

## WHAT IS FLEX?

FLEX (flexible and enhanced learning) is a new, innovative series of three courses in the renewed UBC medical undergraduate program that offers medical undergraduate students unique opportunities to pursue a variety of scholarly activities within a defined learning space. FLEX complements the common curriculum by enabling students to develop activities that allow them to explore individual learning interests in greater depth.

The FLEX courses are designed to foster innovation, creativity, and critical thought, and prepare graduates for roles as scholars and life-long learners across the full trajectory of their medical careers. The course framework supports self-directed learning by allowing students to pursue a variety of learning interests and select activities that begin to incorporate scholarly inquiry and social accountability into their future practice.

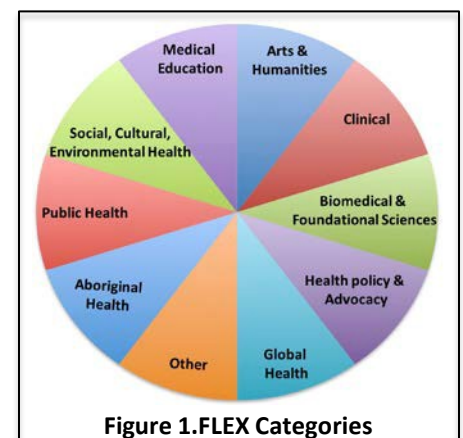
FLEX will offer activities, experiences and opportunities for student to connect with mentors, organizations and colleagues across four UBC medical campuses; Vancouver-Fraser, Prince George, Victoria, and Kelowna.

## COURSE CONTENT AND STRUCTURE

### *What will students do?*

All students will begin their FLEX experience in Year 1 by taking a common component termed the Foundations of Scholarship (FoS). FoS consists of a series of small-group lectures and sessions and is designed to promote scholarly inquiry by providing students with a toolbox of skills, including an understanding of the different types of scholarly activities, basic research skills, communication and facilitation skills and best practices for engaging with communities.

The remainder of the FLEX course time will offer opportunities for students to engage in individualized learning activities. FLEX activities may be selected from a repository or be self-defined. The student experience will be supported by an evolving activity database hosting a variety of course and project options. The FLEX activity repository serves two important functions: (1) it serves as a source of submitted FLEX activities, and (2) it provides a space for researchers, educators and community organizations to connect with medical students by offering individuals and organizations a place to advertise areas of interest and/or goals of the organization. This repository will grow and evolve over time with further contributions from students, community practitioners and organizations, researchers, other institutions, and faculty members.

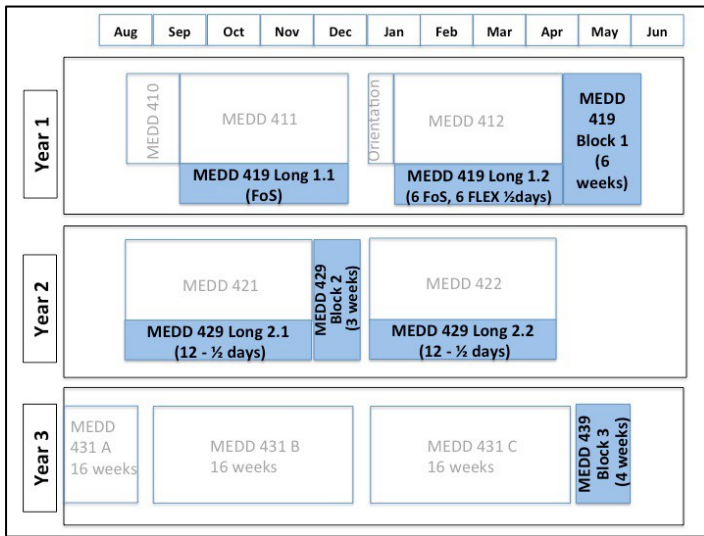


**Figure 1. FLEX Categories**

Within the repository, opportunities and activities are grouped into ten categories: Arts & Humanities; Clinical, Biomedical & Foundational Sciences; Health Policy and Advocacy; Aboriginal Health; Global Health; Social, Cultural & Environmental Health; Public Health, Medical Education, and Other. (See Appendix A for category definitions). Students may undertake a variety of FLEX activities that can include short courses, workshops, research projects, online modules, discussion groups, interprofessional experiences, community service learning options, or other options. FLEX activities may be pursued by individual students as well as groups of students, and can involve collaboration across one or more MDUP sites or between year 1 and year 2 students.



