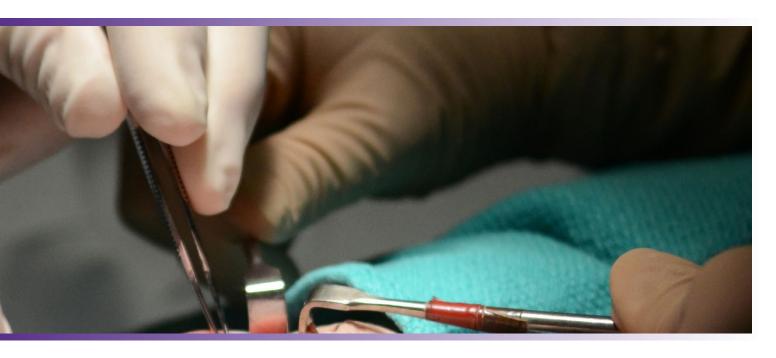
Department of Surgery



STRATEGIC PLAN 2023-2026

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Department of Surgery History & Achievements



Medical Sciences Building. Photo by: Douglas Keddy, May 8, 2008

Land Acknowledgement

The Schulich School of Medicine & Dentistry's London Campus at Western University is located on the traditional lands of the Anishinaabek, Haudenosaunee, Lunaapéewak, and Chonnocton (Neutral) peoples. The Huron-Wendat peoples also have a history of living in this territory. Schulich Medicine & Dentistry - Windsor Campus sits on the traditional territory of the Three Fires Confederacy of First Nations, which includes the Ojibwa, the Odawa, and the Potawatomie.

Southwestern Ontario remains home to diverse Indigenous Peoples (First Nations, Métis, and Inuit) whom we recognize as contemporary stewards of the land and vital contributors to our society. By recognizing First Nations Peoples' relationships to the land, we make explicit Indigenous Peoples' presence and rights to self-determination.

Message from the Chair/Chief

We are incredibly proud to share the Department of Surgery 2023 - 2026 Strategic Plan which has come together as a result of months of reflection upon where we have been, what we are most proud of and value, and where we see ourselves in the years to come.

The past few years have undoubtedly posed challenges we have never before faced, and the time is right to reflect upon how we wish to shape our future. From a humble start in 1881, the Department has grown to be one of the largest and most successful departments in the Schulich School of Medicine & Dentistry, Western University. Our achievements in education, research, innovation and quality of care are stellar and internationally recognized.

As we move forward, our mission is to lead in surgical education; foster research and innovation to enhance and transform surgical care; and advance outreach to better patient outcomes and population health. We will achieve this through the implementation of six pillars of excellence: People, Outreach and Advocacy, Quality, Innovation and Technology, Education and Research.



Emil H. Schemitsch MD, FRCS(C) Richard Ivey Professor and Chair/Chief Department of Surgery Schulich School of Medicine & Dentistry Western University

Our plan is closely aligned with Western University's "Towards Western at 150" Strategic Plan and the 2021-2026 Schulich School of Medicine & Dentistry Strategic Plan. I invite you to join me in embracing our new strategic plan and our vision of elevating human health and quality of life through surgical care, education, discovery and innovation.

Department Mission, Vision, and Values

Mission

The Department of Surgery, Schulich School of Medicine & Dentistry, Western University, leads in surgical education; fosters research and innovation to transform surgical care; and advances outreach to better patient outcomes and population health.

Vision

Elevating human health and quality of life globally through surgical care, education, discovery, and innovation.

Values

Connection

Everyone will share in creating partnerships and a culture of equity and inclusion; respecting the diversity of identities and experiences that shape our world.

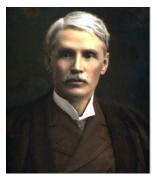
Distinction

Our unwavering pursuit of surgical knowledge informs our delivery of the highest quality of surgical care today and elevates the standard of care for tomorrow.

Responsibility

We assume individual and collective responsibility for promoting wellness in our community and improving the health of our population.

Background



John Wishart (1850-1926). First Professor of Surgery at Western University, London, Ontario. (From the History of Medicine Collection, A04-011-032, The University of Western Ontario Archives)

In 1881, Dr. John Wishart was appointed Chair of the Department of Surgery at Western University's newly founded Faculty of Medicine. Initially staffed by a handful of surgeons, the Department of Surgery is now one of the largest departments in the Schulich School of Medicine & Dentistry at Western University. Dr. Hadley Williams succeeded Dr. Wishart as the next Department Chair, until his retirement in 1931. Dr. George Ramsay would then lead the Department for the next decade. After the war, Dr. Angus D. McLachlan was appointed Chair of the Department in 1944, establishing the Divisions of Urology (est. 1954), Plastic & Reconstructive Surgery (est. 1959), Orthopaedic Surgery (est. 1960), Cardiac Surgery (est. early 1970s), and Neurosurgery – which became its own department in 1969 – throughout his term. Following Dr. McLachlan, the role of Chair of the Department of Surgery would be filled by Drs. Charles G. Drake, John Duff, Ken Harris, John Denstedt, and the current

Chair, Emil Schemitsch. The Divisions of General Surgery (est. 1974), Vascular Surgery (est. 1985), Thoracic Surgery (est. 1992), and Paediatric Surgery (est. 2005) would all be established in the latter quarter of the 20th century.

Department of Surgery and the Canadian Military

London was headquarters of Canada's military district #1 from 1869 until the reorganization in the 1950s. Members of the Department have served in all of Canada's conflicts. Dr. John Cameron Wilson, an associate professor of surgical anatomy and lecturer in surgery, volunteered in 1914 for the No. 3 Canadian Stationary Hospital which was raised in London. Dr. Hadley Williams, Professor of Surgery, volunteered for the Ontario Hospital in Orpington, England. A second unit, the No. 10 Canadian Stationary Hospital was raised by Western University in 1916. It was led by Dr. Edwin Seaborn, a member of the Department of Surgery. In the Second World War, the No. 10 was again in action with nursing and medical staff from Southwestern Ontario. Among its surgeons was Dr. Angus D. McLachlin, who would later become Chair of the Department of Surgery. Dr. McLachlin was seconded to a forward surgical unit during the war, a role that other members of the Department have emulated in more recent conflicts. Current members of the Canadian Armed Forces who are also members of the Department include Lieutenant Colonel Rich Hilsden and Major Shane Smith MSM. Dr. Vivian McAlister, Professor Emeritus, has been instrumental in continuing the role of the military the last 15 years at Western as a military surgeon, leader, educator and military researcher. Dr. McAlister was recently recognized with the Order of Canada for his contribution as a military surgeon.

Department of Surgery Clinical Members as of Dec 2022:

Division	Faculty Members	Residents	Fellows
Cardiac Surgery	7	6	5
General Surgery	25	27	14
Orthopaedic Surgery	26	25	31
Paediatric Surgery*	12	0	0
Plastic & Reconstructive Surgery	10	12	0
Thoracic Surgery	5	4	0
Urology	11	15	10
Vascular Surgery	5	6	0

^{*}Includes all subspecialties of Paediatric Surgery within the Dept of Surgery. Paediatric Surgery does not have a Royal College subspecialty training program.

Our surgeons operate at all three London hospitals, with the primary site distribution as follows: London Health Sciences Centre – University Hospital, 30, Victoria Hospital, 48; St. Joseph's Health Care London, 18; and Fowler Kennedy Sport Medicine Clinic, 5.

In addition, the Department of Surgery is affiliated with eight Hospital programs, tied to one or more Divisions:

- Roth | McFarlane Hand and Upper Limb Centre (HULC), St. Joseph's Health Care London
- Breast Care Program, St. Joseph's Health Care London
- Bariatric Surgery, London Health Sciences Centre
- Canadian Surgical Technologies & Advanced Robotics (CSTAR), London Health Sciences Centre
- Multi-Organ Transplant Program, London Health Sciences Centre
- Fowler-Kennedy Sports Medicine Program, London Health Sciences Centre
- Trauma Program, London Health Sciences Centre
- Minimally Invasive Cardiac Surgical Procedures Program

People



Clockwise from top left: Drs. Dave Nagpal, Associate Professor, Cardiac Surgery, Muriel Brackstone, Professor, General Surgery, Alp Sener, Associate Professor & Chair/Chief, Urology, Patrick Luke, Professor, Urology, Jeremey Burton, Associate Professor and Scientist, Miriam Burnett Research Chair in Urological Sciences, Sayra Cristancho, Associate Professor & Scientist, CERI, Adam Power, Associate Professor, Vascular Surgery, and Andreana Bütter, Professor & Chair/Chief, Paediatric Surgery.

New Recruitments

To date the Department has a full-time clinical faculty staff of 101 surgeons of which 21 are women – five at the rank of Professor, with two also serving as Division Chair/Chiefs and a third to be appointed in 2023. In 2018, our then Division Chair/Chief of Paediatric Surgery, Dr. Leslie Scott, was the first woman to be elected President of the Canadian Association of Pediatric Surgeons. In the last few years, the Department has experienced significant growth with the number of women having more than doubled, a total of 37 new full-time clinical faculty appointments taking place since 2016, and five more in progress for the coming year.

