2025 AFMC BOARD OF DIRECTORS' INVITATIONAL SESSION

Rethinking the Support System for Clinician-Scientists in Canada

TABLE OF CONTENTS

03 ACRONYMS AND ABBREVIATIONS

04 INTRODUCTION

04 BACKGROUND AND CONTEXT

06 SUMMARY OF PROCEEDINGS

11 LOOKING AHEAD

12 CALLS TO ACTION

13 REFERENCES

ACRONYMS AND ABBREVIATIONS

AFMC	Association of Faculties of Medicine of Canada
AFP	Alternative Funding Plan
BIAC	Board Invitational Advisory Committee
CEO	Chief Executive Officer
CIHR	Canadian Institutes of Health Research
CIP	Clinician Investigator Program
CITAC	Clinician Investigator Trainee Association of Canada
CSCI	Canadian Society for Clinical Investigation
FRQ	Fonds de recherche du Québec
ICAM	International Congress on Academic Medicine
KRESCENT	Kidney Research Scientist Core Education and National Training
RCPSC	Royal College of Physicians and Surgeons of Canada

2025
AFMC BOARD OF DIRECTORS' INVITATIONAL SESSION

INTRODUCTION

On April 6, 2025, the Association of Faculties of Medicine of Canada (AFMC) convened a national forum in Halifax, Nova Scotia, in conjunction with the 2025 International Congress on Academic Medicine (ICAM). The primary objectives of this forum were to explore the challenges facing Canadian clinician-scientists and trainees, to brainstorm ideas to enhance support for this highly-skilled workforce, and to identify actionable strategies to uphold the attractiveness and sustainability of the clinician-scientist profession in Canada. This forum brought together the deans of medicine from Canadian medical schools, vice-deans of research and graduate studies deans, MD/PhD and Clinician Investigator Program (CIP) directors, funders, policymakers, trainees, and leading clinician-scientists from across the country. Insights gathered from this important forum have been synthesized into this report, which intends to serve as a foundation for a national, collective, and cohesive advocacy strategy for the clinician-scientist community in Canada. This document is not only intended for the participants of the forum but also aims to increase awareness across the wider health research ecosystem.

BACKGROUND AND CONTEXT

Clinician-scientists – also known as physician-scientists or clinician investigators– are health professionals who integrate clinical practice with scientific research to advance medical knowledge, drive innovation, and improve health outcomes for patients (Lockyer et al., 2022).[1] Their dual training allows them to bridge the gap between medical and health-related research and patient-centered health outcomes and applications. Despite their vital role, clinician-scientists in Canada face persistent challenges.

Recognizing these difficulties, the Royal College of Physicians and Surgeons of Canada (RCSPC) commissioned a comprehensive study in 2023, led by Dr. Shayne Taback, founding director of the University of Manitoba's CIP program, to shine a light on the challenges while helping to formulate lasting solutions.

The RCPSC commissioned study, grounded in a rigorous methodology,[2] helped identify **seven key issues**, ranked below in descending order of importance:

KEY CLINICIAN-SCIENTIST ISSUES

1. Low clinician-scientist conversion rate
2. Clinician-scientist training salary funding
3. Clinician-scientist income funding
4. Health research underfunding in Canada
5. Clinician-scientist training models
6. Advanced fellowship training and faculty hiring incoordination
7. Clinical pressures on clinician-scientists time

2025
AFMC BOARD OF DIRECTORS' INVITATIONAL SESSION

Dr. Taback presented these findings to AFMC's Research Committee and Board of Directors. The presentation resonated well with both groups, leading to the decision to select the clinician-scientist topic as the focal point for the ICAM 2025 Board Invitational session hosted by AFMC.

To support the development and execution of this event, AFMC formed an advisory committee comprised of leading experts in the field, learners, and AFMC staff. The mandate of this committee, formally known as the Board Invitational Advisory Committee (BIAC), was to guide the conceptual framing and content development for the session.

