# Pilot Research Project Funding 2022-2023

## 1. Call for Applications 2022-2023

Since 2008, the Department of Family Medicine (DFM) at McMaster University has funded pilot projects (maximum $5,000 each) for research in primary care and medical education. These 18-month grants are intended to build research capacity at DFM. Pilot project applications should address areas of research related to primary health care. The goal is that pilot projects will produce findings that support the recipients in their development and submission of future research proposals to external funding agencies.

There are two sources of funding based on faculty affiliation. For faculty who are members of Family Medicine Associates (FMA), there is a total of $30,000 available. For faculty who are not FMA members (i.e., community physician or faculty researcher), there is a total of $20,000 available. For both categories, the principal investigator's primary academic affiliation must be with DFM at McMaster University.

### 1.1. **No experience necessary**

We are again offering new investigators the chance to apply for enhanced support for proposal development. New investigators are faculty members who are not as experienced in research methods, design and development (e.g., have not held major grants or been research-active). Enhanced support for proposal development involves one-on-one and group consultations with DFM faculty and research staff, ongoing reminders, access to research resources, budget consultations, meetings with experts, and advice and mentoring to ensure the pilot grant application meets the minimum requirements. The aim is to support new investigators to developing excellent proposals, enhancing skills in research design and grant writing using a mentoring approach.

New investigators will be required to submit a Letter of Intent (LOI) and Application Cover Sheet **by Tuesday, September 27** as the first step in the mentored pilot grant application process. The Letters of Intent will be reviewed, and successful applicants will be invited to submit a full proposal with enhanced support for proposal development. Up to four new investigators will be selected to receive the equivalent of up to $2,000 for in-kind research staff support to develop a full proposal for their pilot grant application based on the LOI. The pilot grant full applications are due **Monday, December 12, 2022**.

Click below to access the application guidelines and forms:
http://fammedmcmaster.ca/research/research-resources/pilot-funding/

**DEADLINES**: Letters of Intent for those participating in the New Investigator mentored application process must be submitted with the Application Cover Sheet by **September 27, 2022 at 8:00 p.m.** ('New Investigators Only').

Pilot Research Project Applications are due **December 12, 2022 at 8:00 p.m. (All new and experienced applicants).** Submit to Patricia Habran-Dietrich, DFM Research Administrative Assistant: dietph@mcmaster.ca

## 2. New Investigator Mentored Application Process

The mentored application process is for new investigators to gain experience and skills and to produce the best possible pilot application. The process begins with a Letter of Intent (LOI), due on **Tuesday, September 27** which will be reviewed by the Pilot Project Application Review Committee in early October. Investigators will be informed by **Friday, October 14** if the letter will be invited to the full application stage. Up to four successful New Investigators will receive support (up to a value of $2,000 in-kind) from the David Braley Primary Care Research Collaborative staff to develop their full proposal. This proposal must meet the usual pilot application criteria outlined below (see Criteria, page 3). The submission of an LOI does not guarantee that the proposal will be funded. Applicants will be required to make time available for the development of a full proposal over the period from October 14 to the proposal deadline of December 12, 2022. After the full pilot application proposal is submitted and if approved by the pilot review committee in the competitive round, $5,000 will be awarded for pilot project completion.

To express interest in this opportunity, please submit a Letter of Intent (maximum 2 pages) with the Application Cover Sheet by **Tuesday, September 27 at 8:00 p.m.**

The Letter of Intent will include the following:

- **Describe yourself**: As an investigator who is new to research methods and design; identify the areas of support that would assist you with full proposal development
- **Define the issue:** Summarize the existing literature to identify what is already known about this topic and the gap in knowledge. Describe how you hope to address the gap
- **Frame the question:** Based on the literature, craft a specific research question. The McMaster Health Sciences Library has a web page to assist with formulating a good qualitative or quantitative research question
- **Answer the question:** What steps can you take toward answering this question with funding from a small-scale pilot? How will you answer this question? What initial ideas do you have about methods and approaches that could be used to answer this question?