Number of Recruited Faculty by ARC from 2016 to 2022

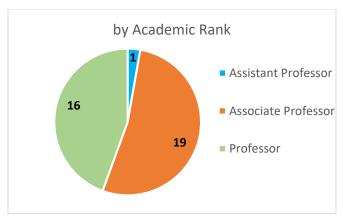
Clinician Administrator	2
Clinician Researcher	30
Clinician Educator	3
Clinician Scientist	1
Clinician Teacher	1
	Total 37

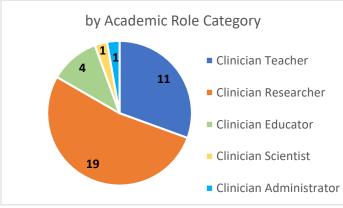
Mentorship and Promotion

Mentorship for all of our newest recruits continues as a priority in the Department of Surgery and the new Conditions of Appointment articles align with our existing processes. The Department Chair/Chief meets annually with each new recruit. Faculty are required to provide an "annual report" of their achievements and the Department Chair/Chief ensures that an active mentorship committee is in place to support and enhance their performance in teaching and research. With an eye on promotion, the Department Chair/Chief ensures faculty members are aware of the expectations of their Academic Role Category. All faculty members are also required to submit an annual Career Development and Planning (CDP) report as a part of the merit-based remuneration process.

We have had 100% success in 36 faculty promotion dossiers since 2016, each with exceptional records in leadership, research and/or teaching, as required by their respective Academic Role Category.

Number of Surgery Faculty Promoted from 2016 to 2022





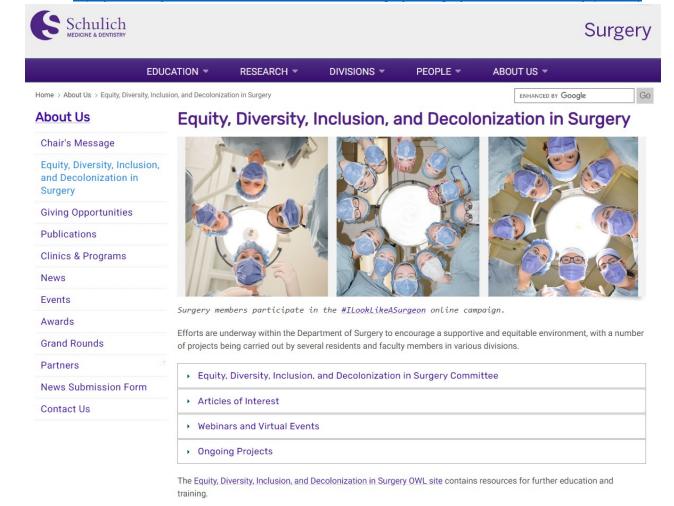
Equity, Diversity, Inclusion, and Decolonization

In 2020, the Department established the Equity, Diversity, Inclusion, and Decolonization (EDID) in Surgery Committee to assist undergraduate students, residents, and faculty in ensuring positive and supportive personal, academic, and work environments. The Committee has provided opportunities for encouraging scholarship in the field of gender & equity studies through guest lectures, Master of Science in Surgery thesis projects, collaboration with other groups such as the Centre for Education Research & Innovation, Canadian national surgical societies, and the Royal College of Physicians and Surgeons of Canada. EDID has also become part of the Department's educational focus with the addition of Ethics Half Day sessions to the postgraduate education curriculum. In the past five years, 37 surgeons have been recruited with 11 being women-identifying.

EDID Activities to Date

Website:

Equity, Diversity, Inclusion, and Decolonization in Surgery - Surgery - Western University (uwo.ca)



Webinars:

o Taking Action on Physician Wellbeing; Drs. Amy Rice, Andrea Lum, and Laura Foxcroft

- Unspeakable: Tackling Taboo Topics in Medicine; Drs. Chris Watling, Jennifer Klasen, Kori LaDonna, Javeed Sukhera, and Taryn Taylor.
- Thriving in Surgery: Is Grit Enough?; Dr. Susan Moffatt-Bruce
- o Clinical Supervision: Five Reasons That It's Harder Than We Think; Dr. Lorelei Lingard
- The power of questions: Perspectives of an Indigenous Surgeon on Turtle Island; Dr. Nadine Caron
- o Panel on Transgender Health: Drs. Jeffrey Campbell, Aaron Grant, and Deb Penava

Newsletter Feature Page

Summary of articles published on EDI published by trainees and faculty

Women in Surgery Group

- Social Activities (Pre-Pandemic)
- Email Group

Academic Merit Award (faculty)

New award category for EDID

EDID Educational Focus

Added Ethics Half Day sessions (PGE)

Research

- EDID requirement in application to Internal Research Fund
- New IRFs with EDID focus

EDID Grants

WHERE Study: Waiting for Hip or knEe REplacement: A prospective cohort.

Funding Source: Canadian Institutes of Health Research (CIHR) and Academic Medical Organization of Southwestern Ontario (AMOSO).

Principal Investigator: **Emil Schemitsch**.

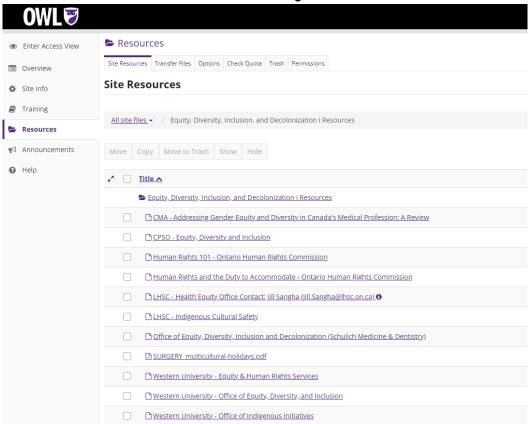
These grants aim to study patients awaiting hip and knee replacement (TJR) with key research questions and the primary goal of identifying which patients are most affected by longer waits, and how inequities affect the progression of symptoms prior to, and recovery following TJR.

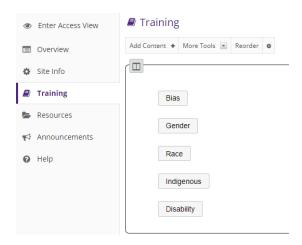
EDID Publications

■ Barton K. You've Got This, Boss Mama: A Mother's Guide to Embracing Growth and Living an Aligned Life. Toronto: YGTMama Media Co.; c2020. Chapter Ten, Mother, Surgeon, and Scientist: Choosing All Three; p. 157-170.

- Chapple CR, Albers P, Denstedt J. Addressing Equality of Representation in Urology Societies.
 Eur Urol. 2021 Oct;80(4):454-455. doi: 10.1016/j.eururo.2021.07.001. Epub 2021 Jul 16. PMID: 34275661.
- Drudi LM, Duncan AA. Striving for gender equity in aortic aneurysm research. J Vasc Surg. 2022
 Mar;75(3):1089-1090. doi: 10.1016/j.jvs.2021.11.053. PMID: 35190141.
- Hunter J, Grewal R, Nam D, Lefaivre KA. Gender disparity in academic orthopedic programs in Canada: a cross-sectional study. Can J Surg. 2022 Mar 9;65(2):E159-E169. doi: 10.1503/cjs.008920. PMID: 35264443.
- Koichopolos J, Ott MC, Maciver AH, Van Koughnett JAM. Gender-based differences in letters of recommendation in applications for general surgery residency programs in Canada. Can J Surg. 2022 Apr 1;65(2):E236-E241. doi: 10.1503/cjs.025120. PMID: 35365496.
- Parsons Leigh J, de Grood C, Ahmed S, Bosma K, Burns KEA, Fowler R, Fox-Robichaud A, Mehta S, Mele T, Straus SE, Zepeda N, Kemp L, Fiest K, Stelfox HT. Improving gender equity in critical care medicine: a protocol to establish priorities and strategies for implementation. BMJ Open, 2020 Jun 11; 10 (6): e037090. doi: 10.1136/bmjopen-2020-037090. PMID: 32532779.
- Ryan JF, Istl AC, Luhoway JA, Davidson J, Christakis N, Bütter A, Mele TS. Gender Disparities in Medical Student Surgical Skills Education. J Surg Educ. 2020 Oct 2:S1931-7204(20)30363-9. doi: 10.1016/j.jsurg.2020.09.013. Online ahead of print. PMID: 33020039.

OWL site for links to online resources & training





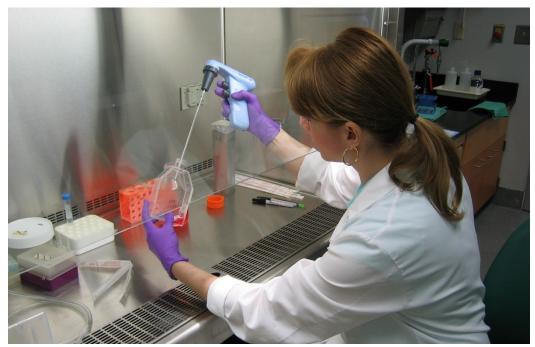
Wellness Committee

The Department of Surgery has struck a new committee which is charged with providing support for resident wellness through social events, peer counseling, and mentorship. It includes seven residents, Dr. Sarah Knowles, Assistant Professor in the Division of General Surgery, and Dr. Sumit Dave, Professor, Divisions of Paediatric Surgery and Urology. A faculty program has also been developed, with peer supports at each hospital site. Dr. Julie Ann Van Koughnett, Associate Professor in the Division of General Surgery is the Department of Surgery Representative for the Schulich Faculty Mentorship Committee.

