



POLICY PAPER

Support of Medical Student Parents in Undergraduate Medical Education

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Introduction

Parents in medical school face unique challenges and situations that require consideration by undergraduate medical education faculties. Parenting while studying medicine is an ambitious and increasingly common endeavour (Gradstein, 2008). These students have dual roles and responsibilities which often compete for time and attention, and as a result occasionally require special resources or accommodations. To date, the Ontario Medical Students Association (OMSA) has not officially addressed this issue. There is a need for a fair and uniform policy position. An urgent call has been put forward in Canada, and internationally, for institutions to develop formal pre-pregnancy, pregnancy and postnatal policies to support medical students at all levels of training and ensure their well-being and success (Task Force on the Accommodation of the Pregnant Physician, 2010; Cujec et al., 2000; Gradstein, 2008; Nagata-Kobayashi et al., 2007; Taylor et al., 2013).

For many medical students, undergraduate medical education directly coincides with childbearing years. Entrance into most Ontario medical schools requires at least 3-4 years of prerequisite undergraduate studies, and as such, most medical students are 26 years or older at the time of graduation (The Association of Faculties of Medicine of Canada, 2016). The number of women graduating from medical school has also increased over the past 45 years, from 17% in 1970 to 59% in 2005 (Gradstein, 2008). Additionally, unforeseen events may also result in a medical student's short or long-term guardianship of a child. Regardless of how students enter the role of parenthood, student-parents' dual responsibilities must be respected and supported by Ontario medical schools.

Many aspects of undergraduate medical education pose particular challenges for student-parents. Sleep deprivation, irregular and unpredictable work hours leading to difficult child-care arrangements, time-intensive and challenging workloads, and a lack of flexibility from the curriculum significantly impact parents of any gender in any family arrangements (Finch, 2003). Conflict due to the competing demands of parenthood and the undergraduate medical curriculum may deeply impact the physical and mental wellness of student-parents. Accordingly, it is important for OMSA to support student-parents and advocate on their behalf for comprehensive policies at Ontario medical schools.

Current Policies for Parental Leave in Ontario Medical Schools

The attached table in the Appendix includes current policies and information regarding parental leave and accommodation policies at Ontario medical schools as of February 2017. A comprehensive search of publicly available Ontario medical school websites and handbooks was conducted in addition to email correspondence with each medical school's Student Affairs office regarding any additional resources or accommodations not included in the publicly available written policies. The search results suggest that current parental accommodation policies at Ontario medical schools are inconsistent and sometimes difficult to access.

Parenting & Medical Student Wellness

OMSA is committed to promoting medical student wellness (Fiorini et al., 2015). Burnout is an ongoing concern in medical schools. Burnout can be described as physical, mental and emotional exhaustion caused by stress, and can result in decreased motivation, enthusiasm, and efficiency at the task at hand. It is distinct from clinical depression, although the former can convert into the latter (Meldrum, 2010). In a study of 2536 Canadian physicians, workload was shown to be related to cynicism and exhaustion, both of which are strong contributors to burnout (Leiter et al., 2009). Many medical student parents may have to contend with dual workloads: that of school, exams and clinical responsibilities, and that of their dependents and home life. Both of these workloads are incredibly demanding and may compete for a student's time, attention and cognitive space.

While seeking mental health services is protective and supportive of mental wellness (Fiorini et al., 2015), students often report lack of time as a barrier to accessing mental health services (Givens & Tijia, 2002). Students with the dual role of parents, whose schedules are less flexible due to family responsibilities, may face additional barriers to accessing support. Along with the regular stressors of family life, there is often unpredictability and inflexibility in the student's schedule causing constraints on personal time, which poses an additional challenge as they try to balance both student and family responsibilities (Lovell et al., 2009).

In medical school, many students experience symptoms of burnout resulting from the fast-paced curriculum, intensity of the work, and extracurricular involvement (CMA, 2012). A 2008 study analysing female physicians and work-life balance noted that participants felt pressure to choose between family and career (Mobilos et al 2008). While no studies have addressed this question among medical students, similar choices between family and perceived pressure to take on extracurricular and research duties certainly exists for student-parents of all genders. Another study, which looked at barriers to wellbeing in Canadian physicians, identified family responsibilities as a major source of stress (Lovell et al., 2009). Many physicians may feel as though the stresses of both environments force them to prioritize one over the other. These sources of burnout extend to student parents as they balance family responsibilities and professional studies.

