United Nations
Educational, Scientific and
Cultural Organization

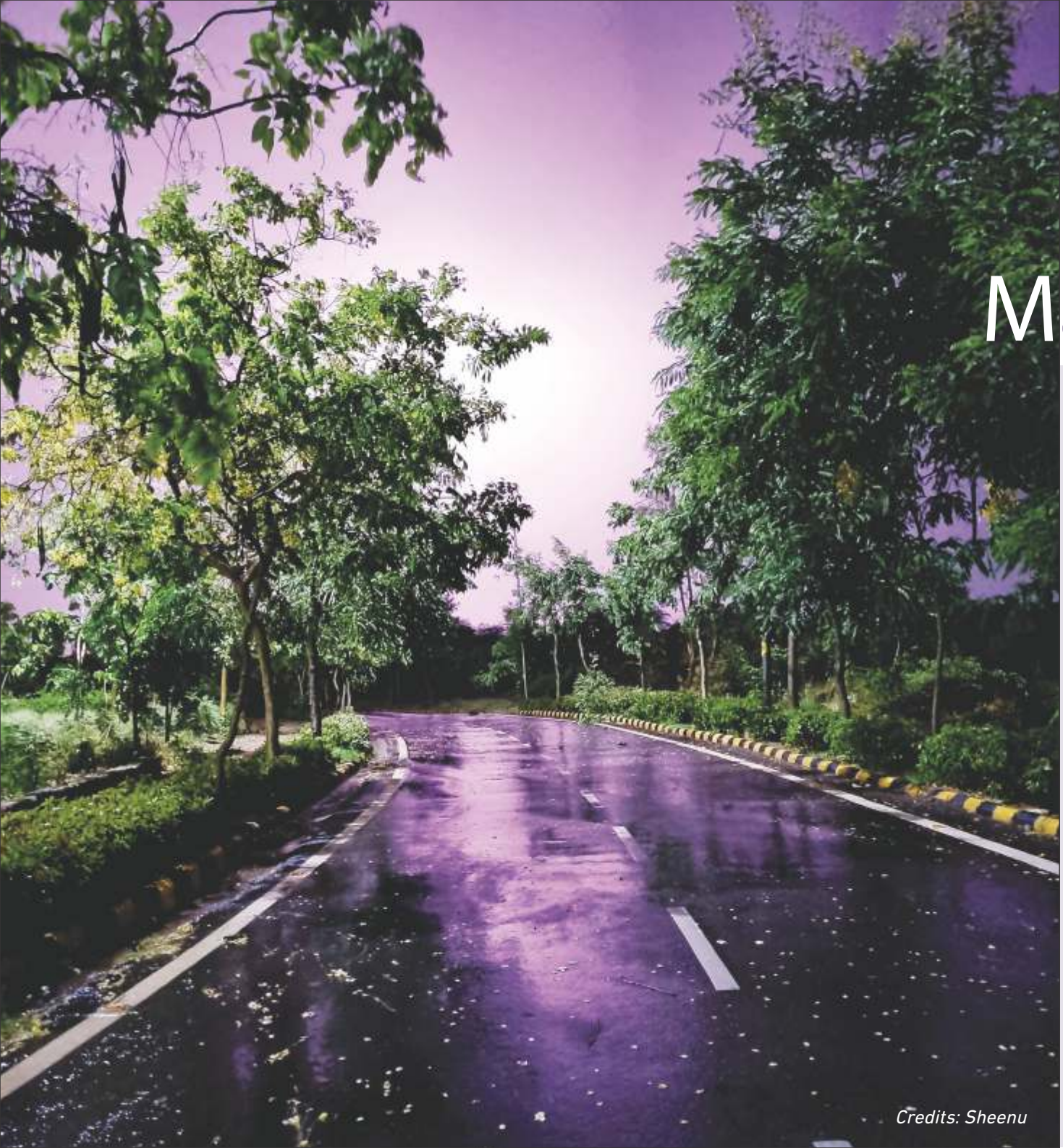
क्षेत्रीय जैवप्रौद्योगिकी केन्द्र
Regional Centre
for Biotechnology

क्षेत्रीय जैवप्रौद्योगिकी केन्द्र

REGIONAL CENTRE FOR BIOTECHNOLOGY

2nd CONVOCATION

12 DECEMBER 2023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Mandate

The mandate of the Regional Centre for Biotechnology (RCB) is to provide a platform for biotechnology education, training and research at the interface of multiple disciplines. The programmes of the Centre are designed to create opportunities for students to engage in multi-disciplinary research where they learn biotech science while integrating engineering, medicine and natural sciences, to provide solutions for human and animal health, agriculture and environmental technologies.

The vision of RCB is to produce human resource tailored to drive innovation in biotechnology, particularly in areas of new opportunities and also to fill talent gaps in deficient areas. The Centre is regarded as a "Category 2 Centre" of UNESCO in terms of the principles and guidelines for the establishment and functioning of UNESCO Institutes and Centres.

