United Nations
Educational, Scientific and
Cultural Organization

क्षेत्रीय जैवप्रौद्योगिकी केन्द्र
Regional Centre
for Biotechnology

क्षेत्रीय जैवप्रौद्योगिकी केन्द्र

REGIONAL CENTRE FOR BIOTECHNOLOGY

1ST CONVOCATION

30 JUNE, 2022

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 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,

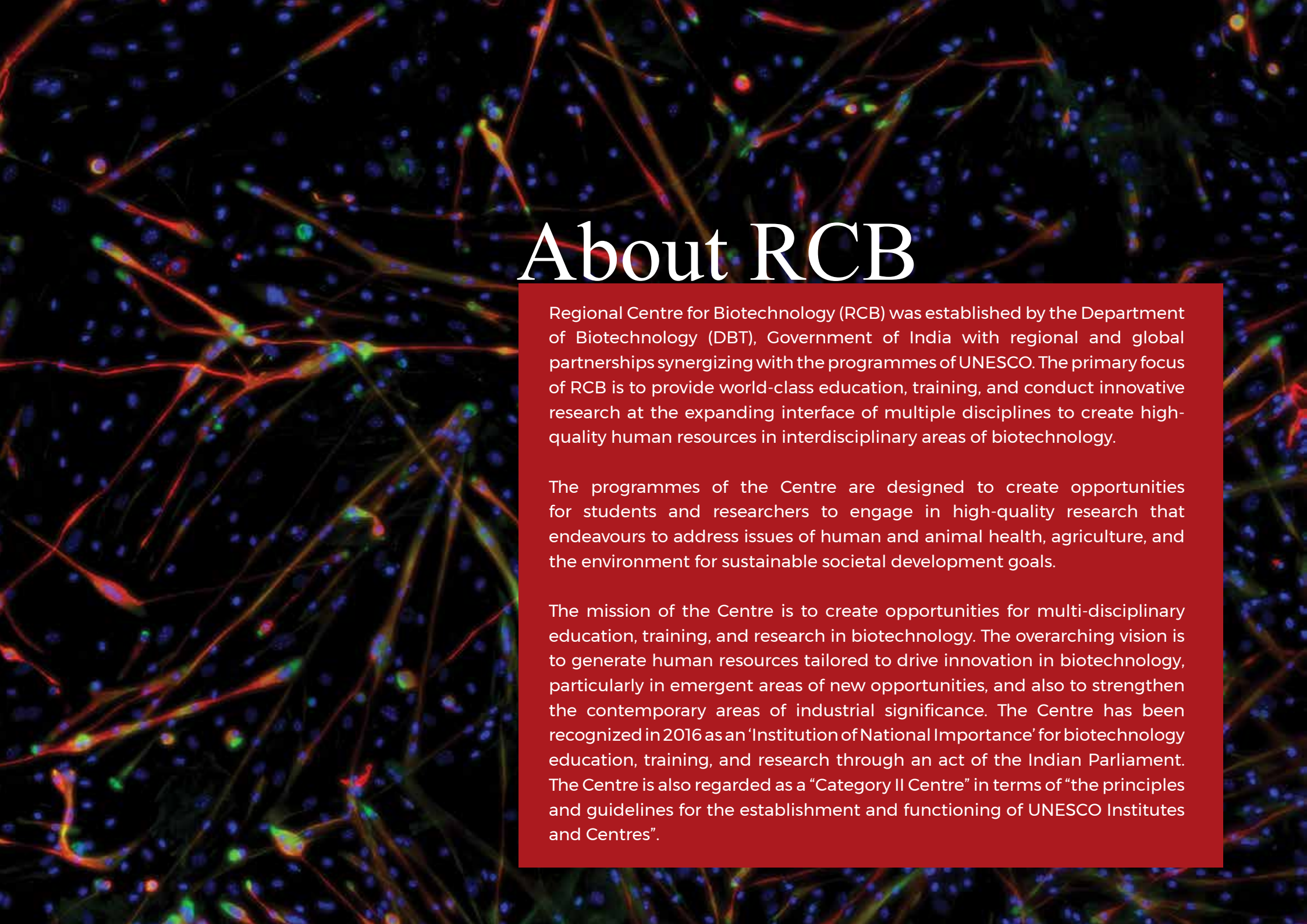
f. to collect universally available information with a view to setting up data banks for bio- information,

