The theme of this year’s Department of Surgery Annual Report is social responsibility.

There are a wide variety of initiatives underway in which our Department members exemplify their commitment to our local, national, and international communities in research, education, and patient care.

From a research perspective, our clinicians and scientists across all subspecialties contribute to multi-institutional trials as well as wide scale population-based registries such as ICES (Institute for Clinical Evaluative Sciences); from which key research findings by Western Department of Surgery members are already emerging on topics of national and international interest such as the impact of sleep deprivation in surgeons.
We are also fortunate to host and train scholars and students from countries around the world as we work together to improve global health. This report highlights many such examples of our Department members’ wide span of outreach and education initiatives and our commitment to our community across all subspecialties.

Our members have an extensive presence at international meetings and universities while collaborating to advance new and innovative surgical techniques and technologies. Department members served as lecturer or guest professor in more than 25 countries in 2013 at approximately 200 engagements. In addition, Department of Surgery members serve in key leadership roles within our region as well as in national and international associations and journals.

I would also like to focus on the commitment to philanthropy at the Schulich School of Medicine & Dentistry, Western University, the London Health Sciences Foundation and the St. Joseph’s Health Care Foundation by our members and community partners. Together, we have successfully established endowed Chairs, granted teaching awards, and dedicated the internationally recognized Roth McFarlane Hand and Upper Limb Centre. By investing in and supporting our leadership, our learners, and our facilities, we are building a sustainable and inclusive health care and education system with a global impact.

Please join me in recognizing all my colleagues in the Department of Surgery, Schulich School of Medicine & Dentistry, Western University, for their outstanding accomplishments this year.
Providing Innovative and State of the Art Treatment and Training

The “Heart-Team” model has revolutionized patient care in the Division of Cardiac Surgery and beyond.

Working as a team with members of the Division of Cardiology, and Department of Medicine and perioperative care, physicians and surgeons work together to decide on the best treatment approach for each individual patient; resulting in less need for outside consultation, better coordinated care, and ultimately, better patient outcomes. Patients also receive services from the Cardiac Rehabilitation and Secondary Prevention Program at St. Joseph’s Hospital London. “This Heart-Team model has been very well received by our Community Hospital partners as well”, said Dr. Kiaii, Chair/Chief, Division of Cardiac Surgery, Department of Surgery, Western University & London Health Sciences Centre (LHSC). “There is a good understanding of our specialized cardiac care model and a more efficient use of resources within our Local Health Integrated Network (LHIN).”
Members of the Division provide educational rounds across South Western Ontario, from Windsor to Kitchener to Goderich, while international physicians from around the globe regularly visit London to learn more about our care model as well as innovative surgical techniques pioneered at London Health Sciences Centre including assist devices, transcatheter valve treatment, and minimally invasive robotic surgery. With a strong focus on education, Dr. Mackenzie Quantz continued to serve as the Chair of the Specialty Committee in Cardiac Surgery and Dr. Richard Novick serves as Chair of the Royal College Examination Board in Cardiac Surgery.

Members of the Division of Cardiac Surgery achieved several clinical firsts and participated in key multi-centre research projects. Dr. Dave Nagpal led the Ventrical Assist Device Program, implanting the HeartMate II Left Ventricular Assist Device (LVAD), developed by Thoratec Corporation, in four patients at LHSC. “The device increases blood circulation which allows patients to better participate in rehabilitation and enhance their nutritional status,” said Dr. Nagpal. “Ultimately, they are stronger and better transplant candidates.”

The cardiac team was also the first in North America to use the Geko™ blood circulation device and first in the world to use the device in cardiac surgery. The device is designed to increase blood flow by activating muscle contractions in the lower leg that return blood back to the heart, emulating the blood flow rate normally achieved by walking (up to 70 per cent), without the patient having to move or exert energy when bed rest is required.

Dr. Richard Novick is involved with the Hamilton-based Population Health Research Institute (PHRI) in the COMPASS study. A global study, it is the largest ever done study that investigates whether the drug rivaroxaban will prevent cardiovascular death, myocardial infarction and stroke in patients with coronary artery disease (CAD) or peripheral artery disease (PAD). Division members are also co-investigators on projects led by scientists at CERI, Robarts Research institute, and the Lawson Health Research Institute.

Social responsibility and outreach also played a key role in the Division. Dr. ML Myers presented at the fifth annual Culture Days weekend in Toronto. The event raises awareness, accessibility, participation and engagement of Canadians in the arts and cultural life of their communities. Initiated by The Canadian Arts Summit, Culture Days is also supported by the Canada Council for the Arts, Culture pour tous and The Banff Centre. Dr. Michael Chu returned to Peru for humanitarian medical work with the organization CardioSalud, seeing about 200 patients and volunteering at the local orphanage. Dr. Ray Guo made his second trip to Taiyuan, China to offer free medical treatment to local individuals in need through the Taiyuan Charity Federation.

The Division of Cardiac Surgery has had a very productive and effective year and we will continue our quest to provide the most innovative and state of the art treatment of cardiovascular disorders to patients locally, nationally, and internationally.
Enhancing Health Care with Community Collaboration and Clinical Research
The Division of General Surgery has had an exciting year of clinical firsts, patient-centered community programs, and community recognition.