Academic Merit Awards

The Department of Surgery has several areas of academic excellence. A yearly academic merit award competition was launched in 2017 to recognize the achievements and outstanding performance of faculty who have exceeded expectations and contributed significantly to the Department's mission of elevating the health and well-being of patients regionally and globally through discovery, education and innovation. Awards are granted in four categories: Teacher/Educator; Researcher/Scientist; Service; and Equity, Diversity, Inclusion, and Decolonization (EDID) which was recently added in 2021.

Research



Dr. Tina Mele, Professor, Division of General Surgery

Infrastructure

The Department of Surgery maintains a committed and active Research Committee, currently chaired by Dr. Kelly Vogt. This Committee is charged with adjudicating the Department of Surgery Annual Internal Research Fund Competition; providing direct financial support for research activities taking place within each of the four Research Nodes in the Department of Surgery; and organizing the highly successful annual Department of Surgery Research Day which is now held at Kings University College, Western University. In 2020 we presented the inaugural endowed research award, the Walker Research Day Award for best resident paper.

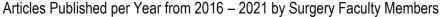
Node Structure

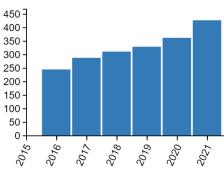
The Research Committee took on a critical role in formulating the Department of Surgery Strategic Plan for Research under the prior Research Chair, Dr. Alp Sener. This plan established four nodes for research in the Department: Big Data/ICES; Surgical Education Research; Fundamental Sciences and Surgical Innovation; and QI & Patient Centered Research. Through this structure, department members have the opportunity to participate in interdisciplinary collaborations with scientists across the University and Hospital partners to advance innovative research. The Committee is dedicated to fostering excellence in surgical research through advocacy, education, and providing research infrastructure support as well as creating an environment that cultivates and rewards research excellence, leadership and the translation of discoveries to patient care.

Internal Research Fund

Our funding competitions have been restructured to support the nodes and encourage collaborative investigation among both faculty and trainees. To date over 100 faculty have enrolled in nodes from across the Academic Health Sciences Centre. Each year the Department of Surgery holds a faculty Internal Research Fund (IRF) Competition and a Resident Research Grant Competition. In 2021, a second resident research competition, the McLachlin Resident Grant Competition, was added.

Research productivity has been excellent in the Department of Surgery with sustained year over year growth in publications and excellent grant capture.





Total Pubs	Pubs Per Year		Cites Pe	r Year			Relativ	e Citation	Ratio	(RCR)	Weighted RCR
		MAX	MEAN	SEM	MED	I	MAX	MEAN	SEM	MED	
1956	326.00	475.33	2.98	0.33	1.17	I	173.52	1.84	0.16	0.91	2863.21

Research Productivity from 2017 to 2021

Research Revenue for Surgery PIs	Number of Ongoing Funded Research Projec	
(includes accounts through both	(Research halted during 2020 due to COVID-19	
Western and Lawson)	pandemic.)	
\$42,971,949	390	

Academic Merit Awards

Since the launch of the Academic Merit Award competition in 2017, a total of 63 Merit Awards have been granted, recognizing outstanding achievements in the Department.

Breakdown by Category	2017	2018	2019	2020	2021	2022	Subtotals
Research	6	6	6	3	4	6	31
Education	5	4	3	5	3	3	23

Service	0	1	1	2	1	0	5
EDID*	0	0	0	0	1	3	4
Subtotals	11	11	10	10	9	12	
Total Awards Granted	63						

*Category introduced in 2021

Notable developments in research and creative professional activity from the past five years:

- First in Canada to enroll patients in a multi-centre study investigating the efficacy and safety of the tissue implant NeoCart® to treat cartilage defects in the knee.
- NEPTUNE trial. NEPTUNE is the first RCT to investigate the use of NPWT (Negative Pressure Wound Therapy) on primarily closed incisions after colon resections to prevent surgical site infections.
- STABILITY trial led by Surgery faculty at Fowler Kennedy Sport Medicine Clinic, is the largest randomized clinical trial of its kind, and shows that performing lateral extra-articular tenodesis (LET) may reduce the risk of ACL re-injury in young athletes.
- Interdisciplinary collaboration leads to development of a new portable temperature regulating device, which can be used to transport a wide array of temperature-sensitive items including organs, vaccines and pharmaceuticals.
- Scientists at the Roth McFarlane Hand and Upper Limb Centre receive national recognition for their advances in new joint protection programs to improve outcomes for patients suffering with hand osteoarthritis.
- Dr. Dalilah Fortin elected Chair of the Royal College of Physicians and Surgeons Specialty Committee in Thoracic Surgery.
- Dr. Richard Malthaner elected Secretary-Treasurer for the Canadian Association of Thoracic Surgeons.
- Dr. John Denstedt named an honorary member of the European Association of Urology (EAU), the Japanese Urology Association (JUA), the Brazilian Society of Urology (BSU), and elected Secretary of the American Urological Association (AUA).
- Dr. Steven MacDonald elected incoming Third Vice President of the The Hip Society.
- Drs. George Athwal and Matthew Teeter received the Charles S. Neer award from the American Shoulder and Elbow Surgeons (ASES) Foundation.
- Dr. Audra Duncan elected a Fellow of the American Surgical Association.
- Dr. Emil Schemitsch chosen as Second President-Elect of the Orthopaedic Trauma Association
- Dr. Christopher Schlachta awarded the Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) Brandeis Award.
- Dr. Hassan Razvi appointed President of the Canadian Urological Association.
- Dr. Luc Dubois, elected to the Executive Committee of the Canadian Society for Vascular Surgery in the role of President Elect.
- Dr. Audra Duncan chosen to be Assistant Editor of Reviews for the Journal of Vascular Surgery.

- Dr. John Denstedt received a Lifetime Achievement Award from the International Alliance for Urolithiasis.
- Dr. Alp Sener elected President of the Urologic Society for Transplantation and Renal Surgery.
- Dr. Blayne Welk elected as President-elect to the International Neurourology Society.
- Dr. Audra Duncan elected Chair of the American College of Surgeons Vascular Surgery Advisory Council.
- Dr. M. Lee Myers elected to the Order of Canada.
- Dr. Emil Schemitsch awarded the Canadian Orthopaedic Association's Award of Merit.
- Dr. Vivian McAlister honoured by the Canadian Society of Transplantation with a Lifetime Achievement Award.
- Dr. Joy MacDermid elected to the Fellowship of the Royal Society of Canada.
- Dr. Bing Siang Gan elected President of the Canadian Society of Plastic Surgeons (CSPS).
- Dr. Alan Getgood and the STABILITY Study team were awarded the Jan Gillquist Scientific Research Award for their paper, "Anterior Cruciate Ligament Reconstruction with or without a Lateral Extra-Articular Tenodesis: Analysis of complications from the ISAKOS Sponsored Stability Study" by the International Society of Arthroscopy, Knee Surgery and Orthopaedic Sports Medicine (ISAKOS).
- Dr. Christopher Schlachta was elected second Vice President of the Society of American Gastrointestinal and Endoscopic Surgeons (SAGES).
- Dr. John Denstedt selected for Karl Storz Lifetime Achievement Award by Endourological Society.
- Dr. Vivian McAlister awarded John McCrae Memorial Medal by the Canadian Medical Association
- Dr. Alan Getgood and the STABILITY study team were awarded the American Orthopaedic Society for Sports Medicine (AOSSM) O'Donoghue research award.
- Dr. Leslie Scott named first female President of the Canadian Association of Paediatric Surgery.
- Dr. Audra Duncan awarded the Society for Vascular Surgery (SVS) President's Citation Award.
- Dr. Joseph Chin awarded a Lifetime Achievement Award by the Canadian Urological Association.
- Dr. Alan Getgood awarded the Albert Trillat Young Investigator Award by the International Society of Arthroscopy, Knee Surgery and Orthopaedic Sports Medicine.
- Dr. Douglas Ross awarded the Canadian Society of Plastic Surgeons (CSPS) President's Medal.
- Dr. George Athwal selected for the 2016 J. Édouard Samson Award by the Canadian Orthopaedic Association.
- Dr. Alan Getgood was awarded the prestigious American Orthopaedic Society for Sports Medicine Travelling Fellowship to Asia.
- Dr. Emil Schemitsch's paper, "Simple Decompression vs Anterior Transposition of the Ulnar Nerve for Distal Humerus Fractures Treated with Plate Fixation - A Multi Centre Randomized Controlled Trial" was selected by the Orthopaedic Trauma Association for the prestigious Bovill Award.
- The paper "A Rapid Detection Method for Propionibacterium acnes from Surgical Biopsies of the Shoulder" by Mr. Scott Holmes, Ms. Ana Pena Diaz, Dr. George Athwal, Dr. Kenneth Faber, and Dr. David O'Gorman was selected for the American Shoulder and Elbow Surgeons (ASES) Charles S. Neer Award in the Clinical Science category.
- Dr. Gregor Reid elected to the Fellowship of the Royal Society of Canada.

Education



Medical student at the Surgery Symposium in 2014.

