

Delhi Pharmaceutical Science and Research University

(Govt of NCT of Delhi)

Mehrauli-Badarpur Road, Pushp Vihar Sector-III New Delhi-110017, India

Advertisement for the Post of Research Associate-I and JRF

Applications are invited- form Indian Nationals for the following position under the project entitled "Establishment of Centre of Precision Medicine and Pharmacy' sanctioned by Directorate of Training & Technical Education. Appointment will be temporary/ contractual nature for the 11 months, which can be continued for maximum of 3 terms on the basis of the performance.

Name of Position	Research Associate-I
Number of Position	01
Emoluments	Rs. 50,000/- (Consolidated)
Educational Qualifications & Experience	Essential: Ph. D in Biotechnology /Molecular Biology/ Pharmacology with of 1 Years of research experience of gene sequencing with Next Generation sequencing equipment or Proficiency in "Precision Medicine for various diseases like cancer infectious, diseases, cardiovascular and metabolic disorders. Desirable: As per Annexure -1
Upper age limit	40 years (relaxable for 5 years Sc/ST/Physically candidates). for Handicapped/Female

Name of Position	Junior Research Fellow
Number of Position	01
Emoluments	Rs. 30,000/- (Consolidated)
Educational Qualifications & Experience	Essential: The Candidate should have a first Class Bachelor degree in Pharmacy (B. Pharm)/ B. Tech (Biotech)with TWO years' experience in the Hospital/Research Organization/Industry Or Post Graduate degree in Pharmacy/ Biotechnology with knowledge of Gene Sequencing. Desirable: As per Annexure -1
Upper age limit	35 years (relaxable for 5 years Sc/ST/Physically candidates). for Handicapped/Female

Delhi

General Instructions:

Interested candidates are requested to send their applications strictly in the prescribed format appended below (Annexure –II) alongwith detailed CV & Covering Letter as hard copy addressing to The Registrar, Delhi Pharmaceutical Sciences and Research University (DPSRU), New Delhi-110 017. Please mention "Application RA-I and JRF in Precision Medicine & Pharmacy Centre" in the subject line of the envelope. Service conditions of project manpower.

1. Dearness Allowance (DA) & Child Care Allowance (CCA): Manpower in projects are not entitled to DA & CCA.
2. House Rent Allowance (HRA): HRA is allowed as per Central Government norms applicable in the city/location where they are working.
3. Medical Benefits: The Project manpower will be entitled for medical benefits applicable as per DPSRU norms.
4. Leave and other entitlements: The project manpower is entitled to leave as per rules of DPSRU.
5. Bonus, Gratuity & Leave Travel Concession: The project manpower will not be entitled to these allowances.
6. Remuneration is taxable as per norms.
7. All manpower positions are purely temporary and co-terminus with the project.
8. Canvassing in any form will lead to disqualification.
9. The University reserves the right to cancel/modify the recruitment process or increase/decrease the number of positions at any stage without assigning any reason.
10. No TA/DA will be paid for attending the walk-in-interview. 11. Original certificates and self-attested copies of all certificates need to be presented before the interview/final selection for verification.

Annexure -1

1. Harnessing different chemical libraries like Zinc 15/20, Pubchem etc for virtual screening
2. Analysis of protein-ligand binding interactions using Molegro, Maestro etc
3. Utilizing *in-silico* tools like Swiss Target Prediction, Swiss ADME to find drug like molecules using Lipinski rule of 5 and further eliminating the toxic molecules from the developed library
4. Synthesis, purification and characterization of novel heterocyclic compounds
5. Preformulation studies: solubility studies, permeability assays, solution & solid stability, compatibility studies
6. Analytical method development & validation HPLC/LC-MS
7. Development & optimization of the conventional & novel formulations (using QbD/Gastroplus)
8. Physicochemical & biological characterization (ex vivo, in vivo) of formulations
9. In vitro studies and analysis of formulations: study of in vitro drug release mechanism (kinetics study)
10. Preformulation studies: solubility studies, permeability assays, solution & solid stability, compatibility studies
11. Sample Tracking & Data collection- clinical metadata entry, Tissue Quality Control, Blood/Fecal Sample Processing: *PBMC isolation* using Ficoll gradient, Data Coordination.
12. Transcriptomics and Proteomics Profiling : RNA extraction, Library preparation, RNA-Seq workflow, Sample QC, *Next-generation sequencing*: data visualization.
13. Proteomics (Metaproteomics / Tumor Proteome): Protein extraction, protein quantification, trypsin digestion, Sample prep for LC-MS/MS, GO term enrichment and pathway mapping (e.g., *DAVID*, *Metascape*), Maintain sample record, QC records, and experiment run sheets, document SOPs
14. In Vivo Animal Modeling, In Vitro Efficacy Assays, Pharmacokinetics (PK) : Dosing and Sampling, Plasma separation, LC-MS/MS-based assay, Pharmacodynamics-Biomarker Evaluation, Documentation: logbooks with ethics compliance.
15. R package for analysis of biological data, R for meta, PhVID for disproportionality analysis (frequency based and Bayesian methods), GRADE pro for GRADE analysis, Evidence Gap Map Analysis, Genome-wide association analysis with longitudinal phenotypes using fGWAS of R package. GROMAC for molecular simulation studies includes DCCM and PCA analysis, Network creation and analysis.

