McMaster Pediatric Residency Research and QI/Patient Safety Curriculum



McMaster Pediatric Resident Research Committee

Lucia Giglia – Chair, Curriculum Development,
Electives, SMaRT Tool

Jeffery Pernica - Journal Club, Research Roundtable
Sandeep Raha – Resident Research Grants

Michelle Bhatish – QI/Patient Safety

Samara Chitayat – QI/Patient Safety

Nik Pai – Pediatric Resident Research

Kristen Salena - Pediatric Resident Research

Representative/CIP



MacPeds Resident Research Curriculum

1. Critical Appraisal Academic Half Day

(4-5 per year) all pediatric residents with 2- year rotating curriculum

2. Journal Clubs

follow Critical Appraisal Half-Days on Tuesday a.m. (presented by 2nd year pediatric residents)

3. Patient Safety/Quality Improvement Academic Half Day (4-5) per year all pediatric residents

4. Resident Research Bootcamp

PGY 1 Residents
(6 AHD sessions over 6 months) principles of research design/scholarly project development

5. Research Roundtable

PGY 2 residents present their research project/questions



PGY 1 Resident Research Boot Camp Objectives

- Establish a framework for developing a research/scholarly question
- Meet Research Faculty during Research "Meet and Greet"
- Become familiar with methods for reviewing the literature
- Understand the REB application process
- Develop understanding of various types of study designs
- Develop familiarity with basic statistics
- Develop a research proposal



Scholarly Requirements

- Attend PGY1 Resident Research Bootcamp
- Attend Resident Critical Appraisal and QI/Patient Academic Half Days
- 3. Attend Pediatric Journal Club sessions
- 4. Attend Monthly Research Roundtable sessions
- 5. Presentation at Research Roundtable
- 6. Presentation of work at McMaster Child Health Trainee Research Day
- 7. Submit one abstract of original work to local, provincial, national or international competition
- 8. If applicable, submission of original work to peer reviewed journal
- 9. Complete the Scholarly Management and Research Tracking (SMaRT) tool
- 10. Completion of a Scholarly Project by 3rd or 4th Year of Residency Programme



Scholarly Research/ Projects

What is considered a Scholarly Project

- Quality Improvement Projects*
- Medical Education Evaluation/Project*
- Knowledge translation activities*
- Advocacy projects*
- Surveillance studies
- Prospective Qualitative Study
- Retrospective, hypothesis-driven clinical or epidemiological research using an existing database
- Systematic or scoping review
- ADVANCED: Prospective, hypothesis-driven clinical or epidemiological research

^{*} must include an evaluation component



Scholarly Requirements

Scholarly Project Requirement:

- Develop or help develop a Research Question/Aim
- Develop or help develop a protocol to answer research question
- Complete the Interagency Advisory Panel (Tri-Council Policy Statement, TCPS) and/or Research Ethics Tutorial
- Prepare an Ethics Submission ensure it passes the local ethics review panel
- Complete the project (collect the data and analyze)



Scholarly Research/ Project Requirements

- Communicate promptly with the Resident Research Committee if major problems arise with Scholarly Project
- Provide an evaluation of the Research Supervisor to the Resident Research Committee
- Residents who receive a McMaster Pediatric Residency Research Award should acknowledge this on their respective presentations/publications



Scholarly Resources

1. Electives*

- Longitudinal. (1/2 day per week during non CTU rotations)
- Block/ Research IP

*must be approved 2 months in advance by Program Director and Resident Research Chair

2. Resident Research Grants

McMaster Resident Research
 Grant – 2 competitions/year



Scholarly Resources

- Resident Research Committee Members
- Research Drop In
 - Monday afternoons between 1300-1500hrs
- MacPeds Website Resident Research
- MacPeds Scholarly Management and Research Tracking Tool (MacPeds SMaRT tool)



MacPeds SMaRT tool

The MacPeds SMaRT Tool is a scholarly project roadmap for residents and mentors. The tool provides links for:

- Initiation, development, implementation, & dissemination of a scholarly research project
- Design-specific curated electronic resource links
- Team role and responsibility definition
- Project timeline tracking
- Useful links:
 - Grant applications
 - Conferences
 - o HiREB
- Mandatory program requirement dates (research roundtable, MCHRD)



MacPeds *SMaRT* tool Administrative



Tracking resident scholarly progress for program requirements



Collecting metrics related to: grants awarded, presentations, abstracts, publications



Faculty mentorship support



CQI of Resident Research and QI/PS program