SUMMARY OF PROCEEDINGS

The Board Invitational forum was structured into two components to optimize knowledge dissemination and foster collaborative dialogue. The first segment featured keynote presentations that provided foundational insights and strategic context, helping to set the stage for ensuing discussions. The second segment provided an opportunity for attendees from a variety of backgrounds and perspectives to participate in facilitated, interactive dialogues on specific aspects of the topic. To enhance cross-participant engagement and broaden knowledge exchange, participants rotated between tables after each discussion round (World Café Style). The discussions were captured by a scribe and participants were also afforded the opportunity to input contributions directly into an online learning platform set up for the event.

KEYNOTES

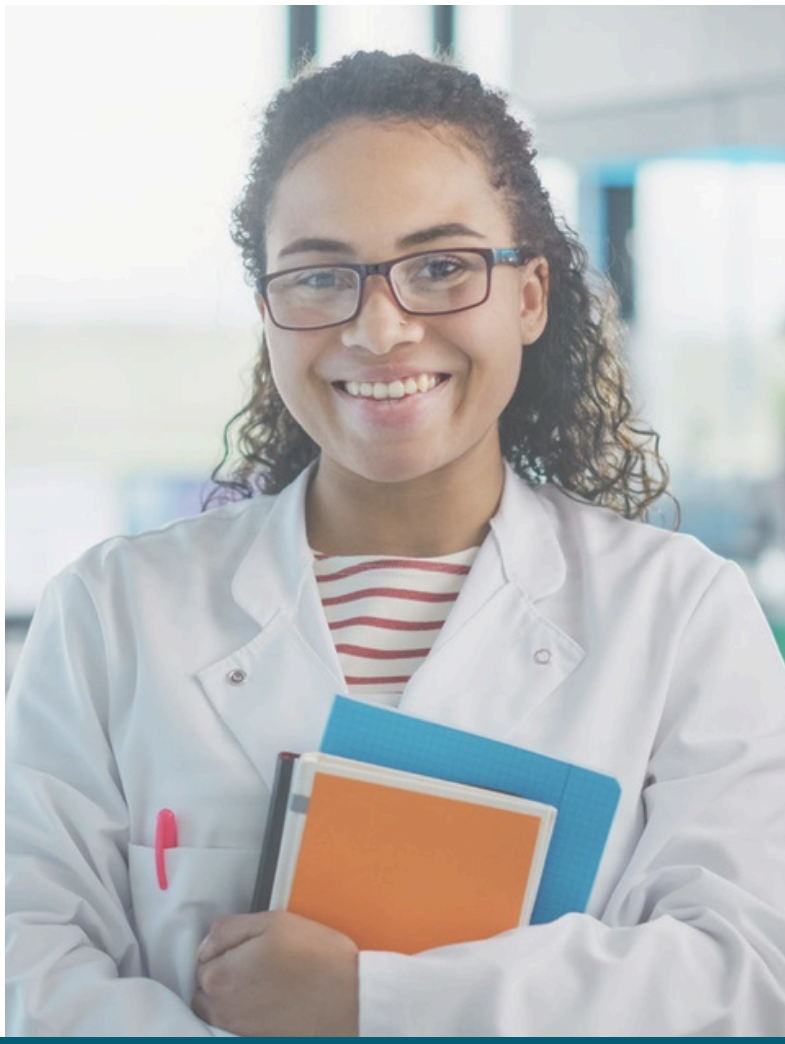
In the interest of promoting equity and diversity of thought, the keynotes included two learners and two senior medical and academic leaders.

- **Dr. Shayne Taback**, *Associate Professor and founding CIP director at the University of Manitoba*: shared insights from the RCPSC's national study on clinician-scientists, which he led. He presented the report's methodology and key findings.

- **Dr. Carole Jabet**, *Vice-President of Research, Health Scientific Division at the Fonds de recherche du Québec (FRQ)*: provided an overview of the province's funding programs for clinician-scientists, identifying both enablers and limitations of the Quebec system. Her address also included a reflection on specific clinician-scientist issues in Quebec, statistical data on funding distribution and impact, as well as strategic recommendations for national consideration.