- **Identify the potential for impact:** What do you hope to achieve by exploring this question? What is the contribution to knowledge, and why is this important?

# 3. Full Pilot Application Proposal Criteria

If you are not participating in the New Investigator mentored process, you may submit a full application, as detailed below.

- The project needs to focus on areas of research that are directly relevant and of value to primary health care
- The project must be led by a faculty member with their primary academic affiliation to DFM at McMaster. Allied health professionals are welcome to participate as co-investigators, as are students, residents, and fellows
- There is a limit of one application per principal investigator
- Preference will be given to principal investigators who have not received DFM pilot funding within the past two years
- Examples of pilot studies include: development and testing of a new survey instrument, a needs assessment, qualitative work to develop a survey instrument, a systematic review, or pilot/feasibility testing of an intervention
- The grant may serve as the total support for a project, or supplement an existing research effort, as long as a specific portion of the research is identified as being made possible by this grant, and provided that the investigator states specifically how the balance will be funded, providing evidence of its guaranteed availability
- The funding is not for program development
- The grant must not duplicate funding for a research project
- Projects must meet the usual requirements for approval by a Research Ethics Board or seek a waiver from a Research Ethics Board once granted. If submitting to HIREB, certification may be required for the principal investigator(s). See Appendix 1.

## 3.1. About the Full Proposal

The proposal should be no more than four pages (excluding cover page and budget) and should address the areas listed below. The headings below **must be included** and can be used as a template in your proposal development. Proposals should include proper referencing and should be supported by corresponding best practices, e.g., reporting guidelines/checklists for the type of study design (e.g., CONSORT, STROBE, Pilot studies) and relevant models, theories or frameworks (e.g., diffusion of innovations, behaviour change). The areas listed below are briefly described. A detailed background for each area can be found in TRAction (Toolkit for Research in Action). Proposals will be reviewed according to the criteria listed in Appendix 2.

- **Background/rationale:** describe the purpose of the study and why it is important
- **Objectives:** identify what will be achieved by conducting this research

- **Research question:** The McMaster Health Sciences Library has a web page to assist with formulating a good qualitative or quantitative research question
- **Study setting:** describe where the research will take place and who will be involved
- **Study design:** describe the qualitative, quantitative, or mixed-method design of your study. It is highly recommended to consult with the corresponding reporting guideline/checklist that corresponds to your study design, e.g., CONSORT, STROBE, Pilot studies
- **Study sample:** describe the number and type of participants involved in the research and the rationale for inclusion. State your participant inclusion and exclusion criteria
- **Recruitment:** describe the human participants involved in the research (if applicable), how you will recruit them to participate, and the departments or organizations you will need to approach to allow participation It is highly recommended to connect with your anticipated partners and enclose letters of support/email confirmation of their agreed participation in your research study
- **Data collection:** describe how you will collect qualitative or quantitative data in-person or virtually and the types of data collection tools you will use (surveys, interviews, focus groups, etc.)
- **Data analysis:** describe the qualitative or quantitative methods you will use to analyze the data
- **Measures/outcomes or findings:** describe quantitative measures and outcomes, and clearly state your primary and secondary outcomes, or qualitative findings, as applicable
- **Ethical considerations:** describe ethics required for human subjects or retrospective review (see www.hireb.ca). If the project could be considered quality assurance or quality improvement, you may be able to apply for a waiver from HiREB. Faculty may be required to attain certification for ethics applications (see Appendix 1) and follow the process for ethics approval at DFM (see Appendix 7)
- **Knowledge Translation:** describe the intent to publish or present your results/findings. If a publication is produced, a DFM Knowledge Translation Specialist will contact the principal investigator to arrange the production of a short 45-second video. The principal investigator is also requested to present their research at a future DFM or GFT departmental meeting
- **Budget table and justification** (no more than 1 page): see Appendix 3 for Research Project Budget Information
- **Timeline:** create a chart outlining the key project activities by the 18 months of the project. For an example, see Appendix 8, page 4
- List of References

