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**AUTISM SCIENCE FOUNDATION ANNOUNCES 2019 GRANT RECIPIENTS
FOR UNDERGRADUATE SUMMER RESEARCH**

Funding Will Support the Work of Autism Researchers at the Start of Their Careers

NEW YORK, NY (March 12, 2019) – The Autism Science Foundation, a not-for-profit organization dedicated to catalyzing innovative autism research, today announced the recipients of its annual undergraduate summer research grants. Four grants have been awarded to promising undergraduates who will study autism risk genes in zebrafish and fruit flies, investigate the relationship between autism and ADHD, and study the effect of maternal infection during pregnancy on autism risk genes. These projects allow undergraduate researchers to contribute to scientifically important projects while gaining skills that will allow them to flourish as future autism researchers.

“Encouraging promising, young scientists to focus on autism is at the heart of what we do” said Alison Singer, president of the Autism Science Foundation. “This group of grantees is doing important and innovative research that will expand our knowledge of the causes of autism and help develop targeted new treatments that will improve the lives of people with autism.”

In 2018, Inside Philanthropy praised ASF’s focus on young scientists, writing that funding undergraduates “is not something we see very often. In fact, we almost never see it. A key to achieving (medical) breakthroughs is first to win the battle to engage and retain young investigators. That means getting to promising researchers early. ASF says it’s alone among funders in its view that support for undergrads is a worthwhile use of research dollars. As far as we know, that’s true.” - [Inside Philanthropy](#)

The following undergraduates have received summer fellowships:

Nathan Bliss, Texas A&M University

Mentor: Hsiao-Tuan Chao, M.D., Ph.D., Baylor College of Medicine

A class of genes called teneurins has been shown to play a role in neuron development and neurodevelopmental disorders. Nathan and Dr. Chao will isolate the function of this gene in a fruit fly to determine its influence on cognitive behaviors and brain function. This will allow for better understanding on the role of this gene in autism spectrum disorder.

Kristen Enriquez**Mentor: Ellen Hoffman, Ph.D., Yale University**

TBR1 is an autism risk gene on chromosome 2 that has only recently been identified. It is critical for proper wiring of brain regions associated with autism like the amygdala and the cortex. Using CRISPR technology, Kristen and Dr. Hoffman will use zebrafish to manipulate the expression of this gene in about 100 fish at a time, so that the role of the gene on both brain circuitry and behavior can be better understood. Zebrafish are an efficient model to screen for potential pharmaceutical interventions.

Emma McQueen**Mentor, Clare Harrop, Ph.D., University of North Carolina at Chapel Hill**

Up to 50% of people with autism show symptoms of ADHD and individuals with both diagnoses require specialized interventions. However, not enough is known about the brain functioning of people with ASD and ADHD. Emma and Dr. Harrop will use advanced techniques to study brain activity during behavioral tasks to test the ability to switch between tasks. The goal of this project is to develop better biomarkers of these co-occurring conditions which will lead to better diagnoses of the disorders together and separately.

Nicholas Page, Rutgers University**Michael Gandal, M.D., Ph.D. and Daniel Geschwind, M.D., University of California at Los Angeles**

One of the many environmental exposures associated with an increased risk of autism is maternal immune infection during pregnancy. Early research in animal models suggests that this exposure influences gene expression differently in males and females. Under the direction of Drs. Gandal and Geschwind, Nicolas will examine the patterns of gene expression following maternal infection and identify genes that are normally expressed together in both male and female offspring. This will help explain the sex difference in diagnosis of ASD and identify specific genetic changes that lead to different genetic signals.

About the Autism Science Foundation:

The Autism Science Foundation (ASF) is a 501(c)(3) public charity. Its mission is to support autism research by providing funding to scientists and organizations conducting autism research. ASF also provides information about autism to the general public and serves to increase awareness of autism spectrum disorders and the needs of individuals and families affected by autism. To learn more about the Autism Science Foundation or to make a donation, visit www.autismsciencefoundation.org.

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