



# CENTRE FOR BIOTECHNOLOGY AND BIOINFORMATICS

## *INFORMATION BROCHURE*

Academic session 2016-17

DIBRUGARH UNIVERSITY

DIBRUGARH-786004

ASSAM

[www.dibru.ac.in](http://www.dibru.ac.in)

## ABOUT THE CENTRE

The **Centre for Biotechnology and Bioinformatics** offers Postgraduate programmes leading to MSc. and PhD in Biotechnology and Bioinformatics. The programmes are designed to generate competent human resources with comprehensive expertise in the broad fields of Biotechnology and Bioinformatics. The Centre aims to address individual, institutional and societal needs by dissemination of knowledge in the aforementioned areas and through engagement in active research.

The Centre has modern ICT-equipped classrooms, a well-stocked departmental library with extensive e-resources, a robust bioinformatics infrastructure facility and laboratories with requisite instrumentation for biotechnology, bioinformatics and computational biology research.



The core faculty members of the Centre are dynamic and are actively engaged in enriching the learning experience of the students through the regular academic regimen and by organizing intense interactive sessions. They are supported by Professors from the Allied Departments of the University who bring in the expertise of their own fields such as the Pharmaceutical Sciences, Life Sciences, Chemistry, Computer Sciences and Mathematical Sciences to extend unique perspectives to the students for addressing different areas of Biotechnology and Bioinformatics.

The syllabus for the MSc programme is in accordance with the guidelines of Department of Biotechnology, Government of India (DBT, GoI) and ensures elucidation of basic theoretical concepts; hands-on practical experience in the wet lab and *in silico* environment. The students are required to do small dissertations in the third and fourth semesters.

## RESEARCH FOCUS

The Centre for Biotechnology and Bioinformatics offers specialization in the Masters' program in **General Biotechnology**, **Pharmaceutical Biotechnology** and **Bioinformatics and Computational Biology** to encourage research on the unique biodiversity of the region.

The Centre has well-endowed funds for teaching and research. The Centre also organizes Workshops and Seminars on a regular basis for support of college teachers and research scholars and accepts applications from students from other Universities for short-term summer projects, etc. Visiting Professors and Fellows from other reputed National and International Universities and Institutes are also invited regularly to the Centre.

The Centre also has International students from foreign countries.



## MAJOR FACILITIES OF THE CENTRE:

1. Central Instrumentation Facility
2. Animal Cell Culture Lab
3. Microbiology Lab
4. Separate labs for students and research scholars
5. Classrooms with audio-visual teaching aids
6. Seminar hall with digital facility
7. Bioinformatics Infrastructure Facility
8. Well-stocked Departmental library along with subscription to more than 990 e-journals through DelCON.

## MAJOR EQUIPMENTS:

1. High Performance Liquid Chromatography (HPLC), Agilent, Germany
2. Thermocycler, BIORAD C100, USA
3. Gel Documentation System, BIORAD, USA
4. High-speed cooling centrifuge, Sigma, Germany
5. Rotary evaporator, IKA, Germany

6. UV-VIS Spectrophotometer, SHIMADZU, Japan
7. BSL-2, Labtech Daihan, South Korea
8. Bioreactor, Eppendorf, BIOFLO, Germany
9. Nucleic Acids and Protein Magnetic Bead Separator, Fischer Scientific, Finland
10. CO<sub>2</sub> Incubator, Eppendorf, Germany
11. Deep Freezers (-20°C, -80°C), Eppendorf, Germany
12. Inverted Microscope, Zeiss, Germany

\* The above facilities are created through:

1. Bioinformatics Infrastructure facility (BIF) sponsored by Department of Biotechnology, Govt. of India (DBT, GoI).
2. DBT-HRD project for strengthening, teaching, training and research in Biotechnology funded by DBT, GoI.
3. Institutional Biotech Hub (IBTHub) project funded by DBT, GoI.

For further details, please visit the webpage of the Centre for Biotechnology and Bioinformatics in the Dibrugarh University website by clicking on the following URL:

<http://www.dibru.ac.in/index.php/schools-of-studies/2014-12-25-08-59-12/centre-for-biotechnology-and-bioinformatics>