Eric R. Kandel, M.D., is University Professor at Columbia, Fred Kavli Professor and Director, Kavli Institute for Brain Science and a Senior Investigator at the Howard Hughes Medical Institute. A graduate of Harvard College and N.Y.U. School of Medicine, Kandel trained in Neurobiology at the NIH and in Psychiatry at Harvard Medical School. He joined the faculty of the College of Physicians and Surgeons at Columbia University in 1974 as the founding director of the Center for Neurobiology and Behavior. At Columbia Kandel organized the neuroscience curriculum. He is an editor of *Principles of Neural Science*, the standard textbook in the field. He recently has written a book on the brain for the general public entitled *In Search of Memory: The Emergence of a New Science of Mind*, which won both the L.A. Times and U.S. National Academy of Science Awards for best book in Science and Technology in 2008. A documentary film based on that book also entitled *In Search of Memory* is now showing in the United States.

Eric Kandel’s research has been concerned with the molecular mechanisms of memory storage in *Aplysia* and mice. More recently, he has studied animal models in mice of memory disorders and mental illness. Kandel has received nineteen honorary degrees, is a member of the U.S. National Academy of Sciences as well as the National Science Academies of Austria, France, Germany and Greece. He has been recognized with the Albert Lasker Award, the Heineken Award of the Netherlands, the Gairdner Award of Canada, the Harvey Prize and the Wolf Prize of Israel, the National Medal of Science USA and the Nobel Prize for Physiology or Medicine in 2000, which he shared with Paul Greengard and Arvid Carlsson.

Dr. Ursula M. Staudinger is Professor of Psychology and Vice President of Jacobs University Bremen, where she acts as Academic Dean of the Jacobs Center of Lifelong Learning and Institutional Development. Ursula Staudinger received her Ph.D. and her Habilitation from the Free University of Berlin. She continued her academic career as senior researcher at the Max Planck Institute for Human Development in Berlin and became Professor of Lifespan Psychology at Dresden University. Her research deals with lifespan developmental psychology, plasticity of aging, and personality growth. Recent projects are on adult development in the work context under conditions of demographic aging. Ursula Staudinger publishes her work in refereed journals such as Psychology and Aging and American Psychologist. She is Vice President of the National Academy of Sciences Leopoldina. From 2008 to 2010 she served...
as President of the German Psychological Society. She is a member of the Demography Advisory Group of the German Government and represented Germany during the negotiations at the UN for a new World Action Plan on Aging.

Dr. György Buzsáki is a Board of Governors Professor of Neuroscience at Rutgers University, Newark, NJ. His primary research interest is how neuronal circuits code, transfer and store information, especially how different brain oscillations serve such mechanisms. He is the co-recipient of The Brain Prize 2011, an elected Fellow of the American Association for the Advancement of Science, and he sits on the editorial boards of several leading journals, including Science and Neuron.

Over the past 35 years György Buzsáki has led the way in analyzing the functional properties of cortical neurons acting within their natural networks. He pioneered the experimental exploration of how coordinated, rhythmic neuronal activity serves physiological functions in the cerebral cortex. The results of these experiments led to his most influential work, the two-stage model of memory trace consolidation: the neocortex-mediated information processing during learning transiently modifies hippocampal networks, followed by reactivation and consolidation of these memory traces later during so-called ‘sharp wave bursts’. He also demonstrated that hippocampal and prefrontal cortical circuits continuously generate self-organized assembly sequences of neuronal activity. Such internally generated sequences have long been thought to be the basis of cognitive functions. These wide ranging issues have been brought together in a recent book "Rhythms of the Brain" (OUP), a masterful account of how cortical cells and circuits give rise to higher cognitive functions.