



Master of Global Surgical Care (MGSC)



THE UNIVERSITY OF BRITISH COLUMBIA

Branch for International Surgical Care

Department of Surgery | Faculty of Medicine



ABOUT THE PROGRAM

Advancing surgical care globally

The Master of Global Surgical Care (MGSC) is a 30-credit program offered by the Branch for International Surgical Care (BISC) at the UBC Faculty of Medicine. As the first-ever accredited graduate-level degree program with a focus on global surgical care, the MGSC bridges the gap between the international demand and the health professional's education to meet the learning needs of this growing cadre of students.

This program provides a unique link between content experts from across the global health community and graduate students to develop policy and support scalable solutions for the development of functional surgical care systems. Students will join a unique multidisciplinary learning community and prepare to make effective contributions in addressing the surgical care problems of underserved populations nationally and internationally.



PROGRAM DETAILS

- 30-credit specialized program
- Full-time (2 year) or part-time (up to 5 years) options
- Offered fully online
- Optional specialization: Canadian Low Resource Settings Stream

PROGRAM REQUIREMENTS

- SURG 510 - Surgical Care in International Health (3)
- SURG 512 - Global Disability: A Surgical Care Mandate (3)
- SURG 514 - Surgical Care in Humanitarian Disaster Response (3)
- SURG 516 - Program Planning and Evaluation in Surgical Care Low Resource Settings (3)
- SURG 517 - Clinical Research Methods for Surgical Procedures with Global Surgical Comparisons (3)
- SURG 518 - Surgical Care in Canada's Rural and Remote Indigenous Communities with Global Comparisons (3)
- SURG 542 - Directed Study in Global Surgical Care (3)
- SURG 560 - Global Surgical Care Field Practicum (6)
- Elective (3)

ADMISSIONS: BISC accepts applications for entry into the MGSC program every September and January. For details on how to apply, please visit internationalsurgery.med.ubc.ca/education/apply

QUESTIONS? Any questions or inquiries can be directed to surgery.international@ubc.ca



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INSTRUCTORS



Brian Cameron
MD, DipMedEd, FRCSC



Jana MacLeod
MD, MSc, FRCS(C),
FACS, FRC(ECSA)

Surgical Care in International Health

SURG 510 | 3 credits

This graduate course provides an essential introduction to the body of academic knowledge, experience and discussion of the global burden of surgical disease.

Topics covered over the semester include the discipline of international surgery within international health; the global burden of surgical disease and disability; trauma: a global pandemic; global maternal mortality; the spectrum of international surgery involvement; principles of development for international surgery; surgical-care education in global low-resource settings; ethical issues in international surgery and the role of surgical-care professionals as advocates in international health.

COURSE OBJECTIVES

Upon completion of the course, learners will be able to

- Summarize the global status of unmet surgical need.
- Describe the ethical issues, the role of advocacy, and the models of surgical care education in international surgery.
- Explain the need for injury prevention strategies and global maternal mortality and morbidity solutions.
- State the spectrum of involvement in international surgical activities including volunteerism.
- Discuss the principles of development in international surgery



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INSTRUCTORS



Norgrove Penny
CM, MD, FRCSC,
FCS(ECSA)



Dan Poenaru
MD, PhD, MHPE, FRCSC,
FACS, FCS(ECSA)

Global Disability: A Surgical Care Mandate

SURG 512 | 3 credits

This online graduate course will explore the relationship of surgical care to preventing and treating disabling impairments in countries and settings of constrained surgical resources. Students will address the fact that globally one billion people live with a disability, of whom 80% live in resource-limited settings, many suffering unnecessary disabling impairment because of lack of access to safe and competent surgical care. Discussions focus on the causation and epidemiology of the burden of disabling disease, measurement of the problem, analysis of global initiatives to address the burden, and proposals for a research agenda.

Annually, millions of surgeries are accomplished around the world in a variety of circumstances. Specific impairments will be explored, including sensory impairments (blindness and deafness) and physical impairment, within the context of cross-cutting themes such as the human resource disparity and infrastructure gap. This course will build on the overview of international surgery issues covered in SURG 510- Surgical Care in International Health, but is designed as a stand-alone course, and thus a review of concepts will be provided as needed.

