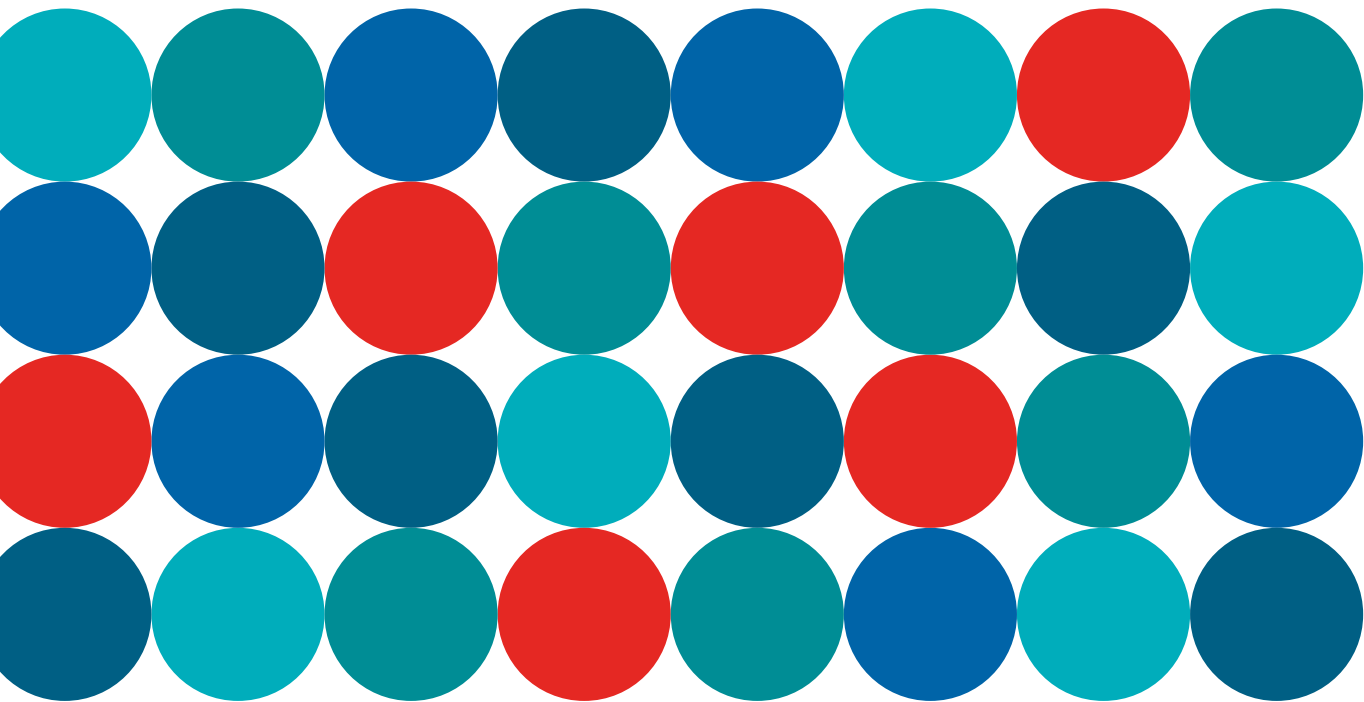


# Annual Report 2019





Department of Surgery  
2019 Annual Report

No part of this publication may be reproduced, stored, or introduced into a retrieval system. It may not be transmitted in any form or by any means (electronic, mechanical, photocopying, recording, or otherwise) without the prior written permission of the copyright owners.

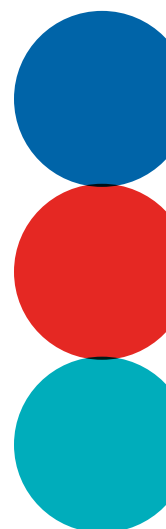
Copyright © 2020  
Department of Surgery, University of Calgary  
All rights reserved

CONTACT  
Department of Surgery  
Cumming School of Medicine  
University of Calgary and Alberta Health Services – Calgary Zone  
Foothills Medical Centre  
North Tower, 10th Floor  
1403 – 29 Street NW,  
Calgary, AB T2N 2T9

[www.Cumming.UCalgary.ca/Departments/Surgery](http://www.Cumming.UCalgary.ca/Departments/Surgery)

# TABLE OF CONTENTS

LETTER FROM THE HEAD OF THE DEPARTMENT OF SURGERY .....	2
LETTER FROM THE DEPUTY HEAD - GOVERNANCE AND PHYSICIAN SERVICES .....	4
UPDATE FROM THE OFFICE OF SURGICAL EDUCATION .....	6
UPDATE FROM THE OFFICE OF SURGICAL RESEARCH .....	8
UPDATE FROM THE OFFICE OF SURGICAL QUALITY .....	10
<b>SECTION HIGHLIGHTS</b>	
<i>Section of Dentistry and Oral Health</i> .....	12
<i>Section of General Surgery</i> .....	14
<i>Section of Ophthalmology</i> .....	16
<i>Section of Oral and Maxillofacial Surgery</i> .....	18
<i>Section of Orthopedic Surgery</i> .....	20
<i>Section of Otolaryngology Head and Neck Surgery</i> .....	22
<i>Section of Pediatric Surgery</i> .....	24
<i>Section of Plastic Surgery</i> .....	26
<i>Section of Podiatric Surgery</i> .....	28
<i>Section of Surgical Oncology</i> .....	30
<i>Section of Thoracic Surgery</i> .....	32
<i>Section of Transplant Surgery</i> .....	34
<i>Section of Urology</i> .....	36
<i>Section of Vascular Surgery</i> .....	38
<b>ORGANIZATIONAL CHARTS</b> .....	40
<b>PROMOTIONS</b> .....	46



# LETTER FROM THE HEAD OF THE DEPARTMENT OF SURGERY



## Dear Colleagues and Friends,

I would like to report that surgical teams continue to provide high-quality patient care across the Calgary Zone (CZ). Increasing surgical case volumes were once again observed as well as the implementation of new surgical techniques, such as the Direct Anterior Hip procedure. Over the past year, one of the main priorities of the Department of Surgery (DoS) leadership was collaborating with the new Alberta provincial government, seeking to better understand its priorities, and contribute to new programs, such as the Alberta Surgical Initiative (ASI). The DoS has been working closely with our Calgary Zone Senior Alberta Health Services (AHS) leaders to review these initiatives and recommendations and assess their impact on surgeons and patient care. In addition, the DoS continued to work closely with Cumming School of Medicine (CSM) officials to strengthen academic activities within the department, despite funding challenges. This annual report summarizes the clinical and academic activities in the Department of Surgery for the year 2019.

## Surgical Activity

CZ surgical teams performed 82,083 cases at the five urban and three rural hospital facilities and 22,804 cases in non-hospital surgical facilities. These volumes

represent a total increase of four percent over the previous year's surgical case volumes. A sincere thank you to all surgeons and support staff, as well as operational and Medical Affairs leads, who work very hard to maximize the efficient use of our health care resources.

## Office of Surgical Research (OSR)

I would like to thank Dr. Claire Temple-Oberle, Director of the OSR, and the OSR Research Committee members for their tremendous leadership in organizing and implementing research activities within the DoS. An investment of over one million dollars by CZ AHS and CSM leaders continues to support activities such as research day, statistician support, and grant funding. In February 2020, the DoS will welcome Dr. Michael Monument as the new OSR Director.

## Office of Surgical Education (OSE)

In the past year, surgeon educators in the DoS, led by Dr. Artan Reso, Director of the OSE, have worked collaboratively with the Office of Postgraduate Medical Education (PGME) to prepare the DoS for the implementation of Competency by Design for resident education. The Office of Surgical Fellowship (OSF) and the Surgical Undergraduate Education Committee (SUGEC) are also working diligently to provide a positive learning environment for fellows and medical students. Lastly, the Center for Global Surgery continues to grow, and new plans are expected in 2020.

## Office of Surgical Quality (OSQ)

The OSQ, led by Dr. Andrew Graham, Director of the OSQ, continues to review quality initiatives in the CZ. Building collaborative interactions with the National Surgical Quality Improvement Program (NSQIP) teams has also been a priority to ensure the appropriate reporting of surgeons in the CZ. The DoS also appreciates the Sectional Quality Leads who are supporting our quality efforts and assisting with the Alberta Surgical Initiative (ASI) implementation.

## Alberta Surgical Initiative (ASI)

Beginning May 2019, the DoS leadership and CZ Medical Affairs/Operational leads have worked to contribute to a provincial document that aims to improve the timely access to surgery for all Albertans. The four-year government initiative focuses on an integrated approach to all phases of the patient's journey. It includes the referral phase (from primary care to surgeons), the surgery phase (the decision/preparation for surgery and delivery of surgical care), and the recovery phase (recovery from surgery and rehabilitation). The government plan includes five key strategies:

## DEPARTMENT OF SURGERY

- Improve the provision of specialist advice to family doctors before consultation (Referral phase).
- Improve the provision of surgical consultation and recovery (Referral and Recovery Phase).
- Improve the provision of surgery – all elective surgery waitlists reduced to 90% of clinical recommended/appropriate targets (ACATS) by April 2023 (Surgery Phase).
- Improve care coordination and development of surgical pathways for patients and referring doctors (Referral phase).
- Develop strategies and recommendations to support long-term service viability (all phases).

Drafts of the provincial ASI document have continued to evolve (i.e. case volumes, operational costs, capital equipment costs, etc.) as scenarios are refined based on updated deliverables from the government. Although additional modifications to the ASI plan are anticipated, the current proposal outlines over 18,000 additional OR cases to be completed in the next three years at CZ urban/rural hospital facilities and Chartered Surgical Facilities, previously called Non-Hospital Surgical Facilities (NHSF). The DoS leadership remains engaged with the local Business Analyst Support (BAS) representatives to develop detailed costing information for the proposed project based on updated resource/workforce requirements and projected case volumes. Work on other parts of the ASI strategy, such as the development of a provincial central triage system and improvements in post-op recovery pathways (e.g. ERAS), is currently underway.

### Acute Care Coverage

Ensuring adequate call coverage for CZ surgeons remains a high priority for the DoS. In 2019, some training programs saw a decrease in resident numbers, which created gaps in call schedules. These have been difficult to fill with existing resources, such as resident extenders and clinical assistant coverage. To address this issue, the DoS remains engaged in the zone Acute Care Coverage (ACC) committee as they seek to identify fiscally responsible coverage options and standardize resources across departments in the zone. These efforts are currently led at a department level by Dr. Neel Datta, Director of the Calgary Zone Surgery Workforce Strategy, Section Chiefs, and the DoS ACC workforce.

### Future DoS Challenges

- Improving surgeon wellness activities through the formation of a DoS peer support group.
- Improving diversity by evaluating the current diversity spectrum and developing a plan of possible initiatives for improvement.

**82,083** *surgical procedures at five urban and three rural hospitals*

**22,804** *cases in non-hospital surgical facilities*

**4%** *increase over previous year's surgical case volume*

- Creating a DoS workforce to explore Clinical Alternative Funding Plans (ARP) for interested surgeon groups.
- Appointing a new Director of Community Relations to improve philanthropic activities and support local health care initiatives.
- Continuing to work collaboratively with AHS leadership, CSM leadership, and the government representatives will be a priority. This is essential to maintaining excellence in patient care and physician wellness as we plan and implement ASI, in addition to evaluating the surgery-related proposals arising from the Ernst & Young (EY) report. Hiring a DoS lead to assist with ASI implementation and evaluating the impact of the EY recommendations on surgical care in the CZ is crucial to successfully complete this process.