The Department recently established an endowed chair – the John Denstedt Chair in Surgical Simulation. Dr. Audra Duncan, Professor & Chair/Chief of Vascular Surgery, was appointed to the role this past year. The John Denstedt Chair was created in 2018 thanks to a group of donors led by the late Mitch Baran, together with matching funds from Western University. The creation of the John Denstedt Chair in Surgical Simulation will provide Western with the resources to build upon its foundational strengths in this area – strengths made possible by Dr. John Denstedt, MD'82, a giant in the discipline, and renowned for his contributions around the world. It will also allow our Department to take a lead role in enhancing linkages between stakeholders and partners who have an interest in surgical simulation, identify emerging, innovative surgical simulation training and assessment tools that can be implemented across surgical disciplines, and explore partnerships with industry and government to establish Western University and London as a global centre of excellence in surgical simulation and education.

The Department of Surgery has three active Committees with respect to education: Undergraduate, Postgraduate, and Graduate. These committees include membership from across the Department and in the case of UGE and PGE, from other surgical subspecialty Departments.

Undergraduate

The Department of Surgery is known for providing one of the best clerkship teaching experiences in Canada. Our faculty provide students with an exceptionally run program that includes teaching on the ward and in clinics; a comprehensive lecture series; as well as orientation and simulation sessions.

Based on student feedback, we have modified the timing and delivery of content of undergraduate surgical education. We have worked collaboratively with the Schulich School on the transition to the Competency Based Medical Education model for undergraduate education; which includes assessments in Elentra. We continue to increase the number of exam bank questions to improve relevancy and content for Canadian medical education. Following a recent undergraduate internal review, the Department of Surgery is focusing on faculty training and feedback to promote a safe and positive learning environment for all of our trainees. The Department of Surgery provides 11 awards annually recognizing outstanding teaching at the undergraduate level by both faculty and residents.

Postgraduate

All of our surgical programs, including Surgical Foundations, received full accreditation from the Royal College for eight years in November 2019. Using a new evaluation system, the accreditors recognized our strengths in surgical training as well as the superb organizational management of our education enterprise.

The Department of Surgery has provided many faculty and staff training opportunities on the Elentra evaluation system. Our largest program, Surgical Foundations, as well as Urology, transitioned to Competency Based Medical Education in July 2018. Cardiac Surgery transitioned in July 2019. Orthopaedic Surgery, General Surgery, Plastic & Reconstructive Surgery, and Vascular Surgery transitioned in July 2020. The final program of Thoracic Surgery transitioned in July 2021. Since 2017, 32 new faculty have been recruited, with 25 being former alumni who have completed either a medical degree, surgical residency, or fellowship in our department.

Graduate

Our MSc in Surgery program is a source of pride for our faculty members, School, and University. Founded and chaired by Dr. Abdel-Rahman Lawendy, the program is now in its 10th year. Under Dr. Lawendy's leadership, the program continues to attract high-quality students nationally and internationally. It remains one of the few basic science Masters housed in a clinical department, making our department one of the only departments in Canada that has the privilege to confer graduate degrees. At our last IQAP review in January 2019 we received the highest possible rating with the reviewer comments focused on program expansion rather than any identified deficiencies. Each year the Department of Surgery has had one winner of the Ontario Graduate Scholarship awards, and in the past two years, two recipients of the Canada Graduate Scholarship awards. As of April 30, 2021, a total of 86 students had graduated from the program and up to136 articles in association with their work had been published by the end of the year. The total combined funding for grants held at Western University and the Lawson Health Research Institute by faculty supervisors was nearly \$12.5M on average per year from 2012 to 2017.

Distributed Education

The Department also has a presence in regional communities, with residents encouraged to participate in rotations in a regional location and a number of adjunct professors at centres in the surrounding region.

Review of Surgery in the Region

Review of Surgery in the Region	
Total Distributed Faculty in Dept of Surgery	46
Surgery Faculty by Specialty	
General Surgery	17
Orthopaedic Surgery	11
Plastic Surgery	2
Urology	7
Undetermined Sub-Specialty	9
Surgery Faculty by Academy	
Elgin-Middlesex	8
Grey-Bruce	6
Huron-Perth	12
Lambton-Kent	14
Oxford	6
Surgery Faculty by Hospital*	
Bluewater Health (Sarnia, Petrolia)	7
Chatham Kent Health Alliance	6
Hanover & District Hospital	1
Huron Perth Health Alliance (Clinton, St. Mary's, Seaforth, Stratford)	11
Grey Bruce Health Services (Owen Sound, Lions Head, Markdale, Meaford,	5
Southampton, Wiarton)	
Listowel Wingham Hospital Alliance	1
St. Thomas Elgin General Hospital	6
Strathroy Middlesex General Hospital	3
Woodstock General Hospital	6

^{*} Faculty often have privileges at multiple hospital facilities. Only one hospital was counted per faculty for this exercise.

Number of Surgical Residents in Regional Locations from 2020 to Present:

General Surgery			
	2022-23	2021-22	2020-21
Chatham	1	0	2
Owen Sound	0	1	1
Sarnia	0	0	2
St. Thomas	3	3	5
Stratford	4	2	4
Woodstock	1	0	1
Orthopedic Surgery			
	2022-23	2021-22	2020-21
Owen Sound	0	2	4
Sarnia	0	0	1
Stratford	1	3	2
Plastic Surgery	2022-23	2021-22	2020-21
Stratford	0	0	1
Urology			
	2022-23	2021-22	2020-21
Sarnia	4	4	All cancelled
Windsor	2	4	due to COVID

Accolades in education from the past five years:

- MSc in Surgery graduate program received the highest quality standing available.
- Four faculty members awarded national-level awards: two Hippocratic Undergraduate Medical Education Committee (HUMEC) Awards of Excellence, one PARO Award for Excellence in Clinical Teaching, and the Horace and Clarice Wankel Award from the Summer Research Training Program
- Drs. Andreana Bütter, Professor & Chair/Chief, Paediatric Surgery, and Audra Duncan, Professor & Chair/Chief, Vascular Surgery, inducted into American College of Surgeons Academy of Master Surgeon Educators
- Dr. Peter Wang, Assistant Professor, awarded a Dean Award of Excellence for Education (2021)
- CERI (Centre for Education Research & Innovation) scientists, including Department of Surgery scientist Dr. Sayra Cristancho, awarded research paper awards at the AMEE (Association for Medical Education in Europe) Lyon 2022 conference. Out of 216 papers submitted, 40 were selected for presentation. Three of the 11 prizes were awarded to CERI, demonstrating the quality

- of the work completed at the Department of Surgery, Schulich Medicine & Dentistry, and Western University.
- Dr. Sayra Cristancho awarded the Early Career Medical Educators (ECME) Champion Award.
- Dr. Debra Bartley, Associate Professor, Paediatric Orthopaedic Surgery, was selected by the Meds 2022 Class as a faculty member that made a significant impact on their education.
- Dr. Joseph Chin, Professor, Urology, awarded Dean's Award of Excellence for Lifetime Achievement
- Dr. Supriya Singh, Assistant Professor, Orthopaedic Surgery, received the Canadian Orthopaedic Association's 2022 Emerging Leader Award.
- Dr. Shane Smith, Adjunct Professor, Vascular and General Surgery, voted "Off-Service Teacher of the Year" for the 2021-2022 academic year by the Paediatric Emergency Medicine Fellows.
- Dr. Alexandra Munn, HULC Fellow, awarded the Best Abstract Award PGME at the C-CASE (Canadian Conference for the Advancement of Surgical Education) 2022.

Quality



Dr. Patrick Colquhoun and Ms. Joanna Gaebel participate in a Q & A after Dr. Colquhoun's grand rounds presentation on November 30, 2016 at LHSC's Victoria Hospital, where he introduced the NSQIP program.

Quality Council

The Department of Surgery Quality Council was created in the spring of 2016 and has been impactful for encouragement, insight, and leadership in the area of Surgical Quality as well as the implementation of the American College of Surgeons (ACS) National Surgical Quality Improvement Program (NSQIP) at London Health Sciences Centre. Dr. Patrick Colquboun has led the Quality Council since its inception and also serves as our Surgical Quality Champion. The Council includes representation from all surgical subspecialties including those from Departments external to the Department of Surgery.

Recruitment

Four of our recently recruited faculty, Dr. Ryan Katchky, Dr. Jennifer Lam, Dr. Brad Moffat, and Dr. Terry Zwiep in the divisions of Orthopaedic Surgery, Paediatric Surgery, and General Surgery are involved in Quality research.

NSQIP

We now have active engagement in three ACS programs: NSQIP (adult surgery), NSQIP – Pediatrics (paediatric surgery), and TQIP (Trauma). NSQIP provides risk adjusted data semi-annually that represents over 85% of all adult surgery in Ontario with all teaching hospitals included in the program. Dr. Colquhoun's leadership has been critical to:

- Identification of areas for focus, e.g., Urinary Tract Infections (UTIs) and Surgical Site Infections (SSIs)
- Allocation of LHSC (industry) funding to perioperative initiatives on UTI reduction in all surgical services

- Development and application of quality improvement programs directly aimed to decrease preventable surgical complications
- Significant cost avoidance in reduction of complications as well as a reduced length of stay
- Several key research studies with meaningful applications featured at the American College of Surgeons annual meeting

Citywide QI Inititatives

Other quality improvement projects spearheaded in London have had a provincial impact, including the "Cut the Count" campaign championed in Ontario which was based on the "STOP narcotics" work from the Division of General Surgery. Our clinical research demonstrates that narcotic prescriptions can be safely cut by a minimum of 30% with no impact to patient satisfaction and pain control; provided that appropriate education on expectations post-surgery and alternative pain control measures are adopted. This has enormous value in addressing the opioid crisis now evident across the country.