“Our general surgeons provide complex care to patients from across our LHIN in cancer care, trauma, transplant, and a wide-range of surgical treatments,” said Dr. Ken Leslie, Chair/Chief, Division of General Surgery. “Our incredible research and education initiatives are also already making an international impact on the future of General Surgery.” The Division continues to expand its networks and partnerships to target specific health problems in the community, including colorectal, HPB (Hepatopancreatobiliary), and GI (gastrointestinal) cancer care.

Dr. Christopher Schlachta became the first surgeon in Canada to perform a robotic single-site gallbladder removal that leaves patients with virtually scarless results. In 2013, London Health Sciences Centre was designated as the exclusive training centre for robotic surgery in Canada by Intuitive Surgical Inc., manufacturer of the da Vinci Surgical System. “Our goal is to help make this technology available to as many Canadian patients as possible by training every surgeon in Canada who is interested in robotic surgery,” said Dr. Schlachta, medical director of CSTAR (Canadian Surgical Technologies & Advanced Robotics). “We will have the capacity to train 100 surgeons a year and that number could increase when we open up to American and international surgeons.”

London’s first Breast Tumour Biobank was opened at St. Joseph’s Hospital London in 2013. Awarded an Innovation Fund grant by the Province, Dr. Muriel Brackstone developed the Biobank to store any type of tumour sample donated by patients. The tissue samples are made available to scientists doing any type of cancer research. “What they lack is access to patient tumour samples and blood in order to test their theories, develop their imaging tools and create new treatments. The goal is to overcome that obstacle, allowing these scientists, together with oncologists, to translate discoveries in the lab into real discoveries in months instead of years,” said Dr. Brackstone.

Dr. Roberto Hernandez-Alejandro continued to have great success with the ALPPS (Associating Liver Partition and Portal vein ligation for Stage hepatectomy) procedure, establishing London Health Sciences Centre as a leader in Canada for this type of liver cancer treatment. Dr. Hernandez-Alejandro was the first in Canada to perform this procedure and continues to lecture and consult nationally and internationally on ALPPS. In recognition of the advancements he made, Dr. Hernandez-Alejandro was named the Researcher of the Month by Canadians for Health Research in April 2013.
The Trauma Program, led by Dr. Neil Parry, continued to be heavily involved in the local community through the injury prevention programs, IMPACT (Impaired Minds Produce Actions Causing Trauma), Period of PURPLE Crying, and VIP: Values, Influences & Peers. IMPACT is a multidisciplinary program that educates high school students about the consequences of driving while impaired by drugs or alcohol, the Period of PURPLE Crying is an in-hospital education program for the prevention of Shaken Baby Syndrome in infants, and the VIP program for Grade 6 students discusses medical consequences of poor choices, drugs, alcohol, smoking and unsafe activities.

Last year, a new Classroom Communication System (CCS) was introduced, to be used in focus group testing for optimizing the IMPACT program. “We are excited about this technology. It will change how we interact with students and direct our prevention message to the community,” said Dr. Neil Merritt, who is also cross-appointed to the Division of Paediatric Surgery.

Members have also been actively representing the Division through medical leadership positions in the local, national and international community. Dr. Vivian McAlister, also the current McLachlin Professor in the Department of Surgery, is a member of the Canadian Forces and has had numerous deployments to Afghanistan and Haiti. He is also an elected Council Member for the Royal College of Physicians and Surgeons of Canada. Dr. Roberto Hernandez-Alejandro is a member of the London Chamber of Commerce and Chair-Elect of the International Liver Transplantation Society’s Vanguard Committee.

Dr. Chris Vinden serves as Vice-President for the Ontario Medical Association’s General Surgery Section and as Co-Director of the ICES@Western group. He recently published with his research team results of a sleep deprivation study in the Journal of the American Medical Association. Dr. Muriel Brackstone is an Expert Advisor for Cancer Care Ontario’s PET Steering Committee, Dr. Michael Ott is the Program Director and Dr. Tina Mele is the Assistant Program Director & Research Coordinator for the Division of General Surgery Residency Program and Dr. Patrick Colquhoun serves as Chair for the London Regional Cancer Program’s Gastrointestinal Diseases Site Team. Dr. Neil Parry is a Council Member for LHSC’s Patient Centred Care Surgery Portfolio, Dr. Steven Latosinsky is President of the Canadian Society for Surgical Oncology’s Executive Committee, and Dr. Douglas Quan is the Director of the HPB Clinical Academic Unit.

Dr. Bill Wall received the Medical Achievement Award from the David Foster Foundation for his outstanding medical accomplishments and pioneering work in the field of transplantation. Dr. Wall led the way in the field of liver transplantation in Canada. Having performed nearly 2,000 liver transplants at LHSC, he is very active in promoting organ donation and educating students on transplantation.

The upcoming year will provide more opportunities for collaborations and community care initiatives, as plans to develop a new wing of experimental general surgery labs at University Hospital will bring together the research efforts of surgeons and scientists in General Surgery.
Bringing Together International Experts

Dr. Steven MacDonald, Chair/Chief of Orthopaedic Surgery
In addition to gaining three new members last year, the Division of Orthopaedic Surgery expanded its research program, and paid tribute to the founders of the Hand and Upper Limb unit.

