



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

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Walk In Interview for the Positions of Research Associate (RA) & Junior Research Fellow (JRF)

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.**

Project Title: "Genome-wide mapping of QTL controlling healthy amylose starch variation in wheat"

Principle Investigator: Dr. Joy Kumar Roy, Scientist-E

Positions: Junior Research Fellow (01) & Research Associate (01)

Duration: Till September 11, 2021

Project summary: High density linkage maps and QTL maps showing QTL regions controlling amylose and resistant starch variation shall be developed in wheat. More than 10 high amylose (amylose content >50% in wheat grain) mutant lines have been developed in the genetic background of a good chapatti variety, 'C 306' through EMS mutagenesis. Few high amylose mutant lines (>65% amylose content) have been crossed with the present high yield variety, 'WH 1105' and a F2 population comprising are growing and F3 seeds will be harvested in April 2018. This population will be advanced to develop recombinant inbred line (RIL) population and backcross population will be advanced to make near isogenic lines (NILs). The advance generation of mapping population will be used for QTL mapping. The genotyping will be done using wheat SNPchips or microarrays and microsatellites. It will also include epistatic interactions such as QTL x QTL, QTL x environment interactions.

(A) Junior Research Fellow (JRF)

Research work responsibility:

1. Development of RIL and NIL populations.
2. Measurement and analysis of starch and amylose content and properties
3. Evaluation of mapping populations at multi-locations
4. Genotyping of mapping populations using microsatellites and SNPs
5. Data analysis such as construction of linkage maps, QTL mapping, QTL x environment interaction study

Essential qualifications of JRF:-

Post Graduate Degree in any branch of life Sciences (Botany, biotechnology, Genetics & plant breeding, etc.) with NET Qualification

OR

Graduate Degree in Professional Course with NET qualification

OR

Post Graduate Degree in Professional Course.

(Eligibility criteria as DST OM No.SR/S9/Z-09/2012 dated 21.10.2014)

Desirable qualifications:

Research training or experience in molecular breeding, DNA-based molecular marker development, linkage mapping, QTL mapping, mapping population development (RIL, F2, backcross); experience in microarrays and SNPchips, nextgen sequencing data analysis;

Age: 28 years (Relaxation is admissible in case of SC/ST/OBC/PD as per GOI instructions)

Emoluments: Rs. 25000/- per month Plus HRA.

(B) Research Associate (RA)-III

Research work responsibility:

1. Development of RIL and NIL populations.
2. Measurement and analysis of starch and amylose content and properties
3. Evaluation of mapping populations at multi-locations
4. Genotyping of mapping populations using microsatellites and SNPs
5. Data analysis such as construction of linkage maps, QTL mapping, QTL x environment interaction study
6. Helping in overall activities of the project

Essential qualifications of RA:-III

PhD in Biotechnology/Agricultural Biotechnology/Biochemistry/any branch of Life Sciences or M.Tech in above related area with at least 3 years of research experience, with at least one

research paper in science citation indexed (SCI) journal. (Eligibility criteria as DST OM No.SR/S9/Z-09/2012 dated 21.10.2014)

Desirable qualifications:

Research experience mainly in molecular markers development, biparental mapping population development, construction of linkage maps, QTL mapping, QTL x environment interaction study

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

Emoluments: Rs.40,000/- Per Month Plus HRA.

Application and Selection Process:

1. All interested candidates may appear for walk-in-interview at NABI located at Knowledge City, Sector-81, Mohali-140306, Punjab, India on **January 21, 2019 (Monday)** at 09:00 AM along-with duly filled application form available on the website www.nabi.res.in.

2. The interested candidates should also send the softcopy of their application form and five-page write up on experience and how to accomplish the project mentioned above to joykroy@nabi.res.in or joykroy@gmail.com on or before **20th January, 2019 for Research Associate-III & Junior Research Fellow.**

3. The **duly filled application form must be submitted** at the time of registration at NABI-reception desk from **0900 Hrs to 1000 Hrs on 21st January, 2019 (Monday)**. 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.

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

5. The selected candidate will be informed by e-mail and the result will be uploaded at NABI's website.

6. The tenure is till September-11, 2021 and co-terminus with the completion of this project. No further extension will be considered in any case.