

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



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[www.nibmg.ac.in](http://www.nibmg.ac.in)

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**“Integrating Multi-Omics Data using Big Data Analytics to Infer Optimal Lifecourse Trajectories for Management of non-communicable diseases (NCDs): Cervical cancer as an Exemplar”.**

**Project Description:**

This Programme Project is anchored on the globally emerging tenet that disease is the hallmark of an adverse life-course trajectory, modulated by inherited genomic factors and life-exposures that alter the epigenome. These factors and alterations are monitorable and partially actionable for the benefit of the individual. The scale and complexity of data are too massive for standard statistical analyses and actions based on these data must be taken quickly, if not in real time. NIBMG has, therefore, proposed AI-based approaches to derive actionable inferences from such data to meet National Health Care Challenges. Cervical cancer will be used as an exemplar of the AI-based approach, with longitudinal monitoring of HPV infection, host-pathogen genomic and epigenomic interactions based on various biospecimens, including circulating cells/exosomes and cellular products such as DNA/RNA, longitudinal tissue images, and life-style factors.

We are looking for motivated and individuals with good academic standing who are interested to explore career opportunities in this innovative multi-organization initiative undertaken by NIBMG in the positions mentioned as below:

Name of the position	No. of Position	Consolidated Remuneration [INR] per month	Essential Qualifications	Desirable Qualifications	Nature of Duty
RA-III (Computational)	1	54000/- + 24% HRA	1) Ph.D. in Biochemistry/Human Genetics/Genetics/ Biotechnology/ Molecular Biology/ Zoology/ Life Sciences/Biological Sciences/Statistics or related discipline  2) Experience in analysis of sequence data.  3) Strong knowledge in R and UNIX	1) High level of interest in analysis of quantitative data with reasonable exposure to statistical methods.  2) Experience in development of AI/ML algorithms.	Participate in study design.  Perform routine data analysis of genomics, transcriptomic and epigenomic datasets.  Develop AI based models to integrate longitudinal data. Data interpretation and manuscript writing.

Project Associate-I (Computational)	2	31000/- + 24% HRA	1) Master's Degree in Bioinformatics/ Biochemistry/Human Genetics/Genetics/ Biotechnology/ or related discipline 2) Experience in analysis of sequence data. 3) Strong knowledge in R and UNIX 4) Age not exceeding 32 years at the time of interview	1) Experience in data management. 2) Good knowledge of any programming language.	Development of data analysis pipeline. QC and analysis of raw data. Preparation of reports
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**These positions are contractual**, and appointments will be initially given for **ONE YEAR (SUBJECT TO CHANGE)**, which are extendable depending upon performance and requirements of the project. Please apply online at **<https://apply.nibmg.ac.in>** (no other form of application will be accepted). The last date of application is **22<sup>nd</sup> October 2021, 5PM**. Please visit our website **[www.nibmg.ac.in](http://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. In exceptionally meritorious cases, the eligibility requirements may be relaxed by the competent authority.