Despite the increased stress which can accompany the dual roles of physician and parent, this combination can also bring about increased well-being to physicians. In an analysis of physician strategies for avoiding burnout, spending time with loved ones is shown to be a very efficacious method for decreasing work-induced exhaustion (Meldrum, 2010). In terms of specific strategies for maintaining an effective work-life balance, a study at the Mayo Clinic outlined a number of key characteristics, including: flexible scheduling, a

culture supporting personal health and well-being, and a culture endorsing a life outside of work (Shanafelt et al., 2008). All of these strategies are family centered and would benefit medical student parents. Thus, while parenting in medical school poses challenges, it can be a source of resiliency, particularly if adequate supports are available to overcome the unique challenges faced by parents.

Principles

OMSA endorses the following principles in support of parents (both biological and adoptive) in the undergraduate medical education program:

1. All people in Ontario deserve equitable access to appropriate health care, including: support during pregnancy and the peripartum period, breastfeeding support, and support for all new parents inclusively.
2. Medical learning and performance is directly influenced by the health of the learner. Healthy learners are more likely to become healthy physicians who can improve the health of communities.
3. Medical students have the right to a safe and healthy learning environment, including: accommodations appropriate during pregnancy and/or breastfeeding; and other accommodations which may be required by any parent.
4. Medical students should have access to advice and support from their faculties in addressing personal health and wellness including pregnancy, postpartum, breastfeeding and parenting support.
5. Medical students who are pregnant, breastfeeding, and/or parenting should be supported by their peers and preceptors.

Recommendations

OMSA recommends that Ontario medical students and Ontario Faculties of Medicine:

1. Increase and improve accessibility of undergraduate medical education to student parents through curricular flexibility, greater transparency, and improved facilities

Accessibility of undergraduate medical education is important for student parents to better integrate their academic pursuits with their roles as parents. This includes: (a) increased flexibility in the UME curriculum; (b) greater accessibility and transparency regarding parental leave policies; and (c) access to certain accommodations (such as breastfeeding/pumping facilities)

A) Increased curricular flexibility

Flexibility in curriculum and in scheduling is integral to developing a supportive school environment for student-parents. The typical undergraduate medical education curriculum, however, is rigid both in terms of schedules and timeframes for completion. Historically, Canadian medical trainees show the greatest need for schedule flexibility due to family reasons during medical school compared to at other stages of training (Cujec et al., 2000). The Federation of Medical Women of Canada (FMWC) conducted a needs assessment in 2008; they found that female students prioritized having flexibility in and control over their schedules, calling for “improved opportunities for different styles of education” which may involve part-time training and improved exit or re-entry strategies (Gartke & Dollin, 2010).

Curricular flexibility can be achieved, as demonstrated by other universities. For example, the Warren Alpert School of Medicine at Brown University adopted a flexible pre-clerkship curriculum made up of discrete 6 week courses. This allows students to take 6 weeks of leave at various points in the curriculum and then later make them up, eliminating the need to take an entire year off and guaranteeing all new parents a minimum of 6 weeks off (Taylor et al., 2013).

The main concern for medical students considering a parental leave of absence is whether they can complete their training within the regular three or four year curriculum (Taylor et al., 2013). Recommendations have been made in the literature for medical schools to adopt flexible schedules, allowing student parents to complete requirements for CaRMS and graduation without taking a formal leave of absence (Taylor et al., 2013; Task Force on the Accommodation of the Pregnant Physician, 2010). OMSA similarly advocates that medical schools improve and increase the flexibility of the undergraduate medical education curriculum for student parents.

