

CENTRE FOR DNA FINGERPRINTING AND DIAGNOSTICS INNER RING ROAD, UPPAL, HYDERABAD – 500 039 Ph: +91-40-27216015 www.cdfd.org.in



Advt. No. CDFD/EMPC/03/May'22

CDFD, an autonomous institute of the Department of Biotechnology, Ministry of Science and Technology, invites applications from Indian nationals for the following purely temporary vacancies in research projects funded by National / International agencies at CDFD like DST/DBT/ICMR/CSIR etc. The description of the positions and minimum qualifications for various vacancies are as follows:

1) <u>Technical Associate (Experimental)</u>

Age Limit: 35 years

<u>Consolidated Emoluments:</u> ₹40,000/- – ₹ 70,000/- p.m.

Essential qualifications:

- 1. M.Sc. or equivalent (or B.Sc. with 3 years laboratory experience) in Genetics/Life Sciences/Biochemistry/related discipline
- 2. Minimum 3 years of experience (in addition to above qualification) of working in highthroughput genomics platforms (massively parallel sequencing and microarray)

Desirable Qualifications:

- 1. Experience in whole genome/targeted sequencing, RNA-Seq, GWAS and Methylation Array
- 2. Experience in laboratory automation plafforms
- 3. Experience in a service laboratory
- 4. Proficiency in massively parallel sequencing library preparation and/or operation of sequencing/microarray platforms

- 1. Conduct molecular biology experiments for next generation sequencing like DNA/RNA extraction, PCR etc
- 2. Library preparation for transcriptome/whole genome/exome sequencing/amplicon sequencing
- 3. Assist in training of students
- 4. Maintenance of laboratory infrastructure/equipment
- 5. Quality control and Quality assurance procedures

2) <u>Project Coordinator</u>

Age Limit : 45 years

<u>Consolidated Emoluments :</u> ₹ 50,000/- – ₹ 75,000/- p.m.

Essential Qualifications:

- 1. Masters degree/M.Com
- 2. Minimum 3 years' management/finance/accounts experience in service industry

Desirable Qualifications:

- 1. MBA from a reputed organization
- 2. Experience in life science/genomics services industry
- **3.** Experience in project-planning, oversight of time execution and delivery of service to clients.
- 4. Experience in preparation of bills and handling financial queries of clients Experience in preparation

Nature of Duty:

- 1. Project-planning, oversight of time execution and delivery of service to clients.
- 2. Preparation of bills and handling financial queries of clients
- 3. Preparation of Utilization Certificate of funds, Audit negotiations, responding to Audit queries.
- 4. Maintenance of accounts books and details of transactions

3) <u>Computational Laboratory Manager</u>

Age Limit : 40 years

<u>Consolidated Emoluments :</u> ₹ 50,000/- – ₹ 75,000/- p.m.

Essential Qualifications:

- 1. PhD in Statistics/Informatics/computational biology or related discipline
- 2. Minimum 3 years' post-PhD experience in computational analysis of massively parallel DNA sequencing data

Desirable Qualifications:

- 1. Degree/diploma in business administration
- 2. Conversance with Quality Assurance and IT compliance measures
- 3. Proven track record of independent academic work and leadership
- 4. Two years' experience in management of a service laboratory

Nature of Duty:

Will manage and coordinate data analysis operations, execute data analysis projects in time bound manner and implement Quality Assurance and IT compliance measures.

4) <u>Senior Project Associate</u>

Age Limit : 40 years

Emoluments : ₹42,000/-+ 24% HRA

Essential Qualifications:

Master's Degree in Natural or Agricultural Sciences / MVSc or bachelor's degree in Engineering or Technology or Medicine from a recognized University or equivalent; and Four years' experience in Research and Development in Industrial and Academic Institutions or Science and Technology Organisations and Scientific activities and services

OR

Doctoral Degree in Science / Engineering / Technology / Pharma / MD / MS from a recognized University or equivalent

Desirable Qualifications:

Experience in cell culture/molecular biology techniques/next generation sequencing/microarray analysis

Nature of Duty:

