



Credit: Province of British Columbia.



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POSTDOCTORAL POSITION IN FISH MIGRATION

Landslide Impact on Flow Dynamics, Fish Migration and Genetics of Fraser River Salmon

THE PROJECT

The [Salmon Watersheds Lab](#) and collaborators at Simon Fraser University (SFU) are seeking a **Postdoctoral Fellow** to work on a project entitled “**Landslide Impact on Flow Dynamics, Fish Migration and Genetics of Fraser River Salmon**”. The successful candidate will be part of an inter-disciplinary team that aims to understand the impacts of the 2018 Big Bar Landslide on channel morphology, flow dynamics, fish migration, and the genetics of Fraser River Salmon. The natural landslide blocked the Fraser River to salmon passage, devastating salmon runs seeking to return to the Northern Basin. The project is led by a large group of multi-disciplinary investigators from Simon Fraser University, University of Northern British Columbia, University of Victoria, Durham University, and University of Massachusetts-Amherst, working in collaboration with the Hakai Institute, Department of Fisheries and Oceans (DFO), Canada, Fraser Basin Council, and the Fraser Salmon Management Council.

THE CANDIDATE

We seek candidates to lead research on salmon migration and hydraulic barriers. The Postdoc would be co-advised by Jonathan Moore (SFU) and David Patterson (DFO). Through analyses of tagged and tracked salmon, this Postdoc will examine the biological and environmental controls of successful fish passage through the Big Bar slide area and other high velocity areas in the Fraser canyon. Candidates should:

- Have experience with programming and analysis of large data sets;
- Some experience with tagging and tracking analyses;
- Experience in ecohydraulics and fish migration including swimming ability, behaviour, bioenergetics, and physiology is an asset.

There will be a larger cluster of Postdoctoral Fellows, research staff and graduate students investigating the impacts of landslides and flow dynamics on salmon migration and evolution. The project provides opportunities for candidates to gain experience working at the intersection of geomorphology, biology and genetics, and within a large group of 15 research collaborators. With this comes additional opportunities to mentor graduate students, lead presentations and discussions within a variety of settings and platforms, and gain experience communicating complex science with real-world implications.



SALMON WATERSHEDS LAB

Ecology & Conservation of Aquatic Systems

Jonathan Moore and Team



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ABOUT SIMON FRASER UNIVERSITY

Simon Fraser University sits atop Burnaby Mountain in British Columbia's lower mainland, minutes from downtown Vancouver and a variety of spectacular mountainous environs. Simon Fraser University has a long history of study in geomorphology and water sciences and remains a stimulating environment in which to learn and do research. SFU is an equity employer and encourages applications from all qualified individuals including women, persons with disabilities, visible minorities, Indigenous Peoples, people of all sexual orientations and gender identities, and others who may contribute to the further diversification of the university.

OTHER INFORMATION

Postdoc funding is available for 1-year, with a possible extension for up to 3-years in total. The start date for this position is negotiable, but we hope to have the full team in place before the end of 2021.

TO APPLY

Applicants should email a CV and a brief cover letter to adminjwm@sfu.ca with the subject: "2021 Salmon Migration application". Applications will be reviewed starting June 21, 2021 but we will consider applicants on a rolling basis. Please note:

- Your CV should reference relevant work and educational experience and contact information for three (3) professional references;
- Your cover letter should be two (2) pages or less and should:
 1. Highlight relevant experience and analytical expertise;
 2. Specific interest and potential research directions for this project;
 3. Communicate the timing of your availability.

Both documents should be pdf files and the file names should start with the last name of the applicant.