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

NIBMG

P.O.: N.S.S., Kalyani 741251, West Bengal, INDIA
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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	1	54000/- + 24% HRA	Ph.D. in Biochemistry/Human Genetics/Genetics/ Biotechnology/ Molecular Biology/ Zoology/ Life Sciences/Biological Sciences or related discipline	Experience in driving field work pertaining to collecting samples and data from human subjects at hospital clinics and camps , conducting Genomics based experiments employing DNA/RNA and related data analysis	To organize sample and data collection by visiting homes of study participants, conduct specialized experiments involving genomics, epigenomics and transcriptomics and other molecular assays, analyze and interpret data, write

					manuscripts.
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 genomic, transcriptomic and epigenomic datasets. Develop AI based models to integrate longitudinal data. Data interpretation and manuscript writing.
Project Associate-I	3	31000/- + 24% HRA	1.Master's Degree in Biochemistry/Human Genetics/Genetics/ Biotechnology/ Molecular Biology/ Zoology/ Life Sciences/Biological Sciences or related discipline or bachelor's degree in Biotechnology/Bioinformatics or Medicine from a recognized University or equivalent 2. Age not exceeding 32 years as on 01.06. 2020	Experience in collecting samples (blood , cervical scrapes etc.), processing and performing DNA/RNA based experiments and related data analysis	Undertaking sample and data collection from cervical cancer screening camps and conducting related experiments in the laboratory
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	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

| Field Worker | 5 | 18000/- + 24% HRA | 1. Graduate Degree in any branch of Life or Social science from a recognized University
2. Ability to read/write and communicate well in Bengali
3. Knowledge of computer applications, like MS Word, MS Excel, etc.
4. Resident of Kalyani or Gayeshpur Municipality
5. Age not exceeding 32 years as on 01.06. 2020 | 1. Experience in conducting field surveys and field data collection work, with an emphasis on Women's Health, in a Government Organization | 1.To conduct door to survey among eligible women and sensitize them to undergo cervical cancer screening
2. Participate in organizing cervical cancer screening camps in the various wards of Kalyani and Gayeshpur area as well in the GYN-OPDs of the local hospitals and Health Centres at Kalyani and Gayeshpur area.
3. Help in collection of biospecimens and undertake other similar responsibilities. |

These positions are contractual and appointments will be initially given for **one year**, which are extendable depending upon performance and requirements of the project. Applicants belong to SC/ST/OBC communities will be given some preference. Please apply online at **https://apply.nibmg.ac.in** (no other form of application will be accepted). The last date of application is **March 27, 2020 5PM**. Please visit our website **www.nibmg.ac.in** for further information. Only the shortlisted candidates will be called for Test/Interview. No TA/DA will be provided for attending the Test/Interview.

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.