- **Dr. Jasmine Mah**, *CIP graduate, Dalhousie University*: shared her perspectives on the CIP pathway, reflecting on her personal journey within the program and the opportunities it afforded her. She also re-emphasized the broader value of clinician-scientist training on healthcare systems and patient outcomes within the Canadian context.

- **Robert Lao**, *MD/PhD student at the University of Toronto and President of the Clinician Investigator Trainee Association of Canada (CITAC)*: provided an overview of the MD/PhD training landscape in Canada, recounting his personal experience within the program. He also highlighted the critical role clinician-scientists play in advancing medical research and issued a call-to-action to strengthen the support system around the profession to guarantee sustainability.



INTERACTIVE WORKSHOPS

Recognizing the breadth of the issues identified and the practical constraints of the meeting, four key thematic areas were investigated at the meeting. Each thematic area was tied to one or more of the aforementioned challenges outlined from the RCPSC commissioned study on clinician-scientists, which ensured more targeted engagement of the participants.

Key takeaways from the discussions are outlined below with their noted connections to the **seven key issues** identified in the RCPSC commissioned study.

Theme 1: Funding for training
(Issues #2 and #4)

- **Uneven Support Across Provinces and Calls for New Funding Models**

Participants reported significant provincial variation in funding levels, eligibility, and availability with Quebec being highlighted as a model of relative stability compared to other provinces that currently lack consistent infrastructure to support clinician-scientists. A central recommendation included the development of joint federal-provincial funding programs, alongside efforts to expand private and philanthropic contributions.

- **Lack of a National Strategy for Clinician-Scientists**

The absence of a coordinated federal strategy for clinician-scientists was highlighted as being a substantial issue. Health ministries often defer responsibility, and other key sectors (e.g., Innovation, Economy, Education) are largely uninvolved in the conversations. A national approach is needed to align funding, clarify roles, and ensure consistency across and within jurisdictions.

- **Rigid and Fragmented Training Pathways**

MD/PhD and CIP programs are often characterized by a lack of flexibility, which poses significant challenges for trainees navigating these pathways. Participants noted that many individuals encounter fragmented pathways and are constrained by short-term funding windows and limited mechanisms to facilitate reintegration into residency after dedicated research periods.

- **Research Scope Limited by Funding**

Short-term funding (e.g., two years) restricts the types of research trainees can pursue. Basic science and long-term studies are often not viable within short time frames. There is a need to shift the narrative to showcase training as a long-term investment with high health system-wide returns.

Theme 2: Training Models
(Issue #5)

- **Flexibility Over Standardized Models while Addressing Variability Across Canada**

Participants emphasized the critical importance of moving away from rigid, homogeneous training structures and instead move towards more adaptable and learner-centered models. Specifically, it was noted that clinician-scientist training programs such as MD/PhD and CIPs, should be designed to accommodate multiple entry and exit points along the educational and professional continuum. Training programs should also support non-linear career progression as well as include options for mid-career entry and part-time engagement. These training programs should also reflect the diverse backgrounds, trajectories, and career aspirations of up-and-coming clinician-scientists.

SUMMARY OF PROCEEDINGS

Additionally, there was strong consensus that training models should include provisions for track-switching, re-entry after periods of clinical practice or personal leave, as well as late-career transitions into research-intensive positions. The need for such flexibility is particularly felt in fields like family medicine where traditional entry points into dual training pathways are less common.

Substantial variability was additionally highlighted in program structures, funding models, and in the expectations of one province compared to another. For instance, Quebec offers structured return-of-service contracts that provide predictable support, whereas in other jurisdictions, trainees rely on fragmented and inconsistent support. This variegated landscape not only creates inequities but also hampers mobility and leads to confusion among learners and administrators.

- **Global and Specialty-based Inspiration**

Attention was drawn to several international models that Canada could emulate in terms of training and support structures. Most notably, programs such as Germany's frameworks and the United Kingdom's Deep Science Ventures program were hailed as exemplars of structured, long-term investment in the clinician-scientist pathway. Common traits between these two initiatives include clearly defined academic trajectories, consistent funding, and robust institutional alignment. All these factors collectively lead to the development of strong, interdisciplinary research careers for clinician-scientists.

