

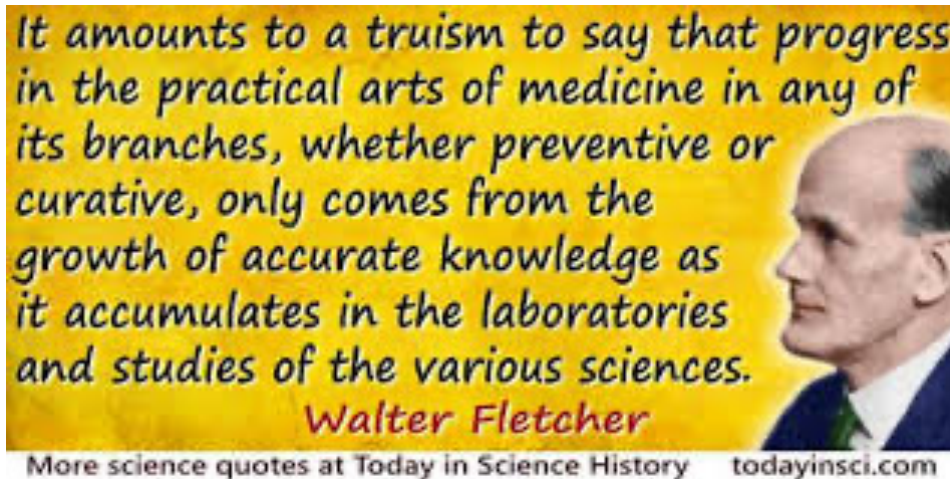
MD/Special Training in Research: Enhancing medical education through research



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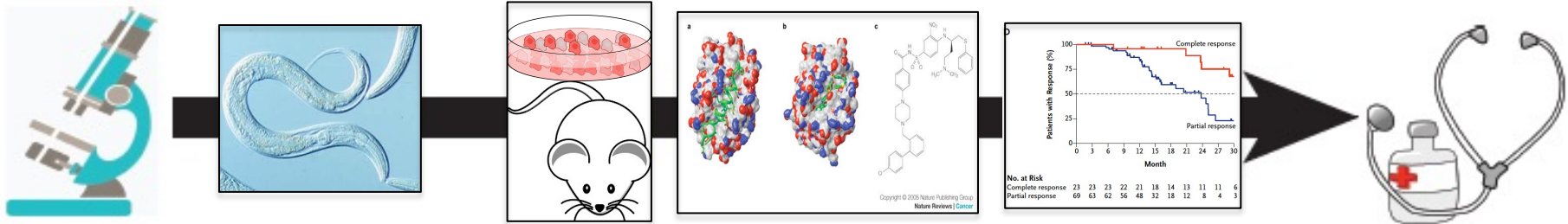
December 3, 2021

Scientific research



Incorporating research into medical training

- Undergraduate—MD/Special Training in Research
- MD/PhD
- CIP



MD Special Training in Research (MD/STIR)

- What is MD/STIR?
 - Program that oversees and formally recognizes research by undergraduate medical education (UME) students
 - ~6 months of research (e.g. summers after 1st and 2nd yr)
 - How is the research recognized?
 - Annotation on diploma and transcript
 - “MD with Special Training in Research”
 - Typically ~5-15 students in each graduating class
 - You MUST apply in your first year
 - No risk to enroll
 - Students that do not complete the program (for whatever reason) are not recorded



Where can you find information on STIR?

<https://www.ualberta.ca/medicine/programs/mdstir>

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MD with Special Training in Research

Overview:

The Faculty of Medicine & Dentistry (FoMD) at the University of Alberta offers the MD with Special Training in Research Program (MD/STIR) to undergraduate medical education (UME) students. This program is designed for those students who wish to participate in research above what is offered within the UME curriculum. UME students join a research team and directly engage in biomedical research while concurrently fulfilling MD/STIR requirements (application, presentations, reporting, defense). Students that successfully complete their MD degree and all requirements of the MD/STIR program receive the designation of "Special Training in Research" on their degree parchment and transcript.

