Biomedical Engineering: Engagement Opportunities

Biomedical Engineering at The University of Calgary is a transdisciplinary effort that drives innovations that are saving lives and revolutionizing health care for Canadians. We have a variety of engagement opportunities for you to connect with expert researchers, top talent and support the next generation of biomedical engineering professionals.

UNDERGRADUATE STUDENTS

- **SCHULICH ENGINEERING CAPSTONE PROJECT**
  Capstone Design Projects are the culmination of four years of study. Student teams are asked to find solutions to industry challenges or to create their own invention. Many of the projects are sponsored by industry and go from concept to fabrication.

  - **Contact:** capstone@ucalgary.ca
  - **Duration:** 8 months long (Part-time)
  - **Start:** Applications due in June for September start
  - **Website:** Capstone Projects

- **SCHULICH ENGINEERING INTERNSHIP**
  The internships are designed to fit your business needs. Your company can access funding for internships through a variety of organizations that participate in the Student Work Placement Programs across Canada.

  - **Contact:** ecc@ucalgary.ca
  - **Duration:** 4, 8, 12, or 16 months long (Full-time)
  - **Start:** Post anytime for students to start between May to September or January
  - **Website:** Schulich Engineering Internship

- **BME SUMMER STUDENTS**
  BME Calgary partners with different groups across campus for undergraduate students to work on biomedical engineering-related projects with the purpose of fostering collaborations. Funding is available through various mechanisms.

  - **Contact:** bme@ucalgary.ca
  - **Duration:** 8 to 16 weeks from May to August (Full-time)
  - **Start:** Applications due in February for May start
  - **Website:** BME Summer Studentship

UNDERGRADUATE AND GRADUATE STUDENTS

- **HEALTH HACKATHONS**
  The annual Innovation4Health (i4H) Hackathon Competition and Neuro Nexus bring multidisciplinary teams together with healthcare expertise and empowers them with mentorship and rapid prototyping facilities to address challenges in healthcare with technology solutions.

  - **Contact:** info@innovation4health.com
director@neuro-nexus.ca
  - **Duration:** 6 weeks long
  - **Start:** November every year
  - **Website:** Innovation4Health
  - **Website:** Neuro Nexus

- **BME INDUSTRY DAYS AND SPEAKER SERIES**
  A collaboration between BME Calgary and the Life Sciences Innovation Hub, BME Industry Days and Speaker Series brings together students, faculty, and industry partners for a chance to discuss the most pressing topics in biomedical engineering, network, and find ways to collaborate on projects together.

  - **Contact:** bme@ucalgary.ca
  - **Duration:** Half or full day
  - **Start:** September to December and January to April
  - **Website:** BME Industry Days and Speaker Series

- **AB BIOMEDICAL ENGINEERING CONFERENCE**
  The Alberta BME Conference is an annual student-led conference featuring research from across Western Canada with national and international guest speakers and industry participation. It's a great opportunity to see the latest BME innovations and network with faculty, students, and industry.

  - **Contact:** abbmeconference@ucalgary.ca
  - **Duration:** Weekend long (Fri-Sun)
  - **Start:** October every year
  - **Website:** AB BME Conference

UCalgary Biomedical Engineering March 2022
GRADUATE STUDENTS

MSc. and PhD THESIS

The Biomedical Engineering Graduate Program at the University of Calgary offers students a unique opportunity to work with leading researchers and industry experts across campus to advance knowledge and find solutions to improve human animal health and wellness. Matching funding is available through MITACS and NSERC Alliance grants to hire graduate students to work on special projects in any of our six research Focus Areas below.

bme@ucalgary.ca

MEDTECH TALENT ACCELERATOR - INTERNSHIPS

A training program designed to launch the next generation of industry-ready talent for the Canadian Medical Technology sector. The program is a collaboration between RU, McGill University, Dalhousie University, University of Calgary, University of British Columbia, Biomedical Zone, Medtech Canada and its member companies.

bmeograd@ucalgary.ca

TRANSFORMATIVE TALENT INTERNSHIP

A skills-based internship opportunity for UCalgary students in both MSc. and PhD programs across academic programs and specializations. We can help you connect to this graduate student talent pool, offering a high degree of flexibility in project length and start dates to suit your organization’s immediate needs and long-term goals.

bme@ucalgary.ca

MITACS INTERNSHIPS

Mitacs brings together industry and post-secondary institutions to develop R&D projects which solve business and societal challenges while advancing academic research goals. Mitacs offer support for internships in a variety of industries (not limited to STEM fields of study) and support both research and non-research projects. Open to International students.

bmegrad@ucalgary.ca

RESEARCH COLLABORATIONS AND INFRASTRUCTURE

Our research network includes over 300 faculty members from multiple disciplines including engineering, medicine, kinesiology, science, nursing, and veterinary medicine. With collaborative teams focused on human mobility, health monitoring, advanced biomedical imaging, precision biodiagnostics, regenerative medicine, and novel medical technologies, our researchers are transforming quality of life and continuously improving the health system. They are available for collaborative projects and matching funding (other sources) is available through MITACS and NSERC Alliance grants.
Research Facilities

Multiple research institutes, centres, facilities, and laboratories across faculties support our multidisciplinary biomedical engineering researchers. Below are a few examples.

**INSTITUTES**
- McCaig Institute for Bone and Joint Health
- Libin Cardiovascular Institute of Alberta
- Hotchkiss Brain Institute
- Alberta Bone and Joint Health Institute
- Alberta Children’s Hospital Research Institute
- Southern Alberta Cancer Research Institute
- Snyder Institute for Chronic Diseases

**CENTRES AND FACILITIES**
- International Microbiome Centre
- Experimental Imaging Centre
- Seaman Family MR Centre
- Stephenson Cardiovascular MR Centre
- Child and Adolescent Imaging Centre
- Boone Pickens Centre for Neurological Sciences and Advanced Technologies
- Southern Alberta Cancer Research Institute Cell Imaging, Microarray, and Translational Labs Facilities
- Microscopy and Imaging Facility (MIF), Cumming School of Medicine
- Snyder Institute Live Cell Imaging Facility
- Clinical Simulation Learning Centre
- Zymetrix Biomaterials and Tissue Engineering Technology Development Centre
- Centre for Cell Therapy and Translation
- Microsystems Hub

**LABORATORIES**
- Pharmaceutical Production Research Facility (PPRF)
- Cellular and Molecular Bioengineering Research Laboratory
- Healthcare Operational Excellence (HOPE) Laboratory
- Human Performance Lab
- BioMEMS and Bioinspired Microfluidic Laboratory
- Integrated Circuits and Optical Imaging Lab

**DO YOU HAVE YOUR OWN IDEAS?**

We would be happy to discuss how we could help you collaborate with our students and faculty. Please contact us to discuss your ideas, and the support available from BME Calgary at bme@ucalgary.ca.

**Michael Kallos**  
Interim Department Head, Biomedical Engineering  
University of Calgary  
mskallos@ucalgary.ca

**Sana Tariq**  
BME Research Coordinator  
University of Calgary  
stariq@ucalgary.ca