# Hands-on Training Program on Isolation of Genomic DNA

Three-Day Hands-on Training Program on Isolation of Genomic DNA

Organized by: DBT-NER Institutional level Biotech Hub, Pettigrew College, Ukhrul, Manipur (Phase II)

Dates: August 5th-7th, 2025

Venue: Biotech Hub, Pettigrew College, Ukhrul

# Objective

The Department of Biotechnology (NER Institutional Level Biotech Hub, Phase II) at Pettigrew College, Ukhrul, organized a three-day intensive hands-on training program on "Isolation of Genomic DNA" from August 5th to 7th, 2025. The training aimed to strengthen practical competencies in molecular biology by providing participants with direct exposure to genomic DNA extraction techniques from various biological sources. This initiative forms part of the Biotech Hub's objective to build local capacity in molecular research methodologies and promote scientific literacy among students and faculty.

#### **Resource Person**

Miss Ngathingwon Kasar, Assistant Professor, Department of Botany,

Pettigrew College, Ukhrul.

She served as the technical lead and facilitator for the training, delivering both theoretical sessions and guiding laboratory practicals.

# **Participants**

A total of 65 participants attended the program, including 53 undergraduate students from the Departments of Botany, Chemistry, and Zoology 12 faculty members, who engaged actively in both technical discussions and lab-based sessions.

#### **Outcomes**

Participants successfully extracted high-quality genomic DNA suitable for downstream molecular applications.

Enhanced technical proficiency in standard molecular biology workflows.

Strengthened confidence in handling instrumentation (micropipettes, centrifuges).

Encouraged critical thinking and peer learning through interactive problem-solving.

### **Feedback from Participants**

Feedback forms indicated that over 80% of participants found the training useful and well-organized, with special appreciation for the practical demonstrations and interactive sessions.

# **Acknowledgments**

We express our sincere gratitude to the Department of Biotechnology (DBT), Ministry of Science & Technology (NER Programme), Government of India, New Delhi, for financial support under the DBT-NER Biotech Hub scheme.

We also extend heartfelt thanks to the Principal, Pettigrew College, and Heads of Departments of Botany, Chemistry, and Zoology for their administrative support.

Special acknowledgment is due to the technical staff and student volunteers for their contribution to the smooth execution of the training program.

# Conclusion

The three-day hands-on training program successfully fulfilled its academic and technical objectives. It provided a robust foundation for genomic DNA isolation procedures and promoted a research-oriented mindset among participants. This initiative is expected to catalyze further interest in molecular biology and genetic research among students and faculty in the region.

# **Photographs**





























