

(An Autonomous Institute of the Department of Biotechnology, Govt. of India)

NCR Biotech Science Cluster, 3rd Milestone, Faridabad – Gurugram Expressway, P.O. Box No. 04, Faridabad – 121001

RECRUITMENT NOTICE NO.: THS/RN/37/2021

Dated 22nd September 2021

RECRUITMENT FOR SCIENTIFIC POSITIONS

- 1. Translational Health Science and Technology Institute (THSTI) is an autonomous Institute of the Department of Biotechnology, Ministry of Science and Technology, Govt. of India. The institute is an integral part of the interdisciplinary NCR Biotech Science Cluster located at Faridabad, and is designed as a dynamic, interactive organization with the mission to conduct innovative translational research and to develop research collaborations across disciplines and professions to translate concepts into products to improve human health.
- 2. THSTI has built several inter-institutional collaborations and connectivity with industry supported by well-trained teams of research and laboratory staff. This foundation has helped pursuit of thematic research programmes which can be broadly categorized as, (a) Infectious diseases and Immunology (b) Maternal and Child Health, (c) Non communicable disease (d) Multidisciplinary clinical and translational research. These will be strengthened by four core facilities viz. Small Animal Facility, Data Management Center, Biorepository and Bioassay Laboratory that will serve not only the research programmes of THSTI, but also the National Capital Region Biotech Science Cluster and other academic and industrial partners.
- 3. This recruitment is to fill up the vacancies under the projects entitled "Epidemic preparedness through rapid vaccine development: support of Indian vaccine development aligned with the global initiative of the Coalition for Epidemic Preparedness Innovations (CEPI) and Translational Research Program (TRP)"

Educational Qualification and Experience required for the post:

S. No.	Name of the Post/ No. of Post / Max Monthly consolidated emoluments/ Age Limit	Minimum Qualifications & Experience	Domain/Programme
1.	Principal Scientist-I	MD or M.Tech or equivalent or Ph.D	Microbiome and Big-data Analysis/
		or corresponding degree in any area	Structural biology core/
	Three posts	of Life Sciences/ Medical Sciences	Maternal and Child Health [MCH]
		from a recognized university with at	
	Rs. 1,50,000/-	least five years of post-qualification	[Note: For MCH Domain/Programme:
		research experience in the relevant	Basic degree in MBBS is Essential]
	55 years	field as mentioned in Note 1.	

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2.	Scientist-D One post	Master's degree in Veterinary Medicine/Veterinary Pathology from a recognized university and	Small Animal Facility & GLP
	One post	must be registered with the state	
	Rs. 1,25,000/-	veterinary council or the veterinary	
	KS. 1,23,000/-	council of India with minimum three	
	45 years	years of relevant post qualification	
	45 years	work experience as mentioned in	
		Note 1.	
		OR .	
		Ph.D in Veterinary	
		Medicine/Veterinary Pathology	
		from a recognized university and	
		must be registered with the state	
		veterinary council or the veterinary	
		council of India with minimum three	
		years of relevant post-qualification	
		work experience as mentioned in	
		Note 1.	
3.	Research Scientist	MD or M.Tech or equivalent or Ph.D	Data Management and data analysis/
		or corresponding degree in any area	Immunology/
	Three posts	of Life Sciences/ Medical	Computational and Mathematical
		Sciences/Sciences from a	Biology Centre
	Rs. 1,00,000/-	recognized university with at least	
		one year of post-qualification	[For Computational and Mathematical
	40 years	research experience in the relevant	Biology Centre: PhD in any area of Sciences with a thesis related to
		field as mentioned in Note 1.	Computational Biology or equivalent is
			essential
4.	Junior Research	MD or M.Tech or equivalent or Ph.D	Proteomics
	Scientist	or corresponding degree in any area	
		of Life Sciences/ Medical Sciences	
	One post	from a recognized university and	
		the relevant field as mentioned in	
	Rs. 85,000/-	Note 1.	
	35 years		
		l ine application : 12th October 2021	

Last date for receipt of online application: **12**th **October 2021**The applications will be scrutinised/shortlisted and processed for further selection.