Some supportive practices already in place at some Canadian schools include recorded lectures and seminars that allow students to study from home. Another such practice includes the longitudinal clerkship experience, where students follow patients in their experience through the various facets of the healthcare system longitudinally, rather than during a predetermined set of weeks. Without the strict timeline and structure of the core specialty blocks, the longitudinal clerkship experience may allow more flexibility and greater control over one's schedule. Policies like these, however, are not uniform across the province, and experiences may vary. Accordingly, OMSA recommends the strengthening and integration of such practices in addition to the development of further curricular flexibility for parents and future-parents.

B) Greater transparency regarding parental leave policies

Each medical school in Ontario should clearly outline parental leave options in an accessible manner for students (i.e., in a student handbook or website). This information is important not only for current or expectant parents, but also for any student who may be considering parenthood at any time throughout their medical school training. It would also be useful for prospective students, who may already be parents or are planning to be, to have this information when planning their training. Clearly outlining available accommodations has been found to send a positive message to female students whose future may include motherhood (Task Force on the Accommodation of the Pregnant Physician, 2010). Similarly, it can be anticipated that inclusive policies would send positive messages to all students considering parenthood. Further promotion of accommodations allows for students to make informed decisions when visiting other medical schools through electives.

C) Increased access to resources and facilities

An additional aspect of parenting includes the right to breastfeed and/or express breastmilk. In a 2008 review, no Ontario medical school had formal policies for supporting breastfeeding (Gradstein, 2008). A comprehensive search of all Ontario medical school's formal policies in 2016, similarly, found no written policies explicitly addressing supports for breastfeeding. Only the Schulich School of Dentistry and Medicine has a public statement acknowledging the "...the need for special arrangements to be made during the educational

program for the purpose of pregnancy and parental leave”. Correspondence with the schools’ Learner Affairs Offices elicited variable levels of accommodation provided for the breastfeeding student-parent. Some schools have breastfeeding rooms at a few of their faculty buildings and hospital training sites (Queens, Toronto, Western), some commit to making “arrangements to accommodate remote learning while breastfeeding” if needed (NOSM), and other simply state that special reservations of rooms can be made for students who need to breastfeed (Ottawa, McMaster) (See Appendix). Formal policies are necessary to ensure a student is provided with protected time and adequate facilities to breastfeed or express breastmilk. This is especially important during clerkship rotations, where students may feel uncomfortable asking preceptors for time and space to express breastmilk. Lack of support for breastfeeding has been identified as a “significant gap” in undergraduate and graduate level policies (Gradstein, 2008). OMSA’s advocacy for increased and improved accessibility of the undergraduate medical education curriculum to student parents can include the call for policies which promote, encourage and protect the right to breastfeed. Such policies are a simple but impactful way that medical schools can show committed support to student parents (Taylor et al., 2013).

2. Foster a strong, supportive and family-friendly environment for its student-parents through peer support and mentorship.

While written policy is the first step in actively supporting student parents, it is not enough without a supportive culture (Task Force on the Accommodation of the Pregnant Physician, 2010). Medical schools and student associations like OMSA must actively work to foster a positive environment which supports, encourages, and celebrates student parents. The level of support and understanding from medical schools in Ontario is considered poor (Gradstein, 2008).

OMSA advocates for the development, participation, and promotion of networks that support and encourage student parents. The FMWC has identified the need for positive role models and mentors for student mothers (Gartke & Dollin, 2010). Another advocacy group, MomDocFamily in the United States, has recommended that all medical schools initiate a systematic network of faculty physicians to “support, advise and mentor medical student parents, especially mothers” (Taylor et al., 2013). These mentors may help student parents and pregnant medical students with disclosures, establishing boundaries with patients and colleagues, dealing with the dual-role and stress involved with simultaneous medical training and child-rearing, and other personal and professional issues (Taylor et al., 2013; MacNamara et al., 2012). The benefits of this mentorship program include reduced isolation for student-mothers, professional networking opportunities, and practical tips and advice for parenting (MacNamara et al., 2012). Similar benefits can be anticipated for mentorship opportunities for student-fathers and student-parents more broadly.

