



Charles Czeisler is Baldino Professor and Director of the Division of Sleep Medicine at Harvard Medical School and Chief of the Division of Sleep Medicine at Brigham and Women's Hospital. He is one of the world's leading authorities on circadian rhythms and the chronobiology of sleep and wakefulness, and a pioneer in translating this research into clinical medicine and occupational health – notably the recently introduced drowsy driving legislation in Massachusetts.



Luis De Lecea is an Associate Professor of Psychiatry and Behavioral Science at Stanford Medical School. Among his relevant contributions to the sleep field are the discoveries of two neuropeptide transmitters, cortistatin and the hypocretins. More recently he has uncovered new functions for the hypocretinergic system, including important roles in the acute stress response and in brain reward function. He is the author of *Hypocretins: Integrators of Physiological Signals*.



David Dinges, Chief of the Division of Sleep and Chronobiology, is also Professor of Psychology in Psychiatry at the University of Pennsylvania School of Medicine. His research focuses on the physiological and cognitive consequences of sleep loss and stress and the evaluation of potential behavioral, pharmacological and technological remedies. Dinges is currently President of the World Federation of Sleep Research and Sleep Medicine Societies and Editor-in-Chief of SLEEP, the leading scientific journal on sleep research and medicine.



Mark Eric Dyken is Director of the Sleep Disorders Center at the University of Iowa. He received his M.D. from Indiana University and completed a residency in Neurology, and Fellowships in Clinical Neurophysiology and Sleep Disorders Medicine at Iowa. His studies of sleep disorders have resulted in his appointment to a number of national study groups and he is listed in "Best Doctors" in sleep medicine. Amongst his many contributions, his work defining the relationship between obstructive sleep apnea (OSA) and stroke and death is often referenced to justify the aggressive treatment of OSA.



Fred Gage is Adler Professor in the Laboratory of Genetics at the Salk Institute. His work concentrates on the adult central nervous system and unexpected plasticity and adaptability to environmental stimulation that remains throughout the life of all mammals. Gage's lab showed that, contrary to accepted dogma, adult human beings are capable of growing new nerve cells – a process called neurogenesis. A former president of the Society for Neuroscience, Gage was named one of TIME magazine's 100 Innovators in Science for the 21st century.



Ralph Greenspan, the Lewis B. and Dorothy Cullman Senior Fellow in Experimental Neurobiology at The Neurosciences Institute, studies the genetic influences of behavior in the fruit fly, including the similarity of its sleep-like behavior to that of mammals. Recently, his lab has been looking at the evolution of mechanisms of behavior in organisms with primitive nervous systems such as the jellyfish. In ' *No Critter left Behind*', a recent Current Biology editorial, and in his new book *An Introduction to Nervous Systems*, Greenspan celebrates a renaissance in the study of invertebrate neurobiology.



Daniel Kripke, now Professor Emeritus of Psychiatry at the University of California, San Diego, developed the first sleep clinic in the region. His 2002 study showing that people who slept only 6 or 7 hours a night have a lower death rate than those sleeping 8 hours or more created controversy amongst sleep researchers. His major interests include the prevalence of sleep apnea, the variations in mortality in comparison with amount of sleep and use of sleeping pills, and the study of circadian-phase responses to bright light and exercise. He has written two e-books: *Brighten Your Life* and *The Dark Side of Sleeping Pills*.



Philip Low is a Fellow of the Sloan-Swartz Center for Theoretical Neurobiology and a Ph.D. candidate in the Computational Neurobiology Laboratory at the Salk Institute. His experimental and computational (SPEARS) methods challenge our current understanding of brain waves during sleeping and waking states in humans and across species. His work has been featured in technical and popular articles including *The Economist* and *The MIT Technology Review*. He is the co-founder and CEO of NeuroVigil, Inc., which builds non-invasive brain activity monitors to provide health diagnostics in real time.



Sara Mednick, a former Salk Institute researcher, has recently joined the Department of Psychiatry at UCSD as a Project Scientist. She studies how napping can improve human performance and uses fMRI and EEG to pinpoint the areas of the brain that underlie these improvements. Mednick is the author of *Take a Nap! Change Your Life*, a new scientific account of the benefits of napping for a general audience. After the rigors of a book tour, she can now be found on her couch practicing what she preaches.



Allan Pack, an expert on obstructive sleep apnea (OSA), is currently Professor of Medicine, Chief of the Division of Sleep Medicine and Director of the Center for Sleep and Respiratory Neurobiology at the University of Pennsylvania. He has pioneered research into the neural mechanisms of OSA and has currently developed a research group to study the molecular mechanisms of sleepiness.



Satchin Panda, an Assistant Professor in the Regulatory Biology Laboratory at the Salk Institute, seeks to understand the mechanism of circadian regulation by using various strategies to identify genes that influence circadian regulation throughout the body. He is also working towards defining the mechanisms involved in synchronization of the circadian oscillator to light-dark conditions and identifying the critical elements involved in the transmission of light information from the eye to the brain's master oscillator.



Terrence Sejnowski is an HHMI investigator, the Francis Crick Professor and Director of the Crick-Jacobs Center for Theoretical and Computational Biology at the Salk Institute. He is the author of several books including *The Computational Brain* and *Liars, Lovers, and Heroes: What the New Brain Science Reveals About How We Become Who We Are*.



Paul Shaw is Assistant Professor of Anatomy and Neurobiology at Washington University- St. Louis where he studies the molecular pathways involved in mammalian sleep and sleep homeostasis. He has also recently identified the first biomarker for human sleepiness based on his work with sleep debt in fruit flies and is currently studying the influence of sleep and circadian rhythms on aging.



Jerry Siegel is Professor of Psychiatry at UCLA, former President of the Sleep Research Society, the recipient of MERIT and Javits awards from NIH and the Distinguished Scientist award from the SRS. His laboratory has made discoveries concerning the role of hypocretin in human narcolepsy. He has studied the phylogeny of sleep as a clue to sleep function, discovering that the primitive mammal, platypus, has REM sleep and that marine mammals can go without sleep for long periods without ill effects.



Robert Stickgold, Assistant Professor of Psychiatry at Harvard Medical School, conducts research on sleep and dreaming at the Laboratory of Neurophysiology at the Massachusetts Mental Health Center in Boston. He has spent much of his career studying the relationship between sleep and learning and has written two science fiction novels, *Gloryhits* and *The California Coven Project*.



Giulio Tononi is Professor of Psychiatry at the University of Wisconsin-Madison where he works at the Center for Sleep and Consciousness, developing and refining the information integration theory of consciousness and pioneering a combination of electrophysiological and molecular approaches to his research in sleep. Tononi is the co-author of *A Universe of Consciousness: How Matter Becomes Imagination*.



Roger Bingham is a scientist in the Computational Neurobiology Laboratory at the Salk Institute, and a member of the research faculty at the Center for Brain and Cognition, University of California, San Diego. He is the co-author of *The Origin of Minds: Evolution, Uniqueness, and the New Science of the Self*, and the creator and host of Emmy award-winning PBS science programs on evolutionary psychology and cognitive neuroscience, including the critically acclaimed series "The Human Quest". He is co-founder and Director of The Science Network.