2019 was a year of change, including many challenges and opportunities, and I would like to recognize the excellence of our surgical leadership team. Their commitment to the department and the provision of outstanding patient care is unparalleled. Thank you to our members, colleagues, and friends for your ongoing support, and I look forward to working with you in the upcoming year.

Sincerely,

**Sean C. Grondin MD MPH FRCSC FACS**  
**Professor and Head Department of Surgery,**  
**Cumming School of Medicine, University of Calgary,**  
**Calgary Zone Clinical Department Head,**  
**Alberta Health Services**

# LETTER FROM THE DEPUTY HEAD — GOVERNANCE AND PHYSICIAN SERVICES



*We recognize that surgeons are our most valuable resource. We support our members and are exploring different ideas to maintain and support physician wellness.*

## Dear Colleagues and Friends,

I feel fortunate to have been selected for this new position, Deputy Head, Department of Surgery: Governance and Physician Services, in 2019. The position evolved from the previous position, Deputy Head-Academic, which was held by Dr. Mary Brindle. Dr. Brindle did an excellent job, and she is now the Scientific Director of the Surgery Strategic Clinical Network.

I was attracted by the breadth of this new portfolio and to the vision and mission of department leadership, which is to enhance the ability of surgeons to provide the highest quality care. The leadership team is guided by the values of fairness, transparency, and equity, and I'm excited to contribute to their ongoing work.

My background as the Section Chief-Pediatric Surgery and the Facility Site Chief-Surgery for Alberta Children's Hospital provides me with the experience needed for this challenging

new role. The key purpose of my position is to maintain alignment between the academic mission and the clinical objectives and requirements of the Department of Surgery (DoS). I will work with the Section Chiefs and the Site Chiefs as my portfolio specifically focuses on the following initiatives:

### Physician Contract Management

Last year we saw significant changes that will affect the DoS, including a new provincial government, increased stress on the Alberta economy, and pressure on Alberta Health Services (AHS) for cost containment. There continues to be variation in the on-site agreements for different surgical groups, and even within groups. We are trying to understand the historical nature of these contracts, and we are working to standardize them for all surgeons. This includes leadership contracts and stipends.

We have also been asked by AHS leadership to review

*Our mission is to enhance the ability of surgeons to provide the highest quality care.*

section leadership positions that are not specifically listed in the medical staff bylaws. Our goal is to standardize positions across sections, and as we update all leadership positions and contracts, we aim to develop deliverables that are achievable and measurable. We are also evaluating the appropriateness of office allocation across sites, with Dr. Paul McBeth leading the Space Committee in this endeavor.

#### **Physician Recruitment and Workforce Planning**

Physician recruitment and workforce planning have been a controversial and much-debated topic. At present, sections can only recruit if a member retires or if the group agrees to divide AHS resources evenly with a new recruit. The senior surgeon policy development, led by Dr. Dixon, also feeds into this area.

AHS leadership has set parameters that we must work within, and new resources are not available. We will approach these guidelines as an opportunity to evaluate how we deliver clinical services in the zone, and it will encourage us to be innovative in our thinking, as we embrace the upcoming changes.

#### **Alternative Funding Models**

Currently, the department only has the Division of Pediatric General Surgery, Section of Pediatric Surgery, in a clinical Alternative Relationship Plan (clinical ARP). There was hope that the Sections of Thoracic Surgery and Pediatric Surgery might be on track for an Academic Medicine Health Services Plan (AMHSP), but this did not come to fruition. Unfortunately, the current climate has dictated that there is no funding to implement new plans in the AMHSP. That said, we have been encouraged to submit proposals for clinical ARPs, specifically for groups who will lose their clinical stipends in 2020. Clinical ARPs aim to provide physicians with stable, set remuneration to deliver services to a specific patient population, in a specific location, using a specified delivery model. I will work with these groups and the AMA ARP Physician Support Services to develop these plans.

#### **Physician Wellness**

We recognize that surgeons are our most valuable resource. We need to support our members, and we are exploring different ideas to maintain and support physician wellness. We will begin by ensuring physicians are aware of the resources available to them if they are struggling at work or in their personal lives. Development of a Peer Support Program has already started, with the help of Jane Lemaire and Well Doc Alberta, and we will be establishing a Physician Wellness Committee.

We also recognize the importance of physician diversity, equity, and inclusivity. Our ombudsperson and lead on diversity, Dr. Elaine Joughin, will play an important role in physician wellness, as we address issues that may arise and plan how to improve the department as a whole.

Our department is diverse in many ways – the type of surgeon, location, type of practice, gender, age, etc. I believe a key component of our leadership team will be to find ways to engage our members, in addition to finding a balance between supporting the members and supporting the goals of Alberta Health Services and the Cumming School of Medicine. This is no easy task. Your ideas and feedback are important to us, we promise to listen, and we will represent your concerns and ideas in an honest and fair manner. Some decisions are out of our control, but we will change what we can and advocate as much as possible. We will continue to optimize the delivery of surgical care in the Calgary Zone. I invite you to work with us.

**Sincerely,**

**Frankie Fraulin MD FRCSC**

**Clinical Associate Professor and Deputy Head,  
Department of Surgery: Governance and Physician  
Services**

**Department of Surgery, Cumming School of Medicine  
University of Calgary, Alberta Health Services**

# UPDATE FROM THE OFFICE OF SURGICAL EDUCATION



## Mission:

- Work to develop, improve, and share ideas, views, and activities at every level of surgical education.
- Lead the development of educational skills for faculty.
- Evaluate education activities in the Department of Surgery (DoS).
- Organize and chair meetings of surgical education groups to promote new ideas and best practices.
- Represent surgical education at leadership forums within the DoS and the Cumming School of Medicine (CSM).

***The Office of Surgical Education works to develop, improve, and share ideas, views, and activities at every level of surgical education.***

## Surgical Foundations

In 2019, Dr. Chris Armstrong took over as the Surgical Foundations Program Director, from Dr. Justin LeBlanc, and Dr. Aaron Knox became the new Surgical Foundations Competency by Design (CBD) Lead. Surgical Foundations successfully completed its first year in CBD, and the program on-boarded over 450 faculty into the Royal College CBD ePortfolio program. In order to assist PGY-1 residents with achieving Entrusted Professional Activity (EPA) requirements, we have incorporated some of the more difficult EPAs into the boot camp and final exam.

We had 25 surgical residents participate in the one-week surgical skills boot camp from July 8-12, 2019, and the final exam on September 26, 2019. The average passing grade was: surgical skills 76%, professionalism 85%, communication 76%, collaboration 85%, and manager 81%. Four residents were high-performers in surgical skills as well as more than one CanMEDS role. The department would like to thank the more than 80 faculty and staff who assisted in making the final exam such a success.

## Continuing Medical Education (CME) Activities:

The CME office provides support to the DoS membership by organizing professional courses and events, including arranging venues, advertising, organizing accreditation and course evaluations, and providing final event reports. Some of the events organized through the CME office included:

- Glen Edwards Day
- Townsend Day
- AO Trauma Basic Course for Operating Room Personnel
- Canadian Orthopaedic Resident Forum
- Surgical Foundations Teacher's Training Retreat
- Department of Surgery Research Day and Gala

## Undergraduate Medical Education (UME) Activities:

Class of 2019. The Clerkship Class of 2019 had a total of 172 clerks, with 21 clerks completing their clerkship in the rural setting, called the University of Calgary Longitudinal Integrated Clerkship (UCLIC). The department received

15-22 University of Calgary clerks for each of the eight surgery blocks. A variety of surgical seminar sessions were presented by dedicated department faculty in each block.

Class of 2020. Surgery rotations for the Class of 2020 commenced in April 2019. The class has a total of 171 clerks, with 13 UCLIC clerks. A total of eight blocks were received by the department with 19-22 clerks in each block. There has been a significant change to the surgery rotations for UCLICs. Class of 2020 UCLICs will return to Calgary to complete a three-week surgery rotation in General Surgery compared to a previous three-week General Surgery plus one-week Selective Surgery rotation.

#### Visiting Clerks and Surgical Electives for 2019

University of Calgary medical students (both clerks and pre-clerks) and eligible final year medical students nationwide (visiting clerks) completed 195 surgical electives. The high volume of requests reflects the quality of clerkship electives and teaching provided by department surgical preceptors.

*The OSE organizes and chairs meetings of surgical education groups to promote new ideas and best practices.*

#### Postgraduate Medical Education (PGME)

Highlights of the PGME program include:

- More than 90 DoS residents, in addition to residents visiting from around the country.
- Ten fully accredited residency programs with 286 surgeons teaching in these programs.
- More than 30 fellows in the Sections of General Surgery, Ophthalmology, Orthopedic Surgery, Plastic Surgery, and Urology.
- Four different teaching sites providing surgical education at every level of training.

**91** *surgical residents*

**8** *surgical extended residents*

**27** *surgical fellows*

#### Accomplishments and Highlights

- Dr. Jennifer Matthew received the Excellence in Teaching by New Faculty Award.
- Dr. Karim Punja received the Excellence in Teaching by Senior Faculty Award.
- Dr. Michael Monument received the Educator of the Year Award.
- Dr. Paul Cattle received the Ectopic Educator Award.
- Dr. Wayne Rosen received the McPhedran Award for Innovation in Surgical Teaching.
- Dr. Angela Deane received the Dr. Martin Spoor Award.

#### *Dr. Artan Reso*

**Director of the Office of Surgical Education,  
Department of Surgery, Cumming School of Medicine,  
University of Calgary, Alberta Health Services**

# UPDATE FROM THE OFFICE OF SURGICAL RESEARCH



## Vision

The Office of Surgical Research exists to help surgeons achieve research excellence.

## Mission

By fostering and facilitating programs aligned with the four research pillars within the Department of Surgery, the Office of Surgical Research will educate, promote, and invest in surgeons working in teams on innovative and impactful research.

The Office of Surgical Research (OSR) exists within the Department of Surgery (DoS) to:

- Offer direction and support to researchers.
- Foster collaborations between thematically aligned institutes within the University of Calgary (UofC).
- Enhance internal grant review processes to increase the success of external funding competitions.
- Offer assistance in formulating research policy, direction, and goals within the DoS.

The Director of the OSR reports to Dr. Sean Grondin, Head of the Department of Surgery. The OSR membership meets every third month to develop and monitor directives of the OSR. Directives include:

- Organizing internal research funding opportunities, including adjudication, accounting, and progress reports.
- Planning and executing the DoS annual Surgeon's Day Research Symposium.
- Providing statistical support for surgeons' research projects.
- Providing research facilitation services, including internal peer review, identification of DoS research needs, and coordination with research administration within the UofC and Alberta Health Services.

## OSR Director

Dr. Michael Monument was appointed Director of the OSR in February 2020 when he replaced Dr. Claire Temple-Oberle, who was the Director from 2017-2019. While Director, Dr. Temple-Oberle orchestrated an external review and needs assessment of the OSR and implemented numerous strategies to overcome research barriers within the DoS. These included hiring a biostatistician and research facilitator to provide internal peer review, assisting DoS members with funding and ethics applications, and interfacing with the UofC research administration. OSR internal grants and funding were restructured to provide targeted support to nominated faculty within the DoS, reimbursement for open access journal publication fees, and collaborative funding to the various sections within the DoS. A new funding strategy, Pillar Grants, was developed to fund DoS members proposing quality research projects that align with the research pillars of clinical research, basic science, surgical education, and health systems.