Note 1: Those willing to apply for the above scientific positions are required to identify their domain/programme below mentioned domain/programme:

S. No.	Domain Area	Description
1.	Structural biology core	The candidate will perform experiments to solve the three dimensional structure of various <i>Mycobacterium tuberculosis</i> proteins in complex with various small molecule inhibitors. The interaction of small molecules with target proteins will also be studied using computational methods and biophysical techniques.
2.	Maternal and Child Health	 This candidate will be responsible for the following: Work on interphase of epidemiology and state of the art "omic" platforms for complex diseases including preterm birth, fetal growth restriction, young infant sepsis and linear growth Expand the scope of integrative, multi-disciplinary research in maternal and child health by developing innovative research questions and obtaining extramural funding to sustain the programme. Initiate and conduct data analysis that integrates clinical and biological data from large studies
3.	Microbiome and Big-data Analysis	Establish proof of principle for microbiome-based interventions in (i) Inflammatory bowel disease and (ii) Pre-term birth The Candidates will work with the existing team in THSTI on the high throughput multi-omics data of (i) vaginal microbiome of Indian women with term and preterm birth outcomes and (ii) gut microbiome of patients suffering from chronic and acute infections. Detail analyses of the metagenomic and genomic data and identification of genomic signatures associated with disease phenotypes will help us to understand the contribution of human associated microbiota in health and diseases. In addition, identification of microbial functions and their source that reduce the risk of developing health disorders will be useful in creating synthetic microbial consortia as potential therapeutics. (i) Candidate should have competencies and work experience in (a) Metagenomics (b) genomics and (c) Big-data analysis. (ii) The work experience should be supported by relevant publications (n≥10) as first author/equally contributed first author or corresponding author in high impact peer-reviewed scientific journal. (iii) Candidates must have knowledge and work experience in R/Perl/Linux
4.	Small Animal Facility & GLP	The candidate will be responsible for laboratory animal care inclusive of small animal breeding and maintenance, performing health and genetic monitoring/genotyping of small laboratory animals, organizing animal ethics committee meetings and record keeping as per CPCSEA guidelines. He/she should be able to manage, supervise and coordinate basic and advance training at regular intervals, supervise and coordinate individual job duties to a team of animal facility caretakers and housekeeping staff. He/she should ensure that all the SOPs be implemented effectively in the animal facility and would be able to help regulatory bodies to perform inspections at regular intervals. He/She will be responsible for performing

regulatory and non-regulatory safety and toxicology studies to support small molecule drug development with robust knowledge and understanding of pre-clinical drug discovery, including but not limited to: in vitro ADME studies, in vivo pharmacokinetic, toxicokinetics, tissue distribution, safety pharmacology, MTD and dose ranging finding, repeat dose toxicity studies etc. in rodents. Design study plans, preparation of reports, and engagement of external clients and/or service providers. The candidate is expected to support internal and collaborative small molecule drug discovery and development programs. Candidates with experience of working in a GLP laboratory and coordinating pre-clinical studies in a GLP laboratory will be preferred.

Desirable Experience:

- 1. Experience of working in a small animal facility.
- 2. Experience in general care, quality control along with diseases and pathology of laboratory animals.
- 3. A comprehensive knowledge and understanding of national and international standards/requirements applicable for vivarium management.
- 4. Experience of performing regulatory and non-regulatory safety and toxicology studies to support small molecule drug development with robust knowledge and understanding of pre-clinical drug discovery, including but not limited to: *in vitro* ADME studies, *in vivo* pharmacokinetic, toxicokinetics, tissue distribution, safety pharmacology, MTD and dose ranging finding, repeat dose toxicity studies etc. in rodents.
- 5. Experience of making study plans, preparation of reports, and engagement of external clients and/or service providers.
- 6. Candidates with experience of working in a GLP laboratory and coordinating pre-clinical studies in a GLP laboratory will be preferred.

