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American College of
Neuropsychopharmacology

Bench to Bedside: Building from Neuroscience Research Discoveries January 29, 2019 Congressional Neuroscience Caucus Briefing

On Tuesday, January 29, the American Brain Coalition, the American College of Neuropsychopharmacology, and the Society for Neuroscience, in cooperation with the Congressional Neuroscience Caucus, held an informational briefing. The panelists discussed recent neuroscience research achievements/challenges, highlighted mental health disorders, and examined treatment options.



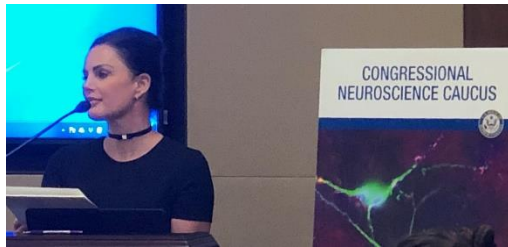
Ms. Leslie Ritter, Senior Director of Federal Government Relations at the National Multiple Sclerosis Society, began by highlighting the substantial impact of neurological disorders. Neurological disorders are the leading cause of disability worldwide—over 100 million Americans are impacted by these disorders and the resulting cost burden exceeds \$760 billion USD annually. Despite the significance of this disease burden, Ms. Ritter noted that neurological disorder treatment options are scarce due to drug development challenges. Studies have estimated that the average drug development timeline spans 15 years and costs to bring a novel therapy to the market fall between \$121 million and \$2 billion USD; yet, only 6% of preclinical opportunities are approved. To counteract these industry challenges and ultimately bring new treatment options to patients in need, Ms. Ritter



offered three solutions: (1) improving the state of the science about the brain, (2) modernizing approaches to clinical trials, and (3) improving regulatory approaches. Ms. Ritter applauded Congressional investments in neuroscience via the 21st Century Cures Act, which established a dedicated funding stream towards the Brain Research through Advancing Innovative Neurotechnologies (BRAIN) Initiative, which focuses on the development of new methods to understand how components of the part function together in both health and disease. Because research is higher quality when neuroscience-related funding increases are stable and predictable, Ms. Ritter supported a \$41.6 billion USD budget for the National Institutes of Health in fiscal year 2020 and encouraged Congress to appropriately fund neurological disease research in all federal agencies.

Dr. Charles Nemeroff, MD, PhD, Professor of Psychiatry and Director of the Institute of Early Life Adversity Research at Dell Medical School, The University of Texas at Austin, shifted the discussion to mental health disorders, with an emphasis on suicide prevention efforts. Dr. Nemeroff deemed suicide “one of the most enigmatic problems in America and the world.” He then explained that suicide can be considered a “uniquely human condition” because there are no other known animal models for depression/suicide. Next, Dr. Nemeroff provided several recent suicide statistics. In 2017, there were 47,123 deaths by suicide in America. On average, 129 deaths by suicide occurred each day; one death occurred every 12 minutes; and for each death, there were 25 suicide attempts. Dr. Nemeroff highlighted the significant sociodemographic differences in suicide rates—male gender, White & Native American race, veteran status, and adolescent/old age were associated with higher suicide rates when compared to the general population. Notably, China is the only place in the world where women are

more likely to die by suicide than men. After providing examples of biological and environmental suicide risk factors, Dr. Nemeroff emphasized the role of neuropsychological disorders in deaths by suicide. Over 90% of people who die by suicide have been diagnosed with a psychiatric/neurological condition, and it is estimated that 50% of people who die by suicide have at least one undiagnosed condition (often major depression disorder). He further noted that nearly two-thirds of all deaths by suicide were carried out using a gun. In conclusion, Dr. Nemeroff identified (1) access to health care, (2) strong social support systems/connectedness, and (3) limiting access to suicide means as key suicide prevention methods.



In conclusion, Ms. Gabrielle Anwar, a patient advocate and American Actress, provided a candid account of her experience with manic depression disorder and described the challenges she has faced while seeking/receiving treatment. “Unlike cancer and heart disease,” she stated, “there was no empathy for my death sentence.” Ms. Anwar emphasized the importance of empathy,

communication, and open-mindedness in the mental health space, and supported treatment efforts that incorporate these ideals.

This event was one of several briefings hosted by the Congressional Neuroscience Caucus. The Congressional Neuroscience Caucus seeks to raise awareness about the millions of Americans afflicted with neurological disorders or mental illnesses. The Caucus is co-chaired by Reps. Earl Blumenauer (D-OR) and Cathy McMorris Rodgers (R-WA).