

# <u>National Agri-Food Biotechnology Institute (NABI)</u> (Dept. of Biotechnology, Ministry of Science & Technology, Govt. of India) Sector-81, Knowledge City, Manauli P.O, S.A.S. Nagar-140306, Punjab, India. <u>Website: www.nabi.res.in</u>

# Advertisement no. NABI/5(01)/2011-19-4 Res

# Walk In Interview for the temporary Positions of Research Associate-III, Research Associate-I, Senior Research Fellow , Junior Research Fellow & Project Fellows.

National Agri-Food Biotechnology Institute (NABI) is an autonomous Institute under Department of Biotechnology, Government of India. NABI aims at catalysing the transformation of Agri-food sector in India by being a nodal organization for knowledge generation and translational science leading to value-added products based on Agri-Food biotech innovations for improved household nutritional security. Since its inception in 2010, NABI is involved in research activities for the Bio fortification, development of designer crops for improved nutrition, providing sustainable and novel solutions towards quality food and nutrition, and development of evidence based functional foods to counter malnutrition. Food and nutritional Biotechnology division at NABI requires following research personnel purely on temporary basis.

# 1. <u>Research Associate-III (NABI core grant) (One Position)</u>

## **Essential qualifications:-**

Ph.D. in computational biology, bioinformatics, statistics, computer science, applied mathematics, biotechnology or a related scientific/technical disciplines or M.Tech in above related area with at least 3 years of research experience and at least one research paper in Science Citation Indexed (SCI) Journal.

Skills in manipulating and analyzing large datasets, handling knowledge of softwares running in different programming languages (C++/C, Java, Perl, Python, R, SQL) for the genomic data analysis.

## **Research work responsibility:-**

Under the general supervision of the scientist, the selected candidate will be expected to:-

- 1. Develop novel computational methods for analyzing high-throughput genomic data.
- 2. Process and integrate experimental results using custom bioinformatics tools.
- 3. Publish scientific papers in peer-reviewed journals and present findings at seminars and conferences.
- 4. Work cooperatively with other lab members and outside collaborators.

### Duration:-

Initially for a period of one year from date of joining and further extension will be granted

based on research progress and accomplishments for another one year. It will not exceed

more than two years.

### **Emoluments :-**

Rs. 54000/- per month plus HRA.(As per DST OM No. SR/s9/Z-08/2018 dated 30.01.2019)

### **Desirable experience:-**

- 1. Research experience in area of computational genomics or next generation sequencing analyses as revealed by at least one publication as first-author
- 2. Knowledge in statistical methods in the context of biological systems

<u>Age limit:</u> 40 years as on date of interview. (Relaxation is admissible in case of SC/ST/OBC/PD as per GOI instructions)

For Details:-Dr. T. R. Sharma, Executive Director

Email:- edoffice@nabi.res.in& trsharma@nabi.res.in, contact no: 0172-5221300

## 2. <u>Research Associate-I (Core Grant) (One Position)</u>

## Duration:-

Initially for a period of one year from date of joining and further extension will be granted based on research progress and accomplishments for another one year. It will not exceed more than two years.

<u>Area :-</u> Computational Biology & HPC cluster Management

# **Research work responsibility:-**

Under the general supervision of the scientist, the selected candidate will be expected to:-

- 1. Management of HPC clusters, network, and storage for smooth running of NABI projects on computation biology and bioinformatics analysis of large data sets.
- 2. Develop novel computational methods for analyzing high-throughput genomic data.
- 3. Process and integrate experimental results using custom bioinformatics tools.
- 4. Publish scientific papers in peer-reviewed journals and present findings at seminars and conferences.
- 5. Work cooperatively with NABI faculty and students and outside collaborators.

# Essential qualifications:-

1. Ph.D. in computational biology, bioinformatics, computer science, mathematics, or M.Tech in above related area with at least 3 years of research experience and at least one research paper in Science Citation Indexed (SCI) Journal.