## Surgeon's Day

The 37th Annual Surgeons' Day Research Symposium was held in June 2019 at the Health Sciences Centre, Libin Theatre, with approximately 170 attendees. The McMurtry Lecture was given by our internal guest judge, Dr. Randy Moore, Section of Vascular Surgery, and the McPhedran Lecture was given by our external guest judge, Dr. Stephen

Feinberg, University of Michigan, Oral and Maxillofacial Surgery. Dr. Daniel Yu, Section of Orthopaedics, was awarded the top podium presentation, and Dr. Rebecca Hartley and team, Sections of Pediatric and Plastic Surgery, were awarded the Sharpest Knife – Live Grant Competition prize. The Research Symposium was followed by an Awards Gala hosted at Winsport Canada Olympic Park.

### Grants & Awards

A total of 28 OSR research grants were awarded in 2019:

- Pillars of Research Awards were given to Dr. Michael Monument and Dr. Prism Schneider, \$25,000 per recipient.
- Six Open Access Fund grants totaling \$10,000 were awarded to cover fees associated with publishing in open access journals.
- Targeted Support Fund grants for faculty totaling \$60,000 were awarded to Dr. Ganesh Swamy, Dr. Trafford Crump, Dr. Bimal Bhindi, and Dr. Jennifer Matthews.
- Collaborative Section awards totaling \$150,000 were awarded to the Sections of Orthopaedics, General Surgery, Plastic Surgery, Pediatric Surgery, Thoracic Surgery, Urology, and Otolaryngology.
- Sharpest Knife Competition prize of \$10,000 was won by Dr. Rebecca Hartley, Sections of Pediatric and Plastic Surgery.
- Eight Calgary Surgical Research Development Fund (CSRDF) grants totaling \$20,000 were awarded.

***By fostering and facilitating programs aligned with the four research pillars within the Department of Surgery, the Office of Surgical Research will educate, promote, and invest in surgeons working in teams on innovative and impactful research.***

Due to accounting and finance reorganization at the UofC, the majority of these funds were delayed in being administered. These obstacles have been resolved, and funding opportunities for 2020 will include the OSR Research Pillars competition, further Targeted Support Fund grants for faculty, and a new competition in honor of COVID-19 – grants for surgical research involving COVID-19. An important mandate of the OSR will be to closely monitor progress and research productivity from the 2019 funding allotments.

### Surgeon Scientist Program

Since 2001, the DoS and OSR have supported the Surgeon Scientist Program (SSP), which provides salary support to surgical residents to pursue dedicated research training and obtain a graduate degree (MSc or PhD). In 2019, Dr. Tito Dadou, Section of Pediatric Surgery, was awarded SSP funding to obtain a MSc of Public Health under the supervision of Dr. Mary Brindle. The OSR believes that this funding opportunity is a valuable resource to encourage scholarly activity within the DoS. Surgical residents enrolled in thesis-based graduate programs provide high-quality research for DoS faculty while developing enthusiasm and critical skills required to pursue careers in academic surgery. The funding for this initiative is limited, and we estimate exhausting these funds by 2025. The OSR will collect detailed metrics of the output provided by this funding opportunity to leverage continued support of this initiative.

### Statistical Support

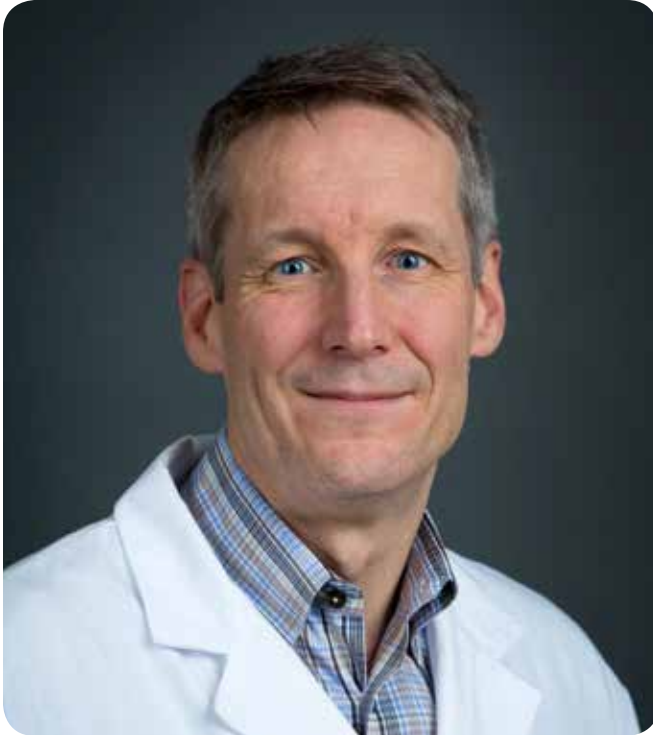
In 2018, the OSR hired Kimberly Rondeau, MSc, to provide statistical support to the DoS. Kim brings ten years of experience, providing statistical support in academic and government environments. To date, she has received 35 requests for statistical consultation and support from DoS members, including faculty and residents. To request her support, faculty and residents can complete the following survey <https://www.surveymonkey.com/r/KWZ6W3F>. Kim has become a valuable asset to the OSR, and ongoing support for this position is highly recommended.

### Research Facilitator

In 2018, the OSR hired a full-time Research Facilitator to overcome administrative research barriers. This role was instrumental in the development of an OSR resource manual to assist navigating administrative research issues at the UofC. The manual was released in March 2019 and is located on the OSR website at [ucalgary.ca/osr](http://ucalgary.ca/osr). It includes information on how to hire a research assistant, internal processes required to apply for grants, and how to set-up a project at the UofC. The next objective is to develop a role that integrates high-level research oversight with administrative duties. A key responsibility of this position is to assist the OSR Director in compiling and evaluating annual research metrics within the DoS. Recruitment for a new Research Facilitator is underway.

***Dr. Michael J. Monument MD MSc FRCS(C)***  
**Director of the Office of Surgical Research,**  
**Department of Surgery, Cumming School of Medicine,**  
**University of Calgary, Alberta Health Services**

# UPDATE FROM THE OFFICE OF SURGICAL QUALITY



## Vision

The vision of the OSQ is to develop an objective, data-driven framework to be used within the Calgary Zone to guide surgical practice. This will result in an improved patient experience, enhanced clinical outcomes, neutral or reduced care delivery costs, and a positive caregiver experience.

## Mission

The OSQ will use the three pillars of quality - effectiveness, efficiency, and safety - to develop a framework based on shared learnings, data integration, and identified core clinical metrics. The framework will be used to generate quality improvement projects, guide resource allocation, and establish a reporting map for the Calgary Zone Surgical Executive.

## Values

The OSQ creates a respectful and transparent environment to promote collaboration, complete data sharing, and accountability. This caring culture of performance stresses improvement, not sanction.

The Office of Surgical Quality (OSQ) was established in 2016 to coordinate and enhance the quality improvement efforts within the Department of Surgery (DoS). The OSQ established the Calgary Zone Surgical Quality Council (CZSQC) to address these goals.

The CZSQC meets monthly and comprises members from all National Surgical Quality Improvement Programs (NSQIP), Surgeon Champions, Anesthetist Champions, Surgical Clinical Reviewers, Department of Surgery, Department of Anesthesiology, AHS Analytics, Surgical Strategic Clinical Network, Calgary Zone Quality Council, Sectional Surgeon QI Leads, Executive Directors, Quality Improvement Consultants, and AHS OR Leadership.

## ACCOMPLISHMENTS AND HIGHLIGHTS

- The DoS was successful in obtaining funding to hire a Clinical Quality Improvement Consultant as a pilot position for two years. Melissa Whidden brings a variety of clinical experience and expertise in health evaluation, change management, and process improvement. The new position is currently under development, but we hope to have her coordinate and support ongoing clinical quality improvement initiatives in the department. We welcome Melissa to the team.
- A foundational goal of the OSQ and the CZSQC is to develop baseline clinical metrics for each section within the Calgary Zone. Excellent progress has been made over the last year. General Surgery, Plastic Surgery, Surgical Oncology, and Thoracic Surgery, with the support of the AHS Analytics Team, have embedded clinical metrics in Tableau and receive Surgical Quality Improvement Reports. These reports include a variety of tables and charts that present data by quarters on the number of procedures, average length of stay, return to OR, 90-day readmissions, 60-day mortality, and patient satisfaction. We are currently working on establishing these metrics for the section of Otolaryngology. The section of Orthopaedic Surgery utilizes core metrics from the robust Alberta Bone and Joint Institute data, and Vascular Surgery is hoping to finalize the reporting of core metrics via the VQI program.
- One of the CZSQC missions was to promote data integration. Within the last year, all of the Calgary sites

participating in the American College of Surgeons National Surgical Quality Improvement Project (NSQIP) have established a process to submit an OR log to AHS Analytics. This file will allow linkages between NSQIP data and the AHS Enterprise Data Warehouse. We envision this will also be a platform for developing analytic QI tools, such as run and control charts for Calgary sites. See 2020 Goals.

- The Section of Thoracic Surgery has completed QI initiatives focused on Lung Resections, and they are currently disseminating their outcomes. Overall, the QI initiative has a projected cost avoidance of \$1,033,690 annually!
- The Section of Plastic Surgery, under the direction of Dr. Kate Elzinga, is working with Skyla Lundgren's ORIS team to review immediate breast reconstruction free flap data across Calgary to identify opportunities for quality improvement. In particular, we hope to ensure patients are receiving optimal care and are experiencing successful surgical outcomes while trying to make the system processes as efficient as possible for these complex patients. These surgeries are performed at the four adult care hospitals in the city. There is an opportunity to recognize the unique strengths of each site and to streamline care pathways across Calgary.
- The Section of General Surgery, under the leadership of Drs. Moffat, Rochon, and MacLean, has been working on monitoring general surgery metrics and creating a distribution plan for the Section. They are also participating in the Surgical Site Infection (SSI) reduction initiative at their respective sites.
- The CZSQC has successfully developed a schedule and presentation format from all NSQIP teams, sectional leads, and other major ongoing QI

projects within the Calgary Zone. Site teams have been sharing their experiences with NSQIP and will continue to do so. The SHC team has done a lot of QI work as a result of their NSQIP outcome data, and they are happy to share their learnings.

## 2020 GOALS

- Establish an archive of active Surgical QI projects within the Calgary Zone with specific information in regards to short term metrics, long term metrics, QI resources, and financial sponsorship.
- Develop a standard analytic and reporting tool kit for Surgical QI teams to interpret and share surgical clinical metrics, such as outcomes and process measures, by displaying data in a meaningful way. Using Tableau, surgeons will be able to view data in a variety of formats, such as Run Charts and Statistical Control Charts. The goal is to enhance data interpretation and support decision making to focus QI resources most effectively.
- Establish a mechanism for regular reporting of Enhanced Recover After Surgery (ERAS) outcomes and share the learnings within the Calgary Zone with other Surgical QI groups.

### Dr. Andrew Graham

Director of the Office of Surgical Quality,  
Department of Surgery, Cumming School of Medicine,  
University of Calgary, Alberta Health Services

*The OSQ creates a respectful and transparent environment to promote collaboration, complete data sharing, and accountability. This caring culture of performance stresses improvement, not sanction.*

# SECTION OF DENTISTRY AND ORAL HEALTH

*The Section of Dentistry and Oral Health consists of three divisions: the Division of Adult Dentistry, the Division of Pediatric Dentistry, and the Division of Community Dentistry/Public Health.*

Through its members, our section provides comprehensive oral health services to adult and pediatric patients through the hospital and community health dental clinics. The service also provides ambulatory care services in partnership with the Riverview Surgical Centre through its Non-Hospital Surgical Facilities (NHSF) contract.

