



VACCINE AND INFECTIOUS DISEASE ORGANIZATION

MSc Student- Subunit Vaccines

The Vaccine and Infectious Disease Organization (VIDO), Canada's Centre for Pandemic Research, is a world leader in infectious disease research and vaccine development for humans and animals. Located at the University of Saskatchewan in Saskatoon, Canada, VIDO is home to one of the largest and most advanced containment level 3 facilities in the world. To strengthen the preparedness for emerging infectious diseases we are currently expanding our infrastructure to include containment level 4 capacity, a GMP vaccine manufacturing facility, and a new animal housing facility. Our vision includes having the capacity to study any emerging disease in any animal model embracing a One Health approach to prevent emerging and re-emerging infectious diseases in humans and animals.

Position Summary

Dr. Aneesh Thakur, Principal Investigator, [Laboratory of Vaccine Engineering, and Immunology \(LVEI\)](#) is seeking a MSc student focusing on Tuberculosis subunit vaccine formulation and delivery to join his team.

Tuberculosis (TB) caused by *Mycobacterium tuberculosis* (*Mtb*) is one of the top 10 causes of death worldwide, despite decades-long use of the Bacillus Calmette–Guérin (BCG) vaccine and antibiotics. TB typically affects the lungs, and the transmission of *Mtb* occurs primarily through inhalation of fine droplets containing bacilli from infected individuals. As the respiratory tract is the natural route of *Mtb* infection, mucosal immunization in the airways with dry powder based highly purified recombinant *Mtb* antigen(s) is a very promising strategy for the development of novel TB vaccines. The overall goal of this project is to evaluate the lung interactions and the efficacy of the dry powder subunit vaccine in animal models. A dry powder based thermostable vaccine can have a tremendous impact on the global fight against TB.

Qualifications

- Recent BSc degree in pharmacy, biochemistry, immunology, or relevant biomedical sciences.
- Evidence of academic excellence.
- Effective organizational, time management skills, and prioritization skills as well as effective verbal and written communication skills are required.

Formal requirements

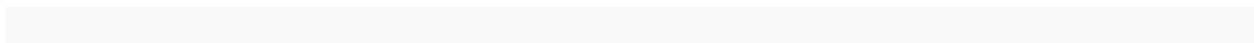
The successful applicant will be required to apply for enrolment and be accepted as a MSc graduate student at the Department of Biochemistry, Microbiology, and Immunology, College of Medicine according to the rules stipulated in the guidelines for the Graduate Program at the College of Graduate and Postdoctoral Studies.

Financial Support

The candidate will be provided a semi-monthly stipend and is expected to apply for internal and external scholarships.

How to Apply

Candidates must submit electronically, one single application document (pdf file) to [Aneesh Thakur](#) that includes (1) a letter of motivation, (2) a complete curriculum vitae (CV), (3) a copy of graduate transcripts, and (4) contact information for individuals willing to provide references.



The successful applicant will be required to provide the following current verification(s) where 'Yes' is indicated below. Further information is available at: <https://careers.usask.ca/tips-for-applying.php#Howtoapplyforaposition>

Facility Access Screening including Criminal Record Check: Yes

Driver's License and Abstract Check: Not Applicable

Education/Credential Verification: Yes

Vulnerable Sector Check: Not Applicable

Review of applications will begin immediately; however, applications will be accepted and evaluated until the position is filled. We thank all applicants for their interest; only those candidates selected for an interview will be contacted.

For more information visit: vido.org

Note: The University believes equity, diversity, and inclusion strengthen the community and enhance excellence, innovation and creativity. We are dedicated to recruiting individuals who will enrich our work and learning environments. All qualified candidates are encouraged to apply; however, in accordance with Canadian immigration requirements, Canadian citizens and permanent residents will be given priority. We are committed to providing accommodations to those with a disability or medical necessity. If you require an accommodation in order to participate in the recruitment process, please notify us and we will work together on the accommodation request. The University of Saskatchewan's main campus is situated on Treaty 6 Territory and the Homeland of the Métis. We pay our respects to the First Nations and Métis ancestors of this place and reaffirm our relationship with one another. Together, we are uplifting Indigenization to a place of prominence at the University of Saskatchewan.