5. Computational and Mathematical Biology Centre

The candidate should have technical experience either with bioinformatics/ systems Biology tools, or machine learning algorithms. The candidate should have a proven track record of handling large-scale data like RNA seq data, microarray data, proteomics data or metabolomics data etc. It is desired to have some preliminary knowledge of mathematical modelling. The candidate should know about different databases, and should also know software like R-package, Matlab etc and/or experience of computer programming in python or C++ etc.

The candidate will be responsible for taking lead during the analysis of the large-scale data like RNA seq data, microarray data, proteomics data or metabolomics data etc generated in THSTI by different biology groups. The candidate also needs to work in developing theoretical tools/ algorithms that can be used to analyze large-scale data. The candidate will work closely with other members of the computational and Mathematical Biology Centre. The responsibility also covers writing projects and training manpower required for the sustainability of the Centre.

6. Immunology

The candidate should have experience in handling animal models (mouse hamster), experience in infectious disease animal models in small animals, experience in ABSL3 and BSL3 animal experiments, experience in

		immunological techniques such as isolation and in-vitro characterization immune populations in animal models and humans PBMCs, ELISA, and deep immune-phenotyping of immune populations etc, experience in T cell assays like activation/cytokine production etc.
7.	Data Management and data analysis	The candidate will be responsible for taking lead on DM activities for all projects where the data management centre responsible. This starts from the grant application stage where the Scientist will contribute to the plan for data management, data protection and data security; budgeting for data management. Once the grant is awarded, the Scientist will interact with the study teams (including investigator, project manager) to understand the data management needs and develop appropriate solutions; develop, deploy and maintenance of study databases; support and oversee data management activities; ensure optimal use of the clinical data management tools. Timely delivery of key tasks, while maintaining high quality standards are key responsibility areas. The Scientist will manage the performance of the data management team(s) working on projects under his/her direction. Mentoring and development of the data management team is a key outcome area for this role. The Scientist will serve as a point of contact for the investigators. The Scientist will also be responsible for working cross functionally and understanding the requirements of multidimensional data management activities of partner investigators from non-clinical disciplines. The Scientist should have in-depth knowledge on development and management of SQL and NoSQL databases and should be able to guide DM team on the same. In addition, the scientist is expected to have a basic knowledge of data analysis techniques like creating summary tables, filtering and merging of datasets, and Exploratory Data Analysis. The Scientist will have direct line reports like, but not limited to data manager, programmer and data entry operator.
8.	Proteomics	The candidate should have sound knowledge of LCMS-based proteomics in metabolic disease. Technical experience with protein and proteome-wide quantification (labeling and label-free approaches), De novo peptide sequencing, analysis of different posttranslational modifications, and enrichment of modified peptides are required. Expertise in operations and maintenance of nono-UPLC coupled with Mass Spectrometry for the identification of stage-specific molecular signature in NAFLD/NASH. Knowledge of experimental design for proteomics study of the cell, tissue, and body fluids. Processing mass spectrometry data using currently available software programs and other informatics tools (vendor-based and freely available). Desirable: Expertise in proteomics data analysis using skyline and R packages.