- 2. Expertise in programming (C++ or C, Java, Perl or Python, R, SQL)
- 3. Expertise in machine language learning

# **Emoluments :-**

Rs. 47000/- per month plus HRA. (As per DST OM No. SR/s9/Z-08/2018 dated 30.01.2019)

# **Desirable experience:-**

- 1. Experience in managing HPC networking topologies for different types of clusters involving technologies based on InfiniBand.
- 2. Knowledge around technologies utilized in HPC clusters and experience in job scheduling.
- 3. Experience around working with clustered/distributed file systems and scale out storage technologies.
- 4. Experience managing and troubleshooting HPC environments from an infrastructural perspective meaning everything from local node problems, blade chasis, intra- and interconnect traffic in the topology, process/job management and the process of tracing backwards to understand what workload affects the cluster in an abnormal way.

Age: 40 years (Relaxation is admissible in case of SC/ST/OBC/PD as per GOI instructions)

For Further Details:- Dr. Joy K Roy, Scientist F

Email:- joykroy@nabi.res.in , contact no: 0172-5221206.

3. Senior Research Fellow (SRF) 01 Position (Project Grant GAP-29)

<u>**Qualification:-**</u> Post graduate degree in Basic Science Or Graduate/Post Graduate in professional course selected through a process described through any one of the following

- a) Scholars are selected through National Eligibility Tests-CSIR UGC NET including Lectureship (Assistant Professorship) and GATE.
- b) The selection process through National level examinations conducted by Central Government Departments and their agencies and institutions such as DST, DBT, DAE, DOS, DRDO, MHRD, ICAR, ICMR, IIT, IISC, IISER etc.

**Essential qualification for Senior Research Fellow-** Qualification prescribed above with two years of research experience.

**Desired Experience:-** Training in agricultural biotechnology, preferably in marker development, QTL mapping, Association mapping.

Emoluments:- 35,000/-PM+16% HRA

**<u>Responsibilities:</u>** Crossing for development of pre-breeding and biparental mapping populations for high iron, zinc, low phytate and grain protein content in wheat; development of association mapping panel in wheat for high iron, zinc, low phyate; DNA and RNA extraction; PCR reaction, SSR and SNP genotyping; phenotyping of micronutrients in wheat; qRT-PCR and sequencing; Off-season growing of plants in green house and plant growth chambers and at off-season stations in HP; multi-location field experiments; biochemical analysis; molecular biology works, large scale population analysis, etc.

<u>Age</u>: 32 years for Senior Research Fellow (Relaxation is admissible in case of SC/ST/OBC/PD as per GOI instructions)

## 4. Senior Research Fellow (Core Grant) (One Position)

#### **Essential Qualifications:-**

Post graduate (with thesis) in Biotechnology, Life Sciences, Biosciences/ Bioinformatics, Genetics/ Plant Pathology with experience in molecular biology, Genomics, etc selected through a process described through any one of the following:-

Scholars who are selected through National Eligibility Tests-CSIR-UGC-NET including Lectureship (Assistant Professorship) and GATE .The selection process through National Level examinations conducted by central government departments and their agencies and institutions such as DST, DBT, DAE, DOS, DRDO, MHRD, ICAR, ICMR, IIT, IISc, IISER, etc.

Bioinformatics knowledge is desirable

# Eligibility Criteria for Senior Research Fellow:-

Qualification mentioned above with two years research experience.

### **Duration:-**

Initially for a period of one year and will be extended annually based on satisfactory assessment.

### **Emoluments:-**

Rs. 35,000/- per month plus HRA.(As per DST OM No. SR/s9/Z-08/2018 dated 30.01.2019) <u>Age limit:-</u> 32 years as on date of interview. (Relaxation is admissible in case of SC/ST/OBC/PD as per GOI instructions)

For Details:-Dr. T. R. Sharma, Executive Director

Email:- edoffice@nabi.res.in& trsharma@nabi.res.in, contact no: 0172-5221300

## 5. Junior Research Fellow (Project Grant GAP-32) (One Position)

#### **Project Title:**

"Developing sheath blight tolerance in rice using Genome editing"

#### Principal Investigator:-

1. Dr. T. R. Sharma, Executive Director, NABI

#### **Co-Principal Investigator**

2. Dr. Humira Sonah, Ramalingaswami Fellow, NABI

## Duration: Till 26th June, 2022.

#### **Essential Qualifications:-**

Post Graduate Degree in Basic Science OR Graduate /Post Graduate Degree in professional course selected through a process described through any one of the following:-

Scholars who are selected through National Eligibility Tests-CSIR-UGC-NET including Lectureship (Assistant Professorship) and GATE

The selection process through National Level examinations conducted by central government departments and their agencies and institutions such as DST,DBT,DAE,DOS,DRDO,MHRD,ICAR,ICMR,IIT,IISC,IISER etc.

