**Position Summary:**

Drs. Anas El-Aneed (Pharmacy), and Lipu Wang and Randy Kutcher (Agriculture) are looking for a Ph.D. student to conduct analytical research examining mycotoxins within wheat crops that may impact grain quality and marketability as well as the health and safety of animals and humans. The mycotoxins are produced by multiple *Fusarium* spp. (fungi) causing Fusarium head blight (FHB) a destructive disease of small grain cereal crops.

A common Fusarium-produced mycotoxin found in North America is deoxynivalenol (DON); however, mounting evidence suggests that there are many DON-related structures, which are being discovered and characterized. The main goal for the Ph.D. student is to develop a targeted analytical method to detect and measure DON-derivatives that have authentic standards. In addition, a screening method should be established for DON-derivatives that do not have authentic standards.

The successful applicant will conduct their research within the laboratory of Dr. El-Aneed with an expected start date of September 2024.

**Qualifications**

* MSc degree in life sciences, such as chemistry, biochemistry, agriculture or relevant sciences (received in the past 3 years) or undergraduate degrees with at least 3 years relevant work experience.
* Fluency in English and excellent communication skills.

**Key criteria for the assessment of applicants**

* Professional qualifications relevant to the PhD project
* Relevant work experience
* Scientific presentations and publications
* A cumulative weighted average of at least 80%
* Interpersonal and leadership skills
* Eligibility for tri-council funding in Canada

**Formal requirements**

The successful applicant will enroll as a PhD student in Plant Science at the University of Saskatchewan according to the rules stipulated in the guidelines for the Graduate Program at the College of Graduate and Postdoctoral Studies.

**Financial Support:**

The candidate will be provided with a stipend and will be expected to apply for internal and external scholarships.

**How to Apply**

Candidates must submit one single application document (pdf file) that includes (1) a cover letter, (2) a complete curriculum vitae (CV), (3) a copy of transcripts, (3) language proficiency test results if applicable, and (4) contact information for two academic/professional references.