

Opportunities: Week of 10/20/17

Undergraduate Research Opportunities in the Sheltzer Lab at Cold Spring Harbor: Dr. Sheltzer is currently seeking undergraduate researchers for a cutting-edge project applying CRISPR to dissect drug targets in breast cancer. The position can pay hourly or provide course credit, depending on the student's preference.

For position requirements and application instructions, please see attached flyer.

Mentorship and Motivation for Students on the Path to the PhD: The Center for Inclusive Education in partnership with the IMSD-MERGE project has arranged to have an informational session for students (undergraduate and graduate) considering careers in research. This event is in celebration of Hispanic Heritage month, all are invited! Dinner will be catered by Island Empanada

Event is next Wednesday, 10/25 at 5:00 PM, 2401 Old Computer Science Building.

See attached flyer for more info. To RSVP and submit questions for the panelists, go to

<http://tiny.cc/path2phd>

Graduate Student Diversity Recruitment Weekend at Cornell: The Cornell University Dept. of Ecology and Evolutionary Biology, Dept. of Entomology, and School of Integrative Plant Science are pleased to announce our second annual event being held from **March 8-11, 2018**. This event is intended to introduce students from underrepresented backgrounds to the graduate school application process and to connect them with faculty members that share research interests. **Participant housing and meals will be provided, as well as up to \$600 in travel expenses.** We encourage applications from students from underrepresented backgrounds (including underrepresented minorities, first-generation students, low income, people with disabilities, LGBTQA) that are interested in applying for graduate school during the 2018-2019 application cycle.

Application deadline is December 1, 2017.

For more information and to apply, please visit www.inclusivecornell.org. If you have any questions, please email inclusivecornell@gmail.com.

Neuroscience Fellowships: The Marcus Autism Center, in conjunction with the Emory University School of Medicine and Children's Healthcare of Atlanta, is offering three fellowships: the Cohen Fellowship in Developmental Social Neuroscience, the Marcus Fellowship in Speech Science and Engineering, and the Simons Fellowship in Computational Neuroscience. Students who will receive a bachelor's degree by June 2018 will be eligible for the positions. The fellowships will commence in July 2018, and they are 2 years in duration.

Find further details at: cohenfellowship.org and simonsfellowship.org and in attached files

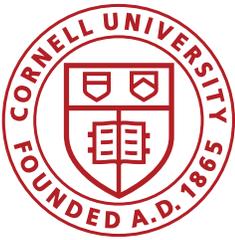
University of Virginia's Biology Graduate Program: The University of Virginia offers both Masters and PhD programs, with faculty mentors working in diverse research areas of Molecular Genetics, Cell & Developmental Biology, Neurobiology & Behavior, and Ecology & Evolution. The programs offer modern labs and state-of-the-art research facilities, field research at Mountain Lake Biological Station, and 5 years of full financial support for PhD students.

For more info, see www.bio.as.virginia.edu or contact biogradprogram@virginia.edu

Kaplan MCAT Free Prep Week: With this free prep week, starting November 4th, students get Kaplan teachers, expertise and resources-all for free. Students can take a practice test, sign up for one, two or all MCAT lessons, and put their new skills to the test in Kaplan's MCAT Bootcamp session. Students must register to participate.

For more info, see <https://www.kaptest.com/freemcatprepweek#aphb>

*Disclaimer: Undergraduate Biology does not endorse or take responsibility for any off-campus programs listed in Opportunities emails. While we do our best to vet any opportunity that is shared, please let us know immediately if you are suspicious of any employers/programs.



Cornell University
Dept. of Ecology and Evolutionary Biology
Dept. of Entomology
School of Integrative Plant Science

Graduate Student Diversity Recruitment Weekend

March 8-11, 2018

Are you considering graduate school in the biological sciences?
We are seeking underrepresented minority and first-generation college students to spend a weekend learning about the graduate school application process and building professional connections.

Workshop your graduate school application!
Practice interview skills!
Learn about fellowships and funding!
Get to know our programs!

Learn more and apply at:
inclusivecornell.org

Application deadline: December 1, 2017

Travel, meals, and housing are provided for participants.





