



**McMaster
Children's Hospital**

Pediatric Residents Research/Scholarly Activity Guidelines and Expectations

Introduction

Involvement in research and scholarly activity during residency is an excellent opportunity to learn evidence based practice. Learning to be a multifaceted clinician and scholar will strengthen any residents' abilities. As a clinician you need to have basic understanding of research process to be able to analyze the current scientific literature appropriately. A first hand research experience enhances these skills. Furthermore, a record of research activity will influence your future eligibility for Fellowship programmes and future positions in academic centres, which are becoming more competitive. The value of resident research projects is two-fold. First, it is a valuable learning experience which will make the Resident highly competitive in the future job market and second, being selected by a resident to supervise his /her project should be an opportunity to enhance the supervisor's own academic and scholarly development as encouraged by the Department, University and Hospital. Faculty are strongly encouraged not to have the same resident as their research advisee.

General Standards for Accreditation

In accordance with the Royal College of Physician's and Surgeon's General Standards for Accreditation, every resident ***must*** demonstrate scholarly activity during his/her residency:

[RCPS General Standards for Accreditation 2011](#)

Scholarship is one of the seven core competencies outlined in the RCPSC CanMEDS standards (Frank 2005).

Specifically related to training in research, scholarship includes 2 key competencies:

- Critically evaluate information and its sources, and apply this appropriately to practice decisions.
- Contribute to the creation, dissemination, application, and translation of new medical knowledge and practices.

Demonstration of scholarly activity is therefore a requirement for completion of each resident's final FITER. The Resident Research Committee in conjunction with the trainee, the resident's research supervisor, and the program director will determine whether a specific activity meets Section 6, RCPS General Standards for Accreditation. In addition to epidemiologic and biomedical research, examples of acceptable scholarly activities might include a critical meta-analysis of the literature, a quality assurance

project, a critical analysis of public policy relevant to the subspecialty, or a curriculum development project with an assessment component. These activities require active participation by the resident and must be mentored. The mentor(s) will be responsible for providing the ongoing feedback essential to the trainee's development.

You are strongly encouraged to submit abstracts for presentations at local and/or international meetings. This is an ideal forum for learning and research exposure, as well as "networking" with peers and other researchers in the field. Whenever possible, the Department will fund those whose presentations are accepted.

Resident Responsibilities and Expectations

Selecting a project and a research supervisor:

You may already have an idea or a specific direction for a project which you may wish to pursue, however, if you have difficulty finding a project, please discuss this with your resident mentor, a member of the research committee, or your program director. Do select an appropriate Research Supervisor. He or she should be someone with the clinical and methodological expertise to support you through your project. Your research supervisor will be responsible for assessing the question being asked, the feasibility of the proposed research and supporting you throughout your project. Select a project that is of interest to you, is feasible, and ultimately will enhance your education and your ultimate career choice. Early assessment of feasibility is vital - the question should be simple and new and the answer should preferably be attainable through easily accessible data or local resources. Ideally, the project should take 1 year to complete. If the project is anticipated to take longer than the time needed to complete their residency programme, it should be strongly reconsidered. It is also the supervisor's responsibility to evaluate your progress throughout the project, as one would during the course of a clinical rotation. You may have more than one research supervisor, depending on your project, or level of interest. Suggested milestones for resident research activity are outlined in Appendix 1.

If you have trouble evaluating whether the proposed project is suitable, or selecting an appropriate Research supervisor, please draw on the resources available in the Department(http://fhs.mcmaster.ca/pediatrics_research/). A member of the resident research committee will always be available to discuss any concerns or problems with you.

Mandatory Expectations of the resident:

Completion of a Scholarly Project

- Presentation at Work-in Progress sessions: These occur on the 1st Tuesday of every month, and are chaired by the MCHRI Chair (Dr. Karen Choong). Presenters at every level of training from students to staff are welcome to present. Every other month is dedicated to resident presentations. *It is mandatory for each 2nd year resident to present their research proposal at this meeting. You will receive a date well in advance.* However, any and all residents are welcome and encouraged to present at these sessions. This is an excellent,

low-key forum for residents to get feedback from their peers as well as seasoned

researchers on their projects at all stages, from conception to study design, data analysis and manuscript preparation.

- Presentation of work at McMaster Child Health Trainee Research Day (June). This is a forum for all trainees at multiple levels who are involved in child health related research, to present their work to the Department of Pediatrics. All residents are invited and encouraged to participate in this event, *however all 3rd years will be expected to submit a presentation*. In addition, anyone who has been awarded a resident research grant is expected to present. A prize will be awarded to the best presentation from each category of trainee.
- Attend 80% of the Resident Critical Appraisal Curriculum
- Completion of a Manuscript at the end of the scholarly project or trainee period. The manuscript should contain: summary abstract, background, methods, results, discussion, conclusion and references.
- Completion the Resident Research Tracking Tool on a routine basis with research mentor

Expectations of the resident:

- Communicate with research supervisor frequently and regularly. The frequency of these meetings will be guided by the individual project
- Communicate promptly with the Resident Research Committee if major problems arise or if you have concerns about your progress, project feasibility or long term potential for your work.
- Provide an evaluation of the Research Supervisor to the Resident Research Committee - if negative it must be in writing.
- In order to support residents in their research endeavors, research electives are available to provide the residents with "protected" research time.
- Residents who receive awards from the postgraduate department for the funding of the research activity should acknowledge this on the respective presentations/publications.