Objectives

a. to disseminate and to advance knowledge by providing instructional and research facilities in such branches of biotechnology and related fields as it may deem fit including technology policy development,

b. to provide capacity-building through education, training, research, and development in biotechnology and related academic fields for sustainable development objectives through regional and international cooperation,

c. to facilitate transfer of knowledge and technology relating to biotechnology at the regional level,

d. to create a hub of biotechnology expertise and to address human resource needs in the countries in the region,

e. to promote and strengthen international co-operation to improve the social and economic conditions and welfare of the people,

f. to promote and facilitate a network of satellite centres in the region as well as within India.

Functions

a. to establish infrastructure and technology platforms which are directly relevant to biotechnology education, training, and research,

b. to execute educational and training activities including grant of degrees in education and research in biotechnology and related fields,

c. to produce human resource tailored to drive innovation in biotechnology, particularly in areas of new opportunities and to fill talent gap in deficient areas,

d. to undertake research and development and scientific investigations in collaboration with relevant research centres in the region,

e. to hold scientific symposia and conferences within India or in the region or outside the region and to conduct short-term and long-term training courses and workshops in all areas of biotechnology,

f. to collect universally available information with a view to setting up data banks for bio- information,

g. to collect and disseminate, through networking, the relevant local knowledge in the field of biotechnology, ensuring protection of intellectual property rights of local stakeholder communities,

h. to develop and implement a policy for intellectual property rights which is equitable and just to the stakeholders involved in research in the Regional Centre,

i. to disseminate the outcome of research activities in different countries through the publication of books and articles,

j. to promote collaborative research and development networking programme in specific areas of biotechnology with national, regional and international networks and promote exchange of scientists at the regional level having regard to issues pertaining to intellectual property rights of collaborating institutions promoting equitable sharing of benefits with collaborating institutions.

About RCB

Regional Centre for Biotechnology (RCB) was established by the Department of Biotechnology (DBT), Government of India with regional and global partnerships synergizing with the programmes of UNESCO. The primary focus of RCB is to provide world-class education, training, and conduct innovative research at the expanding interface of multiple disciplines to create high-quality human resources in interdisciplinary areas of biotechnology.

The programmes of the Centre are designed to create opportunities for students and researchers to engage in high-quality research that endeavours to address issues of human and animal health, agriculture, and the environment for sustainable societal development goals.

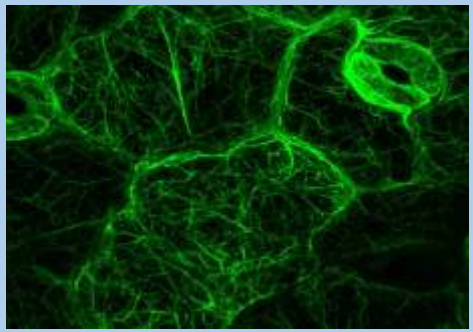
The mission of the Centre is to create opportunities for multi-disciplinary education, training, and research in biotechnology. The overarching vision is to generate human resources tailored to drive innovation in biotechnology, particularly in emergent areas of new opportunities, and also to strengthen the contemporary areas of industrial significance. The Centre has been recognized in 2016 as an 'Institution of National Importance' for biotechnology education, training, and research through an act of the Indian Parliament. The Centre is also regarded as a "Category II Centre" in terms of "the principles and guidelines for the establishment and functioning of UNESCO Institutes and Centres".

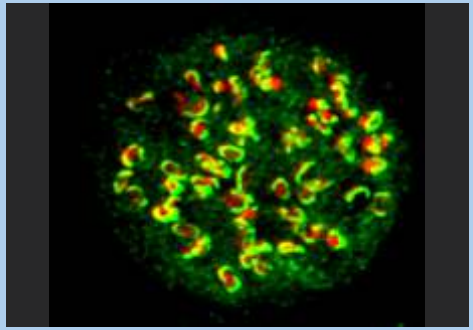
Research at RCB

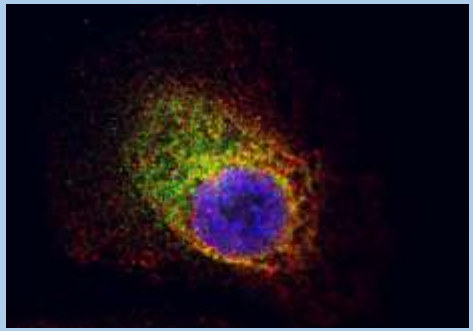
The Centre conducts multidisciplinary innovative research in the biotech sciences under the following broad areas: Infectious Disease Biology, Structural Biology, Molecular Medicine, Cancer and Cell Biology, Agricultural Biotechnology, and Systems & Synthetic Biology. The RCB faculty members have been trained in some of the best national and international institutions for their doctoral and postdoctoral studies, and have set up globally competitive research programmes at RCB across several frontier areas of modern biology and biotechnology. RCB's upstream and biomedical research endeavours have gained major extramural funding and garnered collaborative interest both nationally and internationally. The research is published in highly respected and internationally reputed, peer-reviewed journals and/or patented.