Dr. David Holdsworth was re-appointed to the position of The Dr. Sandy Kirkley Chair in Musculoskeletal Research. The Dr. Sandy Kirkley Centre for Musculoskeletal Research consolidates research and education initiatives advancing bone, joint and musculoskeletal health. The Surgical Mechatronics Lab, led by Drs. Louis Ferreira and James Johnson was opened, providing more opportunities for surgeons and scientists to develop and apply computer-aided technologies to the study of biomechanics and surgical treatments. The lab is housed at the newly renamed Roth McFarlane Hand and Upper Limb Centre. The centre was founded in 1992 by the late Drs. James Roth and Robert McFarlane, and was renamed last September to honour their legacy and vision. The Roth McFarlane Centre is world-renowned, attracting surgeons, trainees, and scientists from across the globe to work with Division members.
Not-for-profit organizations such as Operation Walk Canada have also provided opportunities for Division members to provide orthopaedic care to the international committee. The Canadian chapter was founded by Professor Emeritus of Orthopaedic Surgery, Dr. Cecil Rorabeck. Several Division members participate in yearly trips to Guatemala and Ecuador, where a team of surgeons, anaesthesiologists, internists, physiotherapists, nurses and other volunteers work together to provide total joint replacement surgery to patients in need. Division members are also actively involved with professional societies and committees at the local and international levels.

Servicing the local and surrounding community is a significant part of the Division. In particular, providing support for all paediatric orthopaedic surgery care in the south west region as the Division is the only centre with that type of subspecialty capability. Chair/Chief of the Division of Orthopaedic Surgery, Dr. Steven MacDonald serves as Co-Chair for the South West LHIN (Local Health Integration Network) Orthopaedic Steering Committee. The Orthopaedic Steering Committee is involved in the LHIN’s development of an Orthopaedic Capacity Plan, which aims to optimize access and quality of orthopaedic care throughout the south west region.

The annual Homecoming Sport Medicine Symposium and Orthopaedic Resident Research Day events continue to be a hub for Division members, residents, and rural community hospital surgeons to be well-informed about new research and surgical techniques being developed within the Division.

The Roth McFarlane Hand and Upper Limb Centre was founded in 1992 by the late Drs. James Roth and Robert McFarlane, and was renamed last September to honour their legacy and vision.
Continually looking for avenues with which to enrich the Division’s seven clinical teaching units of lower limb arthroplasty, sports medicine, paediatric, trauma, spine, foot and ankle, and hand and upper limb, the Division has played a substantial role in establishing the Department’s Master of Science in Surgery graduate program and recruiting candidates. Division members have also been involved in partnerships between the Schulich School of Medicine & Dentistry and educational institutes in China and the Middle East as training international residents and clinical fellows, as well as providing resident exchange opportunities for local trainees, remain part of the Division’s future plans.
Supporting the Well-being of Children and Youth, Locally and Globally
At an international level, Dr. Timothy Carey provides innovative procedures for the treatment of children’s orthopaedic issues in the Cayman Islands through his involvement with the Cayman Orthopaedic Group. Dr. Megan Cashin is a volunteer surgeon with the Canadian Association of Medical Teams Abroad (CAMTA). In 2013, Dr. Cashin and other members of CAMTA went to Ecuador to perform necessary hip, tendon, and clubfoot surgeries on children.

Closer to home, Adjunct Clinical Professor Dr. Raymond Lee volunteers his time, knowledge and experience to the Schulich School of Medicine & Dentistry dental students who are part of Oral Health, Total Health (OHTH). OHTH is a not-for-profit organization of students and faculty who advocate, educate and improve oral health care for persons with special needs.

The Division of Paediatric Surgery brings together a group of 14 members from seven sub-specialties. Multi-disciplinary collaborations are routine for this division, with the majority of Division members holding cross-appointments in other departments or divisions. Community involvement is prioritized, as evidenced by Division members’ participation in several community endeavours.

The care of children locally is also enhanced by the project I*S.E.E. The project which is due to start in the summer of 2014, is aimed at children around three years old, and provides screening for early detection of amblyogenic refractive errors and strabismus to reduce the incidence of late presenting, and untreatable, amblyopia. I*S.E.E also focuses on decreasing the number of late referrals of strabismus, which can reduce the chances of children being able to recover binocular single vision. So far over $300,000 has been raised, by the paediatric Ophthalmologist Dr. Inas Makar and St. Joseph’s Hospital Foundation.

So far over $300,000 has been raised
Dr. Sarah Jones, a paediatric general surgeon in the Division serves as Co-Chair of the Canadian Child and Youth Coalition (CCYHC). The vision of this group is to advance the cause of child and youth health and health care in Canada and advocate on national child and youth health, healthcare and policy issues and decisions that will benefit from the collective expertise and influence of the Coalition members. Social responsibility becomes more important as the way we deliver health care changes.

In order to help address such changes and the greater role that social paediatrics needs to play in the health of children and youth in Canada the coalition recently held a symposium to focus on Social Paediatrics. Designed for health care professionals, the vision was to engage health care providers from primary to tertiary care centres to develop a common goal of improving health in children. CCYHC also played an advocacy role in the push for Hockey Canada to eliminate body checking in peewee-level hockey. CCYHC provides a platform for knowledge translation, and is working with UNICEF Canada to bring awareness to different aspects of child health in Canada that need improvement, for example immunization and the early recognition of mental health problems.

The care of children with craniofacial abnormalities is very challenging. Patients may have to endure many surgeries and require support for things that many of us take for granted, such as eating and speaking. Having resources to care for these patients “close to home” is very important. Dr. Damir Matic is Director of the Synthes Canada Craniofacial Fellowship. The first craniofacial fellowship of its kind in Canada, the program has a significant emphasis on paediatric experience with fellows participating in the complete care of children born with cleft lip and palate.

