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

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Positions available

Date: 29-01-2024

National Institute of Biomedical Genomics (NIBMG) Kalyani is an Institute of Government of India, Ministry of Science & Technology, Department of Biotechnology. The Institute has created the necessary physical infrastructure and critical platform technologies to support research, translation and training in biomedical genomics.

Applications are invited for the position of Project Linked Persons for extramural projects to be executed by the National institute of Biomedical Genomics, Kalyani. Selected applicants will be appointed for a period of **9 Months**. The tenure of appointment may be extended depending on performance and availability of funds.

ProjectName: Title: Diabetic Retinopathy Microbiome Study-India (DRMS-India)

Principal Investigator's name: Dr. Souvik Mukherjee

Research Description: Diabetes affects 10% of Indian adults, with diabetic retinopathy (DR) impacting up to 20%, causing irreversible vision loss in 4%. Current DR treatments often have low success rates and lengthy procedures. Recent research in Telangana and Andhra Pradesh highlighted links between gut bacteria and DR in those with diabetes. The DRMS aims to deepen this connection by analyzing stool samples from people with diabetes, diabetes-related retinopathy, and those without health issues. Participants will provide stool and blood samples at no cost. Stool DNA analysis will identify bacteria, while blood tests will assess diabetes levels and related conditions routinely checked in diabetics. This study seeks to shed more light on the role of gut bacteria in DR progression for better understanding and potential treatment advancements.

In this project the wet laboratory work-based applicant will be responsible for hands-on Human samples handling, human and microbial DNA RNA isolation, primer designing, PCR, Real Time PCR, DNA sequencing and other Molecular Biological techniques involving human cell/microbial culture. He/she will also be responsible for project data management on a daily basis.

The data analyst applicant will be responsible for handling high throughput human and microbiome sequence data on a daily basis. He/she will catalogue the changes in bacterial, viral, and fungal composition and its gene families, pathways from human microbiome samples using whole shotgun metagenome sequencing along with highlighting the novel interplay between host and metagenomic correlates in diseased individuals.

Place of Work: National Institute of Biomedical Genomics, P.O.: N.S.S., Kalyani 741251, West Bengal.

Name of the Position	No. of position	Essential Education Qualification	Desirable Qualification	Nature of work & Responsibilities	Consolidated and fixed monthly emolument (₹)
Senior Laboratory Analyst	1	1. M.Sc./ M. Tech in Life Science or equivalent with at least 4 years hands on research experience in wet lab molecular-biological experiments or Ph.D. in Life Science or equivalent with experience in wet lab molecular-biological/micr obiological/micr obiological/micr obiological/micr obiological experiments 2. Age limit 40 years	1. Experience in biological sample handling, Human and Microbial DNA/RNA isolation and related molecular biological experiments 2. Hands-on experience in human cell culture/anaerobic microbial culture, in vitro functional assays and related molecular and cell biology experiments.	 Designing and conducting experiments from different kinds of clinical biospecimens, gathering, organizing, and summarizing data; writing manuscripts; coordination between participating centers on the work progress, writing experimental protocols; preparing various reports; contributing to grant applications and progress reports; training new personnel. Formulation of SOPs and maintaining GLP with proper documentations of day-to-day lab activities Maintenance of Stock and Purchase Indenting 	50,000/-

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		1. M.Sc./ M. Tech	1.		1. Analysis of DNA, RNA	
		in Life Science or		experience in DNA	sequence files from	
		equivalent with at		sequence data	massively – parallel	
		least 4 years		analysis from	sequencing	
		hands on research		FASTQ files,	platforms, and	
		experience in		particularly on	preparing summaries	
		bioinformatic		Human genomic or	and reports of data	
		analysis of		Metagenomic	analysis.	
		genomic/metagen		samples using		
		omic data or Ph.D.		standard data	2. Performing day to day	
		in Life Science or		analysis pipeline.	statistical analysis on	
		equivalent with			the analysed data and	
		expertise in	2.	Proficiency in	assisting the Project PI	
Senior		bioinformatics of		Shotgun	for data interpretation	
Data	1	genomic/metagen		Metagenomics and	and coordination with 50,000/-	
Analyst		omic data		16S rRNA Gene	other participating	
				Sequence data	centers	
		2. Age limit 40		analysis		
		years			3. Development of	
			3.	Good knowledge	newer analysis	
				in Perl/Python,	pipelines focusing on	
				Linux, and R	human genomic and	
				programming	metagenomic data	
			4.		analysis	
				Proficiency in		
				English and good		
				communication		
				skills		

This position is contractual. The appointment will be initially given for nine months, 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 sm2@nibmg.ac.in. The last date of application is 12-02-2024 (upto 12 midnight). Please visit www.nibmg.ac.in for further information. Only the shortlisted candidates will be called for an interview. The interview will be held only in ON-LINE (Google Meet Platform) mode.

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. In exceptionally meritorious cases, the eligibility requirements may be relaxed by the competent authority.