

Training and Early Career Development Program

Clinician Researcher Training Stream Program Guide

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Background

Over the past two decades countries have come to recognize innovation as central to economic sustainability and growth, leading to an increased focus on Highly Skilled People. These individuals — who have advanced degrees in fields such as science, engineering, medicine, finance and economics—are an essential component of knowledge creation and innovation. Alberta Innovates (AI) is providing opportunities to foster the development of future health research and innovation leaders, and prepare them to be drivers of change in diverse settings and environments.

Principles

The Training and Early Career Development Programs provide opportunities for trainees to gain broad experience within the health research environment to facilitate success in launching careers in academia, industry, government or elsewhere.

Aligned with Alberta’s requirement for Highly Skilled People across the research and innovation continuum, this investment will support the development of a high-quality workforce that is vital to the health-based knowledge industry.

To develop the required interdisciplinary and collaborative skill sets for Alberta’s next generation of scientists, clinicians, and health services professionals, the training programs will:

- **Focus on the thematic areas of priority for Alberta.** Support will be provided for the development of trainees undertaking research aligned with the thematic priority areas defined in Alberta’s Health Research and Innovation Strategy.
- **Develop the individual.** The program has the flexibility to allow trainees to customize the training experience to enable their unique career goals. The training programs support

Alberta’s Health Research and Innovation Strategy: Areas of strategic priority

Wellness at Every Age

- Child and maternal health
- Mental health and addiction
- Chronic disease
- Infectious disease
- Health promotion
- Vulnerable populations
- Injury prevention, acute care and rehabilitation
- Environmental health

Innovative Health Service Delivery

- Effectiveness and efficiency
- Innovative delivery models
- Chronic disease management support systems
- Personalized medicine

professional, career, and networking opportunities beyond what may already be available in the academic environment.

- **Provide multifaceted mentorship.** To support professional and career development in today's complex research environment, each trainee will have a minimum of three Mentorship Advisors to provide multiple perspectives on their career path. Mentor advisor roles include: a primary research supervisor; co-mentorship support, preferably from another discipline or sector; and a career advisor.
- **Recognize non-conventional backgrounds and career paths.** It is expected that trainees will use their awards to build their skills in ways that will most benefit their career goals. The training programs are designed to support careers across the full continuum of health research and innovation including academia, the health services sector, government or other policy-related areas, the private sector, research management, or health literacy and science communications.
- **Integrate knowledge translation.** Enhancing the impact of research through knowledge translation is an important objective of AI. Knowledge translation is therefore embedded in the training programs and knowledge translation support will be available to award recipients.

Description

Training and Early Career Development Opportunities include:

- **Graduate Studentship** for individuals undertaking health-related research areas in pursuit of a Master's or PhD at an Alberta university.
- **Postgraduate Fellowship** for individuals conducting postdoctoral health-related research at an Alberta university.
- **Clinician Researcher Training Stream** for individuals who have clinical accreditation and are pursuing graduate or postgraduate health-related research:
 - MD-PhD Studentship
 - Clinician Fellowship

Clinician Researcher Training Stream

The Clinician Researcher Training Stream addresses the critical need for clinician-scientists with the medical training and research experience required to investigate clinically relevant problems. Clinician-scientists split their time between clinical practice and research, enabling them to develop research questions based on the clinical issues encountered in their practice and translate their research results into clinical care. As such, clinician-scientists play important roles in integrating research with clinical practice. We recognize the need to support and encourage the training of clinician-scientists and develop a new generation of highly skilled people who are able to bridge the gaps between the bench, bedside and community.

Graduate Studentship and Postgraduate Fellowship awards are available for individuals who do not hold a health professional degree or who do not have clinical accreditation.

There are two award categories in the Clinician Researcher Training Stream:

[MD-PhD Studentships](#) are available to individuals pursuing combined MD and PhD degrees at an Alberta university.

[Clinician Fellowships](#) are available to individuals who hold health professional degrees with clinical accreditation and are undertaking graduate or postgraduate studies.

MD-PhD Studentship

The number of physicians pursuing research training is on the decline; and this raises a concern as these individuals have an important role in advancing the science of medicine as the translators of medical research. The MD-PhD Studentship is designed to encourage medical students to pursue careers in research and address the recognized decline of the physician-scientist.

