

United Nations
Educational, Scientific and
Cultural Organization



क्षेत्रीय जैव प्रौद्योगिकी केन्द्र
Regional Centre
for Biotechnology

Regional Centre for Biotechnology

A UNESCO Category II Centre | Institution of National Importance

Presents

BioPulse

The rhythm of research, innovation, and impact at RCB



JUN-AUG 2026, ISSUE 5

Regional Centre for Biotechnology

RCB welcomes new Deans



RCB warmly welcomes Dr. Debasisa Mohanty and Dr. Debasis Chattopadhyay as Dean (Research & Innovation) and Dean (Academics), respectively. We look forward to their leadership in advancing academic excellence, fostering innovation, and strengthening RCB's scientific impact.

Academic Highlights

PhD Viva-Voce

15 Jun 2026 | Ms. Nutan Sharma
18 Jun 2026 | Ms. Shivani Sharma
29 Jun 2026 | Ms. Aishwarya Rana
15 Jul 2026 | Mr. Somesh Kumar Jha
24 Jul 2026 | Mr. Rohan Rajiv Babar

27 Jul 2026 | Ms. Garima Joshi
27 Jul 2026 | Ms. Yesheswini Rajendran
10 Aug 2026 | Ms. Dolly Jain
27 Aug 2026 | Ms. Nidhi Gupta
02 Sep 2026 | Ms. Shriya Singh

New Academic Year (2026-27) Begins!!



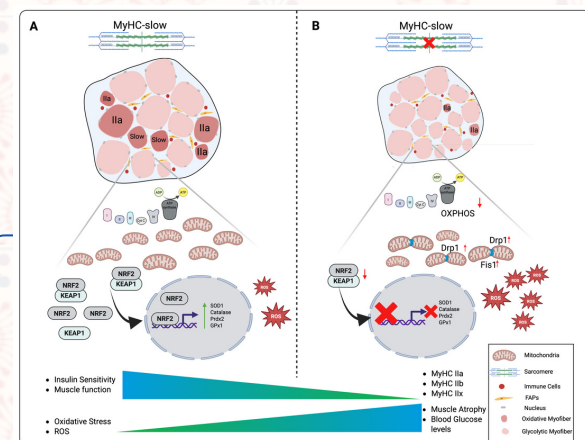
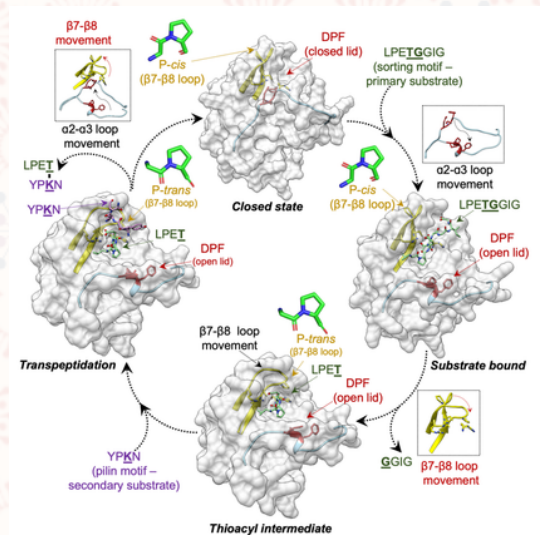
Research Highlights

Crystal structure of pilus-specific sortase from *Enterococcus faecalis* reveals both open and closed conformations: insights into loop dynamics and substrate recognition

This study presents the crystal structure of EfsSrtC, with unprecedented structural snapshots of both open and closed lid conformations at the active site that regulate primary substrate access.

Reference:

Sharma, V., Murmu, S., Prasad Roy, R. & Krishnan, V. (2026). *Acta Cryst. D82*, 947-961.



The skeletal muscle slow myosin heavy chain regulates mammalian metabolic homeostasis through the NRF2 pathway.

The study highlights an unexpected connection between a muscle contractile protein, muscle health, and whole-body metabolism. The promising effects of NRF2 activation suggest that this pathway could be explored as a potential therapeutic approach for muscle and metabolic disorders.

Reference:

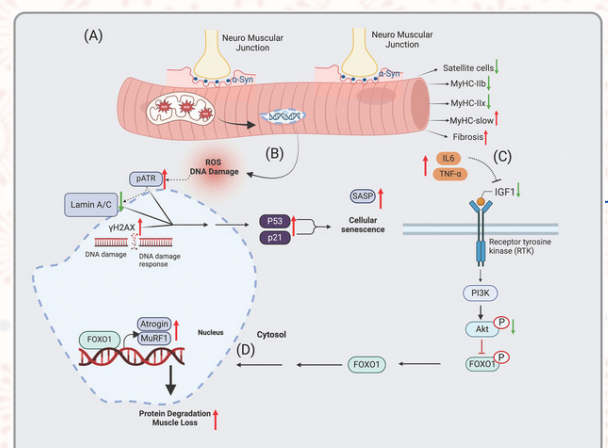
Sharma J, Mondal S, Rai A, Kumari M, Bharadwaj A, Mathew SJ. *Science Advances* (2026).

