VACCINE AND INFECTIOUS DISEASE ORGANIZATION

Postdoctoral Fellow – Mucosal 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 an outstanding Postdoctoral Fellow focusing on subunit mucosal vaccine formulation and delivery to join his team.

The ability to induce airway mucosal immunity is an essential property of future subunit vaccines because several pathogens, *e.g.*, respiratory viruses and *Mycobacterium tuberculosis* enter the human body via the airways. It is well known that protection against these pathogens requires activation of the mucosal immune system, which can only be primed via mucosal vaccine administration. However, little is known about how to design safe nanoparticle-based subunit vaccines optimal for the induction of airway mucosal immunity. The purpose of this project is to elucidate the essential design criteria for protective immunity by inhalable subunit vaccines intended for safe pulmonary administration. The project will combine approaches in formulation, pharmaceutical nanotechnology, imaging, and immunology to achieve the objectives.

Qualifications

- Completion of PhD (in the past three years) in Pharmacy, Biochemistry, Immunology, or another related discipline
- Strong background in drug delivery, formulation, immunology, and/or vaccinology
- Hands-on experience with nanoparticle formulation, cell culture, and animal experiments
- Team player with excellent oral and written communication skills
- Effective organizational and time management skills
- Experience working with biosafety level 3 pathogens is an asset.

Status: 2-year term, with the possibility of extension
Employment Group: Post-Doctoral Fellows – PSAC
Full Time Equivalent (FTE): 1.0
Salary Information: The starting salary will follow the university standard for a post-doctoral researcher and will be commensurate with experience.

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

Interested candidates are asked to submit their application in one single application document (pdf file) including a statement of research interest, complete curriculum vitae (CV), and contact information of three references.

Apply Now

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.