

Issue 2: April—June 2016

A Quarterly Newsletter highlighting activities at the Bangalore Life Science Cluster

#### Research Highlights



Press links: <u>EurekAlert!</u>, <u>Business</u> <u>Standard</u>, <u>Asian Scientist</u>, <u>Mongabay</u>

In a recent paper in *eLife*, Sunil Laxman from inStem and Teymuras Kurzchalia's team at MPI-CBG have identified <u>a key metabolic pathway</u> that allows yeast and round worms to survive desiccation by synthesising the sugar trehalose. Press links: <u>The Statesman</u>, <u>The Times</u> of India, Business Standard Mahesh Sankaran's group from NCBS show that <u>large wildlife is important</u> for carbon storage in tropical forests. In a recent *Nature Communications* paper, the team demonstrated that large-seeded tree species dependent on large animals for seed dispersal grow to greater sizes as adults and have higher carbon storage potential than species with smaller seeds in tropical forests worldwide.



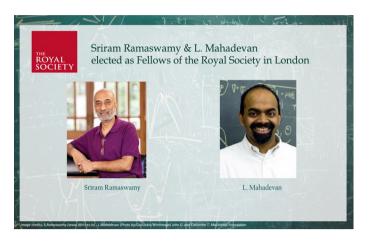
Gaiti Hasan's group from NCBS discover <u>a new guardian for calcium</u> <u>gateways in cells</u>. Published in the journal *Nature Communications*, the work shows that a protein, Septin-7, is a "molecular brake" acting to regulate the calcium gateways of the cell, the Orai proteins. Press links: <u>EurekAlert!</u>, <u>Bangalore</u> <u>Mirror</u>, <u>Drug Discovery and</u> <u>Development</u>, <u>Pharmabiz</u>



In the Spotlight

<u>The Bangalore Life Science Cluster</u> <u>congratulates Sriram Ramaswamy and</u> <u>L. Mahadevan on their election as</u> <u>Fellows of Royal Society.</u>

S. Ramaswamy, currently the director of the TIFR Centre for Interdisciplinary Sciences and L. Mahadevan, currently a Professor at Harvard University, are long-time collaborators with the Simons Centre for the Study of Living Machines at NCBS.





Eve Marder, scientific advisor for NCBS, wins the 2016 Kavli Prize for Neuroscience

NCBS congratulates its scientific board member, Eve Marder, on being one of the recipients of the Kavli Prize in Neuroscience for 2016. The 2016 Kavli Prize in Neuroscience was awarded jointly to Eve Marder, Michael M. Merzenich, and Carla J. Shatz "for the discovery of mechanisms that allow experience and neural activity to remodel brain function."

#### NCBS welcomes new faculty member

<u>— Raj Ladher</u>. Raj Ladher, who comes to NCBS from the RIKEN Centre for Developmental Biology (CDB) in Kobe, Japan, is an expert in the field of developmental genetics focussing on exploring how developmental signals influence basic cellular mechanisms to control morphogenesis.

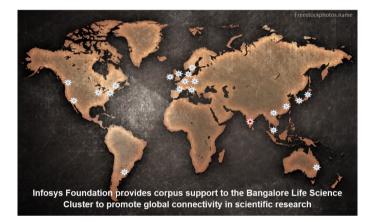




NCBS welcomes Madan Rao as a fulltime faculty member at the Simons Centre for the Study of Living Machines. Madan Rao, who was a Professor at the Raman Research Institute until recently, has been working on the dynamics of plasma membrane composition in a longterm collaboration with Satyajit Mayor from NCBS.

#### **Funding News**

The Infosys Foundation provides corpus support to the Bangalore Life Science Cluster. The philanthropic arm of India's IT giant Infosys, the Infosys Foundation has now provided Rs. 5 crores as corpus funding to the Bangalore Life Science Cluster, for 35 early career researcher travels awards each year for international travel and stay at research laboratories outside of India.