Dr. Neil Merritt serves as Co-Chair of the Trauma Association of Canada’s Injury Prevention and Surveillance Committee. This national organization is the gate keeper for the provision of trauma care to the paediatric population and is instrumental in ensuring that the provision of care is of the highest standard.

The Division has representation on many committees that function at many different levels to ensure that the care of paediatric patients is optimized at both the academic and community level. Dr. Sumit Dave is a Council Member for Health Canada’s Guideline committee on Orchidopexy, and Dr. Leslie Scott serves as Director for the Canadian Association of Paediatric Surgeons’ Executive Committee. In addition to being Subcommittee Chair of the Institutional Self-Study Task Force - Educational Resource Standards for Western University’s Accreditation Committee, Dr. Debra Bartley is also Secretary of the London Branch for the Federation of Medical Women in Canada (FMWC). Dr. Andreana Bütter is involved with the local organization 100 Women Who Care; this organization is dedicated to raising money for community charities and programs.
Division members were awarded several accolades in the past year. Dr. Bartley and Dr. Merritt both received Surgery Clerkship Teaching Awards, with Dr. Merritt also selected for the USC (University Students’ Council) Teaching Honor Roll. Dr. Jones was the keynote speaker at a meeting of the FMWC’s London branch, where she presented on the topic “Facing Adversity in Medicine.” Dr. Sumit Dave was selected for the ICES@Western Faculty Scholars Program.

As highlighted in this report members of the paediatric surgical community play a very important part in supporting the well-being of children and youth locally, nationally and internationally. It is anticipated that as the Division grows and resources expand the Division will choose to support a specific area of need in the local paediatric community.
“Plastic & Reconstructive Surgery is the one surgical subspecialty without a specific anatomic domain,” said Dr. Douglas Ross, Chair/Chief, Division of Plastic & Reconstructive Surgery. “Collaboration with our colleagues across disciplines is a necessity for optimizing function and form for our patients with a wide variety of complex challenges.” Division members are currently working closely with faculty in General Surgery, Orthopaedic Surgery, Paediatric Surgery, and Engineering on research, education, and patient care initiatives.

Recently, the Division of Plastic & Reconstructive Surgery has concentrated its efforts on becoming a leader in competency-based medical education (CBME). A Royal College of Physicians and Surgeons of Canada initiative, CBME is an approach to residency education and specialty practice in Canada, focusing on patient needs. At the 2013 CERI Annual Research Symposium held by the Centre for Education, Research & Innovation, PGY4 resident Dr. Kristina Lutz presented her research on “Defining core competencies in plastic surgery education – A survey of Canadian program directors.”

In addition to CBME, the Division has also focused on concussion research and enhancing breast reconstruction, programs that have both had a direct impact on patient care in the community. Dr. Arjang Yazdani participated in the inaugural See The Line concussion research and awareness event, where he presented on the topic of “Facial fractures: where the face meets the brain.”
Collaborating with Colleagues Across Disciplines
biochemistry, have received local and national media attention for their research into treatment therapies for Dupuytren’s disease.

Within the local community, Dr. Damir Matic and the Cleft Lip & Palate Team organized a one-day camp in May, 2014 for children born with cleft lip and palate and for their families. This allowed kids an opportunity to socialize with other children, share their experiences, and ask questions regarding their facial differences in a fun, welcoming environment.

Division members are also involved with the global and national community. Dr. Matic, who is cross-appointed to the Division of Paediatric Surgery, is the incoming Chair of the Craniomaxillofacial North America Education Committee with the responsibility of developing courses ranging from principles of craniofacial trauma to advanced reconstruction. This will involve over 1000 participants (ranging from senior faculty to residents) drawn from multiple specialties including Plastic Surgery, Otolaryngology, Oral Surgery, and Ophthalmology.

In addition, Dr. Matic serves as the North American Representative on the International Specialty Board of the AO Foundation, which is the largest medical education foundation in the world with an endowment of over one billion dollars. As part of his responsibilities, he has helped to organize, as well as teach, in courses held in Nairobi, Kenya, Beirut, Lebanon, Budapest Hungary, and Davos, Switzerland.
Dr. Ross recently completed his term as President of the Canadian Society of Plastic Surgeons (CSPS) as well as a five year term as Examination Board Chair for the Royal College. In addition, he has just commenced a two year term as President of the Educational Foundation of the CSPS. This past year, he also served as a member of the Timing of Examinations Taskforce for the Royal College of Physicians and Surgeons of Canada.

The Division views its responsibilities to the regional, national and international communities as one of its key missions. Fulfilling that mission enhances the care of its own patients from Southwestern Ontario as well as patients in the global community.

“Optimizing function and form for our patients with a variety of complex challenges”

Dr. Douglas Ross
Committed to Providing Expertise, Education and Care

The Division of Thoracic Surgery has a substantial geographic reach across Southwestern Ontario.