"Government strives to have a work force which reflects gender balance and women candidates are encouraged to apply"

GENERAL TERMS & CONDITIONS:

- a) These are short-term positions and extension will be granted subject to satisfactory performance of the incumbents and tenure of the project for which they are selected. Those appointed to these positions will not have any claim for regularization of their employment.
- b) All educational, professional and technical qualification should be from a recognized Board/University.
- c) The experience requirement specified shall be acquired after obtaining the minimum educational qualifications required for the post.
- d) Persons working in Govt. / PSUs / autonomous bodies should apply through proper channel or produce 'No Objection Certificate' at the time of written test/skill test/Interview.
- e) The age limit, qualification, experience and other requirements may be relaxed at the discretion of the competent authority, in case of candidates who are otherwise suitable. In case candidates are not found suitable for the posts notified, they can be offered lower post / lower emoluments on the recommendation of the Selection Committee.
- f) Age and other relaxations for direct recruits and departmental candidates: 1. By 5 years for candidates belonging to SC/ST communities. 2. By 3 years for candidates belonging to OBC communities. 3. For Persons with Benchmark Disabilities (PwBD) falling under the following categories: (i) UR 10 years, ii) OBC 13 years (iii) SC/ST 15 years 4. For Ex-servicemen upto the extent of service rendered in defence forces (Army, Navy & Air force) plus 3 years provided they have put in a minimum of 6 months attested service. 5. Age is relaxable for Government servants up to 5 years in accordance with the instructions or orders issued by the Central Government, from time to time 6. There is no upper age limit for the Institute employees who are treated as departmental candidates.
- g) Number of positions may vary depending upon the requirement at the time of interview/presentation.
- h) Outstation SC/ST/ PwBD candidates called for the interview/written test/skill test will be paid to & fro second class railway fare, as per Govt. of India rules on production of the proof of the same.
- i) All results will be published on our website and all communications will be only through email.
- j) Canvassing in any form will be a disqualification.

HOW TO APPLY:

- 1. **Documents to be kept handy before filling up the online application:** (all the documents except (i) should be in pdf format):
 - i) A soft copy of your passport size photo and signature. (jpeg/jpg/png format)
 - ii) A comprehensive CV containing details of qualification, positions held, professional experience / distinctions etc.

- iii) Matriculation certificate (equivalent to 10th Standard) / Mark sheet
- iv) Intermediate certificate (equivalent to 12th Standard) / Mark sheet
- v) Graduation degree certificate / Mark sheet
- vi) Post-Graduation degree certificate & Mark sheet
- vii) Ph.D or equivalent degree certificate (if any)
- viii) Relevant experience certificates (if any)
- ix) Caste / Disability certificate in the format prescribed by the Govt. of India, if applicable

2. Procedure for filling up online application:

- i) The eligible and interested candidates may apply online at the Institute's website www.thsti.res.in/career. Applications through any other mode will not be accepted.
- ii) The following will be the step wise procedure-
 - A) Step 1: Details of applicant
 - B) Step 2: Uploading of documents
 - C) Step 3: Payment of application fee
 - The payment can be made by using Debit Card / Credit Card / Internet Banking / UPI.
 - ➤ Once payment is made, no correction / modification is possible
 - Candidates are requested to keep a copy of the provisional receipt forfuture reference.
 - Fee once paid shall not be refunded under any circumstances.
 - Details of fees to be paid are as shown below:

S. No	Applying on direct recruitment	Application fee amount
1.	Unreserved, OBC & EWS candidates	Rs 590/-
2.	SC/ST/Women/PwBD	Rs 118/-

- D) Step 4: Submission of application form
- iii) On successful submission of application, an auto-generated email containing the reference number will be sent to the email address provided. Please keep a note of the reference number for future correspondence.
- iv) Candidates are required to keep a printout of the online application form by using the print button on the dashboard for future reference.
- v) Candidates must ensure that he / she fulfils all the eligibility criteria as stipulated in the advertisement. If it is found that he / she does not fulfil the stipulated criteria during the recruitment process, the candidature of the candidate will be cancelled. If the same is noticed after the appointment, the candidate will be terminated following due process.
- vi) Incomplete applications shall be summarily rejected and no correspondence in this regard shall be entertained.
- vii) In case of difficulty in filling up the online form, please send e-mail to **personnel@thsti.res.in** along with the screenshot of the error displayed (if any).

(M.V.Santo)
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