WHAT IS OUR FUTURE?

UNIVERSITY OF TORONTO
CENTRE FOR THE STUDY OF PAIN
STRATEGIC PLAN 2021
INTRODUCTION

Purpose

Building upon a solid base of strength and achievement that has been established over the last two decades, the strategic plan informs and supports the work of the University of Toronto Center for the Study of Pain (UTCSP) over the next five years (2021/22 – 2026/27)

The planning process took place between September and November 2020 and included a needs assessment survey distributed to regular and trainee UTCSP members; a one hour focus group with trainees, a three-hour virtual planning session with 14 participants (October 22, 2020) and a four-hour virtual retreat with the UTCSP Executive (November 2, 2020). Information gathered throughout the process helped define strategic priorities and resources required to meet the vision, mission and goals of the Centre over the next 5 years.

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Vision

The vision of the UTCSP is to be a key academic voice and a leader, both nationally and internationally, in pain research and education.

Mission

The mission of the UTCSP is to create and disseminate knowledge on pain and inform clinical excellence through interdisciplinary collaboration.

Goals are to:

- Foster research and scholarship leading to an understanding of the mechanisms of pain and its alleviation
- Link research and education in pain to affect the dissemination and application of new knowledge of pain
- Develop, implement, and support coordinated educational programs in pain at undergraduate, graduate, and post-graduate levels
- Foster a multi-disciplinary approach in clinical research activities in pain, including collaboration between basic and clinical service
- Develop and provide continuing education programs for health care providers aimed at the dissemination of information derived from research and clinical evidence
The University of Toronto Centre for the Study of Pain (UTCSP) was established in 1999 as a coordinated network of pain research and education at the University through a collaboration among the Faculties of Medicine, Nursing, Dentistry and Pharmacy which joined in 2000. Dr. Michael Salter from the Department of Physiology, Faculty of Medicine, was the first director from 2000 – 2009. Dr. Bonnie Stevens from the Lawrence S Bloomberg Faculty of Nursing became Director in 2010 and was reappointed in December 2014 for an additional five years. Dr. Stevens stepped down in the last year of her second term to pursue a Research and Study leave. Subsequently, Dr. Robert Bonin, Faculty of Pharmacy assumed interim co-directorship of the Centre in July 2019. Dr. Rachael Bosma, Faculty of Dentistry and Dr. Robert Bonin, Faculty of Pharmacy became co-directors of the centre in January 2020 for a 5-year term.

In 2014, the UTCSP was established as an EDU-C based on the premise that it is a multidisciplinary, multi-departmental, research and educational unit designed to foster research and scholarly interest in the area of pain. Policy requires that EDU-C’s are reviewed every 5 to 7 years hence the Dean of the Faculty of Dentistry- the lead Faculty since the inception of UTCSP, commissioned a review (May 2019) in preparation for Dr. Steven’s departure.

Findings from the review revealed strong support of the UTCSP and suggested renewal for an additional 5-year term based on the accomplishments in fostering scholarly activity as a multidisciplinary and multi-Faculty unit that brings university academics together to work collaboratively in the area of pain. The report highlighted key recommendations to help guide the future direction and new leadership for the Centre with a focus on financial sustainability, administrative resource allocation and UTCSP’s role in helping deal with the opioid crisis.

The UTCSP has grown and developed into an important entity that serves to advance scholarly pursuits and education in pain mechanisms and management. Over the years, Centre leadership has been strong and effective, and the unit has continually promoted a multidisciplinary approach that fosters collaboration in discover, dissemination and application of knowledge specific to pain.

Under the direction of the Deans of the Faculties of Dentistry, Medicine, Nursing, and Pharmacy and the UTCSP Co-Directors, activities are planned and implemented by the membership and support staff.
MEMBERSHIP

119 faculty
45 trainees

78%
Of past trainees remain in pain research

Nursing
Medicine
Pharmacy
Music
Arts & Science
Dentistry
Social Work

RESEARCH

UTCSP Scientist Salary Support

$ Investment

6 UTCSP Scientists

509 Papers

$27.5 M Grants

Pain Trainee Stipend Awards

87%
Remain in pain research

338 Papers
(5 yrs of award)

45 Awarders

$927,000 Investment

40% remain pain trainees
47% now in academic positions

EDUCATION/TRAINING

16500+ trainees

328 Speakers

Interfaculty Pain Curriculum
- Developed, implemented & evaluated a prelicensure curriculum
- Interprofessional education focus
- 20-hour mandatory pain curriculum
- Copyright in progress
- Virtual program delivery model in development

7 Clinical disciplines

UTCSP Scientist Salary Support

87%
Of past trainees remain in pain research

9350 Publications

$27.5 M Grants

328 Speakers

$927,000 Investment

1. Held ~100 seminars, workshops, & scientific meetings
2. Hosted ~400 world renowned speakers
3. Developed the 5-day, Toronto Summer Institute in Pain (TSI)
4. TSI has trained 100+ national and international pain trainees

WHAT
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Accomplishments and Highlights: 2015-2020

Research

- UTCSP financially supported 4 scientists from the faculties of Dentistry, Medicine, Nursing and Pharmacy whose scope of research includes molecular mechanisms responsible for modification of synaptic plasticity in the nervous system, oral pain in acute and chronically critically ill adults, orofacial Pain related to TMD, and biochemical and molecular pharmacology of cannabinoids and lipid signaling systems.