- 1. Conduct molecular biology experiments for next generation sequencing like DNA/RNA extraction, PCR etc
- 2. Analysis of next generation sequencing data
- 3. Sanger sequencing

Report writing and manuscript preparation

5) Project Scientist - III

Age Limit : 45 years

Emoluments : ₹78,000/-+ 24% HRA

Essential Qualifications:

- (i) Doctoral Degree in Science or Master's Degree in Engineering or Technology from a recognized University or equivalent; and
- (ii) Seven years' experience in Research and Development in Industrial and Academic Institutions or Science and Technology Organisations and Scientific activities and services

Desirable Qualifications:

- 1. Experience in working on molecular biology techniques, cell cultures, next generation sequencing analysis etc
- 2. Experience of supervising staff/students

Nature of Duty:

- 1. Overall supervision of laboratory focused on Pediatric rare genetic disorders
- 2. Oversee recruitment of patients with rare diseases via co-ordination with collaborating centres
- 3. Supervise staff for undertaking cell biology and molecular biology experiments
- 4. Preparation of project report/Manuscript writing

6) Project Scientist – II

Age Limit : 40 years

Emoluments : ₹67,000/-+ 24% HRA

Essential Qualifications:

- (i) Doctoral Degree in Science or Master's Degree in Engineering or Technology from a recognized University or equivalent; and
- (ii) Three years' experience in Research and Development in Industrial and Academic Institutions or Science and Technology Organisations and Scientific activities and services

Desirable Qualifications:

- 1. Experience in working with analysis of next generation sequencing / microarray data from whole exome/genome/transcriptome sequencing
- 2. Experience in development of pipelines for analysis of next generation sequencing analysis

- 1. Analysis of exome/genome sequencing data from pediatric rare genetic diseases
- 2. Preparation of reports for patients
- 3. Oversee development of pipelines for analysis of next generation sequencing analysis
- 4. Preparation of project report/Manuscript writing
- 5. Preparation of reports for patients
- 6. Oversee development of pipelines for analysis of next generation sequencing analysis
- 7. Preparation of project report/Manuscript writing

7) <u>Research Associate – I</u> (Post No. 1)

Age Limit : 40 years

Emoluments : ₹47,000/-+ 24% HRA

Essential Qualifications:

PhD/MD/MS or equivalent degree OR 3 years experience of research after MVSc/MPharm/ME/MTech with atleast one research paper in Science Citation Indexed Journal

Desirable Qualifications:

Experience in next generation sequencing / microarray analysis and report making as well as development of pipelines for same

Nature of Duty:

- 1. Analysis of exome/genome sequencing data from pediatric rare genetic diseases
- 2. Preparation of reports for patients
- 3. Development of pipelines for analysis of next generation sequencing analysis
- 4. Preparation of project report/Manuscript writing
- 8) <u>Research Associate I</u> (Post No. 2)

Age Limit : 40 years

Emoluments : ₹ 47,000/-+ 24% HRA

Essential Qualifications:

PhD/MD/MS or equivalent degree OR 3 years experience of research after MVSc/MPharm/ME/MTech with atleast one research paper in Science Citation Indexed Journal

Desirable Qualifications:

Research experience in CRISPR-Cas9 mediated genome editing OR NGS based techniques like ChIP-seq, RNA-seq, WGS. Practical knowledge of NGS-data analysis will be a plus.

Nature of Duty:

Generation of knock-in cell lines. Cell based assays on generated cell lines. Sample preparation for NGS analysis.

9) <u>Research Associate – I</u> (Post No. 3)

Age Limit : 40 years

Emoluments : ₹ 47,000/-+ 24% HRA

Essential Qualifications:

Ph.D. in molecular biology, cell biology, biotechnology or relevant scientific discipline.

Desirable Qualifications:

Preference will be given to candidates with research experience in protein production, protein pull-down and co-immunoprecipitation techniques. Practical knowledge of immunofluorescence analysis and confocal microscopy will be a plus.

Nature of Duty:

Candidate will be responsible for driving a research-project based on preliminary results provided.

