dr. Michael Vigorito <u>michael.vigorito@shu.edu</u>
   influence of immune activation on learning and motivation, learning in HIV

#### COGNITIVE PSYCHOLOGY

- Dr. Kelly M. Goedert <u>kelly.goedert@shu.edu</u>, <u>lab website</u>
   causal learning, visuomotor learning, spatial attention, embodied thinking
- Dr. Marianne E. Lloyd <u>marianne.lloyd@shu.edu</u> memory and memory errors, development of memory, mindfulness

#### **DEVELOPMENTAL PSYCHOLOGY**

 Dr. Amy S. Joh <u>amy.joh@shu.edu</u>, <u>lab website</u> cognitive, perceptual, and motor development in children and adults, spatial problem solving

#### CLINICAL PSYCHOLOGY

- Dr. Paige H. Fisher <u>paige.fisher@shu.edu</u>
   mental health and college adjustment, preschool social and academic development
- Dr. Susan A. Nolan <u>susan.nolan@shu.edu</u> international psychology, perceptions of individuals with mental illness, gender and STEM fields

#### **CULTURAL PSYCHOLOGY**

Dr. Fanli Jia fanli.jia@shu.edu lab website
 cross-cultural differences and multiculturalism among Easterners, Westerners and immigrants
 with regard to their identity development and bilingualism

# ORGANIZATIONAL PSYCHOLOGY

Dr. Andrew Simon <u>andrew.simon@shu.edu</u>
 sports psychology, organizational dynamics

# **SOCIAL PSYCHOLOGY**

Dr. Susan Teague <u>susan.teague@shu.edu</u>
 helping behavior, attitude formation and change, interpersonal conflict

Faculty and students enjoy research partnerships with these colleagues in other departments and in the community:

- Dr. Sulie Chang, Institute of NeuroImmune Pharmacology, Seton Hall University
- Dr. A.M. Barrett and Dr. Peggy Chen, Stroke Research, Kessler Foundation, West Orange, NJ
- **Dr. Kelly Dickerson**, Army Research Laboratories

# Location, Location!

Seton Hall University is that it is located in the Village of South Orange, 14 miles west of New York City. This location uniquely affords the chance to take advantage of all the things that the city has to offer, while also providing proximity to beach communities, mountains and parks.

# **Find Out More About Us**

If you are in the area and would like to come for an informal visit on your own, we'd love to meet you. An interview is not required, but members of the faculty would be happy to meet with you to talk about our program, as would some of our current grad students. You are welcome to sit in on a graduate class, and tour the campus. However, if you don't have the time to come in person, faculty members are available to speak with you over the phone or communicate via e-mail.

If you have more questions, please contact the Director of Graduate Studies, Dr. Amy Joh, at <a href="mailto:amy.joh@shu.edu">amy.joh@shu.edu</a> or 973-275-2709.

# Sample Thesis & DAVA Project Titles of Recent Graduates (click links to go to thesis)

# **Behavioral Neuroscience**

- Do Rats Consume Ethanol to Regulate a Negative Emotion Induced by a Successive Negative Contrast Procedure? Andrew Dieterich, MS 2016
- The Immediate and Long-lasting Cognitive Consequences of Adolescent Chronic Sleep Restriction Kerry Howard, MS 2018

# **Cognitive Psychology**

- The Revelation Effect in Autobiographical Memory Vincent Medina, MS 2019
- Cognitive Demand and the Outcome Density Effect Ciara Willett, MS 2017

# **Developmental Psychology**

- The Effect of Peer Collaboration on Kinematic Problem Solving Alyssa DeRonda, MS 2019
- Preschoolers' Use of Verbal and Musical Strategies for Solving a Spatial Reasoning Task Alyssa Iulianetti, MS 2016

