



ICAR-CENTRAL INSTITUTE OF BRACKISHWATER AQUACULTURE
भा कृ अनु प - केंद्रीय खारा जलजीव पालन अनुसंधान संस्थान

RNA-Seq data analysis: *Hands-on training*

8th – 10th June, 2022

COURSE CONTENTS

- Introduction to Linux environment
- Downloading RNA-Seq datasets from GenBank
- Exposure to Quality control of Illumina RNA-Seq datasets
- Genome-guided analyses with RNA-seq data to establish differentially expressed transcripts
- *De novo* assembly of transcriptome
- Discovery of unigenes using RNA-Seq datasets
- Detailed annotation (homology-based, InterProscan, EggNOG mapping, enzyme code mapping and KEGG pathway) of transcripts

INTRODUCTION

RNA sequence data is being extensively used in functional genomics studies with applications to establishment of unigenes or to identify a set of candidate genes linked to a trait. Computational skills on analyses of RNA-Seq datasets are slowly becoming mandatory knowledge for biologists as they allow study of entire transcriptome in one go. In this context, the current training program gives a complete hands on experience on analyses of RNA-Seq datasets and drawing functional inferences out of it. The institute has a High performance computing facility installed with several open source tools and few paid tools like Omicsbox. **Interested candidates may apply in the prescribed format on or before 5th June 2022.**

HOW TO APPLY

Young scientists, faculties, government officials, technical officers, research associates and scholars with interest to learn/improve bioinformatics skills for RNA-Seq data analysis can apply for the course. The interested candidates can apply by sending the filled-in application form in the given format through proper channel to vinaya.katneni@icar.gov.in. Last date of receiving the application is 5th June, 2022. The selected candidates for the course will be intimated by e-mail.

TRAVEL

The expenditure on travel has to be borne by the candidate.

COURSE FEE

- A fee of Rs. 4,130/- (including GST) per candidate will be charged for the course. The fee includes course fee, lunch and refreshments.

PAYMENT

- Digitally to the bank account-
- ICAR Unit- CIBA
- **Account No. 10013240762 (Current A/c)**
- IFSC Code: SBIN0005797

ACCOMMODATION

- Limited accommodation would be provided on nominal charges at the institute trainees' hostel.

Patron

K. P. Jithendran

Convener

M.S. Shekhar

Course Directors

J. Ashok Kumar

Vinaya Kumar K.

Co-Course Directors

Sherly Tomy

B. Sivamani

J. Raymond Jani Angel

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ICAR CIBA

Application form

Name (in block letters)	
Designation :	
Date of Birth :	
Gender :	
Present employer and address :	
Address for communication (including tel/ mob/fax & email) :	
Area of research & Professional experience :	
It is certified that the information furnished above are true to the best of my knowledge	
Date: Place:	Signature of the Applicant
Recommendation of forwarding authority if any	
Signature of competent authority	