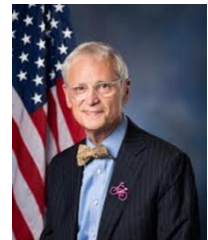




Congressional Neuroscience Caucus Virtual Briefing
June 3, 2020

COVID-19 and the Brain

On Wednesday, June 3, 2020 the American Academy of Neurology, American Brain Coalition, American College of Neuropsychopharmacology, and Society for Neuroscience, in cooperation with the Congressional Neuroscience Caucus, hosted a virtual congressional briefing addressing COVID-19 and the Brain. The briefing featured opening remarks by Representative Earl Blumenauer (D-OR), co-chair of the Congressional Neuroscience Caucus, and three expert speakers who have been following the breaking research emerging on the neurological effects of the SARS-CoV-2 virus. Over 140 House and Senate staffers, brain-related patient advocates, physician, academic, and research professionals, were in attendance.



*Representative Earl Blumenauer (D-OR)
Co-Chair, Congressional Neuroscience Caucus*

The first speaker, Dr. Sandeep Robert Datta, Associate Professor of Neurobiology at Harvard Medical School, discussed the impact of COVID-19 on the chemical senses, namely taste and smell. Dr. Datta discussed the global effort underway to understand the degree to which COVID-19 causes changes in taste and smell. Emerging data show that 60-90% of COVID-19 patients report a loss of taste or smell, which can be the first symptom a patient will notice. For 25% of patients, loss of sense of smell may be the only symptom experienced, but those patients are still infectious and thus able to spread COVID-19 in their communities. Loss of sense of smell may be more predictive of COVID-19 than symptoms, such as fever and cough, that are also associated with other viruses. Researchers are currently developing home-based smell tests to help screen for the virus. The association between COVID-19 and loss of smell is critically important because of the connection between sense of smell and emotional wellbeing. People who have lost their sense of smell have higher rates of depression, anxiety, and suicide. Scientists hope to use the emerging understanding of how virus attacks the sense of smell as a model for how the virus attacks brain function overall.

The second speaker, Dr. Avindra Nath, Chief of the Section of Infections of the Nervous System and Clinical Director of the National Institute of Neurological Disorders and Stroke, discussed neurological complications of all coronaviruses, including COVID-19. Neurological complications, such as loss of sense of smell, stroke, and encephalitis, are associated with four of the seven existing coronaviruses. Of the potential neurological complications linked to COVID-19, stroke is the most common severe complication; however, the full spectrum of long-term neurological complications is still not well known. The National Institutes of Health is currently providing supplemental funding to individuals who have existing grants so they can study COVID-19 and the nervous system. NIH has also developed a coordinating center to collect a database on the

patients who are experiencing neurological symptoms. He emphasized the need for long-term monitoring patients and for development of infrastructure for collection of neurological tissues from patients with COVID-19.

The third speaker, Dr. Emily Troyer, post-doctoral fellow in the Department of Psychiatry at the University of California San Diego, addressed neuropsychiatric symptoms associated with COVID-19 infection, focusing on symptoms related to cognition, mood, perception, and behavior. Neuropsychiatric symptoms of COVID-19 include delirium, neurocognitive impairment, depression, post-traumatic stress, psychosis (including schizophrenia), and many others. Dr. Troyer shared that after past viral outbreaks the incidence of schizophrenia increased in the decades following, particularly for individuals who were in utero during the outbreak. While there is no evidence yet that exposure in utero to COVID-19 is associated with adverse birth outcomes, this highlights the need for long-term, monitoring neuropsychiatric symptoms in individuals exposed to coronavirus infection, at all points in development, from in utero through advance aging.

Dr. Matthew Rizzo, American Brain Coalition Board Chair, and Chair of the University of Nebraska Medical Center Department of Neurological Sciences, moderated the virtual briefing. Dr. Rizzo urged Congress to assure robust and sustainable funding increases for biomedical research. He asked Congress to encourage NIH and CDC to work together to create registries of surviving COVID-19 patients to better track their future health so researchers are better able to assess the long-term implications of this pandemic on individual patients, including the disenfranchised and underserved. Dr. Rizzo highlighted the need for pathology and autopsy specimens from victims of COVID-19 to gain greater knowledge for cures. He underscored the unique value of the Congressional Neuroscience Caucus in advancing these critical nationwide efforts, urging more Congress members to join.

Please [click here](#) to view the presentation on YouTube.

The bipartisan Congressional Neuroscience Caucus promotes a better understanding of how the brain develops, functions, and ages. Co-chaired by Representative Cathy McMorris Rodgers (R-WA) and Representative Earl Blumenauer (D-OR), the caucus seeks to raise awareness about the millions of Americans afflicted with neurological disorders or mental illnesses. The American Brain Coalition has teamed up with the Congressional Neuroscience Caucus in hosting and organizing events that focus on neuroscience.

