**National Agri-Food Biotechnology Institute (NABI)**

**(Dept. of Biotechnology, Ministry of Science & Technology, Govt. of India)**

**Sector-81, Knowledge City, Manauli P.O, S.A.S. Nagar-140306, Punjab, India.**

**Website: www.nabi.res.in.**

**Advertisement no. NABI/Admin/5(09)/2022-23/ACAD-12**

**Walk-In-Interview for temporary positions of Junior Research Fellow and Research Associate-I,**

National Agri-Food Biotechnology Institute (NABI) is an autonomous Institute under the Department of Biotechnology, Government of India. NABI aims at catalysing the transformation of the 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 Biofortification, the development of designer crops for improved nutrition, providing sustainable and novel solutions for quality food and nutrition, and the development of evidence-based functional foods to counter malnutrition. The food and nutritional Biotechnology division at **NABI requires the following research personnel purely on a temporary basis.**

**1. Project title: Molecular analysis of metabolic pathways in rice and chickpea to improve nutritional value for better health. (NABI Core)**

**Principal Investigator:** Dr. Prafull Salvi, Scientist-C

**Research Associate-I (One position) (NABI Core)**

**Essential Qualification:** - Ph.D. in any branch of Life Sciences or Plant Biotechnology with at least one peer-reviewed international publication in Science Citation indexed (SCl) journal. Prior experience in molecular cloning, qRT-PCR, protein expression, and Western blotting is must.

**Duration:** The RA fellowship is a purely temporary assignment and is tenable for a period of 1 year only, and in exceptional cases, depending upon the progress of the research, and the performance, the committee may recommend the up-gradation of RA Levels.

**Desirable Experience:**

1. Skilled in advanced molecular biology techniques, including modular cloning, Y2H, Co-IP, LC-MS and other relevant methodologies.
2. Hands-on experience in plant tissue culture and genome editing.
3. Familiarity with Insilco analysis, MD simulation, or transcriptomic analysis would be advantageous.

**Responsibilities:** Recruited RA will work on genome editing in crop plants, protein-protein interaction, Co-IP, ChIP, plant tissue culture, etc. The candidate will also be responsible to manage day-to-day activities for the successful execution of the project, designing of experiments, data analysis, and writing research grants, manuscripts and progress reports.

**Emoluments: -** Rs. 47000/- per month plus HRA (As per DST OM No.SR/S9/Z08/2018 dated 30.01.2019)

**Age limit: -** 40 years (Relaxation is admissible in the case of SC/ST/OBC/PD and women candidates as per GOI instructions)

2. **Project Title: “**Deciphering the role of transsulfuration pathway (TSP) in innate immune response” (Own Fellowship)

**Principal Investigator:** Dr Mohit Kumar, Scientist-C

**Positions:** Junior Research Fellow (01) (Own Fellowship)

**PhD registration:** IISER-Mohali/DBT-RCB, Faridabad/Punjab University, Chandigarh

**Duration:** 5 years (Two years of JRF and will be converted to SRF after evaluation as per the funding agency guidelines)

**Project Summary:** The project activities are given below:

1. To use co-culture *in-vitro* models of infection to examine the role of TSP in immune-immune and neuro-immune cross-talk.
2. To perform pharmacological or genetic approaches such as enzyme inhibitors, RNAi, CRISPR-Cas9 or AAV to modulate TSP in immune cells and perform downstream assays such as ELISA, phagocytosis assay, western blot and RT-PCR.
3. To perform brain-targeted drug/RNAi/AAV delivery targeting cell-specific TSP using a stereotaxic technique and perform behavioral assays in mice models of infection-induced depression, anxiety and cognitive deficits.
4. To look into the transcriptome profiling of the immune cells especially macrophages and brain resident microglia isolated from the rodent models.
5. To screen broccoli microgreen water extract for its potential to modulate TSP, macrophages and microglial immune response against infection.

**Essential Qualifications:**

i) Postgraduate degree in basic Science OR Graduate /Post Graduate Degree in professional course and

ii) Having own fellowship for 5 years from different funding agencies such as UGC, CSIR, DST, DBT, etc.

**Area of research:** Immunology, Biochemistry, Biotechnology, Molecular Biology, Neuroscience

**Age limit:** 28 Years (Relaxation is admissible in case of SC/ST/OBC/PD/EWS/ women and/or as per GOI Instructions

**Application Procedure & Other Conditions**

1. All interested candidates may appear for Walk-In-Interview at **National Agri-Food Biotechnology Institute located at Knowledge city, Sector-81, Mohali - 140306, Punjab** on **11-01-2024 at 09:00 A.M.** along with the duly filled application form available on the website [www.nabi.res.in](http://www.nabi.res.in).

2. Incomplete application forms and applications that are not in proper format may be summarily rejected.

3. The applications should be submitted strictly as per the prescribed format that can be downloaded from the NABI website.

4. Candidates applying for more than one option can give their preference in the same application by ticking multiple options. No need to submit a separate application form for each option.

5. Candidates should ensure that information mentioned in the application form is accurate. Once the application form is submitted no further request regarding any changes/ information in the application form will be considered.

6. The duly filled application form must be submitted at the time of registration at NABI from **09:00 AM to 10:00 AM on 11-01-2024.**

7. The candidates must ascertain their eligibility before applying, as ineligible candidates will not be interviewed.

8. All the candidates are requested to appear for a Walk-In interview with an application form, experience certificates, publications, and original degree certificates and transcripts.

9. Original mark sheets, certificates, award/fellowship, etc must be accomplished for verification at the time of the interview, and attach one set of attested copies of the documents with the application form.

10. No TA/DA will be paid for appearing in the interview.

11. Canvassing in any form or bringing influence, political or otherwise, will lead to disqualification of the candidate(s).

12. Candidates should strictly adhere to guidelines issued by World Health Organization and Centre Govt/State Govt on Covid-19.

**Manager Administration**