Postdoctoral Position in Gene Therapy of the Human Skin

One full-time postdoctoral position is available in the lab of Dr. Sarah Hedtrich at the Faculty of Pharmaceutical Sciences, UBC. Expected start date is negotiable, although a start date as early as possible is considered favorable.

The research project aims for the establishment of an *in-situ* gene therapy using CRISPR-Cas as a new treatment option for severe monogenic skin diseases. Specifically, we aim for the development of smart delivery strategies for CRISPR/Cas components to (diseased) human epithelia with focus on the skin. Secondly, CRISPR/Cas based gene editing strategies will be developed and optimised to correct autosomal recessive congenital ichthyosis (ARCI) causing mutations in human skin.

Applicants should have a strong background in gene editing using CRISPR-Cas, cell culture and biomolecular methods. Experience with primary cells, organ models and non-viral gene delivery are considered strong assets.

Successful candidates will be expected to take the lead within these projects, to publish manuscripts as a first author, and to present their data at conferences and lab meetings. Applicants should have a PhD in biomedical engineering, pharmacology, biochemistry, or a related field with relevant experience.

The Hedtrich lab focuses on drug delivery and nanomedicine, and is strongly involved in the development of new therapeutic approaches for the treatment of skin diseases. It is also involved in the development of reconstructed human tissues and their use as disease models for the study of pathological processes, drug testing, and the establishment of new regenerative approaches and promotion of wound healing. Research projects within the lab are highly interdisciplinary and routinely require intensive collaborations with groups from other disciplines.

For more information about the Hedtrich group and current research, please see:

https://pharmsci-hedtrichlab.sites.olt.ubc.ca/

We are a young and enthusiastic group looking for people willing to shape and establish a new and innovative research line at the Faculty of Pharmaceutical Sciences, UBC. High levels of participation in a collaborative team setting will be required, as will a high degree of self-motivation, excellent time management skills, and an ability to demonstrate creativity and sound judgment. The candidate should also demonstrate strong writing skills to ensure high-quality scientific publications and grant applications. Preference will be given to those with a strong publication record.

Pay will be commensurate with level of experience and subject to UBC regulations for postdoctoral stipends. The contracted term will be for one year, from which further extensions will be possible. For further information, please email sarah.hedtrich@ubc.ca.

Review of applications will start immediately, and will continue until the position is filled.

Please send a curriculum vitae, a description of your research experience, a statement of your research interests, and the names of three referees to:

Dr. Sarah Hedtrich

Assistant Professor The University of British Columbia Faculty of Pharmaceutical Sciences

Email: sarah.hedtrich@ubc.ca

Equity and diversity are essential to academic excellence. An open and diverse community fosters the inclusion of voices that have been underrepresented or discouraged. We encourage applications from members of groups that have been marginalized on any grounds enumerated under the B.C. Human Rights Code, including sex, sexual orientation, gender identity or expression, racialization, disability, political belief, religion, marital or family status, age, and/or status as a First Nation, Metis, Inuit, or Indigenous person.

All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority.