

A young child with dark, curly hair is sitting in a specialized chair. The chair has a large screen that displays a smiling woman's face. The child is looking up at the screen. The chair is dark-colored and has various mechanical parts and a camera lens visible. The background is a plain, light-colored wall.

FELLOWSHIP OPPORTUNITIES

ADVANCE THE UNDERSTANDING
OF AUTISM SPECTRUM
DISORDER (ASD)

The logo for Marcus Autism Center, featuring a stylized blue wave or swoosh above the word "Marcus".
Marcus
AUTISM CENTER

**NIH Autism Center
of Excellence**

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 four 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.

The Simons Fellowship in Design Engineering will select fellows for a two-year training in the integration of design engineering—mechanical, electrical and software—with neuroscience research.

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.

All four 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 three 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 per 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, Ph.D., Warren Jones, Ph.D., Gordon Ramsay, Ph.D., and Sarah Shultz, Ph. D.

Term of award: Two years

Submission deadline: Jan. 6, 2017

Award amount: \$32,000

All applications must be submitted electronically. The online application portal will open in November 2016.

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 the 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 Ph.D., M.D., and M.D./Ph.D. programs in clinical, developmental and basic science specialties.

Donald J. Cohen (1940-2001) was a nationally and internationally renowned child psychiatrist who positively impacted 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-age 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

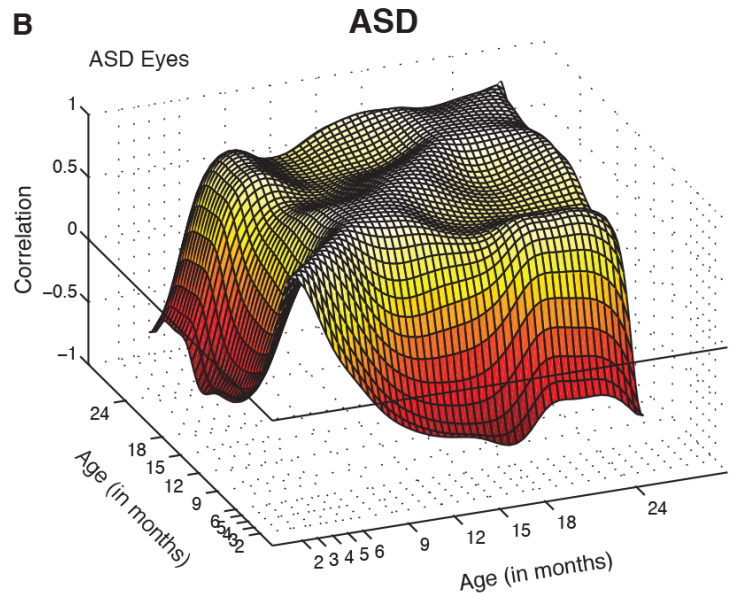
The Simons Fellowship in Computational Neuroscience provides recent college graduates with the opportunity to spend two years using computer programming and basic science to advance our understanding of ASD.

Simons Fellows are directly mentored by the 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 Ph.D., M.D., and M.D./Ph.D. 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.

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SIMONS FELLOWSHIP

in Design Engineering

Award description

The Simons Fellowship in Design Engineering will select fellows to be immersed in a two-year training program aimed at the integration of design engineering with neuroscience research.

Fellowship expectations

Successful applicants will be expected to develop innovative hardware solutions to advance scientific understanding of social neuroscience and ASD. These solutions offer an opportunity to explore human factors engineering, product prototyping and the design of novel tools for neuroscience research. The fellowship is an opportunity for creative engineering and problem-solving, in which basic design challenges are defined but the routes to solutions are open-ended. The selected fellows will be mentored by the program directors and involved in a highly active research community of software, systems and quality engineers who work closely with clinicians and scientists to better understand the causes and consequences of ASD. The fellows will learn about neuroscience and ASD while applying design and engineering skills to answer clinical research questions.

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