Designated as a Level 1 Thoracic Surgery Cancer Centre by Cancer Care Ontario, the Division leads the thoracic surgical care in two Local Health Integration Networks (LHIN 1 and 2) that stretch from Windsor to Owen Sound to Stratford. In order to serve such a wide community, Division members regularly employ technology for rounds and clinics through “Telehealth”. Thoracic Surgery Patient Telehealth Clinics have been set up in Chatham and Walkerton. The patient response is very positive as this significantly reduces travel time and associated costs such as time off work and parking fees. Monthly Cancer Care Ontario sponsored Thoracic Surgery Telehealth Rounds have also been established connecting the community of Thoracic Surgeons in LHIN 1 and 2 and beyond, providing continuing medical education and patient care discussions.
Cancer Care Ontario has supported the establishment of Lung Cancer Diagnostic Assessment Programs (DAP) across the LHINs. Thoracic Surgery has helped evolve the local program. Patients with a suspected lung cancer are referred to a “Nurse Navigator” for specified diagnostic and staging investigations. The aim is to complete the investigations in a timely fashion and conduct as many of the tests as close to patients’ homes as possible. The London DAP has been extremely successful in accomplishing its mandate, and has bettered patient care in all aspects.

Lung Cancer is the number one cause of cancer mortality in both females and males. Prevention through smoking cessation programs, and screening are key factors in reducing mortality in this disease. The Division of Thoracic Surgery and Department of Radiology, in conjunction with community partners and CCO, are looking forward to developing a regional program to screen for early lung cancers in high-risk patients in our community.

The Division of Thoracic Surgery strives to advance the care of thoracic surgical disease through basic and clinical collaborative research. A number of on-going clinical trials include “Quality of Life in Neoadjuvant Versus Adjuvant Therapy of Esophageal Cancer Treatment” and “The Role of Melatonin in the Prevention of Lung Cancer recurrence”. Two trials soon to be initiated are a Gastric Cancer trial and a study looking at the role that Surgery and Stereotactic Body Radiation play in the treatment of Small Lung cancers.

Basic science research projects include studying the implications of circulating esophageal tumor cells, and designing new technology to assist in locating lung nodules during minimally invasive procedures. The Division plans to conduct future clinical research through its recently acquired affiliation with ICES.

Known for its leadership in Thoracic Minimally Invasive Surgery, the Division has just introduced a Thoracic Minimally Invasive/Robotic Clinical and Research Fellowship. The fellowship will also provide candidates the opportunity to apply for the MSc in Surgery program.

The Division of Thoracic Surgery is committed to providing the expertise, education and advancement of knowledge needed to promote and care for the thoracic surgical health of our community.
Dedicated and Committed to Patient Care and the Discipline of Urology
This past year has been eventful for the Division of Urology as many members assumed important new roles, were recognized for important contributions or awarded for past successes.

Many of these accolades reflect faculty members’ work on activities intended to enhance individual patient care but also the specialty of urology as a discipline and the urological health of the community at large. The following are some examples of the group’s dedication and commitment to community:

Many Division members have taken on leadership roles in professional societies and patient care initiatives within the local, provincial, national and international community. Dr. John Denstedt was appointed to the American Urological Association’s Board of Directors, making him the third Canadian in the AUA’s 111 year history to be given the honour.

Dr. Razvi was appointed Chair of the Canadian Urological Association’s Council of University Urology Chairs. He also serves on the American Urological Association’s (AUA) Clinical Practice Guidelines Committee. Dr. Gerald Brock serves as Vice President of Education for the Canadian Urological Association (CUA). Dr. Joseph Chin is Chair of the Patient and Public Education Committee for Prostate Cancer Canada and immediate past President of the CUA.

Dr. Nicholas Power serves as Chair of the Medical Advisory Committee of the Canadian Testicular Cancer Patient Initiative and is co-organizer of the organization’s upcoming Patient Education Symposium. Dr. Power also is the London Regional Cancer Program’s Genitourinary Disease Site Team leader. Dr. Stephen Pautler is the Southwest Regional Surgical Oncology Lead for Cancer Care Ontario.

Dr. Sumit Dave, who is cross-appointed to the Division of Paediatric Surgery, is a Council Member for Health Canada’s National Paediatric Surgical Wait Time Project. Dr. Patrick Luke continues his role as Co-Director of the Multi-Organ Transplant Program at London Health Sciences Centre. Dr. Alp Sener currently chairs the Surgical Research Committee within the Department of Surgery, and has recently joined the Board of Directors of the Northeastern Section of the AUA. Dr. Jonathan Izawa is the Medical and Educational Director for the Society of Urologic Oncology (SUO) Journal Club. Dr. Blayne Welk sits on the Institute of Clinical Evaluative Sciences (ICES) Western Faculty Scholars Committee.

Although a number of examples of the Division’s role in social responsibility could be cited, the most impactful have been in the areas of international education endeavours and more locally, addressing patient access to urological care.

For a number of years, many members of the Division have been actively involved in international educational endeavours. Medical missionary work, invited speakerships and surgical demonstrations have been offered by many of our faculty in countries such as India, China, Ecuador, Peru, Mexico, Saudi Arabia and Qatar. In a number of these countries, the efforts of our faculty have led to the introduction of new surgical techniques not previously utilized in these areas. The dedication and commitment of our faculty to these efforts has much appreciated in these countries improving the quality of patient care and forging many relationships with colleagues across the globe.
The Division also advances the educational cause internationally through our fellowship programs, which continue to attract bright and dedicated urologists hoping to bring back what they have learned in London upon return to their home countries. With recent and current fellows from Australia, Belgium, Canada, China, Israel, Italy, Mexico, Pakistan, Qatar and Saudi Arabia the ability to establish global networks with our graduating fellows has never been greater. It is hoped that our program will continue to impart its expertise and influence within and beyond our own country’s borders through the fellows we train in London.

