Institute of Molecular and Cell Biology
IMCB

SEMINAR ANNOUNCEMENT

We would like to invite you to attend this virtual seminar hosted by A/Prof Frederic Bard:

Date: **Tuesday, 19 May 2020**
Time: **2:00PM – 3:00PM**

Join Zoom Meeting
https://zoom.us/j/99864213604?pwd=aEtrNlFwblVoSGJVbkV5RllQbXNPZz09

Meeting ID: 998 6421 3604
Password: 711316

A Model Organism for "Use-inspired" Biomedical Research: Zebrafish in the Spotlight



A/Prof Sudipto Roy
*Senior Principal Investigator, IMCB, A*STAR*

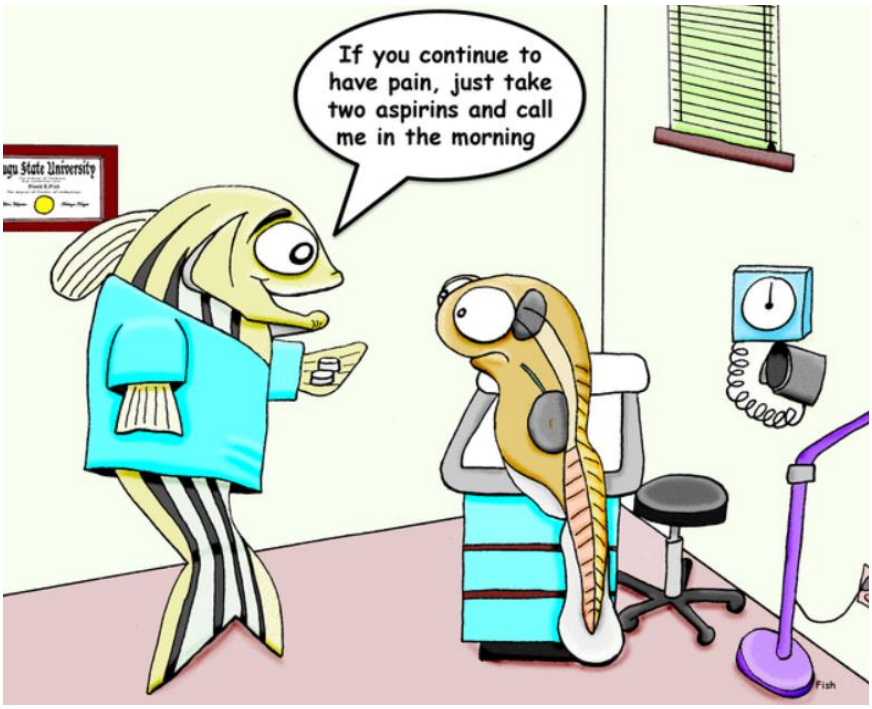
Adjunct Associate Professor, Department of Biological Sciences & Department of Paediatrics, National University of Singapore

Abstract
Our goal for RIE2025 is to engage in "use-inspired" biomedical research. My mind's interpretation of this descriptive term, that aims to define our scientific activities of the future, is that we should be discovering and studying the biological underpinnings of major diseases that plague our societies, and invent therapeutic options for curing or managing them. In this talk, I will illustrate that the zebrafish is a great model for this endeavour, and its virtues nicely complement other systems used by scientists for their investigations such as the mouse and mammalian cells cultured in dishes. I will garnish my talk with evidence in favour of this argument from studies performed in the laboratories of Len Zon (Harvard Medical School) on cancer biology and drug discovery, Lali Ramakrishnan (Cambridge University) on tuberculosis and therapeutic inventions and work from my own group at the IMCB on cilia and ciliopathies that range from valvular heart disease, polycystic kidney disorder and scoliotic spines.

Biography

Sudipto Roy was educated at some of the most distinguished institutions in India. After schooling from Goethals Memorial in Kurseong, Darjeeling, and La Martiniere for Boys in Calcutta, he graduated with a first class first (honours) in zoology from Presidency College in Calcutta in 1991, and again secured the first position during his M.Sc. studies at the Jawaharlal Nehru University, New Delhi, in 1993. He then moved to the National Centre for Biological Sciences in Bangalore, where he obtained a Ph.D. in developmental genetics, studying the cellular and genetic basis of muscle and neuronal development in the fruit fly, Drosophila, with K. VijayRaghavan FRS. During this period, he travelled to Brandeis University in the US and to Cambridge University, England, as a visiting graduate student. He began post-doctoral studies with Philip Ingham FRS at the Centre for Developmental and Biomedical Genetics at the University of Sheffield, England, in 1998, where he initiated research into vertebrate development using the zebrafish embryo.

Dr. Roy has been the recipient of several awards and fellowships from international organizations that include the Company of Biologists (UK), the Wellcome Trust (UK), the Human Frontiers Science Program (HFSP) and the European Molecular Biology Organization (EMBO). In 2002, he was honoured with the prestigious Indian National Science Academy Young Scientist Medal by the President of India, the late Dr. Abdul Kalam. In the same year, he joined the Institute of Molecular and Cell Biology in Singapore as a Young Investigator, and was a Principal Investigator (Assistant Professor) from 2003-2008. Dr. Roy is currently a Senior Principal Investigator, and is an adjunct Associate Professor with the



Department of Biological Sciences and the Department of

Paediatrics of the National University of Singapore, and was visiting Professor on sabbatical with the National Institute of Biomedical Genomics, Kalyani, India (Jul-Dec, 2017). Over the years, his science has uncovered many important aspects of developmental biology, genetics and cell biology and has established the direct relevance of the findings to several human diseases.

In 2012, he was awarded the STAR Employee Award from the Agency for Science, Technology and Research of Singapore (A*STAR) for his achievements and services to scientific research in Singapore, and in 2016, he was conferred the first distinguished alumnus award on the occasion of the silver jubilee celebrations of the National Centre for Biological Sciences, India. He also likes communicating science to the general public through writing, and in 2015 won a merit award at the inaugural Asian Scientist Writing Prize competition. His current obsession is exploring the "nondual consciousness only" as opposed to the conventional "materialistic" model of life, and is gradually succumbing to the truth that matter does not exist and the only thing that is real is experience and the knowing of it!

Meeting capacity limited to 280 participants

We appreciate if you could disseminate this email to your staff.

Thank you.