In parallel, Canadian programs that are specialty-specific and collaborative in nature have shown considerable promise. The Kidney Research Scientist Core Education and National Training (KRESCENT) program, an initiative of the Kidney Foundation of Canada which supports research capacity in nephrology, was highlighted as an example of an initiative that leverages partnerships across institutions and funding agencies. Such models underscore the high potential of thematic, cross-sectoral approaches to foster expertise and knowledge translation.

- **Barriers to Progression and Retention**

Numerous persistent structural and systemic hurdles continue to hamper the progression and long-term retention of clinician-scientists within research and academic settings in Canada. One of the most pressing concerns is the high attrition rate, which results from a combination of hefty financial burden, stringent training timelines, and a lack of adequate protected time for research during and post-training. These conditions make it strenuous for trainees to have a sustained commitment to academic research alongside clinical responsibilities. Additionally, some participants highlighted insufficient institutional support after completing training programs, especially while transitioning into academia. This transitional phase is often plagued by uncertainty, limited access to mentorship, and unclear career itineraries. These issues are further compounded by the ongoing disconnect between clinical and research roles within many institutions. Instead of being fully integrated into a cohesive academic identity, clinician-scientists often find themselves having to navigate siloed environments where research activities are considered ancillary to clinical duties. Ultimately, this fragmentation severely undermines the development of sustainable clinician-scientist careers and hampers the attractiveness of the profession.

Theme 3: Streamlining Training
(Issues #6 and #7)

- **Disconnect Between Training and Employment**

First off, it is important to note that the concept of streamlining clinician-scientist training does not imply uniformity or standardization across all programs; rather it should be understood as the need for more transparency, adaptability, and consistency across the training continuum. A streamlined training environment would enable clearer communication of expectations, facilitate mobility across jurisdictions and institutions, as well as support individualized learning trajectories for clinician-scientist trainees.

A recurring concern raised was the absence of a clear trackway from training to faculty hiring. This lack of continuity creates an environment of uncertainty, dampens motivation, and prevents long-term commitment. To address this, a few strategies were proposed. Firstly, participants recommended the implementation of team-based hiring models that acknowledge the collaborative nature of academic research and foster the integration of emerging clinician-scientists into established multidisciplinary teams. Secondly, the creation of structured transition mechanisms was proposed, akin to postdoctoral-style mentoring positions, which would provide early-career clinician-scientists with dedicated time and guidance to develop their academic portfolios. Another innovative approach would be to link CIP funding to future employment opportunities, thereby incentivizing institutions to commit to long-term career development for their trainees.

By creating more predictable and supportive pathways into faculty roles, retention would be significantly enhanced, and clinician-scientists would have a conducive environment to fulfil their potential.

- **Weak Coordination Between Residency Programs and Research Goals**

The misalignment between residency training structures in Canada and the research objectives of aspiring clinician-scientists was highlighted as a concern. In several cases, residency programs are not currently designed to accommodate the integration of research activities in a way that is reflective of the realities of a clinician-scientist's career. To bridge this gap, participants recommended a more cohesive and embedded approach to research training with residency. This could include the formal integration of research competencies into the residency framework, potentially through the RCPSC's competency-based medical education model. Furthermore, horizontally integrated training structures that allow for the concurrent development of clinical and research skills were proposed as a more realistic and sustainable alternative time-off model.

Theme 4: Time and Income Post-training
(Issues #3, #4 and #7)

- **Protected Time Is Essential, But Difficult to Sustain**

The ability to guarantee protected time for research is widely regarded as a foundational requirement for the success of clinician-scientists. Without dedicated, uninterrupted time to pursue scholarly activities, clinician-scientists face significant challenges in maintaining research productivity, securing funding, and advancing academic careers. Despite this, many existing funding models, for instance those based on fee-for-service remuneration, do not provide the infrastructure necessary to preserve meaningful research time. On the other hand, other approaches such as Alternative Funding Plans (AFP) and hybrid models that allocate protected time through clinical-research time splits (e.g., 60/40 or 50/50), represent more supportive frameworks. However, because of the inconsistent implementation of these models across jurisdictions, some institutions often experience a decline in capacity and performance under mounting clinical pressures. Reinforcing a prior noted point, the shift to team-based models whereby clinician-scientists are assigned varying research time within collaborative teams is encouraged to help alleviate the pressure.