Trying to improve wait times for patients requiring urological surgery is an important initiative for the Division of Urology. Efforts to improve wait times for patients with prostate and other urological cancers as well as paediatric urology patients is especially important as our region has some of the longest wait times in the province. In collaboration with hospital administration, the Southwest Local Health Integration Network (LHIN) and Cancer Care Ontario a Diagnostic Assessment Program is being developed to attempt to improve access to prostate cancer assessments.

Working with the Ministry of Health, hospital leadership and the Division of Paediatric Surgery efforts are well underway to recruit a second full-time paediatric urologist to London to address the critical patient care need in this area.
Clinical and basic research faculty within the Division continue to be active in research. Some highlights include: Drs. Pautler, Power, Chin, and Izawa are working with members from the Departments of Oncology, Medical Biophysics and Medical Imaging in the multi-disciplinary CIHR Team Grant in Image Guidance. Dr. Dave is the London Site Lead for the Antibiotic Prophylaxis versus Placebo in Infants diagnosed with Hydronephrosis Antenatally (ALPHA) clinical trial. Drs. Luke and Sener are co-investigators in the multi-centre project, “The Canadian National Transplant Research Program: Increasing Donation and Improving Transplantation Outcomes” funded by CIHR. Dr. Welk is actively involved in several ICES projects evaluating urological outcomes of the spinal cord injured population. Dr. Jeremy Burton, a basic scientist in the Division is collaborating with Drs. Dave, Pautler, Razvi and Welk on various projects evaluating the microbiome and its impact on urological conditions. Dr. Gregor Reid continues his work both locally and internationally on the use of probiotics to manage recurrent urinary infections and the therapeutic benefits of probiotics among patients with HIV infection. Dr. Razvi in collaboration with US researchers and funded by the National Institute of Health (NIH) continues to evaluate novel urological device biomaterials. Dr. Brock continues his work on innovative erectile dysfunction medical and surgical therapies.

Reward recipients in the Division this past year included, Dr. Alp Sener who received the American Society of Transplant Surgeons Vanguard Prize for his research on the role of supplemental hydrogen sulphide in transplant kidney function; Dr. Hassan Razvi received the St. Joseph’s Medical Advisory Committee Award in recognition of his leadership and contributions to the success of St. Joseph’s Health Care London.

Dr. John Denstedt received the Dean’s Award of Excellence for Schulich Faculty, Dr. Nicholas Power was cited with the Surgery Clerkship teaching award and Dr. Blayne Welk was selected for the Urology Faculty teaching award. Dr. Hon Leong, a basic science oncology researcher was selected for a prestigious Prostate Cancer Canada/Movember Rising Star award. The focus of his work is on the development of improved cancer detection methods.

All in all, it has been another highly productive year for Division of Urology faculty.
Expanding Networks and Partnerships to Enhance Health Care
In the past year, Dr. Adam Power gave three educational talks to the London community on Peripheral Artery Disease (PAD) and venous disease. The Division has also recently published two papers, where the research topic has taken on a socially conscious direction, focusing on community members’ access to care for abdominal aortic aneurysm surgery.

The Division also collaborated with Imperial College London in London, England on a landmark ruptured aneurysm trial. The Immediate Management of the Patient with Ruptured Aneurysm: Open Versus Endovascular repair (IMPROVE) trial was funded by the National Health Service (NHS) and recently published in the *British Medical Journal*. Western was the only non-UK site to participate in this trial.

Highlights for the past year include a second consecutive win for the JC Luke Award from the Canadian Society for Vascular Surgery, the opening of a hybrid operating room for advanced imaging based vascular surgery, and the recruitment of Dr. Luc Dubois. Dr. Adam Power was appointed recently as the Program Director for the Vascular Surgery Residency Program, where he will be involved in renewing and developing the curriculum.

“It has been an extremely busy and productive year and we look forward to building on our successes in the years to come,” concluded Dr. Forbes.

**We work in a global community of health care providers and depend on each other through collaborative efforts to advance our field**

Dr. Thomas Forbes
Providing the Tools to Succeed in Academic Medicine

Launched in the summer of 2013, the MSc in Surgery program has had a successful first year.

This MSc is tailored to the unique needs of surgical trainees; providing an intensive research experience and a solid foundation for success as an academic surgeon. A combination of coursework, basic/clinical/applied research, thesis preparation and defense, the program is intended to fully prepare these individuals specifically seeking future positions in Academic Health Science Centres for the demands of a research career in relation to the CanMeds roles of Medical Expert and Scholar.

With interest in the program continuing to expand, several applications for subsequent terms have been received. Currently, 10 students are enrolled in the MSc in Surgery program, with plans to increase enrolment to 12 students for the coming year.
2013-14 MSc IN SURGERY STUDENTS:

Dr. Ghaleb Aboalsamh, Division of Urology
Supervisors: Drs. Alp Sener, Patrick Luke, Wei-Ping Min

Dr. Syed Ali, Division of General Surgery
Supervisors: Drs. Christopher Schlachta, Tina Mele, Roy Eagleson

Dr. Abdulaziz Alkuwari,
Division of Orthopaedic Surgery
Supervisors: Drs. Christopher Bailey, Abdel-Rahman Lawendy, Cynthia Dunning

Dr. Al Hamam,
Division of Orthopaedic Surgery
Supervisors: Drs. David Sanders, Abdel-Rahman Lawendy, Christopher Bailey