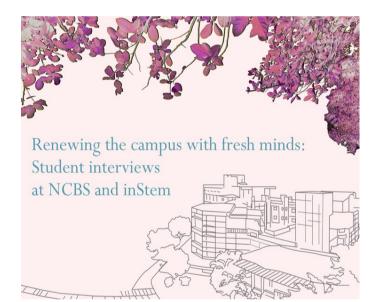


Press links: <u>Times of India</u>, <u>Bangalore</u> <u>Mirror</u>

### Campus Life

<u>The student interviews</u> held on campus are a major event in the last week of May every year.

This article gives a brief glimpse of the arrangements made for interviewees, volunteer voices and applicants' experiences about the interviews.



## Launching the NCBS Archives



The National Centre for Biological Sciences (NCBS) completes 25 years this October!

To commemorate the occasion, <u>NCBS</u> <u>has created an institutional archive</u> which will work closely with the TIFR Archives to become a vital resource centre for historical research on NCBS.

The Archives also aims to serve as a hub for dialogue on the history of research in the biological sciences in India.

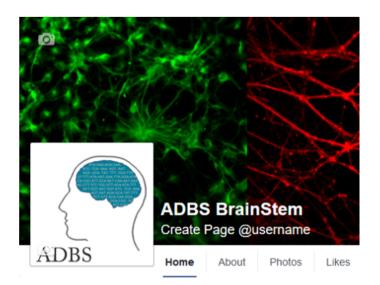
### New Outreach Channels



The <u>Accelerator Program for</u> <u>Discovery in Brain Disorders (ADBS)</u> is now on social media.

ADBS Brainstem on Facebook and <u>@BrainStem ADBS</u> on Twitter The <u>Simons Centre for the Study of</u> <u>Living Machines</u> now has an official social media presence.

Living Machines - NCBS on Facebook and <u>@NCBStheory</u> on Twitter



# Media Spotlights

- <u>The battle against superbugs</u> in *The Hindu* features quotes by Bugworks founder Dr. Balasubramanian from C-CAMP, and NCBS faculty members Aswin Seshasayee and Mukund Thattai.
- <u>Biomaterials research in India: from tissue regeneration to drug targeting</u> <u>technology</u> in *IndiaBioscience* features work from Praveen Vemula's group at inStem.
- <u>Frogs, Birds, Lizards: What's Behind the Spate of New Discoveries in India?</u> in *The Wire* features quotes by Varad Giri, a post-doctoral fellow at NCBS.
- <u>Beautiful minds: How these scientists are getting science out of laboratories</u> <u>and into daily lives</u> in the *Economic Times* features several scientists' voices from C-CAMP.
- <u>Talking about science, NCBS</u> in the blog *Gaplogs* is a piece on science journalism in India inspired by the author's visit to the Annual Science Journalism Workshop that is held every year in NCBS.
- <u>Biotech, devices cos should take advantage of govt's 'ease of doing business'</u> <u>& IPR policy to step up making critical components: DBT secretary</u> in *Pharmabiz.com* features a quote by Prof. VijayRaghavan.
- Fostering collaborations and creating a roadmap for Indian chemical ecology in *IndiaBioscience* is about the upcoming 'First collaborations in chemical ecology' conference in September 2016 and features NCBS faculty member Shannon Olsson's voice.
- <u>Why Do We Not Inherit Mitochondria From Our Fathers?</u> in *The Wire* features quotes by NCBS faculty member Mukund Thattai.

#### For any comments, suggestions or queries, please write to Savita Ayyar: comms@ncbs.res.in



The Bangalore Life Science Cluster consists of the National Centre for Biological Sciences (NCBS), the Institute for Stem Cell Biology and Regenerative Medicine (inStem) and the Centre for Cellular and Molecular Platforms (C-CAMP). Each of these institutions has its own scientific mandate, though all three share a common campus space that promotes synergistic associations between them.