

Bone and Joint Institute (BJI)
for
Research & Innovation in Musculoskeletal Health



Western
UNIVERSITY • CANADA

Membership Criteria, Expectations & Benefits

BACKGROUND

Our Vision: Lifelong mobility

Our Mission: To lead in transdisciplinary research, innovation and education in musculoskeletal health

The Institute will focus on:

- ***Excellence in innovation***
 - *Discoveries are sought related to novel and creative patient-centered:*
 - *Preventive and rehabilitative medical/surgical therapies*
 - *Diagnostic and evaluative tools*
 - *Medical and assistive devices for bone and joint disease*
 - *Clinical and cost-effective solutions are investigated*
 - *The development and transfer of intellectual property to private sector partners is emphasized, with the goal of contributing to thriving industries and associated economic benefits for Canadians*
- ***Collaboration***
 - *Transdisciplinary research breakthroughs are made possible through cohesive participation of skilled researchers in basic and applied disciplines*
 - *Researchers work together to link or create new conceptual and methodological frameworks that integrate and move beyond discipline-specific approaches to address a common problem*
 - *Collaboration facilitates a “Molecule to Community and Back Again” approach that is fundamental at the BJI*
- ***Education & Research Training***
 - *The BJI team administers Western’s Collaborative Graduate Program in Musculoskeletal Health Research (CMHR)*
 - *There is an emphasis on research skills, leadership, mentorship, and ethics*
 - *The program offers integrated, interdisciplinary training, and combines technology, mechanistic research, ethical considerations, and clinical applications in a real-world context*
 - *Through CMHR, the BJI will help to produce the next generation of MSK research leaders*
- ***Knowledge translation***
 - *Translation and exchange of innovative discoveries are key to having a global impact on the burden of MSK conditions*
 - *Efficiently moving new knowledge from the laboratory to the marketplace, clinic, and community is a priority*
 - *BJI is focused on guiding policy related to bone and joint healthcare*

The Institute will provide administrative and logistical services for the following activities: promotion of transdisciplinary collaborative research; research training; the preparation of applications for major funding; fostering of outreach, partnerships, globalization and knowledge translation; internal and external communications;

and performance evaluation. In addition, the Institute is responsible for the administration of the Cluster of Research Excellence in Musculoskeletal Health. The Cluster will provide: stipend support for outstanding trainees in the Collaborative Training Program in Musculoskeletal Health Research; funds for the recruitment of 3 junior faculty; and seed grants to foster new transdisciplinary research initiatives.

MEMBERSHIP CRITERIA & EXPECTATIONS

Faculty Members

Criteria:

To be an Institute member, Western faculty members (including engineers, basic scientists, social scientists, clinician-scientists and clinicians) must self-identify as a “Bone and Joint” researcher that:

- *conducts research in the area of bone and joint/musculoskeletal health (including research to enhance active living, mobility and movement; and/or to address the causes, prevention, diagnosis, treatment, support systems, and palliation for a wide range of conditions related to bones, joints, skeletal muscles and connective tissues). Research from four main themes include: basic biological and biomedical; physical sciences and engineering; clinical and health services; and population and community health.*

Expectations:

Faculty members of the Institute are expected to:

- *pay a membership fee of \$50 per year;*
- *become a mentor in the Collaborative Training Program in Musculoskeletal Health Research;*
- *provide the Institute with information (e.g., a copy of my annual faculty report) to be used for the purposes of reporting overall group metrics and to support Institute funding applications; and*
- *participate or be willing to participate in:*
 - *teaching in the collaborative program, upon request;*
 - *the biennial BJI research retreat/conference;*
 - *the monthly musculoskeletal BJI seminar series;*
 - *BJI focused research workshops (i.e. attend, organize, or facilitate); and/or*
 - *transdisciplinary collaborative research and large applications for major funding (e.g. Networks, Teams, CFIs, etc.).*

Membership will be reviewed every 3 years by the Institute’s Research and Business Advisory Committee. Faculty will be expected to demonstrate an appropriate level of participation to maintain membership in the Institute.

Trainees and Research Staff

Criteria:

All trainees and staff, conducting research in the area of bone and joint/musculoskeletal health under the supervision of a BJI faculty are eligible for membership in the BJI (no membership fee for eligible trainees and staff). This includes

undergraduate trainees, graduate students, postdoctoral fellows, clinician-scientists in training, and research associates.

Expectations:

Trainees and staff who are members of the BJI are expected to:

- *conduct research in the area of bone and joint/musculoskeletal health;*
- *participate in the biennial BJI research retreat/conference;*
- *attend the monthly musculoskeletal BJI seminar series;*
- *participate in BJI focused research workshops;*
- *actively engage in outreach and professional development activities; and*
- *provide the Institute with an annual report on academic, outreach and career development activities to be used for the purposes of reporting overall group metrics, and to support funding applications for the Institute.*

Partners

Western University, along with its affiliated hospitals and institutes, has developed a world class reputation in MSK health research and education by facilitating collaboration between investigators, trainees, and staff, but also by establishing strong partnerships.

Expectations:

Expectations of partners who are members of the BJI are to:

- *promote a positive atmosphere of collegiality, teamwork, and mutual respect – creating a productive collaborative environment for education, research, innovation, and outreach;*
- *support opportunities to liaise with colleagues and identify potential new partners, locally, nationally, and internationally;*
- *help translate research discoveries to the marketplace, clinic, and community; and*
- *encourage economic activity through research commercialization leading to the launch and growth of MSK device and imaging companies.*

MEMBERSHIP BENEFITS

The Institute will integrate and expand research and training programs, recruit outstanding faculty and trainees, obtain major funding, and develop a sustainable program that is recognized nationally and internationally.

Priorities include:

- *Promotion of transdisciplinary collaborative research – Website, venues, and web-based conferencing for interactions among members, including monthly musculoskeletal seminars, focused research workshops, project planning sessions, and a biennial research retreat/conference. Seed funding for new research projects and proof-of-principle grants will be offered on a competitive basis.*
- *Training and education – Administer the Collaborative Training Program in Musculoskeletal Health Research at Western. Expand the program to broaden engagement and to aggressively recruit outstanding Canadian and international trainees. Stipend support will be provided on a competitive basis.*
- *Co-ordination of applications for major funding – Provide logistical support for major grant applications relevant to bone and joint health (e.g., CFI Innovation Fund, Team Grants, Ontario Research Fund, NCEs).*

- *Fostering outreach, partnerships, globalization, and knowledge translation – Serve as a point of contact for external inquiries regarding training, partnerships, industry contract research, etc. As well, advise and assist members on opportunities, finding collaborators, and liaison with WORLDdiscoveries®, the London Medical Innovation and Commercialization Network, the Ivey International Centre for Health Innovation, the Schulich Office of Global Health, and other partners.*
- *Communications – Website, social media, liaison with Western Media Relations, advertising of training opportunities and core facilities and services, face-to-face meetings, web-based video conferencing, hosting of national and international meetings and workshops, etc.*

SUMMARY

Western’s musculoskeletal health researchers have already established a track record of collaboration to achieve high-impact scientific results, to obtain significant research funding, and to acquire world-class infrastructure support. The Institute will enhance Western’s reputation in this area of increasing societal importance.