Student parents bring a unique perspective and have valuable personal and educational contributions to the classroom (Taylor et al., 2013). An environment that is strongly supportive of their role as both a student and a parent can have an enormous impact in enabling them to thrive in both of these aspects of their lives. In addition to advocating that undergraduate medical faculties promote having such a supportive environment, OMSA should itself also promote a strong supportive environment for student parents through, for example, the creation of peer-support networks and events for student parents.

Appendix

Policies for Pregnancy and Parental Leaves of Absences and Accommodations

Non-italicized text: Information summarized from published sources

Italicized text: Information summarized from contacting student affair offices/personnel

McMaster	<p>Parental Leave</p> <ul style="list-style-type: none"> Given maximum of 6 weeks if wish to stay in their present graduating year. Greater length of leave will be 12 months and will graduate with subsequent class. Must make up clinical and academic work missed to meet minimum requirements. <p>Accommodations</p> <ul style="list-style-type: none"> School will alter academic program where necessary and feasible to protect health of pregnant student and her fetus, for example, less physical demanding clerkship rotations in 3rd trimester. May need to take 12 month leave of absence if accommodations cannot be granted. With permission of the tutor/attending physician/clerkship coordinator, pregnant students may be released from class or clerkship for supervision by obstetrician (missed time to be made up) and may have reduction in workload (such as on-call duties). Clinical supervisors must honour students' request to avoid patients investigated for possible infectious diseases or settings (i.e. radiology areas, if appropriate shielding is not available) that may be harmful to the pregnant student and her fetus. <i>Assurance by faculty that needs to pump during clinical activities/mandatory sessions will be accommodated and respected.</i> <i>Faculty willing to consider accommodations if student were assigned more physically intensive rotation right after delivery.</i> <i>Preference of clerkship sites (close to home) is not the norm.</i> <ul style="list-style-type: none"> Online policy 'Leave of Absence – Maternity/Paternity'¹ Individual consultation with Student affairs office and MD program staff
NOSM	<p>Parental Leave</p> <ul style="list-style-type: none"> Up to 3 weeks absence immediately postpartum, responsible for missed portion of curriculum. Greater length of parental leave requests may be approved by MD program. <p>Accommodations</p> <ul style="list-style-type: none"> With permission of attending physician of pregnant student, reduction in workload may be granted to the extent deemed necessary by attending physician including elimination of on-call duty. Pregnant students not required to participate in on-call duty after 31 weeks gestation. <i>May request clerkship placement sites closer to Thunder bay or Sudbury - not guaranteed to be granted.</i> <i>Childcare facility on Lakehead campus (after hours care until 10pm) and Laurentian university (may have waitlists at both facilities).</i> <i>Learner Affairs will ensure appropriate private space is available at learning sites for breastfeeding or pumping milk. If required, arrangements to accommodate remote learning while breastfeeding will be made.</i> <ul style="list-style-type: none"> Policies available on NOSM's intranet (accessible to medical trainees only)² Specific accommodations are made on individualized basis in consultation with Learner Affairs
Queen's	<p>Parental Leave</p> <ul style="list-style-type: none"> May request time off if student or their partner has a child during medical school. No leaves of absence during Phase I to IIE inclusive, particularly for clinical skills course. During Phase III, 4 weeks of parental leave may be granted. Clerkship schedule will be arranged so that the leave is taken during elective block. Greater length of leave from medical studies may be taken and makeup rotations will be necessary. <p>Accommodations</p> <ul style="list-style-type: none"> <i>Breastfeeding room in the Clinical Teaching Center in medical school and at Kingston General Hospital (none at Hotel Dieu Hospital).</i> <i>Official breastfeeding room in school of nursing (near the New Medical Building).</i> <i>Daycare adjacent to Queen's campus (waitlist, no preference for medical students), daycare next to Hotel Dieu Hospital (preference for employees and medical students).</i> <i>Preference of clerkship sites with most rotations in Kingston or commutable areas.</i> <ul style="list-style-type: none"> 'Regulations and Policies' section of Queen's Undergraduate Medical Education website³ Individual consultations with year directors and the Associate Dean of Medicine

