### NATIONAL AGRI-FOOD BIOTECHNOLOGY INSTITUTE

(Deptt. of Biotechnology, Govt. of India)

C-127, Industrial Area, Phase VIII, S.A.S. Nagar, Mohali-160 071. (Pb)

Website: www.nabi.res.in

ADVT. No: 2013-Researcher/(6)

### Junior Research Fellow (JRF)

National Agri-Food Biotechnology Institute (NABI), Mohali, is an autonomous R&D Institute under Department of Biotechnology, Government of India. The institute carries out cutting edge research at the interface of agricultural biotechnology, bioinformatics, biostatistics, food processing, postharvest technology, and nutritional sciences. NABI has state of art facilities in the area of genomics (ABI 3730xl, RT-PCR, DNA analyzer, Affymetrix Microarray system, bioanalyzer, liquid handling system, automated DNA extraction system, LCM, Mass-Array (sequenom), etc), proteomics (MALDI-TOF-TOF, Q-TOF, nano-LC, LA-ICP-MS, HPLC, GCMS-MS, HP-TLC, UPLC, etc.), high performance computing facility, and food science (NIR, FTIR, etc.). To accelerate high quality research, applications are invited from motivated candidates with high level of creativity, innovative research ideas and communication skills and drive for carrying out research aiming at the following areas:

# **Agri-Biotechnology:**

- 1) Identification of starch biosynthesis pathway genes and regulators and their variants for improvement of processing and nutrition quality in wheat
- 2) Accelerated breeding for improvement of processing quality in wheat
- 3) RNA Guided genome editing for crop improvement using CRISPR-Cas system\*

# Food Biotechnology:

- 1) Postharvest biology and metabolomics application in fruits
- 2) Structural modification of the dietary fibres to develop edible films and coating materials
- 3) Nano-biosciences: Immobilization of enzyme on functionalized magnetic nanoparticles
- 4) Probiotic bacteria for exopolysaccharide production and its biological applications

### **Nutrition Biotechnology:**

1) Gut flora and metabolic disease\*

The JRF should mention their respective research interest of choice by mentioning the Project No at the given space in application form. The JRF will be hired as per the emoluments' guidelines and service conditions notified by DST (A.20020/11/97-IFD dated 31st March, 2010) varying from Rs12,000/- to Rs18,000/- per month plus HRA as per their own fellowship support or a fellowship from NABI. Areas marked with (\*) are open only to candidates having their own fellowship support.

NABI may or may not select candidates against one or more of the above areas of research, depending upon the suitability of the candidate to carry out high quality research. Applications in the prescribed format (that can be downloaded from NABI website, www.nabi.res.in) by post to Administrative Officer, National Agri-Food Biotechnology Institute, C-127, Industrial Area, Phase VIII, S.A.S Nagar-160071, Punjab so as to reach latest by 28<sup>th</sup> December, 2013 before 6.00 PM. Applications received after the deadline will not be entertained. Incomplete application or application not in proper format will be summarily rejected. Suitable candidates will be shortlisted based on their area of qualification, training, research experience and relevance of skills to the institute. The shortlisted candidates will be called for an interview in front of a selection committee.