The Section of Dentistry and Oral health is striving to be a valuable service to:

1. The hospital, cancer centre, emergency rooms, and multidisciplinary teams of the Calgary zone.
2. Our patients, some of whom represent the most vulnerable health sectors due to their complex medical conditions, unique dental and oral challenges, and social challenges.

The section continues to be actively involved in the ongoing planning of the new Calgary Cancer Centre Dental Clinic.

## ACCOMPLISHMENTS AND HIGHLIGHTS

### Division of Adult Dentistry

The Division of Adult Dentistry in the Calgary Zone has seen continued growth in the last 12 months. The Foothills Medical Centre (FMC) Dental Clinic has maintained five of its six new dental staff, and they have been great additions to the section. Shelly Bohn (former Patient Care Manager) has moved on to the position of Manager, Department of Surgery, and we wish her well in this new endeavour. We welcomed Lorraine Blaich as our new Patient Care Manager, and Lorraine has been an asset to our clinic from an operational standpoint.

We made significant strides in reducing our OR waitlist through the implementation of new triage protocols and the institution of new special care pathways. We have also increased our annual clinic OR usage from 24 days in 2018 to 97 days in 2019. Overall, the FMC Dental Clinic saw a 300% increase in OR utilization. This was achieved with the help of the dedicated dentists, clinic staff, Department of Surgery leadership, and OR leadership at the FMC.

The clinic staff looks forward to the modernizations that will occur when the new clinic opens in the Calgary Cancer Centre.

**2,100***emergency exams were performed by public health clinics in 2019***3,370***fillings were performed for non-insured, low-income, marginalized patients***300%***increase in OR utilization at the FMC Dental Clinic*

**Dr. Graham Cobb**  
*Section Chief of Dentistry and Oral Health*

### Division of Pediatric Dentistry

The Division of Pediatric Dentistry in the Calgary Zone is composed of 18 pediatric dentists. Dr. Marie Claude Cholette is the Division Chief. The Alberta Children's Hospital (ACH) Dental Clinic dental staff includes two part-time and five casual pediatric dentists, one orthodontist, and two oral and maxillofacial surgeons. The clinic continues to offer comprehensive dental and oral care to infants, children, and adolescents with medical complexities. Treatment modalities include communicative behaviour guidance/non-pharmacological behaviour modification, nitrous oxide inhalation sedation, minimal/moderate oral sedation, and general anesthesia in the operating room. ACH dental specialists are also consultants for the Cleft Palate and Craniofacial Clinic, NAM Clinic, VPI Clinic, Orthodontic Clinic, OMFS Clinic, and TMJ Clinic.

### Division of Community / Public Health Dentistry

The Division of Community Dentistry/Public Health Dental Clinics consists of nine members and is under direction and funding from the Public and Population Health Portfolio and Indigenous Health. Dr. Heidi Rabie is the Division Chief.

The Public Health Dental Clinics provide dental treatment to socio-economically disadvantaged individuals who may otherwise depend on the primary and acute care system for relief of pain and infection. Albertans who do not typically qualify for dental insurance or government benefits can

receive comprehensive basic dental treatment at one of the two dental clinics: the Northeast Clinic at Sunridge Medical Gallery and Sheldon Chumir Dental Clinic. Albertans eligible for these dental services include the working poor, the unemployed, refugees, and the homeless population. In 2019, the Public Health Clinics performed over 2100 emergency exams, over 3000 extractions, and over 3370 fillings for non-insured, low income, marginalized patients.

Our Division Chief, Dr. Rabie, participated in the peer-reviewed manuscript Factors Associated with Emergency Department Use for Non-Traumatic Dental Problems, published in the Journal of the Canadian Dental Association.

### CHALLENGES AND WORKFORCE PLANNING

- Ongoing recruitment is planned for an additional onsite pediatric dentist at ACH.



## SECTION OF GENERAL SURGERY

*The Section of General Surgery has 46 members and performs surgery at four adult Calgary hospitals, including the Foothills Medical Centre (FMC), Peter Lougheed Centre (PLC), Rockyview General Hospital (RGH), and South Health Campus (SHC). The section provides care in a variety of areas, including benign and malignant diseases of the head and neck, breast, liver, pancreas, adrenal glands, and gastrointestinal tract. The section also includes trauma services that provide care to trauma patients in Southern Alberta as well as acute general surgical urgent and emergent conditions.*

### ACCOMPLISHMENTS AND HIGHLIGHTS

#### Education

- 24 residents in the General Surgery Residency Training Program.
- Fellowship Training Programs in Colorectal Surgery, Surgical Oncology, Endocrine Surgery, Hepatobiliary Surgery, and Trauma Surgery.
- Section members provide a strong teaching commitment to the University of Calgary, Cumming School of Medicine.

#### Research

- Members have demonstrated outstanding research productivity, securing over \$2 million in new grants in 2019, with over \$14 million in active grants.
- Dr. May Lynn Quan led the Section with \$1.2 million from the Canadian Cancer Society/CIHR Survivorship Grant for her study titled Preparing to Survive: Improving Outcomes for Young Women with Breast Cancer.
- Members contributed 92 peer-reviewed publications in 2019.
- Dr. Chad Ball led the section with 31 peer-reviewed publications, in addition to being Editor in Chief of the Canadian Journal of Surgery.

#### Medical Leadership and Administration

- Dr. Elijah Dixon is the Deputy Department Head – Clinical Programs and Surgical Innovation, Department of Surgery.
- Dr. Lloyd Mack is the Deputy Academic Head, Department of Oncology.
- Dr. Don Buie and Dr. John Heine are Site Chiefs, Department of Surgery, FMC and PLC sites.
- Dr. Estifanos Debru, Dr. Lea Austin, and Dr. Michael Dunham are Site Leads – General Surgery, PLC, RGH, and SHC sites.



**46** *surgeons in the  
Calgary Zone*

**92** *peer-reviewed  
publications*

*Dr. Tony MacLean  
Section Chief of General Surgery*

- Dr. Adrian Harvey is the Director of Program, Faculty, and Student Evaluation.
- Dr. Neel Datta is the Acute Care Coverage Director, Department of Surgery.
- Dr. Artan Reso is the Director, Office of Surgical Education, Department of Surgery.
- Dr. Gwen Hollaar is the Assistant Dean of Global Health, Cumming School of Medicine, and the Director, Centre for Global Surgery, Department of Surgery. She was also a 2019 Royal College International Collaboration Award recipient for her international work in Lao.
- Dr. Ryan Rochon and Dr. Grant Moffatt are Quality Improvement Leads – General Surgery.
- Several members volunteered their surgical expertise in developing countries, including Dr. Gwen Hollaar, Dr. Phil Mitchell, and Dr. Greg McKinnon.

## CHALLENGES AND WORKFORCE PLANNING

- Surgical wait times have been a chronic challenge for our section; the oncology uplift time provided in 2019 allowed some reprieve for cancer patients.
- Due to the growing and aging population, we expect increased cancer volumes to present additional challenges for our section.

**OVER  
\$14M** *in active grants*

- Our workforce is also aging, and we expect several retirements in the next five years. Quality recruitments to replace those individuals will be critical to our ongoing success.
- Incorporating Competency by Design assessments into our training program.
- Acute care coverage at all sites is an increasing challenge with the contraction of the residency training program.
- Fostering research, despite a lack of GFT positions and protected time in our section.
- 2020 will see a new recruit to the PLC, Dr. Hyea Min Yoon, a colorectal and minimally invasive surgeon.
- Two new positions have been approved for 2020: an endocrine surgeon at the FMC and a general surgeon at the SHC.



# SECTION OF OPHTHALMOLOGY

*The Section of Ophthalmology provides clinical services through Alberta Health Services facilities, non-hospital surgical facilities, and private offices, as well as outpatient clinics at the Rockyview General Hospital and the Alberta Children's Hospital. The section has subspecialists in all areas related to the eye, including retina, cornea, glaucoma, ocular oncology, urgent eye care, neuro-ophthalmology, pediatrics, comprehensive ophthalmology, adult strabismus, thyroid disorders, and low vision.*

Our section offers a number of programs and services including:

- Lions Eye Bank of Southern Alberta at Rockyview General Hospital.
- Sight Enhancement Clinic at Rockyview General Hospital.
- Calgary Eye Foundation.
- Subspecialty clinics at the Rockyview General Hospital:
  - Cornea, glaucoma, Marfan's syndrome connective tissue disorders eye clinic, neuro-ophthalmology, ocular oncology, retina, solid organ transplant eye clinic, adult strabismus, urgent eye, and thyroid.
- Retinopathy of prematurity screening service to the Neonatal Intensive Care Units at Alberta Children's Hospital, Foothills Medical Centre, Peter Lougheed Centre, Rockyview General Hospital, and South Health Campus.

The section has an active residency program with 10 residents, led by program director Dr. Chris Hanson. There are also fellowship programs in Glaucoma, Oculoplastics, Retina, and Oncology.



## 41 ophthalmologists in the Calgary Zone

*Dr. Andrew Crichton*  
Section Chief Ophthalmology

### ACCOMPLISHMENTS AND HIGHLIGHTS

- The section accepted two new residents in 2019, Drs. Shangjun (Collier) Jiang and William Trask.
- The senior residents, Dr. Monique Munro and Dr. Brett Poulis, received their Royal College Certification in June 2019.
- Dr. Jit Gohill is the new President of the Calgary Eye Foundation.
- Dr. Vivian Hill and Dr. Stephanie Dotchin have taken leadership roles in teaching ophthalmology in the newest undergraduate medical curriculum.
- Dr. John Huang has been active in coordinating ophthalmology electives and evaluations for medical students from the University of Calgary and other Canadian universities.

### CHALLENGES AND WORKFORCE PLANNING

- Recruitment has stalled with the new policy of replacement of personnel only as someone retires. We are working to address this issue by evaluating all upcoming retirements and potential spots that

might be available to our own graduating residents or other candidates from across Canada.

- The Urgent Eye Clinic at the Rockyview General Hospital has become extremely busy. We have taken steps to remove some of the volume by improving triage of referrals and communicating back to referring physicians.
- The volume of retinal cases at the Rockyview General Hospital, mainly after hours, has presented some challenges. We hope to have some retinal cases moved to the Non-Hospital Surgical Facilities to decrease this burden.
- We continue to work on improving communication between ophthalmologists, in-hospital referring physicians, and the Vision Clinic at the Alberta Children's Hospital.
- With the aging population, there will be future needs in almost every sub-specialty, as well as comprehensive ophthalmology. Much work can be done in the Non-Hospital Surgical Facilities, so apart from budgetary concerns, the impact on other departments is negligible.



## SECTION OF ORAL AND MAXILLOFACIAL SURGERY

*The section of Oral and Maxillofacial Surgery (OMFS) has 11 members and provides surgical services at the Peter Lougheed Centre (PLC), Foothills Medical Centre (FMC), Alberta Children's Hospital (ACH), and Non-Hospital Surgical Facilities (NHSF). The section specialises in the treatment of diseases, injuries, and defects in the head, neck, face, jaw, and the hard and soft tissues of the oral (mouth), maxillofacial (jaw), and face region.*

Section members provide services at the Cleft Lip and Palate Clinic, Craniofacial Clinic, Dental Clinic, and Temporal Mandibular Joint/Rheumatology Clinic at ACH. Members also provide services at the Dental Clinic and Head and Neck Tumour Clinic at the FMC. Our section provides call coverage for all Calgary Zone hospitals and urgent care centres, as well as facilities in southern Alberta. The section is committed to advancing the specialty of OMFS and providing excellent quality care to patients.

