

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



DEC 2025-FEB 2026, ISSUE 3

# Regional Centre for Biotechnology



## Academic Highlights

**4th Convocation of Regional Centre for Biotechnology, 19 December 2025**



### PhD Viva-Voce

22 January 2026 | Mr. Sudipt Kumar Dalei  
04 February 2026 | Mr. Naman  
06 February 2026 | Ms. Payal Gupta  
17 February 2026 | Ms. Samridhi Arora  
24 February 2026 | Ms. Shikha Raghav

### Orientation Session

20 December 2025 | Immersion Programme under the i3c BRIC-RCB PhD Programme  
02 January 2026 | PGDIB Batch 2026  
19 January 2026 | RCB-PhD (Autumn Session 2025-26)



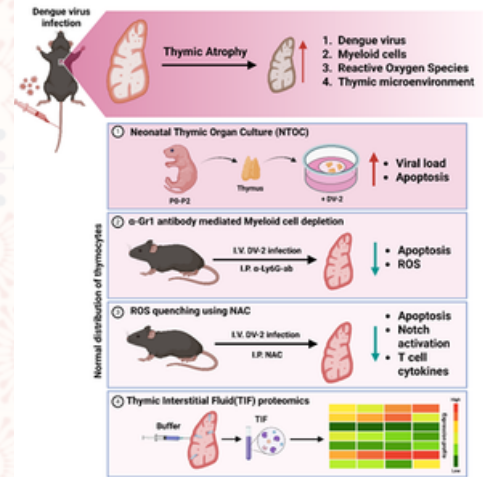
# Research Highlights

## Dengue virus infection causes thymic atrophy – culprits being myeloid cells

This study, published in Cell Communication and Signaling, is a collaborative work between RCB and BRIC-THSTI, dengue infection causes T cell anomalies, which in multiple studies is linked to disease severity in infected individuals.

### Reference:

Kusuma, B., et al. *Cell Communication and Signaling*. 2025 Dec 06.

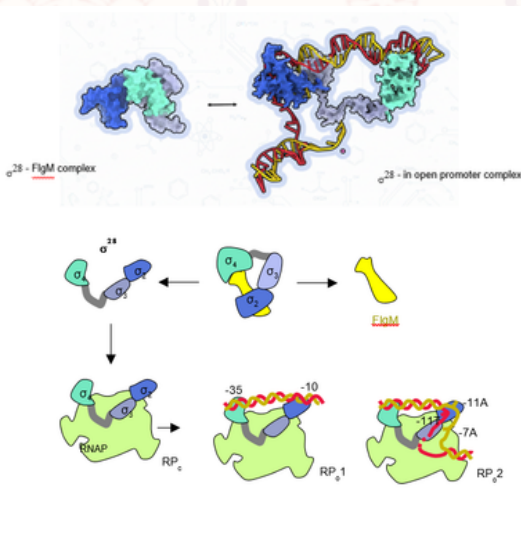


## Unlocking the late flagellar gene synthesis in Pseudomonas aeruginosa

Published in Nucleic Acids Research, Dr. Deepti's lab captures the atomic-level details of the flagellar sigma factor, FliA (also known as  $\sigma_{28}$ ) in complex with the anti-sigma factor, FlgM at a resolution of 1.95 Å. The study also describes the single-particle cryo-EM structure of the  $\sigma_{28}$ -RNAP-DNA complex at a resolution of 3.4 Å from Pseudomonas aeruginosa.

### Reference:

Sheenu, et al., *Nucleic Acids Research* 2026 Jan 13.

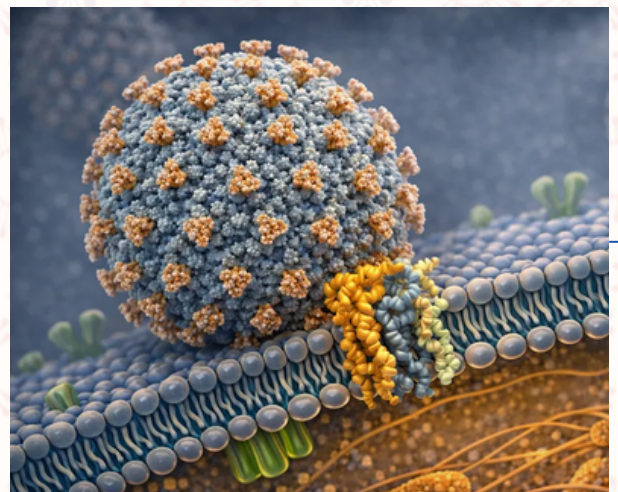


## Uncovering a Hidden Gateway: AGPAT1 Identified as a Novel Receptor for Chikungunya Virus

A recent work from Prof. Vрати's Lab, published in the Journal of Virology, identifies AGPAT1 as a novel receptor for CHIKV on human cells and demonstrates that AGPAT1 has implications for understanding the virus pathogenesis and designing the receptor-blocking CHIKV antivirals.