## 3.2. Developing Your Proposal

The principal investigator and/or research team are strongly encouraged to review the slides shared at the DFM Spring Retreat on September 22, 2020: "Moving your research from idea to action: a hands-on exercise to map out a pilot study" (Access the slides here or see Appendix 5). Here are more suggestions to assist with the design and development of your proposal:

- Visit our website to access our Research Knowledge and Skill Builder seminar series. Topics include "Basic and Advanced Research Designs for Primary Care Research" and "Pilot Studies: What We Need to Know". See Appendix 6 for a full list of topics.
- Request a review of your proposal by members of our research staff. Please submit a draft of your proposal 4 weeks in advance of December 12 for feedback to dfmresearch@mcmaster.ca
- Visit TRAction (Toolkit for Research in Action) to get detailed information on study design, data collection, and literature reviews.
- See Appendix 8 for an example of three successful pilot project proposals and budgets.
- DFM's Faculty Portal has a "Begin to do Research" page; you may access the faculty portal with your MAC ID and password. See also faculty research resources from the UBC Department of Family Medicine

## 3.3. Full Application Checklist

The application should consist of the following:

☐ Application cover sheet with email consent from each co-investigator (see Appendix 4)

☐ Research proposal (maximum 4 pages)

☐ Budget and budget justification (maximum 1 page)

☐ Curriculum vitae of the principal investigator, highlighting clinical and educational accomplishments, as well as research relevant to the proposal. **Abbreviated CVs are preferred** to focus on activity over the last 5 years

☐ Appendices of no more than 2 pages related to the work proposed (optional)

Completed Letters of Intent must be submitted with the Application Cover sheet by **September 27, 2022 at 8:00 p.m.** Completed Pilot Research Project Applications are due **December 12, 2022 at 8:00 p.m.** Submit to Patricia Habran-Dietrich, DFM Research Administrative Assistant: dietph@mcmaster.ca

# Application Timelines

| | |
|---|---|
| New Investigator letter of intent due | September 27 2022 |
| New investigator invitation for full proposals announced | October 14 2022 |

| | |
|---|---|
| New Investigator mentored process: one-on-one and group consultations with DFM faculty and research staff | October 14 to December 12 2022 |
| Full pilot application due (all applicants) | December 12 2022 |
| Funding announced | February 15 2023 |
| HiREB approval due<br>Full ethics approval, in principle approval or a waiver is required | March 31 2023 |
| Research account opening (HIREB approval or waiver required for account opening) | April 30 2023 |
| Initiation of research study<br>• New Investigator mentored process: monthly Community of Practice group meetings; ongoing one-on-one consultations with DFM research staff | May to August |
| Interim report due | November 15 2023 |
| Project completed | August 14 2024 |
| Final report due | September 14 2024 |

# Appendices

# Appendix 1: Required Certification for Faculty Research Participation at McMaster

**Note:** not all the items listed below are required for all ethics applications. There may also be other courses, questionnaires or certifications required. Always check the most up-to-date requirements when completing your HiREB application: www.hireb.ca

1. **Tri-council Policy Statement 2: Course on Research Ethics** (TCPS 2: CORE)
   For non-clinical trials, the study PI must have completed TCPS 2:CORE or GCP (below) when obtaining ethical approval from the Hamilton Integrated Research Ethics Board (HiREB)
   Completed through the Panel on Research Ethics website
   TCPS 2:CORE User guide

2. **Good Clinical Practice** (GCP)
   For clinical trials, the study PI must have completed GCP training when obtaining ethical approval from HiREB
   Request access to the CITI GCP Training by emailing hsresadm@mcmaster.ca

3. **McMaster Tutorial for Researchers Conducting Retrospective Review of Health Records**
   Required for studies involving chart reviews when obtaining ethical approval by HiREB
   Completed through McMaster University