**Three-year FLEX Course Schedule (blue boxes)**



**Figure 2. Curriculum Map.**

FLEX spans the first three years of the medical undergraduate curriculum and is divided into 3 courses; Year 1: MEDD 419, Year 2: MEDD 429, and Year 3: MEDD 439. Years 1 and 2 will utilize a combination longitudinal of half-days (Mondays, 1-5 pm) and dedicated block time, while Year 3 consists only of dedicated block time. Block time refers to consecutive weeks of dedicated time in which a student is solely engaged with FLEX activities. Each FLEX course can be broken down into individual FLEX sessions (see Figure 2 and Appendix B) and each FLEX session is identified by a session number (please see Appendix B). Students may participate in a FLEX activity that occurs in a single FLEX session, or they may participate in a larger project that spans more than one FLEX session or more than one year.

**HOW CAN YOU GET INVOLVED?**

If you have an activity, research project or other learning opportunity that you think will be of interest to medical students, FLEX is an excellent way to engage with one or more bright, capable and eager individuals.

To advertise your area of interest, or a particular activity or project within the FLEX course repository, you and/or your organization are invited to fill out an Activity Proposal form. This form will provide information such as a description of the activity, time required to complete the project, and contact information. Please see Appendix B for proposal forms and additional information.

**CONTACT**

For more information about the FLEX course, please contact:

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## Completing the FLEX Activity Proposal Form

The purpose of the FLEX Activity Proposal form is to provide data on opportunities that future students might engage in during the MEDD 419, 429 or 439 ('FLEX') courses in the renewed UBC MDUP curriculum. These activities will reside in a database organized by activity category and activity type. Some entries on the form are self-explanatory, while others less so. This guide and associated appendices addresses the latter aspects.

**Title of FLEX Activity** - Please provide a title for your activity. (250 characters or fewer)

**Activity Category** – FLEX activities fall into one or more of 10 categories; some activities may naturally align with more than one category. For example, a Global Health project may be structured such that it also addresses Health Policy & Advocacy, or Social, Cultural and Environmental Health. Definitions of each category are given in Appendix A. Please check all that apply to your activity.

**Select Course / Session(s)** – These options align with the curriculum map in the 'Call For Proposals' document. FLEX time occurs in Year 1, Year 2 and Year 3, and utilizes a combination of half-days on Monday afternoons (1:00 – 5:00) and block times (full weeks dedicated solely to FLEX). Your proposed activity or any activity you develop with a student may be appropriate for one particular FLEX session, may span more than one FLEX session or may cross years. Based on the table below, please select the session or sessions that are best suited to your activity.

Year and Course number	FLEX Session	Date
Yr 1: MEDD 419	Long 1.2 (6 – ½ days available in Yr 1, spring)	Feb 29, 2016 – Apr 11, 2016
Yr 1: MEDD 419	Block 1 (6 weeks dedicated FLEX time)	Apr 18, 2016– May 24, 2016
Yr 2: MEDD 429	Long 2.1 (12 – ½ days available in Yr 2, fall)	Aug 22, 2016-Nov 21, 2016
Yr 2: MEDD 429	Block 2 (3 weeks dedicated block time, Yr 2: Dec)	Nov 28, 2016-Dec 12, 2016
Yr 2: MEDD 429	Long 2.2 (12 – ½ days available in Yr 2, spring)	Jan 2, 2016-April 3, 2016
Yr 3: MEDD 439	Block 3 (4 weeks dedicated FLEX time)	TBD

**Delivery Details** – Does the activity require the student to be onsite for the activity or can the activity be undertaken online (skype, videoconference, email contact, etc.).

