

# WORKSHOP ON BASIC MOLECULAR BIOLOGY TECHNIQUES

(October 4-9, 2021)



भा.कृ.अनु.प.-भारतीय कृषि जैव प्रौद्योगिकी संस्थान, रांची  
ICAR-INDIAN INSTITUTE OF AGRICULTURAL  
BIOTECHNOLOGY, RANCHI  
(Deemed to be University)

**Preface:** Rapid advancements in the field of molecular biology have stimulated research and significantly impacted progress in all the areas of biological sciences. Thus, a basic understanding of the molecular biology tools along with hands-on skill among the research scholars and students of various streams of biological sciences is critical. Hence, the main objective of the workshop is to acquaint the target group with a focused and comprehensive hands-on training on basic molecular biology techniques. The training will consist of sessions of scientific lectures, and practical sessions to impart thorough understanding about the molecular tools and techniques. The participants shall be encouraged to discuss about their ongoing research work with the trainers, which will be helpful to them.

### **Scientific Organisers:**

**Course Director:** Dr. Anil K Singh, Pr. Scientist & Head-SGE

**Course Coordinators:** Dr. Soumen Naskar & Dr. Sujit K Bishi, Sr. Scientist

**Course Outline:** The workshop will include theory as well as hands-on lab experiments.

**Theory sessions:** Applications of Molecular Biology/Genetic Engineering in biological science research, Basics of Molecular Biology techniques and basic bioinformatics, etc.

**Experimental sessions:** Genomic DNA isolation, RNA isolation, cDNA synthesis, PCR, gene cloning, competent cell preparation and transformation, colony PCR, plasmid DNA isolation, restriction digestion of DNA and recombinant plasmid, etc.

**Target group:** Candidates pursuing Masters (2<sup>nd</sup> year) or Ph.D. in any branch of Biological Sciences in universities/institutes in Ranchi and nearby areas.

**Training outcome:** The candidates will feel confident in performing routine molecular biology techniques by him/her-self.

**Trainers:** The experienced scientists, post-doctoral fellows, and research scholars of the Institute.

**No. of participants:** A total of 15 candidates will be selected. Selection of the candidates will be broad-based, inclusive and responsive. Decision of the Institute will be final.

**Registration:** Scan the filled-up and duly forwarded application form, and mail it to [training.iiabranchi@gmail.com](mailto:training.iiabranchi@gmail.com) by **30 September 2021**. No registration fee will be charged.

**Accommodation & Transport:** The candidate has to arrange for his/her own accommodation. The Institute shall provide fixed-point local transport facility (Kantatoli/Firayalal Chowk ↔ Garhkhatanga).

**Workshop Location:** ICAR-IIAB, Farm B, Garhkhatanga, on Ranchi Ring Road, Near Biodiversity Park, Ranchi – 834003, Jharkhand.

**Workshop on Basic Molecular Biology Techniques**

**(October 4-9, 2021)**

**Application form**

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- 1. Name: .....
- 2. Affiliation: .....
- 3. Address: .....  
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- 4. E-mail.....Mobile No.....
- 5. Educational Qualification (Graduation onwards):

<b>*Degree (completed/ pursuing)</b>	<b>College/University</b>	<b>Year</b>	<b>Subject</b>	<b>Division</b>

\* Mention the semester/year, if pursuing the degree

- 6. M.Sc./Ph.D. Research work planned/being carried out in brief:  
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- 7. How the training will help in your research work?  
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**Signature of the Applicant**  
**Date:**

**Signature of Guide/HoD/Head of  
the Institute with Stamp**  
**Date:**