

**APPLICATION FORM**

**Sensitisation Training  
on  
“Bioinformatics Resources and Tools for  
Agricultural Research”**

1. Full Name: \_\_\_\_\_

2. Designation: \_\_\_\_\_

3. Sex (M/F):

4. Date of birth        
(dd-mm-yy)

5. Present employer and address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Phone (off.) \_\_\_\_\_  
Phone (Res.) \_\_\_\_\_  
Fax \_\_\_\_\_  
E-mail \_\_\_\_\_

6. Teaching/research/professional experience (mention post held during last 5 years and number of publications).

7. Mention if you have participated in any Research Seminar/ summer/ Winter School/ Short term course etc. during the previous five years under ICAR and other organizations.

8. Academic records

Degree	Subject/ Discipline	Year	Class/ Div	University/ Institution
Ph.D.				
Master degree				
Bachelor degree				

9. Working knowledge of Operating System  
Windows/ Linux / Unix/ Mac OS/ Sun OS  
Others \_\_\_\_\_

10. Bioinformatics related Experience

11. Expectation from training

Date: \_\_\_\_\_

Place: \_\_\_\_\_ Signature of the applicant

12. Recommendation of forwarding Institution:

Signature and designation of the sponsoring  
authority with seal

Date: \_\_\_\_\_

Place: \_\_\_\_\_

**ANNOUNCEMENT**

**Training Programme**

**on**

**Bioinformatics Resources and Tools for  
Agricultural Research**

**Under**

**National Agricultural Bioinformatics Grid  
24 - 29 January, 2011**

**Course Co-ordinator**

**S. B. Lal**

sblall@iasri.res.in



**Organized by**

**Centre for Agricultural Bioinformatics (CABin)  
Indian Agricultural Statistics Research Institute  
Library Avenue, New Delhi-110012**

## BACKGROUND

Bioinformatics aims to bring biologist, statisticians and computer scientists together from the point of view of system biology approach to understand the biological phenomenon through innovative applications of statistics and computer science. It entails the creation and advancement of databases, algorithms, computational and statistical techniques, and theory to solve formal and practical problems arising from the management and analysis of biological data. The field of Bioinformatics focuses on developing and applying computationally intensive techniques (e.g., pattern recognition, data mining, machine learning algorithms, and visualization) which gives the opportunity to quickly and efficiently study heap of genomic information, chemical structure and other biological data. It uses the biological information to enhance the standard of life for mankind. Bioinformatics has already started showing its profound impact on agricultural research and developments.

National Agricultural Bioinformatics Grid (NABG) will help in developing databases, data warehouse, software and tools, algorithms, genome browsers and high-end computational facilities through systematic and integrated approach in the field of agricultural bioinformatics.

The aim of this training program would be to provide knowledge to participants in analyzing the biological information by understanding the bioinformatics software and tools. The training emphasizes on sequence alignment, phylogeny and applications of bioinformatics in field of crop sciences, animal sciences, microbes studies and entomology. The course is practical oriented. It employs a combination of lectures and hands-on exercises.

## Objectives

- To familiarize the participants with the strategies and scope of bioinformatics applications.
- To give demonstration and hands on session on the various bioinformatics software and tools.

## Eligibility

- Master's Degree in any discipline of Agricultural/ Allied Sciences.
- Working in a position not below the rank of Scientist/Assistant Professor.
- Working knowledge of windows, RDBMS and internet.

## Course Contents

**Module 1:** Basics of Biomolecules, Concepts of Molecular Biology, Introduction to Bioinformatics

**Module 2:** Nucleotide Databases, Protein Databases, Tool/Softwares in Bioinformatics.

**Module 3:** Sequence Analysis, Pair-wise Alignment, Multiple Sequence Alignment & Phylogeny, Proteins: Sequence to Structure, Agricultural Bioinformatics, Application of Bioinformatics in Microbiology, Application of Bioinformatics in Animal Sciences, Application of Bioinformatics in Entomology, Recent Advances in Bioinformatics

## Venue

Centre for Agricultural Bioinformatics (CABin)  
Indian Agricultural Statistics Research Institute (IASRI),  
Library Avenue, Pusa, New Delhi 110 012

**Duration: 24 to 29 January, 2011**

## About IASRI

The IASRI established in 1959 is mainly responsible for promoting and conducting research and imparting education/training in the field of Agricultural Statistics and Computer Applications. With the passage of time the Institute has equipped itself with the following modern facilities to meet the requirements in the changed scenario:

- *Computing Facilities:* Division of Computer Applications has two computer laboratories and one Statistical Computing Laboratory well equipped with

modern teaching aids and systems with latest hardware and software packages.

- *Library:* The Institute has one fully furnished computerized library having important and latest books and journals relating to Computer Science, Statistics, Mathematics, and other related disciplines.
- *Hostel Facilities:* The Institute has besides guesthouse, a well-furnished hostel, which can comfortably cater to the needs of the participants.

## New Delhi

Delhi, India's capital and a major gateway to the country, is a bustling metropolis, which successfully combines in its fold the ancient and the modern. Exploring the city would be a fascinating and rewarding experience. It is well connected by air, rail and bus to the rest of the country. The climate in Delhi is very cold during the month of January. It is advisable to come with warm cloths for comfortable stay.

## Nominations

The application for participation may be sent in the format given in the brochure. It must be duly forwarded by the competent authority of the institution. The selected participants will be paid TA/DA as per ICAR rules, if required. Free boarding and lodging will be provided to participants during the training program.

Number of participants : **20**  
Last date for receipt of nomination : **31 December, 2010**  
Selected candidates will be informed: **10 January, 2011**

The application form may be sent to:

**Dr. V. K. Bhatia**

Director

Indian Agricultural Statistics Research Institute  
Library Avenue, Pusa, New Delhi-110012

Email: [director@iasri.res.in](mailto:director@iasri.res.in)

Phone: 011-25841479 Fax: 25841564

**Dr. Anil Rai**

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Head (CABin)

**S. B. Lal**

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Course Co-ordinator