4. **Integrating Sex & Gender in Health Research core certification**
   Required for all applicants to CIHR, not just the PI. However, collaborators are exempt. Three modules are required:
   - sex and gender in biomedical research
   - sex and gender in primary data collection with human participants
   - sex and gender in analysis of secondary data from human participants

   Completed through the CIHR Institute of Gender and Health

5. **CIHR Equity and Diversity Questionnaire**
   Required for all applicants to CIHR at the full application stage, not just the PI. However, collaborators are exempt.
   Completed through ResearchNet
   Directions for completing the questionnaire

# Appendix 2: Review Criteria[1] for DFM Pilot Research Project Final Proposals

- BACKGROUND AND RATIONALE (10 points): Are the specific aims/hypotheses for the research project clearly stated? Does the proposal explain why this project should be undertaken? Does it reflect an adequate review of the literature?
- SIGNIFICANCE (10 points): Is the project relevant to primary care practice? Is the proposed project original or unique in any respect (new problem or question, new or unique study method or evaluation technique, etc.)? Will the outcome of the project likely help to advance primary care?
- METHODS (40 points): Do the proposed methods appropriately address the specific research question, methods, aims/hypotheses? Are the methods well described? Are methodological problems anticipated and alternative approaches proposed?
- INVESTIGATORS (10 points): Are the professional (including clinical, educational or research) competencies and previous research experiences of the principal investigator and co-investigators appropriate to carry out the project? Do the previous research experiences, availability of pilot data or the clarity in the presentation of the research methods indicate that the investigators are familiar with the research methods being employed?
- FEASIBILITY (10 points): Is the intervention or research activity feasible according to the proposed scope and timeline of the project? Will the target population be available for recruitment and participation in the project within the proposed timeline?
- BUDGET (10 points): Does the budget match the staffing resources required (i.e. staff, students) to complete the project? Is the probable outcome worth the time and money invested? Will the grant serve as the total sum for the project or supplement an existing research effort? If the grant will provide only partial support for the project's total budget or any personnel, has the investigator stated specifically how the balance will be funded and provided evidence of its guaranteed availability?
- LIKELIHOOD TO CONTRIBUTE TO FUTURE RESEARCH ENDEAVOURS (5 points): Will the project most likely generate findings that can support a future full-scale grant application?
- PRIORITY AREA (5 points): Does the project focus on the priority area of the call for proposals (i.e. research related to primary health care or medical education)?

[1] Review criteria adapted from the TIPPS call for pilot funding, Canadian College of Clinical Pharmacy Research Grant Call for proposals, and CFPC Janus Research Grants

# Appendix 3: Research Project Budget Information

Please present your budget in a table with budget amounts and a description of the items, as in the example below. For examples of three project proposals with budgets, see Appendix 8

| Item and description | Cost |
|---|---|
| Personnel | |
| Research Staff *(see table below for wages)* | |
| Supplies and services | |
| Office supplies | |
| Equipment/Software *to a maximum cost of $750. Please note NVivo, SPSS, and Endnote software are available for faculty use at the DFM Research faculty workstations, 5th floor, DBHSC* | |
| Participant honoraria | |
| Knowledge Translation/Dissemination *(to a maximum of $750)* | |
| Other: transcription services, simulation lab fees, travel to and from research sites for data collection, meetings, etc. | |
| Total *(to a maximum of $5000)* | |

| **Research Staffing** | |
|---|---|
| Research Assistant, Data Manager | Hourly rate of $25 – $32; add 30% benefits |
| Research Coordinator, Knowledge Translation Specialist, Biostatistician | Hourly rate $29 - $37; add 30% benefits |
| Business Analyst for MUSIC (OSCAR) data requests | Hourly rate $32 - $42; add 30% benefits |
| **Practicum Program** | Students in Masters and MPH programs |

