



**ICMR - National Institute for Research in Environmental Health (NIREH)
Bhopal Bypass Road, Bhauri, Bhopal - 462 030 (MP), India**

**IXth Summer Internship Programme in Environmental Epigenetics
(12th to 28th June 2024)**

The Summer Internship Programme in Environmental Epigenetics is a 15-days hands-on training course offered by ICMR-NIREH, Bhopal. Participants of this programme will experience the excitement of working in a unique academic ambience apt for cutting-edge scientific discourse. During this programme greater emphasis will be laid on the fundamental wet-lab tools and techniques relevant to environmental epigenetics.

Course Content: Basic and advanced techniques pertaining to the field of environmental epigenetics shall be covered.

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| 1) Isolation of DNA, RNA & Proteins | 11) Histone Methylation Arrays |
| 2) PCR and Reverse Transcriptase PCR | 12) MicroRNA Characterization |
| 3) Agarose Gel Electrophoresis | 13) lncRNA Isolation & Identification |
| 4) Real Time PCR | 14) RNA Methylation Analysis |
| 5) Multiplex RT-RT PCR | 15) mtDNA Methylation Analysis |
| 6) SDS-PAGE & Western Blot Analysis | 16) Multi-photon Image Analysis |
| 7) Double Sandwich ELISA | 17) Nanocytometry Analysis |
| 8) mtDNA Fragmentomics and Mutation Analysis | 18) ddPCR Based Assays |
| 9) Mitochondrial ISR Analysis | 19) Principles of Bioethics |
| 10) Methylation-Specific PCR | 20) Biosafety and GLP Practices |
| | 21) Flow Cytometric Assays |

Eligibility: Students pursuing graduate, post-graduate and doctoral courses are encouraged to apply.

Seats: Only **20** students will be admitted in this course on "**First Come First Serve**" basis.

Application Procedure: Applications should be submitted through Google Form (<https://bit.ly/4bk2WzX>) on or before **May 30, 2024**. Participants must make their own arrangements for food and travel. Accommodation on sharing basis is available in Institute's guest house on payment basis.

Registration Fees: Rs. 10000/= only (excluding food, travel, and accommodation charges).

For any further queries, please contact:

COURSE COORDINATOR - SIPEE 2024

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