

Neural Stem Cells in Health and Disease

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Neural Stem Cells in Health and Disease

Editor

Ashok K. Shetty

Institute for Regenerative Medicine

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About the Editor



Dr. Ashok K. Shetty is Director of Neurosciences at the Institute for Regenerative Medicine and Professor in the Department of Molecular and Cellular Medicine, Texas A&M Health Science Center College of Medicine, Temple, Texas, USA. Dr. Shetty is also Research Career Scientist at the Olin E. Teague Veterans' Affairs Medical Center, Central Texas Veterans Healthcare System in Temple, Texas, USA. Dr. Shetty

received his Masters degree in human anatomy from the Kasturba Medical College Manipal, of Mysore University in 1983. He obtained his Ph.D. degree in Neuroscience from the All India Institute of Medical Sciences, New Delhi in 1990. Following his postdoctoral research work at Montana State University and Duke University, Dr. Shetty joined the Division of Neurosurgery (Department of Surgery) at the Duke University Medical Center as an Assistant Professor in 1995. He became an Associate Professor in 1999 and held the position of Professor from 2004 to 2011. Dr. Shetty joined the faculty at Texas A&M University Health Science Center in July 2011.

Dr. Shetty is currently Charter Member of the NIH Study Section, Developmental Brain Disorders (Brain Disorders and Clinical Neuroscience IRG). Previously, Dr. Shetty served as Charter Member of the NIH Study Section CNNT (Brain Disorders and Clinical Neuroscience ZRG1, 2004–2008) and as member of over 25 other study section panels of the NIH, study section panels

of Congressionally Directed Medical Research Program of the Department of Defense, Maryland State Stem Cell Research Fund and New York State Stem Cell Research Fund. He has also served as reviewer of grant applications for over 12 international funding agencies from Germany, France, England, Israel, India, Singapore and Italy. Dr. Shetty is currently Co-Chief Editor of the journal *Aging and Disease*, and Associate Editor of journals, *Frontiers in Epilepsy*, *Molecular and Cellular Epilepsy* and *Neurogenesis*. Dr. Shetty also serves as an Editorial Board Member of many international journals, which include *Stem Cells*, *Aging Cell*, *Stem Cells International*, *Current Aging Science*, *Frontiers in Neurogenesis*, *Frontiers in Aging Neuroscience*, *Frontiers in Neuropharmacology* and *Frontiers in Cellular Biochemistry*. Dr. Shetty has authored 112 publications and his work has appeared in a number of top-class journals including *Molecular Psychiatry*, *Neuropsychopharmacology*, *Journal of Neuroscience*, *Stem Cells*, *Aging Cell*, *Progress in Neurobiology*, *Neurotherapeutics*, *Pharmacology and Therapeutics*, *Neurobiology of Aging*, *Neurobiology of Disease*, *Neuroscience & Biobehavioral Reviews*, *Stem Cells Translational Medicine*, *Experimental Neurology* and *Scientific Reports*. Dr. Shetty has received over 5,700 citations for his published research articles. As per the Essential Science Indicators of Thompson Reuters, Dr. Shetty is among the top 1% of scientists worldwide in the field of Neuroscience and Behavior, in terms of citations received for articles published over ten-year periods.

Dr. Shetty has received research grant awards from the National Institute of Neurological Disorders and Stroke (NINDS), National Institute for Aging (NIA) and National Center for Complementary and Alternative Medicine (NCCAM) of National Institutes of Health, peer reviewed medical research program (PRMRP) grants from the Department of Defense (DOD), and Merit Review Awards from the Department of Veterans Affairs (DVA). Dr. Shetty's current research is focused on developing clinically applicable strategies that enhance brain function after injury, disease or aging, which include the following: (1) Elucidating mechanisms by which transplanted neuronal precursors, neural stem cells or inhibitory interneuron progenitors promote brain repair and ease spontaneous seizures, cognitive dysfunction and depression in prototypes of

status epilepticus, temporal lobe epilepsy and traumatic brain injury. The donor cells derived from brain tissues as well as human-induced pluripotent stem cells are employed. (2) Studying mechanisms of brain dysfunction in prototypes of Gulf War Illness and developing treatment strategies to ease cognitive and mood impairments in Gulf War Illness. (3) Developing approaches to improve hippocampus neurogenesis, and memory and mood function in aging and neurological diseases via stimulation of endogenous neural stem/progenitor cells. (4) Analyzing promising neuroprotective compounds and drugs for their usefulness to block chronic epilepsy development after an initial precipitating injury such as status epilepticus or traumatic brain injury including mild traumatic brain injury induced by blast shock waves.

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