Objectives

MD-PhD Studentships are specifically intended to provide opportunities for exceptional candidates, who wish to pursue careers as physician-scientists, and undertake the MD and the PhD degrees simultaneously. Support is complementary to the formal MD-PhD programs at the [University of Alberta](#) and the [University of Calgary](#).

Eligibility

Applicants must be currently enrolled at an Alberta university in a combined MD-PhD program. Support is available only to candidates who have completed their first year of medical school or graduate training.

AIHS recognizes that the MD-PhD programs differ between the [University of Calgary](#) and the [University of Alberta](#). Training plans can be customized to meet the requirements of the specific program as well as the trainee's career goals.

We recognize the importance of strong mentorship for successful career development and have made multifaceted mentorship team a requirement of the MD-PhD Studentship (see [Mentorship Advisors](#)).

Term of the Award

MD-PhD Studentship awards are tenable for a maximum of 6 years. The award may be implemented at any time within 6 months from the date of offer.

Value of the Award

The MD-PhD Studentship will consist of a stipend of \$30,000 per annum and [a research and career development allowance](#) of \$2,000 annually.

Clinician Fellowship

Clinician-scientists are critical contributors to the health system as they are positioned to directly identify health issues needing to be addressed, to enhance translation of basic scientific discoveries to the bedside and community, and enable patient access to cutting edge treatments. As clinician scientists split their time between clinical duties and research, they are faced with challenges distinct from their postgraduate counterparts.

We recognize the value of clinician-scientists and have broadly defined clinicians to include allied health professions. We offer the Clinician Fellowship to help meet the needs of clinicians pursuing research opportunities.

Objectives

Clinician Fellowships provide stipend support to highly qualified individuals who hold MD, and/or health professional degrees, and who anticipate undertaking careers in health-related or clinical research. Individuals who hold PhD and/or professional health degrees *without clinical accreditation*, may be eligible for the Postgraduate Fellowship.

Eligibility

Clinician Fellowship applicants must:

1. Hold an MD-PhD, health professional degree or health professional degree-PhD at the time of award implementation.
 - The health professional degree must be in a [regulated health profession in Alberta](#) such as medicine, dentistry, pharmacy, optometry, veterinary medicine, chiropractic, nursing or rehabilitative sciences (such as OT or PT).
2. The health professional degree must require at least a Bachelor's degree and be eligible for licensure in Canada. Have completed all Canadian clinical requirements, be licensable in Alberta, and must have a practice permit and/or license to work as a health care professional in Alberta at the time of award implementation.

We will consider supporting Clinician Fellowship recipients for training outside of Alberta from Canadian citizens or permanent residents with:

- Justification for the need or opportunity that the training presents relative to the career plans of the individual;
- Strong institutional support at an Alberta-based institution (e.g. Faculty Dean, CEO of a hospital, or medical officer of a health region) as demonstrated by an interest in the Fellow's future recruitment back to the province

We recognize the importance of strong mentorship for successful career development and have made multifaceted mentorship a requirement of the Clinician Fellowship (see [Mentorship Advisors](#)).

Term of the Award

Clinician Fellowships will provide up to a maximum of 3 years of support.

Value of the Award

The Clinician Fellowship will consist of a stipend of \$70,000 per annum and an annual \$5,000 [research and career development allowance](#). Stipends are subject to the Income Tax Act and Regulations of the Government of Canada.

MD-PhD Studentship and Clinician Fellowship

Application Assessment Criteria

All applications undergo a rigorous review process by a committee whose membership is both interdisciplinary and intersectoral. Applicants will be assessed with a focus on the trainee, their career plan and the anticipated benefits they would gain from the opportunities provided by the proposed training environment(s) as measured by the following criteria:

- Academic track record (MD-PhD Studentship only)
- Relevant work and/or research experience
- Career development plans
- Supervisory team, and the research and mentorship environment
- Research proposal

Academic Record (MD-PhD Studentship only)

Refer to section: ***Academic Background of Applicant and Submitted Transcripts***

- Does the applicant's academic record show evidence of solid and sustained academic excellence and performance throughout their training?
- Has the applicant received academic recognition (e.g. Dean's list)?
- Has the applicant received several prizes/awards, and/or highly competitive, premier prizes/awards at the national level?