### ACCOMPLISHMENTS AND HIGHLIGHTS

- Plastic Surgery, Otolaryngology-Head and Neck Surgery, and Dental and Oral Health residents rotate through the OMFS service.
- Drs. Cobb, Smith, and Robertson are involved in two research projects, Virtually Planned Free Fibula Reconstructions of the Mandible and Maxilla: Outcomes of Selective Laser Manufactured (Custom) and Non-Selective Laser Manufactured Plates and Alveolar Bone Graft Pathway ACH-Cleft Multidisciplinary Team.
- Dr. Edwards is the Section Chief of OMFS in the Calgary Zone, Dr. Goos is the PLC Site Chief for OMFS, Dr. Smith is the ACH Site Chief for OMFS, and Dr. Cobb is the Section Chief of Dentistry and Oral Health in the Calgary Zone.
- Drs. Cobb, Smith, and Touchan are examiners for the Royal College of Dentists of Canada (RCDC).
- Dr. Habijanac is responsible for the Non-Hospital Surgical Facilities (NHSF).
- Dr. Smith is the President-elect and Dr. Cobb is the Alberta Regional Councillor for the Canadian Association of Oral and Maxillofacial Surgeons (CAOMS).



*Dr. Richard Edwards*  
Section Chief of Oral and Maxillofacial Surgery

**11** *surgeons in the  
Calgary Zone*

**408** *surgical cases  
completed at the Peter  
Lougheed Centre*

## CHALLENGES AND WORKFORCE PLANNING

- Operating room access at PLC, FMC, and ACH.
- Increasing the scope of practice for OMFS in the treatment of oral cancer patients.
- Budget for plates, screws, and equipment at PLC.
- Funding for custom made TMJ prostheses and custom made plating.
- Funding for NHSFs.
- Accessing funds through the Oral and Maxillofacial Devices and Services (OMDS) Program for dental implants for head and neck cancer patients.
- Future risks include decreased access for patients at hospital operating rooms and NHSFs as well as decreased funding.
- Challenges will continue to be addressed with Alberta Health Services (AHS). The Section of OMFS has a good working relationship with AHS and receives positive responses to our issues.
- Dr. Kevin Robertson was hired, following completion of a fellowship in Pediatric Maxillofacial Surgery in Melbourne, Australia.
- Recruitment to replace Dr. Kroetsch is in process.

**691** *surgical procedures  
in non-hospital  
surgical facilities*

**25** *temporal mandibular  
joint cases*

**202** *orthognathic (jaw)  
surgery cases*

# SECTION OF ORTHOPEDIC SURGERY

*The Section of Orthopaedic Surgery has 68 active members who deliver surgery at all four adult Calgary hospitals: the Foothills Medical Centre, Peter Lougheed Centre, Rockyview General Hospital, and the South Health Campus. In addition, we deliver specialized pediatric orthopaedic care at the Alberta Children's Hospital. We perform surgeries related to the musculoskeletal system, including joint replacement, spine surgery, and reconstruction.*

There are 18 residents in the Orthopaedic Residency Training Program, and all sites are engaged in the education of orthopaedic trainees, which includes medical students, residents, and fellows.

The majority of our faculty members and trainees are involved in orthopaedic research, an important pillar in our academic mission. These research activities include laboratory/basic science, clinical, and health service delivery/policy. Our research partners include the Alberta Bone and Joint Health Institute, the McCaig Institute for Bone and Joint Health, and the Bone and Joint Health Strategic Clinical Network.

Section members provide key leadership roles for Alberta Health Services, the University of Calgary, the Bone and Joint Health Strategic Clinical Network, and regional, provincial, and national Orthopaedic Associations and Professional Societies.

## ACCOMPLISHMENTS AND HIGHLIGHTS

The Section of Orthopaedic Surgery is proud of its members' accomplishments over the past year. We collectively strive for excellence in the three realms of clinical care: delivery, research, and education.

- 68 active orthopaedic surgeons in the Calgary Zone across 5 acute care sites.
- 18 residents in the Orthopaedic Residency Training Program.
- Section members published a total of 74 peer-reviewed journal articles in 2019.
- Section members received 99 separate research grants in 2019 totaling more than \$3.9M.
- Dr. Prism Schneider received two CIHR grants totaling \$950,000 for her Thrombelastography (TEG) research in trauma patients.
- Quality improvement efforts in hip fracture care zone-wide have resulted in a quicker time to OR across all sites and reduced mortality rates.



**68** *surgeons in the  
Calgary Zone*

**18** *residents in the  
Orthopaedic Residency  
Training Program*

**16,800** *surgical cases  
performed at all  
five hospitals*

*Dr. Jason Werle  
Section Chief of Orthopedic Surgery*

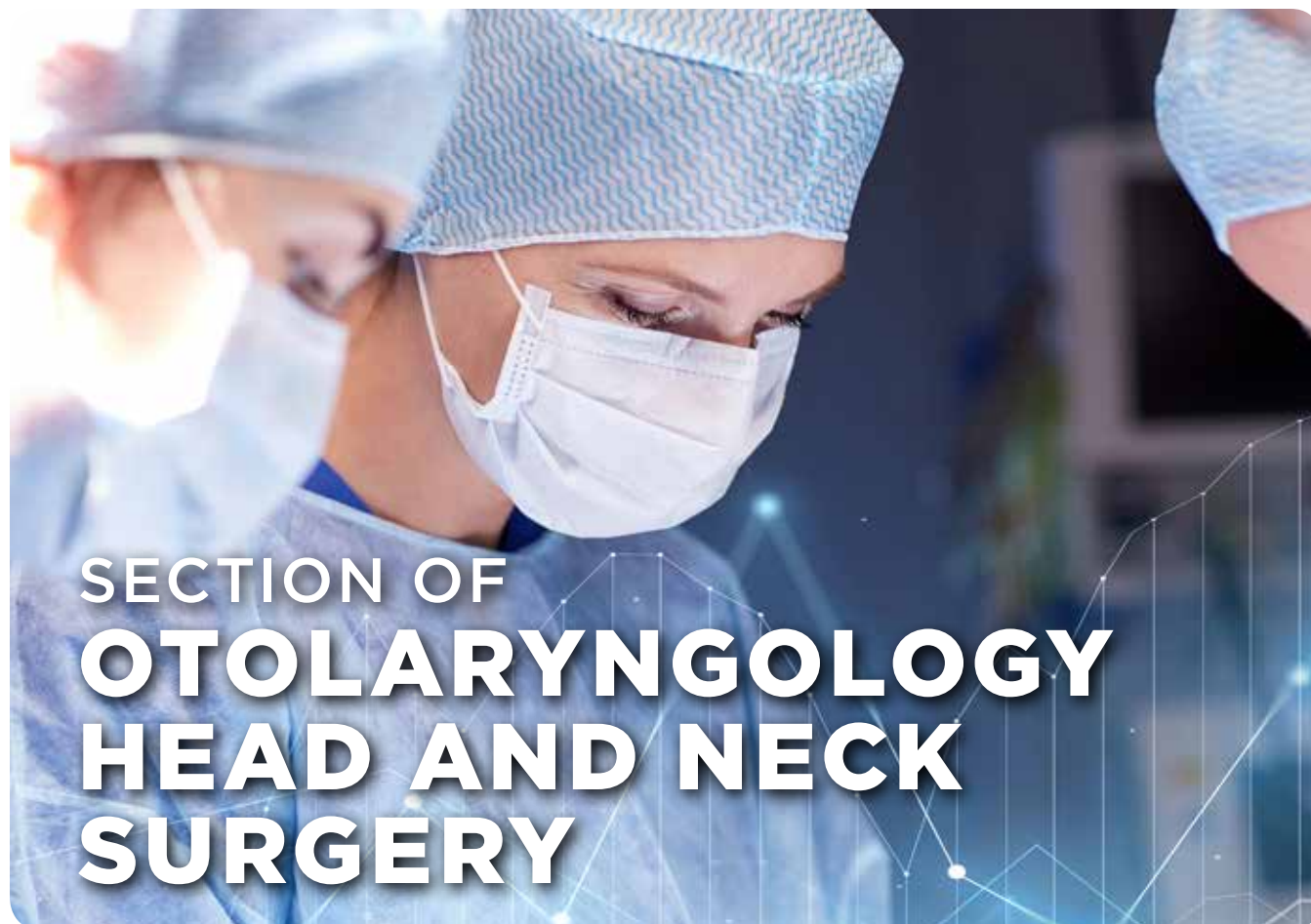
- Our strategic planning process was completed in 2019 with action items currently being addressed along the themes of Unity, the Department, Patient-Centred Care, Data, Academic compensation (for non-clinical work), and Call/OR allocation/ Senior Surgeon Policy (Ortho Executive).
- Retirement of Dr. Gerry Kiefer from Pediatric Orthopaedic Surgery practice at ACH in June 2019.

## CHALLENGES AND WORKFORCE PLANNING

- Acute care call coverage at all sites with reduced resident numbers and a high volume of patients.
- Senior Surgeon policy development and implementation.
- Long wait lists for all patients requiring orthopaedic surgery and orthopaedic consultation.
- Access to the operating rooms at all sites.
- Sustaining leadership positions within the Section of Orthopaedic Surgery without adequate financial resources.
- Recognizing academic contributions without GFT/Cumming School of Medicine (CSM) resources to support this work.

**74** *peer-reviewed  
publications*

- Uncertainty regarding future Value Add funding which has been a key component of the Section's and Department's academic success to date.
- Maintaining Surgeon Wellness given above ongoing challenges to surgical care provision.
- Recruitment of Dr. Emmanuel Illical into Arthroplasty practice at SHC for January 2020.
- Recruitment in progress for Pediatric Orthopaedic surgeon at ACH in 2020.
- Recruitment in progress for Orthopaedic Spine surgeon at FMC in 2020.
- Future needs will include an additional surgeon at PLC (Arthroplasty) and at SHC (Sports Med).
- The population demand for MSK surgical care is not currently being met.



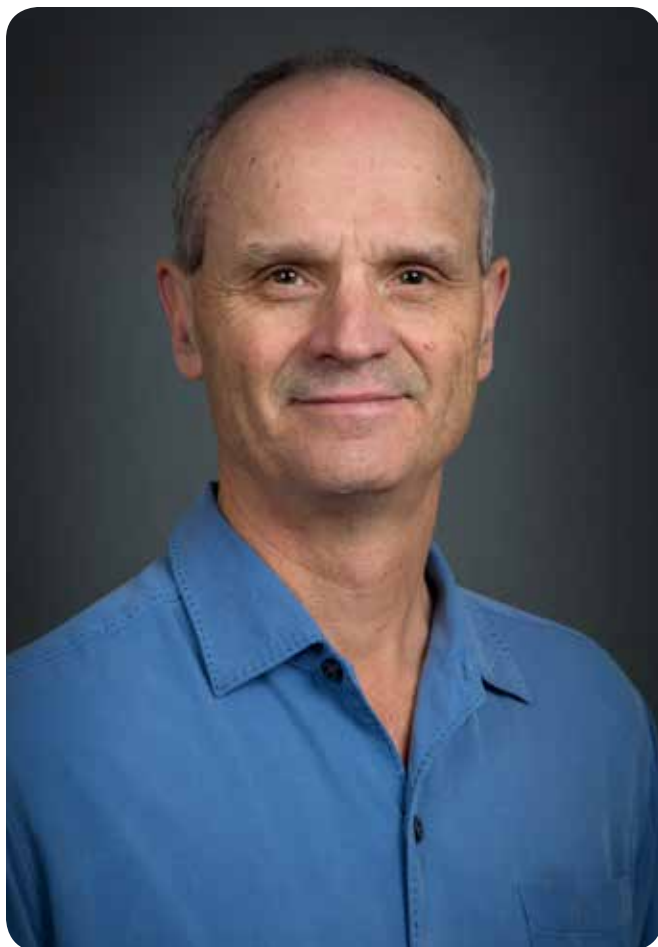
## SECTION OF OTOLARYNGOLOGY HEAD AND NECK SURGERY

*The Section of Otolaryngology delivers surgery to all five Calgary hospitals. Our surgeons specialize in providing comprehensive care across the spectrum of otolaryngologic disorders. Surgical care is provided in the specialties of pediatric ENT (ears, nose, and throat), head and neck surgery and oncology, rhinology, skull-based surgery, otology, neurotology, facial plastic and skin cancer surgery, laryngology, and general otolaryngology.*

Our section has a highly successful otolaryngology surgery residency training program and accepts one to two residents per year. We also support clinical teaching for undergraduate and postgraduates in various disciplines.

