TENURE-TRACK APPOINTMENT IN EXERCISE PHYSIOLOGY
Department of Biomedical Physiology and Kinesiology, Faculty of Science

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 x̱məθkw̓əy̓əm (Musqueam), Sk̈wx̱wú7mesh Ų̓xwmí̊xw (Squamish), səll̓iwətaʔɬ (Tsleil-Waututh), Ɂ̓ilc̓ilgwíy̓xw (Katzie), kʷik̓w̓il̓x̱am (Kwikwetlem), 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 diversity, equity and inclusion, and the pursuit of decolonization, indigenization and reconciliation.

The Opportunity

The Department of Biomedical Physiology and Kinesiology (BPK) invites applications for a tenure-track faculty position at the rank of Assistant Professor in Exercise Physiology to commence July 4, 2022 or a mutually agreed-upon date.

The core duties of Assistant Professors in BPK are as follows:

- **Research**: Develop an extramurally funded research program devoted to advancing the field of exercise physiology, including supervising and mentoring graduate students and highly qualified personnel in research training, and disseminating discoveries through peer-reviewed publications, conference presentations, and other forums appropriate to the discipline.

- **Teaching**: Teach undergraduate and graduate courses in the areas of exercise and human physiology, in various formats (in-person, online, and hybrid), and contribute to curriculum and program development.

- **Service**: Perform service to the Department and the University, such as serving on committees and participating in departmental initiatives.

The typical workload distribution for tenure-track assistant 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 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 research faculty are listed in the SFU-SFUFA collective agreement (https://www.sfu.ca/agreements-and-policies/collective-agreement-2019-22/).

*Last updated September 29, 2021*
Desired research area

The ideal candidate will lead a research program that investigates the mechanisms underlying the human physiological adaptations to exercise training over time. We envisage that the candidate will primarily employ wearable, portable, or in-body sensor technologies to detect physiological, biophysical (e.g., mechanical, electrical, magnetic, optical, etc.), or biochemical signals. These measurement methods will ideally be supplemented with other experimental approaches or mathematical modeling to enable inferences regarding the underlying physiological mechanisms. The methods and research findings can be readily applied to monitoring, predicting, and optimizing exercise training for enhancing the health, performance, rehabilitation, or quality-of-life of individuals. Other areas of application, such as diagnostics and promoting health behaviour change, are also welcome. Through their research, the ideal candidate will lead technology innovation and entrepreneurship initiatives at SFU. The candidate will have a collaborative disposition and sufficiently broad interests and expertise to readily engage in collaborations with other researchers in BPK, SFU, and the broader exercise physiology community.

The desired research area reflects the SFU’s 2016-2022 Strategic Research Plan’s emphasis on approaches that are interdisciplinary, data-driven, and collaborative, and contribute to addressing two of six challenges identified in the document, namely “Enhancing our world through technology” and “Supporting health across the human lifespan.”

About BPK

BPK originated in 1970 as the Department of Kinesiology, the first such department in Western Canada. The mission of BPK is to advance the understanding of human physiology, movement, neuroscience, and human health through fundamental and applied research, education, and service. BPK offers undergraduate degrees (BSc, BSc Honours) and graduate degrees (MSc, PhD) in kinesiology, biomedical physiology, and behavioural neuroscience. The Department currently has 24 research faculty, 9 continuing teaching faculty members, and 14 staff members, who serve over 1,000 undergraduate majors and approximately 50 graduate students.

BPK features the research clusters of exercise and environmental physiology, cardiovascular physiology, chronic diseases, neuromechanics, and neuroscience. Exercise physiology is relevant to each of these clusters and the successful candidate can expect diverse opportunities to collaborate on research projects. Consistent with SFU’s tagline as “Canada’s Engaged University,” members routinely interact with external groups such as companies, government agencies, and community groups as part of their scholarly work.

