

## **Contributions of Scholarship and Service by the Henry and Amelia Nasrallah Center for Neuroscience to the COVID-19 Pandemic**

In response to the urgent and rapidly evolving COVID-19 pandemic, members of the Henry and Amelia Nasrallah Center for Neuroscience at Saint Louis University have acted swiftly to engage in a range of COVID-19-related endeavors, including publications, new research grants, media appearances, court letters and declarations, and a webinar. This summary highlights some of our achievements sparked by the COVID-19 pandemic, with emphasis on diverse populations that are especially vulnerable to viral infection, as well as long-term neurological and psychiatric consequences of the COVID-19 pandemic. These contributions align the Nasrallah Center for Neuroscience with at least two components of SLU's mission: 1) "foster programs that link University resources to local, national and international communities in collaborative efforts to alleviate ignorance, poverty, injustice and hunger; extend compassionate care to the ill and needy; and maintain and improve the quality of life for all persons"; and 2) "strive continuously to seek means to build upon its Catholic, Jesuit identity and to promote activities that apply its intellectual and ethical heritage to work for the good of society as a whole."

Dr. Henry Nasrallah, M.D., former chair of the SLU School of Medicine's Department of Psychiatry and founder of the CfN along with his wife, research psychologist Amelia Nasrallah, penned four tour-de-force articles for the journal *Current Psychiatry*: "During a viral pandemic, anxiety is endemic: The psychiatric aspects of COVID-19", "The cataclysmic COVID-19 pandemic: This changes everything", "COVID-19 and the precipitous dismantlement of societal norms", and "Enduring the ordeal of a quadruple threat is especially arduous for psychiatric patients". Dr. Nasrallah is currently at the University of Cincinnati College of Medicine, where he serves as Vice Chair for Faculty Development and Mentorship; Professor of Psychiatry, Neurology, and Neuroscience; Director of Neuropsychiatry and Schizophrenia Programs; and Director of Psychiatry CME Programs.

Dr. Tony Buchanan, Ph.D., Professor in the Experimental Program on Cognition and Neuroscience, Co-Director of the Neuroscience Program and Principal Investigator of the Cognitive Neuroscience of Stress Lab at SLU's Department of Psychology, gave a most uplifting and enlightening interview about coping strategies during the pandemic on public radio's "St. Louis on the Air" program. His interview was entitled "Experts share coping strategies for stressful times".

Dr. Liz Chiarello, Associate Professor in SLU's Department of Sociology and Anthropology, was interviewed by the Radcliffe Institute for Advanced Study Harvard University for a cross-disciplinary series examining the real and possible effects of the COVID-19 crisis. Her interview was entitled "Eclipsed by virus, addiction still shadows the land". Additionally, Dr. Chiarello authored a guest commentary for "the Columbia Missourian" entitled "There's no place like home. Missouri needs a stay-at-home order now", and an article for "The Conversation" entitled "Addiction treatment shrinks during the pandemic, leaving people with nowhere to turn".

The correctional healthcare work of Dr. Fred Rottnek, M.D., MAHCM, has received much media attention. Dr. Rottnek is Professor and Director of Community Medicine in the Department of Family and Community Medicine and Program Director of the Addiction Medicine Fellowship, both in the SLU School of Medicine. He wrote a letter to the Missouri Supreme Court urging them “to take swift action to avert the catastrophic loss of life that would result when Missouri jails and prisons experience an outbreak of COVID-19”. For a lawsuit filed with the Southern Center for Human Rights, the American Civil Liberties Union, and the ACLU of Georgia, Dr. Rottnek wrote an expert declaration asking that the Georgia Clayton County Sheriff’s Office “take corrective action immediately in order to decrease the substantial risk of serious harm to detainees, staff, and the community at large.” His opinion “Substance abuse is the elephant in the quarantined room” appeared in the St. Louis Post-Dispatch, and his article “COVID-19, Criminal Justice and Calvary” was published in the *Journal of the Catholic Health Association of the United States*.

The Neuro-Rehabilitation of Language Laboratory of Dr. Whitney Postman, Ph.D./CCC-SLP, Assistant Professor in the Doisy College of Health Sciences’ Department of Communication Sciences and Disorders, was awarded a Rapid Response COVID-19 Seed Fund grant entitled, “Advanced Tele-Practice Services for Adult Neurogenic Communication and Swallowing Disorders during the COVID-19 Pandemic”. This grant supported Dr. Postman and her research assistants’ provision of experimental interventions via Zoom Telemedicine to medically complex cases of dysarthria, dysphonia and dysphagia in late-onset Myasthenia Gravis and acquired apraxia of speech secondary to left hemisphere stroke.

The lab of Dr. Sergey Korolev, Ph.D., Associate Professor in the Edward A. Doisy Department of Biochemistry and Molecular Biology of the SLU School of Medicine, received SLU funding to test libraries of small molecule compounds for inhibition of the Coronavirus Main Protease (SARS-CoV-2 3CLpro). Dr. Korolev’s lab is conducting computer and biochemical screening in collaboration with Washington University to employ a cell-based assay.

And finally, Dr. George Grossberg, M.D., Samuel W. Fordyce Professor and Director of Geriatric Psychiatry in the SLU School of Medicine’s Department of Psychiatry and Behavioral Neuroscience, was featured in a webinar via PsychU.org entitled “Neuropsychiatric Symptoms (NPS) During COVID-19”. With Dr. Jeffrey Cummings, M.D., Sc.D., Dr. Grossberg presented a hypothetical case of neuropsychiatric symptoms in a patient in a residential facility during the COVID-19 pandemic. They discussed the management of these neuropsychiatric symptoms in various care settings, as well as the impact of COVID-19 on patients with dementia, their families, and their caregivers.