LaminA/C-dependent cellular senescence signaling promotes skeletal muscle atrophy and abnormalities in Parkinson's disease.

In a recent study published in *Cell Death & Disease*, from Prof. Sam Mathew's lab investigated how Parkinson's disease affects the skeletal muscle by using a mouse model that develops Parkinson's-like symptoms due to a mutated form of a protein called α -synuclein.

Reference:

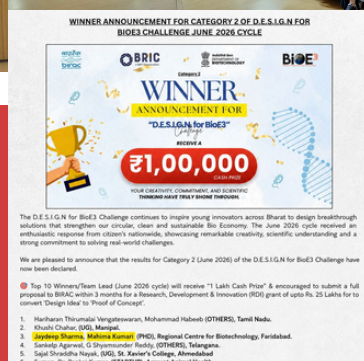
Sharma J, Mondal S, Bisht KS, Biswas A, Panneerselvam L, Maiti TK, Mathew SJ. *Cell Death Disease* (2026).





Student's Achievement

Dr Jaydeep Sharma and Ms. Mahima Kumari from Dr. Mathew's lab were the winners of the D.E.S.I.G.N. for BioE3 Challenge-Category 2 (June 2026). Their idea was recognized for its potential to advance precision medicine in metabolic diseases while contributing to India's vision of a circular, clean, and sustainable bio-economy.



News and Events

❖ On 1 June 2026, RCB welcomed the new cohort of the Gujarat State Biotechnology Mission (GSBTM) Summer Research Internship Program (SRIP) 2026 with an orientation session, marking the beginning of a month-long journey of research and learning.

❖ A POSH Awareness Session titled, "Creating Safe Work Places: Gender Sensitization and POSH Compliance" was organised for the entire RCB community, led by Prof. Ritu Gupta (Professor and Dean, Faculty of Legal Studies; Director of Centre for International Collaborations & Outreach at South Asian University), on 17 June 2026.

❖ RCB celebrated International Yoga Day 2026 by bringing colleagues, staff and students together to embrace the spirit of wellness through yoga and mindfulness.

❖ GSBTM-SRIP concluded on 30 June 2026 after a month long journey full of learning for this year's cohort of interns.

❖ The i3c BRIC-RCB PhD Programme in Biosciences (2026-27) – Project Presentations and Interaction with Students session was held from 8-10 July 2026.

❖ On 21 July 2026, RCB bid a warm farewell to the PhD graduating batch of 2021 as they set to join the ever-growing RCB Alumni family!

❖ RCB celebrated the 80th Independence Day on 15 Aug 2026 with the families of staff, students and faculty. The security personnel were felicitated for their dedicated service. This was followed by cultural performances by RCB children community.

❖ The Orientation Programme for the PhD (RCB and i3c BRIC-RCB) and MS-PhD was held on 3 Aug 2026.

❖ The Orientation Session for YourDost(an online mental health and wellness platform) was conducted for the PhD (RCB and i3c BRIC-RCB) and MS-PhD, on 13 Aug 2026.

❖ The Regional Centre for Biotechnology, in association with the Sri Sathya Sai Seva Organisation, Faridabad, organised a plantation drive on campus on 22 August 2026





Talks at RCB

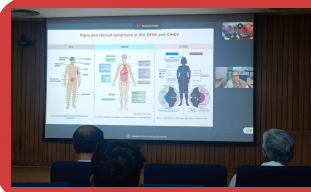
Leadership Talks

8 Aug 2026 | Dr. Ramesh V Sonti, Director, ICGEB, New Delhi, delivered a talk on *"A Biotechnologist as a Knowledge Seeker and a Problem Solver"*, setting the tone for the new batch of PhD scholars.

22 Aug 2026 | Dr. Anil Gupta, founder Honey Bee Network, delivered the second leadership talk on *"Bio entrepreneurship: expanding choices for aspirational communities: Towards ethical and responsible science"*.



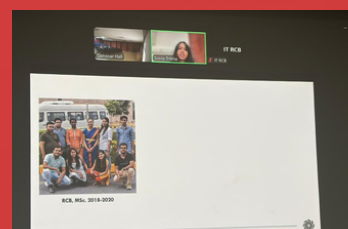
16th 'iBRIC+ Biotech Spotlight' webinar



01 Aug 2026 | Prof. Manjula Kalia delivered a talk titled, *'Repurposing Trifluoperazine uncovers a host-directed strategy for broad-spectrum control of Arboviral infection'* during the 16th spotlight webinar.

Alumni Talk/Webinar

25 Jun 2026 | Ms. Sonia Trikha (Final Year PhD Candidate at Gulbenkian Institute for Molecular Medicine, Portugal) delivered a webinar titled, *"Age-dependent metabolic adaptation to SARS-CoV-2 infection"*. She did her Masters at RCB under Prof. Sudhanshu Vрати.