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16. Nanotechnology & Drug Delivery: Expertise in nanoparticle synthesis, antibody conjugation, and physicochemical characterization using advanced analytical tools.
17. Cell Culture & Disease Modeling: Proficient in 2D and 3D in vitro systems including spheroids, patient-derived organoids, ECM-based scaffolds, and disease models (IBD, cancer, inflammation, gut permeability).
18. Tissue Engineering & Biomaterials: Skilled in design, synthesis, and evaluation of biomaterials and ECM scaffolds for regenerative medicine and immunomodulatory applications.
19. Molecular & Protein Analysis: Hands-on experience in protein isolation, SDS-PAGE, Western blotting, ELISA, qPCR, and fluorescence-based assays.
20. Immunology & Gut Health Models: Expertise in macrophage-based assays, gut dysbiosis models, and Caco-2 permeability studies for leaky gut and inflammatory conditions.
21. In Vivo & Translational Research: Proficient in animal handling (rats, mice, rabbits), tumor xenograft and orthotopic models, drug administration techniques, blood collection, necropsy, and tissue analysis.
22. Advanced Instrumentation: Experienced in handling HPLC, FTIR, Capillary Electrophoresis, SEM, NanoDrop, Microplate Reader, Confocal Microscopy, Chemiluminescence systems, homogenizers, and sonicators.
23. Imaging & Phenotypic Characterization: Skilled in fluorescence imaging, immunostaining, and cellular phenotypic analysis for disease modeling and therapeutic evaluation.

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Annexure -II

DELHI PHARMACEUTICAL SCIENCES AND RESEARCH UNIVERSITY (DPSRU)
Pushp Vihar, Sector-III, M.B. Road, New Delhi-110017

APPLICATION FORM
(Under DKDF Project)

1. Post Applied For

Junior Research fellow Research Associate-I

2. Personal Information

Full Name (in Block Letters)

Father's / Mother's Name

Date of Birth (DD/MM/YYYY)

Age (as on date of interview)

Gender

Nationality

Category (UR/OBC/SC/ST/EWS)

Marital Status

Aadhaar / PAN No.

Correspondence Address

Permanent Address

Mobile No.

Email ID

3. Educational Qualifications

Examination	Board/Univer sity	Year of Passing	Division/Gra de	Percentage/C GPA	Subjects / Specializatio n
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4. Experience Details

Designation	Institution / Organization	Duration (From- To)	Total Period	Nature of Work / Key Responsibilities
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(Attach additional sheet if required)

5. Publications / Research Output (if applicable)

List up to five most relevant publications or attach a complete list as an annexure.

S. No.	Title of Paper	Journal / Book	Year	DOI / ISSN
1				
2				
3				
4				
5				

6. Technical Skills / Areas of Expertise

Virtual Screening & Molecular Docking (Zinc15, PubChem, Molegro, Maestro)

Synthetic chemistry

In-silico ADME/Toxicity Prediction (SwissADME, SwissTarget)

Analytical Techniques (HPLC / LC-MS / LC-MS-MS)

Formulation Development (QbD, GastroPlus)

Preformulation & Stability Studies

Transcriptomics / Proteomics / Bioinformatics Tools

Animal Handling & Pharmacokinetics

R / PhVID / fGWAS / GROMACS / Data Analysis

Others (please specify): _____

7. References

Name	Designation	Institution	Email / Contact No.
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8. Declaration

I hereby declare that all the information provided above is true and complete to the best of my knowledge and belief. I understand that any false information or suppression of facts will disqualify me from consideration or result in termination if appointed.

Date: _____ Place: _____

Signature of Applicant: _____

Instructions to Candidates

1. Bring this filled-in form along with one set of self-attested photocopies of certificates and testimonials.
2. Bring all original documents for verification.
3. Reporting time: 08:30 AM, 25-June-2026.
4. Venue: Auditorium, DPSRU Campus, Pushp Vihar, Sector-III, New Delhi-110017.
5. No TA/DA will be paid for attending the interview.

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