Advertisement No: NIBMG/ADMIN/ESTB/Prj Rect./2024-25/422 **Date: 19/ 03/2025**

National Supercomputing Mission (NSM) Platform for Genomics and Drug Discovery:

Development of a fast, flexible, high performance computing framework to accelerate NGS omics-data analysis

Massively Parallel Sequencing or Next Generation Sequencing (NGS) has taken the scientific community by storm. After commercial availability of the technology from last decade onwards, even modest sized laboratories and institutions all over the world can effectively produce petabytes of data in weeks. This revolution in data generation technology, warrants an array of statistical and computational advancement to translate information into knowledge. The stumbling blocks in translating the large volume of data (information) to biologically relevant inferences (knowledge) range from (a) information storage, retrieval of the raw data as-is generated from the sequencing machine - (b) large-scale fast computation and processing that is essential for the data to be useable by the general scientific community – (c) sophisticated analysis that is required in transforming the enormous information to knowledge.

The objective of this project was to make available an easy and extremely flexible supercomputing analysis framework, preferably web-based, to the basic scientist. This would enable them to exercise their choice of programs sequentially in a seamless fashion to process the raw sequence data in accordance with their need and choice. It will also provide the research a wide array of tools for sophisticated data-analysis. The project is in a stage where we now require a specialist who can work with large scale genetic data and has familiarity with the data analysis and handling programs.

We are looking for motivated and bright individuals interested to explore short-term career opportunities in this innovative multi-organization initiative in National Supercomputing Mission (NSM) at NIBMG in the positions mentioned as below:

Name of Project	Name of the position	No. of Positions	Consolidated remuneration [INR] per month	Essential Qualifications	Desirable Qualifications	Nature of Duty
NSM	Post-doctoral scientist	1	50000/-	(1) PhD in Computer Science, Computational Biology, Bioinformatics or related discipline with application of the above-mentioned skills (2) Demonstrated experience in development of software tools and data analysis pipelines. (3) Demonstrated knowledge of computer programming. (4) Strong Unix Skills	(1) Published scientific papers in reputed journals. (2) Development of analysis tools and pipelines. (3) Handling large scale genomic data	(1) Management and coordination (including hands on work) of computational facilities, execution of data analysis for projects in time bound manner, (2) Development of software analysis pipelines and tools for genomics application (3) Report writing

This position is contractual. The appointment will be initially given up to **31-12-2025**, which is extendable depending upon performance, requirement of the project and availability of funds. Interested candidates need to send mail with a copy of the CV to **ab1@nibmg.ac.in** .

The last date of application is **04-04-2025** (**up to 12 midnight**). Please visit **www.nibmg.ac.in** for further information.

Only the shortlisted candidates will be called for an **ON-LINE** web-based interview.

All Educational, Professional and Technical qualifications should be from a recognized Board/University. Fulfillment of essential qualifications and experience does not automatically entitle a candidate to be shortlisted or called for Interview.

Canvassing in any form or bringing influence will lead to disqualification of the candidate.

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.

Associate Director