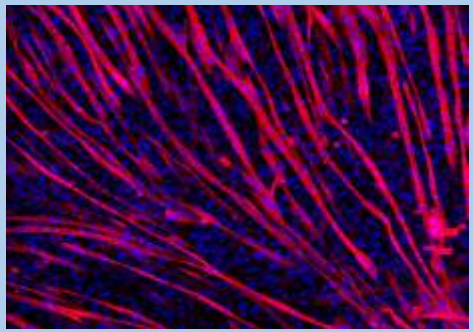
The RCB flagship research program is focused on the development of antivirals against medically important viruses such as Chikungunya and Japanese encephalitis. In the past two years, RCB has been at the forefront of conducting research on the SARS-CoV2 virus responsible for COVID infections, has instituted a national facility for testing the efficacy of new drugs and formulations against COVID infection, and has been providing *in vitro* antiviral testing for the candidate drugs to users from industry and academia. Contemporaneously, fundamental research on the biology of the SARS-CoV2 virus has been undertaken to understand its pathogenesis. More recently, RCB faculty members have initiated multi-pronged investigations into frontier areas of biomedical and agricultural research. A new project, involving a team of multidisciplinary scientists and clinicians across national institutions, has been conceptualized to understand the connections between metabolic disease and neurodegenerative disorders. Another group of interdisciplinary researchers is exploring the molecular processes of the potato leaf roll virus (PLRV) infection in the host potato plants, to develop genetically durable and bio-safe chemical tools to mitigate its incidence.

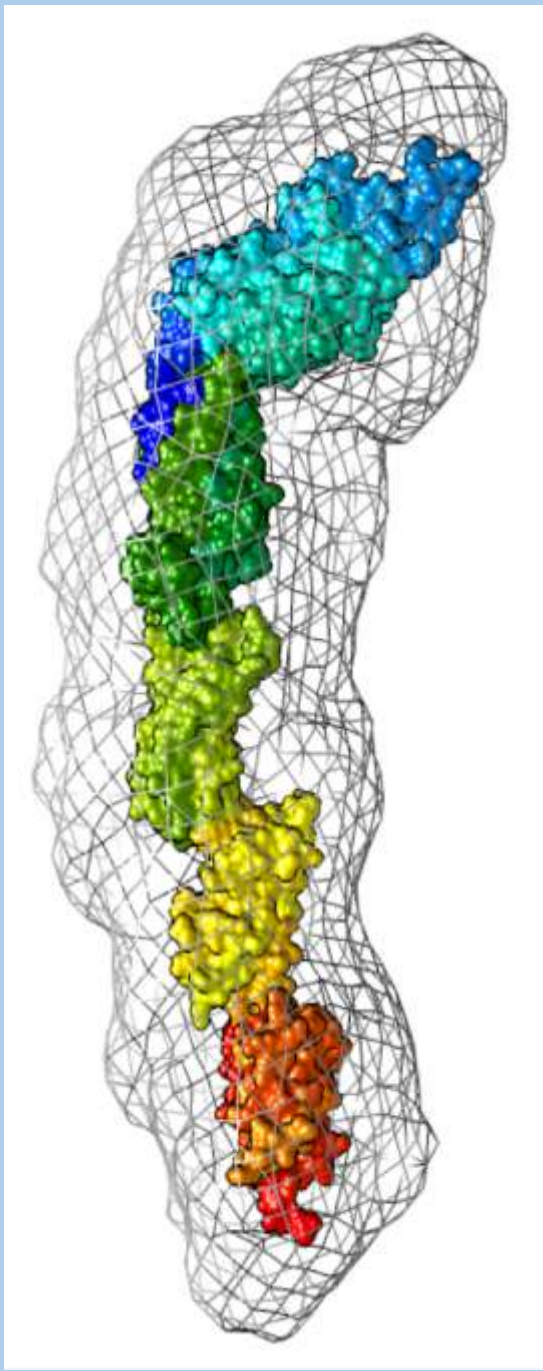
RCB partners with the Translational Health Science and Technology Institute (THSTI), the National Institute of Biomedical Genomics (NIBMG), and other clinical institutions in embarking upon an ambitious national research programme to understand the underlying reasons behind pre-term birth. RCB investigators are spearheading the proteomics-based questions to address this major national and global challenge.