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. High throughput assays have been developed to screen small molecule libraries in the cell culture for their antiviral activity. These molecules are then tested in the mouse model of the virus infection to identify potential antivirals. In the past two years, RCB has been at the forefront of conducting research on the SARS-CoV2 virus responsible for COVID infections. RCB has instituted a national facility for testing the efficacy of new drugs and formulations against COVID infection. To meet the growing need for antiviral assays for screening new drug candidates/test substances, RCB 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.

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.

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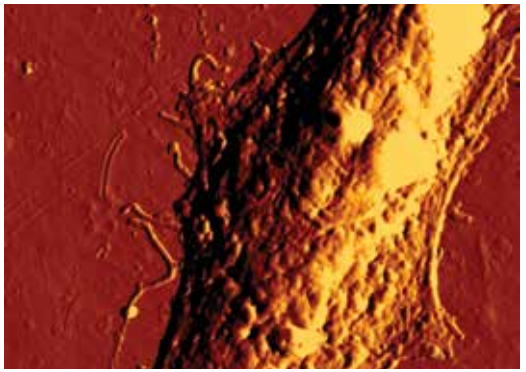

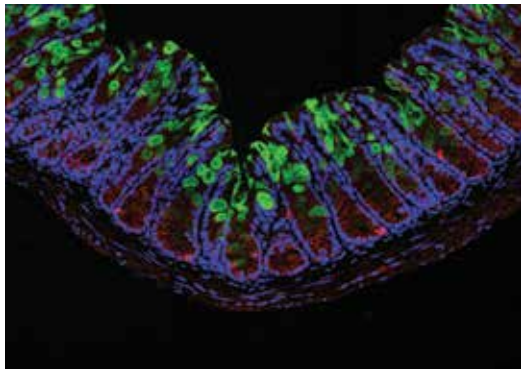

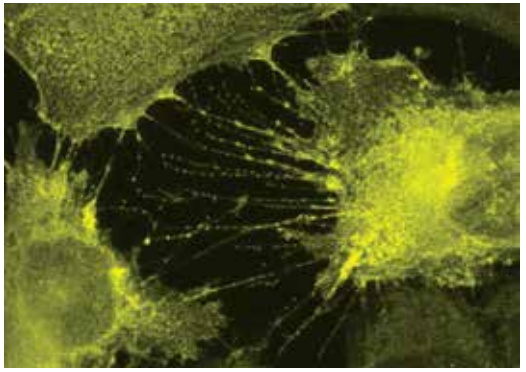

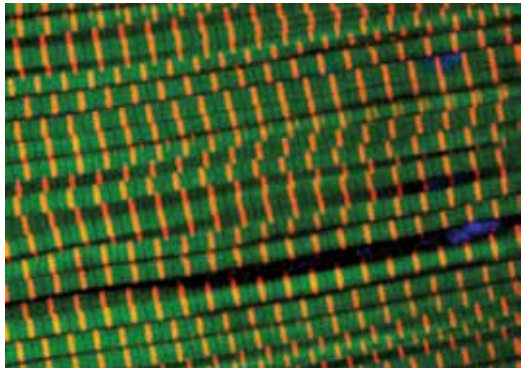


Tuxedo
short reads
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Reference
TopHat
Cufflinks
Cuffmerge

Academics

One of the primary mandates of RCB is to provide high-quality education in various areas 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 Centre for DNA Fingerprinting and Diagnostics (CDFD), Hyderabad; National Institute of Animal Biotechnology (NIAB), Hyderabad; National Agri-Biotechnology Institute (NABI), Mohali; Centre for Innovative and Applied Biotechnology (CIAB), Mohali; Institute of Life Sciences (ILS), Bhubaneshwar; Rajiv Gandhi Centre for Biotechnology (RGCB), Thiruvanathapuram; Translational Health Science and Technology Institute (THSTI), Faridabad; National Institute of Biomedical Genomics (NIBMG), Kalyani; National Centre for Cell Sciences (NCCS), Pune; Christian Medical College (CMC), Vellore; Institute of Bioresources and Sustainable Development (IBSD), Imphal and ESIC Medical College and Hospital, Faridabad. 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.