Guidelines For Research Supervisors Of Paediatric Resident Projects.

The Residents will be provided with a list of Department Members which they can access as potential resources for research projects (Research Resource List). The resident may select you as a Research Supervisor purely because of career interest without having a topic in mind or may have only a vague idea of what type of project they could undertake. If you think another supervisor or a different project would be

more appropriate please let the resident know early on. Alternatively, some joint discussion and background literature review may help you and the resident develop a collaborative exciting question which will be exciting to both. Regardless of how straightforward a project may appear, it will require a significant input from the Supervisor in order to ensure that the Resident has adequate resources and guidance throughout the project, as well as to evaluate their progress. Please review the resident expectations and responsibilities. They will be expected to present their projects at academic half day – please try your best to attend these sessions. Residents are expected to present their project at the McMaster Child Health Research Day, the supervisor's encouragement is important to this endeavor.

Responsibilities of The Supervisor

- ◆ Establish and agree upon specific objectives for the resident's project.
- ◆ Provide guidance and necessary resources for the resident's project
- ◆ Seek out funding opportunities and assist with applications for grants to support resident research activity. Residents are encouraged to take advantage of the resident research grants.
- ◆ Meet regularly with the resident to ensure that the project is progressing smoothly and in a timely fashion.
- ◆ Encourage Residents to present their research question, study design, etc., at the Department of Pediatrics Work in Progress
- ◆ Encourage Residents to submit projects for presentation at scientific meetings, McMaster Child Health Research Day, and for publication.
- ◆ Prepare resident for all scheduled presentations and assist with written report, abstract or manuscript.
- ◆ Attend each presentation of the resident's project. It will be your responsibility to evaluate the presentation, to lead the questioning and to ensure that the resident understands and addresses the suggestions or criticisms raised at the presentation.
- ◆ Communicate with the Resident Research Committee and/or the Postgraduate Program Director if problems arise with progress.
- ◆ Provide written evaluations of the resident to the Research Committee
- ◆ Ensure that the resident completes the Resident Research Tracking Tool

Annual Meetings, and estimated dates.

- McMaster Child Health Research Day: June
- Annual Winnipeg Pediatric Resident Research Competition: May
- Canadian Pediatric Society: May/June
- American Academy of Pediatrics: October
- Pediatric Academic Societies Annual Meeting: May
- Society of Pediatric Research – Research Conference: May
- European Society of Pediatric Research: October

Useful Links/Resources

Evidence-Based Medicine: How to Practice and Teach EBM, 3rd edition (2005).

Centre for Evidence-Based Medicine www.cebm.utoronto.ca

Canadian Child Health Clinician Scientist Program cchcsp.ca

UBC/PERC Research Methods Course www.pusic.org/rmc/home.html

<http://www.cps.ca/english/index.htm>

<http://www.aps-spr.org/>

<http://www.aps-spr.org/SPR/default.htm>

<http://www.espr.info/young.asp>

Appendix 1

Suggested Milestones for Research Activity

Date	Milestone	Expectation	Outcome/Measurement
September	Research Topic/Supervisor	Select a research supervisor and research idea	Complete Resident Research Tracking Form
Ongoing	Research Plan	Schedule regular meetings with supervisor	Complete Goals as per Resident Research Tracking Form
Ongoing	Work in Progress (WIP)	Mandatory for all 2 nd year residents. Presentation of research ideas and projects at various stages of development	Complete 20-30 min power point presentation and discussion. Refer to website for guidelines
Ongoing	PSI Grant (physician's incorporated resident research grant)	Submission of research proposals for funding	Refer to website
November	Canadian Pediatric Society Meeting	Call for abstracts for oral and poster presentations	Refer to website
	Pediatric Academic Societies (PAS) Meeting/Society for Pediatric Research (SPR)	Call for abstracts for oral and poster presentations	Refer to website
March	St. Louis Travel Fund	Travel fund for PAS/SPR	Refer to macped website for application
	Annual National Pediatric Resident and Fellow Competition	National Pediatric Research Competition for Trainees held annually in Winnipeg	See macped website for application details Submission of completed research
April	McMaster Resident Research Award	Submission of research proposals for funding	Refer to macped website for application details
June	McMaster Child Health Trainee Research Day	Formal oral or poster presentation of research projects	Completed posters or oral presentations Awards for best presentations for each category of trainee
August	RMA Scholarship	Formal submission of completed Quality Assurance (QA) Project	Completed application Associate Dean, Postgraduate Education
	PSI Foundation Prizes for Research by Residents	Formal submission of completed research project abstract	Completed application to Associate Dean, Postgraduate Education