Nazem Kadri Surgi-Centre

The Nazem Kadri Surgi-Centre is a first-of-its-kind ASC in Ontario, Canada and its Proof of Concept demonstrated 56% lower case costs based on human resources, disposables and anesthesia costs for Tier 1 procedures at LHSC, while simultaneously expanding surgical capacity. Dr. Abdel-Rahman Lawendy initiated, executed, and maintained the program, serving as the Centre's chief and medical director. Creating the Surgi-Centre has allowed LHSC to shift low-intensity, low-resource surgical procedures from its main acute site to an outpatient ambulatory surgical center. LHSC accomplished this shift, maintained a high-level of clinical quality and engagement among staff, and reduced surgical operating costs to the system.

LHSC's ambulatory surgical centre, opened in March, 2020 however was quickly impacted by the COVID pandemic. The off-site day-surgery facility was able to continue performing some surgeries during the tenure of the pandemic, primarily due to its non-aerosol generating procedures. To date, approximately 4,000 lower complexity procedures have been successfully performed, improving patient and staff experience, efficiency, and reducing cost by streamlining processes, equipment and staff. Currently the leadership team is pursuing an expansion that could create four additional operating rooms to enable arthroplasty procedures to be performed along with additional orthopaedic trauma, sports, general surgery and insured plastic surgery procedures while meeting academic standards for plastic surgery residents.

Accomplishments in Quality Improvement from the past five years:

- Cut the Count: Reducing Opioids After Surgery campaign is launched. Our Division of General Surgery's Chair/Chief and his team have been leaders in the campaign, establishing a framework to reduce opioids after outpatient surgery. The STOP Narcotics study is being shared and has set a precedent for Ontario hospitals.
- The American College of Surgeons National Surgical Quality Improvement Program (ACS NSQIP®) recognized University Hospital at London Health Sciences Centre (LHSC) as one of 90

ACS NSQIP participating hospitals that have achieved meritorious outcomes for surgical patient care in 2020.

• Creation of a dedicated geriatric hip unit at VH to reduce average length of stay, improve outcomes and optimize adherence to Health Quality Ontario quality standards in patients with hip fractures.

Innovation



Dr. Abdel Rahman-Lawendy Professor, Orthopaedic Surgery, is the chief and medical director of the ambulatory surgical centre at London Health Sciences Centre. Here he is featured in the CBC News' "An idea to streamline the operating room got patients into surgery sooner" October 24, 2022.

Innovation & Robotics Committee

Reestablished in 2019, the purpose of this Committee is to develop an overall strategy for clinical use and research related to innovation and robotics. In addition, the members of the Committee act as advocates, champions, and ambassadors of the Department of Surgery and other surgical Departments for innovation and robotics. This committee includes membership from all surgical subspecialties and has effectively replaced the MIS Committee that previously functioned as a sub-committee of the City-Wide Perioperative Committee.

This committee was at first charged with aligning our plan for innovation and robotics with the provincial direction for funding in these areas. With the government change impacting the projected allocation of resources for robotics assessment, the focus has shifted to consider issues relating to the use of robotics in the hospitals for clinical use such as the lifespan of the technology and annual maintenance contracts; providing guidance on staging related to the effectiveness of robotics in clinical applications; and providing initial assessment of business plans developed with the intent to acquire new technology and evaluate the evidence to allow for value-based care.

Nazem Kadri Surgi-Centre

This initiative proposed a novel model of surgical care which focuses on high quality, efficient, value-based care in an out-patient ambulatory care centre under the governance of an Academic Health Science Centre. Founded and led by Dr. Abdel-Rahman Lawendy, it aligns with initiatives to provide high quality care with reduced resource utilization. The initial in-hospital pilot study demonstrated success in increasing efficiency by 30-40% and in decreasing cost by 60 cents on the dollar for a limited number of procedures. This required a careful examination of patient criteria, safety, resources, and standardization. The

SurgiCentre provides an accurate model for case costing and will free up resources from the critical care resourced ORs at LHSC. This has been a very positive experience for delivery of patient care and inclusion of residents for educational purposes. It will be a key component of care delivery going forward as we transition to less invasive surgical care with early recovery that is provided for in an ambulatory setting and look for new opportunities for revenue generation. This project supports the LHSC Strategic Plan; optimizes patient care; achieves financial efficiencies; and leverages capacity across the system to improve patient access and flow. The success of the Centre has been highlighted by both local and national media, most recently by the CBC News (Zafar A., & Birak, C. (2022 Oct 24). "An idea to streamline the operating room got patients into surgery sooner". CBC News. https://www.cbc.ca/news/health/surgicentre-operating-room-1.6623980).

Elliott Chair in Surgical Innovation

Mr. Ray and Mrs. Margaret Elliott's generous donation in 2011, together with matching funds from Western University, founded the Ray and Margaret Elliott Chair in Surgical Innovation. The creation of this Chair positions Western at the forefront of surgical care, education and research. London is internationally recognized for its expertise in surgical innovation and as such, the Ray and Margaret Elliott Chair will continue to meaningfully advance these activities. In 2022, the Elliott Chair was awarded to Dr. Michael Chu, an international leader in Cardiac Surgery Innovation and the Chair/Chief of the Division of Cardiac Surgery.

Clinical innovations from the past five years:

- Canada's first robotic ventral rectopexy to treat obstructive defecation syndrome (ODS).
- First in Canada to perform a transcaval TAVI procedure.
- One of Canada's first kidney stone prevention clinics is established.
- First in Ontario to implant the Canadian made Neovasc Tiara transcatheter device to correct a leaky mitral valve.
- World's first robotic assisted aortic valve replacement in patients with aortic valve stenosis is performed using the da Vinci® surgical system.
- Canada's first implantation of the Medtronic Pro Valve device through a patient's femoral artery
- World's first implantation of the Medtronic Evolut Pro Valve directly through the main aorta
- The COBRA-OS (Control of Bleeding, Resuscitation, Arterial Occlusion System) device to manage blood loss is developed and granted Health Canada approval.
- The Edge Upper Cervical System, a safer, faster, and less invasive spinal implant, is developed and submitted for FDA approval.
- Vascular and cardiac surgery teams recognized as leaders in use of hybrid arch technique (such as the thoraflex graft), treating patients from across Canada and training surgeons from other centres in North America.
- First in Canada and second in the world to use 3D hologram technology for planning and completing shoulder replacement operations.

Care Process Redesign

Every year, approximately 13,000 people suffer from a fragility hip fracture in Ontario. In 2015, 1 in 8 fragility hip fracture patients in the province died within 90 days of admission to hospital.

The AMOSO funded Department of Surgery project, "Evaluating the Impact of a Dedicated Geriatric Hip Unit at London Health Sciences Centre" aims to evaluate the effectiveness of implementing an innovative, specialized hip fracture unit with the goals of reducing the average length of stay, rates and severity of delirium, and complications as well as improving patient satisfaction and pain scores. Led by Drs. Emil Schemitsch, Abdel Lawendy and David Sanders, this 12-bed geriatric hip unit at Victoria Hospital is designed to prioritize the management of hip fracture care based upon best evidence models to reduce delirium and medical complications, and improve osteoporosis care after fracture. Specific interventions include improved pain management with regional blocks; reduced opioid intake with alternative pain strategies; nutritional optimization; surgical fast tracking; osteoporosis intervention; and optimized nursing and allied health resources. This project is the first to concentrate all of the new 2017 Health Quality Ontario Hip Fracture Care Quality Standards recommendations and best practices in a single site and will have an important impact on both patient care as well as the healthcare system.

Virtual Care: Present and Future



Virtual care is modernizing medicine and shaping the future of health and care. Within the Department of Surgery, utilization of virtual modalities of care is high. When compared to pre pandemic levels, virtual care has grown exponentially. Despite exponential growth, the real potential of virtual remains in expanding technologies such as video and secure messaging to connect in new ways with our patients as well as reimagining old workflows. Rather than doing the same things differently, we must start doing different things. A better clinician and patient experience tethered to the virtual encounter without sacrifice of efficiency will incentivize ongoing innovation in this space.

The Department has participated in a variety of remote patient monitoring and care initiatives across different surgical divisions. These individual pilot projects all have the potential of scaling up and allowing more care to move outside of the four walls of the hospital. Some of the patient advantages of virtual have been summarized in a recent study with lead author and ICES scientist, Blayne Welk.



The Department of Surgery remains well positioned to lead the way in future development and implementation of virtual modalities of care. Ultimately, this will help address our health and human resource crisis with the potential to increase overall value and improve health disparities, outcomes of care, and finally patient and clinician experience.

Advocacy and Outreach



Dr. Alp Sener, Associate Professor & Chair/Chief of Urology, with Leanne and Keith Lavergne, of the Lavergne Family Chair in Urology.

Fellowships

Fellowship programs allow young medical professionals to further their education in a specific surgical specialty, advance research, and help to provide care. Six Divisions in the Department offer fellowships in a range of programs including orthopaedic trauma; orthopaedic spine; orthopaedic foot and ankle; shoulder; orthopaedic sports medicine, arthroplasty, paediatric general surgery; cardiac surgery; urology; endourology; hand and upper limb; amongst others. At present there are 45 clinical fellows in the Department of Surgery, coming from various countries near and far to learn from Surgery faculty.

