



Course Syllabus The Grant Generating Project

Course Director: Dr. Gillian Bartlett (*University of Missouri*)

Course Faculty: Tracie Barnett (*McGill University*)
Fariba Aghajafari (*University of Calgary*)
Ioannis Kakadiaris (*University of Houston*)
Kate Trout (*University of Missouri*)

Educational Director: Dr. Tamara Carver (*McGill University*)

Course Coordinator: Anya Oléandre (*McGill University*)

NAPCRG Staff Liaison: Leyla Haddad (*NAPCRG*)

Learning Objectives

By the end of this course, GGP Fellows should be able to develop and describe an integrated research project or program relevant to primary care research. This will include being able to effectively communicate a research agenda in various formats from written to oral for a range of audiences with varying levels of research experience.

By the end of this course, you will be able to:

- Demonstrate increased competency of scientific communications
- Apply techniques and methods to develop a scientific protocol in health research

Instructional Method

This is a blended learning course meaning that portions of the course will be completed online at the Fellow's convenience and portions will be conducted in-person (either face-to-face or virtually) with the Course Director, the Educational Director, and the Course Faculty. Fellows are expected to be active participants for the in-person sessions as well as the online discussion forums.

Course Evaluation

Evaluation will be based on completion of each online module, participation in the in-person sessions and completion of the milestones.

Course Content

Session I: Online from Sept 1 – October 28, 2023

Release Date	Module Title	Module Details	Milestones & Due Dates
ORIENTATION VIRTUAL MEETING –August 30, 2023 – 12:30 – 2:00 pm EST - ZOOM			
Sep 1	1 Effective Writing Strategies	how to conceptualize a research problem, overcoming writers block, critical thinking, organization, avoiding jargon	Sep 11: 1-page conceptualization of research
Sep 8	2 Knowledge Translation / Dissemination	understanding the dissemination phase of evidence production and how this impacts protocol writing	Sept 18: Identification of end-users, decision about research partners, draft of dissemination plan
Sept 15	3 Development of Research Question	defence/explanation of research paradigms, building the research question and understanding the difference between question, objectives, link with hypothesis	Oct 2: Research objectives and preliminary research questions - MENTOR FEEDBACK REQUIRED
Sep 29	4 Conducting Literature Reviews	concept vs problems, identifying gaps, keys to literature reviews, building a search strategy	Oct 16: Literature review for protocol, finalized research objectives and questions
VIRTUAL CLASS – Q & A – October 11, 2023 - 12:30 – 2:00 pm EST – ZOOM			
Oct 13	5 Writing the Methods Section	identifying methods that answers research question, use of theoretical models and framework, different sections, justifications	Oct 26: First draft completed of methods section of protocol Oct 26 at the latest: Draft protocol with background, objectives, research question(s) and methods - MENTOR FEEDBACK REQUIRED

Session II: Interactive Session October 30, 2023

NAPCRG San Francisco, CA (for Virtual Participants times are GMT-8)

8:30 – 9:30 Introductions and Icebreaker

9:30 - 11:00 Peer-Reflective Consultations

Fellows will break into groups of three. Each triad will engage in a reflective exercise that follows the same 30-minute structure. At the end of the first 30 minutes, the next fellow will become the presenter.

1. A 7-minute presentation will be given by Fellow 1 that briefly states their research objective and then presents what challenges they have faced in developing their protocol. During the presentation, the other Fellows will listen and cannot interrupt the presentation or ask questions of the presenter.
2. After the presentation, Fellow 2 and Fellow 3 will take turns asking questions of Fellow 1 for a total of 10 minutes. The presenter will answer questions as briefly as possible.
3. Fellow 2 and Fellow 3 will then discuss the challenges as they understand it while Fellow 1 listens for 10 minutes. This gives an opportunity for the presenter, Fellow 1, to reflect on the interaction without the pressure of having to respond to ideas at that time. The task for the “consultants”, Fellow 2 and Fellow 3, is to generate ideas, solutions, opinions, options, etcetera. Fellow 2 and 3 should NOT ask questions of Fellow 1. The task for Fellow 1 will be to listen to the reflecting conversation and note ideas that might be worth trying.
4. In a final step, Fellow 1 will reflect for 3 minutes to Fellow 2 and 3 on his/her experience of listening to their conversation and to identify three things that stood out for her/him.

This exercise is repeated until each Fellow in the triad has a chance to be the presenter.

11:00 – 11:15 – biobreak/coffee

11:15 – 1:00 pm Peer-Review Activity

Each Fellow will be assigned a partner who is another Fellow. They will each receive the draft grant protocol of their assigned partner at the beginning of the day – PLEASE BRING A HARD COPY OF YOUR PROTOCOL. In this exercise, they are expected to draft the blank tables of results or table of expected themes (depending on methods) from

the draft protocol they are provided with. They will spend 45 minutes each (for a total of 90 minutes) reviewing and asking their partner for any information that they felt was missing or unclear for producing the blank tables/anticipated results. The author of the protocol is not allowed to “present” their grant but only to respond to the questions from their partner. This will highlight logic/information gaps that still exist in protocol and the research objectives/questions.