10) <u>Research Associate – I</u> (Post No. 4)

Age Limit : 40 years

Emoluments : ₹47,000/-+ 24% HRA

Essential Qualifications:

PhD/MD/MS or equivalent degree OR 3 years experience of research after MVSc/MPharm/ME/MTech with atleast one research paper in Science Citation Indexed Journal

Desirable Qualifications:

Experience in protein biochemistry and mammalian cell biology and/or fruitfly genetics.

Nature of Duty:

The selected candidate will conduct collaborative research using fruitflies and mammalian cell lines as model systems to functionally characterize novel genes responsible for inherited single-gene disorders

11) <u>Research Associate – I (</u>Post No.5)

Age Limit : 40 years

Emoluments : ₹ 47000/-+ 24% HRA

Essential Qualifications: PhD/MD/MS or equivalent degree OR 3 years experience of research after MVSc/MPharm/ME/MTech with atleast one research paper in Science Citation Indexed Journal.

Desirable Qualifications: Preference will be given to candidates with research experience in protein biochemistry and mammalian cell biology. Experience in working with laboratory animals will be a plus.

Nature of Duty:

The candidate will be engaged in studying the metabolism and physiology of polyphosphate in mammals, using cell lines and mice as model systems, as part of an Indo-German collaborative project.

12) <u>Research Associate - I (Post No. 6)</u>

Age Limit : 40 years

Emoluments : ₹47000/- INR + HRA/pm

Essential Qualifications:

Ph.D. in molecular biology, cell biology, biotechnology or relevant scientific discipline.

Desirable Qualifications:

Research experience in Chromatin immunoprecipitation (ChIP), ChIP-seq. Practical knowledge of NGS-data analysis will be a plus.

13) Project Associate – II (Post No. 1)

Age Limit : 35 years

Emoluments : (i) ₹ 35,000/- + HRA to Scholars who are selected through (a) National Eligibility Tests - CSIR-UGC NET including lectureship (Assistant Professorship) or GATE or (b) A selection process through National level examinations conducted by Central Government Departments and their Agencies and Institutions.

(ii) ₹ 28,000/- + HRA for others who do not fall under (i) above.

Essential Qualifications:

(i) Master's Degree in Natural or Agricultural Sciences / MVSc or bachelor's degree in Engineering or Technology or Medicine from a recognized University or equivalent;

and

(ii) 2 years' experience in Research and Development in Industrial and Academic Institutions or Science and Technology Organisations and Scientific activities and services

Desirable Qualifications:

Experience in next generation sequencing/microarray analysis and report making as well as development of pipelines for same

Nature of Duty:

1.Analysis of exome/genome sequencing data from pediatric rare genetic diseases

2. Preparation of reports for patients

- 3.Development of pipelines for analysis of next generation sequencing analysis
- 4. Preparation of project report/Manuscript writing

(14) <u>Project Associate – II</u> (Post No. 2)

Age Limit : 35 years

Emoluments : (i) ₹ 35,000/- + HRA to Scholars who are selected through (a) National Eligibility Tests - CSIR-UGC NET including lectureship (Assistant Professorship) or GATE or (b) A selection process through National level examinations conducted by Central Government Departments and their Agencies and Institutions.

(ii) ₹ 28,000/- + HRA for others who do not fall under (i) above.

Essential Qualifications:

(i) Master's Degree in Natural or Agricultural Sciences / MVSc or bachelor's degree in Engineering or Technology or Medicine from a recognized University or equivalent;

and

(ii) 2 years' experience in Research and Development in Industrial and Academic Institutions or Science and Technology Organisations and Scientific activities and services

Desirable Qualifications:

Experience in molecular biology, plasmid cloning, PCR, gel electrophoresis. Experience in working with laboratory animals will be a plus.

The selected candidate will be trained in methods to generate CRISPR knockout mice, and will be responsible for generating knockout mouse strains for multiple projects

(15) <u>Project Associate – I</u> (Post No. 1)

Age Limit : 35 years

Emoluments : (i) ₹ 31,000/- + HRA to Scholars who are selected through (a) National Eligibility Tests - CSIR-UGC NET including lectureship (Assistant Professorship) or GATE or (b) A selection process through National level examinations conducted by Central Government Departments and their Agencies and Institutions.

