



## **REGIONAL CENTRE FOR BIOTECHNOLOGY**

### **Applications invited for**

### **PhD programmes on Biostatistics and Bioinformatics**

Regional Centre for Biotechnology (RCB) is an institution of national importance with the primary focus of providing world-class education and training, and to conduct innovative research at the interface of multiple disciplines to create high quality human resource in the area of biotechnology. RCB is offering interdisciplinary doctoral programmes on Biostatistics and Bioinformatics in partnership with other institutions by creating a virtual faculty pool. These programmes will be supported through a collaboration with the global pharmaceutical giant, GlaxoSmithKline Pharmaceuticals India Private Ltd. (GSK) and are subject to [RCB statutes, ordinances and regulations](#).

#### **Faculty for the Programme:**

In addition to RCB faculty members, the following mentors from the partner institutions, holding an adjunct faculty appointment at RCB, shall be the faculty for the program.

[Prof. Partha Pratim Majumder, Distinguished Professor, NIBMG, Kalyani](#)

[Prof. Saurabh Ghosh, Professor, ISI, Kolkata](#)

[Dr. Debasisa Mohanty, Staff Scientist VII, IIT, New Delhi](#)

[Dr. Analabha Basu, Associate Professor, NIBMG, Kalyani](#)

[Dr. Indranil Mukhopadhyay, Associate Professor, ISI, Kolkata](#)

[Dr. D. Sundar, Associate Professor, IITD, New Delhi](#)

[Dr. Samsiddhi Bhattacharjee, Assistant Professor, NIBMG, Kalyani](#)

#### **Eligibility for admission:**

For the program on Biostatistics, the candidate must possess a first-class (60% marks or more) Master's degree in Statistics or Mathematics. For the program on Bioinformatics, the candidate must have a first-class (60% marks or more) Master's degree in Computer Science or Bioinformatics. Those appearing in the final examination and having secured at least 60% marks on an average in all examinations held during the Master's degree programme are also eligible to apply. However, students will be permitted to join the program only on production of first-class Master's degree certificate.

#### **Selection procedure for admission and stipend:**

Eligible candidates need to appear for a nationally-open written examination at RCB. Shortlisted candidates will then be interviewed for the final selection. Selected students shall receive a consolidated stipend of Rs. 45000 per month for the first 2 years of the program and Rs. 50000 for the next three years. The stipend shall be subject to taxes as per Govt. of India rules. Continuation of stipend is subject to satisfactory progress made by the student to be evaluated annually. A total of four students may be selected annually to these programmes.

#### **Course work:**

**Biostatistics programme:** In the first year of the programme (divided into two semesters), the students will undergo rigorous coursework as per the schedule below. The courses comprise topics in basic Biology, advanced Statistics, Computer Programming and Applications, and Data Analyses. During the coursework, the candidates will spend the first six months at RCB for courses primarily on Biology, and the next six months at NIBMG for courses on Statistics. This will be followed by a

three-months statistical internship at GSK's Clinical development operations centre in Bengaluru. Each candidate will be assigned a thesis supervisor from among the members of the faculty for the program and work at the NIBMG. Please [click here](#) for the detailed course content.

| S. No.             | Course Title                            | Code    | Credits |
|--------------------|---|---------|---------|
| <b>Semester I</b>  |   |         |         |
| 1.                 | Introductory Biology                    | RCB 201 | 0       |
| 2.                 | Biochemistry                            | RCB 301 | 3       |
| 3.                 | Molecular Biology & Genetic Engineering | RCB 303 | 3       |
| 4.                 | Microbiology                            | RCB 304 | 3       |
| 5.                 | Research Methods                        | RCB 411 | 3       |
| 6.                 | Scientific Communication                | RCB 413 | 2       |
| <b>Semester II</b> |   |         |         |
| 1.                 | Data Driven Statistical Methods         | RCB 433 | 3       |
| 2.                 | Programming in R                        | RCB 434 | 3       |
| 3.                 | Computational Statistics                | RCB 435 | 3       |
| 4.                 | Survival Analysis & Clinical Trials     | RCB 436 | 3       |
| 5.                 | Human Genetics & Genomics               | RCB 437 | 3       |

**Bioinformatics program:** In the first year of the program, the students will undergo rigorous coursework as listed below. Additional courses in biological sciences may be prescribed for the computer science graduates. Each candidate will be assigned a thesis supervisor from among the members of the faculty for the program and work at RCB. Please [click here](#) for the detailed course content.

| No. | Course Title                                 | Code    | Credits |
|-----|--|---------|---------|
| 1.  | Biostatistics                                | RCB 316 | 2       |
| 2.  | Research Methods                             | RCB 411 | 3       |
| 3.  | Scientific Communication                     | RCB 413 | 2       |
| 4.  | Introduction to Drug Discovery & Development | THS 409 | 2       |

### **Application procedure:**

Interested students may apply [online](#) by paying the prescribed application fee of Rs. 1000. The last date of application is **20-July-2018**. Eligible candidates shall be invited for a written test and interview on 27th and/or 28th July 2018 at RCB in Faridabad. Selected students are required to join the program on August 1, 2018.

### **Fees:**

|                             |   |
|-----------------------------|---|
| Academic Administration Fee | Rs. 5000 per semester                           |
| Laboratory Fee              | Rs. 6000 per semester                           |
| Medical Fee                 | Rs. 3000 per semester                           |
| Student amenities Fee       | Rs. 1000 per semester                           |
| Thesis examination Fee      | Rs. 10000 (at the time of submission of thesis) |
| Caution money               | Rs. 5000 (at the time of admission)             |
| Hostel Room Fee             | Rs. 1200 per semester                           |
| Hostel Electricity charges  | As per the installed meter                      |
| Mess Charges                | As per actual                                   |

## Online Application Form

In case of any discrepancy/issue observed in filling up the form or payment related issues, the applicant may contact - [registrar@rcb.res.in](mailto:registrar@rcb.res.in), [icareezypay@icicibank.com](mailto:icareezypay@icicibank.com)