Contact Us



For more information, please contact:

Nicole Kosturic

Tel: 780-492-8365

E: nkosturi@ualberta.ca

Step 1. Identify a research supervisor

- Supervisors direct MD/STIR student research activities and in some cases contribute to stipend support
- Not all potential supervisors are familiar with STIR, so be prepared to describe the program
- Important points:
 - Supervisors must be full-time academic member of the University of Alberta (UofA).
 - Find a strong supervisor. It is extremely important that the supervisor has an active research program and is willing to put in the time to guide the student through the program.
 - Strong supervisors usually have:
 - peer-reviewed research grant support
 - successfully supervised research trainees
 - published with their trainees (typically as first- or last-author)

Step 2. Apply for summer stipend support

- All MD/STIR students must be paid for the summer research portion
 - From scholarship or from supervisor
- Students must apply for an Alberta Innovates (AI) summer research award (AI SRS)
 - Application call is already out with deadline ~February
 - This application automatically makes you eligible for MD/STIR support
 - MD/STIR support is limited to ~8-10 students
- Students should also apply to any other studentship stipend competition
- Students will NOT be accepted into the program without stipend support

Step 3. The Application: Proposal

- The student is responsible for writing the research proposal
- *The proposed research must be hypothesis-driven and requires collection of primary data*
- The supervisor should actively guide the student during the writing of the proposal
 - If not, the student may need to reconsider whether this is the best environment for a successful MD/STIR
- The student should start writing the proposal early January if not sooner!



JORGE CHAM © THE STANFORD DAILY

phd.stanford.edu/comics

Step 3. The Application: Ethics

- The student MUST attach documentation that all ethics approval is in place or pending or the application will be denied
- If the supervisor does not have or is not actively applying for ethics approval for the STIR project, the student should re-consider whether this is the best environment for a successful MD/STIR
- Lack of timely ethics approval is a major reason for student withdrawal from the program

Step 3. The Application: CVs

- Student CV
 - No previous research experience is required
- Supervisor CV
 - The reviewers will assess the supervisor with respect to (i) peer-reviewed research grant support, (ii) successful supervision of research trainees, (iii) publications from their own group (typically as first- or last-author), (iv) publications with their trainees

Step 3. Identify timeline for 24wk of research

A

	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Year 1							Application		FT Research (16wk)			
Year 2									FT Research (8wk)			
Year 3	Report due		Defence									
Year 4												

B

	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Year 1							Application		FT Research (16wk)			
Year 2	PT Research (~3d/month=4wk)								FT (4wk)			
Year 3	Report due		Defence									
Year 4												

C

	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug
Year 1							Application		FT Research (16wk)			
Year 2	PT Research (~3d/month=4wk)											
Year 3	PT Research (~3d/month=4wk)											
Year 4	Report due		Defence									

Step 3. Submit your application

- The application is due **February 2022** to Nicole Kosturic, nkosturi@ualberta.ca
- The applications are assessed by members of the MD Research Committee
 - The research must be novel, hypothesis-driven and requires collection of primary data
 - The proposal must be scientifically sound
 - Feasibility
 - is the proposed research “doable” within the 24-week timeframe?
 - is the proposed work in line with supervisor’s research program?
 - Is the proposed work reasonable with respect to the student’s research background?

