

The Opportunity

The Department of Biomedical Physiology and Kinesiology (BPK) invites applications for a full-time tenure-track faculty position at the rank of **Assistant** or **Associate Professor** in Cardiac Arrhythmias to commence January 1, 2025, or a mutually agreed-upon date.

Desired Research Area

The ideal candidate will lead a research program using stem cell-derived cardiomyocytes (hiPSC-CMs) to investigate inherited arrhythmias and cardiomyopathies at the Cellular and Regenerative Medicine Centre (CRMC). Areas may include studies on genetic variants associated with arrhythmias (e.g., ion channelopathies, sarcomeric proteins) or other cardiac diseases. Through their research, the ideal candidate will make use of available state-of-the-art infrastructure designed for optimal development and phenotyping of hiPSC-CMs to study this cardiac dysfunction. The candidate will have a collaborative disposition and sufficiently broad interests and expertise to readily engage in collaborations with other researchers in BPK, at SFU and UBC, and with the broader cardiac arrhythmia community.

Core Duties of the Position in Cardiac Arrhythmias:

- **Research:** Develop an externally funded research program devoted to advancing the field of channelopathy/cardiomyopathy research using hiPSC-CMs, supervise and mentor graduate students and other highly qualified personnel, and disseminate discoveries through peer-reviewed publications, conference presentations, and other forums appropriate to the discipline.
- **Teaching:** Teach undergraduate and graduate courses in the areas of molecular cardiac physiology and contribute to curriculum and program development.
- **Service:** Serve the Department, the University, and the larger scientific community by contributing to committee work and in departmental initiatives.

Qualifications for Assistant Professor

Excellence in research and teaching are the primary criteria for this position. The successful candidate must hold a PhD, MD, or equivalent degree in molecular cardiac physiology, biophysics, electrophysiology, biomedical engineering, or a related discipline by the employment start date.

The candidate must demonstrate:

- a strong record of research productivity commensurate with their experience;
- establishment of, or potential for, a successful research program;
- potential for excellence in teaching at both the undergraduate and graduate level;
- potential for supervision of graduate students.

Qualifications for Associate Professor

Excellence in research and teaching are the primary criteria for this position. The successful candidate must hold a PhD, MD, or equivalent degree in molecular cardiac physiology, biophysics, electrophysiology, biomedical engineering, or a related discipline by the employment start date. Only those holding or expected to hold the rank prior to the employment start date will be considered.

The candidate must demonstrate:

- a strong record of research productivity commensurate with their experience;
- establishment of, or potential for, a successful research program;
- sustained success in teaching at both the undergraduate and graduate level;
- potential for supervision of graduate students;
- demonstrated contribution to the academic community and potential contribution to the Department, Faculty and University's academic community.

The typical workload distribution for assistant and associate professors in BPK is 40% research, 40% teaching, and 20% service. In carrying out these duties, the successful candidate will advance BPK's goals to foster equity, diversity, and inclusion; for example, by working to eliminate the barriers that impede the ability of department members from historically underrepresented and marginalized populations to achieve their full potential. The successful candidate will foster a positive and inclusive working environment through respectful interactions with all faculty, staff, and students. The responsibilities, terms, and conditions of employment of faculty are listed in the [SFUFA-SFU Collective Agreement](#).

About the Department and University

About the Department of Biomedical Physiology and Kinesiology (BPK)

The mission of [BPK](#) is to advance the understanding of physiology and human health through fundamental and applied research, education, and service. BPK offers undergraduate degrees (BSc, BSc Honours) in biomedical physiology, behavioural neuroscience, and kinesiology, as well as graduate degrees (MSc, PhD). The Department includes 24 research faculty, 9 continuing teaching faculty members, 7.4 staff members, approximately 50 graduate students, and over 1,000 undergraduate majors. BPK features research clusters in cardiovascular physiology, chronic diseases, neuromechanics, and neuroscience.