Academics

One of the primary mandates of RCB is to provide high-quality education in the area of biotechnology and modern biology. RCB provides research-based learning through pre-doctoral, doctoral, and post-doctoral education and training in the biotech sciences. A Master's program, and an integrated Master's-PhD program in biotechnology have been instituted since 2018. A thriving interdisciplinary Ph.D. program produces highly trained, globally competitive scientists. The post-doctoral program under the mentorship of RCB faculty nurtures talented PhDs for future careers in biotechnology. The students trained at RCB have been selected to several of the best academic research institutions globally for pursuing their further research careers. Postdoctoral fellows of RCB have moved to independent faculty positions in academic/ research institutions and taken up positions in science administration.

Several of India's leading biomedical research institutions are affiliated with RCB for the award of degrees in biotechnology to their students. These include the Centre for DNA Fingerprinting and Diagnostics (CDFD), Hyderabad; National Institute of Animal Biotechnology (NIAB), Hyderabad; National Agri-Food Biotechnology Institute (NABI), Mohali; Center of Innovative and Applied Bioprocessing (CIAB), Mohali; Institute of Life Sciences (ILS), Bhubaneshwar; Rajiv Gandhi Centre for Biotechnology (RGCB), Thiruvananthapuram; Translational Health Science and Technology Institute (THSTI), Faridabad; and National Institute of Biomedical Genomics (NIBMG), Kalyani; National Centre for Cell Sciences (NCCS), Pune; Christian Medical College (CMC), Vellore; and ESIC Medical College and Hospital, Faridabad; Institute of Bioresources and Sustainable Development (IBSD), Imphal; Institute for Stem Cell Science and Regenerative Medicine (inStem), Bangalore; Institute of Advanced Virology (IAV), Thiruvananthapuram; and Max Society of Medical Academics Innovation and Research (MSMAIR), Delhi. RCB has also partnered with leading biopharma industries for industry-relevant academic programs. Interdisciplinary doctoral programmes in the areas of biostatistics and bioinformatics have been developed in collaboration with the global pharmaceutical giant GlaxoSmithKline (GSK). These programs are offered by creating a virtual faculty pool in partnership with other leading research institutions in the country.

Scientific Workshops and Conferences

As part of its mandate, RCB conducts advanced workshops and conferences on several aspects of biotechnology and life sciences. The Centre's workshops and training programs are designed to create a pool of highly specialized scientists in academia and industry for high-end research and technology development. These workshops, typically week-long, offer a combination of theoretical knowledge and hands-on experimental time in the appropriate area from experts in the field, drawn from both within and outside the faculty of RCB. The workshops are typically targeted towards doctoral students and faculty.

Skill development and training

The Human Resources Development Project and Management Unit (HRD-PMU) of RCB manages major national human resource development and training initiatives of DBT in biotechnology and allied areas. The HRD-PMU conducts the Biotechnology Eligibility Test (BET) annually to select students for the Junior Research Fellowship (DBT-JRF) to pursue Ph.D. degree in the frontier areas of biotechnology for various institutions in the country. Through the nationally conducted Graduate Aptitude Test – Biotechnology (GAT-B), the HRD-PMU selects students for the DBT-supported post-graduate programs in Biotechnology and allied areas across the Indian institutions/universities. The HRD-PMU also coordinates the Ramalingaswami re-entry fellowship program of DBT wherein experienced post-doctoral fellows returning from their overseas training are provided support to start their scientific career in India.

RCB conducts career counselling and mentoring sessions for students of biotechnology and the allied sciences across India. The orientation/counselling programmes such as "Crafting Your Career (CYC) workshops" and webinar series are meant to create awareness of career options available to science students in India, as well as provide requisite tools, knowledge, and information for navigating a productive career path in science. This year, RCB conducted a "Visualising Science" Workshop in partnership with *Nature India* and the *India Alliance Wellcome-DBT Trust* to train researchers from across the country in using creative and effective tools of visual science communication. Such workshops are targeted at Master's and Ph.D. students and postdoctoral fellows who are at the cusp of moulding their careers in science.

RCB inducts post-graduate science students from various universities/ institutions/ colleges of repute for research and training to carry out dissertation/project work towards partial fulfilment of their post-graduate degrees. Selected candidates undergo training under the supervision of members of RCB faculty, wherein they learn to conduct their research project in collaboration with other group members. Trainees get a realistic experience of several facets of conducting modern biological research and embarking on a research career. Short-term training for one- or two-months duration is also imparted to undergraduate students. These students perform a variety of laboratory practical, interact with faculty and research students and receive professional career counselling in biotechnology and life sciences disciplines.