In addition to the regular degree courses, RCB also hosts Master's students in the biological sciences for short-term (2-3 months) and medium-term (6 months) research training apprenticeships under the mentorship of RCB faculty members. Several such trainees have benefited over the years doing their Master's research projects, internships, and thesis dissertations at RCB.

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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. These 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. The training programme is typically of a six-month duration starting in January and July every year.

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. The 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 engineer and the faculty of RCB. In addition, the campus houses a full-fledged small animal facility (SAF), and an infectious disease research facility (IDRF), a 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 is also establishing 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

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curated data sets to facilitate knowledge discovery in various domains of the 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.

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.

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, table tennis, a cricket ground, a volleyball court, etc. The entire campus of RCB is fortified with 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. For the benefit of employees and students with young children, Kridangan, the campus child daycare centre, provides a safe and engaging environment.

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

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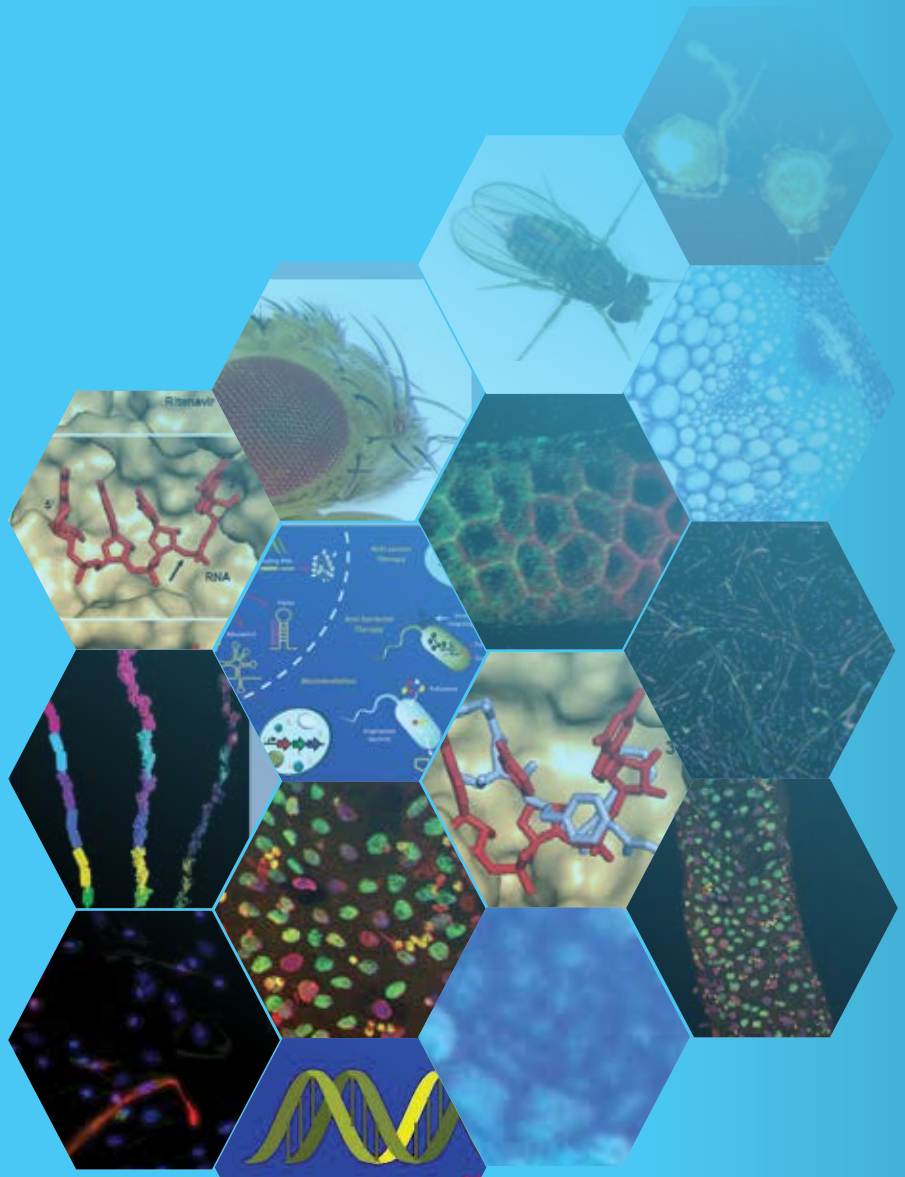
the Parliament of India in 2016 and has been recognized in the band "promising" under the Institute of National Importance & Central Universities/CFTs (Technical) category in the Atal Ranking of Institutions on Innovation Achievement (ARIIA) 2021. The faculty members and scientists of the Centre have 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, the fellowships of the Indian science academies, etc. 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 pursue their academic program for the integrated Master's and Ph.D. degree. 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.