About SFU

At the intersection of innovative education, cutting-edge research, and community engagement lies Simon Fraser University (SFU), Canada's top-ranked comprehensive university. With three campuses located in beautiful British Columbia's largest municipalities—Vancouver, Burnaby, and Surrey—our students, faculty, and staff are privileged to live and work on the traditional unceded territories of the x^wməθk^wəyəm (Musqueam), Sḵwxwú7mesh Úxwumixw (Squamish), səliiwətaʔ (Tsleil-Waututh), ǵíćəý (Katzie), k^wik^wə́ləm (Kwkwetlem), Qayqayt, Kwantlen, Semiahmoo, and Tsawwassen peoples. Consistently ranked as one of Canada's top employers, SFU's excellence as an engaged university is derived from our shared commitments to equity, diversity, and inclusion, and the pursuit of decolonization, indigenization, and reconciliation.

SFU offers several unique assets to its research faculty that are particularly relevant to this position. This includes the newly established Cellular and Regenerative Medicine Centre at BC Children's Hospital Research Institute (BCCHRI). This institute hosts numerous core facilities including those in imaging, flow cytometry, and MS proteomics. Within the CMRC is the RoboCult, a unique instrument for the maintenance and passaging of hiPSCs in a hands-free manner, Eppendorf bioreactors for the differentiation of hiPSCs to both ventricular and atrial cardiomyocytes, and phenotyping rigs for multiple electrode array assays, automated patch clamping, and high-speed optical mapping. As a testament to BPK and SFU's culture of innovation, BPK professors have founded four companies in the past 20 years, while World University Rankings for Innovation 2023 ranked SFU second globally in the Entrepreneurial Spirit category and 13th globally in the Innovative Universities category. Metro Vancouver offers burgeoning wearable technology and biomedical device ecosystems, with several start-up and mid-sized

companies now operating who are keen to engage in academic-industry partnerships. Several BPK faculty who conduct clinical research maintain affiliations with local hospitals including the BC Children's, Vancouver General, and St. Paul's Hospitals.

The Successful Candidate

The following credentials, skills, expertise, experience, values, and attitudes comprise the desired qualifications.

The successful candidate must:

- Hold a PhD, MD, or equivalent degree in molecular cardiac physiology, biophysics, electrophysiology, biomedical engineering, or a related discipline.
- Have at least one year of postdoctoral or related research experience.
- Have demonstrated excellence in research making use of hiPSC-CMs to study various aspects of cardiac function or dysfunction. Excellence will be assessed in various ways, including but not limited to the following criteria:
 - Extensive experience conducting scientific studies in cardiac biophysics;
 - High-quality scientific publications in the leading peer-reviewed journals of the field;
 - Awards or external funding (e.g., scholarships);
 - Disseminated discoveries via conferences, seminars, and other mechanisms for knowledge translation.
- Articulate a compelling vision for a research program that addresses questions of fundamental importance to the field and has clear potential to attract top-quality trainees, external funding, new scientific collaborations, and uptake by knowledge users.
- Show clear potential for excellence as a mentor of research trainees, especially those from equity-deserving groups.
- Demonstrate deep and broad knowledge of the fields of molecular cardiac physiology to teach undergraduate and graduate courses effectively in these areas.
- Show strong potential for effective teaching of undergraduate courses and fostering of inclusive learning environments.
- Show strong potential for effective knowledge translation and community engagement.
- Demonstrate outstanding interpersonal and communication skills (oral and written, in English). These skills include but are not limited to strong listening skills, valuing and respecting diverse perspectives, and a collaborative disposition.
- Show strong potential to be an engaged academic citizen, in part by demonstrating a record of volunteerism and participation in service activities, such as committee work and outreach initiatives.

The following qualifications are considered assets:

- Interest and capability for running patient-derived hiPSC-CM experiments to foster translation.
- Experience conducting research in diverse environments or from different perspectives.
- Show clear potential to collaborate within and outside the University.
- Previous or existing collaborations with leading researchers.
- Have assisted or led the teaching of undergraduate courses, and in so doing demonstrated keen interest in teaching, strong pedagogical skills, and effectiveness in fostering inclusive learning environments.
- Demonstrated experience in increasing diversity in their previous institutional environment(s) or in curricula.
- Experience or goals to apply research to better understand and address health issues affecting underrepresented populations.
- Interest, experience, and expertise in entrepreneurship and technology development.
- Leadership potential, demonstrated by leadership roles, formal leadership training, or leadership abilities.

