Faculty of Medicine and Dentistry—Department of Surgery

Undergraduate Surgical Education
Annual Report 2012-2013

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SURG546 Clerkship Director
Dr Kam Fathimani
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Our undergraduate program remains one of the strongest and most innovative in the country, and our faculty continues to excel in undergraduate teaching. The Class MD 2013 scored above the national average in the Surgery component of the MCCQE Part 1.

Thirty of the graduating class of 2013 took up positions in surgical residency training, a rate of approximately 1 in 6.

Program evaluation and student achievement data continue to show sustained high performance by our faculty and students. We continue to offer high-quality surgical teaching at 6 hospital sites across Edmonton and in St Albert and Fort Saskatchewan.

Our undergraduate education team has continued to lead the way and innovate in the use of new teaching technologies. Our clerkships switched to the new curriculum system MedSIS in September 2012, a year before implementation in other clerkships and have learned much about the strengths and weaknesses of the new system.

Our series of ‘Surgery 101’ podcasts has continued to attract much attention worldwide. 2013 saw us exceed 150 episodes and 1,000,000 downloads in over 170 countries. This year, we launched a new Surgery 101 app for the iPhone and a new Surgery 101 website, and partnered with the School of Business to explore the field of online marketing.

Our program of research in surgical education has continued to grow, with grant-funded research projects, publications, presentations and an increasing number of graduate students pursuing advanced degrees in Education. Our team presented 13 projects at the 2013 Canadian Conference in Medical Education.

Multiple members of our team received teaching awards this year, for Research Enhancement (Shannon Erichsen), preclinical and clinical teaching (Drs Allan Ho and Kamran Fathimani) and for innovation in education research (Dr Jonathan White).

We have now established the Summer Studentship Program in Surgical Education; in 2013, there were 7 summer students conducting various projects in the field of surgical education.
Mission and Vision

The mission of undergraduate surgical education at the University of Alberta is to:

- Provide undergraduate students with teaching in surgery to prepare them for their future roles as family doctors, hospital specialists or surgeons. The surgical education we provide must be relevant, interesting, effective, efficient and responsive to the changing needs of students and faculty.
- Support, develop and reward our faculty in their roles as surgical educators.
- Utilize educational research to evaluate innovative educational methods for possible adoption into our curriculum.

Our vision is that by 2013, undergraduate surgical education at the Department of Surgery will:

- Continue to provide students with knowledge, skills and attitudes to enable them for their future roles as doctors, by engaging them in an undergraduate program which communicates the enthusiasm of our faculty or careers in surgery and for surgical practice in general.
- Deliver more interactive, innovative, enjoyable and effective teaching compared to other departments within the Faculty and to other departments of surgery nationally. Utilize a range of assessment and evaluation tools which have high reliability and validity.
- Develop a faculty whose members are interested in and enthusiastic about undergraduate surgical education, who are keen to improve their skills as surgical educators, and who contribute willingly to a variety of educational activities.
- Provide meaningful reward and recognition to our faculty members for the time they invest in preparing for and delivering surgical education.
- Publish on a variety of surgical education topics.
- Develop and maintain close connections with other Departments of Surgery.

Courses Offered

The Department of Surgery offers the following courses to undergraduate medical students:

- SURG546-General Surgery, Anesthesiology & Pain Medicine clerkship
- SURG556-Speciality Surgery clerkship
- Elective attachments in General Surgery and Speciality Surgery

Our faculty members also contribute to other preclinical courses as tutors in the Discovery Learning and Gilbert Scholars programs, and many also provide lectures and small group teaching sessions in the preclinical blocks.
Student Performance in 2012-2013

SURG 546 General Surgery, Anesthesiology & Pain Medicine
152 of 152 students of the Class of 2014 in the mandatory rotation SURG 546 were issued passing grades in General Surgery at the end of the 3rd year of the MD Program in August 2013.

SURG 556 Speciality Surgery
180 of 180 students of the Class of 2013 in the mandatory rotation SURG 556 were issued passing grades in Speciality Surgery at the end of the 4th year of the MD Program in May 2013. Our data shows that we were able to accommodate “The Bubble” class with the same level of experiences as previous classes with no issue. The Class MD 2013 scored above the national average in the Surgery component of the MCCQE Part 1.