### Reference:

Basu, Brohmomoy, et al. *Journal of Virology*. 2026 Feb 17.





## News and Events



-Mr. Jaydeep Sharma won the first prize in the poster presentation (Life Sciences category) and received the Young Researcher Award at the 6th National Biomedical Research Competition (NBRCOM 2025).



-RCB participated in the India International Science Festival (IISF) from 6-9 Dec 2025 at Panchkula, Haryana.



-Dr. Prashant Pawar received the Prof. SK Sopory Award at the 6th International conference on Plant Physiology (15-18 Dec 2025)



-RCB observed its 4<sup>th</sup> convocation on 19 Dec 2025. Mr Adil Zainulbhai (a distinguished Indian business leader and public policy advisor, former Chairperson of the Capacity Building Commission, and current Chair of the Network18 Group) delivered the Convocation Address. The convocation was presided over by Dr. Rajesh S Gokhale, Chairperson, Board of Governors, RCB and Secretary, DBT.



-The Orientation Session for the Immersion Programme under the i3c BRIC-RCB PhD Programme was successfully conducted, marking the start of the three-month field immersion internship on 20 Dec 2025



-As the I3C BRIC-RCB PhD students completed their coursework at RCB, "Aagaaz-i3C" was organised to celebrate the milestone on 26 Dec 2025.

-Dr. Jyoti Tanwar, INSPIRE Faculty Fellow was declared a Runner-Up (Emerging Talent-Biological Sciences) at the Merck Young Scientist Award 2025 on 30 Dec 2025.

-Ms. Kusuma B, Int-PhD student under Prof. Arup Banerjee, received the Best Poster Presentation Award at the EMBO Conference on RNA Virus Infection and Host Immune Responses 2026

-RCB bid an emotional farewell to Dr R.P. Roy as he completed his tenure from the position of Dean, RCB on 30 Jan 2026.

-Dr. Deepak Nair was conferred the Haryana Vigyan Ratna Award by the Hon'ble Governor, Prof. Ashim Kumar Ghosh, and State Education Minister, Shri Mahipal Dhanda on 28 Feb 2026.





## 28 Feb 2026 | RCB Open Day



To commemorate National Science Day 2026, over 2000 students and faculty from across Delhi NCR were hosted. The event featured interactive exhibits, hands-on demonstrations, and expert interactions showcasing cutting-edge research in biotechnology and life sciences.



A Nukkad Natak competition added a creative dimension, highlighting the role of biotechnology in sustainable development.



The celebration reinforced RCB's commitment to inspiring young minds and fostering scientific curiosity.





## Workshop & Courses



- 2nd edition of the Computational Biology Conference (CBC 2.0), was organized by the Indian Biological Data Centre (IBDC), at the Regional Centre for Biotechnology (RCB), Faridabad, from 8-10 Dec 2025.

-Hands-on Training Workshop on "Gene Editing in Plants: From CRISPR Design to Analysing Edited Lines" was held from 6–10 Jan 2026.

-RCB-UCSD certification course on data analysis for systems biology was conducted from 19 Jan-6 Feb(online) and 9-20 Feb 2026(offline).

-RCB hosted the 7th Autophagy India Network Meeting from 23-25 Feb 2026

-The India EMBO Satellite lecture course on "RNA virus infection and host immune responses" was conducted on 10 Feb 2026 in the MK Bhan Auditorium, RCB.

-The India EMBO Lecture Course on "RNA virus infection and host immune responses" was conducted from 11-14 Feb 2026 at RCB.

-RCB in association with IIT-New Delhi, AIIMS-New Delhi & IISER-Trivandrum organised an EMBO practical course on 'Cryo-electron microscopy and 3D image processing (CEM3DIP)' from 21 Feb to 3 Mar 2026.