### ACCOMPLISHMENTS AND HIGHLIGHTS

- Dr. Rob Hart was the keynote speaker at the Annual Otolaryngology Resident Research Day in January 2019.
- Dr. Devon Livingstone completed his Royal College certification in Otolaryngology in June 2019. He joined the Otolaryngology staff at the South Health Campus in August 2019.
- Dr. Carrie Liu completed her one-year fellowship in Pediatric Otolaryngology at the University of Washington, Seattle, Washington. She has joined the Pediatric Otolaryngology group at the Alberta Children's Hospital. Dr. Liu will be the Otolaryngology representative on the Surgical Quality Council.
- Dr. Luke Rudmik has completed his term as



**3,667** *adult surgical cases  
in the Calgary Zone*

**2,075** *pediatric surgical cases  
in the Calgary Zone*

**36** *peer-reviewed  
publications*

*Dr. J. Doug Bosch  
Section Chief of Otolaryngology  
Head and Neck Surgery*

Lead of the Evidence Decision Support Program (EDSP) for the Department of Surgery. We appreciate all of Dr. Rudmik's hard work, and we thank Dr. Rob Hart for assuming the role.

- The Ohlson Transoral Surgery Symposium was held on September 27, 2019, at the University of Calgary. Thank you to the Ohlson Research Initiative, Cumming School of Medicine, and Dr. Joe Dort for sponsoring and arranging the symposium.
- Dr. Mark Taylor, Professor and Division Head, Otolaryngology, Dalhousie University, Halifax, Nova Scotia, was a visiting professor in February 2019.

## CHALLENGES AND WORKFORCE PLANNING

- The main challenge facing our section is meeting the demand for office consultations, and if required, surgical intervention. The most significant limitation is the availability of surgical resources. This limits our ability to recruit new colleagues, which would reduce office and surgical waitlists.

**\$27,550** *in research grants*

- A section retreat was held in November, and we discussed how to create a more efficient office consultation process. Excellent presentations were given by Specialist Link, eReferral Advice, and Alberta Referral Directory groups. Our plan into 2020 is to use these three well-established resources to streamline the path to our members' offices.
- The section is planning to recruit a Head and Neck Surgeon/Researcher at the Foothills Medical Centre in the next one to two years, a Clinical Otologist at the South Health Campus in 2021, and a Rhinologist at the Rockyview General Hospital in 2022.

# SECTION OF PEDIATRIC SURGERY



*The Section of Pediatric Surgery delivers surgery to the Alberta Children's Hospital (ACH). Members are from pediatric general surgery, pediatric orthopedics, pediatric plastic surgery, pediatric otolaryngology, pediatric urology, and pediatric ophthalmology. The ACH's surgical services are complete with surgeons from the Department of Surgery's Section of Dentistry and Section of Oral & Maxillofacial Surgery, the Department of Neurosciences, and the Department of Obstetrics and Gynecology.*

ACH is a Level 1 Pediatric Trauma Centre. Each discipline listed supports many multidisciplinary clinics in the hospital. Some key programs are the Pediatric Extracorporeal Life Support (ECLS) program and the Pediatric Surgical Oncology program-multidisciplinary program support for pediatric cancer patients. In addition, the newest clinic is the combined Plastic Surgery – Dermatology multidisciplinary clinic.

## ACCOMPLISHMENTS AND HIGHLIGHTS

### Members

- Dr. Gerry Kiefer, pediatric orthopedic surgeon, retired from his primary surgical practice in July 2019 after 32 successful years. He was active in all 4 pillars of clinical work, education, research, and leadership and received many awards over his career.
- Dr. Derek Drummond, pediatric otolaryngologist, was recognized with the Distinguished Service Award from the Department of Surgery in June 2019.
- Dr. Carrie Liu, pediatric otolaryngologist, joined the section in August 2019. She completed her residency at the University of Calgary and a fellowship in pediatric otolaryngology at Seattle Children's Hospital.

### Education

- The Royal College Accredited Pediatric General Surgery program, led by Drs. Lopushinsky and Lo, underwent a successful RCPSC internal review in 2019.
- Several section members have completed the Teaching Excellence in Medicine Education Program and are leaders in medical education for the University of Calgary.
- Pediatric/Adolescent Gynecology Fellowship was initiated and the first fellow inducted in 2019. One of only three programs in Canada.
- Semi-annual Perioperative Crisis Management Course (POCM) is a high-fidelity simulation-based program celebrated by surgical faculty as a significant aspect of their professional development. Participation by all section members is supported.
- Dr. James Brookes is the Program Director for the Otolaryngology/ Head and Neck residency program, and Dr. Jay Riva-Cambrin is the Program Director for the Neurosurgery residency program.
- Dr. Don McPhalen is co-chair of the Med School Well Physician Course and faculty member of the PSRTC Wellness subcommittee, in addition to teaching in the Master Teacher Program.
- Dr. Paul Beaudry is the course coordinator for Medical Graduate Education 628, Invasion Metastasis and Angiogenesis Module.

### Research

- Dr. Mary Brindle continues to run the Health Sciences Research Lab, EQuIS, supported by the Brian and Brenda MacNeill Chair in Pediatric Surgery. She is expanding her international work on the revision of the Surgical Safety Checklist, including ongoing collaboration with NASA human factors

research and initiating work with the World Health Organization. She became the Scientific Director of the Surgery Strategic Care Network. She also led the development of standards for ERAS guideline development as part of the ERAS Society. She continued her CIHR-funded work and has achieved additional funding from CIHR, MNCY SCN, and the International ELSO registry. In 2019, she received the Quality and Safety Award from the Department of Surgery and the Award for Resident Mentorship from PGME from the University of Calgary. She has published 10 papers in the last year in journals, including BJS Open, JAMA Pediatrics, and CMAJ.

- Drs. Frankie Fraulin and Rob Harrop supervised Masters of Epidemiology student Dr. Rebecca Hartley's project on developing a prediction rule for pediatric hand fractures. The project was awarded the Sharpest Knife research grant in June 2019. Dr. Hartley also received the Best Resident Research Award for Clinical Research at the Canadian Society of Plastic Surgeons annual meeting in Newfoundland in June 2019. Drs. Fraulin and Harrop are also Royal College of Physicians and Surgeons Examiners for Plastic Surgery.

#### Medical Leadership and Administration

- Dr. Frankie Fraulin completed his term as Section Chief of Pediatric Surgery, Facility Site Chief of Surgery, ACH, and took on the new position of Department of Surgery, Deputy Head, Governance and Physician Services. He also received the Department of Surgery's Citizenship Award for 2019 and was the Section of Plastic Surgery Resident's choice Best Teacher Award 2018-19, awarded June 2019.
- Dr. Paul Beaudry has been named the new Section and Site Chief for the Section of Pediatric Surgery and ACH.
- Dr. Steve Lopushinsky has assumed the interim Site Lead for Pediatric General Surgery.
- Dr. Rob Harrop is the Section Chief of Plastic Surgery and has an exceptional record of DoS committee participation. He was promoted to Clinical Professor in 2019.

#### CHALLENGES AND WORKFORCE PLANNING

- Responding to the need to improve safety and quality in pediatric surgery has grown substantially in 2019. ACH enrolled in Solutions for Patient Safety (SPS), a multi-center North American Children's Hospital program that looks to address the highest risk areas of pediatric hospital care.



*Dr. Paul Beaudry*  
Section Chief of Pediatric Surgery

**10,463** surgical cases performed at ACH

In the operating room, we have been challenged to implement care bundles in several areas.

- We recently initiated the pediatric version of the National Surgical Quality Improvement Project (NSQIP-P). It will provide benchmarked surgical outcomes for our group, and it is anticipated that our reports will identify areas in need of improvement.
- A longer-term challenge will be determining the comparative value to Alberta children of pediatric procedures done at ACH. This will be critical if we are to maximize the quality of surgical care delivered to Albertans in light of increased resource restrictions.
- Dr. Robin Eccles, Pediatric General Surgery, announced her retirement plans for October 2020, after 28 years of practice at ACH. There is a search and selection process currently underway to find her replacement.
- Pediatric Orthopedic Surgery has begun the search and selection process for a full-time pediatric orthopedic surgeon, expecting to start in fall 2020.



## SECTION OF PLASTIC SURGERY

*The Section of Plastic Surgery consists of 32 plastic surgeons who provide care at Calgary's four adult acute care sites and the Alberta Children's Hospital. Our members focus on the care and surgical restoration of structures of the body that are affected, aesthetically or functionally, by birth defects, tumours, injuries, diseases, or the aging process. We operate on many anatomic regions of the body and work with many specialties to solve a variety of surgical problems.*

Our section has a five-year resident training program, under the leadership of Dr. Duncan Nickerson, that accepts two residents each year. After completing the residency, almost all residents go on to further fellowship training in various plastic surgery subspecialties. We offer three subspecialty fellowships:

- Oncologic reconstruction – Program Director: Dr. Claire Temple-Oberle
- Microsurgical reconstruction – Program Director: Dr. Christiaan Schrag
- Hand surgery - Program Director: Dr. Justin Yeung

### ACCOMPLISHMENTS AND HIGHLIGHTS

#### Surgical Quality

- A variety of clinical databases have been established to review the delivery of care to certain large subsets of patients. These include:
  - ACH Vascular Birthmark Clinic database

- Head and Neck Cancer Database (in collaboration with ENT)
- Burn Database
- Breast Reconstruction Database
- ERAS pathways have been implemented for breast reconstruction and head and neck reconstruction patients.
- Dr. Nickerson has developed and implemented a successful Plastic Surgery Trauma Service model at the FMC, which has resulted in greater efficiency in the treatment of traumatic injuries by Plastic Surgery at the FMC.
- A central intake pathway has been established for urgent and non-urgent plastic surgery referrals at the ACH and the Hand Program at the SHC.
- The synoptic operative report has been adopted for use in breast reconstruction, melanoma surgery, and reconstruction following major head and neck cancer resection.

#### Education

- Dr. Aaron Knox is serving as the inaugural Chair of the Clinical Competency Committee for the Plastic Surgery Resident Training Program.
- Dr. Don McPhalen is serving as Co-chair of the Well Physician Course for UGME.
- Dr. Jennifer Matthews coordinated the annual microsurgical skills simulation course in the spring of 2019 for plastic surgery residents. Dr. Matthews also coordinated the Calgary Chapter of Breast Reconstruction Awareness Day.
- Drs. Schrag, Harrop, Byers, and Yeung, in collaboration with faculty from Clinical Neurosciences, served as faculty at the University of Calgary Spine and Peripheral Nerve Course held on January 9, 2019.