Relevant Work and/or Research Experience

Refer to sections: ***University Academic Achievements***
Research and Other Relevant Work Experience of Applicant
Academic Details

- Does the applicant demonstrate a strong foundation of research skills and achievements evidenced by relevant work/research experience and formal presentations, abstracts and publications for their stage of research career? Are these of high quality?
- Is the applicant's research experience of high quality?
- Does the applicant show strong leadership qualities as demonstrated by relevant academic, leadership, work and/or leadership accomplishments? Are these of high quality?
- Does the applicant have the potential for becoming an important contributor to the health research and innovation environment?

Career Development Plan

Refer to sections: ***Applicant's Career Development Plan***
Letters of Reference

- What is the likelihood that career development plan will contribute substantially to the scientific development and productivity of the applicant?
- Does the applicant link past achievements, publications, award and related research and work experiences to the career plan?
- Is there strong linkage between applicant's proposed training program and career progression?
- Is the applicant's prior research and/or work experiences relevant to the career goals/objectives?
- Are the applicant's career plans well-articulated and illustrate a well thought out progression towards their career goals/objectives?
- Are there appropriate justifications for the selection of the mentorship advisors and their contribution to the career and scientific development of the applicant?
- What is the likelihood that the award will contribute substantially to the continued scientific development and productivity of the applicant?
- Do the letters of reference provide unanimously strong support and considerable detailed assessments of the applicant's research strengths/capabilities and intellectual capacity?
- Do the letters of reference describe the benefits that the proposed research experience provides the applicant towards their career goals?

Research Training & Mentorship Environment

Refer to sections: ***Mentorship Advisors – Biographical Sketches***
Research Training Environment
Mentoring Plan

- Are the primary (co-) supervisor's research qualifications in the area of the proposed research appropriate?
- Do the mentor(s) adequately address the applicant's potential and their strengths and areas needing improvement?
- Are there adequate plans for the mentorship advisors for monitoring and evaluating the applicant's research and career development progress?
- Is there adequate description in the mentoring plan of the quality and extent of the proposed role of each mentorship advisor in providing guidance and advice to the applicant to support their career development? Does the mentoring plan adequately describe the elements of the research career development activities, including formal course work?

- Are the plans to provide mentoring adequate? Have past and current mentoring activities been adequately described? Is an appropriate level of effort proposed for the mentoring component?
- Is there evidence of the mentor's, co-mentor's and career advisor's previous experience in fostering the development of "highly skilled people"? Does the background information on the mentorship advisors provide evidence of success in their respective careers? Is active/pending support for the proposed research project appropriate and adequate? Are there adequate plans for monitoring and evaluating the applicant's career development progress toward independence?
- Are the proposed opportunities for professional growth of the applicant appropriate and of high quality?
- Does the research training environment provide the expertise and resources required for the proposed research?
- Are the proposed collaborations for the applicant with other active investigators adequate and are there other opportunities for professional growth appropriate and of high quality?
- Is the role of the trainee in the proposed research and how it links to the primary supervisor's research program and/or research group clearly described?
- Is the benefit of the applicant training in the proposed research environment clearly described?

Research Proposal

Refer to section: ***Proposed Research Project***

- Does the proposed research project embody leading edge concepts and is the description of the hypothesis and methodology of the caliber expected for the career stage of a researcher who is at the forefront of a field?
- Are the proposed research question, design, and methodology of significant scientific and technical merit?
- Is the research plan relevant to the applicant's research career objectives?
- Is the research plan appropriate to the stage of research development and as a vehicle for developing the research skills described in the career development plan?
- Is the research plan of high quality, and does it have potential for advancing the field of study?
- If applicable, are there adequate plans for data and safety monitoring of clinical trials?
- If applicable, is the research plan an appropriate vehicle for developing the prospective mentee's skills and capabilities in (patient-oriented) research?

Funding, Administration, Expectations and Responsibilities

Stipend Incentive

We encourage trainees to apply for and receive awards from other national or international agencies. The MD-PhD Studentship and Clinician Fellowship provide an incentive to those individuals who receive additional awards.

If a MD-PhD Studentship recipient receives another major comparable, peer-reviewed award, they may be eligible to receive a minimum incentive of \$12,000 per year or more to a maximum combined award value of \$30,000 per year; or the maximum allowed by the other agency.