Ottawa	<p>Parental Leave</p> <ul style="list-style-type: none"> Maximum of 6 weeks of parental leave, no impact on graduation if all academic requirements are fulfilled. Taking leave greater than 6 weeks will incur delay in graduation. <p>Accommodations</p> <ul style="list-style-type: none"> <i>In Core rotations, Faculty will follow PARO guidelines for call schedule: “in no event will a [learner] be scheduled or required to participate in on call duty after thirty-one (31) weeks gestation unless otherwise agreed to by the [learner]”.</i> <i>Accommodations can be requested through the Student Accommodation Committee with regards to any aspect of the curriculum (classrooms, exams, OSCEs, clinical rotations).</i> <i>No specific rooms for breastfeeding but special reservation can be made upon student request.</i> <i>During extended parental leave (i.e. 1 year or more) financial aid is suspended, but students can apply for emergency funds through the Student Affairs Office.</i> <ul style="list-style-type: none"> UOttawa: Undergraduate Medical Education Regulations and Student Guide 2016-2017⁴ Professional Association of Residents of Ontario: PARO-CAHO Agreement 2013-2016, Attachment 3 ‘Workload during Pregnancy’⁵ Individual meeting with Academic Advisor and/or the Student Affairs Office for further information
Toronto	<p>Parental Leave</p> <ul style="list-style-type: none"> No leave of absence policies specific to pregnancy/parental leave. A leave of absence from MD program can be taken for personal reasons: maximum of 1 full academic year. Impact on graduation not stated. <p>Accommodations</p> <ul style="list-style-type: none"> <i>Breastfeeding rooms in Medical Sciences Building and in some clinical teaching sites.</i> <i>Daycare grants available for undergraduate students at U of T (not medicine specific).</i> <i>U of T Family Care Office has resources, events, seminars, groups for students with children (not medicine specific).</i> <i>Listserv for student-parents in UME being set up (not yet ready).</i> <ul style="list-style-type: none"> Regulations and guidelines for leaves of absence from the MD program⁶ Individual meetings/consultations (Office of Health Professionals and Student Affairs via meetings with faculty or staff)
Western	<p>Parental Leave</p> <ul style="list-style-type: none"> Students encouraged to take full year of pregnancy/parental leave during pre-clerkship and clerkship studies with re-entry into curriculum where they left off. Clerkship students (year 3 and 4) may take up to 4 weeks of pregnancy/parental leave with no delay in graduation date if clinical duties missed during the 4 weeks are made up. <p>Accommodations</p> <ul style="list-style-type: none"> Learner Equity and Wellness Services states it ‘provides progressive support services for students and residents, acknowledging the need for special arrangements to be made during the educational program for the purpose of pregnancy and parental leave’. <i>Small private meeting room with locked door in Learner Equity and Wellness Services can be used for breastfeeding.</i> <i>Western students have priority with campus daycare facilities.</i> <i>Accommodations can be made upon request for students who may require flexibility during clerkship due to childcare responsibilities (i.e. locations not requiring overnight or long commute).</i> <ul style="list-style-type: none"> Western UME ‘Pregnancy and Parental Leave’ policy 2014⁷ Individual consultations with the Learner Equity and Wellness Services Office

¹http://mdprogram.mcmaster.ca/docs/default-source/general-resources-page/attendance-and-absence/leave_of_absence_maternity_paternity.pdf?sfvrsn=4

² Please contact NOSM directly for copy of intranet document

³ <http://meds.queensu.ca/undergraduate/policies>

⁴https://med.uottawa.ca/undergraduate/sites/med.uottawa.ca.undergraduate/files/ugme_faculty_of_medicine_regulations_and_student_guide_2016_2017_en_version_july_2016.pdf

