Sessional Lecturer | School of Biomedical Engineering

At UBC, we believe that attracting and sustaining a diverse workforce is key to the successful pursuit of excellence in research, innovation, and learning for all faculty, staff and students. Our commitment to employment equity helps achieve inclusion and fairness, brings rich diversity to UBC as a workplace, and creates the necessary conditions for a rewarding career.

The School of Biomedical Engineering at The University of British Columbia (UBC), Vancouver campus, invites applications for a part-time (37.5% in term 1 and 25% FTE in term 2) Sessional Lecturer to teach the following Biomedical Engineering courses:

BMEG 310 (half the term of the 3 credit course; hence 1.5 credits)
Introduction to Bioinformatics
2025 Winter Term 1 (approximately mid-October to December 2025)

COURSE DESCRIPTION: BMEG 310 is a core course in the Biomedical Engineering undergraduate program in principles behind the methods of bioinformatics. Topics covered include the use of bioinformatics databases and tools for solving problems in genomics, proteomics, structural biology and evolutionary biology.

BMEG 591N (3 credit course)
Biomedical Data Fundamentals
2025 Winter Term 1 (September to December 2025)

COURSE DESCRIPTION: BMEG 591N is a course in the Biomedical Engineering graduate program and a part of the MUlti-Scale multi-modal Image and omics Computing for health (MUSIC) NSERC CREATE training program. Topics covered include cellular and clinical imaging modalities, as well as omics technologies; the advantages and limitations of each technology; how these technologies are integrated in modern biomedical studies to capture data across micro to macro scales; software tools and programming libraries to explore these datasets and extract fundamental information.

BMEG 591T (3 credit course)
Machine Learning in Medicine
2025 Winter Term 2 (January 2026 to April 2026)

COURSE DESCRIPTION: BMEG 591T is a course in the Biomedical Engineering graduate program and a part of the MUlti-Scale multi-modal Image and omics Computing for health (MUSIC) NSERC CREATE training program. This course comprises three interconnected modules that highlight machine learning applications in healthcare: Deep Learning Fundamentals and Medical Imaging, Language Models (LLMs), and Genomics. Topics covered include: foundational concepts in neural networks and their application to medical imaging tasks such as classification and segmentation; large language models, exploring how LLMs can be leveraged to analyze clinical text data for tasks like clinical text mining; key principles and workflows for applying machine learning to genomic data, addressing topics such as variant calling, gene expression analysis, and drug discovery.

RESPONSIBILITIES
Reporting to the Director of the UBC School of Biomedical Engineering, the successful candidate will be responsible for delivering lectures, coordinating tutorials, supervising teaching assistants, grading of final course assignments, any deferred or supplemental examinations that might be required, and conducting other duties in support of student learning in BMEG 310, BMEG 591N and BMEG 591T. The incumbent is also responsible for developing the

content of the course and for the administration of the course through UBC teaching and learning platforms such as UBC Canvas, UBC Faculty Service Centre.

QUALIFICATIONS
The successful candidate will have completed a Master's degree or higher in a relevant discipline and a record that provides evidence of teaching effectiveness as an instructor or teaching assistant in the field of applied machine learning, specifically within the field of biomedical engineering. This includes: a strong foundation in traditional and core machine learning methods; familiarity with major recent advancements, such as deep learning, and awareness of current research trends in the field; experience applying machine learning techniques to health-related problems and biomedical data; a track record of integrating project-based learning or hands-on machine learning practice in academic or research settings. In addition, the successful candidate will have demonstrated an ability to effectively communicate and interact with empathy, understanding and, respect of diverse perspectives. Experience in collaborating and bringing forward projects with diverse groups, including colleagues, students, and/or stakeholders, is valued.

The successful candidate will contribute to fostering an environment that promotes inclusivity and embodies values of respect, integrity, compassion, collaboration, and equity. Equity, diversity, inclusion, and justice are essential to academic excellence, as well as to fostering an inclusive community for voices that have been historically underrepresented or discouraged.

EXPECTED SALARY
The expected salary for this position is $3,778.36 per credit (4.5 credits in Term 1 and 3 credits in Term 2) for a total of $28,337.70 for the appointment period.

APPLICATION PROCEDURE
Candidates who bring diverse perspectives and lived experiences are encouraged to apply as we strive to enhance diversity, inclusiveness, socio-cultural representation, and perspective of the School. An application package should include:
- A cover letter
- A detailed curriculum vitae, which includes a record of experience and a detailed list of all post-secondary courses taught (course name and number, length, credit value, dates, and the teaching responsibilities)
- Evidence of teaching effectiveness, if available; and
- Contact information for two referees

Applications should be submitted to:
      Kristen Blades
      Assistant Manager, Human Resources
      School of Biomedical Engineering
      sbme.hr@ubc.ca
      Subject: BMEG 371, BMEG 591N, BMEG 591N Sessional Lecturer Position

Applications will be accepted until Thursday June 19, 2025, or until position is filled.