REGIONAL CENTRE FOR BIOTECHNOLOGY **CONVOCATION**

Degrees being Conferred

Doctor of Philosophy

Zaid Kamal Madni (RCB-1007)
Title of Thesis: Understanding the lipid binding dynamics and structure-function correlation of a Non-Specific lipid transfer protein
Guides: Prof. Deepak T Nair, Dr. Dinakar M Salunke
Regional Centre for Biotechnology

Master of Science

Sonia Trikha (RCB/Int-PhD/2018/1001)
Title of Dissertation: To find the host factors interacting with non-structural proteins of chikungunya virus
Guide: Prof. Sudhanshu Vrati,
Regional Centre for Biotechnology

Monika Rawat (RCB/Int-PhD/2018/1003)
Title of Dissertation: The Role of RNA binding protein PCBP2 in tunnelling nanotube formation
Guide: Dr. Sivaram V S Mylavarapu,
Regional Centre for Biotechnology

Rajarshi Chaudhuri (RCB/Int-PhD/2018/1005)
Title of Dissertation: Structural and functional implications of methylglyoxal modification of UCHL1
Guide: Dr. Tushar Kanti Maiti,
Regional Centre for Biotechnology

Rashmi Joshi (RCB/Int-PhD/2018/1006)
Title of Dissertation: Purification of polymerases for different applications in biotechnology
Guide: Prof. Deepak T Nair
Regional Centre for Biotechnology

Piyush Bisht (RCB/Int-PhD/2018/1009)
Title of Dissertation: Role of small molecule inhibitors of CXCR3 in inhibiting dengue virus replication in vitro
Guide: Prof. Prasenjit Guchhait,
Regional Centre for Biotechnology

Umesh Thapa (RCB/Int-PhD/2018/1010)
Title of Dissertation: Studying the functional consequence of interferon α-inducible protein 27 (IFI27) in dengue infection
Guide: Dr. Arup Banerjee,
Regional Centre for Biotechnology

Dikshalee Bassi (RCB/Int-PhD/2019/1005)
Title of Dissertation: Role of BIRC3 in systemic Salmonella infection
Guide: Dr. Sam Jacob Mathew,
Regional Centre for Biotechnology

Gagan Gupta (RCB/Int-PhD/2019/1006)
Title of Dissertation: Functional characterization of Ribonuclease- like proteins expressed in Erysiphe pisi Haustoria (RALPHs) for deciphering its RNA interactors in plants
Guide: Dr. Divya Chandran,
Regional Centre for Biotechnology

Tanushri Dargar (RCB/Int-PhD/2019/1011)
Title of Dissertation: Understanding the role of myosin heavy chain embryonic in adult fast muscle homeostasis
Guide: Dr. Sam Jacob Mathew,
Regional Centre for Biotechnology