 Marcus
AUTISM CENTER
NIH Autism Center
of Excellence

FELLOWSHIP OPPORTUNITIES

ADVANCE UNDERSTANDING OF
AUTISM SPECTRUM DISORDER (ASD)

PREDOCTORAL FELLOWSHIP OPPORTUNITIES

Marcus Autism Center, in conjunction with Children's Healthcare of Atlanta and Emory University School of Medicine, is offering two-year fellowships in three scientific subspecialties. Fellows will participate in innovative research to provide novel solutions to complex problems in a robust clinical environment.

Our fellowships

The Donald J. Cohen Fellowship in Developmental Social Neuroscience will select fellows for a two-year training in the study of child development and social neuroscience in children with autism spectrum disorder (ASD).

The Simons Fellowship in Computational Neuroscience will select fellows for a two-year training at the nexus of computer science and psychology to integrate computational strategies with clinical research goals.

The Marcus Fellowship in Speech Science and Engineering will select fellows to spend two years engaged in research on early vocal development in children at risk for ASD.

Research training program

Our research fellowships are intended for college graduates to dedicate two intensive years to research on ASD prior to entering graduate studies. Fellows will participate in and guide innovative research while working with families and children affected by ASD, ranging in age from week-old infants to adolescents and young adults.

Fellows receive direct research mentorship from the program directors and Marcus Autism Center faculty members, and they are involved in a highly active and productive community of clinical research scientists. In addition to research training and mentorship, fellows also complete an intensive summer training seminar covering clinical research in ASD (one week), ASD grand rounds meetings (twice a month), social neuroscience lab meetings (weekly) and ongoing didactic practica. Fellows are strongly encouraged and expected to submit their research for posters and publications and will be funded to attend at least one conference a year.

All three fellowship tracks are paid, two-year positions, with full healthcare coverage.

Visit marcus.org/fellowship for more information and to download an application.



PREDOCTORAL FELLOWSHIP OPPORTUNITIES

Research at Marcus Autism Center

Marcus Autism Center is one of five National Institutes of Health (NIH)-recognized Autism Centers of Excellence in the country. It is the largest center for clinical care of children with ASD and their families in the U.S., seeing more than 5,000 patients every year. The center also works in partnership with Yerkes National Primate Research Center, the Centers for Disease Control and Prevention (CDC), and Georgia Institute of Technology. These varied institutions enable a multidisciplinary and translational approach to ASD research, spanning projects in behavioral neuroscience, neuroimaging, molecular and population genetics, and treatment. The directors of the fellowship program lead the social neuroscience, spoken communication and neuroimaging research cores within Marcus Autism Center. These research cores use eye-tracking technology, neuroimaging, computational modeling and behavioral neuroscience methods to better understand the causes and developmental mechanisms underlying ASD, and to develop new tools to improve early detection, diagnosis and treatment of ASD.

Application information

Sponsor institutions: Marcus Autism Center, Children's Healthcare of Atlanta and Emory University School of Medicine

Program directors: Ami Klin, PhD, Warren Jones, PhD, Gordon Ramsay, PhD, and Sarah Shultz, PhD

Term of award: Two years

Submission deadline: Jan. 5, 2018

Award amount: \$34,000

All applications must be submitted electronically. The online application portal will open in November 2017.

To complete your online application, you will need a resume or curriculum vitae, a statement of purpose, two letters of recommendation and a scanned transcript(s).

Visit marcus.org/fellowship or call 404-785-9554 for application materials and additional information.

DONALD J. COHEN FELLOWSHIP

IN DEVELOPMENTAL
SOCIAL NEUROSCIENCE

Award description

The Donald J. Cohen Fellowship in Developmental Social Neuroscience provides recent college graduates with the opportunity to spend two years engaged in state-of-the-art clinical and basic research with children and families affected by ASD. Cohen fellows are directly mentored by program directors and are involved in a highly active and productive community of clinical research scientists who study ASD. Previous Cohen Fellows have led a wide range of research projects and have gone on to PhD, MD, and MD/PhD programs in clinical, developmental and basic science specialties.

Donald J. Cohen (1940-2001) was a nationally and internationally renowned child psychiatrist whose work improved the lives of children and families all over the world. More information about his life and work can be found [here](#).

