

6 Months Internship Program in the Field of Molecular Biology and Molecular Diagnostics under the Department of Health Research (DHR) Sponsored Training Programme entitled “Molecular Biology Applications: Research and Diagnostic Techniques”

The Laboratory of Molecular Virology and Oncology, under the Department of Bioengineering and Technology, Gauhati University under the supervision of Dr. Subhash Medhi is dedicated to exploring the molecular mechanisms underlying viral infections and cancer, focusing on discovering novel therapeutic strategies and diagnostic tools. The research integrates multidisciplinary approaches from molecular biology, virology, oncology, and bioengineering to unravel complex biological processes and contribute to the development of new treatments for viral diseases and cancer. Under Dr. Medhi’s guidance, the lab actively collaborates with national and international institutions, fostering innovation and excellence in biomedical research.

The internship will be given on priority research areas of this region which is currently been undertaken in our laboratory, i.e.

Liver Disease: The host lab has been working to study the intent to correlate the association of genetic variant of alcohol detoxifying pathway genes along with the cytokine production in different forms of liver disease i.e. ALD and NAFLD.

Viral Hepatitis: Apart from detection of Viral hepatitis, the host lab has also been working on the association of Vitamin D Receptor with Hepatitis B and correlation of TLR with vertical transmission of Hepatitis B. The lab is also working on prevalence of Resistance Associated Substitutions in Hepatitis C patients of North Eastern area.

Virus Detection: Hepatitis and HIV are familiar diseases in India, and determination of viruses simultaneously through inexpensive technology can provide the key foundation for treatment. In the recent times, optical detection method has gained much more attention compared to other sophisticated techniques due to its low cost, simplicity, and visual detection by naked eyes. The host lab has also adopted the colorimetric technique for the selective detection of the HBV, HCV and HIV simultaneously. Boron Nitride Quantum Dots (BNQD) were synthesized and established as nanozyme by TMB oxidation under various parameters. These nanozymes are currently being conjugated with antibodies for specific detection.

Who Can Apply

- Faculty and Scientists associated in molecular diagnosis-based research in Medical College/ Institute/ University.
- UG, PG and Research Scholar in the field of Life Science/Biotechnology.
- DMLT/BMLT students.

Application Procedure:

1. Applicants are required to submit their resumes detailing their educational background, relevant coursework, and any prior research or laboratory experience in molecular biology. The applicant should forward their application from their administrative head of the Institute.
2. Applicants will also be required to submit letters of recommendation from professors, researchers, or professionals from their respective Institute/ College / University.
3. Applicants will also be required to provide a statement of purpose or a cover letter explaining their interest in the internship, their career goals, and how the internship aligns with their academic and professional aspirations.

Applicants are required to upload the necessary documents in the google link mentioned below

<https://forms.gle/mWSez9gjQkparrCOA>

Contact Details

E. Mail: subhashmedhi@gauhati.ac.in and moleculardiagnosicsworkshop@gmail.com

For any query, please contact:

1. Kalpajit Dutta, Ph. No.: 7099260323
2. Deepak Upadhaya, Ph. No.: 9540214674

Application Fee: NIL

Selection of Candidates:

A screening committee will finalize the list of selected applicants who will be allowed to register in the internship program.

Lodging & Food:

Lodging & Fooding for the selected candidates need to be arranged at their own.

Last Date of Application:

Last date of application is **30th November 2024**. List of the selected candidates will be intimated through email or over phone.



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