Academic fellowships have also been developed through funding from London Health Sciences Centre and St. Joseph's Health Care London. The fellowships are in: Advanced GI Minimally Invasive Surgery; Urologic Oncology; Kidney and Pancreas Transplantation; Comprehensive Breast Reconstruction; Limb Preservation; Colorectal Surgery; and A Retrospective Population-Based Cohort Study to Identify the Time Period When Complications Occur After a Paediatric Surgical Procedure: Proposing a New Definition of Ideal Follow-Up Duration. Out of the eight fellowships funded by LHSC's Academic Realignment Initiative, half were awarded to Department of Surgery members. A pilot project with the St. Joseph's Health Care Foundation raised just over \$230,000 in support for fellowships in breast care, urology, hand and upper limb, ophthalmology and otolaryngology (head/neck).

Since 2003, London Health Sciences Foundation has raised a total of \$77.4M dispersed among the following areas of care:

Cardio/Cardiac - \$36.2M Orthopaedics - \$19.5M General Surgery - \$4.4M Transplant - \$9.6M

Urology - \$6.6M (and over \$4M with St. Joseph's Health Care Foundation)

Other (includes Plastics, Vascular, Thoracic and others) - \$6.1M

Scholarships

Dr. Christopher G. Scilley Scholar Award

The University has received a generous gift which has been endowed to establish the *Dr. Christopher G. Scilley Fund in Plastic Surgical Reconstruction* in the Department of Surgery, Division of Plastic and Reconstructive Surgery in the Schulich School of Medicine & Dentistry. This fund is used in the Department of Surgery to support a Scholar Award for early career faculty members in area(s) of training, education or research, with a preference for candidates with a clinical practice and research interest in post-traumatic lower limb reconstruction, breast reconstruction, microsurgery or skin cancer treatment. The Chair of the Department of Surgery, in consultation with the Chair of the Division of Plastic & Reconstructive Surgery and the Dean of the Schulich School of Medicine & Dentistry, determines the length of the term (up to three years) and the value of the award (up to a maximum of \$10,000/year).

Endowed Chairs and Term Chairs

In addition to the previously mentioned John Denstedt Chair in Surgical Simulation, the Department is currently in the process of recruiting to two more endowed chairs: the Chin-Hardie Chair in Urologic Oncology and the LHSC/UWO Chair in Spine and Orthopaedic Trauma Biomechanics. The Chin-Hardie Chair in Urologic Oncology at Western University was established in 2021. The creation of this Chair will build on the legacy of care provided by world-class faculty in the Division of Urology, Department of Surgery. The Chair will be a national and/or international leader in urologic oncology research with a focus on prostate cancer. The creation of the LHSC/UWO Chair in Spine and Orthopaedic Trauma Biomechanics will build on the legacy of world class biomechanics research performed at the London Hospitals.

The Keith and Leanne Lavergne Family Chair in Urology was recently funded to support research and development in Urology. Dr. Alp Sener, Associate Professor & Chair/Chief, Urology, is the inaugural holder of the Chair. Dr. Steven MacDonald, Professor & Chair/Chief, Orthopaedic Surgery, is the holder of the J.C. Kennedy Chair in Orthopaedic Surgery. Dr. Michael Chu, Professor & Chair/Chief, Cardiac Surgery, currently holds the Ray and Margaret Elliott Chair in Surgical Innovation.

Cross-appointed between the Faculty of Health Sciences and the Schulich School of Medicine & Dentistry, the James Roth Research Chair in Musculoskeletal Measurement and Knowledge Translation is held by

Dr. Joy MacDermid, Professor & Scientist, Physical Therapy, and cross-appointed to the Division of Orthopaedic Surgery, Department of Surgery. Complementing the work of existing chairs, including the J.C. Kennedy Chair in Orthopaedic Surgery; the Graham King Musculoskeletal Research Chair; and the Sandy Kirkley Chair in Musculoskeletal Research, the James Roth Research Chair supports clinical research for treating hand and upper limb disorders, the development and evaluation of musculoskeletal diagnostic tools and outcome measures, and the knowledge translation necessary to move innovations into practice.

The Richard Ivey Chair of Surgery, currently held by Dr. Emil Schemitsch, was established to support the Department of Surgery and its Chair/Chief. The Ivey family's ongoing generosity has helped to grow the endowment. Funds available have contributed toward the advancement of Dr. Schemitsch's orthopaedic research projects and the future establishment of an Office of Equity, Diversity, Inclusion and Decolonization in the Department of Surgery.

Plans to develop more term and endowed Chairs with the hospital foundations are continuing. Two more endowed Chairs in the research theme areas of Big Data and Patient Centred Research are being discussed. Term chairs in the clinical focus areas of Bioengineering, Quality, Ambulatory Surgery, MIS / Robotics, Transplant, Oncology, Trauma, Health Technology Assessment, Health Economics, and Geriatric Surgery are being considered.



Fundraising opportunities for clinical fellowships across Department divisions in the areas listed below are also being pursued, with some having already been funded this past year (see page 30):

- Breast Surgical Oncology
- Breast Reconstructive Surgery
- Upper Limb Surgery
- Endourology and Minimally Invasive Surgery
- Andrology and Reconstructive Urology
- Complex Aortic Reconstructive Surgery
- Minimally Invasive, Robotic and Transcatheter Surgery
- Mechanical Circulatory Support and Heart Transplantation
- Advanced Cardiac Surgery
- Liver transplantation
- Advanced GI Minimally Invasive Surgery
- Advanced Surgical Endoscopy
- Acute Care Surgery
- HPB Oncology/Advanced HPB MIS Surgery
- Colorectal Surgery

- Breast Surgical Oncology
- Adult Reconstruction Fellowship Program
- Orthopaedic Sport Medicine Fellowship
- Combined Orthopaedic/Neurosurgical Spine Fellowship Program
- Orthopedic Trauma and Foot and Ankle Fellowship
- Trauma and Microsurgery
- Advanced Minimally Invasive and Robotic Techniques
- Urologic Oncology
- Kidney and Pancreas Transplant
- Advanced Aortic Surgery
- Limb Salvage
- Pediatric Urology
- Pediatric General Surgery
- Pediatric Orthopedic Surgery
- Pediatric Plastic Surgery

Regional Planning

Developing a sustainable regional plan for surgical services has benefits for the London hospitals, our partners, our patients and their families, and our communities. It will put the right patient, in the right place, with the right resources available to deliver optimal care across southwestern Ontario.

<u>Department of Surgery (Division of Orthopedics) Distributive Academic Surgical Site</u>

Dr. Clay Inculet currently provides Orthopedic surgical care to the community of Tillsonburg with a distributive academic appointment of Adjunct Professor through the Division of Orthopedics and the Schulich School of Medicine and Dentistry. The relationship between Tillsonburg Hospital and the Orthopedic Trauma group began almost 4 years ago to support trauma care in the community. Many factors lead to this outreach, but its origin was founded in a quality initiative that was unique to that referral base.

In line with the Schulich School of Medicine recent strategic plan 2021-2026 under the pillar of partnerships, Schulich has clearly stated material goals including:

- Grow our relationship with hospitals and community health care organizations and make our collaborations visible.
- Expand community-engaged learning opportunities across the school.
- Raise our research profile within the region and its communities and encourage participation among the Southwestern Ontario population.

- Promote interfaculty and interinstitutional collaborations.
- Develop productive partnerships outside academia, including with industry.

Also aligned with LHSC's strategic regional priorities, this collaboration with Orthopedics is novel with significant potential to serve as a model for further growth in other areas of surgery.

Current State:

During his first year of practice, Dr. Inculet has been integrated into the LHSC Orthopedic Trauma/Foot & Ankle group, academically and clinically. He has been incorporated into the trauma schedule at Victoria hospital on a regular basis and has been academically involved with the research group. Dr. Inculet does have a full resource package at Tillsonburg Hospital.

In this model, which is still being developed, the primary academic appointment is with Western although the primary clinical appointment is outside of London. The current plan is to move to a fully integrated appointment with a defined ARC as a faculty member.

Bariatric Surgery Program

Dr. Christopher Schlachta serves as the regional lead for bariatric surgery for LHSC. The program received formal approval in 2017 as a Provincial Centre of Excellence concurrent with the recruit of a second general surgeon, Dr. Ahmed Elnahas. This has been an important component to be added to our general surgery training program which requires residency training in bariatric surgery. This program has designated funding and provides interdisciplinary clinical care to patients from across southwestern Ontario.

Advancements in advocacy and outreach from the past five years:

- Opening of the Prostate Diagnostic Assessment Program (DAP) located at St. Joseph's Hospital.
 The Prostate DAP has consolidated all prostate biopsy procedures to St. Joseph's Hospital, supporting an improved system of care across London Middlesex.
- Faculty members from various divisions provide medical care in underserviced international locations through collaborations with Project Haiti, Doctors without Borders/Médecins sans Frontières, Team Broken Earth, and Operation Walk.
- Full-service bariatric surgery program made available to patients at LHSC as general surgery faculty becomes regional lead for Bariatric surgery.