### **Desired Experience:-**

Experience in plant or agricultural biotechnology, plant tissue culture, rice or any other crop plant transformation, genome editing, genomics/bioinformatics.

### **Emoluments :-**

JRF (1st & 2nd Year): 31,000/- PM Plus 8% HRA from 3rd Year 35,000/- PM Plus 8% HRA

### **Responsibilities:-**

Maintaining fungal cultures, Genome editing, Tissue culture, Transformation, Molecular Biology.

<u>Age limit:-</u> 28 Years as on date of interview.(Relaxation is admissible in case of SC/ST/OBC/PD as per GOI Instructions)

## 6. <u>Project Title: Improvement of seed oil, protein content and nutritional quality in</u> <u>soyabean (Glycine max (L.) Merr.) (Project Grant)</u>

## Principle Investigator: Dr. Humira Sonah

**Sponsoring agency:** DBT, Government of India.

**Position available:** Project Fellow-I (02-positions).

**Essential qualifications:** M. Tech/M.Sc in Biotechnology or equivalent degree in life sciences or B. Tech in Biotechnology or B.Sc in Agricultural Biotechnology with minimum 55% marks.

Age: 28 years (relaxation will be given as per Government of India norms)

#### **Emoluments:**

Rs. 12,000/- per month Plus HRA as applicable at Mohali.

# 7. <u>Project Title:</u> <u>Improvement in silicon uptake, fruit ripening, and yield by</u> <u>targeting multiple genes (SINIP2a, SP5G, and PL) with CRISPR?CAS9</u> <u>approach in tomato" (Project Grant)</u>

Principle Investigator: Dr. Rupesh Deshmukh

**Sponsoring agency:** DBT, Government of India.

**Position available:** Project Fellow-I (02-positions).

**Essential qualifications:** M. Tech/M.Sc in Biotechnology or equivalent degree in life sciences or B. Tech in Biotechnology or B.Sc in Agricultural Biotechnology with minimum 55% marks.

Age: 28 years (relaxation will be given as per Government of India norms)

### **Emoluments:**

Rs. 12,000/- per month Plus HRA as applicable at Mohali.

# 8. <u>Project Title:</u> "<u>Development of nanomaterials based biosensors for the detection</u> <u>of pesticides and food contaminants</u>" (Project Grant)

Principle Investigator: Dr. Vanish Kumar

Sponsoring agency: DST, Government of India.

**Position available:** Project Fellow-I (02-positions).

**Essential qualifications:** Post graduate degree in science or bachelor degree in engineering and technology with minimum 55% marks.

Age: 28 years (relaxation will be given as per Government of India norms)

#### **Emoluments:**

Rs. 12,000/- per month Plus HRA as applicable at Mohali.

#### **Application and Selection Process:-**

All interested candidates may appear for Walk-In Interview at National Agri-Food Biotechnology Institute (NABI) located at Knowledge City Sector-81, Mohali 140306 on **15th October, 2019 (Tuesday) at 0900 hrs along-with duly filled Application form** (Mandatory) available on the website www.nabi.res.in. The duly filled application form must be submitted at the time of registration at NABI from **09:00 hrs to 10:00 hrs on above** mentioned date and time. The candidates must ascertain their eligibility before applying; as ineligible candidates will not be interviewed. All the candidates are requested to appear for the interview with full CV, thesis/project report, publications and original degree certificates and transcripts. No TA/DA will be paid for appearing in the interview. Canvassing in any form or bringing influence, political or otherwise, will lead to disqualification of the candidate(s).