

University of Hyderabad

Repository of Tomato Genomic Resources

Department of Plant Sciences

Research Positions in Tomato Functional Genomics

At the Repository of Tomato Genomics Resources (<https://lifesciences.uohyd.ac.in/rtgr/>), which is a DBT Centre of Excellence and Innovation in Biotechnology (CEIB): "Program Support on Genome Engineering of Tomato", we are working on Tomato Functional Genomics involving, Genome Editing, Whole Genome Sequencing, Proteomics, and Metabolomics along with TILLING approaches to manipulate the fruit ripening in tomato. The current aims of the group are to isolate tomato mutants with high lycopene, β -carotene (provitamin A) and folate content in tomato fruits. For recent publications of the group see (*New Phytologist* 2023 <https://doi.org/10.1111/nph.19510>, *Frontiers in Plant Science* 2023 <https://doi.org/10.3389/fpls.2023.1290937>, *Horticulture Research*, 2023, 10: uhac235, <https://doi.org/10.1093/hr/uhac235>, *The Plant Journal* 2022 <https://onlinelibrary.wiley.com/doi/10.1111/tpj.15925>; *Plant Science* 2022 <https://doi.org/10.1016/j.plantsci.2022.111177>; *The Plant Journal* 2021 106: 844-861. <https://onlinelibrary.wiley.com/doi/10.1111/tpj.15206>; *The Plant Journal* 2021 106: 95-112. <https://doi.org/10.1111/tpj.15148>; etc.).

Currently, we have four research associate and one laboratory assistant and one field attendant/worker positions available in the DBT-funded projects "*Research and Service facilities for Plant Metabolomics and Proteomics*" (DBT-SAHAJ) and "*Targeted editing of light and hormone signaling for generating novel alleles regulating agronomically beneficial traits in tomato*" (DBT-GET) awarded to **Prof. Y. Sreelakshmi**. The qualifications for the positions are as follows:

1. Research Associate I (Plant molecular Biology and tissue culture): Applicants should have PhD in Plant molecular biology preferably in tomato or other crop plants. We are looking for a candidate with research experience in plant functional genomics using CRISPR/CAS system and candidate should have expertise in gene cloning and tissue culture. The experience in crossing/backcrossing and maintaining mutant lines is desirable. 1-2 years' postdoctoral experience is required and experience should be supported by publications. Selected candidate would be paid Rs. 47,000+24% HRA (revised emoluments release expected from DBT-SAHAJ).

2. Research Associate II (Proteomics/Protein-protein interactions): Applicants should have experience in proteomics-2D electrophoresis/LC-MS of plant samples and in data analysis. Experience in handling HPLC, nanoLC-MS is a must. Knowledge of characterizing PTMs is desirable. Experience should be supported by publications. A PhD in Plant biology/Biochemistry with 1-2 years' postdoctoral experience is required. Selected candidate would be paid Rs. 47,000+24% HRA (revised emoluments release expected from DBT-SAHAJ).

Or

Applicants should have very good experience in gene cloning and functional genomics approaches, protein-protein interactions, yeast two hybrid-BiFC analyses and CHIP preferably in tomato or other crop plants and should be supported by publications. Selected candidate would be paid Rs. 47,000+24% HRA (revised emoluments release expected from DBT-SAHAJ).

3. Research Associate III (Metabolomics): Applicants should have experience in identifying plant metabolites using Mass spectrometry (GC-MS and LC-MS) and they should have operating knowledge of GC-MS/LC-MS or both and should be able to handle them independently. A PhD in Plant Biology/Biochemistry/Chemistry with 1-2 years' postdoctoral

experience is required and experience should be supported by publications. Selected candidate would be paid Rs. 58,000+24% HRA.

4. Research Associate IV (Plant molecular biology and metabolomics): Applicants should have PhD in Plant molecular biology preferably in tomato or other crop plants. We are looking for a candidate with research experience in plant functional genomics using CRISPR/CAS system and candidate should have expertise in identifying plant metabolites using Mass spectrometry (GC-MS and LC-MS). The experience in crossing/backcrossing and maintaining mutant lines is desirable. 1-2 years' postdoctoral experience is required and experience should be supported by publications. Selected candidate would be paid Rs. 58,000+24% HRA.

5. Laboratory assistant – 1 position: Applicants should have M.Sc. in any branch of Life Sciences plus 1-2 years' research experience in handling plants, analyses using basic molecular biology techniques including PCR, and analytical techniques like HPLC, GC/LC-MS. Selected candidates would be paid Rs. 20,000+24% HRA.

6. Field attendant/field worker - 1 position: Applicants should have minimum 5 years' experience in growing tomato plants, maintenance of greenhouses, net houses, minor repairs of fan/pump motors, autoclaving for decontamination and glassware cleaning. Graduation in any subject is required. Selected candidates would be paid a consolidated pay of Rs. 18000 +24% HRA. *Applications for this position without enclosed experience certificate will be rejected.*

We also accept applications from the candidates who wish to pursue post-doctoral research with their own fellowships from DBT/DST/CSIR/UGC in the area of tomato functional genomics/metabolomics/proteomics. The candidates who wish to be considered for independent fellowship can send CV with a research proposal at the email id given below.

Candidates interested in above project positions *should email a one-page statement* clearly explaining how their skills are relevant to the position. The candidates should also email detailed CV and the name/email id for three referees. In addition, they should fill the attached application form and email the softcopy. The candidates can email their application at **y.sreelakshmi@uohyd.ac.in** on or before **5.00 pm, April 20th, 2024**. *All the positions are purely temporary in nature and the emoluments will be paid upon receipt of funds from DBT. UOH does not have any responsibility towards emoluments payments. Shortlisted candidates would be called for interview. No TA/DA would be provided for attending the interview.*