

Full-time Research Assistant – Proteomics and Cancer Biology

McGill University/Lady Davis Institute for Medical Research, Jewish General Hospital University Health Centre

The Ahn Lab at the Lady Davis Institute for Medical Research (LDI), Jewish General Hospital University Health Centre, affiliated with McGill University, is seeking a motivated Research Assistant to support research at the interface of systems biology, cancer biology, and functional proteomics.

The Ahn Lab studies how tumor cells communicate with surrounding cells to shape cancer progression and therapeutic response. Our goal is to uncover the molecular mechanisms underlying these communications and identify new opportunities for cancer therapy. We pursue multidisciplinary research that integrates systems biology, mass spectrometry-based functional proteomics, molecular biology, and preclinical models of brain cancer, while developing new methods to interrogate tumor–host interactions at the systems level.

The successful candidate will play a key role in research projects within the Ahn Lab and collaborative projects with other labs, contributing to both experimental and computational work. They will also contribute to the development and implementation of new experimental methods and support the day-to-day organization and operation of the lab.

This is a full-time position. The initial appointment will be for one year, with a 120 working day probationary period, and may be renewed. Salary and employment conditions will be commensurate with qualifications and experience and in accordance with institutional guidelines.

Key responsibilities

- Use liquid chromatography-mass spectrometry (LC-MS/MS) for bottom-up proteomic analyses (e.g., phosphoproteomics, immunopeptidomics).
- Generate and process biological samples for MS-based analyses.
- Perform routine instrument monitoring, maintenance, quality control, and troubleshooting.
- Process, analyze, visualize, and interpret MS-based proteomic datasets, as well as data generated from complementary wet lab experiments.
- Use MS-related software (e.g., Xcalibur, Proteome Discoverer, Mascot, commercial/open-source software).
- Use R for data processing, statistical analysis, and visualization. Prior coding experience is not required, but willingness to learn and routinely use R is critical.
- Perform standard molecular and cellular biology experiments (e.g., tissue culture, immunoblot, RT-qPCR, ELISA) following established lab protocols.
- In collaboration with other lab members and under the guidance of the supervisor, develop, optimize, validate, and implement new experimental protocols and methods.
- Prepare and maintain detailed experimental protocols.
- Maintain accurate experimental records and contribute to data organization, documentation, and lab record keeping.
- Effectively organize and communicate experimental progress, data, figures, analyses, results, and challenges to the supervisor and other lab members.
- Attend and actively participate in regular lab meetings and other relevant research-related meetings.
- Support the training of other lab members in established lab protocols.
- Work collaboratively with lab members and collaborators.
- Support day-to-day lab operations (e.g., maintaining lab organization, monitoring inventories, ordering reagents, consumables, and other research supplies, coordinating with vendors, and receiving and unpacking orders).
- Communicate with collaborators regarding sample requirements, handling, shipping, and prepare summaries of experimental results.

Required:

- BSc or MSc in biochemistry, immunology, neuroscience, biology, systems biology, analytical chemistry, computational biology, bioinformatics, or a related field.
- At least 2 years of relevant research experience in an academic or industry lab.
- Prior experience in MS-based proteomics and quantitative data analysis, or a strong interest and willingness to develop expertise in these areas.
- Demonstrated hands-on experience with molecular biology, biochemistry, cell biology, or related wet-lab techniques.

- Excellent problem-solving skills.
- Strong attention to detail and ability to perform rigorous and reproducible experimental work.
- Ability to work independently while contributing within a collaborative research environment.
- Strong organizational and time-management skills, with a demonstrated ability to manage multiple responsibilities and meet deadlines.
- Excellent written and oral communication skills, including the ability to clearly communicate experimental results, progress, and technical challenges to lab members, supervisor, and collaborators.
- Willingness to be trained and to subsequently train other lab members in established procedures.
- Willingness to learn and routinely use R for data analysis.
- Willingness and comfort working in a research environment in which mouse models are used. Mouse handling and animal experimentation are not required responsibilities of this position. However, prior experience with and willingness to perform mouse work will be considered a significant asset.

Assets:

- Previous experience with LC-MS/MS.
- Previous experience with lab automation.
- Experience with quantitative proteomic workflows (e.g., label-free, TMT) and enrichment techniques.
- Experience analyzing proteomic or other large-scale biological datasets (e.g., scRNA-seq).
- Experience with R and/or Python or other programming languages.
- Experience working with mouse models.

Benefits:

Annual Vacation Days: 1.667 days per month. Vacation is accrued over a 12-month reference year, from May 1st to April 30th. Accrued vacations leave must be taken within 12 months of the end of the reference year.

Sick Days: 9.6 days per year. Sick day's computation is based on 12 months from December 1st to November 30th. Effective after 3 months of employment, not transferable, payable if not taken. Please note that 3 of those 9.6 days can be taken for personal reasons.

Statutory Holidays: 13 days per year following the SMBD Jewish General Hospital – Statutory Holidays schedule.

Group Insurance Plan: Admissible to join the group plan after 3 months of employment, provided that you have a valid RAMQ card. Your principal investigator will cover 50% of the cost associated with the Health and Dental coverage. Additionally, LDI employees contributing to the LDI Blue Cross Health and Dental Insurance Plan and their dependents (for families and single parents) are eligible for an additional taxable benefit called the LDI Health Supplementary Fund (referred to as the Health Spending Account (HAS) at Blue Cross). Under this program, employees get an allocated amount between \$250 and \$500 per year depending on their insurance coverage (single, single parent, family) that can be used for health costs not covered under our group insurance plan or the provincial health plan.

Pension Plan: By virtue of the Act respecting the Government and Public Employees Retirement Plan you will be contributing to the Government and Public Employees Retirement Plan (RREGOP).

How to Apply

Interested applicants should complete the application form: <https://forms.gle/6LtZV2jbC5112ktj6>

Salary range: \$29.53/hour to 35.77/hour

In addition, applicants should submit the following:

- Brief cover letter describing their research experience and interest in the position
- CV
- Undergraduate transcript and, if applicable, MSc transcript
- Names and contact information of two references who can speak to their experience and/or work. References may be contacted as part of the application review process, including prior to an interview.

Please combine the CV, transcript(s), and cover letter into a single PDF named LastName_FirstName_Application.pdf and email it to Dr. Ryuhjin Ahn at ryuhjin.ahn@mcgill.ca. The application deadline is December 15, 2026 or until a suitable candidate is found. We thank all candidates for applying. Only those selected for an interview will be contacted.