# Clinical Psychology

- <u>Examining the Effect of Education Type on Common Misconceptions of Traumatic Brain Injury Monica</u>
   Delorio, MS 2015
- The Use of Celebrity and Non-celebrity Examples to Reduce Stigma in University Students Tyrus McCartney, MS 2019

# **Organizational Psychology**

Computer Monitoring in the Workplace: Performance Effects and Perceptions Kimberly Rubenstein, MS 2016

# Social Psychology

- The Effects of Counterfactual Priming on Belief in Fake News Sean Bogart, MS 2019
- Ethnicity, qualifications, and peer influence: Relative effects in a simulated hiring decision Victoria Kerns, MS
   2015

# **Data Visualization and Analysis Project**

Bayesian and Frequentist Methods of Model Fitting for Longitudinal MLM, Raymond Blattner, MS 2017

# **Placement of Graduates**

Student/Graduation Date	Where They are Now
Soniya Assudani, MS 2014	PhD student, Perception, Action & Cognition, University of Connecticut
Christopher Cagna, MS 2013	PhD student, Behavioral Neuroscience, Rutgers University
Shannon Callahan, MS 2009	PhD student, Social Psychology, University of California, Davis, CA
Ciara Willett, MS 2017	PhD student, Cognitive Psychology, University of Pittsburgh
Brent Costleigh, MS 2007	Faculty member, Brookdale Community College
Monica De Iorio, MS 2015	PhD student, Clinical Psychology, Wayne State University
Michele Barry, MS 2016	Research Assistant, Kessler Institute for Rehabilitation, Saddle Brook, NJ
Megan Daly, MS 2016	Program Manager, IPS Labs, Somerset, NJ
Sharon Fernbach, MS 2011	PsyD student, Alliant International University, San Diego, CA
Katherine Moen, MS 2014	PhD student, Louisiana State University, Baton Rouge, LA
Dina Mattern, MS 2016	Learning and Decision Making Lab Manager, Rutgers University, New Brunswick, NJ
Kimberly Rubenstein, MS 2016	PhD student, Industrial/Organizational Psychology, Hofstra University, Hempstead, NY
Abigail Lashomb, MS 2007	Medical Editor, The Westfield Group
Marjorie Levinstein, MS 2013	Research scientist, Affective Disorders Laboratory, Columbia University Medical Center, New York State Psychiatric Institute
Andrew Dieterich, MS 2016	PhD student, Cellular Biology and Neuroscience, Rutgers University, New Brunswick, NJ
Junaid Merchant, MS 2010	PhD student, Developmental Social Neuroscience, University of Oregon, Eugene, OR
Chi Ngo, MS 2013	PhD student, Cognitive Psychology, Temple University, Philadelphia, PA
Chloe Shearer, 2017	Research Assistant, Carnegie Mellon University, Pittsburgh, PA
Shannon, Haas, MS 2014	Clinical Research Coordinator at the MS Comprehensive Care Center at NYU Langone, New York NY
Chelsea Reichert, MS 2012	Research Support Assistant, Nathan Kline Institute for Psychiatric Research, Orangeburg, NY
Raymond Blattner, 2017	Clinical Data Management, MedAvante-ProPhase
David Root, MS 2006, PhD 2012	Assistant Professor, University of Colorado, Boulder
Daniela Sacchetti, MS 2012	Research Specialist, Laboratory for Cognition & Neural Stimulation, University of Pennsylvania

#### Curriculum

The Department of Psychology offers the Master of Science (M.S.) degree in Experimental Psychology that is typically completed in two years of full-time enrollment (9 credits per semester). The program trains students in the scientific methods of psychology in preparation for entry into a Ph.D. program or for direct entry into research-intensive careers (e.g., pharmaceutical or market research, science writing, data analytics). The program offers five areas of concentration across two separate tracks for admission: 1) the MS in Experimental Psychology, which requires 36 credits of coursework and 2) the MS in Experimental Psychology-Thesis, which requires 36 credits of coursework plus completion of an empirical thesis. While students must indicate a track and concentration at the time of admission, students may move between concentrations within a track after speaking with their faculty advisor.

