

# The American Society of Pharmacognosy

<https://www.pharmacognosy.us/job/postdoctoral-research-associate-p450-engineering/>

## Postdoctoral Research Associate – P450 Engineering

### Description

The Skellam lab at the University of North Texas is seeking a highly motivated and determined Postdoctoral Research Associate with experience in manipulating / engineering eukaryotic cytochrome P450 monooxygenases (P450s) for biotechnological use. This position will investigate the use of P450s as biocatalysts in *Nicotiana benthamiana* and / or filamentous fungi, testing approaches for enhancing interactions with redox partners, ensure correct anchoring, and designing mutagenesis experiments to diversify substrate scope. The project is highly interdisciplinary and will require knowledge and experience of molecular biology, fungal / plant cell biology, protein modelling, and analytical chemistry techniques. The successful candidate will join a team consisting of postdocs, research assistants, graduate and undergraduate students, in a highly collaborative environment. This project provides opportunities to learn additional techniques such as confocal microscopy, metabolic engineering, and natural product chemistry techniques.

### Responsibilities

Further responsibilities include the day-to-day management of the project, manuscript and proposal writing, presenting original research internally and externally at meetings and conferences, and mentoring students at the undergraduate and graduate level.

### Qualifications

Minimum Qualifications• The candidate should have completed their PhD in biochemistry or a related field and have experience and interest in engineering P450 enzymes in eukaryotic hosts• Experience with molecular biology techniques such as gene cloning, plasmid construction, PCR, RT-PCR, Western blots and bioinformatic skills to aide in experimental design• Proficiency with protein structural predictions and protein purification• Ability to work independentlyPreferred Qualifications• Experience with *agrobacterium* / protoplast -mediated transformation• Experience with molecular modelling / docking• A passion for developing biotechnology solutions• Good interpersonal skills and a team-working attitude• Interest in training and mentoring students.

### Contacts

Dr. Elizabeth Skellam, [elizabeth.skellam@unt.edu](mailto:elizabeth.skellam@unt.edu)

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### Hiring organization

University of North Texas

### Industry

Academic

### Job Location

Denton, TX

### Date posted

April 24, 2026

### Valid through

31.05.2026