

राष्ट्रीय जैवचिकित्सा जीनोमिक्स संस्थान National Institute of Biomedical Genomics

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

Online interview: Date 15-01-2025 from 11.00 AM onwards.

- 1. This position is contractual, and appointments will be initially for three months, which is extendable depending upon performance and requirements of the project.
- 2. Interested candidates should send their detailed CV to ab1@nibmg.ac.in within 13-01-2025
- 3. Microsoft Teams link will be shared only with those candidates for the interview who will send the CV and fulfil the eligibility criteria.
- 4. If selected, you will be asked to produce all documents in the original. If the documents don't truly reflect what is mentioned in the advertisement, your candidature will be cancelled.
- 5. Please visit our website www.nibmg.ac.in for further information.
- 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