Fellowship expectations

Cohen Fellows guide a research project from the point of data collection through analysis and publication of results. Over the course of two years, fellows gain in-depth research and clinical experience through work with infants, toddlers and school-aged children spanning the full autism spectrum. Fellows also complete an intensive summer training seminar covering clinical research in ASD (one week), ASD grand rounds meetings (twice a month), social neuroscience lab meetings (weekly) and ongoing didactic practica.

Contact the Cohen Fellowship Committee at cohen.fellowship@emory.edu or **404-785-9554** with additional questions.



SIMONS FELLOWSHIP

IN COMPUTATIONAL NEUROSCIENCE

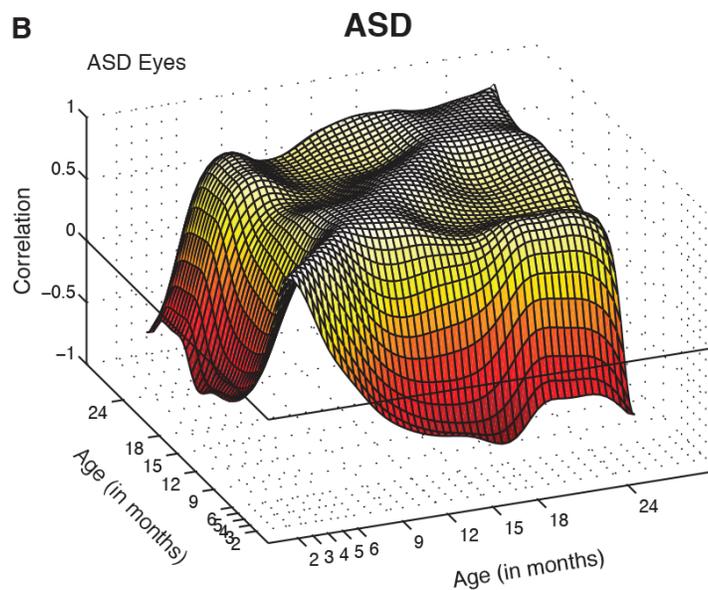
Award description

The Simons Fellowship in Computational Neuroscience provides recent college graduates with the opportunity to spend two years using computer programming and basic science to advance our understanding of ASD. Simons Fellows are directly mentored by program directors and are involved in a highly active and productive community of clinicians, scientists and engineers who study ASD. Previous Simons Fellows have led a wide range of research projects and have gone on to PhD, MD, and MD/PhD programs, as well as research positions in computer and software engineering.

Fellowship expectations

Over the course of two years, Simons Fellows work to integrate computational strategies with clinical research goals, guiding a research project from data collection through analysis and publication of results. Fellows work on developing methods for analyzing visual scanning and eye-tracking data, computational models of visual salience, and data visualization techniques, all with the aim of advancing understanding of ASD and efforts at early diagnosis. Fellows also complete a training curriculum through their participation in an intensive summer training seminar covering clinical research in ASD (one week), ASD grand rounds meetings (twice a month), social neuroscience lab meetings (weekly) and ongoing didactic practica.

Contact the Simons Fellowship Committee at simons.fellowship@emory.edu or **404-785-9554** with additional questions.



MARCUS FELLOWSHIP

IN SPEECH SCIENCE AND
ENGINEERING

Award description

The Marcus Fellowship in Speech Science and Engineering is a two-year predoctoral research fellowship designed to prepare graduate-level engineers and linguists for entry into a doctoral degree, leading either to an academic career in speech science and engineering, or to a clinical career in speech-language pathology and communication disorders.

The main focus of the training program is early vocal development in the first years of life in children at risk of ASD, as part of a broader interdisciplinary research program mapping out the development and derailment of spoken communication in early childhood.

Fellowship expectations

Fellows will receive training in all areas of speech science relevant to their goals, including speech production and speech perception. They will also receive training in relevant areas of signal processing, including sampling theory, spectral analysis and stochastic processes, as well as speech analysis, synthesis and recognition.

Practical training will involve computer programming (Matlab, C, Labview), software engineering, hardware design and construction of laboratory equipment where needed. Additional training will also be provided in experimental design, data acquisition, data analysis, statistics, preparation of publications, grant writing, human subject research and bioethics. Fellows will have the opportunity to observe clinical assessments of patients with ASD and related developmental disabilities in the clinic.