1 - 2 pm – Biobreak/lunch/social activity

2:00 – 4:00 Dragons’ Den aka Sharks’ Tank (biobreak 3:00 -3:15 pm)

NOTE: AI/ML Fellows will join the AI/ML boot camp for this section

In the afternoon each of the Fellows will “pitch” their grant application idea in a Dragons’ Den format. The Fellow will present a 3-minute “pitch”. This will be followed by one question each from the “Dragons” for maximum of 6 minutes. The “Dragons” will declare if they would have funded the “pitch” or allowed it past the LOI stage (6 minute). At least one “Dragon” will be a course faculty who is an experienced researcher with the Fellows taking turns as “Dragons”. Unlike the famous TV Dragons, they will be a source of constructive feedback. One Fellow will act as a note taker for the Fellow who is pitching their grant idea.

4:00 – 5:00 Feedback and Evaluation

NOTE: AI/ML Fellows will rejoin GGP Fellows

The day will wrap up with an open Q & A session for the Fellows to the Faculty and Course Director. The Fellows will be expected to incorporate the feedback in their protocol and to finalize their concept paper which will be uploaded to the learning platform by **Dec 1 at the latest. Feedback will be provided by Jan 30, 2024.**

Session III: Online from January 1 – April 28, 2024

Release Date	Module Title	Module Details	Milestones & Due Dates
Jan 5	6 Other Grant Sections	understanding spin, understanding what your study will and will not contribute, having a plan b for negative results etc.	Jan 22: Limitations and Implications sections
Jan 19	7 Building a Timeline	how to develop a timeline and calculate resources, calculating time needed	Feb 5: Timeline attached to protocol objectives and methods with feedback incorporated -

			MENTOR FEEDBACK REQUIRED
Feb 2	8 How to Create a Budget	building a budget for Canada and the US granting opportunities	Feb 19: Budget attached to protocol objectives and methods
Feb 16	9 Creating a CV	Biosketch and CV's	Mar 18: CV/Biosketch Mar 18: Description of where the protocol will be submitted with title of grant and abstract/summary
VIRTUAL CLASS – Q & A – February 21, 2024 - 12:30 – 2:00 pm EST – ZOOM			
Mar 15	10 Adapting to Granting Agency Requirements	modifying the revised protocol to a specify granting agency application with specific modules for AI/ML applicants	April 1 at the latest: Complete grant application with all sections required by the granting agency (i.e. CV, budget, abstract) and description of funding opportunity you are applying for - MENTOR FEEDBACK REQUIRED
Apr 12	11 Reviewing Grants	Instructions on how to review a grant	May 4 (in-person): Bring review of the grant from one of your peers to the in-person session that you will be assigned Apr 12

Session IV in-person at STFM (Los Angeles, CA) May 4, 2024
(for Virtual Participants times are GMT-7)

9:00 – 12:00 Peer Review Panel / Mock Study Section

12:00 – 12:30 Lunch Break

1:00 – 2:30 Peer Review Panel / Mock Study Section

Each Fellow will have an expert reviewer assigned to their grant as well as one of their Fellows. Fellows will be divided into two groups to run a mock peer review / study section. The reviewers will score the grant and provide reviews to be discussed at the meeting. This will be Chaired by the Course Faculty with Fellows taking turn to act as scientific officer and a community member will provide feedback on each grant. The Fellows will be asked to vote on each application and will have access to the grants during the committee discussions. The feedback from the reviewers, the other Fellows and the scientific officer will be provided to each Fellow one week after the in-person session.

2:30 - 3:00 Group Expert Feedback

The Fellows will have a discussion with their expert reviewers for a general “Ask the Expert” session. The group dynamic will allow the “reviewer” to address issue that may not have been highlighted in specific proposals.

3:00 – 3:15 Break

3:15 - 4:00 Large Group Discussion

Wrap up of the day with an open Q & A about protocols, budget items, CV’s etc as well as the Reviewers own experiences with grant reviews. The Fellows will be expected to incorporate the feedback in their protocol which will be uploaded to the learning platform by **June 30, 2024 at the latest** and the certificate of completion will be sent once this milestone is met.

4:00 – 5:00 Course Assessment

The Fellows, the Faculty, Instructors and Course Director will complete written surveys and discuss what they appreciated about the course and what needs to be changed or modified for the following year. Achievement of learning objectives will be evaluated.

Course Administration

Due to potential travel constraints, our in-person sessions will enable people to attend virtually if need be. You will need a mic, camera and reliable Wi-Fi. We strongly encourage Fellows to attend NAPCRG even if it is a virtual conference. If you face travel restrictions to the US in 2023 or 2024, we will allow participants to attend virtually. GGP Fellows who complete the course will have access to that year’s material after the course completion. If a Fellow has not self-selected a mentor, one will be assigned. Mentors should be met with formally at least 6 times during the year. Each GGP Fellow will also be assigned to a Course Faculty. Specific questions can be addressed by making an appointment with that Faculty member that will be done through our virtual meeting software (ZOOM).