⁵ http://www.myparo.ca/Contract/PARO-CAHO_Agreement#Attachment%203

⁶<http://www.md.utoronto.ca/policies>

⁷<http://www.westerncalendar.uwo.ca/Archive/2014/2014/pg546.html>

References

- Anderson J, Couchman M, Fong J, Schreiber M, Rachlis A. Undergraduate Medical Education University of Toronto Student Handbook 2014-2015 [Internet]. Toronto: Undergraduate Medical Education, Faculty of Medicine, University of Toronto; 2014 [cited 2015 Aug 1]. Available from: <http://www.md.utoronto.ca/Assets/FacMed+Digital+Assets/Undergraduate+Medicine+Education+MD+Program/Curriculum/Handbooks/Mar2015+Student+Handbook.pdf>
- BMO. Professional or Medical Student Line of Credit [Internet]. 2015 [cited 2015 Sept 25]. Available from <https://www.bmo.com/home/personal/banking/mortgages-loans/loans-loc/loc/student-loc/medical>
- CACMS Standards and Elements - Standards for Accreditation of Medical Education Programs Leading to the M.D. Degree [Internet]. 1st ed. The Associations of Faculties of Medicine of Canada; 2015 [cited 2015 Aug 6]. Available from: https://www.afmc.ca/pdf/CACMS_Standards_and_Elements_June_2014_Effective_July12015.pdf
- CanLearn. Paying Back Student Loans [Internet]. 2013 [cited 2015 July 20]. Available from http://www.canlearn.ca/eng/loans_grants/repayment/index.shtml
- CIBC. Professional Edge Student Program [Internet]. 2015 [cited 2015 Sept 25]. Available from <https://www.cibc.com/ca/loans/prof-edg-st-pers-ln-credit.html>
- CMA (2012). A risky business - medical students' perspectives on factors that impact on their well-being during training. Retrieved March 23, 2015, from <https://www.cma.ca/Assets/assetslibrary/document/en/practice-management-and-wellness/Fri-2pm-03B-risky-business-Cohene.pdf>
- Cujec B, Oancia T, Bohm C, Johnson D. 2000. Career and parenting satisfaction among medical students, residents and physician teachers at a Canadian medical school. *CMAJ* 162(5); 637-40.
- Gartke K, Dollin J. 2010. FMWC Report to the House of Commons Standing Committee on the Status of Women (Women in non-traditional careers). Federation of Medical Women of Canada. Accessed July 2015 from www.fmwc.ca/docs/FMWC_Report_to_the_House_of_Commons_Standing_Committee_on_the_Status_of_Women__final.pdf
- Gradstein R. 2008. Mothering in Medicine: Parenting policies in Canadian Medical Education. *Atlantis*. 32(2):147-156.
- Fiorini, K., Mazze, N., Cottrell, J., & Smith, H. (2015). *Medical student wellness*. Retrieved from: <http://www.omsa.ca/position-papers/>
- Lakehead University Students' Union. Health and Dental Plan Benefits Brochure 1516 [Internet]. 2015 [cited 2015 Sept 24]. Available from https://www.studentvip.ca/Forms/LUSU/Benefits_Brochure1516.pdf
- Leiter MP, Frank E, Matheson TJ. Demands, values, and burnout: relevance for physicians. *Can Fam Physician*. 2009; 55:1224-1225.e1-6.

Lovell BL, Lee RT, Frank E. May I long experience the joy of healing: professional and personal wellbeing among physicians from a Canadian province. *BMC Family Practice*. 2009; 10:18.

Macnamara M, Taylor J, Grimm K, Taylor L, Gottlieb A. 2012. Using a professional organization, MomDocFamily, to understand the lives of physician mothers. *Medicine & Health/Rhode Island*. 95(6):189-193.

Maternity Leave and Parental Leave [Internet]. 1st ed. Government of Alberta; 2014 [cited 2015 Aug 6]. Available from: <http://work.alberta.ca/documents/Maternity-Leave-and-Parental-Leave.pdf>

McGill University. Absences and Leaves | Undergraduate Medical Education - McGill University [Internet]. 2015 [cited 2015 Aug 6]. Available from: <http://www.mcgill.ca/ugme/academic-policies/absences-and-leaves>

McMaster Association of Part-Time Students. MAPS Members Optional Health and Dental Plan [Internet]. 2015 [cited 2015 Sept 24]. Available from <http://www.mcmaster.ca/maps/insurance.html#2>

McMaster Students' Union. Health and Dental Plan [Internet]. 2015 [cited 2015 Sept 24]. Available from <https://www.msumcmaster.ca/services-directory/36-health-and-dental-insurance>

Medical Student Leave of Absence/Time Away [Internet]. 1st ed. University of Calgary - Cumming School of Medicine; 2014 [cited 2015 Aug 6]. Available from: https://wcm.ucalgary.ca/mdprogram/files/mdprogram/leaveofabsence_timeaway-guidelines.pdf

Meldrum, H. Exemplary physicians' strategies for avoiding burnout. *The Health Care Manager*. 2010; 29(4):324-331.

