



Online Training on Decoding Genomics & Proteomics data using Machine Learning Approach

February 21-27, 2024

Sponsoring Project

DBT-Establishment of Centre for Bioinformatics and Computational Biology in Agriculture-BIC

Submission Deadline : 15th February, 2024

Eligibility: Scientific/ Technical/ Contractual Research Staff
working in NARES

Course Director: Dr. Girish K Jha
Course Coordinators: Dr. Sunil Kumar
Mr. Sanjeev Kumar
Dr. Sarika Sahu

Division of Agricultural Bioinformatics
ICAR-Indian Agricultural Statistics Research Institute
Library Avenue, PUSA, New Delhi - 110012

<http://cabgrid.res.in/cabin/>; <https://iasri.icar.gov.in/>

Super-Computing Facility (ASHOKA)

In the last decade, Institute has established a high performance computing facility ASHOKA with upgraded clusters of 30 node linux, 3 node GP-GPU, 16 node Windows cluster and one SMP server. This facility is accessible to researchers working in the area of agricultural bioinformatics through National Agricultural Bio-computing portal. As per requirement of the scientists from NARES institutions, number of important bioinformatics software have been installed.

Introduction:

Bioinformatics is an interdisciplinary field comprising of biology, statistics and computer sciences. During the past decades enormous sequence data has been generated in biological sciences, firstly with the onset of sequencing the genomes of living organisms and, secondly, rapid application of high throughput experimental techniques in laboratory research. Application of various bioinformatics tools in biological research enables storage, retrieval, analysis, annotation and visualization of results and promotes better understanding of biological systems in their entirety. This will further lead to development of tools and techniques for sustainable agriculture. This training mainly consists of modules related to Concepts of Machine learning and its Applications in various Genomics, Transcriptomics, Metagenomics and Proteomics data.

About IASRI:

The Institute ICAR-IASRI started its journey as a Statistical Section in 1930 in then Imperial Council of Agricultural Research and has grown to a premier institute of relevance to conduct research and to develop trained manpower for Statistical Sciences (Statistics, Computer Applications, and Bioinformatics) and their judicious fusion in agricultural sciences for enriching quality agricultural research and informed policy decision making. The Institute also conducts M.Sc. and Ph.D. degree courses in Agricultural Statistics, Computer Applications and Bioinformatics in collaboration with the Graduate School, ICAR-IARI, New Delhi. The Institute also conducts postgraduate and in-service teaching, customized and sponsored training courses in Agricultural Statistics and Informatics at National and International level so as to be a leading Centre of excellence in Human Resource Development.

ICAR-IASRI provides advisory and consultancy services for strengthening the National Agricultural Research and Education System (NARES) and undertaking sponsored research and consultancy for National and International organizations. ICAR-IASRI also provides methodological support in strengthening National Agricultural Statistics System (NASS) and has established linkages with State Departments of Agriculture and allied fields, other Research Institutions, and Industry etc. It leads in development of Agricultural Knowledge Management Systems for NARES.

There are six divisions in the Institute and the Institute is equipped with the modern facilities that include:

Computing facilities: The Institute has several computer laboratories well equipped with latest hardware and software packages along with modern teaching aids.

Library: The library has rich collection of books and journals on Statistics, Computer Science, Bioinformatics and other related disciplines.

General Information:

The training will be conducted through virtual mode using ZOOM platform. Participants are requested to join only through Laptop/ Desktop.



Objectives:

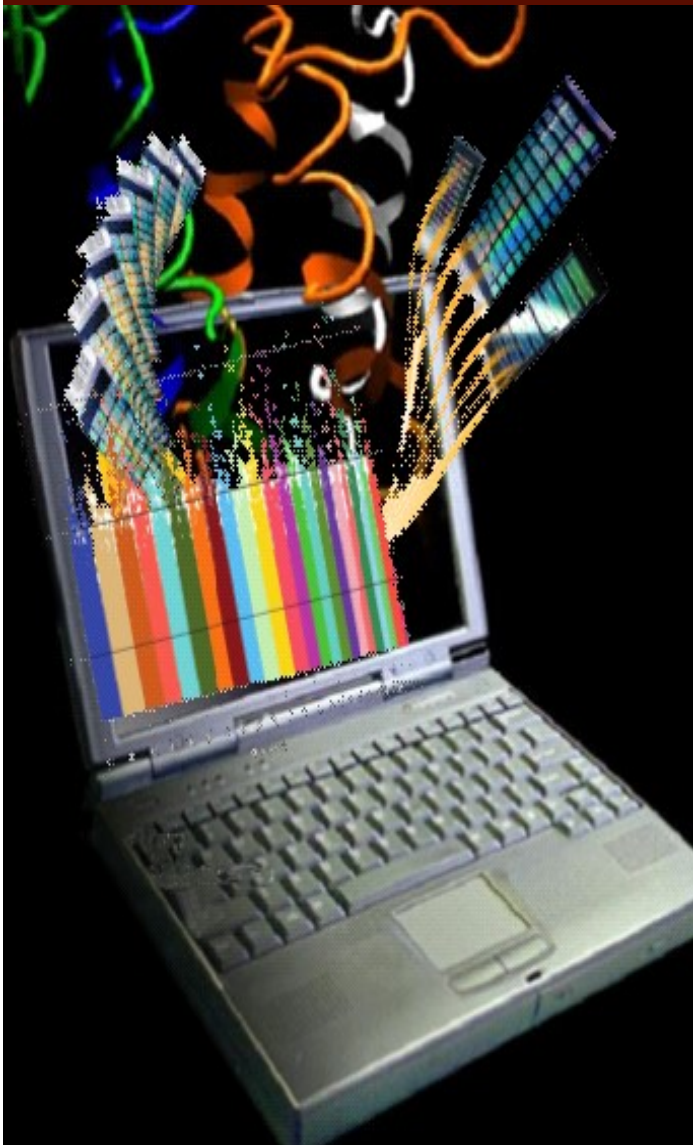
- ◆ To deliver the concepts and applications of Machine learning techniques in Genomics & Proteomics data.
- ◆ To illustrate the above through lectures, demonstrations and hands on sessions.

Modules of the Course

- Concepts of Machine learning
- Applications in various genomics and transcriptomics data.
- Application in Metagenomics data
- Application in Proteomics data

Eligibility:

- Should be a scientific/ technical/ contractual research staff in the National Agricultural Research and Education System (ICAR Institutes, Agricultural Universities)
- Desirable: Working knowledge of computer and Internet



Nominations:

The application for participation must be filled online through the link <http://surl.li/pwyki>. The scanned copy of the filled application form as per given format, approved by the competent authority must be emailed to trp.dbt@gmail.com on or before 15th February 2024.

Note: Both online and scanned copy of application form are compulsory.

Application Form for Nomination to Training Programme

1.	Name (in block letters)	:
2.	Designation	:
3.	Discipline	:
4.	Age (in years)	:
5.	Gender (Male/Female)	:
6.	Address for Correspondence	:
7.	E-mail Address	:
8.	Telephone Number (Mobile)	:
9.	Educational Qualifications	:
10.	Present Employer's Address	:
11.	Date of Employment	:

Signature of the Applicant with Date

It is certified that information furnished above is correct.

Signature of PI / Recommending authority with date and seal

Please send the duly filled, signed and approved application before last date of nomination.

Last date for receipt of nomination: 15th February 2024

Intimation to selected candidates: 19^h February 2024

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