PROJECT SHOWCASE

We undertook a variety of projects in 2015/16 in the areas of learning resource development, research & scholarship, program support, and service.
Health Information Act Training Course
Christine Wagoner, Health Information Privacy Advisor
Faculty of Medicine & Dentistry

The Health Information Act Training Course is a self-directed online course intended for University of Alberta faculty, staff, and students who work with identifiable health information. The course covers basic components of the Act, including rules around collection, use, and disclosure of health information; the duty to protect or safeguard health information; the individual’s right to access and correct their own health information; and specific considerations when using electronic medical records.

Blended Otolaryngology
Nahla Gomaa, Division of Otolaryngology

Blended Otolaryngology combines online self-study resources with a face-to-face seminar. The goal of the course is to enhance learning engagement in the development of cognitive, affective and psychomotor abilities, in accordance with the CanMED requirements. We assisted in course design and production.

Physiology Online
Department of Physiology

We are working with the Department of Physiology to develop an online introductory course in Human Physiology (PHYSL 210). We assisted in the development of a course template, production of illustrations, assistance with recording of audio, video, and transcription services, and the development of support materials.
Project Showcase: Online learning

**Dental Hygiene Local Anesthetic Continuing Education**  
Rachelle Pratt, Dental Hygiene

This resource site is meant to serve as an online classroom for the Local Anaesthesia for Registered Dental Hygienists Course. The course supplements a 3-month home study by participants. The course includes lectures, demonstration videos, and electronic versions of the course manual. We provided pedagogic and technical assistance in redevelopment and digitalization of these pre-clinical preparation modules.

**Pediatric Rheumatology**  
Mercedes Chan, Department of Pediatrics;  
Kristin Houghton, Department of Pediatrics, UBC

This online course, which includes a new developed competency-based model, is planned for use at the University of Alberta and University of British Columbia. Designed for a flipped-classroom approach, the course includes self-study resources, and asynchronous activities which allow learners to interact with peers and clinical supervisors at both institutions in semi-structured discussion. We helped to adapt the paper-based course for online delivery, and the production of the online course and interactive components.
Project Showcase: Self-study Resources

**Oral Pathology Digital Manual**  
Seema Ganatra, School of Dentistry

A digital oral pathology manual for dental students and practitioners, this e-book covers common pathologies affecting the soft tissues of the mouth, head and neck. The eBook format provides students with convenient access to descriptions, reference photographs, and prescription guidelines. We assisted with the design and production of the book. The first volume covering soft tissues will be available in the Fall of 2016, with a second volume dedicated to hard tissue pathology scheduled for 2017.

**Open Physics**  
Jonathan Sharp, Radiation Therapy

Funded by OER Alberta, Open Physics is a collection of reusable learning objects using engaging interactive graphics and animations, designed for first-year college and university learners, and depicting atomic, nuclear and radiation physics concepts and processes. We provided pedagogic, design and coordination services to the project, which is available under a Creative Commons Attribution-ShareAlike license.

**Interventional Radiology Procedures**  
Suki Dhillon, Department of Radiology

Interventional Radiology Procedures is an open-access reference to interventional radiology (IR) procedures. The site features open-access articles written by experts, and is open to medical professionals, learners at various stages of training, and the general public. We consulted on the design and development of the website.
Diminutive Polyp Analysis with Narrow Band Imaging
Pernilla D’Souza, Division of Gastroenterology
This online training module introduces learners to diminutive polyp analysis with narrow band imaging (NBI), an optical imaging technology that enhances the visibility of vessels and other tissue on the mucosal surface. The course includes video-based instruction and assessment. We assisted in course production and video editing.

Dental Hygiene Instrumentation Video Series
Sally Lockwood, Dental Hygiene
This video series is intended to assist dental hygiene students prepare for the clinical portion of their education. The series consists of eight videos demonstrating various common periodontal instrumentation techniques. With funding from the School of Dentistry’s Educational Research & Scholarship Fund (ERSF), Professor Lockwood will expand the series and assess its impact on student learning. We provided assistance with video editing and publishing.

Oral Surgery Videos
Reena Talwar, School of Dentistry
This project involved the creation of a series of videos covering oral surgery techniques. The videos, which are intended to serve as a reference to third and fourth year students, cover a number of basic topics in oral surgery, which will grow over time. We provided instruction design strategy, software support, and assistance in the creation of narrated videos.
Medical and Dental Icons
Chris Brodt, Academic Technologies

We designed and published a series of medical and dental icons on the Noun Project, a website that aggregates and catalogs symbols that are created and uploaded by graphic designers around the world. We published a set of icons from selected projects and made them available under a Creative Commons Attribution license.

