

## McGill University Obstetrics and Gynecology Residency Program **Goals and Objectives**

# **Research training**

During their five years of training Obstetrics and Gynecology Residents are required to undertake at least one research project of scholarly value. Their project will provide experience with the process of: defining a scientific question; conducting a literature search; writing a research proposal; collecting, analyzing and interpreting data; presenting the findings at a major scientific meeting and preparing a manuscript for a peer-review journal.

The nature of their research project may be span any type of research from basic science to population health, in any topic related to obstetrics and gynecology, even in conjunction with other fields (neonatology, endocrinology, nutrition, cardiology etc.). However, the project itself – from start to finish - must be feasible within their training period and primarily during their research rotations. For this reason retrospective database inquiries are often conducted for residents research projects, although some prospective studies or auxiliary projects of such may be done when well organized and supported. A case report will not qualify as a research project but such an endeavour would be encouraged and considered as additional work for the Medical Expert, Collaborator and Scholar competencies during the evaluation of the related rotation.

#### Goal

On completion of their training program, the ObGyn resident will have acquired the CanMEDS competencies related to research that will assist in their future role as an Obstetrician-gynecologist.

**The objectives** of the research training for the Obstetrics and Gynecology (ObGyn) Resident may be achieved gradually over the five years of their training, depending on the project they undertake. They will be expected to achieve the following objectives:

- 1. When reviewing the literature on a given subject, be able to critically appraise and summarize the evidence and judge whether a publication is sound, ethical, unbiased and clinically valuable; and
- 2. Be able to apply the basic principles of evidence-based medicine, especially epidemiology and biostatistics;
- 3. Gain experience in the development, execution, data analysis, interpretation, presentation and manuscript preparation of a research project.

The Research rotation of at least two blocks of 4 weeks at any of these teaching sites:

- > McGill University Health Centre's Royal Victoria Hospital (RVH)
- Jewish General Hospital (JGH)
- > eventually also at St Mary's Hospital Centre (SMHC)

All documents related to Residents rotations can be found on the departmental website at the following link: <u>www.mcgill.ca/obgyn/teaching/residents/</u>

# **Overview of research objectives and competencies during residency**

The Residency Research Committee meets every 2 months to facilitate planning and evaluating of residents research projects. During the research rotations, Residents will be expected attend Journal club and Epidemiology or other related rounds on site. All Residents will attend the Annual Research Day.



During their broad exposure in various fields of ObGyn Residents may encounter topics/faculty that particularly pique their interest; these contacts may represent the beginnings of a future research project that they may further discuss and pursue. Ideas can also develop from reading journals, summaries of abstracts and becoming familiar with existing databases. Any planning at this stage may facilitate scheduling of future research rotations – speak to Director of Residency Research committee, <u>Dr Haim Abenhaim</u>.

Year	Objectives		CanMeds
PGY1	Theory		Scholar
	In May of PGY1, complete 4 week Epidemiology Rotation which involves the		
	completion of a Reproductive Epidemiology course and a Biostatistics course at		
	the McGill De		
PGY2-	With WHOM?		Collaborator
PGY4	Identify research supervisor/collaborators prior to scheduled research rotations.		
	Residents should refer to the departmental website (Supervisors and their		
	research ideas, Directory> <u>Faculty profiles</u> or <u>Research</u> for projects or		
	publications) to help identify an area of interest according to Faculty research		
	pursuits.		
	Hands on		
	One to two 4 week research rotations will be scheduled during PGY2-3		
	depending on several factors (supervisor, project itself- availability of data,		
	timing, etc.).	Specific objectives are listed below:	
	1. Form	ulate a research question (basic science, clinical, population health	Medical Expert
	or ed	ucational);	
	2. Cond	uct a literature review;	Scholar
	3. Desig	in study and write research proposal in consultation/ collaboration	Collaborator
	With	appropriate experts, such as epidemiologist or statistician;	Desfersterel
	4. Subr	hit for Research Ethics Board (REB) approval – may also involve	Professional
	scien	ce review and resources impact analysis depending on study;	
	5. Colle	ct/manage/ analyze data and interpret results;	
	Discomination of findings		
	Dissemination of finaings		
	Although there is nexibility with the number and timing of research rotations		
	findings may not have a specific rotation during which these objectives are		
	accomplished:		Medical Export
	7 Drocont recearch project (as oral or poster abstract) at a scientific		Scholar
	7. FIESt	ing.	Collaborator
	8 Pron	are and submit manuscrint in journal-specific format in	Communicator
	colla	poration with co-investigators if nossible	Health Advocate
	colla	poration with co-investigators, if possible.	Health Advocate

#### Evaluation

MRESone45 forms will be completed by project supervisor at end of each research rotation and at end of residency program by appointed supervisor.

### References

#### Websites

- McGill Department of Obstetrics and Gynecology for rotation objectives documents, faculty profiles with research interests and publications, current research projects and publications by division. <u>www.mcgill.ca/obgyn</u>
- Canadian Foundation for Women's Health (CFWH) provides funding and awards annually to the best resident research projects in women's health. Deadline in Feb or March. <u>www.cfwh.org</u>
- MUHC's Academic Enrichment Fund (AEF) Can provide up to \$7,500 for study support for projects which involve a MUHC ObGyn faculty member www.mcgill.ca/obgyn/funding
- MUHC's Research Institute (RI) provides guidelines research proposals, ethics submission and research axes/researchers at MUHC. <u>www.muhc.ca/ri</u>
- JGH Research Ethics Committee (REC) provides guidelines for consent forms, downloadable application forms and other useful info. <u>http://jgh.ca/en/ResearchEthicsCommittee</u>
- Association of Professors of Obstetrics and Gynaecology (APOG) see their residets research training objectives and other resources. <u>http://www.apog.ca/</u>
- Society of obstetrics and Gynecology (SOGC) <u>http://www.sogc.org/</u>

#### Suggested Reading (McGill library)

- The Research Guide: A primer for residents, other health care trainees, and practitioners. Eds. BJ Harvey, ES Lang, JR Frank. RCSPC, 2011.
- Fertility and Pregnancy: An Epidemiologic Perspective. By AJ Wilcox. Oxford University Press, 2010 Life Sciences
- **Epidemiology: An Introduction. By KJ Rothman.** Oxford University Press; 1 edition, 2002 *Life Sciences; Macdonald Campus; Schulich Science & Engineering*
- Introduction to the Practice of Statistics 5<sup>th</sup> ed. by D.S., and G.P. McCabe. New York: W.H. Freeman, 2005.

Life Sciences; Humanities and Social Sciences

- Statistical Methods in Medical Research 4<sup>th</sup> ed. by P. Armitage and G. Berry. Malden: Blackwell Science Inc., 2002. Life sciences; Montreal Children's – Library; Jewish General - Health Sciences Library
- Designing Clinical Research An Epidemiologic Approach. Ed. by SB Hulley, SR Cummings, Baltimore: Williams & Wilkins, 1988.
  Life sciences; Montreal Children's – Library; e-book, through McGill
- Evidence-based practice manual : research and outcome measures in health and human services. Edited by Albert R. Roberts, Kenneth R. Yeager. Oxford ; New York : Oxford University Press, 2004. Humanities and Social Sciences - McLennan Bldg