If a Clinician Fellowship recipient receives another major comparable, peer-reviewed award, they may be eligible to receive a minimum incentive of \$15,000 per year or more to a maximum combined award value of \$70,000 per year; or the maximum allowed by the other agency.

Recipients of the stipend incentive will continue to receive the Research and Career Development Allowance. Individuals who receive a MD-PhD Studentship or Clinician Fellowship in the form of a stipend incentive should note that the maximum years of eligibility remain the same as those for individuals receiving the full stipend value.

Award recipients may not receive simultaneous support from another Alberta Innovates trainee program.

Research and Career Development Allowance

The research and career development allowance will be administered by the trainee's university with the expectation that the primary research supervisor will approve any expenses drawn from the allowance. Approved uses of the research and career development allowance include, but are not limited to, the following:

- Career development activities including coursework that is not part of the requirements of obtaining the graduate degree (must be supported by the trainee's [mentorship advisors](#));
- Purchase of scientific materials, supplies and expendables;
- Purchase of minor equipment (Note: the policies of the host institution with respect to ownership of equipment will apply to equipment bought with these funds);
- Purchase of computer software;
- Costs for the use of libraries, or computers;
- Costs associated with the publication of research results;

- Travel expenses to attend scientific meetings;
- Purchase of books, periodicals and journals;

If the award is terminated prematurely, unused funds must be returned to AI. The research and career development allowance cannot be used for stipend support or tuition.

Multifaceted Mentorship Advisors

All MD-PhD Studentship and Clinician Fellowship trainees are required to complete their training with the support of Mentorship Advisors to provide a multifaceted mentorship approach during their training. A minimum of three individuals are required to be identified as Mentorship Advisors. For the MD-PhD Studentship, the mentorship advisors may be distinct from the formal supervisory committee associated with thesis-based graduate programs. The mentorship advisors will be multidisciplinary and comprised of a:

- **Primary research supervisor** who will sponsor the application and ensure adherence to the terms and conditions of the award. He or she must possess both a record of productive health-oriented research and sufficient resources to ensure the satisfactory conduct of the research. He or she must provide direct supervision.
- **Co-supervisor** if the applicant has a secondary research supervisor for their degree program.
- **Co-mentor** to provide an alternate perspective, either from another discipline or research focus (e.g. basic scientist, clinician, population health investigator), sector, or institution.
- **Career advisor** to focus on the trainee's career development.

Who is a Career Advisor?

A Career Advisor is someone that supports the trainee in the exploration of and decisions for potential career options.

It is expected that the mentorship advisors agree to assist the applicant in designing their training program and career development plans, regularly monitoring and adjusting their progress to those plans, facilitating the launch of the careers and in providing progress reporting to AI.

It is incumbent on the applicant to identify a minimum of three Mentorship Advisors prior to submission of the application. For any change in the primary research supervisor, or the mentorship advisors, the trainee must obtain prior written approval from AI. We reserve the right to terminate support if its requirements for supervision and mentorship are not met.

Application Process

Applications for the MD-PhD Studentship and Clinician Fellowship will be accepted into an annual April competition.

Release of Competition Results

Following approval by AI, the results will be posted on the website approximately 2.5 months after the close of the competition. Results will not be released over the phone. Official letters with the competition results are sent to the applicants shortly thereafter. The formal letters will serve as Alberta Innovates' official decision should there be any discrepancy with the material on the web site.

Commencement of Funding

MD-PhD Studentships may be implemented within six months of the date of offer. Clinician Fellowships may be implemented within 12 months of the date of offer. Offers will be withdrawn for any award not implemented within this time period.

Termination of Funding

MD-PhD Studentships will be terminated when the trainee has successfully completed the MD degree and defended his or her thesis prior to the official award end date; the award will be terminated on the last day of the month in which the defense examination occurs.

We reserve the right to terminate any award if the terms and conditions of the award are not met, or if there is evidence of unsatisfactory progress.

