Seattle Institute for Biomedical and Clinical Research

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Feature

Ian D'Souza, PhD

Dr. Ian D'Souza is a Research Assistant Professor at the VAPSHCS with special expertise in molecular and cell biology. Dr. D'Souza received his PhD in the Biomedical Sciences (Virology) at the University of Texas and M.D. Anderson Cancer Center (Houston) in 1996. He also joined the University of Washington School of Medicine in 1996 as a post-doctoral fellow and as faculty in 2002.

His research focuses on understanding how expression of the human tau gene is normally regulated in the central nervous system and how it is altered during development, normal aging and disease. Tau forms an integral part of the neuronal architecture, which is important for neuronal function. Pathologically, tau forms abnormal aggregates in a group of 22 neurodegenerative disorders called "tauopathies', which includes Alzheimer's Disease (AD) and the frontotemporal dementias (FTD). AD and FTD are the two most common forms of dementia, where tau expression is altered in vulnerable brain regions by unknown mechanisms. In FTDP-17, multiple mutations in the tau gene cause severe neurodegeneration. These mutations alter tau expression in neurons and glia by multiple mechanisms and disrupt a catalog of regulatory RNA sequences his lab has identified. Using *in vitro* and *in vivo* models for these tau-based disorders, Dr. D'Souza hopes to reveal common as well as unique disease mechanisms that would facilitate RNA- and protein-based therapeutics in maintaining normal tau expression.

Dr. D'Souza's research funding has included an American Health Assistance Foundation grant which examines normal, developmental and disease-specific mechanisms for tau isoform expression in the central nervous system and an Alzheimer's Association grant which identifies regulatory determinants including novel genes that modify tau mRNA and protein expression, stability as well as trafficking within neurons to their region of function. These studies address two prominent features shared in several neurodegenerative disorders: 1) how tau is abnormally expressed and 2) how tau is mislocalized from its region of importance in neurons.

What's New

NIH Announces E-submissions…

NIH plans to transition to electronic submissions throughout 2006 and 2007. Please see www.nih.gov, notice NOT-HS-06-003 for more information.

eRA Commons…

Do you have an NIH eRA Commons account? Please contact SIBCR Grants Administration at 6-3971 to establish an account. Principal Investigators must have a Commons account to submit NIH grants electronically.

Welcome!

SIBCR would like to welcome: Sephren Barrow, Tracia Clark, Joanna Cho, Jamie Illif, Barbara Scheffler, and Alysha Yagoda. Thank you for joining our institute. We look forward to working with all of you.

Good bye…

SIBCR said goodbye to some employees this month. We would like to wish Michael Donahue, Nghia Pham, and Shani Wilbur good luck with future endeavors.

IMPORTANT ANNOUNCEMENTS

- September 30th marked the end of the SIBCR 2005 fiscal year.
- Please submit all of your SIBCR expenses for 2005 no later than Friday, November 11th, 2005. For questions contact the accounting office at 6-2730 or 6-2971.