Faculty Performance in 2012-2013

Our Department provided a total of 3302 learning encounters for medical students in the academic year 2012-2013 (a ‘learning encounter’ is defined as an educational experience taking place between a student and a teacher). 213 of our department members were engaged in formal education of our undergraduate students, an increase from the previous year (165 members). Informal teaching was also provided by the residents in our various divisions. Program evaluation data for this year has shown continued improvement across all of our undergraduate rotations. (see Appendix 1).

The average number of learning encounters per teaching surgeon per year was 17. The median student rating of our preceptors was 4.47 out of 5. Forty-nine members of our department provided a total of 313 teaching hours in our mandatory clerkships with a median student rating of 4.40 out of 5 (these figures do not include sessions in the Gilbert Scholars program, the pre-clinical blocks and Discovery Learning). A summary of the educational activity of our various divisions is attached in Appendix 2.

Teaching evaluation scores were issued to all of our Department members in January 2014.

This teaching evaluation data was used to identify the Top 10 Teachers in our two undergraduate courses, and these educators will be honoured at the Department’s annual Awards Dinner in May 2014.

Top 10 Teachers
General Surgery 2012-2013
Dr. Ghassan Alhassani
Dr. Klaus Buttenschoen
Dr. Michael Chatenay
Dr. Curtis Ciona
Dr. Kam Fathimani
Dr. Ramesh Juta
Dr. Shahzeer Karmali
Dr. James Stewart
Dr. Jonathan White
Dr. Walter Yakimets

Top 10 Teachers
Specialty Surgery 2012-2013
Dr. Niels Jacobsen
Dr. Dan O’Connell
Dr. Keith Rourke
Dr. Blair St. Martin
Dr. Ken Stewart
Dr. Gerry Todd
Dr. Jon Toy
Dr. Azim Valji
Dr. Tim Wollin
Dr. Erin Wright
Course Descriptions

SURG546 General Surgery, Anesthesiology & Pain Medicine

Course Coordinator: Dr Kamran Fathimani
Course Co-Coordinator Anesthesiology: Dr Ron Cheng
Course type: 3rd year, mandatory
Course length: 7 weeks, 6 times per year

SURG546 — Educational Goals

The 3rd year program in General Surgery, Anesthesiology & Pain Medicine is intended to build on students’ knowledge of the structure and function of the body acquired in preclinical education, and to allow them to refine the history-taking and examination skills that they were introduced to in Years 1 and 2.

This program also aims to help the student to develop skills to manage their own learning, along with clinical and practical skills.

SURG546 — Format

Students complete two 3-week rotations, usually rotating between a community hospital (Grey Nuns, Misericordia, Sturgeon or Fort Saskatchewan Hospitals) and a trauma centre (Royal Alexandra or University of Alberta Hospitals).

For each rotation, students are assigned to a team of surgeons and residents; teaching takes place on the wards, in the outpatient clinic and in the operating room, and students are expected to be present for rounds and to take call with their team up to every fourth night. Students are expected to be able to perform a basic history and physical examination on elective and emergency patients and to present their findings to the team. Students also spend a total of 4 days working with an anesthesiologist in the OR.

SURG546 — Instructional Methods

Formal and informal instruction is provided by faculty members and residents. The document “Educational Objectives in Undergraduate Surgical Education” is provided to all students through the clerkship website. This includes sections on Learning Skills, Clinical Skills, Practical Skills and Principles of Surgery, as well as more traditional system-based objectives. Students are given a list of recommended textbooks and online learning resources. Each student is also provided with the ‘Learning Surgery’ document which contains information on the clerkship and answers frequently-asked questions. All of this material is also available on the clerkship website, http://surgeryanesthesia.org.