Time Commitment Expectations

It is expected that MD-PhD Studentship recipients will engage in focused research activities as proposed in their original application. It is recognized that Clinician Fellowship recipients will engage in clinical activities in addition to their research activities. Clinician Fellows must ensure that they spend no more than a maximum of 20% of their time on non-research-related activities. These activities must be relevant to their research and approved by their primary research supervisor. Non-research-related activities include direct participation in:

- Clinical responsibilities;
- Teaching;
- Preparation time;
- Contributions to laboratory teaching

Notification Responsibilities

The trainee and their primary research supervisor must obtain written approval from AI prior to any substantial alterations in supervision, mentorship, the training environment, or the research project described in the original application. Consideration may be given to proposed changes and will be assessed on a case by case basis. We reserve the right to terminate support if its requirements for supervision/mentorship are not met, or if changes to the proposed training environment or research project are not approved.

Management of Awards

For AI, the ultimate impact of funding and facilitating health research and innovation is to realize health, health system, and socio-economic benefits for Albertans. We use a performance management and evaluation framework adapted from the Canadian Academy of Health Sciences to provide accountability for its public investment and to produce evidence of the benefits of its investments in health research and innovation. The results and benefits from research are captured across five broad categories of impact that include capacity building, knowledge generation, informing decision making, health and economic benefit.

Information that is collected is used to generate statistics that inform program planning, funding allocation decisions, program monitoring and evaluation, the identification of best practices, and communications to key stakeholders.

Progress Reports

Renewal Report. Award recipients are required to submit renewal reports to ensure compliance with the terms and conditions of the award. Recipients will receive a reminder outlining the required submission date along with the required report forms in advance of the deadline.

Annual Impact Report. Award recipients are required to submit annual impact reports collected through an [electronic tool called Researchfish®](#) to capture the health research impacts achieved through AI funding.

Failure to submit these reports will result in suspension of the funding and may lead to cancellation of the award.

Final Report. MD-PhD Studentship and Clinician Fellowship recipients and their [Mentorship Advisors](#) are required to submit a final report within one month of the termination or completion of an award. Final report forms will be sent to award recipients and their Mentorship Advisors.

Extended Leaves

Parental Leave

Full-time MD-PhD Studentship and Clinician Fellowship recipients may receive up to one year of paid parental leave.

When each parent is taking a portion of the leave, the awardee is eligible for up to one year less any period of leave taken by the other parent. Leave must occur within the first year of the child's life and cannot be taken simultaneously with the other parent. Combined leave must total no more than 12 months.

To be eligible, MD-PhD Studentship and Clinician Fellowship recipients who take a parental leave during the tenure of their awards must notify AI prior to the commencement of the leave period. There is no limit to the number of parental leaves that can be taken during the tenure of a given award.

Leaves of Absence

Unpaid leaves of absence of up to six months may be granted following a formal request to AI outlining the purpose of the leave. The support of the primary research supervisor and the host institution is required. Each request will be considered on a case-by-case basis. We reserve the right to terminate the award should the required approval not be met.

Upon the trainee's return, we will consider extending the period of support by the duration of the approved leave.

Knowledge Translation

In addition to skill-building opportunities and resources to facilitate knowledge translation, we can provide some direct knowledge translation support such as profiling research results, brokering relationships between trainees and knowledge or end-users, or providing advice on knowledge translation activities.

Communications

We reserve the right to publish and/or disseminate information regarding its grants and awards. All publications, including public messages, arising from research supported by AI grants or awards must acknowledge the support of AI. Please go to www.aihealthsolutions.ca for

downloadable logos.

Studentship and Fellowship recipients are asked to inform the AI communications staff in advance if their research will be published in a major journal such that it might result in a press release from the university and/or the journal.

Support of Research Integrity

We support Alberta research institutions in their efforts to promote and ensure the highest standards of research and scholarship practice and behavior. It is incumbent upon each applicant to adhere to all research policies and procedures in place at his or her institution, including those regarding integrity in research and scholarship. We reserve the right to confirm, through independent means, representations of authorship, credentials or research support.

In the event of material deviations in the submitted information, including citation sources (in the case of authorship), issuing organization(s) (in the case of credentials), or granting agencies (in the case of research support), we reserve the right to disqualify any applicant from the competition in question.

Further actions may include disqualifying the applicant from future AI competitions for a time period to be set at our sole discretion, withdrawal of any remaining installments of support for any existing AI grant or award for which misrepresentation appears in the submission, and seeking partial or full repayment of any past financial support under any AI grant or award for which misrepresentation appears in the submission.

Contact Information

For further information on the MD-PhD Studentship and Clinician Fellowship please contact us at:

Programs

780-423-5727

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