Memorial University. The Handbook - Student Responsibilities [Internet]. 2014 [cited 2015 Aug 6]. Available from: [http://www.med.mun.ca/UGradME/Handbook-\(1\)/Student-Responsibilities/Parental-Leave.aspx](http://www.med.mun.ca/UGradME/Handbook-(1)/Student-Responsibilities/Parental-Leave.aspx)

Mobilos S, Chan M, Brown JB. Women in Medicine: The challenge of finding balance. *Can Fam Physician*. 2008; 54:1285-1286.e1-5.

Nagata-Kobayashi S, Koyama H, Shimbo T. 2007. A call for student maternity leave in the medical educational system. *Medical Education*. 41:426-427.

Ontario Human Rights Commission. Commission settlement guarantees gender equality for doctors seeking parental leave [Internet]. 2006 [cited 2015 Aug 6]. Available from: http://www.ohrc.on.ca/en/news_centre/commission-settlement-guarantees-gender-equality-doctors-seeking-parental-leave

Pre-Clerkship Short-Term Leave / Leave of Absence Protocol [Internet]. 1st ed. Dalhousie University Faculty of Medicine; 2015 [cited 2015 Aug 6]. Available from: http://medicine.dal.ca/content/dam/dalhousie/pdf/faculty/medicine/departments/core-units/undergrad/2015_Preclerkship_TimeOffProtocol-APPROVED%20by%20UMECC-%20July232015.pdf

Professional Association of Residents of Ontario. About PARO [Internet]. 2015 [cited 2015

Sept 26]. Available from: http://www.myparo.ca/About_PARO

Professional Association of Residents of Ontario. PARO-CAHO Agreement [Internet]. 2012 [cited 2015 Sept 20]. Available from: http://www.myparo.ca/PARO-CAHO_Agreement

Professional Association of Residents of Ontario. Pregnancy and Parental Leave FAQ [Internet]. 2015 [cited 2015 Sept 26]. Available from: http://www.myparo.ca/Pregnancy_FAQ

Queen's University School of Medicine. Leave Policies [Internet]. 2003 [cited 2015 Aug 1]. Available from: http://www.queensu.ca/calendars/archive/2004-05/medicine/LeavePolicies_1610.htm

Queen's University Student Government Alma Mater Society. Health Benefits - Who's covered? [Internet]. 2015 [cited 2015 Sept 24]. Available from http://ihaveaplan.ca/rte/en/QueensUniversityAMS_Health_WhosCovered

Queen's University Student Government Alma Mater Society. Self Enrolment. [Internet]. 2015 [cited 2015 Sept 24]. Available from http://ihaveaplan.ca/rte/en/QueensUniversityAMS_ChangeofCoverage_SelfEnrolment

RBC. Financial Solutions Designed for Medical & Dental Students [Internet]. 2015 [cited 2015 Sept 25]. Available from <http://www.rbcroyalbank.com/student/medical-dental/>

Rush-Rhodes A, Alldred T, Chauvin C, Purdy E, Simmons G, Simpson J, et al. Queen's University Medical Student Handbook [Internet]. Kingston: Queen's Medicine; 2014 [cited 2015 Aug 1]. Available from: http://meds.queensu.ca/assets/UGME_SHB.pdf

Scotiabank. Student Professionals [Internet]. 2015 [cited 2015 Sept 25]. Available from <http://www.scotiabank.com/ca/en/0,,628,00.html>

Service Canada. Employment Insurance Maternity and Parental Benefits - Service Canada [Internet]. 2014 [cited 2015 Aug 6]. Available from: <http://www.servicecanada.gc.ca/eng/sc/ei/benefits/maternityparental.shtml>

Shanafelt TD, West CP, Poland GA, LaRusso NF, Menaker R, Bahn RS. Principles to Promote Physician Satisfaction and Work-Life Balance. *Minn Med*. 2008; 91(12):41-43.