MD/STIR Committee oversees program

- Adetola Adesida, PhD—Surgery
- Oana Caluseriu, MD—Medical Genetics
- Sandra Cockfield, MD—Division of nephrology, Medicine
- Michelle Graham, MD—Division of cardiology, Medicine
- Ing Swie Goping, PhD, Chair of Committee—Biochemistry
- Kieran Halloran, MD—Division of pulmonary medicine, Medicine
- Lisa Hartling, PhD—Pediatrics
- Jacob Jaremko, MD—Radiology & Diagnostic Imaging
- Sanjay Kalra, MD—Division of neurology, Medicine
- Paul LaPointe, PhD—Cell Biology
- Jean-Michel Le Melledo, MD/MSc—Psychiatry
- Janis Miyasaki, MD—Director Parkinson and Movement Disorders Program, Medicine
- Silvia Pagliardini, PhD—Physiology
- Elena Posse de Chaves, PhD—Pharmacology
- Michael Schultz, PhD—Biochemistry
- Nicole Kosturic—Program Coordinator

Step 4. Complete program requirements

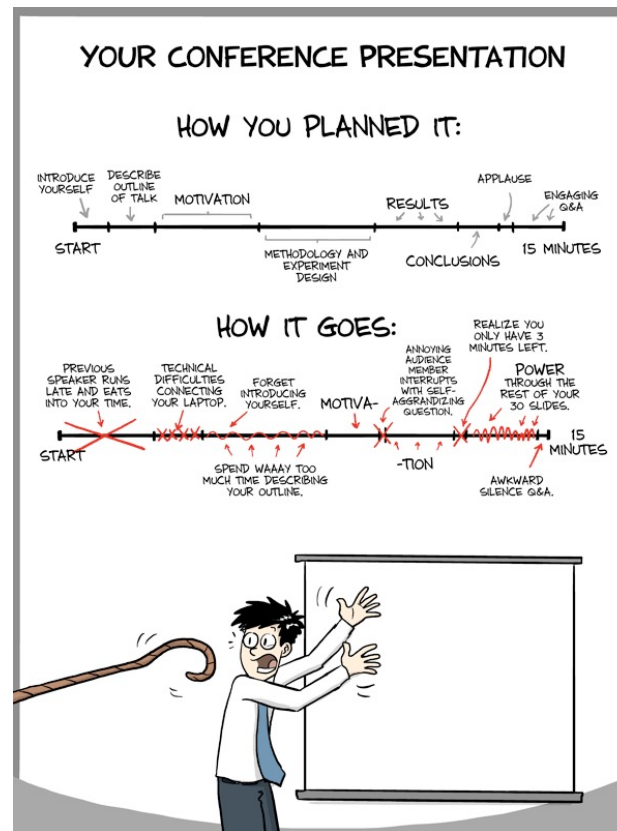
- Immerse yourself in the research experience (24 weeks)
- Oral presentation to fellow MD/STIR students in the format of a “3 minute pitch” at the beginning of the program
- Midterm report submitted by July 1 of the first summer
- Oral presentation to an appropriate group (e.g. lab meeting, group meeting, conference) arranged by the supervisor
- Poster presentation at FoMD Summer Student Research Day or equivalent

Step 5. Final written report

- Research manuscript format
 - 10-15 typewritten pages in length (double-spaced) excluding figures, tables and references
- “Student contributions to research” that clearly describes the student’s technical and intellectual contributions to the project
- The supervisor submits a confidential Student Evaluation form

Step 6: Oral defence

- 10-minute seminar to the examining committee
- 10-minute question period
- The student is expected to understand the basis and selection of methodologies used, the interpretation of results and the impact of findings



Pros and Cons

- *Pros:*
 - Opportunity to participate in the design and execution of a peer-reviewed research project
 - Time commitment of 24 weeks dedicated to research provides opportunity for student to become a valued member of a research team
 - Opportunity to assess interest and aptitude for research that may influence future career decisions
 - Formative feedback helps student develop skills in critical thinking and communication
 - No risk to enrollment. No indication if the student withdraws from the MD/STIR program.
 - Formal recognition of research training with the notation of “Special Training in Research” on student MD degree parchment and university transcript.
- *Cons:*
 - Time commitment of 24 weeks dedicated to research may be a challenge to students wishing to participate in other UME programs, e.g. extra clinical electives.

Questions?