COURSE OBJECTIVES

Upon completion of the course, learners will be able to

- Summarize the global status of impairment and disability due to unmet surgical need
- Discuss international conventions and policy documents of the United Nations and World Health Organization with reference to surgical implications in health and disability
- Outline the spectrum of involvement of surgical activities in preventing and treating disabling impairments
- Explain the need for workforce capacity building and infrastructure enhancement to meet the need
- Discuss proven strategies in overcoming the barriers to effective surgical care of disabling conditions
- Elaborate on some of the ethical controversies and dilemmas in meeting a service need in the context of limited available resources



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INSTRUCTORS



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OMM, CD, MA, MD,
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Hossam Elsharkawi
PhD



Jana MacLeod
MD, MSc, FRCS(C),
FACS, FRC(ECSA)



COURSE OBJECTIVES

Upon completion of the course, learners will be able to

- Understand the complexity of the global burden and trends of humanitarian disasters
- Understand the various phases of a humanitarian disaster and unique population needs and response tools at each stage
- Describe and critique select responses to humanitarian disaster
- Outline the essentials and enablers for adequate surgical care in any disaster response
- Prepare to deploy in disaster response operations at both professional and personal levels

Surgical Care in Humanitarian Disaster Response

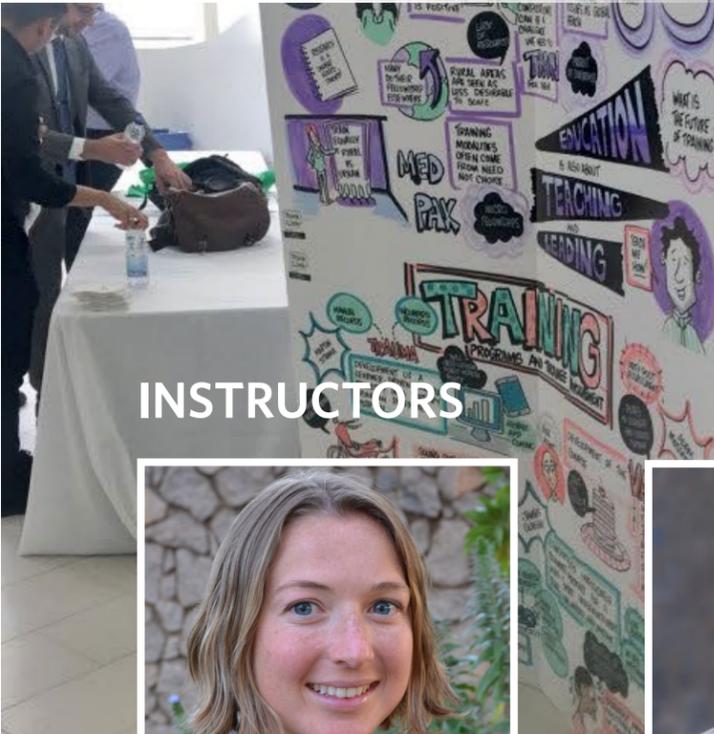
SURG 514 | 3 credits

Major disasters have been part of the human landscape since the dawn of history. To a greater or lesser degree, these have evoked a humanitarian response to help from survivors and from nearby witnesses. Over the past century, with increasing communication and travel and with the formation of international health organizations, response to disasters has increased in magnitude and in the number of actors. Although this increased response is positive in many aspects, it also creates a complex set of challenges related to coordination and standardization.

In this course, students will examine the current status of global activity by national and international responders to both natural and conflict-related humanitarian disasters with particular emphasis on the role of surgical care. Students will also address strategies to move from relief to recovery, and case models of surgical care responses in humanitarian disasters.