Illustrations for GI 101
Dan Sadowski, Division of Gastroenterology

We created illustrations used in the podcast, GI 101, on the topic of GI motility. The illustrations were created so that they could be manipulated to create simple animations of peristalsis. We assisted in the conception and creation of illustrations.
LiveBook
Eleni Stroulia, Department of Computing Science, Sarah Forgie, Clarence Wong, FoMD

LiveBook is a virtual patient simulation platform which challenges learners to formulate a diagnosis and a treatment plan in a free-form manner. Learners are presented with cases, from which they must elicit information by asking free-text questions, to which the system responds with pertinent facts. The goal of the project is to create a natural interaction, in which learners engage in dialogue in way that simulates real-life scenarios and the ambiguity of clinical encounters.

RETAIIN Training Game for Neonatal Resuscitation
Vadim Bulitko, Jessica Hong, Kumar Kumaran, Ivan Swedberg, William Thoang, Georg Schmölzer

RETAIIN is a simulation game intended to enhance training of neonatal resuscitation. The game was designed and implemented by students in CMPUT 250 (Jessica Hong, Ivan Swedberg, William Thoang). The project was carried out in collaboration with Vadim Bulitko (Computing Science), Georg Schmölzer and Kumar Kumaran (Pediatrics). We assisted with the writing of the project brief, providing feedback to students, and contributed to a paper describing the project.

Card-based Simulation for Transfusion Medicine
Lauren Bolster & Kathleen Wong
Department of Hematology

On-call transfusion medicine (TM) physicians must rapidly interpret lab values, issue blood products, manage inventory and communicate with clinical and laboratory staff. This project is a card-based small group activity that simulates on-call experience in transfusion medicine for hematology residents. Learners must practice optimal decision-making under pressure, taking into account time required to return lab results, deliver product, and product shortages. We assisted in the conception, design and printing of the cards.
Physician Learning Program Advertisement
Physician Learning Program

We worked with the Physician Learning Program (PLP) to design an advertisement to promote opportunities for physicians to earn self-assessment credits by working with PLP. We assisted in the copywriting and design of a magazine insert for the Canadian Medical Association Journal.

Patient Immersion Experience 2015
Arts & Humanities in Health & Medicine, MD Program

We created materials to promote the exhibition of student artwork arising from the Patient Immersion Experience – a program which pairs medical students with patient mentors as a part of physicianship block. The materials include an exhibit poster, handbill, digital ads, and website banners.

2016 MD Program Prospectus
MD Program

The MD Program booklet is a print prospectus for potential applicants to the Doctor of Medicine program. We assisted in the writing and redesign of the booklet. In addition, we designed new large-format vinyl banners. The booklet features photographs taken by Gregory Sawisky (c2016), a recent graduate of the MD program. The booklet and banners were designed by Ashley Truong (BDes 2016).
Eating and Drinking Before Surgery Handout
Jeanette Lawrence, Enhanced Recovery After Surgery, Alberta Health Services

Enhanced Recovery After Surgery (ERAS) introduces new surgical care protocols drawing from best practices around the world. Specifically, ERAS places a focus on patients and family involvement and understanding of good care to promote recovery. Ashley Truong, a summer student under our supervision, worked with the director of Enhanced Recovery After Surgery, Alberta (AHS) and clinical staff, to redesign patient education materials for related to eating, drinking, and exercise before and after surgery. The materials are published on the Enhanced Recovery After Surgery section of the MyHealth Alberta website. [https://myhealth.alberta.ca](https://myhealth.alberta.ca). The project was funded through an AHS student scholarship.

Introduction to Quality Improvement Presentation and Facilitator Guide
Dr. Khalid Aziz, Department of Pediatrics

We assisted Dr. Aziz in the development of an introductory workshop and facilitator guide to Quality Improvement using the Evidence-based Practice for Improving Quality (EPIQ) for developing countries. EPIQ is an evidence-based multidimensional approach to quality improvement focused on changing organizational culture and sustained behavioural change, by selectively targeting hospital-specific practices for intervention, and reducing reliance on intuition. We provided pedagogic, editorial, and design support. Piloted in Ethiopia, and successfully delivered at the 2016 annual convention of the Canadian Neonatal Network, this workshop is being delivered in the developing world, including India.