Welcome to the inaugural edition of the CRTF Alumni Newsletter, designed to foster relationships and cultivate future leaders in clinical research on the path to finding cures for neurologic disease.

MS Investigator’s Work Advanced, Inspired by Award

Gabriele C. De Luca, MD, PhD, received the 2010 John F. Kurtzke, MD, FAAN, Clinician-Scientist Development Award, sponsored by the AAN Foundation and the Consortium of Multiple Sclerosis Centers (CMSC). As a researcher in multiple sclerosis in the Nuffield Department of Clinical Neurosciences (Clinical Neurology) at the University of Oxford, De Luca’s work has been enhanced by the additional protected time in the laboratory that this three-year award provides him.

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—Gabriele C. De Luca, MD, PhD

“Ms. The generous funding from the AAN has been crucial to the pursuit of my dream to be a clinician-scientist at a research-intensive academic institution,” said De Luca. “The award has enabled me to undertake research focused on the relationship between genetics and pathology in MS. By developing a better understanding of the pathogenesis of MS, my research has the potential to influence MS care by guiding the development of therapies aimed at halting the devastating consequences of the disease.”

De Luca feels that the award, and the opportunity to meet personally with its namesake, will have a lasting effect on his work. “To be awarded a fellowship named after Dr. Kurtzke is a remarkable honor. Dr. Kurtzke has made fundamental contributions to our understanding of various aspects of MS. I have had the privilege of meeting Dr. Kurtzke and his wife; their warmth, passion, and wisdom have continued to inspire me as I continue on my journey to unravel the mysteries of this disease. I hope that my research contributions will make Dr. Kurtzke and the rest of the MS research community proud.

“I am deeply indebted to the donors and sponsors who support the AAN Foundation and CMSC, for without their generosity, these wonderful organizations would not be able to provide the financial and academic support needed to nurture the next generation of MS clinician-scientists. Through working together, I am confident that we will make a palpable difference for the better for people who have MS.”

Clinical Research Training Fellowship Helps Accelerate Autism Investigations

As one of the 139 recipients of the AAN Foundation’s Clinical Research Training Fellowships since 1993, behavioral child neurologist Shafali Jeste, MD, is a textbook example of how crucial these awards are to the careers of young investigators and furtherance of their work.

Jeste graduated from Yale University with a bachelor’s degree in philosophy in 1997, and earned her medical degree from the Harvard Medical School in 2002. She completed her residency in child neurology and a fellowship in behavioral child neurology at the Children’s Hospital in Boston. She returned to Harvard Medical School from 2007 to 2009 for post-doctoral training in developmental cognitive neuroscience.

A 2007 Researcher-in-Training fellowship from the Child Neurology Foundation and the AAN Foundation’s Clinical Research Training Fellowship from 2008 to 2010 helped enable Jeste to develop an ongoing study scrutinizing neural correlates of autism in infants and toddlers with tuberous sclerosis complex, an inherited neurological disorder that leads to autism and other developmental disorders.

Her remarkable progress during her AAN fellowship led to an invitation to join UCLA in 2010, where she has established an electrophysiology lab at the Center for Autism Research and Treatment (CART). She is working to develop ways to employ brain-based methods to better illustrate behavioral and cognitive domains in at-risk infants and very young children with autism, hoping to see if these domains foretell clinical outcomes. She also is exploring the relationship between motor impairments and cognitive development.

“Shafali Jeste, MD, adjusts the EEG net on a girl’s head to get an accurate reading of her brain activity.”

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Clinical Research Training Fellowship Helps Accelerate Autism Investigations (Continued from cover)

What prompted you to take an interest in autism?

“I have always been fascinated by early cognitive and social development. During my child neurology training, I started to focus on the care of children with developmental disabilities, and I was so struck by the heterogeneity of presentation and outcome of young children with autism spectrum disorders (ASD). The question that every parent would ask was: ‘What is my child’s prognosis and what is the best treatment for him/her?’ In most other medical disorders, this is a question that physicians can at least attempt to answer, but in ASD we cannot. I immediately knew that this was the field to which I wanted to dedicate my career. Specifically, I wanted to be able to better characterize children at the time of diagnosis and to understand pathways to their deficits. There is a great need for more child neurologists to specialize in ASD, and we are well equipped given our training in neurodevelopment and neurobiology.”

How did the Foundation’s research fellowship help advance your work? Were you able to experience any significant accomplishments or milestones during your fellowship?

“The AAN funding was critical as a launching pad for my career. One year after receiving AAN funding, I was recruited to UCLA as an assistant professor-in-residence to start an electrophysiology program in CART under Director Daniel Geschwind, MD, PhD. I have been quite productive during that time with data collection, publications, and grant support. My lab currently is comprised of two full-time research coordinators, a neuroscience graduate student, and a post-doctoral fellow. My lab focuses on the use of EEG and event related potentials (ERPs) to characterize young children with autism and, importantly, to use these biomarkers to inform predictors of treatment response. I am tightly integrated with the genetics and treatment cores here at UCLA. With regard to funding, I have been awarded funding from both NIMH and the Department of Defense in the last year. First, with Dan Geschwind as my mentor, I was awarded an NIMH P30 grant in 2009 that supported my recruitment to UCLA. This grant is entitled Providing Core Support for Junior Faculty for Translational Research in ASD. Then, in February 2011, I was awarded an NIMH K23. This grant is entitled Neural Predictors of Language Acquisition After Intensive Behavioral Intervention in Young Children with an Autism Spectrum Disorder (ASD). Finally, and very importantly, based on the pilot data gathered from the AAN award and the resulting awareness of a need to expand the study on infants with tuberous sclerosis complex, Dr. Charles Nelson and I applied for a large grant from the Department of Defense to continue and expand this research. We were the only project awarded the grant, and it provides us with $1.2 million over three years. This award is entitled TS100029—Defining Early Markers of Neurodevelopmental Disorders in Infants with TSC. This grant allows us to continue and expand on the TSC study, with sites in southern California and in New England. Funding began in September 2011.”

As demonstrated by Jeste’s successful research and her ability to leverage her AAN Foundation fellowship to advance her work, these fellowships can have a tremendous impact on the career of a young investigator. To learn more about AAN Foundation Research Fellowship program, visit www.aan.com/go/foundation/research. To make a donation to help support the important work of researchers like Jeste, visit www.aan.com/go/foundation/giving.

Big Announcement Coming to Research Area on Tuesday, April 24

Every Annual Meeting attendee will want to attend the Presidential Plenary Session on Tuesday, April 24, for a big announcement at 10:05 a.m. by AAN Foundation Chair John C. Mazziotta, MD, PhD, FAAN—then be sure and stop by the Research Area immediately after!