

Table 1

Proposed expectations for achieving scholarly designation during paediatric residency training

Proposed Skills / Training / Experience

<input type="checkbox"/>	1	Able to describe the basic principles of epidemiology and be able to apply them in evaluating journal articles (Includes presenting at a Journal Club between PGY 1 and PGY3 years; critical appraisal activities)
<input type="checkbox"/>	2	Able to describe the basic principles of biostatistics and be able to apply them in evaluating journal articles (Includes presenting at Journal Club between PGY1 and PGY 3 years)
<input type="checkbox"/>	3	Complete a research methodology course(s) during the Residency Program (suggested minimum attendance at the lectures of 80%).
<input type="checkbox"/>	4	Complete the Interagency Advisory Panel (Tri-Council Policy Statement, TCPS) on Research Ethics Tutorial and provide a copy of the "Certificate of Completion" for Resident records. CIHR/NSERC/SSHRC: "...to promote the ethical conduct of research involving human subjects course in Research Ethics"
<input type="checkbox"/>	5.0	Carry out a scholarly project(s) as per the Royal College of Physicians and Surgeons expectations (Standard requirements to meet).
<input type="checkbox"/>	5.1	Develop or help develop a Research Question/Aim
<input type="checkbox"/>	5.2	Select a study design that is considered acceptable (See table 2)
<input type="checkbox"/>	5.3	Develop or help develop a scholarly evaluation protocol: (1) Rationale; (2) Aims/Hypothesis; (3) Design and Methods; (4) Analytical Plan; (5) Relevance to Child Health
<input type="checkbox"/>	5.4	Prepare an Ethics Submission (if applicable) for review by the local ethics review panel.
<input type="checkbox"/>	5.5	Have the project approved by local resident research committee/coordinator and faculty mentor/supervisor
<input type="checkbox"/>	5.6	Present an interim progress report to committee/coordinator (i.e. works in progress) during PGY2 or early in early PGY3
<input type="checkbox"/>	5.7	Carry out the project (collect the data and analyze)
<input type="checkbox"/>	6.0	Present findings and final project at the Department's Annual Research Day or equivalent
<input type="checkbox"/>	6.1	STRONGLY RECOMMENDED: Present mid-term report to committee/fellow residents to determine progress to date
<input type="checkbox"/>	6.2	ADVANCED: Presentation of final project at national or international conference. This may serve as an alternative to presenting at the local Research Day or Equivalent.
<input type="checkbox"/>	7.0	Write up scholarly findings and submit scholarly report to the satisfaction of the resident research coordinator/program director and faculty mentor/supervisor (Faculty mentor/supervisor should sign off on manuscript).
<input type="checkbox"/>	7.1	STRONGLY RECOMMENDED: Abstract submitted to local/national research competition
<input type="checkbox"/>	7.2	ADVANCED: Peer-reviewed publication prepared and submitted to medical journal

Table 2

Proposed list of acceptable study designs for paediatric resident scholarly projects

Study Design

- Quality Improvement*

- Medical Education Evaluation/Project*

- Knowledge translation activities*

- Advocacy projects*#

- Surveillance studies

- Case Series Study

- Prospective Qualitative Study

- Retrospective, hypothesis-driven clinical or epidemiological observational research using an existing database

- Systematic or scoping review

- Prospective, hypothesis-driven clinical or epidemiological observational or experimental study

* = must include an evaluation component; # must have significant individual contribution

Note: some programs may consider pairing residents into small groups to complete larger research projects.

Table 3

Proposed time for a scholarly project during paediatric residency

Milestone	Timeline
<input type="checkbox"/> 1 Complete TCPS2* Tutorial	Before end of PGY1
<input type="checkbox"/> 2 Identify a research mentor	Before end of PGY1
<input type="checkbox"/> 3 Submit a short summary of research project to committee/coordinator	End of PGY1 (Sept. PGY2)
<input type="checkbox"/> 4 Submit ethics proposal to Biomedical Research Ethics Board	December PGY2
<input type="checkbox"/> 5 Complete basic introduction to Epidemiology/Biostatistics Course	During PGY2
<input type="checkbox"/> 6 Present interim progress ("Works in Progress") regarding proposed project	March-June PGY2
<input type="checkbox"/> 7 Submit interim progress report or meet with local coordinator/committee regarding progress	End of PGY2
<input type="checkbox"/> 8 Present a manuscript during Local Resident Research Competition / Research Days	March-June PGY3
<input type="checkbox"/> 9 Submit manuscript for publication or to resident research committee	June/July PGY3

TCPS2 = Tri-Council Policy Statement 2 (2014): Ethical Conduct for Research Involving Humans

Table 4

Proposed consequences for not achieving proposed milestones and project in the proposed timeframe.

Level 1

Delay during interim reporting (either missing a works in progress, interim meetings, interim reports)

- If the resident fails to achieve interim milestones, they and their mentor will be asked to meet with the program director and / or program research lead to determine the barriers to the scholarly project, revise the timeline and agree on a course of action.
- If the resident does not respond to the revised agreement, this will be treated as an incomplete rotation and the resident will be required to take an additional elective to make up for lost time.

Level 2

Incomplete project by PGY3

Level A – Delay was unrelated to the effort/commitment of the resident (they were on track throughout and delay occurred during / at the end of the study due to circumstances out of the resident's control.

Consequence: Submit final report detailing barriers to completion and resident and mentor meet with program director and research committee lead to discuss.

Level B – Delay was caused by a reluctance by the resident to complete a project

Consequence: If a resident fails to complete a project, present at a local or national meeting and fails to submit a final product, this should be treated the same as an incomplete clinical rotation; the resident will be held back from finishing residency or transferring to sub-specialty training until the project is complete to a level considered acceptable to the program director, research coordinator and mentor.

A time-line should be established and agreed upon by both the program coordinator and research coordinator/committee during which time the resident will complete the necessary tasks to be considered an adequate scholarly project.