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**FOR IMMEDIATE RELEASE**

## **AUTISM SCIENCE FOUNDATION AWARDS NEW GRANT TO EXAMINE MECHANISM OF SEX DIFFERENCES IN AUTISM**

NEW YORK, NY (July 2, 2018) – The Autism Science Foundation, a not-for-profit organization dedicated to advancing innovative autism research, today announced that its 2018 Research Accelerator Grant is presented to Allison Jack, PhD, of the Autism and Neurodevelopment Disorders Institute at George Washington University. This grant is designed to expand the scope, speed the progress, increase the efficiency, and improve final product dissemination of active autism research grants. Dr. Jack will explore oxytocin as a mechanism for gender-related differences in brain structure in autism.

"Girls and boys are diagnosed with autism at very different rates. We still have much to learn about the biology of this difference, which in turn will help us to improve diagnosis and treatment for both sexes. This funding provides us with an opportunity to significantly expand our understanding of sex differences in the brain development of people with autism," said Dr. Allison Jack. "For this, we are incredibly grateful to the Autism Science Foundation for helping us move our research to where it needs to be."

"There has been mixed evidence on the effectiveness of oxytocin for deficits in social interaction in people with autism, both in children and adults, and it isn't clear why some people seem to respond and others do not," said Alycia Halladay, Ph.D., Chief Science Officer of the Autism Science Foundation. "This accelerator grant from ASF will assist Allison Jack in looking at changes in the genetic expression of the oxytocin receptor as a possible explanation, and exploring whether there are sex differences in how the oxytocin receptor works and whether it's related to brain structure in people with autism. This will help determine who is an ideal candidate for oxytocin, and possibly identify even newer and more sophisticated therapies, which may work better in males or females."

Dr. Jack and her colleagues are examining the differences in brain structure between males and females with autism spectrum disorder. They have recently received funding from the NIH to follow up with these individuals to examine the changes at multiple times, including into adulthood, and have found differences in specific brain regions as well as responses to social stimuli between genders. However, the underlying cause of the differences in brain structure and function is still unclear. Early studies on small samples suggest that epigenetic modification of the oxytocin receptor, which is important for social reward processes, explain some of these differences. This research accelerator grant from the Autism Science Foundation will allow the researchers to analyze epigenetic modifications of the oxytocin

receptor in all 250 participants, which will provide important data to better understand why more males are diagnosed with autism compared to females, and why females with autism show different features of autism compared to males with autism.

**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](http://www.autismsciencefoundation.org).

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