# M.S. in Experimental Psychology

- A. Data Visualization and Analysis Concentration
- B. Psychological Science, General Concentration

# M.S. in Experimental Psychology-Thesis

- A. Behavioral Neuroscience Concentration
- B. Cognitive Neuroscience Concentration
- C. Behavioral Sciences Concentration

# **MASTER OF SCIENCE DEGREE IN EXPERIMENTAL PSYCHOLOGY - THESIS**

This program is particularly geared towards preparing students for admission to doctoral programs in the field of psychology, including all aspects of experimental psychology (biological, social, developmental, cognitive, perception) and neuroscience, as well as scientist/practitioner programs in clinical psychology. Degree conferral requires successful completion of 12 courses (36 total credits) and successful defense of an empirical thesis project. For the thesis, students design, execute, analyze, and write up an empirical study. The project culminates with an oral defense.

Students must select a concentration:

- A. Behavioral Neuroscience Concentration
- B. Cognitive Neuroscience Concentration
- C. Behavioral Sciences Concentration

Regardless of concentration, students complete the following two sets of requirements:

Essentials of Research Requirement (9 credits)		<u>Credits</u>
PSYC 7200	Graduate Seminar	3
PSYC 6100	Research Design and Analysis I	3
PSYC 6200	Research Design and Analysis II	3

Thesis Research Requirement (9 credits)		<u>Credits</u>
PSYC 7202	Independent Research II	3
PSYC 7203	Independent Research III	3
PSYC 8001	Thesis	3

The concentrations involve selections among sets of elective courses:

Behavioral Neuroscience Concentration	
<ul> <li>Choose two of the following three courses (6 credits):</li> </ul>	
PSYC 7102 Cognition	3
PSYC 7103 Perception	3
PSYC 7106 Cognitive Neuroscience	3
<ul> <li>Complete all of the following courses (9 credits):</li> </ul>	
PSYC 7101 Conditioning and Behavior	3
PSYC 7104 Psychopharmacology	3
PSYC 7105 Behavioral Neuroscience	3

Complete one elective course from the list of Experimental Psychology Electives below (3 credits).

# **Cognitive Neuroscience Concentration**

Credits

• Choose one of the following two courses (3 credits):

	PSYC 7101 Conditioning and Behavior	3
	PSYC 7104 Psychopharmacology	3
•	Complete all of the following courses (12 credits):	
	PSYC 7102 Cognition	3
	PSYC 7103 Perception	3
	PSYC 7105 Behavioral Neuroscience	3
	PSYC 7106 Cognitive Neuroscience	3

Complete one elective course from the list of Experimental Psychology Electives below (3 credits).

Behavioral Sciences Concentration	
<ul> <li>Choose one of the following two courses (3 credits):</li> </ul>	
PSYC 7102 Cognition	3
PSYC 7106 Cognitive Neuroscience	3
<ul> <li>Choose one of the following three courses (3 credits):</li> </ul>	
CPSY 6102 Developmental	3
CPSY 6103 Abnormal	3
CPSY 7515 Social	3

- Complete four elective courses from the list of Experimental Psychology Electives below (12 credits).
- A maximum of 9 CPSY credits may be applied towards the degree.

# MASTER OF SCIENCE DEGREE IN EXPERIMENTAL PSYCHOLOGY

This program is particularly geared towards preparing students for direct entry into fields requiring strong data analysis and research skills. Degree conferral requires successful completion of 12 courses (36 total credits).