## Talks at RCB

### RCB SEMINAR SERIES

**28 January 2026** | Dr. Arnab Mukhopadhyay, Staff Scientist, BRIC-NII delivered the first talk of the RCB Seminar Series 2026 second batch, titled, 'Interspecies interactions that ensure optimal life span'

**18 February 2026** | Dr. Kausik Chakraborty, Chief Scientist, CSIR-IGIB, delivered a stimulating lecture titled, 'Fitness defects due to cytosolic protein misfolding In *S.cerevisiae* can be alleviated by decreasing mitochondrial protein import capacity'

**27 February 2026** | Dr. Krishanu Ray, Senior Professor at BITS-Pilani, Hyderabad, delivered a stimulating lecture titled, 'Impact of acute insulin stimulation, lipid phosphorylation and endosomal transport on synapses in the central nervous system'

### Aspiring Faculty Talks

**12 January 2026** | Dr. Nikhil Job (Postdoctoral Fellow at the Gregor Mendel Institute of Molecular Plant Biology, Vienna, Austria) delivered a talk titled, 'How Light Initiates Life: Environmental Control of Cell Division and Stress Tolerance in Plants'

**21 January 2026** | Dr. Soni Kaundal (Staff Scientist, Baylor College of Medicine, Houston, USA) delivered a talk titled 'Phase-separated Norovirus Replication Condensates: Regulatory Principles and Potential Antiviral Relevance'

### Expert Talks as a part of the Hands-on Training Workshop on "Gene Editing in Plants: From CRISPR Design to Analysing Edited Lines"

