

**DEPARTMENT OF BIOTECHNOLOGY (GOVT. OF INDIA) SPONSORED**  
**BIOINFORMATICS INFRASTRUCTURE FACILITY**

The Department of Biotechnology (Govt. of India) sponsored Bioinformatics Infrastructure Facility at Bodoland University was sanctioned on 30.04.2015. The facility came into working on 24th September, 2015. As the mandate of the BIF is “**Biology teaching through Bioinformatics**” hence the center put more stress on Teaching-Learning and Research by conducting basic and advanced training programs for different category of learners.

In today's' era of omics- Genomics, Proteomics and Metabolomics the application of data analysis using bioinformatics has become a basic necessity for scientific community and in this context the center imparts hands-on training on various tools & resources for data driven computational analysis. During the period of 2015 to 2022, the center has organized more than 20 nos. of workshops on different topics of Bioinformatics for the M. Sc. students of Botany, Biotechnology and Zoology; M. Phil. and Ph. D. students of Life Science subjects and College and University teachers of Bodoland University and Gauhati University.

The Center is catering the need for laboratory facility of **Bioinformatics theory and practical classes for the Departments of Biotechnology, Botany and Zoology** of the University. Further; the **facility is utilized by the fourth semester M. Sc. students of the Department of Biotechnology for pursuing of Computational Biology** special paper. The BIF **offers six months traineeships and studentships** respectively to post M. Sc. and M. Sc. pursuing students of Life Sciences. In research front, the center is working on different Proteomics platform for drug discovery towards Haemoglobinopathy and Enzymopathy with data generated by molecular diagnostic labs on the diseases of the Department.

The Facilities in the Center includes the followings:

Hardware	Software
HP Server DL 360 GE with monitor-1 no	BIOVIA Discovery Studio
HP Server ML 10 with monitor-1 no	CRESSET
HP Z book 15v mobile work station -1	SPSS 26.0
HP desktop with monitor-20 nos.	AMBER 18.0
Printer Canon LBP 6230 DN-1 no	Modeller 9.2
Printer Canon IB4070 DN-1 no	EasyModeller
Xerox-MF6180DN-1 no	UCSF Chimera

Projector BENQ MX525 with Screen-1 no	YASARA
PA Lactern System Ahuja-1 no	AutoDock 4.2
Online UPS-16 KVA-1 no	ESET nod 32 anti virus
Internet Modem with NKN LAN connection	Windows Server Standard
Computer table-20 nos.	Server OS Client Access
Plastic Chair-20 nos.	VS Pro 2015 SNGL OLP NL
Executive Table-1 no.	SQL Server standard
Executive Chair-6 nos.	SQL Cal 2014
	Office STD 2016
	REDHAT Enterprise LINUX

Research Associates/ Trainees / Studentship holders under the Center are:

Sl. No.	Name	Duration	Position
1	Dr. Archana Kumari	2015-2017	RA, DBT-BIF Project
2	Dr. Himakshi Sarma	2018-2019	RA, DBT-BIF Project
3	Miss Noymi Basumatary	2016-2017	Traineeship, DBT-BIF Project
4	Mr. Ansula Gwra Brahma	2016-2017	Traineeship, DBT-BIF Project
5	Miss Hangma Mochahary	2016-2017	Traineeship, DBT-BIF Project
6	Miss Jitumoni Swargiary	2017-2018	Traineeship, DBT-BIF Project
7	Mr. Indra Bhusan Basumatary	2017-2018	Traineeship, DBT-BIF Project
8	Miss Rijumoni Daimari	2018-2019	Traineeship, DBT-BIF Project
9	Mr. Samudra Brahma	2018-2019	Traineeship, DBT-BIF Project
10	Miss Seema Khkhalary	2019-2020	Traineeship, DBT-BIF Project
11	Miss Trisha Sonowal	2019-2020	Traineeship, DBT-BIF Project
12	Mr. Bijoy Dahal	2016-2017	Studentship, DBT-BIF Project
13	Mr. Rajib Ratan Kashyap	2016-2017	Studentship, DBT-BIF Project
14	Miss Kapati Basumatary	2016-2017	Studentship, DBT-BIF Project
15	Mr. Subhomoy Sarkar	2017-2018	Studentship, DBT-BIF Project
16	Mr. Manaj Kumar Barman	2017-2018	Studentship, DBT-BIF Project
17	Mr. Priyobol Goyari	2018-2019	Studentship, DBT-BIF Project
18	Mr. Suraj Sharma	2018-2019	Studentship, DBT-BIF Project
19	Mr. Kunal Subba	2018-2019	Studentship, DBT-BIF Project
20	Mr. Mriganka Chakraborty	2019-2020	Studentship, DBT-BIF Project
21	Mr. Manas Thakuria	2019-2020	Studentship, DBT-BIF Project
22	Mr. Paban Kalita	2019-2020	Studentship, DBT-BIF Project
23	Mr. Barnali Roy	2019-2020	Studentship, DBT-BIF Project
24	Md. Afjal Ali	2020-2021	Studentship, DBT-BIF Project
25	Miss Swmkehrwi Basumatary	2020-2021	Studentship, DBT-BIF Project
26	Mr. Gholam Md.	2021-2022	Studentship, DBT-BIF Project
27	Miss Chandana Basumatary	2021-2022	Studentship, DBT-BIF Project

