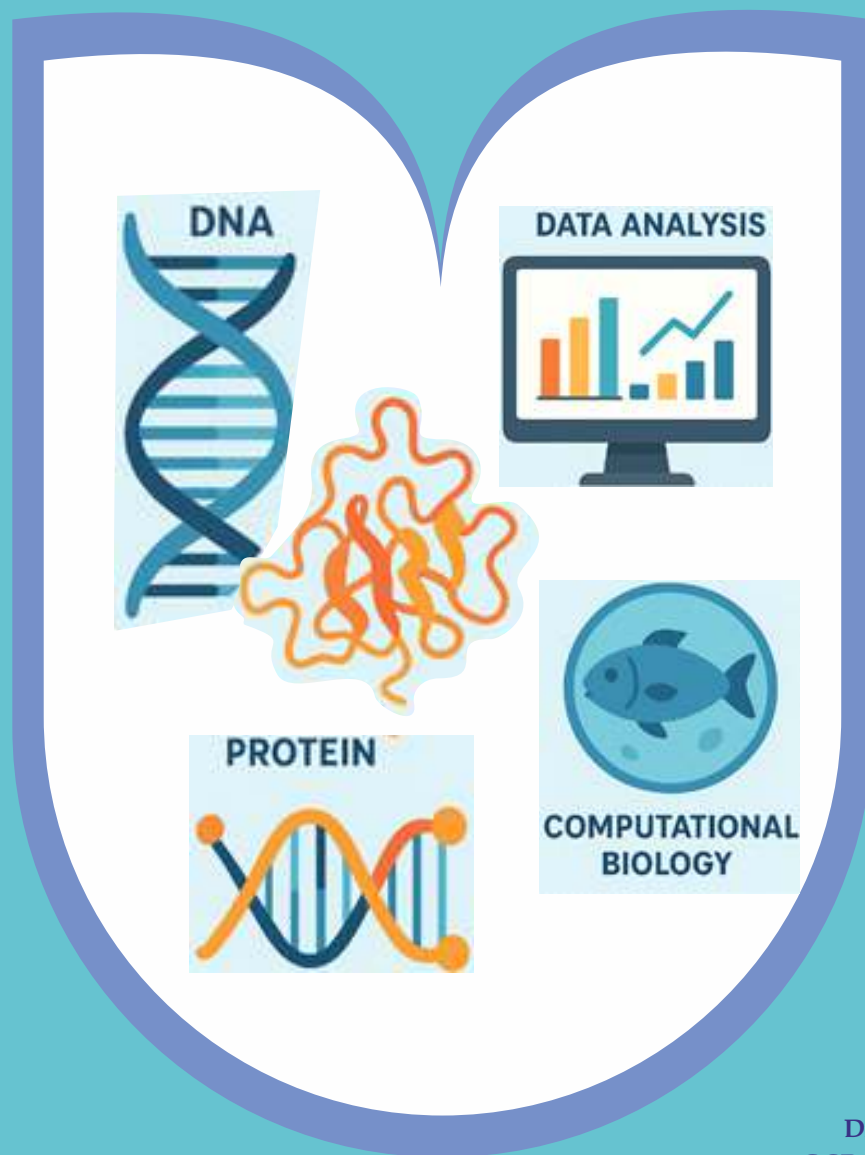


Hands-on Training Course on *"Basic Bioinformatics: Tools and Applications"*

January 05-09, 2026



Course Convener
Dr. Kajal Chakraborty
Director, ICAR-NBFGR

Course Director
Dr. Murali S., Scientist
GCR Division, ICAR-NBFGR

Date to remember
Last date for submission of Application
27 December, 2025

Course Coordinators
Dr. Ravindra Kumar, Principal Scientist & Head
Dr. Basdeo Kushwaha, Principal Scientist
GCR Division, ICAR-NBFGR



ICAR - National Bureau of Fish Genetic Resources, Lucknow

Dear Colleagues,

Bioinformatics is an interdisciplinary field involving molecular biology, genetics, computer science, mathematics and statistics. Rapid advancements in genomic and sequencing technologies, coupled with increased computational power, have transformed biological research. This field has not only helped in genome annotation, gene discovery and evolutionary studies, but is also essential for understanding various biological processes, like growth response, thermal acclimation, abiotic and biotic stress responses, and to understand the development and function of different cell types that make up complex tissues.

Course Objectives:

The proposed training is planned to develop a trained workforce in the area of bioinformatics through hands-on experience and practical insights into sequence alignment, NGS data handling and analysis.