Dr. Brad Moffat, Division of General Surgery
Supervisors: Drs. Neil Parry, Daryl Gray, Kelly Vogt, Kenji Inaba

Dr. Richard Nadeau,
Division of Orthopaedic Surgery
Supervisors: Drs. Douglas Naudie, James Howard, Lyndsay Somerville

Dr. Stephen Petis,
Division of Orthopaedic Surgery
Supervisors: Drs. Edward Vasarhelyi, James Howard, Dianne Bryant

Dr. Khurram Siddiqui, Division of Urology
Supervisors: Drs. Joseph Chin, Nicholas Power, Eva Turley

Dr. Caitlin Symonette,
Division of Plastic Surgery
Supervisors: Drs. Eva Turley, Arjang Yazdani, Francisco Perera, Michael Rieder

Dr. Thomas Tailly, Division of Urology
Supervisors: Drs. Hassan Razvi, Stephen Pautler, Jeremy Burton
Empowering Research

Established in 2009, CERI is becoming one of the national leaders in medical education research.
The Centre for Education Research & Innovation (CERI) is an internationally-recognized centre for high-calibre, naturalistic research in health professions education.

Established in 2009, CERI is becoming one of the national leaders in medical education research. Their focus is simple – answer the most critical medical education questions to enhance health care for our communities and advance education for our learners and future physicians and health care teams.

Drs. Lorelei Lingard, director, and Mark Goldszmidt, associate director, inspire and lead a team of three PhD scientists as they delve into the world of education research. Dr. Sayra Cristancho brings her unique background in engineering and medicine to her special focus on surgical research and is primarily appointed to the Department of Surgery.

CERI researchers hold competitive funding with provincial and national agencies including the Canadian Institutes of Health Research, the Royal College of Physicians & Surgeons of Canada, Physician Services Incorporated, and the Academic Medical Organization of Southwestern Ontario. In 2012-13, CERI received more than $800,000 in grants, had 29 peer-reviewed publications, and made 63 presentations.

Mentorship is an important component of the Centre’s mission. In addition to its annual conference, visiting scholars, and rounds/seminars, it provides several opportunities to participate and be mentored in research-related activities. This includes CERI’s Education Research Fellowship (ERF), competitively funded by AMOSO, allowing faculty to develop their research program under the supervision of the Centre. CERI also continues to work in collaboration with the University of Maastricht (Netherlands) and the Centre for Education Scholarship (CHES; UBC) offering a Masters in Health Professions Education degree.

### KEY ACCOMPLISHMENTS:

**Dr. Sayra Cristancho** (with Lorelei Lingard and Richard Novick) was awarded CIHR Operating Grant and RCPSC Medical Education Research Grant for research on surgical judgment and surgical complexity.

**Dr. Marie-Eve Lebel.** (with Sayra Cristancho and Ken Faber, and in collaboration with the Brain and Mind Institute) received a PSI Grant to study observational learning in arthroscopic surgery.

**Dr. Michael Ott.** received the 2013 CAME Certificate of Merit Award.

CERI and the Department of Surgery jointly sponsored two leading surgical education researchers as visiting professors: Dr. Carol-Anne Moulton (U of T) and Dr. Roger Kneebone (Imperial College of London, UK).

**Drs. Marie-Eve Lebel, Michael Ott and Richard Novick** received AMOSO funding and engage with CERI as ERF fellows.

**Dr. Megan Cashin** began studying in the MHPE-Canada in 2012.
Advancing Surgical Knowledge Through Innovation
Surgeons perform Canada’s first totally endoscopic closed-chest robotic coronary artery bypass surgery on a patient’s beating heart.

A team of surgeons perform the world’s first da Vinci assisted, robotically-sewn, intestinal bypass for a young woman with Wilkie Syndrome.

Surgeons at LHSC are the first in North America to implant an insertable cardiac monitor that offers long-term and continuous monitoring for atrial fibrillation.

Surgeons perform Canadian first in the treatment of lung cancer using brachytherapy.

A North American first achieved by surgeons in providing peritoneal home dialysis patients with touch screen technology and access to a health coach from home.

Doctors at LHSC become the first in the world to use the Correx AVB device.

LHSC’s cardiac surgery team commits another world first after successfully performing an emergency surgery using the DaVinci robot to repair a hole in a patient’s heart.

Cardiac team at LHSC performs a new method of minimally invasive aortic valve replacement, a procedure which enables surgeons to replace failing heart valves without the patient having to undergo major surgery.

A Canadian surgical first, a successful associating liver partition and portal vein ligation for stage hepatectomy (ALPPS), a two stage surgery to remove cancer from the liver, is performed at LHSC.

Cardiac surgery team at LHSC is the first in North America to use the Geko™ blood circulation device, and the first in the world to use it for cardiac surgery.

Urologists at LHSC make Canadian history by performing the first living-donor kidney removal for transplant purposes, using a single incision point.

Cardiac surgeons are the first in Canada to use a 4-armed da Vinci robot to complete a single coronary artery bypass graft.

Surgeons are part of the team who performs Canada’s first robotic-assisted multi-vessel small thoracotomy.