Statistics Canada. Live births, by month, Canada, provinces and territories. Canadian Vital Statistics, Birth Database; 2015.

Student Federation University of Ottawa. Healthplan [Internet]. 2015 [cited 2015 Sept 24]. Available from <http://sfuo.ca/other/healthplan/>

Student Leave of Absence Policy [Internet]. 1st ed. University of Manitoba Faculty of Medicine; 2015 [cited 2015 Aug 6]. Available from: http://umanitoba.ca/faculties/health_sciences/medicine/education/undergraduate/media/Leave_of_Absence.pdf

Task Force on the Accommodation of the Pregnant Physician. *Medicine and Motherhood: Can We Talk?* Vancouver: Physician Health Program of British Columbia; 2010. Accessed July 2015 from <https://www.physicianhealth.com/sites/default/files/Medicine%20and%20Motherhood-Can%20We%20Talk.pdf>

Taylor J, MacNamara M, Groskin A, Petras L. Medical student mothers. Rhode Island Medical Journal. 2013 Mar; 43-45.

TD Canada Trust. Student Line of Credit [Internet]. 2015 [cited 2015 Sept 25]. Available from <https://www.tdcanadatrust.com/products-services/borrowing/loans-lines-of-credit/student-line.jsp>

The Association of Faculties of Medicine of Canada. Canadian Medical Education Statistics. Ottawa: Office of Research and Information Services; 2016.

The University Students' Council of Western University. USC Benefit Plan [Internet]. 2015 [cited 2015 Sept 24]. Available from <https://studentbenefits.ca/coverage-home>

U.S. Department of Education. Supporting the Academic Success of Pregnant and Parenting Students. Washington; 2013.

Université de Montréal. Faculty of medicine - Faculté de médecine - Université de Montréal [Internet]. 2015 [cited 2015 Aug 6]. Available from: <http://medecine.umontreal.ca/medical-school/I>

Université Laval. Faculté de médecine de l'Université Laval [Internet]. 2015 [cited 2015 Aug 6]. Available from: http://www.fmed.ulaval.ca/site_fac/

University of Ottawa Student Affairs Office. Couples & Family Counselling - Family Counselling [Internet]. Date of publication unknown [cited 2015 Aug 1]. Available from: http://www.med.uottawa.ca/Students/StudentAffairs/eng/couples_family_fam.html#top

University of Toronto Students' Union. Health and Dental Plan - FAQs [Internet]. 2015 [cited 2015 Sept 24]. Available from <http://utsu.ca/faq/>

uOttawa Faculty of Medicine. Undergraduate Medical Education Regulations and Student Guide Academic Year 2015-2016 [Internet]. Ottawa: uOttawa Faculty of Medicine; 2015 [cited 2015 Aug 1]. Available from: https://med.uottawa.ca/undergraduate/sites/med.uottawa.ca.undergraduate/files/ugme_student_guide_2015_2016_en_july_22_2015_v2.pdf

Université de Sherbrooke. Le programme de doctorat en médecine - Université de Sherbrooke [Internet]. [cited 2015 Aug 6]. Available from: <http://www.usherbrooke.ca/doctorat-medecine/>

Van Wylick R. Policy on Attendance and Absences in Undergraduate Medical Education [Internet]. Kingston: Undergraduate Medical Education; 2013 [cited 2015 Aug 1]. Available from: http://meds.queensu.ca/assets/policies/policy_on_attendance_and_absences_in_undergraduate_medical_education_-_September_2013.pdf

Western University. Pregnancy/Parental Leave Policy [Internet]. 2014 [cited 2015 Aug 1]. Available from: <http://westerncalendar.uwo.ca/2014/pg546.html>

Western University's Learner Equity & Wellness Services. Academic Accommodation [Internet]. 2015 [cited 2015 Aug 1]. Available from: https://www.schulich.uwo.ca/learner-equity-wellness/services/academic_accommodation.html