A class meeting is held at the midpoint of the clerkship to discuss student experiences and to ensure that all students are making satisfactory progress.
SURG 546—Assessment

Assessment methods are directly linked to the learning objectives provided to the students, and students are given examination blueprints and sample marking sheets for all components of their assessment. Students receive formative assessment throughout the clerkship through team-based assessment. All students also receive a summative assessment of their performance on the clerkship, comprising:

- a multiple choice examination (MCQ)
- a 12-station Objective Structure Clinical Examination (OSCE)
- a reflective written or learning/wiki assignment

Team-based assessment provides students with formative feedback on their performance throughout the rotation. Students are given the responsibility of gathering the following assessment forms before the end of the clerkship: 4 assessments by a Surgeon, 4 assessments by an Anesthesiologist, 2 assessments by a Chief Resident, 2 assessments by a Senior Resident, 2 assessments by an Operating Room Nurse, 2 assessments by an Allied Health Professional and 6 assessments by a Patient. In addition, students receive assessments from Peers, and an Administrator from the Undergraduate Office of Surgical Education.

The clerkship director meets with all students at the end of the examination to review their experiences, ensure that all students have been exposed to the core clinical conditions, and to discuss ways in which the clerkship can be improved. Students who have not encountered all of the core conditions are provided with additional targeted opportunities to address this deficiency in the final week of the clerkship.

To be awarded a passing grade, students must obtain:

- at least 50% in the MCQ
- 50% in at least 9 of the 12 OSCE stations, with an overall OSCE mark of at least 60%
- at least 50% in the written or learning/wiki assignment
- no more than two forms with a score of “1” or “2” (out of 5) in MSF assessments

SURG546—Program Evaluation

All students are required to complete a standardized, anonymous online evaluation form on faculty members and residents they have encountered, and also on the clerkship itself. Data from these evaluations is aggregated annually to provide anonymised feedback to individual preceptors, residents and clerkship coordinators.
Course Descriptions

SURG556 Specialty Surgery

Course Coordinator: Dr Rob Chan
Course type: 4th year, mandatory
Course length: 6 weeks, 4 times per year
Class size: 2 rotations of 43 students and 2 rotations of 47 students

SURG556 — Educational Goals

The 4th year program in Speciality Surgery is intended to build on students’ knowledge of surgical principles and the practice of General Surgery acquired in years 1-3. Students are expected to continue to demonstrate their mastery of learning objectives in the domains of Learning Skills, Clinical Skills, Practical Skills and Principles of Surgery.

SURG556 — Format

Students complete three 2-week rotations chosen from the following 8 specialities:
- Cardiac Surgery
- Neurosurgery
- Orthopedics
- Otolaryngology/Head and Neck Surgery
- Plastic Surgery
- Thoracic Surgery
- Urology
- Vascular Surgery

For each rotation, students are assigned to a team of surgeons and residents; teaching takes place on the wards, in the outpatient clinic and in the operating room, and students are expected to be present for rounds and to take call with their team up to every fourth night, with no overnight call. Students are expected to perform a basic history and physical examination on elective and emergency patients and to present their findings to the team.

SURG556 — Instructional Methods

Students are expected to cover objectives from all 8 specialities available, not just the 3 they rotate through. Formal and informal instruction is provided by preceptors and residents. The document "Educational Objectives in Undergraduate Surgical Education" is provided to all students; this document contains specific learning objectives relating to Speciality Surgery.
Students are given a list of recommended textbooks and online learning resources. Each student is also provided with the ‘Learning Surgery’ document which contains information on the clerkship and answers frequently-asked questions. Students are also required to complete an online patient encounter log during their 3 attachments. All of this material is also available on the clerkship website http://specialitysurgery.org. A series of Speciality Surgery seminars is also provided in a weekly academic half day:

- Cardiac Surgery
- Burns
- The Hand
- Head Injury
- Spinal Injury
- Cerebral Vascular disease
- Laryngology
- Head and Neck cancer
- Diseases of the Ear
- Rhinology
- Pediatric Urology
- Genitourinary Imaging
- Clinical Orthopedic Radiology
- Osteoarthritis
- Disorders of the Knee
- Disorders of the Shoulder
- Disorders of the Spine
- Application of plaster casts
- Orthopedic Emergencies
- Thoracic Surgery
- Vascular Surgery

SURG556 — Instructional Methods

Assessment methods are directly linked to the learning objectives provided to the students, and students are given examination blueprints and sample marking sheets for all components of their assessment. Students receive formative assessment throughout the clerkship through team-based assessment. All students also receive a summative assessment of their performance on the clerkship, comprising:

- a multiple choice examination (MCQ)
- a reflective written or learning/wiki assignment

Team-based assessment provides students with formative feedback on their performance throughout the rotation. Students are given the responsibility of gathering the following assessment forms before the end of the clerkship: 6 assessments by a Surgeon, 2 assessments by a Resident, 2 assessments by an Allied Health Professional and 6 assessments by a Patient. In addition, students receive an assessment from an Administrator from the Undergraduate Office of Surgical Education.