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INSTRUCTORS



Laura May Lee
 MSc, PhD



Shafique Pirani
 MBBS, FRCS

Program Planning and Evaluation in Surgical Care Low Resource Settings

SURG 516 | 3 credits

This course is an introductory, graduate-level course in program planning and evaluation in the surgical care context. The course will present theories, frameworks and approaches and will encourage critical reflection and application through online discussions and assignments. Students will learn the facets of program planning and evaluating public health programs, including community assessment, stakeholder involvement, program planning models, and logic models, community engagement, evaluation approaches and theories, quantitative and qualitative data collection and analysis strategies, evaluation design, implementation and reporting. Students will critically assess existing programs and will be challenged to reflect on ethical issues in program planning, implementation and evaluation, including their own social positioning relative to others and the implications that this has on surgical care practice in local and global contexts.



COURSE OBJECTIVES

Upon completion of the course, learners will be able to

- Explain the basic elements of program planning and evaluation in surgical care and illustrate the linkages between health program planning, implementation, monitoring and evaluation.
- Formulate an assessment plan for a particular population in a local or global context.
- Understand the importance of community engagement and the role of stakeholder involvement in program planning and evaluation.
- Demonstrate competence in developing program logic models and understand the linkages between the logic model components parts.
- Distinguish different types of evaluations and justify when to use certain approaches for evaluating surgical care programs.
- Become familiar with the professional evaluation standards, ethical guidelines for evaluation, and general ethical considerations in surgical care planning and evaluation.
- Critically assess the effectiveness, appropriateness and feasibility of surgical programs for specific local contexts and how this may be assessed through a formal evaluation process.



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INSTRUCTORS



Kishore Mulpuri
MBBS, MS (Ortho),
MHSc, FRCSC



Brian Westerberg
MD, MHSc, FRCSC

Clinical Research Methods for Surgical Procedures with Global Surgical Comparisons

SURG 517 | 3 credits

This course will emphasize approaches to clinical research that are different for surgical research compared to medical research. Students will learn many aspects of the research process from research proposal development, to data analysis and statistical methods used in surgical research, to grant writing. This course will also provide an opportunity for students to learn about systematic reviews, quality improvement and assurance, and technology evaluation in surgical research.

The student will select a research topic that will be relevant to their chosen field of study, where they will evaluate a surgical intervention in comparison to a medical intervention or comparing two surgical interventions and develop a research proposal in the form of a grant application for this topic. This will allow exploration and application of knowledge in surgical clinical research methods in general, and of the evidence base for what methods are most effective.



COURSE OBJECTIVES

Upon completion of the course, learners will be able to

- Identify clinical research methods in surgical care and the importance in clinical practice
- Identify the specific needs and challenges associated with surgical clinical research and apply knowledge by designing a surgical research study proposal and assessing a surgical trial
- Identify differences and assess types of research approaches, methodologies and study designs
- Describe general ethical considerations, new technologies, patient safety programs leading to quality improvement in surgical care research and illustrate approaches to address them



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INSTRUCTORS



Nadine Caron
MD, MPH, FRCSC



Jane Lea
BSc, MD, FRCSC



Melanie Morris
BSc, MD, FRCSC

Surgical Care in Canada's Rural and Remote Indigenous Communities with Global Comparisons

SURG 518 | 3 credits

This online course critiques the current and historical provision of surgical care services in rural and remote indigenous communities in Canada and in other higher income countries. It examines the challenges and opportunities confronting both the clinician and the service delivery system, embracing lessons learned from these communities. It provides a graduate level understanding of the issues involved and prepares the course participants for leadership both in surgical care delivery systems and in advocacy for addressing care disparities.

COURSE OBJECTIVES

Upon completion of the course, learners will be able to

- Comprehend and be able to critique some of the historical reasons influencing the health status indicators, particularly those relating to surgical care, in rural and remote Indigenous communities of Canada
- Be able to discuss how Canada's surgical care delivery to its rural and remote Indigenous communities compares with that in other high and middle income countries, in light of the United Nations Declaration on the Rights of Indigenous Peoples
- Have an understanding, gained from listening to the voices of Indigenous individuals with surgical care needs of their unique social circumstances that influence health care
- Be able to articulate and defend strategies to address the disparities in surgical care between rural and remote Indigenous communities and mainstream urban communities in the Canadian setting



