# Surgery on a global scale at Western University

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Accepted for publication July 3, 2013

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DOI: 10.1503/cjs.016713

ounded in 1881,¹ the Department of Surgery is one of the largest departments in the Schulich School of Medicine & Dentistry at Western University. Housing 8 divisions, the department has experienced tremendous growth in the past 10 years. Several endowed chairs have been established in recent years, such as the J.C. Kennedy Chair in Orthopaedic Surgery, the Sandy Kirkley Chair in Musculoskeletal Research, the Graham King Musculoskeletal Research Chair and the Ray and Margaret Elliott Chair in Surgical Innovation. Through international initiatives in education, research and surgical advancements, the international profile of the department has increased substantially. With a long history of surgical innovation² and providing high-quality patient-centred care, the department has become a sought-after training opportunity.





Chair/Chief: Dr. John Denstedt, Richard Ivey Professor

Divisions: cardiac surgery; general surgery; orthopaedic surgery; paediatric surgery; plastic & reconstructive surgery; thoracic surgery; urology; vascular surgery

Number of surgeons: 83 Number of research scientists: 9 Number of fellows: 57 Number of residents: 97 Number of clinical clerks: 132 Home elective students: 50 Visiting elective students: 100 Military physician assistant students: 23

## SURGICAL EDUCATION THROUGH INTERNATIONAL INITIATIVES

Throughout the years, the department has welcomed many fellows and visiting professors from around the globe. Some have come from as far as Saudi Arabia, New Zealand, Singapore, Bahrain, the Philippines, Israel, Italy, Australia, the UK, China and Switzerland. The relationships resulting from these fellowships have continued to grow, as recently demonstrated by the collaboration between the Division of Vascular Surgery and 2 of its former clinical fellows in developing vascular surgery programs in Sudan and Colombia. Faculty members have taken part in several travelling fellowships through international organizations, such as The James IV Association of Surgeons, the British Hip Society, the American Society of Shoulder and Elbow Therapists, the Canadian Orthopaedic Association Canadian-French-Belgian-Swiss Travelling Fellowship, and the European Association of Urology-Canadian Urological Association International Academic Exchange Programme. Humanitarian and volunteer efforts in Peru, Haiti, China, India and Afghanistan have also provided faculty members and residents with the opportunity to share their surgical expertise. Through hundreds of guest professorships around the globe and participation in multinational programs, such as the Committee for Global Paediatric Initiatives and the AO North America

CMF Specialty Council, faculty members continue to form strong connections with the international community.

Surgical residents have also been able to participate in international exchanges, most recently through the partnership between Western University and the West China Hospital School of Medicine at Sichuan University in Chengdu, China. Trainees and faculty from both countries have made several trips, participating in surgical cases, presentations and research collaborations.

A new Master of Science in Surgery degree program has recently been launched in the Department of Surgery. This unique program is tailored to the specific needs of surgical trainees to provide intensive research training and a solid foundation for success as a future academic surgeon. This program has already affected international student interest.

#### RESEARCH COLLABORATIONS ON A GLOBAL PLATFORM

The department's annual Research Day event has brought guest speakers from Washington, North Carolina, New York, Israel, British Columbia and, most recently, Imperial College in London University, United Kingdom.

Surgical research continues to flourish in the department, as evidenced by the growing involvement of faculty in international partnerships. Collaborations with the University of Adelaide in Adelaide, Australia, in setting up research exchanges with Bangalore, India; implementing a Transcatheter (Percutaneous) Aortic Valve Program; and forming linkages with pediatric urologists in Ranchi, India, are just a few examples. Many national and international firsts have resulted from department members' research into novel surgical techniques.

### RECOGNITION IN SURGICAL ADVANCEMENTS

The department has a strong tradition of surgical innovation, from the first successful heart transplant in Canada to being the first in the world to use the geko<sup>TM</sup> device in cardiac surgery.<sup>3</sup> Surgeons from Japan, China, Colombia and Germany have come to train with the department's cardiac surgeons. Live surgeries have also been broadcast to Brazil, Colombia and China, providing more opportunities for collaboration and training, and department members' are continually invited to organize and present at international conferences.

The department's transplant surgeons have also been nationally and internationally recognized for achievements and advancements in liver transplantation; one of them performed the liver transplant in the longest-surviving heart transplant patient in Canada,<sup>4</sup> and another was one of the select few globally to successfully perform a new surgical procedure to treat liver cancer.<sup>5</sup> Department members have pioneered and led Donation after Cardiac Death Liver Transplantation in Canada. Fifty transplantations have been successfully performed in London, Ont., leading to invita-

tions to present at other Canadian transplant centres and to several publications in scholarly journals.

Service and contributions by department members have also been recognized at the highest levels. Several members have been elected to the Order of Canada and received Queen Elizabeth II Diamond Jubilee medals; 1 member was honoured by the North Atlantic Treaty Organization<sup>6</sup> in addition to receiving these 2 awards. Department members have been honoured with appointments to serve on the boards and committees of international associations, such as the American Urological Association, the International Society for Minimally Invasive Cardiothoracic Surgery, the International Dupuytren's Society, the AO Technical Commission and the International Federation of Societies of Endoscopic Surgery.

#### CONCLUSION

In its pursuit of surgical innovation and excellence, the Department of Surgery at Western University has grown its presence nationally and internationally. Exchange opportunities for faculty and residents have proven to be successful and highly beneficial in furthering surgical education. Partnerships with many education and research centres have continued to flourish, and faculty members have been sought out by the international community for their widely recognized clinical and research expertise. A department full of determined clinicians, educators and researchers, the Department of Surgery at Western University continues to move forward with the goal of providing outstanding clinical care, leadership, research achievements and educational opportunities.

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