Course content:

- Information retrieval from biological databases
- Linux commands and syntax
- BLAST command usage
- Sequence data formats and conversion
- Sequence alignment
- Phylogenetic analysis
- Basics of R programming
- NGS data pre-processing and quality check
- RNA-seq analysis
- Annotation

About ICAR-NBFGR:

ICAR-National Bureau of Fish Genetic Resources (NBFGR) was established in 1983 under the aegis of the Indian Council of Agricultural Research (ICAR) for providing research inputs for sustainable management and conservation of fish germplasm resources. It has emerged as a Center of Excellence in cataloging and conserving aquatic bio-resources of the country. It has developed modern facilities, multidimensional strategies, and technological capabilities to achieve its mandate related to genomics, conservation, health, genotyping, database development, registration of aquatic germplasm, gene banking, and evaluation of endangered as well as exotic fish species.

Hands-on Training Course on “Basic Bioinformatics: Tools and Applications”

ICAR-NBFGR is one of the leading institutes in the field of genomics, transcriptomics research and their bioinformatic applications in the fisheries sector and have sequenced whole genome of many fish species. The institute is leading an ICAR-Consortium Research Project on Genomics and is also one of the domain partners in Network Project for Agricultural Bioinformatics and Computational Biology, an ICAR Scheme project implemented through ICAR-IASRI, New Delhi. The institute is also part of DBT funded Project- 'NNP (Agri-Genomic Repository Analytical System) of ICAR-Indian Agricultural Statistics Research Institute, New Delhi'. One of the objectives of this project is to organize training programmes on bioinformatics to develop trained manpower in the area, particularly NGS data analysis. Therefore, a Hands-on Training Course on “Basic Bioinformatics: Tools and Applications” has been scheduled at ICAR-NBFGR, Lucknow.



Eligibility:

Faculty members, research scholars/ fellows, student (in permanent or temporary positions) associated with such works or students in fisheries/ genetics/ biotechnology/ environmental sciences/ zoology / life sciences.

Intake capacity: 20 participants

Fee: There is no registration fee as the training is conducted under the DBT-sponsored project.

Working lunch and light refreshments will be provided during the training period. No travel or daily allowance will be provided.

Accommodation: The candidate will be provided accommodation in the Institute's guest house on payment of Rs. 250/- per day, if available; however, hotel accommodation can be arranged on request by the participants on payment basis.

Application: Interested persons can apply on the attached prescribed format (Registration Form) and send to the Course Director at the Institute address. Selected candidates will be informed through E-mail. For enquiry, write to: murali4543@gmail.com (Mob: 7893359601)

**About Lucknow**

Lucknow, the capital city of Uttar Pradesh historically known as the Awadh region, is believed to begin after Lord Ram of Ayodhya, the hero of the Ramayana, ordered his devoted brother Lakshman to establish a town at the present site of 'Lakshman tila'. Therefore, people say that the original name of Lucknow was 'Lakshmanpuri', and slowly the name 'Lakshmanpuri' became 'Lakhnau' and then named 'Lucknow' by the British. It is situated on the bank of river Gomti.

Lucknow's rise to growth and fame begins with its elevation to a capital city. The architectural contributions of the Awadh rulers, many paintings of whom are maintained at the Art Gallery today, include numerous palaces. Of the monuments standing today, the Bada Imambara, the Chhota Imambara, and the Roomi Darwaza are notable examples.

Today, Lucknow is a vibrant city with a perfect blend of the ancient with the modern, as many glitzy shopping arcades coexist with the old monuments. Lucknow has emerged as a "Science City", as numerous national laboratories, premier medical colleges, universities along with engineering and management institute exists here. The greatest attraction of Lucknow, where the past jostles with the present, is its unique ability to achieve harmony.

Lucknow, the golden city of the east retains an old world charm that fascinates one and all. Regarded as one of the finest cities of India, Lucknow emanates a culture that combines emotional warmth, a high degree of sophistication, courtesy and a love for gracious living. This sublime cultural richness famous as 'Lucknowi Tehzeeb' blends the cultures of several communities living side by side for centuries, sharing similar interests, speaking a common language.

The climate during January will be around 10-15°C. The campus of ICAR-NBFGR is located around 8 km away from Lucknow (known as Charbagh) main railway station and 12 km from Ch. Charan Singh International Airport, Amausi, and both of which are well connected with pre-paid Auto/ Taxi services.

REGISTRATION FORM

Hands-on Training Course on *“Basic Bioinformatics: Tools and Applications”*

January 05-09 2026

ICAR-National Bureau of Fish Genetic Resources, Lucknow

Name (Dr./ Mr./ Ms./ Mrs.) :.....
Designation :.....
Date of Birth :.....
Educational Qualification :.....
Professional Experience :.....
Present area of work :.....
Mailing Address :.....
E-Mail
Phone: (O) (R) (M)

Place:

Date:

(Signature of candidate)

Please send:

- Duly filled REGISTRATION FORM by email to:
The Course Director, ICAR-NBFGR at “murali4543@gmail.com”
- Travel plan by email to:
The Course Director at: murali4543@gmail.com

With the subject as: Hands-on Training Course on 'Basic Bioinformatics: Tools and Applications' at ICAR-NBFGR, Lucknow, during January 05-09, 2026.