(ii) ₹ 25,000/- + HRA for others who do not fall under (i) above.

Essential Qualifications:

Master's Degree in Natural or Agricultural Sciences / MVSc or bachelor's degree in Engineering or Technology or Medicine from a recognized University or equivalent

Desirable Qualifications:

Experience in molecular biology, biochemistry, and/or cell biology and genetics (preferably Drosophila genetics)

Nature of Duty:

Drosophila genetics, immunohisto cytochemistry, generation of CRISPR knockouts for Drosophila genes, generation of plasmid constructs, protein expression and purification, and routine biochemical experiments.

16) Project Associate – I (Post No. 2)

Age Limit : 35 years

Emoluments : (i) ₹ 31,000/- + HRA to Scholars who are selected through (a) National Eligibility Tests - CSIR-UGC NET including lectureship (Assistant Professorship) or GATE or (b) A selection process through National level examinations conducted by Central Government Departments and their Agencies and Institutions.

(ii) ₹ 25,000/- + HRA for others who do not fall under (i) above.

Essential Qualifications:

Master's Degree in Natural or Agricultural Sciences / MVSc or bachelor's degree in Engineering or Technology or Medicine from a recognized University or equivalent

Desirable Qualifications:

Capability of using Linux based platform for NGS data analysis arising out of ChIP-Seq and RNA-seq experiments. Experience with computational/bioinformatics tools used for NGS analysis, proficiency with using Linux and BASH or other similar shell, comfortable in developing code in Python and/or R for data analysis and visualization

Nature of Duty:

NGS data analysis and visualization of data arising out of ChIP-Seq and RNA-seq experiments done in Drosophila.

17) Project Associate – I (Post No. 3)

Age Limit : 35 years

Emoluments : (i) ₹ 31,000/- + HRA to Scholars who are selected through (a) National Eligibility Tests - CSIR-UGC NET including lectureship (Assistant Professorship) or GATE or (b) A selection process through National level examinations conducted by Central Government Departments and their Agencies and Institutions.

(ii) ₹ 25,000/- + HRA for others who do not fall under (i) above.

Essential Qualifications:

Master's Degree in Natural or Agricultural Sciences / MVSc or bachelor's degree in Engineering or Technology or Medicine from a recognized University or equivalent

Desirable Qualifications:

Experience in molecular biology, biochemistry, and/or cell biology

Nature of Duty:

Generation of plasmid constructs, protein expression and purification, cell culture, generation of CRISPR knockout cell lines.

18) <u>Project Associate – I</u> (Post No. 4)

Age Limit : 35 years

Emoluments : (i) ₹ 31,000/- + HRA to Scholars who are selected through (a) National Eligibility Tests - CSIR-UGC NET including lectureship (Assistant Professorship) or GATE or (b) A selection process through National level examinations conducted by Central Government Departments and their Agencies and Institutions.

(ii) ₹ 25,000/- + HRA for others who do not fall under (i) above.

Essential Qualifications:

Master's Degree in Natural or Agricultural Sciences / MVSc or bachelor's degree in Engineering or Technology or Medicine from a recognized University or equivalent

Desirable Qualifications:

Experience in molecular biology, biochemistry, and/or cell biology

Nature of Duty:

Generation of plasmid constructs, protein expression and purification, enzyme assays, cell culture, generation of CRISPR knockout cell lines.

19) <u>Project Associate – I</u> (Post No. 5)

Age Limit : 35 years

Emoluments : (i) ₹ 31,000/- + HRA to Scholars who are selected through (a) National Eligibility Tests - CSIR-UGC NET including lectureship (Assistant Professorship) or GATE or (b) A selection process through National level examinations conducted by Central Government Departments and their Agencies and Institutions.

(ii) ₹ 25,000/- + HRA for others who do not fall under (i) above.

