



McMaster Pediatric Residency Programme



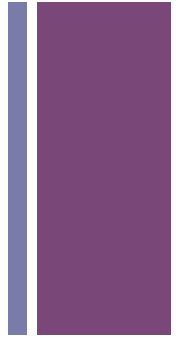
Inspiring Innovation and Discovery

Orientation to Resident Research

Dr Karen Choong
July, 13 2009

+ Overview

- Research during residency
- Expectations
- Resources
- Research Electives
- Grants and Awards



+ Why do research during residency?

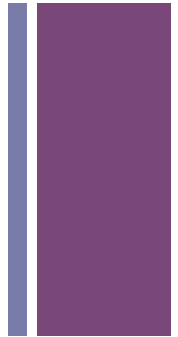
- Research can be fun!
- Excellent opportunity to learn EBM
- Nurtures critical thinking - multifaceted clinician and scholar
- Important in advancing career
- Opportunity for collaboration
- It is an expectation of the Residency programme!

+ What is Resident Research?

- Scholarly investigation to test a hypothesis or answer a health related question:
- Methodical study
 - Basic Science
 - Observational study (case report, case series, cohort, case-control)
 - Clinical Trial
 - Systematic Review
- Quality Assurance, Review of Practice,
- Gathering of information/data must be systematic and organized
 - Study protocol and design

+ What makes a good resident research project?

- Interesting
- A project that can and will help you
- Appropriately mentored
- Feasible
 - Realistic time line
 - Resources available –support, personnel and \$\$



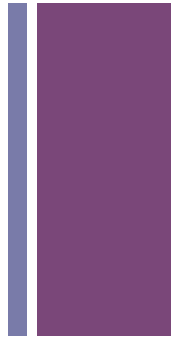


Research during pediatric residency: predictors and resident-determined influences.

Ullrich N, Botelho CA, Hibberd P, Bernstein HH

Acad Med. 2003 Dec;78(12):1253-8

- Interest in research during residency is high, but participation in research is low (18%)
- The most commonly identified influences to conducting research were:
 - availability of time (97%)
 - personal interest in research (84%)
 - availability of opportunities (76%)
 - mentors on hand (72%).



+ Resident Expectations



The CanMEDS 2005 Physician
Competency Framework

Better standards. Better physicians. Better care.

Scholar

+ Resident Expectations



The Royal College of Physicians and Surgeons of Canada
Le Collège royal des médecins et chirurgiens du Canada
774 promenade Echo Drive, Ottawa, Canada K1S 5N8
Tel: (613) 730-8191 ✦ 1-800-668-3740 ✦ Fax: (613) 730-3707

OBJECTIVES OF TRAINING IN PEDIATRICS

2008

- Section 6, RCPS General Standards for Accreditation:

“....every resident must demonstrate scholarly activity during his/her residency”

- ***Demonstration of research and scholarly activity is a requirement for completion of each resident's final FTER***

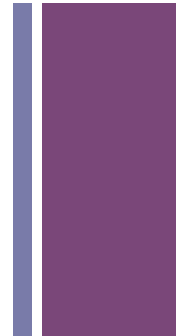
+ Pediatric Resident Guidelines and Expectations

www.macpeds.com

- Select an appropriate project and mentor
- Get feedback on research idea and protocol
 - Work in Progress sessions – mandatory for all R2s
- Complete your project during residency
 - Annual MCH Trainee Research Day – mandatory for all R3s and award recipients
 - Submit and abstract/manuscript of original work
- Communicate - research supervisor, resident research committee

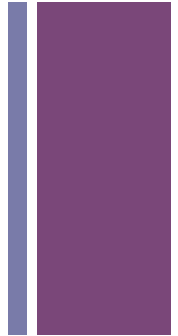


<i>Suggested Milestones for Resident Research Activity</i>		
Date	Expectations	Measurement
September	Select a research supervisor and research idea	
Ongoing	Schedule regular meetings with research supervisor	
Work-in Progress (scheduled on 3 rd Tuesday, every other month)	Mandatory for all 2nd year residents. Presentation of research ideas, and projects at various stages of development.	20-30 min, power point presentation and discussion
January	Note deadline for abstract submissions to Pediatric meetings (CPS, SPR)	See individual websites
April 30 th (McMaster Resident Research Award)	Submit research proposal for funding	Refer to "Award" section on website for more information
August 31 (RMA Scholarship)		
June	Formal presentation of project (poster or oral).	15 min oral presentation. Prize awarded for best presentations for each category of trainee.
McMaster Child Health Trainee Research Day	Mandatory for all 3rd year residents. Submission forms to be submitted by April 30 th to Dr. Stephanie Atkinson's office.	



