

Researcher Focused on Reversing Stroke-Induced Brain Damage Wins Neurology Prize



Peter Turkeltaub, MD, PhD, is an assistant professor of neurology and rehabilitation medicine, and director of the Cognitive Recovery Lab.

March 10, 2017 - [Peter Turkeltaub, MD, PhD](http://explore.georgetown.edu/people/turkeltp/) (<http://explore.georgetown.edu/people/turkeltp/>), assistant professor of [neurology](https://neurology.georgetown.edu) (<https://neurology.georgetown.edu>) and [rehabilitation medicine](https://rehabmedicine.georgetown.edu) (<https://rehabmedicine.georgetown.edu>), and director of the [Cognitive Recovery Lab](https://neurology.georgetown.edu/research/cognitiverecovery) (<https://neurology.georgetown.edu/research/cognitiverecovery>), has been chosen by an international society of neurologists to receive its annual award for excellence in behavioral neurology research.

The [Norman Geschwind Prize](http://tools.aan.com/science/awards/?fuseaction=home.info&id=12) (<http://tools.aan.com/science/awards/?fuseaction=home.info&id=12>) is given annually by the [American Academy of Neurology \(AAN\)](https://www.aan.com) (<https://www.aan.com>) to an early-career scientist – an investigator no more than 10 years from completion of training and at an academic rank no higher than assistant professor – who demonstrates outstanding research. The award also recognizes individuals who have a strong desire to advance the field of behavioral neurology, a subspecialty of neurology that examines the basis of behavior, memory, cognition, the impact of neurological damage on these functions and treatment to repair the damage.

Turkeltaub also serves as the medical director of the [Center for Aphasia Research and Rehabilitation](https://neurology.georgetown.edu/research/carr) (<https://neurology.georgetown.edu/research/carr>), and director of the [Aphasia Clinic at MedStar National Rehabilitation Network](http://www.medstarnrh.org/our-services/aphasia-clinic/#q={ }) (<http://www.medstarnrh.org/our-services/aphasia-clinic/#q={ }>). His research focuses on stroke-induced aphasia, an impairment of language that affects the ability to read, write and understand or express speech. About one-third of stroke patients experience aphasia, which occurs when a stroke on the left side of the brain impacts language areas.

Turkeltaub is studying the brain's organization for language, why damage in particular parts of the brain cause specific language problems, and, most importantly, what can be done to minimize or reverse the disability. He has found, for example, that noninvasive transcranial brain stimulation may help stroke survivors.

“We are investigating who will be helped with brain stimulation, how much it might help and with which problems,” he says. “Our hope is that we will be able to understand how to use this technique in a way that benefits a large number of people.”

A clinician-scientist

With his many roles, Turkeltaub splits his time between the clinic and the lab. He earned his MD and PhD in neuroscience at [Georgetown](http://georgetown.edu) (<http://georgetown.edu>), where he also completed an internship after earning his MD. He then went to the [University of Pennsylvania](http://www.upenn.edu) (<http://www.upenn.edu>) for residency and a fellowship in neurology and cognitive neurology.

In awarding the Norman Geschwind Prize, the AAN also cited Turkeltaub's substantial contributions to cognitive and behavioral neurology, including his invention and continuing development of a method that eliminates “false positives” that have recently distorted neuroimaging studies. This neuroimaging meta-analysis technique, known as Activation Likelihood Estimation (ALE), is now commonly used in neuroimaging research. Turkeltaub's original study outlining this free method has been cited more than 1,000 times in research studies.

Turkeltaub says he is very pleased to be receiving the prize during the AAN annual meeting in Boston April 22-28. “It is an honor to be associated with Dr. Geschwind's legacy and with the incredible prior recipients of this award,” he says.

The prize is sponsored by the AAN, the AAN Behavioral Neurology Section and endowed by Geschwind's family, friends and colleagues; [Pfizer Inc.](http://www.pfizer.com) (<http://www.pfizer.com>), and the [Society for Behavioral and Cognitive Neurology](http://the-sbcn.org) (<http://the-sbcn.org>).

Renee Twombly
GUMC Communications

Georgetown University Medical Center
Suite 120
4000 Reservoir Road, N.W., Washington D.C. 20057
Phone: [\(202\) 687-0100](tel:2026870100)