- **Value and Clarity on the Role of Clinician-Scientists**

Clinician-scientists are frequently viewed as half researcher, and half clinician. This perception creates some ambiguity in role expectations, deliverables, and compensation frameworks. Instead, they should be seen as occupying a distinct professional role with all that it entails. To remedy this situation, participants highlighted that salary models and performance expectations should be decoupled from those used for purely clinical or academic roles.

Put simply, compensation structures should reflect the integrated nature of clinician-scientist responsibilities which encompass research productivity, academic leadership, and clinical service.

- **Compensation and Fragmented Funding Structures**

These compensation issues are further exacerbated by the fragmented nature of funding across Canada, with noticeable variation in support from one province, institution or department to another. Currently, salary support comes from multiple sources including federal or provincial entities such as the Canadian Institutes of Health Research (CIHR) or FRQ, institutional top-ups, research chairs, and alternative payment plans. This multi-level fragmentation results in systemic inequities and diminishes the sustainability and attractiveness of the profession.

LOOKING AHEAD

Beyond the structural reforms to training models, funding mechanisms or compensation frameworks discussed above, there is an immediate need for a broader cultural and systemic shift to elevate the profile and perceived value of clinician-scientists and trainees within Canada's healthcare ecosystem. Presently, their role and contributions are not well understood by the public, peers, and policymakers alike. This gap in understanding ultimately leads to reluctance in institutional investment and further heightens the vulnerability of the profession. A deliberate, collective and strategic public relations and advocacy effort is needed to better articulate the value proposition of this group and change the narrative around clinician-scientists in Canada.

Finally, Canada needs to maintain active awareness of the rapidly shifting health research landscape in the United States in light of the recent funding rollbacks. This situation presents both a challenge and a timely opportunity for Canada to position itself as a global leader within this space. In fact, this provides an avenue to stem the outflow of Canadian talent south of the border, and attract researchers from the United States, thereby enhancing the competitiveness of the Canadian brand on the global stage.

CALLS TO ACTION

Coordinated, sustained investment in health research is essential to the well-being of Canadians, our health care system, and the economy. It must be a national priority.

CANADA'S MEDICAL SCHOOLS CALL ON THE FEDERAL GOVERNMENT TO:

1. Recognize the training of clinician-scientists as a critical long-term investment that yields substantial returns for patients and for our economy.

2. Engage with partners nationally (including provincial partners) to devise a collective national clinician-scientist strategy that creates alignment in funding mechanisms, clearly defines mandates, and ensures consistency across jurisdictions.

3. Co-develop joint federal-provincial funding programs that support clinician-scientists and trainees in contributing to Canadian biomedical research excellence on the national and world stages.

4. Prevent the loss of clinician-scientists to other countries or sectors by supporting the inclusion of protected research time within training programs and healthcare institutional employment.

5. Raise awareness around the immense contributions made by clinician-scientists to Canada's health ecosystem.

Find more information here or reach out to get involved at advocacy@afmc.ca

REFERENCES

[1] Lockyer, J.M., Brzezina, S., Thake, J., Beck, P.L., Hollenberg, M.D., Hemmelgarn, B.R., Taber, S., Harris, K.A., Gorman, L. and Strong, M., 2022. *Clinician Scientists in Canada - White Paper*. University of Ottawa. Available at: Clinician Scientists in Canada - White Paper [Accessed on June 4, 2025].

[2] Canadian deans of medicine ranked top clinician-scientist issues; submissions were amalgamated into a list of 19 de-identified issues; deans independently ranked the 19 issues based on perceived impact, regardless of feasibility of change, strategy setting and action planning considerations; 16 deans submitted rankings; medians calculated for each item, ranked list by median; for variability: the interquartile range (the range of the middle 8 Deans on each item); sensitivity analysis: QC compared to the rest of Canada