Essential Qualifications:

Master's Degree in Natural or Agricultural Sciences / MVSc or bachelor's degree in Engineering or Technology or Medicine from a recognized University or equivalent

Desirable Qualifications:

Experience in molecular biology, biochemistry, and/or cell biology and genetics (preferably Drosophila genetics)

Drosophila genetics, immunohisto cytochemistry, cell biology in Drosophila, generation of CRISPR knockouts for Drosophila genes, generation of plasmid constructs, protein expression and purification, and routine biochemical experiments.

20) Project Associate – I (Post No. 6)

Age Limit: 35 years

Emoluments : (i) ₹ 31,000 + HRA/pm for candidates selected through

- CSIR-UGC NET including lecturership and GATE
- Selection process through National Level Examinations conducted by Central Government Departments and their Agencies and Institutions such as DST, DBT, ICMR etc. OR
- (ii) ₹ 25,000 +HRA/pm for candidates without NET or GATE.

Essential Qualifications:

Master's degree in biochemistry, biotechnology, bioinformatics or relevant scientific discipline Or Bachelor's degree in Technology.

Desirable Qualifications:

Research experience with computational/bioinformatics tools used for NGS analysis (RNA-seq, ChIP-seq), proficiency with using Linux or other similar shell, comfortable in developing code in Python and/or R for data analysis and visualization.

21) Project Associate – I (Post No. 7)

Age Limit : 35 years

Emoluments : (i) ₹ 31,000/- + HRA to Scholars who are selected through (a) National Eligibility Tests - CSIR-UGC NET including lectureship (Assistant Professorship) or GATE or (b) A selection process through National level examinations conducted by Central Government Departments and their Agencies and Institutions.

(ii) ₹ 25,000/- + HRA for others who do not fall under (i) above.

Essential Qualifications:

Master's Degree in Natural or Agricultural Sciences / MVSc or bachelor's degree in Engineering or Technology or Medicine from a recognized University or equivalent

Desirable Qualifications:

Experience in Molecular Biology, protein purification, structural modelling or NGS analysis

22) Computer Programmer Grade A

Age Limit : 35 years

Emoluments : (i) ₹ 31,000/- + HRA to Scholars who are selected through (a) National Eligibility Tests - CSIR-UGC NET including lectureship (Assistant Professorship) or GATE or (b) A selection process through National level examinations conducted by Central Government Departments and their Agencies and Institutions.

(ii) ₹ 25,000/- + HRA for others who do not fall under (i) above.

Essential Qualifications:

Master's Degree in Computer Application (MCA) or bachelor's degree in Computer Engineering or Technology (BE/B Tech) from a recognized University or equivalent

Desirable Qualifications:

- 1. Should have good working knowledge of linux platforms; shell programming
- 2. Should be familiar with GitHub

3. Should have knowledge of RDBMS such MySQL, PostgressSQL; SQL programming; ViennaSQL

- 4. Should have knowledge of OOPs using C++, JAVA, Python, R
- 5. Should have knowledge of HTML, CSS3, Javascript, JDBC or ODBC connectivity for web enabling database.
- 6. Should be willing to learn Computational Biology and Molecular Dynamics Simulations
- 7. Should have experience as Data Analyst
- 8. Capability as trainer will be of added advantage.
- 9. Familiarity with Data handling and Tableau platform will be of added advantage.

- 1. Development and maintenance of database of variants identified in rare diseases patients
- 2. Development and maintenance of website for the program
- 3. Computational biology based analysis like Molecular Dynamics Simulations
- 4. Training of students

23) Laboratory Assistant (Post No. 1)

Age Limit : 50 years

Emoluments : ₹ 20,000/- + 24% HRA

Essential Qualifications:

B.Sc./ 3 years Diploma in Engineering & Technology

Desirable Qualifications:

Experience in routine laboratory maintenance, preparation of reagents, microbial culture. Experience in working with laboratory animals will be a plus

Nature of Duty:

The selected candidate will be trained in methods to generate CRISPR knockout mice, and will be responsible for generating knockout mouse strains for multiple projects.