| | |
|---|---|
| Fall or Spring Term (10 hours per week for 16 weeks) | Recommended stipend of $500 per month ($2000) |
| Summer Term (35 hours per week for 16 weeks) | Recommended stipend of $500 per month ($2000) |
| **McMaster Work Program (subsidized program for undergrad student Research Assistants)** | Hire in April for summer work from 10-35 hours per week @$16/hr with a subsidy of $5.50 per hour |
| Fall Term (up to 10 hours per week Sept 1 - April 25) | $3000 |
| Summer Term (up to 35 hours per week for 16 weeks) | $7000 |
| **Volunteers**<br>Undergraduate medical students and residents are interested in primary care research. Arrangements can be made to have a volunteer on your project. Volunteers must receive a concrete and desired outcome from their experience (e.g. role in a publication), and researchers must be aware that their time and availability is limited. Contact our Research Administration team at dfmresearch@mcmaster.ca | |

**Ineligible Expenses**

- Institutional or administrative overhead
- Travel or other expenses related to presentation of findings at conferences
- Salary support is restricted to that of technical or support personnel and is not to be used for salary support of the principal investigator or co-investigators

Contact Laura Cleghorn, Research Manager cleghol@mcmaster.ca, with any questions about budgeting for staffing and expenses

# Appendix 4: Application Cover Sheet

The fillable form is located here:

https://fammedmcmaster.ca/research/research-resources/pilot-funding/

# Appendix 5: 2019 Spring Retreat Pilot Project Session Description

Title: Moving your research from idea to action: a hands-on exercise to map out a pilot study.

Click here to view the slides

Facilitators: Michelle Howard, Dee Mangin

Description: If you are considering applying for a pilot research grant or if you have a question and aren't sure where to start, this slide presentation will help you formulate a systematic approach to getting started.

Learning objectives:

- To understand what pilot studies are and how they contribute to successful research
- To apply concepts learned about pilot studies to an example from literature.
- To create a draft outline of a pilot study you are interested in doing.

Other resources:

Thabane, L., Ma, J., Chu, R., Cheng, J., Ismaila, A., Rios, L. P., ... & Goldsmith, C. H. (2010). A tutorial on pilot studies: the what, why and how. BMC medical research methodology, 10(1), 1-10.

# Appendix 6: Research Knowledge and Skill Builder Topics and Links

RKSB is a monthly in-service learning opportunity for faculty and staff. It occurs on the third Tuesday of every month from September to June. Previous topics and slides are listed below.

| Topic | Presenter(s) | Link |
|---|---|---|
| Moving your research from idea to action: A hands-on exercise to map out a pilot study | Michelle Howard, Dee Mangin | Slides |
| Pilot Studies: What We Need to Know | Sayem Borhan | Slides |
| Research Paradigms | Larkin Lamarche | Video \| Slides |
| The process of searching the literature for research | Jo-Anne Petropoulos | Video \| Slides |
| Creating and Managing a Research Budget | Laura Cleghorn, Julie Datta, Dawn Elston, Francine Marzanek-Lefebvre | Slides |
| Basic and Advanced Research Designs for Primary Care Research | Ric Angeles | Video \| Slides |
| Qualitative Research: Overview of Methods | Meredith Vanstone | Video \| Slides |
| Systematic Reviews in Health Research | Dr. Jennifer Salerno | Part 1: Video \| Slides<br>Part 2: Video \| Slides |
| Retrospective Chart Reviews | Dr. Michelle Howard and Jeffrey Templeton | Video \| Slides |
| Knowledge Translation | Casey Irvin and Erin Beaulieu | Part 1: Video \| Slides<br>Part 2: Video \| Slides |
| For a complete list of RKSB archives, please visit: https://fammed.mcmaster.ca/research/research-resources/research-knowledge-and-skill-builder/ | | |

# Appendix 7: Information about the Research Ethics Process at DFM

At the request of the DFM Chair, all HiREB applications are to be reviewed by our research staff prior to requesting the Chair's signature. Additional approvals for research participation and recruitment may be required by DFM Leadership and/or other committees prior to submission to HiREB. Note that the HIREB process can take 1-2 months, so it is best to start as soon as research funds are awarded.