Should you have any queries around this position, please contact Kristen Blades at sbme.hr@ubc.ca.

For more information, please visit www.bme.ubc.ca. All positions are subject to availabilities of funds and will be governed by UBC's "Agreement on Conditions of Appointment for Sessional Faculty Members".

ABOUT SBME
The School of Biomedical Engineering is a partnership between the Faculties of Medicine and Applied Science, acting as a nucleus for education and training, research, and innovation in biomedical engineering, creating new knowledge, new academic and training programs, and fostering translation and innovation. The vision of SBME is to transform health care outcomes through unconstrained exploration of the best possible integrative solutions across engineering, medicine, and biology. Through collaborative, innovative, and interdisciplinary approaches

and building on UBC academic and research excellence, the School of Biomedical Engineering is emerging as a global leader in biomedical engineering research, education and translation. For more information about the School of Biomedical Engineering, please visit https://www.bme.ubc.ca/.

The **University of British Columbia** is a global centre for research and teaching, consistently ranked among the top 20 public universities in the world. Since 1915, UBC' entrepreneurial spirit has embraced innovation and challenged the status quo. UBC encourages its students, staff and faculty to challenge convention, lead discovery and explore new ways of learning. At UBC, bold thinking is given a place to develop into ideas that can change the world.

We invite applications from qualified candidates who share our commitment to employment equity and inclusive excellence, and we welcome applications from candidates belonging to historically, persistently, or systemically marginalized groups: Indigenous (First Nation, Métis, Inuit) Peoples, racialized persons, persons with disabilities, women, 2SLGBTQIA+ people, and trans and non-binary people.

The University is committed to creating and maintaining an inclusive and equitable work environment for all members of its workforce. An inclusive work environment presumes an environment where differences are appreciated, recognized, and integrated into current structures, planning, and decision-making modes. Within this hiring process we are committed to creating an inclusive and equitable process for all candidates (including but not limited to people with disabilities). Confidential accommodations are available on request for applicants. Please contact Michelle Liu via email at michelle.liu@ubc.ca.]If you have any questions regarding accommodations or accessibility during the recruitment and hiring process or for more information and support, please visit UBC's Centre for Workplace Accessibility website at https://hr.ubc.ca/health-and-wellbeing/workplace-accessibility/centre-workplace-accessibility or contact the Centre at workplace.accessibility@ubc.ca.

With gratitude, we acknowledge that the University of British Columbia Faculty of Medicine and its distributed programs, which include four university academic campuses, are located on traditional, ancestral and unceded territories of First Nations Peoples and communities around the province.

Our Vision: To Transform Health for Everyone.

Ranked among the world's top medical schools with the fifth-largest MD enrollment in North America, the **UBC Faculty of Medicine** is a leader in both the science and the practice of medicine. Across British Columbia, more than 12,000 faculty and staff are training the next generation of doctors and health care professionals, making remarkable discoveries, and helping to create the pathways to better health for our communities at home and around the world.

The Faculty - comprised of approximately 2,200 administrative support, technical/research and management and professional staff, as well approximately 650 full-time academic and over 10,000 clinical faculty members - is composed of 19 academic basic science and/or clinical departments, three schools, and 24 research centres and institutes. Together with its University and Health Authority partners, the Faculty delivers innovative programs and conducts research in the areas of health and life sciences. Faculty, staff and trainees are located at university campuses, clinical academic campuses in hospital settings and other regionally based centres across the province.

The Faculty of Applied Science includes all UBC Engineering activities at both the UBC Vancouver and UBC Okanagan, as well as the Schools of Architecture and Landscape Architecture, Community and Regional Planning and Nursing. The Faculty was one of UBC's three founding faculties, admitting some of the University's first students in engineering in 1915. The Faculty includes over 300 full-time faculty members and more than 8,600 students.

The Faculty of Applied Science comprises a unique constellation of disciplines and is committed to creating lasting change by discovering and applying knowledge. Our core purpose is to discover, design, and innovate, provide unwavering top-tier education, and champion a community of responsible professionals devoted to serving a thriving, sustainable and healthy society. Our work and the professional disciplines we represent span the entire human-centred built environment. We represent innovation at all scales from nanoscale electronic devices that power communications to the design of entire cities.

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