The multiple choice examination is usually held in the last week of the rotation. The clerkship director usually meets with all students at the end of the clerkship to review their experiences, and to discuss ways in which the clerkship can be improved. To be awarded a passing grade, students must obtain:

- no more than one “2” rating per preceptor assessment (averaged across 3 assessments)
- at least 50% in the MCQ
- at least 50% in the written or learning/wiki assignment.

SURG556 — Assessment

All students are required to complete a standardized, anonymous online evaluation form on the preceptors and residents they have encountered, and also on the clerkship itself. Data from these evaluations is aggregated annually to provide feedback to individual surgeons, residents and clerkship coordinators.
Elective Attachments

207 students chose to carry out elective attachments in Surgery in 2012-2013.

We offer a “12-hour elective” program in the first and second years of the MD degree, designed to provide pre-clinical students with an introductory experience to surgical practice. Typically, students accompany a consultant surgeon for 2-3 days, spending 4-5 hours per day in endoscopy, outpatients, minor operations and the operating room. Students are expected to observe normal practice and assist with procedures, but are not required to be on call or provide direct clinical care. There are no learning objectives specified for the experience, although preceptors do complete a brief assessment of the student’s behaviour during the elective. Student feedback for these sessions has been very positive, and many members of our Department are engaged in the program.

We also offer longer elective attachments in General and Specialty Surgery to students across the country who are in the clinical years of their MD Degree. Typically these are offered to students considering entry into a Surgical Residency Training Program, and those seeking more experience in a specific field of Surgery. Students are assigned to a single preceptor for a 2-3 week period and join a surgical team for the duration of their rotation. Teaching takes place on the wards, in the outpatient clinic and in the operating room, and students are expected to be present for rounds and to take call with their team up to every fourth night. Students are expected to perform a basic history and physical examination on elective and emergency patients and to present their findings to the team. Given the diversity of students’ educational needs during these elective attachments, no learning objectives are specified for the experience, although preceptors do complete an assessment of the student’s performance during the elective, as dictated by the medical school to which they belong.

This year also saw us offer our first electives in surgical education. This program allows a student to join our education team for 2-3 weeks and get involved in teaching and developing curriculum content.

All elective students are required to complete a standardized, anonymous online evaluation form in the same way as students in the mandatory clerkships, and data from these evaluations is included in the annual program evaluation.

Number of electives per Division 2012/2013

- Cardiac Surgery: 8
- General Surgery: 55
- Neurosurgery: 16
- Orthopedic Surgery: 25
- Otolaryngology: 25
- Plastic Surgery: 46
- Thoracic Surgery: 0
- Urology: 28
- Vascular: 1
- Surgical Education: 3
Highlights of the Year

2013 was another year of growth and change for undergraduate surgical education at the University of Alberta. Our program remains one of the strongest and most innovative in the country, and our faculty continues to excel in undergraduate teaching. Our clerkships and electives programs remain strong at six sites across Northern Alberta, with high-quality teaching being offered in Edmonton, St Albert and Fort Saskatchewan.

Program evaluation and student assessment data demonstrate continued high achievement; 30 of the graduating class of 2013 chose to enter surgical residency.

Our team also continued to renew itself this year, with the appointment of two new clerkship directors for our courses in undergraduate surgery. Dr Allan Ho replaced Dr Rob Chan as the Director of the Year 4 course, while Dr Heather Cox replaced Dr Kam Fathimani as Director of the Year 3 course. Karee Moffatt also joins us as the Year 3 Medical Education Program Assistant while Jenni Marshall is on maternity leave. We are excited about the fresh ideas and new directions that our new team members will bring with them.