Department of Surgery Strategic Framework 2023 - 2026

The Department of Surgery Strategic Framework outlines what we hope to achieve in the next four years as represented through multiple pillars:

- People
- Research
- Education
- Quality & Patient Safety
- Innovation & Technology
- Advocacy & Outreach

Within each pillar, there is an overarching goal for that pillar, 3-5 key objectives to achieve the goal, the various strategies to achieve those objectives and the supporting metrics and timelines.

Pillar: People

Overarching Goal: Ensure the success of the Department of Surgery is heightened						
by all members reaching	•					
Objectives	Strategy	Metrics				
Ensure the DOS is diverse and inclusive with respect to its culture, membership, and leadership	 Review terms of reference for committee membership and discuss committee composition with Chairs. Develop an HR plan that embeds Equity, Diversity, Inclusion and Decolonization (EDID) within it and processes for recruitment. Support the EDID committee and its initiatives Promote EDID training 	 Review composition of DOS membership and committees Track and report on recruitment and EDID metrics Report on incorporation of EDID metrics in committee initiatives Track and report on EDID training in STAR 				
Support wellness by ensuring emotional, mental, and physical well-being of faculty, staff, and trainees	 Develop a business case for expanded support for physician extenders across Divisions Support the wellness committee and its initiatives Provide information on wellness seminars and events Consider new approaches to practice management to provide better work-life balance ie split positions, block protected time Optimize the working environment i.e. nutrition, sleep, safe and dedicated lounge/office space Ensure and enhance support for new recruits and early career surgeons 	 Review data on uptake of wellness events and seminars Issue an annual wellness survey Track and report on issues negatively affecting wellness and how they are dealt with Collect and periodically review office space allocations to help with recruitment planning Ensure new recruits are supported with plans for committed space and appropriate resources and these plans are enabled and accomplished 				
Support faculty development, advancement and leadership training	 Promote and support faculty in achieving awards locally, nationally and internationally and broadly communicate this success Support faculty in the promotion process by recognizing the full depth and breadth of their creative professional activity 	 Develop a formal mechanism to put forward faculty for awards (ie Departmental, Hospital, Schulich/UWO, Provincial, National and International); track and report on this success Review data on faculty completion of credit and non-credit courses when arranged via the DOS. Document and review use of mentorship resources. 				

	 Promote faculty development and interest in taking on leadership roles by creation of enhanced support mechanisms ie stipends, training, leadership, mentorship Increase mid-career faculty opportunities in Department committees and expanded subcommittees. Gather list of leadership training options and provide Departmental support. Ensure effective mentorship/sponsorship at all levels. Consider EDID as a factor in faculty development 	 Track and report on mentorship training in STAR Review and quantify effectiveness of mentorship committees Document number of faculty on Department committees and subcommittees Work with Schulich in developing a world class leadership program
Enable recruitment and ensure there are no gaps in physician workforce	 Develop a medium- and long-term HR plan based on population need and physician demographic data that addresses EDID and defines key resource and academic needs. Review recruitment processes (Department/ Divisional levels) Ensure recruitment is linked to both clinical and academic needs Develop a formal process to support surgeon-scientists and provide appropriate training. Develop a formal process for transition planning and provide retirement counselling 	Review data on recruitment and retirement annually Track and report on plans for late career transition Incorporate at least one EDID trained representative in all recruitment processes

Pillar: Research

Overarching Goal: Ensure the Department of Surgery advances its international		
reputation by reaching i	ts full potential as a research-int	ensive Department
Objectives	Strategy	Metrics
Ensure a culture of research is fully integrated within the Department of Surgery to maximize success	 Ensure research node structure is fully utilized and functioning optimally Develop an HR plan that embeds research within it and processes for recruitment, including support for surgeon scientists and clinician researchers Support the Research Committee and its initiatives Promote and support research training, advancement, and early career research mentorship to prepare faculty for a career in research and the ability to capture high-level grant funding Increase research output in key areas i.e., high impact publications and grant capture Promote cross-disciplinary collaboration that allows team-based research to be successful Promote cross-Divisional and cross-Departmental output and collaboration in common areas i.e., Quality, Innovation, Frailty, etc. Promote recognition of research success through award nominations, Hospital / University communications, etc. Consider equity, diversity, inclusion, and decolonization (EDID) in all aspects of research 	 Review research node structure and determine whether composition is satisfactory Survey DOS annually to ensure understanding of changing research priorities and gaps Track and report on recruitment and research metrics Report on output of research committee initiatives Report on research training of residents, fellows, and new faculty, including graduate degrees and participation in MSc in Surgery program Track and report on measures of success in STAR including publications, grant capture, patents Track and report on development of cross-disciplinary, cross-Divisional, and cross-Departmental collaborations Enhance merit award competition and expand reporting on individual and group successes Report on EDID measures in all academic output (grant reports, publications, composition of research teams Create sustainable funding for surgeon scientists Encourage and report sharing of research resources across the Department (clinical trials expertise, statistical support, research administrative support)

· Identify and support new or · Develop academic role categories Track and report on prioritized areas of with metrics that recognize new advancements in new and research that have the areas of research i.e., innovation, emerging areas such as potential to increase wellness, EDID, quality improvement innovation, wellness, EDID, academic success and • Provide infrastructure to support quality improvement, and best productivity emerging areas of research i.e., practices innovation, wellness, EDID, quality • Report on outcome of plans to improvement support new and emerging areas • Align with and leverage prioritized of research focus by SSMD on clinical trials and • Report on growth in clinical trials translational research and translational research Work with Foundations and Ensure sustainability of Track and report on new funding research programs by Development office to establish sources including Research establishing secure funding sustainable funding sources for Chairs mechanisms that enable research i.e., Chairs, Scholars, Track and report on new success scientist funding, fellowships research partnerships • Develop a process to provide • Track and report on growth of increased financial support for internal research funding and its protected research time outputs • Use research to drive innovation that Explore the development of a full enables successful partnerships with or partial AFP to provide financial industry support for research time for faculty Grow support for internal research grants and resident research grants Develop support for research operations that would allow enhanced productivity i.e., grant writing, statistical and methodological support, health economics, KT etc. • Provide trainees (fellows, • Promote faculty interest in taking on Survey trainees annually to residents, and students) research mentorship roles and ensure high-quality research with high-quality research supervision of graduate work experiences are provided. experiences Encourage completion of graduate Track and report on research degrees during residency and experiences that involve crossfellowship training disciplinary and extra- Work with hospital foundations to Departmental collaboration develop fellowships with embedded research components and deliverables • Grow research experiences for trainees with a focus on crossdisciplinary collaboration. • Ensure effective mentorship / sponsorship of all trainees • Consider EDID when providing high quality research experiences

Pillar: Education

Overarching Goal: Ensure the Department of Surgery creates excellence in surgical			
education in London and the distributed sites			
Objectives	Strategy	Metrics	
Become a leader in surgical education scholarship through innovation and interdisciplinary collaboration	 Promote cross-divisional surgical education research collaboration through the Educational Research Node and Divisional leads Develop an HR plan that embeds education within it and processes for recruitment, including support for Clinician Educators Improve partnerships and be more engaged with stakeholders in CERI and other departments/units at Schulich, including Anatomy, Microbiology, Robarts imaging and BJI Promote and support education training, advancement, and early career mentorship to prepare faculty for a career in education Increase education research output in key areas i.e., high impact publications, grant capture and presentations at national and international meetings Develop novel approaches to education in new areas i.e., Quality, EDID, career planning, late career transitioning Promote recognition of education success through award nominations, Hospital/University communications, etc. Consider equity, diversity, inclusion, and decolonization (EDID) in all aspects of teaching and learning and across all Education Committees Promote and support peer education and CME opportunities, including both in person and virtual opportunities within and outside the operating room 	 Track and report on recruitment and education metrics Report on output of Education Committees' initiatives Report on education training of residents, fellows, and new faculty, including graduate degrees. Integrate defined curriculum and assessment metrics into fellowship programs. Report on inter-disciplinarity and scholarly output of Master of Surgery program Track and report on development of cross-disciplinary, cross-Divisional, and cross-Departmental collaborations in Education Track and report on the number of faculty that interface with CERI and related scholarly output Track and report on national and international leadership roles in surgical education Report on EDID measures in educational initiatives Create sustainable funding for fellowships and MSc in Surgery program 	
Enhance and improve surgical educational skill sets including around competency-based education and EDID for	Generate an academy of surgical educators to improve the quality and uniformity of surgical teaching and to facilitate professional development workshops on teaching and promotion	Survey trainees annually to ensure high-quality education experiences are provided i.e., quality of clinical experiences,	

both London and distributed sites	of student and resident wellness, locally and at distributed sites • Develop workshops that enhance the skill sets of preceptors involved in CbD i.e., education, surgical supervision, evaluation, giving feedback, surgical coaching	formal teaching, approaches to wellness etc. Design an annual faculty teaching needs assessment survey for local and distributed sites Ensure all residency training programs in the DOS have a community preceptor in their RTP
Ensure sustainability and growth of education programs by establishing mechanisms that enable success and enhance recognition of faculty engagement	 Increase faculty engagement in UGME activities by identifying all undergraduate activities, and ensuring appropriate representation Identify surgeons in each Division to be UGME champions and encourage participation in UGME events (e.g. Surgery Interest Groups, annual Taste of Surgery) Educate staff, faculty, fellows and residents about creating a culturally safe, inclusive, and positive learning environment Ensure there is equity among faculty for their involvement in UGME and PGME activities and accountability for fulfilling teaching responsibilities Increase awareness of the fundamental role of teaching, educational leadership roles and other education roles in the promotion process Ensure education infrastructure needs including space are identified and met to support pedagogical/curricular needs 	 Track and report on all undergraduate educational activities where surgeons are/should be represented Track and report on roles and responsibilities of Divisional Surgical Education leaders Track and report on faculty involvement in UGME and PGME activities Track and report on new funding sources including support for infrastructure and Chairs with an education focus Track and report on DOS Education leaders promoted because of their contributions to education i.e., leadership, curriculum design, teaching, innovation
Enhance the education of trainees through simulation to improve operational outcomes, delivery of care and patient safety within the health care system	 Create and implement an anatomy focused curriculum (virtual or in-person) to improve student comprehension and performance in surgical training Develop a plan to consider how simulation will be better integrated into the Education Pillar of the DOS and subsequently supported Consider EDID when developing and promoting high quality simulation experiences 	 Survey trainees and faculty to determine how simulation can be better integrated within the DOS Track and report on the use of simulation within the DOS and share best practices and opportunities across Divisions