- The UTCSP hosts an Annual Scientific Meeting, which provides scientific updates and opportunities for collaboration amongst scientists/trainees.

- The UTCSP continues to offer its annual Pain Scientist Scholarship to clinical and basic science trainees, as well as supporting student travel awards for participation in pain conferences (IASP 2016).

Clinical Education & Research Training

- The UTCSP continues to deliver the Interfaculty Pain Curriculum (IPC) annually to over 1000 students from 7 health sciences disciplines at U of T.
  - The program is updated and revised based on annual program evaluation and advances in educational technology.
  - Key updates to the Curriculum included the addition of 2 online learning modules; additional concurrent lecture offerings (7-8 sessions vs. 4 previously); moving to online evaluations from paper-based
  - The IPC-CIPE Accountability Task Force continues to meet annually to update processes related to the Governance model that has been established for the IPC.

- A Pain Curricular Mapping Study was undertaken to determine the amount and nature of pain content in the faculties and for the purpose of ensuring that the IPC complements existing curricula within the faculties. The results of this study were published in the Canadian Journal of Pain.

- The Pain Interprofessional Design (PICD) Workshop was designed and developed by UTCSP in collaboration with the CIPE; an interactive opportunity for interprofessional academic faculty and teams to understand and explore the essential strategies and components in the design, implementation, evaluation and sustainability of an interprofessional pain curriculum for health professional students. The program was offered in both 2015 and 2016.

- A Pain Needs Assessment Survey was conducted of over 200 clinicians concerning their pain knowledge sources, self-identified pain learning needs, and preferred routes for receiving new pain evidence to inform practice. The results were presented to the UTCSP Executive Committee to inform and establish new priorities for pain education.
**Knowledge Translation**

- The UTCSP Connaught Summer Institute in Pain was developed and offered (2016-2019), with financing through the Connaught Summer Institute (CSI) Award. This 5-day intensive program on how to effectively use KT strategies to bridge cutting edge pain research and clinical practice has been delivered to over 119 trainees since the program’s inception by 111 speakers/facilitators.

- The UTCSP Website, eNewsletter and Twitter continues as the primary vehicle for knowledge translation and key communication tool to broaden exposure to the Centre.

- The UTCSP continues to offer bi-annual translational seminars to implement and disseminate knew knowledge to a broad range of researchers, educators and clinicians.

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**SETTING THE CONTEXT- CURRENT STATE**

Pain continues to represent a major health and societal problem in developed and developing countries. Studies show that pain is the most common reason for seeking health care and accounts for up to 78% of visits to the emergency department in Canada and the United States. 1 in 5 Canadian adults suffers from chronic pain and 1 in 5 Canadian children have weekly or more frequent chronic pain. Two thirds of these children go on to become adults with chronic pain. To improve clinical practice outcomes, there is need for coordinated action to increase our knowledge of pain through research and education, and to determine ways to disseminate information about pain through effective knowledge translation strategies.

The UTCSP currently engages a diverse membership of approximately 120 faculty and 45 trainees and provides support to a broad array of research, education and knowledge translation activities. The Centre defines its work in three inter-related areas identified in the Strategic Plan, including:

- Research (e.g., funded scientists, trainee awards, annual scientific meeting)
- Education (e.g., IPC, educational outreach, TSI)
- Knowledge Translation and Dissemination (e.g., website, publications/presentations, educational outreach, mentorship)

Ongoing key initiatives include:

- The Interfaculty Pain Curriculum (IPC), which involves over 1,000 pre-licensure students from the health science Faculties. Its success in bringing students together from the different health professions is being considered as a model for Interprofessional Education elsewhere, both nationally and internationally. Efforts at copyrighting this program for commercial purposes are being pursued.
• The Annual Scientific Meeting brings in keynote speakers of interest across the health disciplines and provides networking opportunities to support collaborative opportunities.

• Educational Outreach and knowledge dissemination events (e.g., lectures and seminars) are considered highlights by centre members in building skills and capacity relative to pain mechanisms and management. Members also engage in knowledge translation and collaborative activities to build awareness about pain management and changing practice, including the use of guidelines and improving interdisciplinary collaborations through the Centre’s updated website and bi-monthly e-news blast.

