

DSI-NRF Centre of Excellence in Plant Health Biotechnology (CPHB) Internship Programme

The CPHB Internship Programme represents a period of experiential learning during which previously acquired knowledge and theory are integrated with practical application and skills development in the plant health research environment or professional setting. It provides interns with the opportunity to gain applied experience, while affording their mentors/supervisors the opportunity to guide their development. The programme will prepare interns for careers in the plant health domain or academia by cultivating a range of personal and professional attributes and values. The latter includes subject knowledge, verbal and written communication skills, project management and problem solving abilities, computer literacy, an awareness of community and societal issues, self-direction and motivation, collegiality and teamwork, as well as professional attitudes and work habit.

The Internship Programme is designed to expand the depth and breadth of the intern's previous academic learning in the plant health domain. Interns also gain practical experience in how to apply theory, subject knowledge and biotechnology for solving real-world problems regarding the diseases and pests of plants that are of socioeconomic importance. This one-year period will further also inform the interns' decisions regarding future employment or postgraduate studies.

During the Programme interns will:

- link academic theory/knowledge to practice and reflect on the content/process of their experiential learning,
- become familiar with laboratory practices and safety procedures,
- develop an awareness of the importance of plant health, plant health research and science in general for addressing National priorities and for achieving the United Nation's Sustainable Development Goals,
- develop self-understanding, self-discipline, maturity and confidence,
- build and maintain positive professional relationships,
- develop strong mentoring relationships, and
- identify and clarify their future career path regarding postgraduate studies or employment.

By the end of the Programme, a successful intern will be:

- proficient in working with fungal and bacterial pathogens of plants,
- familiar with various procedures related to the rearing of insect pests and studying their biological control agents,
- proficient in working with DNA and in performing standard molecular biology procedures,
- capable of performing basic bioinformatic procedures and analyses,
- familiar with extension and knowledge/skills transfer activities for promoting plant health in agriculture/forestry,
- competent in extracting and interpreting relevant information from scientific literature,
- able to clearly communicate scientific information in the verbal and written forms, and
- capable of designing a feasible research project aimed at addressing an aspect relevant to real-world plant health issues in agriculture or forestry.

Eligibility, remuneration and start date

- South African graduates with a BSc Hons degree or a four-year BSc Agric degree. These may include specialization in a range of fields in the biological and agricultural sciences (e.g., genetics, entomology, microbiology, plant pathology, plant breeding, plant production, agricultural extension, etc.).
- Preferred applicants are those whose appointment would contribute towards achieving demographic representation in the CPHB.
- This is a one-year internship with a monthly stipend of R 8 000 for 2020.
- The Internship Programme typically runs from February to February every year.

How to apply

Applicants should email their detailed CV, copy of their South African ID and full academic record to heidi.roos@fabi.up.ac.za

Note that preference will be given to applications received early during January 2020.