- The D.C Birdsell Plastic Surgery Resident Research Day and Visiting Professorship was held on December 6, 2019, with Dr. Elizabeth Hall-Findlay (Banff, Alberta) serving as Visiting Professor.
- Dr. Mark Haugrud developed a Breast Reconstruction Awareness Seminar Series available several times per year to women considering breast reconstruction after cancer.
- Drs. Frankie Fraulin and Rob Harrop are Royal College Examiners for Plastic Surgery.

### Members

- Dr. Rebecca Hartley (PGY-4) completed her Master of Science degree in Clinical Epidemiology in the Department of Community Health Sciences at the University of Calgary.
- Dr. Claire Temple-Oberle completed a Master of Medical Education degree at the University of Dundee.
- Dr. Frankie Fraulin was appointed Deputy Head, Department of Surgery.
- Dr. Jennifer Matthews was appointed Patient Concerns Coordinator, Department of Surgery.
- Dr. Duncan Nickerson is serving as the Department of Surgery Safety Lead (Adult).
- Dr. Kate Elzinga is serving as the Quality Improvement Lead for the Section of Plastic Surgery, studying outcomes from free flap breast reconstruction.
- Dr. Claire Temple-Oberle completed her term as Director of the Office of Surgical Research.
- Drs. Christiaan Schrag and Ryan Frank participated in the 2019 Operation of Hope surgical mission to Zimbabwe.
- Drs. Frankie Fraulin and Rob Harrop participated in the 2019 Project Outreach surgical mission to Cusco, Peru.
- Drs. Rebecca Hartley (PGY-4), Frankie Fraulin, and Rob Harrop were recipients of the 2019 Sharpest Knife Award at Surgeons' Day.
- Dr. Alan Lin received the 2019 Distinguished Service Award for the Peter Lougheed Centre.
- Dr. Frankie Fraulin received the 2019 Department of Surgery Citizenship Award and the 2018-19 Plastic Surgery Resident's choice Best Teacher Award.
- Dr. Rob Harrop received the 2019 Department of Surgery Leadership Award.



*Dr. Rob Harrop*  
Section Chief of Plastic Surgery

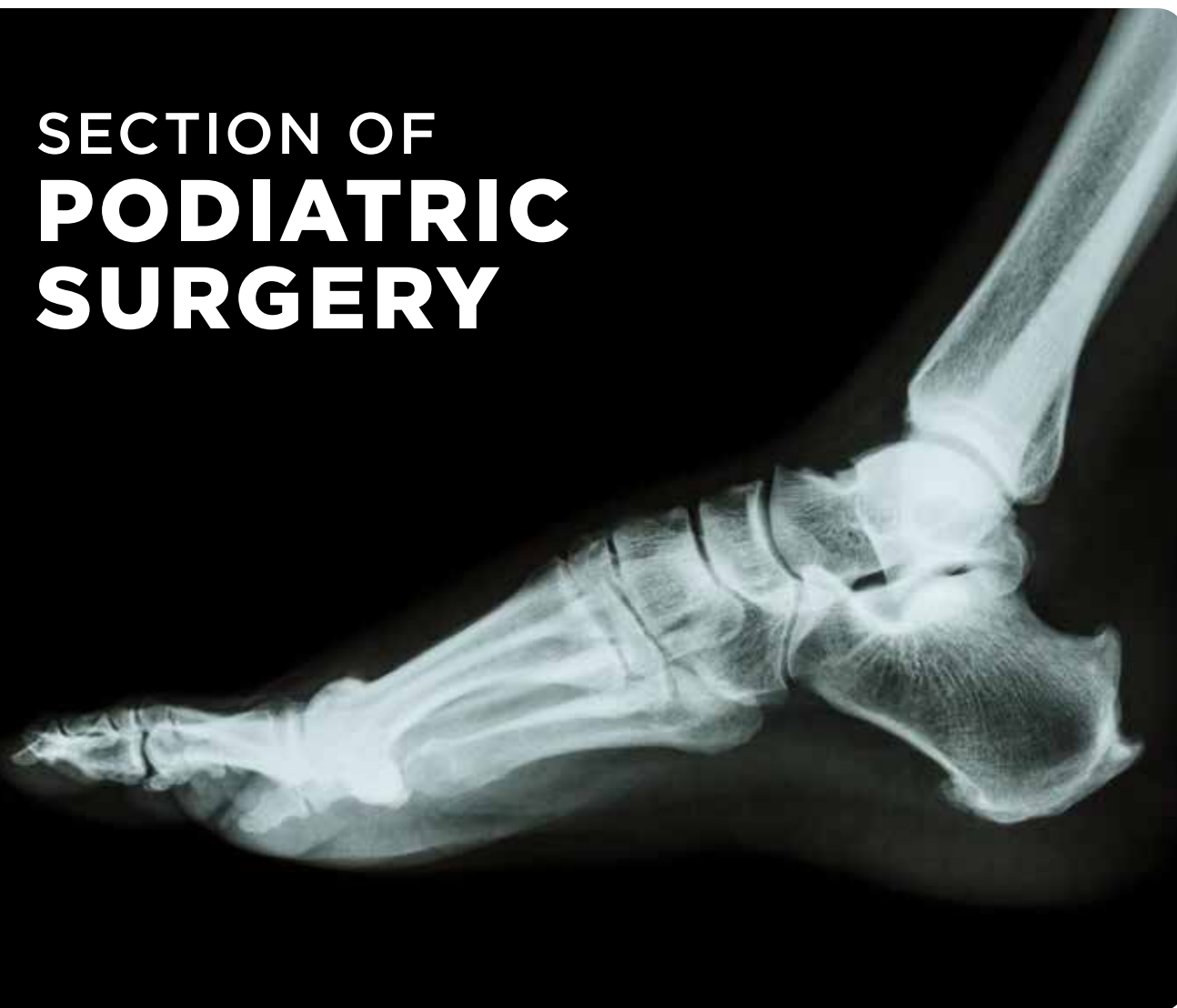
**20,500**

*surgical cases  
performed in the  
Calgary Zone*

### CHALLENGES AND WORKFORCE PLANNING

- There is a need for a multi-disciplinary gender affirmation surgical program in Calgary and Alberta. The Section of Plastic Surgery worked on a proposal with other surgical and medical disciplines and AHS, but the proposal has been put on hold.
- Providing resident education in the area of aesthetic plastic surgery is required by the Royal College of Physicians and Surgeons, but it remains challenging for a variety of reasons. Drs. Paul Whidden, Duncan Nickerson, Ryan Frank, and Rob Harrop continue to explore the concept of developing a Resident Aesthetic Surgery Clinic. The clinic would have residents assess potential patients, participate in their surgery, and manage their postoperative care, under the supervision of a staff plastic surgeon.
- Increasing the number of academic plastic surgery faculty remains a priority for the Section of Plastic Surgery. Current efforts at trying to achieve this goal are aimed at exploring novel funding models for such surgeons.

# SECTION OF PODIATRIC SURGERY



*The Section of Podiatric Surgery includes 11 surgeons who deliver surgery to all five hospitals in the Calgary Zone, with section members treating disorders of the foot and ankle.*

Prevention and advanced wound care of foot ulcerations is a large part of our practice, in addition to providing patient education around toolsets to decrease the amount of pressure on the foot when standing or walking. The section also specializes in limb preservation surgery, ranging from draining a foot abscess, to larger debridements of nonviable tissue, to performing amputations.

Due to the complexity and multifactorial health conditions of diabetic foot ulcerations, we work closely with the Section of Vascular Surgery to ensure optimized blood flow and enhanced healing. We also consult with other specialties as required, including infectious disease, internal medicine, endocrinology, orthopedic surgery, and plastic surgery.

## ACCOMPLISHMENTS AND HIGHLIGHTS

The Zivot Limb Preservation Clinic at the Peter Lougheed Centre continues to focus on bringing the diabetic foot



**11** *surgeons in the  
Calgary Zone*

**7,000** *visits to the Zivot Limb  
Preservation Clinic*

**3,500** *cases in the minor  
surgery clinic at the PLC*

**1,025** *cases at non-hospital  
surgical facilities*

*Dr. Francois Harton  
Section Chief of Podiatry*

and its complications to the forefront of healthcare in Alberta. With the assistance of a very generous donation, we have purchased new equipment that will help keep our institute as a centre of excellence in Western Canada. The clinic had almost 7,000 patient visits in 2019.

In addition, our section performed 3,500 cases in the minor surgery clinic at the Peter Lougheed Centre and 1,025 surgical cases at Non-Hospital Surgical Facilities. Section members also provided call coverage for the five acute care facilities in Calgary, urgent care facilities, RAAPID, and Specialist Link for the Calgary Zone.

Our section is currently involved in two research studies, and we completed one study last year. We presented an interim analysis at the International Symposium on the Diabetic Foot at The Hague, Netherlands, and the research was received with enthusiasm. The research involved an interim analysis of the Orpyx offloading insole to prevent reulceration of the diabetic foot.

Over the past seven years, our section has been self-reporting post-operative complications and issues at Non-Hospital Surgical Facilities. Complications are discussed at section meetings. This allows surgeons to learn from one another, share ideas on how to improve the system, and set up protocols to prevent complications.

Each year, our section presents to the family medicine residents on pathologies involving the foot and pathways for referrals, and vascular residents spend two blocks with our section. We are also a centre for clinical rotation of the podiatry school in the Université du Québec à Trois-Rivières (UQTR), in Trois-Rivières, Quebec. Fourth-year podiatry students can spend a block of time with our section concentrating on comprehensive care of the diabetic foot.

## CHALLENGES AND WORKFORCE PLANNING

With one member moving from Calgary, the section is planning to hire a new recruit in 2020.



## SECTION OF SURGICAL ONCOLOGY

*The Section of Surgical Oncology delivers surgery to three hospitals in the Calgary zone, including the Alberta Children's Hospital, Foothills Medical Centre, and Peter Lougheed Centre. The section performs surgeries related to cancer, including breast, colorectal, endocrine, head and neck, hepatobiliary, lung, melanoma, and sarcoma.*

The section consists of a multidisciplinary group of surgeons dedicated to cancer care as their primary goal. Four members are located full-time in the Tom Baker Cancer Centre (TBCC), and two of these are primary appointments to the Department of Oncology, with a cross-appointment to the Department of Surgery. All other members are primarily appointed to the Department of Surgery and located at various sites.

In addition to being full members of other sections, notably General Surgery and Plastic Surgery, our surgical oncologists also function in leadership positions in the Tom Baker Cancer Center and multiple tumor clinics, including cutaneous, breast, sarcoma, and advanced G.I.

### ACCOMPLISHMENTS AND HIGHLIGHTS

- The breast/melanoma and the surgical oncology services host a full complement of students, residents, and elective learners. The Surgical Oncology Fellowship is a secondary residency with three active fellows. In addition, there is one Plastic Oncologic Reconstruction Fellowship and an American Association of Endocrine Surgeons accredited Fellowship.

- Dr. Antoine Bouchard-Fortier was promoted to Assistant Clinical Professor and appointed to the Calgary Zone Surgical Quality Council.
- Dr. May Lynn Quan was instrumental in the hiring of Dr. Shawn Xu as an Assistant Professor for the Department of Oncology, Community Health, and Surgery, with a focus on breast cancer research as part of the SPHERE (Strategies for Precision Health in Breast Cancer) and Alberta Cancer Outcomes Research Network (ACORN). Dr. Quan was awarded the 2019 President's Excellence Award for Outstanding Achievement in Quality Improvement for the Provincial Breast Health Initiative. She was also awarded the Canadian Cancer Society/CIHR Survivorship Grant 2019 – 2024 (\$1,152,908.19) for her study titled Preparing to Survive: Improving Outcomes for Young Women with Breast Cancer.
- Dr. Mack remained the Deputy Academic Department Head for the Department of Oncology, Cancer Surgery Alberta Head for Cancer Surgery Alberta, and Program Director of the Surgical Oncology Training Program.
- Dr. Temple-Oberle continued as the Director of the Office of Surgical Research for the Department of Surgery. She also received the Jennifer Gardiner award for surgical oncology research.
- Drs. Temple and McKinnon co-chaired the first annual CanPros conference in November 2019. This was an academic meeting with multiple disciplines and international experts presenting original work on patient-reported outcome research.
- Dr. Scott Hurton successfully graduated from the general surgical oncology fellowship and accepted a teaching position at the University of Manitoba.