Dr Rajesh Gokhale's Inaugural Address for the i3c BRIC-RCB PhD Batch 2026-27



Honorable Secretary, DBT & Director General, BRIC Dr. Rajesh S Gokhale delivered a fascinating inaugural talk titled, *"PhD: Beyond the Degree"*.

Dr. Gokhale drew inspiration from *The Parable of the Twins in the Womb* to highlight an essential lesson for every researcher—that the greatest discoveries often lie beyond the limits of what we can presently see or understand.



12 Jun 2026 | RCB was pleased to host Biotechnology students from Galgotia University for a campus visit aimed at fostering scientific curiosity and research awareness.



23 Jul 2026 | RCB was delighted to host the students and faculty of DAV Gian Prakash Chopra Public School, Faridabad, for an engaging visit to ATPC, Experimental Animal Facility and MSc Lab.

28 Jul 2026 | RCB was delighted to host the students of K.R. Mangalam International School, GK-1. Dr Nidhi Adlakha and Dr Shashank Shekhar interacted with the students. Later, the students visited ATPC to experience biotechnology beyond the classroom.





30 Jul 2026 | RCB was pleased to welcome the students and faculty of Eicher School, Faridabad, for an enriching campus visit designed to provide first-hand exposure to the research facilities like ATPC and IBDC.



18 Aug 2026 | B.Tech Biomedical Engineering students from SRM University, Sonapat visited RCB. Accompanied by faculty members, the students were given a brief about RCB's academic programs and current facilities.

19 Aug 2026 | RCB welcomed students from St. Peter's Convent School, Greater Faridabad for an engaging educational visit. The students explored ATPC and Indian Biological Data Centre.





Upcoming Events

i3c BRIC-RCB PhD Leadership Talk

- Speaker: Col (Dr) Divakaran Padma Kumar Pillay
- Research Fellow, Manohar Parikkar Institute for Defence Studies and Analyses, Shaurya Chakra awardee
- Date: 12 Sep 2026, Venue: ATPC Classroom

i3c BRIC-RCB PhD Leadership Talks

Colonel Dr. Divakaran Padma Kumar Pillay (Retd.)

Research Fellow,
Manohar Parikkar Institute for Defence Studies and Analyses

Date: 12 Sept 2026, 10:00 AM

Venue: i3c BRIC-RCB PhD Classroom, ATPC Building

www.rcb.res.in

followed by an
Interactive Session

Post-Transcriptional Regulation and Translational Control- From Model Plants to Crops

Indo-French Seminar

Feb 23-26, 2027

Call for Abstracts

**Indo-French Seminar
Feb 23-26, 2027**

Organizers

- Dr. Ramu S. Vemanna (RCB)
- Dr. Rémy Merret (CNRS / University of Strasbourg, France)

Co-Organizer

- Dr. Debashish Chattopadhyay (RCB)

For updates and registrations, visit:

<https://rcb.res.in/plant-rna/>

The 31st International Complement Workshop

16th – 21st September 2027
India Habitat Centre, New Delhi, India

Save the Date

A special one-day excursion to the iconic TAJ MAHAL, Agra on 22 September 2027

icw2027india@rcb.res.in

www.icw2027delhi.org

Call for Abstracts (Opening soon) Sep 16-21, 2027

Hosted by RCB, the 31st International Complement Workshop (ICW 2027) is coming to India, for the first time! It will bring together leading scientists, clinicians, researchers, and experts from across the globe to explore the latest advances in complement biology.

For updates, visit:

<https://icw2027delhi.org/>

Regional Centre for Biotechnology,
NCR Biotech Science Cluster Faridabad Gurugram Expressway, Haryana – 121001
www.rcb.res.in

TESTIMONIALS



As an MS-PhD student at RCB, it was an incredibly enriching experience that gave me the opportunity to learn, explore, and grow as a researcher while being surrounded by an inspiring scientific community. This early exposure to independent research makes the programme stand out from many other MS Biotechnology programmes.

-Saksham Sarnyal, MS Biotechnology Batch 2024-26

The PGDIB course at RCB is bridging the gap between industry and academia. I commend RCB for curating such a innovative course and invite students from all over India to become a part of it.

- Dr Sumant Karnik

Instructor-PGDIB

Head Quality - Resolve Biotech, Former Director, National Plasma Fractionation Centre (NPFC)



Our visit to RCB along with our students from GD Goenka University, Sohna, Gurugram was a wonderful and enriching learning experience. The visit gave our students valuable exposure to advanced laboratory techniques and scientific research.

- Dr. Shweta Gehlout, Assistant Professor, GD Goenka University, Sohna, Gurugram



Alumni Speaks



RCB gave me an intellectually stimulating environment where I could explore my passion for research and develop both scientific and personal confidence. My research on exploring the nerve-cancer crosstalk under the supervision of Prof. Avinash Bajaj helped me to work on challenging research questions, learn diverse experimental techniques, and interact with inspiring researchers, shaping the way I approach science today.

-Ragini, MSc Biotechnology, RCB 2022-2024

Curently a PhD student, Rudolf Virchow Center, University of Wurzburg, Germany