

NATIONAL INSTITUTE OF BIOMEDICAL GENOMICS  
(An Autonomous Institution of the Government of India)



P.O.: N.S.S., Kalyani 741251, West Bengal, INDIA  
[www.nibmg.ac.in](http://www.nibmg.ac.in)

Advertisement No. NIBMG/ADMIN/ESTB/2023-24/383

Date: 16-02-2024

## **Position available.**

**Project name and Funding body:** 'Sex-difference in the genetic architecture of human complex diseases' – DST

**Principal Investigator's name:** Dr Anasuya Chakrabarty

### **Project description:**

Sex-difference is widespread in the onset, prevalence, or expression of human complex disorders. Human height differs between the sexes as does BMI, waist-to-hip ratio etc. Incidences of cardiovascular and autism spectrum disorder are more common among men, while disorders like schizophrenia etc., have an earlier onset in males compared to females. But males and females share almost their entire genomes despite their difference. Such differences can arise either due to the underlying genetic architecture or due to difference in environmental factors. In this project, we are interested in the difference between the sexes that can be attributed to genetics. Particularly, the following questions would be addressed –What is the extent of the difference in genetic architecture between the sexes? What contributes to this difference despite the shared genomes? Is this difference between the sexes trait-specific? And most importantly, how did sexual dimorphism evolve? These questions will be addressed using publicly available summary data and the UK Biobank. We are using i) multivariate quantitative genetic methods, ii) statistical and computational tools to analyse our data. We are looking for a project associate (biologist/non-biologist) who has a quantitative bend of mind, interested in statistics and programming, or has outstanding knowledge of genetics. If you want to unravel the secrets of sexual dimorphism in the genetic architecture of humans and are open to learn quantitative methods and tools, then we encourage you to apply. The position is for 1 year, which may be extended depending upon performance. For any queries, please email [ac4@nibmg.ac.in](mailto:ac4@nibmg.ac.in)

Name of the position	No. of position	Remuneration [INR] per month	Essential qualifications	Desirable qualifications	Nature of duty
Project Associate- I	1	<p><b>(i) 31,000/- + 24% HRA</b> to scholars who are selected through (a) National Eligibility Tests – CSIR-UGC NET including lectureship (Assistant Professorship ) or GATE or (b) A selection process through National level examinations conducted by Central Government Departments and their Agencies and Institutions.</p> <p><b>(ii) 25,000/- + 24% HRA</b> for others who do not fall under (i) above.</p>	<p>i) Masters in any branch of Biology/ Statistics/ Bioinformatics/ Biotechnology / Computer Science</p> <p>ii) Basic knowledge in R programming / Linux</p> <p>iii) Age limit 35 years as on last date of application</p>	<p>i) Basic knowledge in genetics and genome wide association studies (GWAS)</p> <p>ii) Hands on experience in GWAS, DNA sequence data analysis and familiarisation with necessary bioinformatic tools like PLINK etc.</p> <p>iii) Good communication skills and competency in English</p>	<p>Data wrangling of summary data as well as genotyped data from UK Biobank. Statistical analysis of individual level genotype data as well as GWAS summary statistics. Data interpretation and writing up results. Assisting PI in bioinformatic and statistical analysis.</p>

**Following documents are required at the time of interview:**

1. Curriculum Vitae along with reprints of publications, if any
2. One Passport- size coloured Photograph
3. Original along with one set of Self-Attested Copies of Certificates of Educational Qualifications
4. Original along with Self-Attested Copies of Experience Certificates
5. Original and Self-Attested Copies of Govt. issued Photo ID proof

**This position is contractual**, and appointments will be initially given for **ONE YEAR**, which is extendable depending upon performance and requirements of the project. Please send a detailed CV with other relevant documents to **ac4@nibmg.ac.in** (no other form of application will be accepted). The last date of application is **1<sup>st</sup> March 2024, 5PM**.

Please visit our website **www.nibmg.ac.in** for further information. Only the shortlisted candidates will be called for Interview/Test. No TA/DA will be provided for attending the Interview/Test.

The decision of NIBMG in all matters relating to eligibility, acceptance or rejection of application, mode of selection, and conduct of interviews will be final and binding on the candidates.

**Manager-Administration**