SFU is Canada’s top-ranked research-intensive comprehensive university. It offers several unique assets to its research faculty that are particularly relevant to this position. SFU hosts several core facilities, including the recently opened core facility for wearable technologies (WearTech Labs), the Big Data Hub, 4D Labs for materials research and development, and the ImageTech Lab. SFU also hosts several research institutes, centres, and research collectives, such as the Sports
Analytics Group and the Biological Physics and Soft Condensed Matter group. SFU supports knowledge mobilization through the SFU Knowledge Mobilization Initiative and innovation through SFU Innovates. As a testament to BPK and SFU’s culture of innovation, BPK professors have founded three companies in the past 14 years, while SFU was recently ranked third globally in the Entrepreneurial Spirit category and 24th among innovative universities by World Universities with Real Impact. Metro Vancouver offers burgeoning wearable technology and biomedical device ecosystems, with several start-up and mid-sized companies now operating, and who are keen to engage in academic-industry partnerships. Several BPK faculty who conduct clinical research maintain affiliations with local hospitals, e.g., BC Children’s Hospital, Surrey Memorial Hospital, Vancouver General Hospital, and Royal Columbian Hospital.

The Successful Candidate

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

The successful candidate must:

- Hold a PhD in kinesiology, physiology, or a relevant discipline.
- Have demonstrated excellence in research in exercise physiology. Excellence will be assessed in various ways, including but not limited to the following criteria:
  - has extensive experience conducting scientific studies in the area of human exercise physiology,
  - has authored high-quality scientific publications in the leading peer-reviewed journals of the field,
  - won awards or secured external funding (e.g., scholarships),
  - delivered talks at conferences or departmental seminars,
  - has participated in collaborations with leading exercise physiology researchers.
- 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, extramural funding, new scientific collaborations, and uptake by knowledge users.
- Demonstrate deep and broad knowledge of the fields of exercise and human physiology to competently teach undergraduate and graduate courses in these areas.
- Show clear potential for excellence as a mentor of graduate students and research trainees, especially those from equity-deserving groups.
- Have competently 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.
- 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, outreach initiatives, etc.
• Demonstrate willingness to take on new roles with unfamiliar tasks and, in performing these roles, demonstrate curiosity, adaptability, and initiative by doing research, asking questions, being receptive to mentoring, and seeking constructive feedback.

The following qualifications are considered assets:

• Postdoctoral research experience.
• Experience conducting research in diverse environments or from different perspectives.
• Demonstrated experience in increasing diversity in their previous institutional environment(s) and in curricula.
• Previous experience or future goals to apply research to better understand and address health issues affecting underrepresented populations.
• Interest, experience, and expertise in entrepreneurship and technology development.
• Certification by the Canadian Society for Exercise Physiology or American College of Sports Medicine as a Certified Exercise Physiologist (CEP), and/or interest and capability to assist students to achieve these certifications.
• Experience and expertise in performing invasive research procedures (e.g., biopsies, catheterization, etc.) to supplement non-invasive methodologies.
• Leadership potential, demonstrated by leadership roles, formal leadership training, or leadership abilities.

How To Apply

Candidates should address their applications to Dr. David Clarke (he/him/his), Chair of the Search Committee. Applications should consist of a single PDF file inclusive of and bookmarked for the following components:

• A concise cover letter (maximum two pages) that addresses the following items: 1) citizenship and whether the candidate is a Canadian citizen or permanent resident of Canada, 2) reasons for applying to the position, and 3) a narrative description highlighting evidence that the candidate meets the job qualifications and can effectively perform the listed job duties.
• 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. With regards to 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 3 or 4 referees, three of whom are qualified to assess the candidate’s research capabilities and one who is qualified to assess teaching capabilities. Referees will be contacted by SFU for candidates advancing to the later stages of the selection process.

Candidates should submit their applications by email to bpkcs@sfu.ca with the subject line expphysiol2021_<lastname>_<firstname>. Full consideration will be given to applications received by November 30, 2021. 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 nontraditional areas of research and/or research outputs.

In keeping with SFU’s strategic vision which pledges to foster a culture of inclusion and mutual respect and to celebrate diversity among faculty, SFU is committed to ensuring that no individual is denied access to employment opportunities for reasons unrelated to ability or qualifications. SFU is dedicated to building a diverse faculty by advancing the interests of underrepresented groups, specifically women, Indigenous people, persons with disabilities, visible minorities, and people of all sexual orientations and gender identities. We strongly encourage individuals from these groups to apply.

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. Under the authority of the University Act, personal information that is required by the University for academic appointment competitions will be collected. For further details see the Collection Notice: http://www.sfu.ca/vpacademic/faculty_openings/collection_notice.html

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.