**Primary Location** – If your project or activity can only be offered in a certain region and/or is associated with a particular campus, please indicate so on the form. If the activity is available to students from more than one campus or all campuses, please select the appropriate boxes.



**Estimated Time to Complete** – If you have a pre-defined activity (workshop series, etc.), please provide your best estimate, in hours, of the time required to complete the activity. If the time estimate is dependent upon the activity and the student, please state “subject to discussion with student”.

Students earn FLEX points in their course assessment based on the accumulation of activity hours (1 FLEX point is earned for each week of activity (approximately 28 hours of activity)).

**Supervisor(s)** – Please provide the name of the student who will be supervisor the student.

**Number of Students Who Can Participate** – It is important to note here if an activity requires a minimum enrollment to run (many workshops and online courses have this restriction). Equally, it is important to know if there is a maximum number who can engage in the activity at any one time.

**Prerequisites** – If successful completion of an activity is founded on prior knowledge or level of achievement, please indicate clearly the nature of this criterion.

**Costs** – Some activities may have costs attached (such as registration or completion / certificate fees). Please indicate the total cost to the student(s), if any, involved in undertaking the activity.

**Describe Your Area of Interest and/or Potential Activities** – In non-technical language (so far as possible), give a brief high-level description of your area of interest and the types of activities in which a student might become involved.

**Continuation** – Has this activity been undertaken previously within the FLEX course?

**Type of Activity** – Select the appropriate description of this activity. If you are interested in working with a student but do not have a pre-defined activity, please state “subject to discussion with student”.

**Suggested Deliverables** – A deliverable is any product the student is expected to create or undertake to complete the activity. Examples of deliverables may include but are not limited to: the production of educational materials (pamphlets, database or website), literature reviews, chart reviews, an abstract, poster, manuscript or presentation. In the case of a workshop series or short course, the deliverables may include a reflection, a written piece, a debate, etc. The course is designed to support a wide variety of activities and deliverables. Students are advised that deliverables should be discussed with the assigned activity supervisor prior to engaging in the activity. NOTE: Successful completion of an activity from the viewpoint of the FLEX course is based on demonstrated learning within the activity, not on achieved deliverables per se.

**Student Application Process** – Please indicate the step(s) required in order for a student to apply for the activity, manner of contact with activity supervisor(s), and any deadlines attached to the activity.



## Appendix A. Definitions of FLEX Repository Categories

**Global Health:** Global Health embraces the realms of ‘notion’, ‘objective’ and ‘research / practice’, and as such the Consortium of Universities for Global Health (Kaplan et al., 2009) define global health as *“an area for study, research, and practice that places a priority on improving health and achieving equity in health for all people worldwide. Global health emphasizes transnational health issues, determinants, and solutions; involves many disciplines within and beyond the health sciences and promotes interdisciplinary collaboration; and is a synthesis of population-based prevention with individual-level clinical care.”* This intentionally comprehensive definition translates into a broad scope of potential FLEX activities; for example see the workshops offered through the UBC GHI (<http://globalhealth.med.ubc.ca/service/student-groups/global-health-initiative/global-health-initiative-workshops/>), the Global Health e-Learning Center (<http://www.globalhealthlearning.org/>); see also the UBC Faculty of Medicine’s Global Health Initiative <http://globalhealth.med.ubc.ca/>.

Kaplan, JP, C Bond, MH Merson et al. 2009. Toward a common definition of global health. *Lancet* 373: 1993-95. [http://dx.doi.org/10.1016/S0140-6736\(09\)60332-9;](http://dx.doi.org/10.1016/S0140-6736(09)60332-9;)