Surgeons perform Canada’s first robotic-assisted common bile duct exploration using a da Vinci robot.
**Publications Produced by Cardiac Surgery Division Members**

**JOURNAL ARTICLES**


MacDermid JC, Grewal R. Development and validation of the patient-rated ulnar nerve evaluation. BMC Musculoskelet Disord. 2013 Apr 26; 14: 146


Sommerville L, Bryant D, Willits K, Johnson A. Protocol for determining the diagnostic validity of physical examination maneuvers for shoulder pathology. BMC Musculoskelet Disord, 2013 Feb 8; 14: 60

SPRINT Investigators, Bhandari M, Tornetta P 3rd, Rampersad SA, Sprague S, Heels-Ansdell D, Sanders DW, Schemitsch EH, Swiontkowski M, Walter S. (Sample) size matters! An examination of sample size from the SPRINT trial study to prospectively evaluate reamed intramedullary nails in patients with tibial fractures. J Orthop Trauma. 2013 Apr; 27 (4): 183-8


Vasarhelyi EM, MacDonald SJ. The jumbo cup: The 95% solution. Semin Arthroplasty. 2013 Jun; 24 (2): 116-118


Awards Received by Orthopaedic Surgery Division Members

Grewal, Ruby. Dean’s Award of Excellence, Schulich School of Medicine & Dentistry, Western University.

King, Graham. Achievement For Educational Service to American Academy of Orthopaedic Surgeons.

King, Graham. Award of Merit, Canadian Orthopaedic Association.

LeBel, Marie-Eve. CFBS Travelling Fellowship (Canadian-French-Belgian-Swiss), Canadian Orthopaedic Association.

MacLeod, Mark. H.S. Cameron Award for Teaching, Schulich School of Medicine & Dentistry, Western University.

Willits, Kevin. Arthroscopy Association of North America Advanced Arthroscopy Traveling Fellowship.

Publications Produced by Paediatric Surgery Division Members

JOURNAL ARTICLES


Awards Received by Paediatric Surgery Division Members

Bartley, Debra. Surgery Clerkship Teaching Award, Division of Orthopaedic Surgery, Department of Surgery, Schulich School of Medicine & Dentistry, Western University.

Matic, Damir. Award for best teacher within the Division of Plastic & Reconstructive Surgery, Schulich School of Medicine & Dentistry, Western University.

Merritt, Neil. Surgery Clerkship Teaching Award, Division of Paediatric Surgery, Department of Surgery, Schulich School of Medicine & Dentistry, Western University.

Merritt, Neil. USC Teaching Honour Roll, University Students’ Council, Western University.

Publications Produced by Plastic & Reconstructive Surgery Division Members

JOURNAL ARTICLES


BOOK CHAPTERS


**Publications Produced by Thoracic Surgery Division Members**

**JOURNAL ARTICLES**


Gill SE, 2013 Jan; 16 (1): 28-40

Disease Site Group. Neoadjuvant or adjuvant therapy


**Awards Received by Thoracic Surgery Division Members**

Malthaner, Richard. Clinical Clerkship Faculty Teaching Award, Schulich School of Medicine & Dentistry, Western University.

**Publications Produced by Urology Division Members**

**JOURNAL ARTICLES**


Chung E, Solomon M, DeYoung L, Brock GB. Clinical outcomes and patient satisfaction rates among elderly male aged ≥75 years with inflatable penile prosthesis implant for medically refractory erectile dysfunction. World J Urol. [Epub ahead of print]. 2013 May 26


**Dansedt JD. Clinical Research Office of the Endourology Society - giving developing countries the opportunity to be involved in research. J Endourol, 2013 Jun; 27 (6): 673-675


Foster A, Paultser SE. Complications Following Robot Assisted Radical Prostatectomy in a Prospective Canadian Cohort of 305 Consecutive Cases. Can Urol Assoc J. 2013 Mar; 7 (3-4): 116-121
Division Publications and Awards


Fuller A, Vanderhaeghe L, Nott L, Martin PR, Pautler SE, Bolton D, Celia A, de la Rosette J, CROES PCNL Study Group. Radical retropubic prostatectomy: a randomized, double-blind, placebo-controlled trial. Recommended as being of significant clinical importance. BJU Int. 2012 Dec; 110 (1 Pt C): 1187-95


Awards Received by Urology Division Members


Chin, Joseph. Prostate Cancer Foundation Award, Society of Urologic Oncology/American Urological Association.


Denstedt, John. Dean’s Award of Excellence for Faculty, Schulich School of Medicine & Dentistry, Western University.

Luke, Patrick. Surgery Clerkship Teaching Award, Division of Urology, Department of Surgery, Schulich School of Medicine & Dentistry, Western University.


Razvi, Hassan. St. Joseph’s Medical Advisory Committee Award, St. Joseph’s Health Care London.

Sener, Alp. Canadian Society of Transplantation Research Excellence Award, Canadian Society of Transplantation.

Welk, Blayne. UWO Division of Urology Residents’ Teaching Award, Department of Surgery, Schulich School of Medicine & Dentistry, Western University.

Publications Produced by Vascular Surgery Division Members

JOURNAL ARTICLES


BOOK CHAPTERS


Awards Received by Vascular Surgery Division Members

Harris, Jeremy. Surgery Clerkship Teaching Award, Division of Vascular Surgery, Department of Surgery, Schulich School of Medicine & Dentistry, Western University.

Power, Adam. USC Teaching Honour Roll, University Students’ Council, Western University.
2013 ANNUAL REPORT

Department of Surgery
St. Joseph’s Health Care London
268 Grosvenor Street
London, Ontario N6A 4V2

519-663-3349

schulich.uwo.ca/surgery