

Advanced MRI Studies of Traumatic Brain Injury in Preclinical Models and Human Subjects

ABOUT THE LECTURE

The major focus of our ongoing and planned investigations is to develop, validate, and implement methods to fully and precisely assess the extent, localization, and dynamics of structural brain damage following traumatic brain injury. There is tremendous interest in concussive traumatic brain injury from sports in the developed world, and a rapidly increasing burden of traumatic brain injury in the developing world. Our goal is to test the hypothesis that specific deficits in cognitive function and emotional regulation experienced after concussive traumatic brain injury are the direct result of traumatic axonal injury disconnecting specific functional brain networks. Despite clear evidence of axonal injury after concussive traumatic brain injury from human post-mortem studies and animal models, when we began our studies there were no reliable methods to assess axonal injury in living humans. Our research group has been at the forefront of addressing this unmet need. Most notably, we performed the first studies of blast-related concussive injury and have performed the highest resolution diffusion MRI studies in the world in traumatic brain injury patients.

Speaker: ***Professor David Brody***
Professor of Neurology and Biomedical Engineering
Washington University
St. Louis, Missouri, USA

Host: ***Professor David Virshup***
Professor and Director
Cancer & Stem Cell Biology Programme
Duke-NUS Medical School

Date: Monday, 29 February 2016

Time: 4.00 PM— 5.00 PM
(Light refreshment will be served at 3.30 PM)

Venue: Duke-NUS Medical School
Amphitheatre, Level 2

Contact Person: Ms Kathleen Chan, Duke-NUS Research Affairs Department
Tel: 6516 7255 or Email: kathleen.chan@duke-nus.edu.sg

ABOUT THE SPEAKER

Dr. Brody is an MD, PhD trained, board certified neurologist with both a research and clinical specialization in traumatic brain injury and neurodegenerative diseases. His undergraduate degree was from Stanford University. He completed the NIH Medical Scientist Training Program at the Johns Hopkins University, and served as a resident at Washington University in St. Louis where he is currently a full professor. He maintains a well-funded, rapidly growing laboratory with 17 members at present.



** Please be informed that photography and videography may be taken during the event for publicity purposes.*