Each fellow will design and implement a research project of their own under the direct mentorship of the program director and will be expected to present their results at one or more national or international conferences.

Contact the Marcus Fellowship Committee at marcus.fellowship@emory.edu or 404-785-9554 with additional questions.





marcus.org



Stony Brook University

Center for Inclusive Education

Mentorship and Motivation for Students on the Path to the PhD

Wednesday, October 25, 2017 at 5:00pm
Center For Inclusive Education

The Graduate School | 2401 Old Computer Science Building

Please join us for an inspirational conversation with Stony Brook scholars pursuing graduate degrees. They will share the experiences that sparked their desire to pursue a graduate degree and talk about the people that provided valuable mentorship along the way.

Who should attend? Undergraduate students interested in getting involved in research and/or considering a graduate degree, or graduate students in need of a motivation boost. Dinner will be catered by Island Empanada.

RSVP and submit your questions for the panelists at: <http://tiny.cc/path2phd>

For more information contact: cie_graduateschool@stonybrook.edu

For accessibility-related accommodations, please call 2-1386



Moderator:
Dr. R. Antonio Herrera
Postdoctoral Scholar
Department of Applied
Math & Statistics

PANELISTS



Ricardo Raudales
Graduate Student
Neuroscience



Jinnette Tolentino-Collado
Graduate Student
Chemistry



Samuel Urena
Undergraduate Student
Biomedical Engineering



Analyzing breast cancer genomes with CRISPR at Cold Spring Harbor Laboratory

The Sheltzer Lab at Cold Spring Harbor Laboratory is seeking undergraduate researchers for a cutting-edge project applying CRISPR to dissect drug targets in breast cancer. The position can pay hourly or provide course credit, depending on the student's preference.

Cancer cells require the expression of certain genes, called “addictions” or “genetic dependencies”, that encode proteins necessary for tumor growth. Targeting the proteins encoded by these genes can trigger cell death and durable tumor regression. The Sheltzer Lab is applying CRISPR to study genetic dependencies in breast cancer in order to identify new therapeutic vulnerabilities and targets for drug development. Additionally, through CRISPR mutagenesis, we investigate the on-target and off-target effects of breast cancer drugs, with profound implications for their clinical use.

More information on our previous research can be found in these publications (written by Stony Brook undergraduates):

Lin, A., Giuliano, C.J., Sayles, N.M., and Sheltzer, J.M. (2017) [CRISPR/Cas9 mutagenesis invalidates a putative cancer dependency targeted in on-going clinical trials](#). eLife, 6:e24179.

Giuliano, C.J., Lin, A., Smith, J.C., Palladino, A.C., and Sheltzer, J.M. (2017) [Combining CRISPR/Cas9 mutagenesis and a small-molecule inhibitor to probe the function of MELK in cancer](#). bioRxiv.

Position Requirements

- Ability to work in the lab at least 12 hours a week (which could include evenings and weekends, based on the student's preference, though work during those hours is not a requirement).
- Ability to get to/from Cold Spring Harbor Laboratory.
- Prior lab experience in molecular biology is preferred but not mandatory.
- Strong communication, organization, and data analysis skills.

More information can be found on the Sheltzer lab website: <http://sheltzerlab.labsites.cshl.edu/>.

Interested students should send a CV and cover letter to Dr. Sheltzer at sheltzer@cshl.edu.

Graduate Program in Biology

University of Virginia



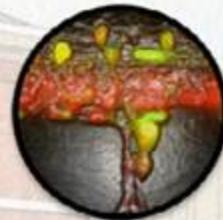
5 years of full financial support for PhD students



Faculty mentors working in **diverse research areas:**



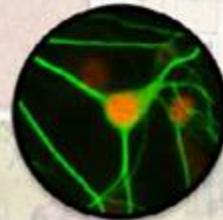
Training in biological research and teaching



Molecular Genetics, Cell & Developmental Biology



Modern labs and state-of-the-art research facilities



Neurobiology & Behavior



Field research at Mountain Lake Biological Station



Ecology & Evolution



Excellent quality of life in Charlottesville, VA

Application deadline: December 1, 2017

Contact: biogradprogram@virginia.edu

More info: www.biology.as.virginia.edu