Students must select a concentration:

- A. Data Visualization and Analysis Concentration
- B. Psychological Science, General Concentration

# **Concentration: Data Visualization and Analysis (DAVA)**

By fulfilling this concentration, students satisfy the requirements for the DAVA certificate

Essentials of Research Requirement (12 credits)		<u>Credits</u>
PSYC 7200	Graduate Seminar	3
PSYC 6100	Research Design and Analysis I	3
PSYC 6200	Research Design and Analysis II	3
PSYC 7111	Independent Laboratory Research I	3
Doto Vigualizat	Cradita	

<u>Data Visualization and Analysis Requirements (9 credits)</u>		<u>Credits</u>
DAVA 6010	Data Mining	3
DAVA 7000	Data Visualization	3
PSYC 7214	Cognition for Visualization*	3

\*PSYC 7103 Perception may be substituted for PSYC 7214 for students admitted to the MS program with an undergraduate survey course in cognitive psychology.

<b>Choose One Pre</b>	sentation Course (3 credits)	<u>Credits</u>
COGR 6323	Presentation Graphics	3
COST 7220	Effective Presentations	3

Choose One Scientific Writing Course (3 credits)		<u>Credits</u>
GMHS 7503	Scientific Writing	3
GMHS 7507	Scientific Inquiry	3
ENGL 6414	Scientific and Technical Writing	3

Choose One D	AVA Experiential Requirement (3 credits)	<u>Credits</u>
DAVA 8011	Intern in Visual Analytics	3
DAVA 8021	Project in Visual Analytics	3

# Choose Two Electives from the Experimental Psychology Electives Listed Below (6 credits) At least one of these electives must be a PSYC course.

# **Concentration: Psychological Science, General**

<b>Essentials of Rese</b>	earch Requirement (12 credits)	<b>Credits</b>
PSYC 7200	Graduate Seminar	3
PSYC 6100	Research Design and Analysis I	3
PSYC 6200	Research Design and Analysis II	3
PSYC 8002	Literature Review Writing	3
Research and Wri	ting Requirement (6 credits)	Credits
Choose Option A o	r Option B for fulfilling this requirement:	
Option A: Choose	Two Research Courses	
PSYC 7111	Independent Laboratory Research I	3
PSYC 7112	Independent Laboratory Research II	3
PSYC 7202	Independent Research II	3 3
PSYC 7203	Independent Research III	3
Option B: Complete	e One Research Course and One Writing Course	
Research Courses		
PSYC 7111	Independent Laboratory Research I	3
PSYC 7112	Independent Laboratory Research II	3
PSYC 7202	Independent Research II	3
PSYC 7203	Independent Research III	3
Writing Courses		
GMHS 7503	Scientific Writing	3
GMHS 7507	Scientific Inquiry	3
ENGL 6414	Scientific and Technical Writing	3

# Choose Six Electives from the Experimental Psychology Electives List Below (18 credits) A maximum of 9 CPSY credits may be applied towards the degree.

EXPERIMENTAL PSYCHOLOGY ELECTIVES		<b>CREDITS</b>
CPSY 6001	Tests and Measurement	3
CPSY 6101	Personality Theory	3
CPSY 6102	Developmental Psychology	3
CPSY 6103	Abnormal Psychology	3
CPSY 7515	Social Psychology	3
CPSY 8521	Foundations of Neuropsychology	3
DAVA 6010	Data Mining	3
DAVA 7000	Data Visualization	3
DAVA 8011	Intern in Visual Analytics	3
DAVA 8021	Project in Visual Analytics	3
PSYC 6211/CPSY 6505	Principles of Learning and Behavior Modification	3
PSYC 7101	Conditioning and Behavior	3
PSYC 7102	Cognition	3
PSYC 7103	Perception	3
PSYC 7104	Psychopharmacology	3
PSYC 7105	Behavioral Neuroscience	3
or CPSY 6105	Biological Bases of Behavior	3
PSYC 7106	Cognitive Neuroscience	3
PSYC 7214	Cognition for Visualization	3

<sup>\*</sup>Students may apply either PSYC 7105 or CPSY 6105 to their degree, but not both. Choice of which one to take should be made in consultation with the student's advisor.