Vanshika Rastogi (RCB/Int-PhD/2019/1013)
Title of Dissertation: Understanding the mechanism of adaptive immune response in Tibetan highlanders with $PHD2^{D4E;C127S}$ variant
Guide: Prof. Prasenjit Guchhait,
Regional Centre for Biotechnology

Silpa A R (RCB/RGCB-MSc/2019/1001)
Title of Dissertation: Voltage-gated calcium channel activation and downstream signaling events in a hippocampal cell line
Guide: Dr. R V Omkumar,
Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram

Devika S R (RCB/RGCB-MSc/2019/1002)
Title of Dissertation: Evasion strategies adopted by Chandipura virus to limit host complement
Guide: Dr. John B Johnson,
Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram

M Shafnaz (RCB/RGCB-MSc/2019/1003)
Title of Dissertation: Identifying biomarkers for uterine receptivity diagnosis
Guide: Dr. Malini Laloraya,
Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram

Vyshna V V (RCB/RGCB-MSc/2019/1005)
Title of Dissertation: Altered hemodynamic shear stress induce endothelial to mesenchyme transition in patients with chronic venous diseases
Guide: Dr. Sumi S,
Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram

Sudhanand M (RCB/RGCB-MSc/2019/1006)
Title of Dissertation: Rv0919, a putative acetyltransferase from Mycobacterium tuberculosis, promotes acetylation of endogenous aminoacyl-tRNA
Guide: Dr. R Ajay Kumar,
Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram

P V Vinitha (RCB/RGCB-MSc/2019/1007)
Title of Dissertation: Structural and functional implications of the receptor binding domain mutations of the SARS- CoV-2 spike protein
Guide: Dr. Shijulal Nelson Sathi,
Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram

Sheri Vidya Rani (RCB/RGCB-MSc/2019/1008)
Title of Dissertation: Understanding the significance of NIHes-1 expression in neural stem cells during early development using NIHes-1 cKO mouse model
Guide: Dr. Jackson James,
Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram

Usman Ghani (RCB/RGCB-MSc/2019/1009)
Title of Dissertation: Paclitaxel entrapped PEG-PCL polymeric nanoparticle for breast cancer
Guide: Dr. G S Vinod Kumar,
Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram

Samrajni Banerjee (RCB/RGCB-MSc/2019/1010)
Title of Dissertation: To Study the interplay between BRCA1, β-hCG and ER-α in BRCA1 defective breast cancer
Guide: Dr. Priya Srinivas,
Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram

Sampurno Banerjee (RCB/RGCB-MSc/2019/1011)
Title of Dissertation: Involvement of one carbon metabolism genes in autism spectrum disorder in Kerala population
Guide: Dr. Moinak Banerjee,
Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram

Nidhin Murali Kookkal (RCB/RGCB-MSc/2019/1012)
Title of Dissertation: Identification of novel LncRNAs and its mechanism involved in Star-PAP mediated cardiac hypertrophy
Guide: Dr. Rakesh S Laishram,
Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram

Susi Mathews (RCB/RGCB-MSc/2019/1013)
Title of Dissertation: Lentiviral downregulation of α-fodrin and apoptosis studies in lung cancer
Guide: Dr. Suparna Sengupta,
Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram

J Irene Infancy (RCB/RGCB-MSc/2019/1014)
Title of Dissertation: Identification of targets for TAR DNA binding protein in germ cells
Guide: Dr. Pradeep Kumar G,
Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram

Athira Menon (RCB/RGCB-MSc/2019/1015)
Title of Dissertation: Identification and molecular validation of the key genes involved in miRNA machinery of black pepper (Piper nigrum L.) and their regulation during pathogen infection
Guide: Dr. E V Soniya,
Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram

Ahel Bhattacharyya (RCB/RGCB-MSc/2019/1016)
Title of Dissertation: Expression and purification of DNA binding domain of BRCA1
Guide: Dr. Priya Srinivas,
Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram

Sreeparna Nath (RCB/RGCB-MSc/2019/1017)
Title of Dissertation: Involvement of serotonin pathway genes in suicidal behaviour in Kerala population
Guide: Dr. Moinak Banerjee,
Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram

Priyanka Mehra (RCB/RGCB-MSc/2019/1018)
Title of Dissertation: Maternal hypercholesterolemia and gene expression patterns of LDL receptor and PCSK9 in rabbit placenta
Guide: Dr. Surya Ramachandran,
Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram

Aishwarya Suresh Kumar (RCB/RGCB-MSc/2019/1019)
Title of Dissertation: Cyclophilin A impairs efferocytosis in high glucose activated macrophages by upregulating the don't eat me signal, CD47
Guide: Dr. Surya Ramachandran,
Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram

Areeba Marib (RCB/RGCB-MSc/2019/1020)
Title of Dissertation: Isolation and proteomic characterization of mitochondria derived vesicles
Guide: Dr. Ananthalakshmy Sundararaman,
Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram

Arsha E P (RCB/RGCB-MSc/2019/1021)
Title of Dissertation: Characterisation of Star-PAP controlled micro RNAs that modulates oncogene expression in breast cancer cells
Guide: Dr. Rakesh S Laishram,
Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram

Lariza T R (RCB/RGCB-MSc/2019/1022)
Title of Dissertation: Understanding the Regulation of Actin Ring Formation around Mitochondria
Guide: Dr. Ananthalakshmy Sundararaman,
Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram

Fathima Hisana K Ferosh (RCB/RGCB-MSc/2019/1023)
Title of Dissertation: Characterization of Plasmodium falciparum virulent proteins
Guide: Dr. Arumugam Rajavelu,
Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram

Bijwe Manthan Shekhar (RCB/RGCB-MSc/2019/1024)
Title of Dissertation: Effects of lipoprotein (a) [Lp(a)] on cellular functions of human trophoblasts
Guide: Dr. Abdul Jaleel K.A.,
Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram

Krishnendu C L (RCB/RGCB-MSc/2019/1025)
Title of Dissertation: Investigations on mTOR activation mechanisms in mammalian cells
Guide: Dr. Umasankar P K,
Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram

Shifana C Sadiq (RCB/RGCB-MSc/2019/1026)
Title of Dissertation: Evaluation of uttroside B as a potent therapeutic lead against non-alcoholic fatty liver disease
Guide: Dr. Ruby John Anto,
Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram

Jiju P S (RCB/RGCB-MSc/2019/1027)
Title of Dissertation: Cloning and preliminary characterization of LONELY GUY gene in oleaginous alga Coccomyxa subellipsoidea
Guide: Dr. Saraswati Nayar,
Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram

Samir Nandi (RCB/RGCB-MSc/2019/1028)
Title of Dissertation: Biophysical characterization of transmembrane pores for nanobiotechnology
Guide: Dr. K R Mahendran,
Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram

Anjali Devarajan (RCB/RGCB-MSc/2019/1029)
Title of Dissertation: Optimization and characterization of unscheduled DNA synthesis assay in an endometrial cancer cell line, AN3CA
Guide: Dr. Ananda Mukherjee,
Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram

Anjana Vijayan (RCB/RGCB-MSc/2019/1030)
Title of Dissertation: Development and evaluation of touch DNA analysis protocol for use in crime scene investigation
Guide: Dr. E V Soniya,
Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram

Soorya S Kumar (RCB/RGCB-MSc/2019/1031)
Title of Dissertation: A study on the synergistic activity of a natural polyphenol with antibiotics against colistin resistant Klebsiella pneumoniae
Guide: Dr. Sabu Thomas,
Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram

Anshu (RCB/RGCB-MSc/2019/1032)
Title of Dissertation: Role of BCL-2 family proteins in mitophagy
Guide: Dr. T R Santhosh Kumar,
Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram

Peethala Revanth (RCB/RGCB-MSc/2019/1033)
Title of Dissertation: Screening of soil metagenomic library for cellulase enzyme
Guide: Dr. Hari Krishnan K,
Rajiv Gandhi Centre for Biotechnology, Thiruvananthapuram

Narwade Ajay Ashok (RCB/RGCB-MSc/2019/1034)
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