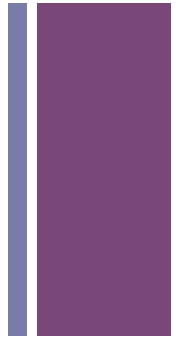
+ Resources

- www.macpeds.com
- <http://fhs.mcmaster.ca/pediatrics/>
- macpedsresearch@gmail.com; Resident research database
- Education:
 - Critical Appraisal course
 - Work in Progress Rounds
 - Journal clubs
 - HHS rounds
 - Mentor
- MCHRI
- Research Electives
- Resident Research Committee



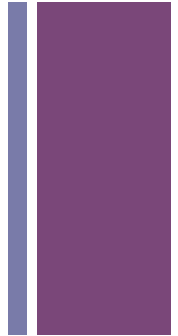
+ Literature Search Resources

- [A User's Guide to the Medical Literature.](#)
- McMaster Librarian
- BUMC Searching Tutorial. A listing of tutorials designed to assist users of different MEDLINE systems and at different experience levels
- [ISI Web of Science](#)



+ Research Electives

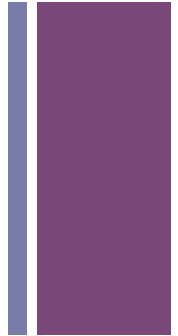
- Protected research time
- “Horizontal”: half day / week during non-service rotations
- “Block”: a complete rotation block
- Written request to programme director required
- Evaluation of rotation for resident and supervisor



+ Grants and Awards

Type of Award	Who is eligible	Deadline for application
McMaster Resident research award	Pediatric residents	April 30
RMA Research Scholarship	All residents	August 31
Travel Awards	Pediatric residents	Any time
St. Louis Family Fund	Pediatric residents	March 1
Winnipeg Annual Resident and Fellow Research Competition	2 candidates (1 resident and 1 fellow; 2 residents; or 2 fellows).	April 14, 2009
McMaster Child Health Research Day Award	Trainees (Residents, Fellows, medical students and Graduate students) who present at the Research Day	June
PSI Resident Research	http://www.psifoundation.org/resident_research.htm	Sept 11, 2009 (See website)
CSCI/CIHR	http://www.csci-scrs.org/english/awards-csci-cihr.htm	May 29, 2009 (See website)
PAIRO Trust Fund resident teaching award	http://www.pairo.org/Content/Default.aspx?pg=1293	
Numerous other funding and award opportunities are available from the McMaster Office of Research services (www.mcmaster.ca/ors/)		

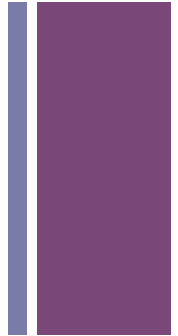
+ Presentation Opportunities



- Institutional
- Pediatric Academic Society: May 2010, Vancouver
- Canadian Pediatric Society: June 2010, Victoria
- European Academy of Pediatric Societies, Oct 2010, Copenhagen

+ Resident Research Committee, 2009

- Karen Choong, MB, BCh, MSc
- Uma Athale MBBS, MD, M.Sc.
- Lucy Giglia MD,
- 2009 Resident representative: Jodie Ouahed



The Role of Mandated Research During Dermatology Residency Training

J of Investigative Dermatology, 1999

Table I. Journal names and number of articles published in each (N = 148) (residents graduating from 1988 to 1995)

Journal name	Number of articles
<i>Journal of the American Academy of Dermatology</i>	42
<i>Dermatologic Surgery/JDSO</i>	18
<i>Archives of Dermatology</i>	17
<i>International Journal of Dermatology</i>	8
<i>British Journal of Dermatology</i>	6
<i>Journal of Dermatologic Science</i>	6
<i>Journal of Investigative Dermatology</i>	5
<i>Pediatric Dermatology</i>	5
<i>Journal of Cutaneous Pathology</i>	4
Others (journals with less than five articles each)	37
Total	148

The Role of Mandated Research During Dermatology Residency Training

J of Investigative Dermatology, 1999

Table II. Responses from resident (graduating years 1988–95); N = 43 (response rate 71%)

Statement	Percentage of respondents agreeing with statement
I was happy to participate in research as a resident	45%
I am happy to have done research as a resident	80%
Research in residency changed the way I think about patients	50%
Research in residency helped me in the way I treat patients	50%
Research helped me become a critical thinker	75%
Research during dermatology residency is a beneficial part of training	90%