• The UTCSP supports the 4 participating Faculties in providing financial support for recruiting pain scientists. These same scientists develop independent research programmes and engage with collaborators throughout U of T and the associated research hospitals for their research endeavors. The Pain Scientist Scholarship program supports trainees to provide a future cohort of pain scientists.

Although the Centre’s growth and evolution is built on a strong foundation of strength and achievement, there are some challenges that threaten the viability of the UTCSP over the next 5 years. These challenges include financial sustainability as well as the establishment of an administrative support structure that will help the Centre reach its full potential in meeting its mission and goals for the future.

**Strategic Drivers for UTCSP Strategic Planning**

1. Continue advancement of pain research and education to improve clinical outcomes.
2. Identify opportunities to engage membership and enhance internal and external collaborations, networking and partnerships.
3. Focus efforts on alignment of current resources and goals to ensure financial sustainability of the Centre, while seeking opportunities for growth.
## STRATEGIC PLAN-LOOKING TO THE FUTURE (2021-2026)

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<th>Goals</th>
<th>Potential action items</th>
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| **1. Build capacity with a focus on equity, diversity, and inclusion** | • Seek opportunities within our research, education, and knowledge translation activities to foster a culture of EDI.  
• In collaboration with the Deans, identify and prioritize needs for the recruitment of diverse pain scientists, for hiring new UTCSP scientists.  
• Partner with other associations and faculties on educational offerings and contribute expertise to existing programs.  
• Foster trainee development and leadership. | • Work with the U of T Equity Offices to identify opportunities to strengthen, coordinate activities and implement EDI practices.  
• Advance pain education in response to changes in evidence, gaps in curricula, and advances in educational technology. This includes a focus on virtual program development and delivery, continuing to update and modify the Interfaculty Pain Curriculum, and enhancing our educational reach.  
• Encourage and equip UTCSP trainees to take on active leadership roles in the UTCSP and broader pain community.  
• Offer and seek opportunities to integrate new members, such as community partners or individuals with lived experience to enhance and advance our UTCSP community. |
| **2. Leverage existing strengths** | • Capitalize on the breadth of expertise and the existing research infrastructure to support UTCSP member-led flagship projects.  
• Facilitate collaborations between clinicians and scientists in research and education.  
• Bridge the gap: identify opportunities to become a seamless conduit for knowledge generation and dissemination. | • Identify and develop funding applications to support collaborative research projects and program development.  
• Explore areas of synergy and seek opportunities to partner by offering matching funds or resources to co-create, co-host, or expand opportunities in strategic areas such as scholarships or educational programs.  
• Develop a taskforce with implementation and KT expertise to re-examine our KT strategies to align with other areas of focus, such as capacity building, education, advocacy, and research. |
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| 3. **Enhance the profile of the UTCSP community**                         | • Enhance visibility and authority of the UTCSP for its accomplishments through membership recognition, consistent branding, social media and outreach activities.  
• Foster community through engagement opportunities, strong communication, networking and mentoring.  
• Explore activities to expand member benefits.                                                                                       | • Develop and implement marketing and media campaigns for the synthesis, spread and uptake of UTCSP related research and projects amongst key stakeholders, both nationally and internationally.  
• Generate training opportunities that integrate education, networking and mentorship opportunities to enhance research and professional development.  
• Promote and make accessible existing educational resources for use across our membership.                                             |
| 4. **Ensure sustainability and Promote Growth**                          | • Ensure financial sustainability through alignment of resources with available funding.  
• Pursue initiatives focused on generating revenue.  
• Advance philanthropic/ sponsorship support.                                                                                         | • Examine administrative resources required to streamline our activities and achieve our goals.  
• Explore funding opportunities in new areas and with new partners.  
• Promote alignment of UTCSP activities with broader U of T priorities to ensure eligibility for resource allocation.  
• Explore revenue-generating opportunities (e.g., online learning and certificate programs, curriculum development workshop).  
• Develop a concept paper for donor audiences highlighting UTCSP achievements and outlining opportunity for future investment. |
This has been a year of unprecedented circumstances that have required constant adaptation. While there have been many challenges, we also recognize the opportunities for innovation in research, education, and knowledge translation. Undertaking this strategic planning exercise has enabled us to conduct a needs assessment and acquire input from our various stakeholders. Through this process we have highlighted current strengths and have identified many areas for potential growth and development. These include advancing the pain agenda by identifying ways to build capacity, facilitate collaboration and remove barriers to strengthen our community with a focus on equity, diversity, and inclusion.

Advancing pain education remains a priority. We will focus on pivoting our current program delivery to developing web-based curriculum, allowing us to expand our educational reach. Furthermore, we are driven to enhance connection across our membership through strong communication and raising the profile of the UTCSP through marketing and media. While we pursue multiple avenues to procure new sources of revenue to support this growth, we recognize the need to realign and restructure our current resources to meet our evolving needs.

CONCLUDING REMARKS