Our series of ‘Surgery 101’ podcasts continues to expand - in summer 2013, we exceeded 1 million downloads in more than 170 countries. The 120 episodes of Surgery 101 have also been published as peer-reviewed learning resources on MedEdPortal. The podcasts are available for free from www.surgery101.org and the iTunes Music Store. This year, we partnered with the School of Business and with Grant McEwan University to further develop this resource. Our online education initiative continues to grow, and the surgery clerkship wiki websites contain multiple learning resources, videos and reflective submissions written by our own students.

In September 2012, our clerkships switched to the new curriculum system MedSIS, a year before implementation in other clerkships, and have learned much about the strengths and weaknesses of the new system. We continue to be leaders in innovation in our medical school.

Our program of research in surgical education has also continued to grow, with multiple manuscripts submitted and presentations given at national and international meetings. We have published papers on a variety of topics including the use of the IPhone, Facebook and TV drama in education, resident-student shadowing and resident fatigue. Our work on wiki website technology was presented at CAGS 2012 and our team presented a total of 13 papers at the 2013 Canadian Conference on Medical Education. Details of our presentations and publications are given in the Appendix.

2012 also saw the establishment of the Summer Studentship in Surgical Education program. In 2013, there were a total of 7 summer students conducting various projects in the field of surgical education. We also initiated a new collaboration with the Digital Media and IT unit of NAIT, and have been working with film-makers on our ‘Surgery 101 Studios’ project. At the end of the summer, our students presented their work to a special meeting of the League of Surgical Educators.
The number of residents enrolled in the new Masters in Health Sciences Education has continued to increase, and we hope this will facilitate further expansion of our education research program. This year our successful annual Teacher-Training Workshop for residents in Core Surgery entered its sixth year; we have now delivered this workshop to almost 200 surgical residents.

Members of the undergraduate surgery team were also honoured with a number of teaching awards this year. Shannon Erichsen was named as the winner of the Support Staff Research Enhancement Award for her work with summer students. Dr Kam Fathimani received the W.A. Shandro Award for Teaching Excellence in Clinical Surgery, while Dr Allan Ho was awarded the Gilbert Scholars Preceptor of the Year and Dr Jonathan White won the David Cook Award for Innovation in Medical Education.

In summary, our undergraduate surgical education program continues to grow and change, to innovate, and to expand its horizons. The future is exciting. We would like to offer our sincere thanks to all of our faculty for their continuing engagement and support of undergraduate surgical education.

Dr Jonathan White  
Senior Director of Undergraduate Education  
Associate Professor & Tom Williams Chair in Surgical Education  
Department of Surgery, University of Alberta
The UOSE team has had a fantastic year working together tweaking an already well performing system and achieved great results. We look forward to the challenges that the 2012-2013 year will bring us.

CONTACT US

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tel: 780.735.5455
fax: 780.735.5459
## Undergraduate Surgery Programs 2007-2008 to 2012-2013

### General Surgery

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### Specialty Surgery

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APPENDIX 2: UNDERGRADUATE SURGICAL EDUCATION COMMITTEE 2012-2013 MEMBERSHIP

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<td>Chair, Department of Surgery</td>
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APPENDIX 3: PUBLICATIONS AND PRESENTATIONS 2012-2013

Peer Reviewed Original Work


Peer Reviewed Abstracts


2. Measuring the Effectiveness of Faculty Facilitation Training in Problem-Based Learning in a Medical School. T. Paslawski, R. Kearney, J White. Medical Education 2013; 47 (Suppl. 1) 41.


Peer Reviewed Podcasts


APPENDIX 3: PUBLICATIONS AND PRESENTATIONS 2012-2013

Presentations and Posters

2. The Effects of Technology on Surgical Education. Surgeon’s Travel Club, Edmonton, June 2013.
5. Measuring the Effectiveness of Faculty Facilitation Training in Problem-Based Learning in a Medical School. T. Paslawski, R. Kearney, J White. Canadian Conference on Medical Education, Quebec City, April 2013.
6. “It’s on my iPhone”: attitudes to the use of mobile computing devices in medical education, a mixed-methods study. S Wallace, M Clark, J White. Canadian Conference on Medical Education, Quebec City, April 2013
14. Real Strategic Planning. Education Retreat, Department of Anesthesiology & Pain Medicine, Edmonton, December 2012.
18. The Singularity and You. Graduate course on Technology and the Future of Medicine (LABMP 590), University of Alberta, October 2012.