24) Laboratory Technician (Post No.2)

Age Limit : 50 years

<u>Emoluments :</u> ₹ 25,000/- (Consolidated)

Essential Qualifications:

DMLT or Science graduate with 2 years experience in laboratory work

Desirable Qualifications:

Experience of working in a clinical laboratory

Nature of Duty:

Analysis of samples for beta thalassemia and newborn screening

25) Project - Junior Research Fellow

Age Limit : 35 years

<u>Emoluments :</u> (i) ₹ 31000 + HRA per month for NET (ii) ₹ 25000 + HRA for non-NET

Essential Qualifications:

Good academic record with first class master's degree in any branch of Life Science.

Desirable Qualifications:

Proficiency in one or more of the following: Experience in molecular biology techniques, microbiology, biochemical techniques and imaging.

26) Project - Senior Research Fellow

Age Limit : 35 years

Emoluments : ₹ 35,000 + HRA

Essential Qualifications:

Post Graduate Degree in Basic Science OR Graduate / Post Graduate Degree in Professional Course with two years of research experience.

Desirable Qualifications:

- Qualified National Eligibility Tests CSIR-UGC NET including lectureship (Assistant Professorship) or GATE.
 OR
- (ii) Qualified National level examinations conducted by Central Government Departments and their Agencies and Institutions.
- (iii) Experience in Tissue culture, animal studies, cell signalling, Mass spectro photo metric analysis, NGS, real time PCR, Cell Biology work, Transcriptomics and genomics with atleast 02 research publications in International Journals.

GENERAL TERMS AND CONDITIONS

- 1. The vacancies against the positions shall be filled based on the vacancies available at the time of selection. If more vacancies with identical job requirements become available within one year after the selection, these can also be filled from among the candidates who are empaneled for the above positions.
- 2. Candidates are encouraged to apply for multiple positions. Depending on the qualifications, experience and recommendations of the Selection Committee, the candidates may be selected for more than one position.
- 3. Depending on the qualifications, experience and recommendations of the Selection Committee, the selected candidates may be placed in a scale and designation lower than the grade advertised/applied against.
- 4. Candidates selected against the positions will be expected to carry out research in the areas of Biochemistry, Cell Biology, Computational and Structural Biology, Genetics, Immunology, Microbiology or Molecular Biology.
- 5. Emoluments of the candidates selected against the positions may vary depending upon the qualifications, experience, recommendations of the Selection Committee or emoluments sanctioned by the funding agency in the project.
- 6. Selection against the positions will not make the candidates with Master's Degree, eligible to register for the Ph.D. degree.
- All these positions are purely temporary and are initially for a period of six months or one year. These positions could be extended/terminated depending on the continuation of the project(s).
- 8. Reservation for SC/ST/OBC/Physically Handicapped/Ex-service person/ EWS applicants will be as per Govt. of India rules.
- 9. Relaxation of age for SC/ST/OBC/Physically Handicapped/Ex-service person/ Women applicants will be as per Govt. of India rules.
- 10. Mere fulfilling the minimum qualifications will not entitle the candidate for being called for interview. The applications will be screened by a committee based on research experience and requirement of each project. The candidates found suitable will be shortlisted and interviewed through Video Conference. The decision of the Director, CDFD will be final in this respect and no correspondence will be entertained in this regard.
- 11. Any of the selected individuals may from time to time be assigned to perform any other duties commensurate with their qualifications, by the Director, CDFD.

Interested candidates, who fulfill the above conditions, should apply in the prescribed application form **ONLINE through this portal**, wherein the candidate is also required to submit a Statement of Purpose (maximum 200 words), emphasizing how his/her experience/expertise will contribute to research programs of CDFD. Please upload soft copies of certificates in support of date of birth, educational qualifications, reservation category (if applicable). You may contact <<u>empcrcrmt@cdfd.org.in</u>> for any queries. The last date for submitting online applications is **20.06.2022**.

Incomplete applications, applications without Statement of Purpose, and applications without copies of certificates in support of date of birth / educational qualifications / experience / reservation category (if applicable) or the applications received after the last date are liable to be rejected.

Officer Incharge Acad & EMPC CDFD