| Steps | Timeline |
|---|---|
| 1. Additional approvals may be required if: | |
| a. You wish to recruit research participants from the McMaster Family Health Team (patients, clinicians, and/or residents). Approval by DFM Leadership is required. | Approval from DFM Leadership may take up to one month. |
| b. You are using OSCAR or MUSIC data, or your participants are from the McMaster Family Health Team. Approval by DFM Leadership is required. | Approval from the UGME PRC may take up to 6-10 weeks. |
| c. You wish to recruit medical students as participants. Approval is required from the Undergraduate Medical Education Program (UGME) Protocol Review Committee (PRC). | |
| d. You wish to recruit participants (patients, clinicians, and/or residents from a department other than DFM, approval from the respective department may be required. | Approval timelines from other medical departments are variable. |
| If you require any approvals listed above, Neha Arora, Clinic Research Coordinator, can assist you with this process: dfmresearch@mcmaster.ca | |
| 2. Sign up for an account to complete the online HiREB application: https://www.hireb.ca/ | See the HiREB website for submission instructions and |

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|---|---|---|
| | Access the helpdesk here: 905-521-2100 x70014; erebhelpdesk@hhsc.ca.<br><br>Applications that involve human subjects must use the General Application Form. Retrospective chart reviews can use the Chart Review Application Form. | deadlines: https://hireb.ca/meetings-news/<br><br>Application review by the HIREB Committee may take 4 – 8 weeks |
| 3. | Before you submit the online application:<br><br>● Send Michelle Sylvain, Administrative Coordinator (sylvaim@mcmaster.ca), a PDF of the HiREB application, the protocol, consent form(s), and data collection forms.<br><br>● The research staff will review your application and correspond with you about any recommended changes. | Research staff will require up to seven business days to review your application; please allow enough time before the HiREB submission deadline. |
| 4. | Once staff have reviewed your HIREB application, you will need to request the DFM Chair's approval, Dr. Cathy Risdon's (risdonc@mcmaster.ca) signature. Laura Cleghorn's (cleghol@mcmaster.ca) signature is required if research resources (staffing, equipment, space) is needed for your study. Michelle Sylvain (sylvaim@mcmaster.ca) can assist with signature requests. After all signatures are obtained, the application will submit automatically. | **The Chair's signature must be requested a minimum of 24 hours before the HiREB submission deadline**<br><br>**HiREB reviews can take 4-8 weeks.** |

# Appendix 8: Examples of Successful Pilot Project Proposals with Budgets

Click here to access three examples of successful pilot project proposals with budgets

# Appendix 9: Reporting Guidelines / Checklists for Different Study Designs

Below is a list of the common reporting guidelines/checklists that can be used in the proposal development as it relates to different study designs. The Equator Network is a repository of many of the commonly used guidelines/checklists, Available here: https://www.equator-network.org/. Please consults TRAction (Toolkit for Research in Action) for additional information and further details.

Pilot and Feasibility Studies

- Main: https://bmcmedresmethodol.biomedcentral.com/articles/10.1186/1471-2288-10-1
- For Randomized Controlled Trials: https://www.equator-network.org/reporting-guidelines/consort-2010-statement-extension-to-randomised-pilot-and-feasibility-trials/
- For Non-Randomized Controlled Trials: https://pilotfeasibilitystudies.biomedcentral.com/articles/10.1186/s40814-019-0499-1

Randomized Controlled Trial

- CONSORT, parallel groups, Available here: https://www.equator-network.org/reporting-guidelines/consort/

Non-Randomized Studies

- STROBE, Available here: https://www.equator-network.org/reporting-guidelines/strobe/

Systematic Reviews

- PRISMA, Available here: https://www.equator-network.org/reporting-guidelines/prisma/