Pillar: Quality

Overarching Goal: Ensure the Department of Surgery is an international leader in the delivery of evidence-based, high-quality and safe patient care **Objectives** Strategy **Metrics** · Ensure a culture of Initiate and assess surgical quality • Review and report on the clinical quality and patient improvement projects in the London outcome measures that reflect safety is fully Hospitals while fostering a systems-based the quality of care provided by integrated within the approach to the improvement of care the London Hospitals Department of • Improve quality and patient safety by the • Review and report on qualitative Surgery to enhance development and implementation of outcome data measuring patient outcomes standardized pathways for patient care satisfaction Provide oversight of the National Surgical • Track and report on recruitment Quality Improvement Program or other related to Quality quality related clinical data, analyses, and Report on output of Quality recommendations Council initiatives Enhance the provision of ambulatory and Track and report on growth of short stay surgical care by developing the activity and outcomes at the infrastructure to support it Surgicentre Expand quality improvement initiatives • Report on EDID measures within across Divisions and Departments, Allied quality initiatives and identify Health, Administration, etc. to foster gaps that would improve patient collaboration and adherence care Develop an HR plan that embeds quality within it and processes for recruitment Support the Quality Council and its initiatives • Ensure virtual care is based on a foundation of quality and patient safety Promote and support research training, advancement, and early career research mentorship to prepare faculty for a career in Quality and the ability to capture grant funding in this area Consider equity, diversity, inclusion, and decolonization (EDID) in all aspects of • Planetary health/sustainable health care is essential and must be considered in all

aspects of quality

Develop and support Quality as a prioritized area of academic success and productivity	 Develop an Academic Role Category with metrics that recognizes Quality as a career pathway Provide infrastructure to support Quality Improvement including the Quality Council Align with and leverage prioritized focus by SSMD on clinical and pragmatic trials to enhance research in QI Increase usage of the NSQIP database to increase academic outputs Collaborate with external partners focused on Quality i.e., Health Quality Ontario Surgical Quality Improvement Network 	Track and report on academic output related to Quality Track and report on outcome of plans to support academic programs in Quality Report on growth in clinical trials in QI Report on EDID measures utilized in QI academic work and identify gaps that would enhance research outcomes
Ensure sustainability of QI programs by establishing secure funding mechanisms that enable success	 Work with Hospital Foundations to establish sustainable funding sources for QI initiatives Work with London Hospitals to develop support for new initiatives that enhance high-quality value-based care Develop support for research operations that would allow assessment of the impact of QI initiatives and their value i.e., health economics, health technology assessment Grow support for internal research grants and resident research grants that are focused on QI and patient safety 	 Track and report on new funding sources related to Quality Track and report on growth of internal research funding and its outputs related to Quality
Provide trainees (fellows, residents, and students) with high-quality education and research experiences in Quality	 Promote faculty interest in taking on mentorship roles and supervision of work in QI Encourage completion of graduate degrees during residency and fellowship training related to Quality Develop a resident curriculum across Divisions that emphasizes QI Consider EDID when providing high quality experiences in QI 	Survey trainees annually on availability and uptake of high-quality research and education experiences related to QI Track and report on education and research experiences for trainees that are focused on Quality

Pillar: Innovation & Technology

Overarching Goal: Ensure the Department of Surgery at Western is an international			
leader and center of excellence in surgical innovation			
Objectives	Strategy	Metrics	
Ensure a culture of innovation is fully integrated within the Department of Surgery to enhance outcomes	 Develop a process for the clinical use of robotics in the DOS which aligns with Provincial directions and allocation of resources Support innovation by the development and implementation of standardized pathways for the introduction and assessment of new technologies Assess, develop and summarize the evidence for robotics, digital surgery and other innovative new technology driven advances in surgery to allow use in surgical practice Develop an HR plan that embeds innovation within it and processes for recruitment Support the Innovation and Robotics Committee and its initiatives Support bench to bedside innovation by establishing partnerships and sharing best practices for robotics, digital surgery, innovative activities, and new technologies within Divisions of the DOS and across Departments Support pre-market assessment of innovative technologies, including research and compassionate use pathways Promote and support research training, advancement, and early career research mentorship to prepare faculty for a career focused on innovation Facilitate communication and collaboration across the DOS while promoting common messaging around innovation and robotics Consider equity, diversity, inclusion, and decolonization (EDID) in all aspects of innovation 	 Review and report on the use of robotics and patient outcomes in the DOS Review and report on the implementation of approaches for and outcomes of the introduction and assessment of new technologies Track and report scholarly presentations and publications related to new health technology assessment Track and report on recruitment related to Innovation Report on output of Innovation and Robotics Committee initiatives Report on EDID measures within innovation initiatives and identify gaps that would improve patient care 	

Develop and support innovation as a prioritized area of academic success and productivity	 Facilitate and engage in scholarly research related to innovation, robotics, and digital surgery Develop an Academic Role Category with metrics that recognizes innovation as a career pathway Provide infrastructure to support innovation academic initiatives including the work of the Innovation and Robotics Committee Support the development and adoption of digital surgery including Artificial Intelligence and Machine Learning applications Collaborate with external partners focused on innovation i.e., World Discoveries, Industry, Government etc. 	Track and report on academic output related to innovation i.e., patents, commercialization of products, presentations, and publications
Ensure sustainability of innovation initiatives by establishing secure funding mechanisms that enable success	 Work with the London Hospitals to acquire, develop, evaluate, and maintain leading edge technologies for surgery and develop models that enhance high-quality value-based care Develop processes that support development and commercialization of new products that will establish funding mechanisms to support future innovation Develop support for research operations that would allow assessment of the impact of new technologies and their value i.e., health economics, health technology assessment 	Track and report on new funding sources related to Innovation
Provide trainees with high- quality education and research experiences focused on innovation and the development of new technologies and products	 Promote faculty interest in taking on mentorship roles and supervision of work around Innovation and the introduction of new technologies Encourage completion of graduate degrees during residency and fellowship training related to innovation Consider developing a resident curriculum across Divisions that emphasizes innovation 	 Survey trainees annually on availability and uptake of high-quality research and education experiences related to innovation Track and report on education and research experiences for trainees that are focused on innovation

Pillar: Advocacy & Outreach

Overarching Goal: Promote the Department of Surgery as a regional resource for			
complex surgical care while advocating for support of the Departmental mission			
Objectives	Strategy	Metrics	
Outreach: ensure the DOS is broadly focused on our regional and global impact as it relates to patient care, education, and research, through its culture, membership, and leadership	 Develop an HR plan that embeds regionalization within it Collaborate with regional hospital and community partners to optimize clinical care, research and education Improve patient outcomes via development of regional partnerships to enhance transitions of care Enhance delivery of care through practices that are culturally sensitive, improve access for under-represented individuals, and are informed by an understanding of the presence and impact of bias on patient outcomes Ensure surgical training programs are integrated within our region via strong regional collaborations Ensure research initiatives are focused on our region and have global impact Ensure virtual care is integrated into the culture and operations of the DOS Develop a focus on population health to optimize clinical care, research and education and respond to regional and global needs 	 Track and report on regional partnerships Track and report on new population health initiatives in the DOS Review survey results of patient feedback on their care journeys Track and report on research measures that include representation from regional partners Report on uptake of virtual care as compared to in-person care delivery for non-surgical treatment episodes 	
Advocacy: increase awareness and support of the DOS and its mission and vision within the Academic Health Sciences Centre, the region, and beyond	 Promote the appropriate allocation of resources (operations and infrastructure) and the acquisition of new technology to support high quality surgical care Promote planetary health within surgical services to address the future major threats of climate change and its effects on patient health and health systems Develop a regional focus on planetary healthcare to reduce the carbon footprint of healthcare Promote support for our people i.e., the EDID and Wellness Committees and their initiatives 	 Track and report on outcomes of advocacy initiatives related to surgical care Track and report on outcomes of advocacy initiatives related to the academic mission i.e., new Chairs, fellowships, scholarships, research funding, etc. 	

Ensure and enhance support for new	
recruits and early career surgeons	
Develop a business case for expanded	
support for physician extenders	
Work with internal and external	
partners ie Foundations, alumni etc, to	
support the academic mission of the	
DOS	

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