



Paediatric Residents Research Activities

Rationale

Paediatric Resident projects represent one of the best opportunities you will have to contribute to research or scholarly activity during your residency and develop a profile in academic medicine. Involvement in research at this level is a key component in the process of learning evidence based practice. Learning to be a multifaceted clinician and scholar will strengthen any residents' abilities. 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.

Every Resident is expected to demonstrate research or scholarly activity during his/her residency programme. ***Demonstration of research and scholarly activity is a requirement for completion of each resident's final FITER.*** The Resident Research Committee in conjunction with the trainee, the mentor, and the program director will determine whether a specific activity is appropriate to meet the postgraduate committee guidelines for scholarly activities. In addition to 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. Extra funding is available for those who's presentations are accepted.

Resident Responsibilities and Expectations

Expectations of the resident (Appendix 1):

- Annual presentation of project at academic half day.
- Presentation of project at Resident Research Day (June)
- Written progress report of research and/or scholarly activity submitted at the end of each academic year to the post-graduate committee.
- Submit one abstract or manuscript of original work (to a meeting e.g. CPS, or for publication): during the first 3 years of residency

A schedule of milestones in the resident research project is appended. In addition to meeting at these timepoints the resident is considered to have the following responsibilities:

- ◆ Communicate with the research mentor and/or 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.
- ◆ For research electives: *written requests* must be submitted and approved by the programme director and resident research committee (Appendix 2). Goals and objectives for the elective must be outlined in agreement with research supervisor. An evaluation form for that elective rotation will be need to be completed at end, as per any other rotation.

Guidelines For Research Supervisors Of Paediatric Resident Projects.

Regardless of how straightforward a project may appear, it will require a significant input of your time, your ability to be innovative and your ability to give practical advice and support. All of these factors need to be taken into consideration when accepting a student and in designing an appropriate and realistic project for the resident to undertake.

The following provides guidelines and specifies your responsibilities as a supervisor.

Selection Of Project -What Should I Do?

The resident may select you 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. This may result in study of a problem which is not inspiring for the resident and will likely fail. If you think another supervisor or a different project would be more appropriate 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.

The resident may already have an idea or a specific direction for a project which they may wish to pursue. It is the supervisor's responsibility at this point to evaluate the project, the question being asked and the feasibility of the proposed research. Early assessment of feasibility is vital - the question should be simple and new and the answer should preferably be attainable through data or resources available locally. It should normally take 1 year. If the project is anticipated to take longer than the time needed to complete their residency programme, it should strongly reconsidered.

If you have trouble evaluating whether the proposed project is suitable please draw on the resources available in the Department. Discussing these questions with the coordinator or with other “experts” in the Department will only enhance the experience for yourself and the resident and encourage useful scholarly interaction. You may even feel it is appropriate for two Department members to jointly supervise a resident’s project.

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
- ◆ Meet regularly with the resident to ensure that the project is progressing smoothly and in a timely fashion.
- ◆ Prepare resident for all scheduled presentations and assist with written report, abstract or manuscript. You will be asked to evaluate the final written report and help to format it for publication, if appropriate.
- ◆ 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 if problems arise with progress.
- ◆ Provide a written evaluation of the resident to the Research Committee

Responsibilities Of The Resident Research Committee (Research Mentors):

Each resident will be assigned to a member of the Resident Research Committee, who will be responsible for the following activities:

- ◆ Establish the Critical Appraisal curriculum.
- ◆ Orient residents to the expectations for research and critical appraisal within their training programme.
- ◆ Serve as a resource for residents in terms of potential projects, research methodology and mechanisms for approaching and performing research.
- ◆ Meet with residents regularly (minimum twice yearly, and as necessary).
- ◆ Attend all resident research presentations. Evaluate resident's progress and provide constructive feedback suggestions.
- ◆ Provide guidance and assistance in preparation of Resident project for peer reviewed publication or presentation at Resident Research day, CPS, SPR, Residents and Fellows Winnipeg Meeting or preferred meeting, if appropriate and if requested.
- ◆ Review resident's written evaluation to Program Director at year end.
- ◆ Review written evaluations of the resident and their supervisor.
- ◆ Review of resident requests for research electives prior to submission to Program Director.
- ◆ Review Applications for the Pediatric Resident Research Award.

Resident Research Committee Membership

Uma Athale

Karen Choong

Cynthia Cupido

Kenneth Tan

Appendix 1

<i>Schedule for Resident Research Activity- Suggested Milestones</i>		
Date	Expectations	Measurement
September	Meet with Research Mentor	
Nov/December (AHD) (R3 and R4's)	Presentation of project proposal, progress and future directions.	10 min, power point presentation
March	Meet with Research Mentor	
April/ May (AHD) (R1 and R2's)	Presentation of project outline, literature review description of hypothesis and proposed methodology	10 min power point presentation
June Resident Research Day	Formal presentation of project (poster or oral). Prize awarded for best presentations.	15 min presentation
June 30	Annual progress report submitted to Program Director, signed by both research supervisor and member of resident research committee.	

Appendix 2

In order to support residents in their research endeavors, research electives are available to provide the residents with "protected" research time. Electives can either be arranged on a "horizontal" or "block" basis. Horizontal electives can be taken as a half day per week during non-service rotations and block electives on a one or two month basis in place of clinical elective time. All residents interested in pursuing a research elective must formally apply for these electives to the postgraduate committee and/or Program Director by written request accompanied by a research protocol, electives objectives form and a letter of support from the research supervisor. *The request must be signed off by a member of the Resident Research Committee (Research Mentor) prior to submission to the Program Director.* In addition, formal evaluation forms (attached) *must be completed by the resident and the research supervisor* at the end of each rotation and returned to the postgraduate committee. These will be on WebEval.

Appendix 3

Annual Meetings: eg

- Annual Winnipeg Pediatric Resident Research Competition: May
- Canadian Pediatric Society: Montreal, June 26-30, 2007
- American Academy of Pediatrics: Atlanta, October 7-10, 2006
- Pediatric Academic Societies Annual Meeting: May 5-8, 2007
- Society of Pediatric Research – Research Conference: October 2007
- European Society of Pediatric Research: Barcelona Oct 7-10, 2006, Prague, Oct 2007

Useful Links

<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>

Potential Funding Sources:

McMaster Resident Research Grants Competition

RMA Grant

Peer Review funding sources (CSD)

Appendix 4

**Pediatric Postgraduate Education Program
McMaster University**

**Request
for
Elective (clinical/research) or Community Rotation**

RESIDENT NAME: _____

DATE OF REQUEST: _____

COMMUNITY 9

CLINICAL ELECTIVE 9

RESEARCH ELECTIVE 9

Please attach Abstract/Proposal and letter of Support 9

Date from: _____ Date to: _____

Supervisor: _____

Address: _____

Telephone #: _____

APPROVAL:

Research Committee Member

Date

Program Director/Assistant signature

Date

Evaluation form completed:

Resident 9

Supervisor 9

Please return completed form to Shirley Ferguson, HSC-3N27I

Appendix 5: Evaluation Forms

Evaluation forms

Annual Reports

Submission for Resident Research Day