**Social, Cultural & Environmental Health:** The Canadian reality is one of a pluralistic and multicultural society, living in an expansive and geographically diverse country. We rank 2<sup>nd</sup> in land area at almost 10 million km<sup>2</sup>, 37<sup>th</sup> in population size at just over 35 million people and 9<sup>th</sup> in terms of per capita GDP (with a purchasing power parity of almost \$45,000). Yet 81% of Canadians live in an urban context, 75% live within 160 km of the Canada – US border, and almost 10% are deemed ‘low-income’ Canadians (all data from Government of Canada websites, e.g., <http://www4.hrsdc.gc.ca/.3ndic.1t.4r@-eng.jsp?iid=34>). Not surprisingly, health promotion and provision is both complex and costly. According to the World Health Organization environmental health addresses *“all the physical, chemical, and biological factors external to a person, and all the related factors impacting behaviours. It encompasses the assessment and control of those environmental factors that can potentially affect health”* ([http://www.who.int/topics/environmental\\_health/en/](http://www.who.int/topics/environmental_health/en/)). The range of possible FLEX activities in this category is broad, including immigrant / refugee health, population diversity & health beliefs, gender & age, social & economic determinants, urban, rural & remote health, cultural competence, health impacts of climate change & pollution, workplace safety, spirituality, addiction, abuse in society, sexual health, complementary and alternative medicine, and more. It encompasses the various determinants of health.

**Public Health:** Definitions of public health invariably reference a focus on populations rather than individuals, on prevention and health promotion rather than curative medicine, and policy development and regulation focused on safety and quality of life. The Public Health Agency of Canada definition reads: *“Public health can be described as the science and art of promoting health, preventing disease, prolonging life and improving quality of life through the organized efforts of society. As such, public health combines sciences, skills, and beliefs directed to the maintenance and improvement of the health of all people through collective action”* (<http://www.phac-aspc.gc.ca/publicat/sars-sras/naylor/3-eng.php#s3a2>). FLEX activities in this category might overlap



with other categories (such as Social, Cultural and Environmental Health, Medical Education, or Health Policy and Advocacy). Such activities could embrace realms such as epidemiology & population health, health literacy & health promotion, chronic & infectious disease, surveillance, food safety, screening & intervention, occupational health, and risk communication among others. A useful guide to this category is the *AFMC Primer on Population Health*, found at <http://phprimer.afmc.ca/>.

**Medical Education:** The field of medical education explores the formal and informal teaching / training of health care professionals. It examines different pedagogies (e.g., problem-based versus case-based), scrutinizes best practices, analyses curriculum (e.g., explicit versus hidden), and studies relationships within and among institutions, disciplines, organizations, governments and communities. It has been noted, in reference to how physicians in particular are trained, that “Medical education seems to be in a state of perpetual unrest” (Cooke et al., 2006: 3339), and that “(t)he development of medical education [is] a history of reform without change” (Lempp and Seale, 2004: 770). This FLEX category allows students to critically examine how they themselves are being taught, by what ways and means, with the objective of producing the best possible clinician / researcher. Activities might focus on learner styles and group conformity, e-learning modalities, interprofessional care, assessment and evaluation, and many others. For information visit the Canadian Association for Medical Education (<http://www.came-acem.ca/>)

Cooke, M, DM Irby, W Sullivan and KM Ludmerer. 2006. American medical education 100 years after the Flexner Report. *NEJM* 355: 3339-44. <http://dx.doi.org/10.1056/NEJMra055445>.

Lempp, H and C Seale. 2004. The hidden curriculum in undergraduate medical education: qualitative study of medical students’ perceptions of teaching. *BMJ* 329: 770-773. <http://dx.doi.org/10.1136/bmj.329.7469.770>.