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Robert Baird
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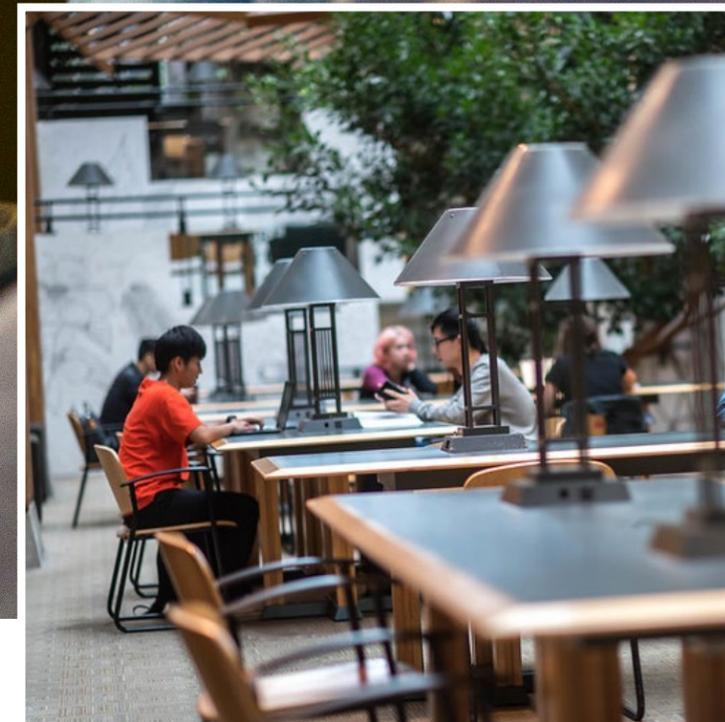
Charles Mock
MD, PhD, FACS

Directed Study in Global Surgical Care

SURG 542 | 3 credits

This course provides a means for Master of Global Surgical Care (MGSC) students to undertake a customized project, designed to provide an opportunity to develop and strengthen their knowledge in global surgical care and to accommodate special research interests that cannot be met through other MGSC courses.

Students will carry out an exhaustive search of the world literature, on a global surgical care topic. Topics will be chosen by the student in the specialty discipline in consultation with a faculty advisor to support in-depth learning of the current state of knowledge in that topic and to explore knowledge deficits that need to be addressed. This course will promote knowledge acquisition and critical thinking for the student and contribute significantly to the education of peers and to UBC's global surgical care knowledge repository.



COURSE OBJECTIVES

Upon completion of the course, learners will be able to

- Identify impediments in providing patients in low-resource settings the required surgical care
- Analyze the reasons behind and the relevant factors contributing to the impediment
- Collaborate with colleagues locally, nationally and internationally to coordinate efficient solutions to identified impediments in provision of surgical care to patients in low-resource settings
- Establish a framework to work within to develop creative and/or novel solutions to improve surgical care provision to patients in low-resource settings
- Acquire additional knowledge in a learner chosen discipline or field of specialization in the area of global surgical care provision
- Demonstrate self-directed and life-long learning education skills in the field of provision of surgical care in low-resource settings



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INSTRUCTORS



Emilie Joos
MD, FRCSC



Peter O'Brien
MD, FRCSC



Global Surgical Care Field Practicum

SURG 560 | 6 credits

This online graduate course, prepares students for the transition into independent global surgical care practitioners. Students will develop detailed project proposals, including project definitions, literature reviews, research methodology designs, ethics considerations, and budget allocation in preparation for a four to eight week field on-site practicum in a low resource setting globally.

The field practicum will facilitate the 'on-the-ground' development and integration of knowledge and skills gained from the coursework. It provides candidates with the opportunity for additional practical skill development in their specialties and regions of interest and is designed to help facilitate their transition into independent global surgical care practitioners.

COURSE OBJECTIVES

Upon completion of the course, learners will be able to

- Articulate and defend the value of a field practicum to consolidate learning of surgical care in low resource settings globally
- Conceptualize and design a surgical care project in a research format for a low resource setting globally
- Create and submit a formal request of a global surgical care project for standard ethics approval
- Implement and evaluate an approved surgical care project in a global underserved setting
- Prepare and complete a paper on a global surgical care project
- Articulate and discuss the barriers to successful global surgical care projects



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