Research and Innovation Infrastructure

The extensive research infrastructure at RCB has been developed at a rapid pace since the inception of the institution. The equipment and facilities are accessible as part of central instrumentation facilities at multiple locations throughout the Centre. With the scientific strength of RCB increasing steadily, the Centre continues to judiciously add both specialized and commonly required equipment in a modern biological laboratory. Specialized facilities have been established for high-resolution optical imaging, electron microscopy, bioprocessing, high throughput image-based screening, protein biochemistry, biophysical analysis of macromolecules, structural biology, proteomics, flow cytometry, plant and animal cell culture, and insect culture. The management of all major equipment is handled by a team of dedicated technical personnel, overseen by an instrumentation engineering department under the guidance of the faculty of RCB. In addition, the campus houses a full-fledged small animal facility (SAF), and an infectious disease research facility (IDRF), a biosafety level-3 (BSL-3) facility for handling class 3 pathogens.

Advanced Technology Platform Centre: RCB runs a state-of-the-art Advanced Technology Platform Centre (ATPC), a national facility offering services for mass spectrometry, optical and electron microscopy, genomics, protein purification, molecular interactions, and flow cytometry to both academia and industry. The primary goal of the ATPC is to accelerate innovations in science & technology and plug the gap in the innovation pipeline that has previously attenuated the ability of Indian researchers to realize their true potential. The centre is equipped with state-of-the-art research facilities, skilled personnel, and world-class infrastructure.

Indian Biological Data Centre: RCB has established the Indian Biological Data Centre (IBDC) as the national repository for life science data. IBDC is mandated to archive all life science data generated from publicly funded research in India. Besides archiving data, IBDC shall also develop highly curated data sets to facilitate knowledge discovery in various domains of the

The Indian Biological Data Centre (IBDC) is the first national digital data repository mandated to archive all life science data generated from publicly funded research in India. It is established by RCB with support from the Government of India (GOI) through the Department of Biotechnology (DBT). IBDC played a pivotal role in supporting the Indian SARS-CoV-2 Genomics Consortium (INSACOG) by curating and analyzing the virus genome data on a real time basis.

Credits: Himanshu Rathour

Credits: Rushikesh M. Khadake

life sciences, and would also provide infrastructure and expertise for biological data analysis. Fundamentally, IBDC is committed to the spirit of data sharing as per FAIR data principles. The centre is run by a dedicated team of trained personnel under the supervision of RCB.

BioNEST Bio-Incubator (BBB): RCB operates the BSC BioNEST Bio-Incubator (BBB) in the NCR Biocluster with a vision to foster innovation, research, and entrepreneurial activities in biotechnology-related areas. BBB aims to stimulate the growth of biotechnology-based start-up companies by providing excellent incubation facilities. The BBB infrastructure spread across 35000 sq ft., includes laboratory space, office space, professional business suites, culture facilities, and the necessary instrumentation. The incubatees also have access to the ATPC facilities. Currently, the BBB houses 28 start-up companies working in various areas of biotechnology.

Campus facilities: The campus of the NCR Biotech Science Cluster, which houses RCB, has grown into a vibrant place offering an attractive blend of bustling research and academic activity ensconced in natural surroundings. RCB offers campus housing for its students and faculty. The student hostel is well equipped with modern facilities with shared accommodation and a common dining hall. The campus has a canteen and a cafeteria for students, researchers, and other staff. The recreational indoor facilities include a gymnasium, badminton court, basketball court, table tennis, a cricket-cum football ground, a volleyball court, etc. The entire campus of RCB is networked through high-speed internet connectivity. The class rooms, auditorium, and seminar rooms are equipped with modern audio-visual facilities to support online classes, seminars, webinars, and workshops. RCB houses a small library with selected printed books and a large collection of electronically subscribed journals, textbooks, and other reading material. RCB subscribes to the DBT Electronic Library Consortium (DeLCON), through which it provides access to leading international peer-reviewed journals to its researchers, students, and scientists.

Achievements and Awards

RCB has won several distinctions in the short span of just over a decade of existence. RCB was awarded the status of an Institution of National Importance by the Parliament of India in 2016. The faculty members and scientists of the Centre have won some of the highest national research

awards, including the Shanti Swarup Bhatnagar Prize in Biological Sciences, the National Bioscience Award, the India Alliance Wellcome Trust-DBT Intermediate and Early Career Fellowship Awards, the Innovative Young Biotechnologist Award, the Ramalingaswami Re-entry Fellowship, the Ramanujan Fellowship, the INSPIRE Faculty Fellowship, the J C Bose National Fellowship etc. Several RCB faculty members are elected fellows of the prestigious Indian science academies; the Indian National Science Academy (INSA) and the National Academy of Sciences, India (NASI), and Indian Academy of Sciences (Bangalore). RCB's students have secured positions in the best institutions globally. Postdoctoral fellows trained at RCB have gone on to secure prestigious positions in academia, science management, and industry.