How To Apply

Candidates should address their applications to Dr. Glen Tibbits, Chair of the Search Committee. Applications should consist of a single PDF file inclusive of and bookmarked for the following components.

- A cover letter (maximum two pages) that addresses: 1) reasons for applying to the position, and 2) a narrative description highlighting evidence that the candidate meets the job qualifications and can effectively perform the listed job duties. **Please also specify the rank you are applying for.**
- A complete up-to-date curriculum vitae that lists the candidate's education and employment history, publications and conference presentations, funding and awards, student supervision, collaborations/partnerships, teaching experience, and service activities.
- A research statement (maximum two pages) that describes the candidate's research experience, goals, and a five-year plan for their research program.
- Three examples of peer-reviewed published scholarly work.
- A teaching statement (maximum one page) that describes the candidate's teaching philosophy, teaching experience, and evidence of teaching effectiveness.
- A statement (maximum one page) describing past or potential contributions to enhancing equity, diversity, and inclusion within research, service, and teaching. Regarding the latter component, candidates should discuss their experience with and/or understanding of inclusive teaching and mentoring, and how the candidate would meet the needs of equity-deserving students.
- The names, titles, and email addresses of 4 referees who are qualified to assess the candidate's research capabilities, at least one of whom can assess teaching potential. Referees will be contacted by SFU for candidates advancing to the later stages of the selection process.
- Please indicate your legal status to work in Canada.

Candidates should submit their applications by email to bpkcs@sfu.ca with the subject line **hiPSC-CMs<lastname>_<firstname>**. Full consideration will be given to applications received by **September 15, 2024**. Applications received after this deadline may be reviewed if the position is still open.

SFU recognizes that alternative career paths and/or career interruptions (e.g., parental leave, leave due to illness) can impact research achievements and commits to ensuring that leaves are taken into careful consideration. Candidates are encouraged to highlight in their application how alternative paths and/or interruptions have impacted them. SFU also recognizes the value of mentoring and research training, outreach, professional service, and non-traditional areas of research and/or research outputs.

Simon Fraser University is an institution whose strength is based on our shared commitments to diversity, equity, and inclusion. Diversity is an underlying principle of our Strategic Vision, which pledges SFU to “foster a culture of inclusion and mutual respect, celebrating the diversity reflected among its students, faculty, staff, and our community.” SFU is committed to ensuring that no individual is denied access to employment opportunities for reasons unrelated to ability or qualifications. Consistent with this principle, SFU will advance the interests of underrepresented members of the work force, including Indigenous peoples, persons with disabilities, racialized persons, and women; embrace gender and sexual diversity; ensure that equal opportunity is afforded to all who seek employment at the University; and treat all employees equitably. Candidates that belong to underrepresented groups are particularly encouraged to apply.

Faculty salaries at SFU are based on the [salary scales](#) bargained between the University and the SFU Faculty Association. A reasonable estimate of the base salary range for this role at the Assistant Professor rank is \$104,700



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- \$133,322 (dependent on experience). A reasonable estimate of the base salary range for this role at the Associate Professor rank is \$130,142 - \$155,584 (dependent on experience).

SFU offers several benefits and services aimed at creating a more inclusive and accessible campus community for faculty; please see the [Faculty Relations, Benefits and Service page](#) for more details. SFU is also committed to ensuring that the application and interview process is accessible to all applicants. If you require accommodations or have questions about SFU benefits, services, accommodations policies, or equity considerations, please contact the [Specialist, Equity, Diversity and Inclusion in Faculty Relations](#).

All qualified candidates are encouraged to apply; however, Canadian citizens and permanent residents will be given priority. Personal information that forms part of an application is collected under the general authority of the Freedom of Information and Protection of Privacy Act, applicable University Policies, and the SFUFA/SFU Collective Agreement. For further details see the full [Collection Notice](#).

The position is subject to availability of funding and approval by the SFU Board of Governors.

Inquiries regarding this posting may be directed to the BPK Chair's Assistant, bpkcs@sfu.ca.