

INTERNATIONAL BRAIN RESEARCH ORGANISATION

funded

IBRO Global Engagement Virtual PUBLIC LECTURE

"Golden Age of Neuroscience"

Professor Walter J. Koroshetz

Director, NIH National Institute of Neurological Disorders and Stroke, USA

Saturday, April 17, 2021 at 07.00 pm Indian Standard Time (IST)

University Institute of Pharmaceutical Sciences Panjab University, Chandigarh – 160 014 INDIA



Professor Walter J. Koroshetz

Director National Institute of Neurological Disorders and Stroke NIH Neurological Institute, USA

Professor Walter J. Koroshetz, M.D. was selected Director of NINDS on June 11, 2015. Dr. Koroshetz joined NINDS in 2007 as Deputy Director, and he served as Acting Director from October 2014 through June 2015. As NINDS Director, Dr. Koroshetz directs program planning and budgeting, and oversees the scientific and administrative functions of the Institute. He has held leadership roles in many NIH and NINDS programs including the NIH's Brain Research through Advancing Innovative Neurotechnologies (BRAIN) Initiative, the Helping End Addiction Long-term (HEAL) programs developing non-addictive pain treatments, the NIH Blueprint for Neuroscience Research, and the establishment of the NIH Office of Emergency Care Research. Additionally, Dr. Koroshetz serves as Chair of the Interagency Pain Research Coordinating Committee (IPRCC) which coordinates pain research across the federal government and the Executive Committee for the NIH Pain Consortium.

Before joining NINDS, Dr. Koroshetz served as Vice Chair of the neurology service and Director of stroke and neurointensive care services at Massachusetts General Hospital (MGH). He was a professor of neurology at Harvard Medical School (HMS) and led neurology resident training at MGH between 1990 and 2007. Over that same period, he co-directed the HMS Neurobiology of Disease course with Drs. Edward Kravitz and Robert H. Brown.

A native of Brooklyn, New York, Dr. Koroshetz graduated from Georgetown University and received his medical degree from the University of Chicago. He trained in internal medicine at the University of Chicago and Massachusetts General Hospital. Dr. Koroshetz trained in neurology at MGH, after which he did post-doctoral studies in cellular neurophysiology at MGH with Dr. David Corey, and later at the Harvard neurobiology department with Dr. Edward Furshpan, studying mechanisms of excitotoxicity and neuroprotection. He joined the neurology staff, first in the Huntington's Disease (HD) unit, followed by the stroke and neurointensive care service. A major focus of his clinical research career was to develop measures in patients that reflect the underlying biology of their conditions. With the MGH team he discovered increased brain lactate in HD patients using MR spectroscopy. He helped the team to pioneer the use of diffusion/perfusion-weighted MR imaging and CT angiography/perfusion imaging in acute stroke.

About Public Lecture

Golden Age of Neuroscience

In the first decades of the 20th century physics entered a golden age as experimentalists and theorists uncovered the secrets of matter and energy. Modern neuroscience began to sprout in the second half of the 20th century and has been growing exponentially over the past 4 decades. A series of major advances at the end of the 20th and extending into the 21st century identified key molecules, transmitters, receptors, other signaling molecules and even molecular pathways in normal and diseased tissue. In 2014 the Brain Research through Advancing Innovative Neurotechnologies (BRAIN) Initiative was launched with a mandate to develop new technologies to enable the study of brain circuits. From its outset, its singular focus was on applying those technologies toward fundamental questions of how neural circuits integrate sensory information and produce behaviors. Fueled in large part by the National Institutes of Health (NIH), neurotechnologies have now developed that allow investigators to map, monitor and modulate complex neural circuits, enabling the pursuit of research questions previously considered unapproachable. As a result, systems neuroscience has witnessed a renaissance. Yet it is the convergence of molecular neuroscience with the new systems neuroscience that promises the greatest future advances. This is particularly true for our understanding of nervous system disorders, some of which have known molecular drivers or identifiable brain pathology but we lack knowledge of how these disturb circuit function to cause a patient's disability. Others are without known molecular causes or obvious neuropathology are even more dependent upon new abilities to identify and characterize the disordered circuit(s).

Molecular and systems neuroscience are advancing at such pace that as they converge it is difficult to imagine that they will not reveal secrets of how the brain works and issue in a Golden Age of Neuroscience.

Audience

Policymakers/Officials from the Indian Agencies, International Brain Research Organization, Indian Academy of Neuroscience, Directors/Heads/Officials of Academic as well as Research Institutes, Indian academicians including senior/junior basic science researchers, clinicians, faculty, school teachers, Students (PDF, PhD, PG, UG, School students – Class 6 to 12), Media Persons and General Public.

REGISTRATION IS FREE on first come first serve basis.

For Registration, please visit CISCO WebEx Link <u>https://apjpu.webex.com/apjpu/onstage/g.php?MTID=ecc37ad6847bf823c2923a081d1fb7d1</u> <u>0</u>

Event number: 184 871 1731

E-certificate will be provided ONLY to the registered participants who will attentively attend complete session.

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