International connect

RCB was established by the Department of Biotechnology, Government of India under the auspices of UNESCO. RCB's integrated Master's-PhD program is open to foreign students. RCB offers scholarships to support these foreign students to pursue their academic program for the integrated Master's and Ph.D. degree. RCB conducts periodic workshops on relevant themes in partnership with UNESCO. Over the years, RCB scientists have established international collaborations with globally reputed institutions located in the USA, France, Denmark, Germany, Finland, Sweden, Japan, South Korea, Singapore, and other countries.

RCB, on behalf of the Government of India, has entered into an agreement with the European Synchrotron Radiation Facility (ESRF) for medium-term use of the ESRF synchrotron facility by Indian researchers to collect x-ray diffraction, small-angle X-ray scattering, or cryo-electron microscopy data for non-proprietary research for the benefit of the Indian scientific community as a whole, and notably the structural biology research groups. The programme provides access to Indian investigators to high-intensity macromolecular crystallography, small angle x-ray scattering experimental stations, and the cryo-electron microscopy facility located in ESRF.

RCB has also partnered with the National Institute of Advanced Industrial Science & Technology (AIST), Japan to conduct multiple bioimaging workshops at both RCB and AIST, through the RCB-AIST Joint Research Training and Capacity Building in Bio-imaging and Biotechnology. The initiative has enhanced career opportunities for scientists and researchers working in the area of biomedical sciences.

DEGREES BEING CONFERRED

DOCTOR OF PHILOSOPHY

Amber Gupta (RCB/ILS-PhD/2018/1002)

Title of Thesis: Biochemical and Molecular Characterization of Genes Involved in Ion-Relation in Rice Cultivars Contrast for Salt Tolerance

Guide: Dr. Birendra Prasad Shaw, Institute of Life Sciences, Bhubaneswar

Manisha Kumari (RCB-1003)

Title of Thesis: Dissecting the Molecular Mechanism of Amyloidogenic Protein Aggregation and its Impact on Parkinson's Disease

Guide: Dr. Tushar Kanti Maiti, Regional Centre for Biotechnology, Faridabad

Mritunjay Kasera (RCB-1006)

Title of Thesis: Role of Post Translational Modification (PTM) by Small Ubiquitin like Modifiers (SUMOs), Isoform SUMO3 in Effector Triggered Plant Immunity

Guide: Dr. Saikat Bhattacharjee, Regional Centre for Biotechnology, Faridabad

Shrimali Nishith Maheshbhai (RCB-1011)

Title of Thesis: Hypoxic Regulation of Thrombosis and Inflammation in Tibetans with Prolyl Hydroxylase 2 Variant

Guide: Dr. Prasenjit Guchhait, Regional Centre for Biotechnology, Faridabad

Araveti Prasanna Babu (RCB/NIAB-PhD/2018/1002)

Title of Thesis: Insights Into Action of Theileria Parasite in Host

Guide: Dr. Anand Srivastava, National Institute of Animal Biotechnology, Hyderabad

Premlata Kumari (RCB/ILS-PhD/2018/1010)

Title of Thesis: DNA-Protein Crosslink Repair in Pathogenic Yeast Candida albicans

Guide: Dr. Narottam Acharya, Institute of Life Sciences, Bhubaneswar

Shraddheya Kumar Patel (RCB/ILS-PhD/2018/1008)

Title of Thesis: Deciphering the Role of Po132, the Non-Essential Subunit of DNA Polymerase Delta in Pathogenesis of Candida albicans

Guide: Dr. Narottam Acharya, Institute of Life Sciences, Bhubaneswar

Subha Saha (RCB/ILS-PhD/2018/1031)

Title of Thesis: Epigenetic and Post-Transcriptional Gene Expression Regulation in Myeloid Development and Acute Myeloid Leukemia

Guide: Dr. Punit Prasad, Institute of Life Sciences, Bhubaneswar

Lipika Das (RCB/ILS-PhD/2018/1005)

Title of Thesis: Composition and Functional Characterization of Microbiome Collected from Aquatic Animals

Guide: Dr. Subrata Kumar Das, Institute of Life Sciences, Bhubaneswar

Suchismita Behera (RCB/ILS-PhD/2018/1023)

Title of Thesis: Identification and Characterization of Differentially Expressed Proteins in Rabies Virus Infection: Implication in Understanding Pathogenesis

Guide: Dr. Amol Ratnakar Suryawanshi, Institute of Life Sciences, Bhubaneswar

Sara Anisa George (RCB/CDFD-PhD/2018/1014)

Title of Thesis: Comparative Functional Analysis of Mutant p53 Proteins

Guide: Dr. Murali Dharan Bashyam, Centre for DNA Fingerprinting and Diagnostics, Hyderabad

Priyanka Verma (RCB-1018)

Title of Thesis: Spatiotemporal Targeting of Gene Therapeutics to Gastrointestinal Tract (GIT) using Engineered Nanoparticles

Guide: Dr. Avinash Bajaj, Regional Centre for Biotechnology, Faridabad

Shreyasi Das (RCB-1002)