**Arts & Humanities:** As attributed to Hippocrates, “*Wherever the art of medicine is loved, there is also a love of humanity.*” Many medical schools in North America have recognized the value of an interdisciplinary curricula incorporating medical humanities through which students explore the intersection of health and healing with programs in the Arts (e.g., literature, visual arts), Humanities (e.g., philosophy, religious studies) and Social Sciences (e.g., anthropology, psychology, cultural studies). As noted by the Medical Humanities program at NYU “*Attention to literature and the arts helps to develop and nurture skills of observation, analysis, empathy, and self-reflection -- skills that are essential for humane medical care. The social sciences help us to understand how bioscience and medicine take place within cultural and social contexts and how culture interacts with the individual experience of illness and the way medicine is practiced*” (<http://medhum.med.nyu.edu/>). It also encompasses the emerging field of Narrative Medicine: “*The care of the sick unfolds in stories. The effective practice of healthcare requires the ability to recognize, absorb, interpret, and act on the stories and plights of others. Medicine practiced with narrative competence is a model for humane and effective medical practice. It addresses the need of patients and caregivers to voice their experience, to be heard and to be valued, and it acknowledges the power of narrative to change the way care is given and received.*” (<http://ce.columbia.edu/narrative-medicine>). FLEX activities in this category might engage the student in the production, critical analysis & reflection or synthesis of creative work(s) in the context of clinical practice and/or population health. Visit the Medical /



Health Humanities in Canada site at <http://www.medhealthhumanities.ca/>) and the Arts Health Network (<http://artshealthnetwork.ca/>).

**Clinical:** Activities and research in this category involve the investigation of the etiology, prevention, diagnosis or treatment of human disease using human subjects, human populations or materials of human origin. Students may undertake chart reviews, research projects, educational projects or short courses.

### **Biomedical and Foundational Sciences**

The category represents a broad area of science that looks for ways to understand healthy structure and function of the human body, and prevent and treat diseases that cause illness and death in people and in animals. This category includes many areas of both the life and physical sciences.

**Health Policy & Advocacy:** Activities in this category explore ways that health care systems, governments, doctors and patients can interact to deliver health care. Students can study how regulatory policy shapes health care delivery costs and benefits of new technologies, or the efficiency and effectiveness of health care systems. Many other policy decisions can fit here as well, such as taxation on junk food, looking at the healthy built environment, legalizing marijuana, harm reduction, and more. For resources, visit the Canadian Health Policy Institute, an independent body “conducting, publishing and communicating evidence-based socio-economic research on health system performance and health policy issues that are important to Canadians.” (<http://www.canadianhealthpolicy.com/>). For advocacy resources, see for example the Canadian Health Coalition (<http://healthcoalition.ca/>).

**Aboriginal Health:** As noted in Waldram, Herring and Young (2006: 3), “the health of any human population is a product of a complex web of physiological, psychological, spiritual, historical, sociological, cultural, economic, and environmental factors.” Nowhere is this more evident in Canada than with regard to the health of its aboriginal populations (First Nations, Inuit and Métis), for whom life expectancy is almost 7 years lower than the general population, heart disease is 1.5x higher, T2D 3x to 5x greater, TB infection rates 8x - 10x higher, and suicide / self-inflicted injury is the leading cause of death (among First Nations youth and adults < age 44) (all data from Health Canada [www.hc-sc.gc.ca](http://www.hc-sc.gc.ca)). The latitude for FLEX activities in this category is extensive, including health disparities; social and economic determinants; health research with FN communities; traditional knowledge, diet and healing practices; urban aboriginal populations; colonization and de-colonization; racism; and environmental degradation / climate change, among others. Visit the UBC Faculty of Medicine Centre for Excellence in Indigenous Health (<http://health.aboriginal.ubc.ca/>) as well as the National Collaborating Centre for Aboriginal Health website (<http://www.nccah-ccnsa.ca/en/>).

Waldram, JB, Herring, A and Young, TK 2006. *Aboriginal Health in Canada: Historical, Cultural and Epidemiological Perspectives*, 2<sup>nd</sup> ed. University of Toronto Press, Toronto.



**Other:** There are many opportunities for students to engage in FLEX activities that could fall outside the eight specified categories / themes, though they could be touched upon in a peripheral sense. Such activities could involve Community Service Learning (<http://www.chius.ubc.ca/community-service-learning-programs/>), the Health Mentor's Program (<http://www.dhcc.chd.ubc.ca/healthmentors>), eHealth projects ([http://www.health.gov.bc.ca/ehealth/telehealth\\_project.html](http://www.health.gov.bc.ca/ehealth/telehealth_project.html)), as well as numerous online workshops and short courses (<https://www.class-central.com/subject/health>).