**6 January 2026** | Dr. Debasis Chattopadhyay, Director(Additional Charge), BRIC-NIPGR

**6 January 2026** | Dr. Ramu Vemanna, Associate Professor, RCB

**7 January 2026** | Dr. Avinash Bajaj, Professor, RCB

**8 January 2026** | Dr. Naveen C Bisht, Scientist IV, BRIC-NIPGR

**9 January 2026** | Dr. Tanushree Kaul, Group Leader, ICGEB

**9 January 2026** | Dr. Saikat Bhattacharjee, Associate Professor, RCB

**10 January 2026** | Dr. Ajay K Pandey, Scientist F, BRIC-NABI

**10 January 2026** | Prof. C. Viswanathan, Joint Director (R), IARI

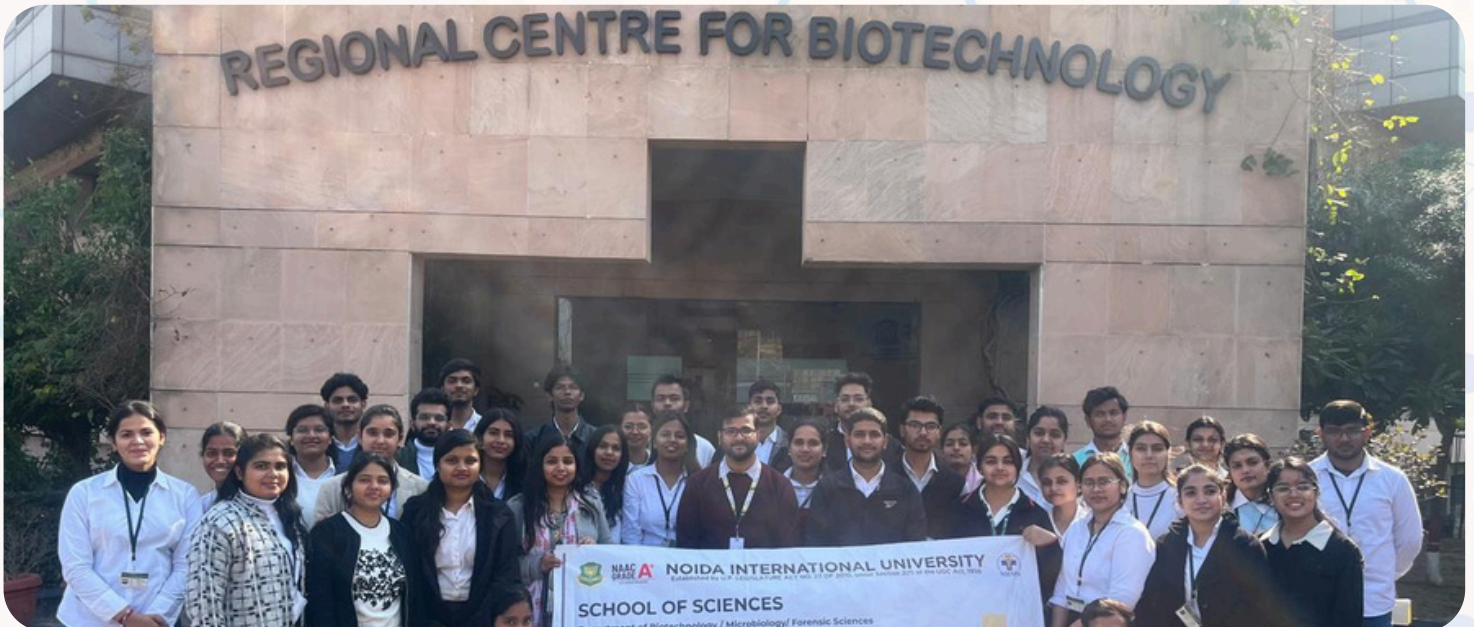




**02 Dec 2025** | Final-year B.Sc. (Hons.) Biotechnology students from IMS Ghaziabad explored the Advanced Technology Platform Centre (ATPC) and the Indian Biological Data Centre (IBDC), gaining exposure to cutting-edge research facilities and high-end analytical instrumentation.



**22 Jan 2026** | Undergraduate Biotechnology students from Gita Vidya Mandir (GVM) Girls College, Sohna Road, visited RCB'S key facilities. They were also introduced to RCB's academic and research programmes, providing them with valuable insights into cutting-edge biotechnology research and innovation happening in the campus.



**06 Feb 2026** | The Regional Centre for Biotechnology (RCB), Faridabad, hosted students and faculty from Noida International University for an academic visit. Participants were introduced to RCB's research and academic programmes and toured facilities including the Greenhouse, ATPC, and IBDC.



## 'Innovation and Entrepreneurship in India'

RCB Day Address

**Dr. Vijay Chauthaiwale (Guest of Honour)**

Member DBT-BRIC Governing Body



## 'Artificial Intelligence in Biological Research'

RCB Day Oration

**Prof. Shekhar C. Mande (Chief Guest)**

President, INSA

## Upcoming Events

### RCB FOUNDATION DAY 2 March 2026

- Scientific Pitch Talks by senior RCB PhD students
- RCB Day Address by Dr. Vijay Chauthaiwale (Member DBT-BRIC Governing Body)
- RCB Day Oration by Prof. Shekhar Mande (President, INSA)
- SPIC MACAY kathak recital by Pt. Rajendra Gangani



### Invited Talk by Dr. Vineeta Bal

Former Scientist, BRIC-NII

9 March 2026

An open session with a thought provoking title, 'Invisible, Missing Women in Science and Society: A Relook in 2026' to commemorate International Women's Day



### Hands-on Training Workshop

30 April 2026

An online workshop on "Saral AI: Democratising Scholarly Work by Transforming into Accessible, Multilingual Content" by Prof. P. Kumaraguru, IIIT Hyderabad

Web link:  
<https://saral.democratiseresearch.in/>

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[www.rcb.res.in](http://www.rcb.res.in)

# STUDENT TESTIMONIALS



*At RCB, the i3c BRIC programme makes learning collaborative and engaging, where teamwork and shared ideas are just as important as the coursework.*

*-Arushi Kalsotra, i3c BRIC RCB PhD  
Batch 2025*

*My time at RCB was truly enriching. It was there that I began my research journey, which stirred my interest in gene regulation and structural biology. RCB's collaborative and intellectually vibrant environment allowed me to learn immensely from faculty and lab mates alike.*

*– Anuska Das,  
Junior Research Fellow,  
Dr. Deepti Jain's lab,  
2014-2015*



*From advanced hands-on training to the camaraderie of my peers, the i3c BRIC RCB PhD Programme has been the most enriching experience of my academic journey. I extend my sincere gratitude to BRIC-DBT, RCB, and the leadership for creating such a motivating environment for future researchers.*

*- Darshit Singh Rawat, i3c BRIC PhD student  
Batch 2025*



## Alumni Speaks



*I completed my PhD in Dr. C. V. Srikanth's lab at RCB, where I had a truly wonderful experience. The warmth and constant support from the faculty and fellow researchers made everyday science enjoyable and meaningful. RCB played a big role in shaping how I think about research and collaboration, and I carry that with me today.*

*-Preksha Gaur (PhD; 2016-2023)*