28	Miss Priyanka Das	2021-2022	Studentship, DBT-BIF Project
29	Miss Jingle Narzary	2021-2022	Studentship, DBT-BIF Project

The BIF has released 19 nos. of online lessons/ for the 10<sup>th</sup> standard students of Bodo Medium during the year 2017. The list of the **Audio-Visual Study Modules and URLs** are provided below:

VIDEO TITLE (in Bodo Language)	URL ADDRESS
Module 1 Transportation in Plants	<a href="https://www.youtube.com/0J9yHcY2ebY">https://www.youtube.com/0J9yHcY2ebY</a>
Module 2 Respiration in Plants	<a href="https://www.youtube.com/PAnzTC6Lp5A">https://www.youtube.com/PAnzTC6Lp5A</a>
Module 3 Animal Hormones	<a href="https://www.youtube.com/2J3xZ4fz-fc">https://www.youtube.com/2J3xZ4fz-fc</a>
Module 4 Sexual Reproduction in Flowering Plants	<a href="https://www.youtube.com/T0VmxXLOaEQ">https://www.youtube.com/T0VmxXLOaEQ</a>
Module 5 Human Brain	<a href="https://www.youtube.com/CMmLdoBLnOw">https://www.youtube.com/CMmLdoBLnOw</a>
Module 6 Heredity	<a href="https://www.youtube.com/8p430LBEtJk">https://www.youtube.com/8p430LBEtJk</a>
Module 7 Environment	<a href="https://www.youtube.com/CEAWHoE3YOc">https://www.youtube.com/CEAWHoE3YOc</a>
Module 8 Reflex Action	<a href="https://www.youtube.com/pnMiuN4eUe4">https://www.youtube.com/pnMiuN4eUe4</a>
Module 9 Evolution I	<a href="https://www.youtube.com/ezJXf7O2NCU">https://www.youtube.com/ezJXf7O2NCU</a>
Module 10 Reproduction in Human Beings	<a href="https://www.youtube.com/uM6uGk-tTjk">https://www.youtube.com/uM6uGk-tTjk</a>
Module 11 Nutrition in Plants in BODO	<a href="https://youtu.be/SGtDyoPtAdU">https://youtu.be/SGtDyoPtAdU</a>
Module 12 Excretion in Humans	<a href="https://www.youtube.com/Q9Mar-mWVKU">https://www.youtube.com/Q9Mar-mWVKU</a>
Module 13 Mechanism of Evolution	<a href="https://www.youtube.com/7z-wXcqmpAo">https://www.youtube.com/7z-wXcqmpAo</a>
Module 14 Sex Determination in Bodo	<a href="https://youtu.be/Jf5I5Ld6Sb0">https://youtu.be/Jf5I5Ld6Sb0</a>
Module 15 Control and Coordination in Plants in BODO	<a href="https://youtu.be/I9ACyV_QKIY">https://youtu.be/I9ACyV_QKIY</a>
Module 16 Nutrition in Human Beings	<a href="https://www.youtube.com/5kdazJp7oLM">https://www.youtube.com/5kdazJp7oLM</a>
Module 17 Respiration in Humans	<a href="https://www.youtube.com/MEM3pQLNEI">https://www.youtube.com/MEM3pQLNEI</a>
Module 18 Evolution II in BODO	<a href="https://youtu.be/BKJC7g7sbII">https://youtu.be/BKJC7g7sbII</a>
Module 19 Transportation in Human in BODO	<a href="https://youtu.be/1r8EQC1F7BM">https://youtu.be/1r8EQC1F7BM</a>

The Center **welcomes proposals from future researchers for Post Doctoral and Ph. D. programs and internships for M. Sc. students** from India and abroad. The highlight of the center is its application oriented research for diagnosis and drug development for patient management in monogenic disorders particularly Haemoglobinopathies and Enzymopathies. The highlight of the center is its active collaboration with Clinicians, Pathologists, Molecular Biologists, Bioinformaticians, Computational Biologists from different leading intuitions of India. The center welcomes collaborative works from the researchers from India and abroad.

A few photographs of already conducted workshops/ training programs are provide below as Annexure-I

ANNEXURE -1