Title of Thesis: Drosophila as a Model to Study the Role of Human Embryonic Myosin Heavy Chain Associated Congenital Myopathies

Guide: Dr. Sam J. Mathew, Regional Centre for Biotechnology, Faridabad

Dahale Shraddha Kantilal (RCB-1013)

Title of Thesis: Functional Elucidation of Virulence Function of HopA1 Effectors from Different Pathovars of Pseudomonas syringae

Guide: Dr. Saikat Bhattacharjee, Regional Centre for Biotechnology, Faridabad

Arunima Gupta (RCB-1004)

Title of Thesis: Investigations into the Molecular Mechanisms of Resistance to Pea Powdery Mildew in the Model Legume Medicago truncatula

Guide: Dr. Divya Chandran, Regional Centre for Biotechnology, Faridabad

Anuj Shukla (RCB/NABI-PhD/2018/1013)

Title of Thesis: Molecular and Biochemical Characterization of Wheat Genes Involved in Inositol Pyrophosphate Biosynthesis

Guide: Dr. Ajay Kumar Pandey, National Agri-Food Biotechnology Institute, Mohali

Voddu Suresh (RCB/ILS-PhD/2018/1014)

Title of Thesis: A Novel Insight into the Role of MIF in Pathophysiological Property of Cancer-Associated Fibroblast Cells (CAFs) in Pancreatic Cancer

Guide: Dr. Shantibhusan Senapati, Institute of Life Sciences, Bhubaneswar

Ajay Kumar (RCB/NIAB-PhD/2018/1001)

Title of Thesis: Identification and Immuno-Characterization of Leptospira Surface Proteins Involved in Modulation of Host Innate Immune Response

Guide: Dr. Syed M. Faisal, National Institute of Animal Biotechnology, Hyderabad

Neha (RCB/NABI-PhD/2018/1003)

Title of Thesis: Insight into Enteroendocrine Hormone Modulation via TRPA1 Channel Activating Dietary Constituents

Guide: Dr. Mahendra Bishnoi, National Agri-Food Biotechnology Institute, Mohali

Saikat De (RCB/ILS-PhD/2018/1019)

Title of Thesis: Development of MBZM-N-IBT as Anti-Chikungunya Virus Molecule

Guide: Dr. Soma Chattopadhyay, Institute of Life Sciences, Bhubaneswar

Aishwarya Singh (RCB/CIAB-PhD/2018/1001)

Title of Thesis: Enzyme Based Process for Rare Sugars Production from Agro-Biomass

Guide: Dr. Sudesh Kumar Yadav, Center of Innovative and Applied Bioprocessing, Mohali

Pallavi Mohapatra (RCB/ILS-PhD/2018/1038)

Title of Thesis: Identification of CMTM6 as a Novel Regulator of Cisplatin Resistance in Oral Squamous Cell Carcinoma

Guide: Dr. Rupesh Dash, Institute of Life Sciences, Bhubaneswar

Aliva Prity Minz (RCB/ILS-PhD/2018/1015)

Title of Thesis: Targeting Cancer Associated Stromal Cells in Pancreatic Cancer

Guide: Dr. Shantibhusan Senapati, Institute of Life Sciences, Bhubaneswar

Ruchir Chandrakant Bobde (RCB/ILS-PhD/2018/1030)

Title of Thesis: Structural and Functional Characterization of Plant Histone Deacetylases

Guide: Dr. Dileep Vasudevan, Institute of Life Sciences, Bhubaneswar

Priya Singh (RCB/ILS-PhD/2018/1007)

Title of Thesis: Piperlongumine Based Nanomedicine: A Multimodal Approach for Targeting Breast Cancer Stem Cells (CSCs) in Triple Negative Breast Cancer

Guide: Dr. Sanjeeb Kumar Sahoo, Institute of Life Sciences, Bhubaneswar

Akriti Sharma (RCB-1010)

Title of Thesis: Investigating the Role of the Plant Inner Nuclear Envelope Protein SUN in Host Nuclear Positioning and Immunity during Legume-Powdery Mildew Interactions

Guide: Dr. Divya Chandran, Regional Centre for Biotechnology, Faridabad

Jaya Saini (RCB-1022)

Title of Thesis: Role of lncRNA NEAT1 in the Regulation of Inflammatory Response during Dengue Infection

Guide: Dr. Arup Banerjee, Regional Centre for Biotechnology, Faridabad

Krishnendu Goswami (RCB-1005)

Title of Thesis: Characterizing the Molecular Link Between SRFR1 and IPK1 in Innate Immune Responses of Arabidopsis thaliana

Guide: Dr. Saikat Bhattacharjee, Regional Centre for Biotechnology, Faridabad

Lini Sethi (RCB/ILS-PhD/2018/1041)

Title of Thesis: Characterisation of Recombinant Promoter for Efficient Gene Expression in Plants

Guide: Dr. Nrisingha Dey, Institute of Life Sciences, Bhubaneswar

Fizza Askari (RCB/CDFD-PhD/2018/1020)

Title of Thesis: Identification and Characterization of Phosphoinositide 3-Kinase Signalling Effectors in Candida glabrata

Guide: Dr. Rupinder Kaur, Centre for DNA Fingerprinting and Diagnostics, Hyderabad

Vaishna V (RCB/CDFD-PhD/2018/1016)

Title of Thesis: Functional Characterization of HECT E3 Ligases

Guide: Dr. Maddika V Subba Reddy, Centre for DNA Fingerprinting and Diagnostics, Hyderabad

Tanmoy Debnath (RCB/ILS-PhD/2018/1006)

Title of Thesis: Composition and Functional Characterization of Microbiome Collected from Hot Springs

Guide: Dr. Subrata Kumar Das, Institute of Life Sciences, Bhubaneswar

Animesh Kar (RCB-1014)

Title of Thesis: Identification of Molecular and Metabolic Signatures in Response to Engineered Nanotherapeutics Targeting Breast Tumor Progression

Guide: Dr. Avinash Bajaj, Regional Centre for Biotechnology, Faridabad

Soumya Sengupta (RCB/ILS-PhD/2018/1011)

Title of Thesis: T Cell Response in Infection & Inflammation

Guide: Dr. Satish Devadas, Institute of Life Sciences, Bhubaneswar

Mohd. Faraz Alam (RCB/ILS-PhD/2018/1025)

Title of Thesis: Characterizing the Significance of Mitochondria-Centric Events in Japanese Encephalitis Virus Lifecycle and Neurodegeneration

Guide: Dr. Gulam Hussain Syed, Institute of Life Sciences, Bhubaneswar

Sanchari Chatterjee (RCB/ILS-PhD/2018/1020)

Title of Thesis: Studies on Host Factors Essential for Chikungunya and SARS-COV-2 Viruses

Guide: Dr. Soma Chattopadhyay, Institute of Life Sciences, Bhubaneswar

Surendra Kumar Prajapat (RCB/PhD-BT/2018(W)/1006)

Title of Thesis: Pharmacological Induction of Autophagy as a Potential Therapeutic Target for Japanese Encephalitis

Guide: Dr. Manjula Kalia, Regional Centre for Biotechnology, Faridabad

Sandhini Saha (RCB-1012)

Title of Thesis: Mechanistic Insight into Lipid Induced Death in Hepatocytes

Guide: Dr. Tushar Kanti Maiti, Regional Centre for Biotechnology, Faridabad

Sonalika Maurya (RCB-1017)

Title of Thesis: Studies on Role of Polycomb Group Protein CBX4 and Host Epigenetic Modulations during Salmonella typhimurium Infection

Guide: Dr. Chittur V. Srikanth, Regional Centre for Biotechnology, Faridabad

Prajna Parimita Kar (RCB/NIAB-PhD/2018(W)/1002)

Title of Thesis: Deciphering the Kinome of Theileria annulata and Elucidating the Role of Selected Kinases in the Immortalization of Host Cells

Guide: Dr. Anand Srivastava, National Institute of Animal Biotechnology, Hyderabad

Sibasish Mohanty (RCB/ILS-PhD/2018/1051)

Title of Thesis: Identification of MINK1 as a Novel Kinase Regulator of 5-FU Resistance through CRISPR Based Kinome Screening in Oral Squamous Cell Carcinoma

Guide: Dr. Rupesh Dash, Institute of Life Sciences, Bhubaneswar

Virender Kumar (RCB/NABI-PhD/2018/1010)

Title of Thesis: Identification of Loci Governing Seed Oil Content in Soybean (Glycine max L.)

Guide: Dr. Joy Kumar Roy, National Agri-Food Biotechnology Institute, Mohali

Sanskriti (RCB/NABI-PhD/2018/1002)

Title of Thesis: Improvement in Fruit Quality Related Traits in Tomato (Solanum lycopersicum L.) Using Genome Editing Approach

Guide: Dr. Joy Kumar Roy, National Agri-Food Biotechnology Institute, Mohali

Chandan Kumar (RCB-1008)

Title of Thesis: Understanding the Role of Nucleolin in Mitosis

Guide: Dr. Sivaram V. S. Mylavarapu, Regional Centre for Biotechnology, Faridabad

Sunny (RCB/PhD-BI/2018/1008)

Title of Thesis: Computational Analysis and Development of Resources to Facilitate the Discoveries of Novel Sustainable Solutions for Waste Plastic Materials

Guide: Dr. Vengadesan Krishnan, Regional Centre for Biotechnology, Faridabad

Aher Abhishek Taterao (RCB/CDFD-PhD/2018/1015)

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