*Dr. J. Greg McKinnon*  
Section Chief of Surgical Oncology

## CHALLENGES AND WORKFORCE PLANNING

- Growth and recruitment in a constrained resource environment will present challenges over the next few years.
- 2020 will see the recruitment of a surgeon with expertise in endocrine/surgical oncology. This will be the third person to join the highly successful endocrine group.

**8** *surgeons in the  
Calgary Zone*

**33** *research  
publications*



# SECTION OF THORACIC SURGERY

*The Section of Thoracic Surgery delivers surgery to the Foothills Medical Centre. Our six surgeons provide all aspects of esophageal surgery from surgery for benign disease to multimodality cancer care. We collaboratively care for esophageal disease with our gastroenterology and oncology colleagues. Our section provides high-quality surgical care to the patients of southern Alberta.*

## ACCOMPLISHMENTS AND HIGHLIGHTS

### Clinical Service

- Dr. Andy Graham's work on the Lung Resection Quality Improvement Initiative, along with our section's collaborative efforts, has resulted in a case based cost reduction of \$5,500 with > \$1M in annual savings/cost avoidance and a decrease in length of stay of ~2 days.

### Education

- Dr. Colin Schieman continues his educational work as the Thoracic Surgery Residency Program Director. Dr. Schieman received the University of Calgary's Surgery Clerkship Teaching Award.
- Dr. Janet Edwards is the Undergraduate Medical Education lead for the Section of Thoracic Surgery. In this role, she sits on the Surgery Undergraduate Education Committee. She also participates in the new Career Coaching Program with medical students.
- Dr. Evan Barber was successfully matched to the Thoracic Surgery Residency Program for the 2020 intake.
- Preparations for the 2020 Internal Review were completed and submitted to the PGME.

## Research

- Dr. Colin Schieman was a co-investigator and Canadian Institutes of Health Research (CIHR) grant recipient for the Randomized Controlled Trial to determine whether administration of colchicine compared with placebo reduces the incidence of perioperative atrial fibrillation within 14 days after major thoracic surgery. Conen D, et al.
- Site Initiation/Accrual to COP-AF trial. Multicenter Randomized Control Trial.
- Dr. Janet Edwards was invited to speak at the World Conference on Lung Cancer in Barcelona, Spain. Dr. Edwards is on several national and international committees, including the General Thoracic Workforce with the Society of Thoracic Surgeons (STS) and the Western Thoracic Surgical Association (WTSA), Early Lung Cancer Committee for the International Association for the Study of Lung Cancer (IASLC), and the Research Committee for the Canadian Association of Thoracic Surgeons (CATS). Dr. Edwards also had three abstracts accepted by the European Society of Thoracic Surgeons (ESTS) and CATS.

## Medical Leadership and Administration

- Dr. Colin Schieman was a major developer of the CLEAR score – a tabulation of clinical, leadership, education, administration, and research activities. It is being adapted by the Department of Surgery (DoS) as a way to measure the activities of its members, and the Section of Thoracic Surgery had the highest average and median CLEAR Scores of all DoS sections in the 2019 annual CLEAR Score Report.
- Dr. Sean Grondin continues as the Head of the Department of Surgery.
- Dr. Andy Graham continues as the Director of the Office of Surgical Quality.

## CHALLENGES AND WORKFORCE PLANNING

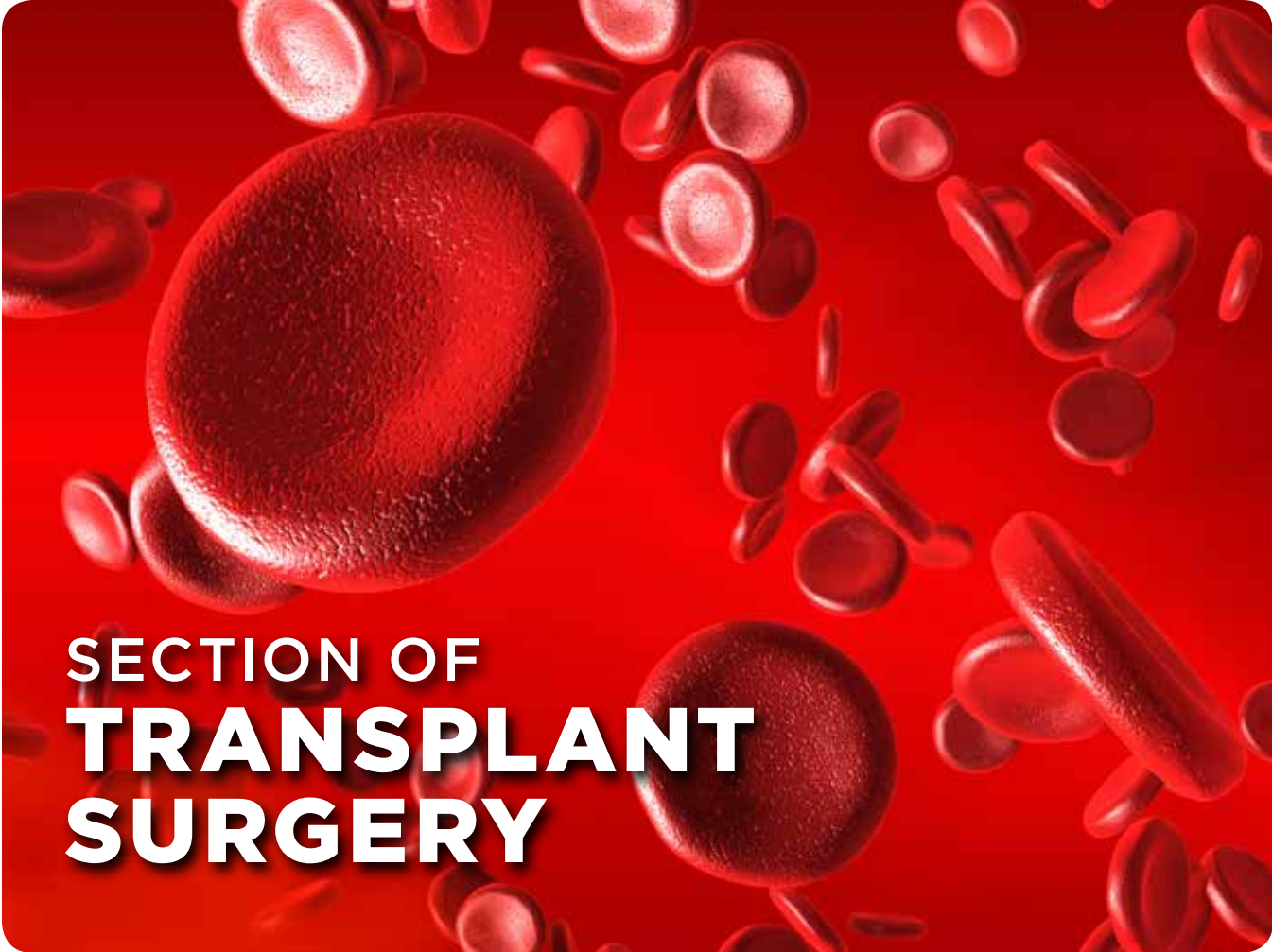
- For several years the section was being considered for an Academic Medicine and Health Services Program (AMHSP), which is an alternative funding mechanism. Due to budget constraints, this plan has been stalled. The section has instead been encouraged to pursue a clinical alternative relationship plan (cARP). We will continue to follow through on the clinical ARP application.
- Recruitment is not planned at this time.



*Dr. Sean McFadden*  
*Section Chief of Thoracic Surgery*

**6** *surgeons in the  
Calgary Zone*

**215** *lung resections  
performed each year*



# SECTION OF TRANSPLANT SURGERY

*The Section of Transplant Surgery delivers surgery at all five hospitals in Calgary, though primarily at the Foothills Medical Centre and the Alberta Children's Hospital. Our three transplant surgeons perform almost 100 kidney and pancreas transplants in Calgary every year.*

## ACCOMPLISHMENTS AND HIGHLIGHTS

### Clinical services

The section continues to provide uninterrupted clinical services in kidney transplants, pancreas transplants, and dialysis surgery (vascular access for hemodialysis and placement of catheters for peritoneal dialysis). We also perform multi-organ cadaver donation, including donation after cardiac death and after brain death.

Our area of practice is primarily southern Alberta, though we collaborate with other centres in Canada, and on occasion the United States, to procure livers, kidneys, and pancreases for transplant. We also evaluate and prepare live donors for other centres in the country.

A complex and complicated case clinic (CCCC) was implemented this year. It is led by Dr. Salazar, our most senior surgeon, to take advantage of his clinic expertise and experience. The purpose of the CCCC is to provide clear direction for the physicians and nurses referring complex surgical transplant cases. This is particularly important for new physicians (surgeons and transplant physicians) and nurses with limited experience when dealing with unconventional cases.

### Education

The section continues to train fellows in transplant surgery, and we currently have a first-year and a second-



**3** surgeons in the Calgary Zone

**31** multi-organ donations

**98** transplants performed

*Dr. Anastasio Salazar*  
Section Chief of Transplant Surgery

year fellow training with our team. In addition, we train general surgery residents in the general aspects of transplant surgery and some general surgery techniques (peritoneal dialysis (PD) catheters) and vascular access procedures (A-V fistula anastomosis and transplant vessel anastomosis). We also provide training for elective medical students, nursing staff, and new Human Organ Procurement and Exchange program (HOPE) personnel.

### Research

Members of the section are actively involved in clinical research, including participation in a multicentre cohort study on perioperative complications after living donor nephrectomy, evaluating postoperative wound management with a suction device, studying markers for long term graft survival, and working with a computer simulation program on an artificial immune system (IMMUNO).

### CHALLENGES AND WORKFORCE PLANNING

Last year saw the completion of a one-year sabbatical by one of our members, and this posed a significant stress on the program due to our limited manpower. Contributions from members in the Section of General Surgery and the Section of Urology during that time helped with call coverage and the completion of transplants. The absence of our member highlighted a clear need to plan for the future. We need to ensure a sustainable call-coverage model, prevent surgeon burnout due to our variable workload, and provide a predictable income. If these issues are not resolved, the section could be at risk of collapse if an unexpected event were to occur.

The section has been working on a clinical Alternative relationship plan (cARP) application, which will help to address the manpower and sustainability issues.



## SECTION OF UROLOGY

*The Section of Urology is based at the Rockyview General Hospital at the Southern Alberta Institute of Urology (SAIU). The team of 14 adult urologists and 3 pediatric urologists serves patients at all acute-care sites in Calgary, providing care to individuals with a variety of urological conditions.*

The Section offers specialized programs, including the Acute and Chronic Kidney Stone Clinics at the South Health Campus, vesia [Alberta Bladder Centre] at SAIU, the Men's Health Program at SAIU, and prostate cancer rapid-access clinics at the Prostate Cancer Centre.

Contributions to teaching and research are valued by the team, and members provide clerkship teaching and supervision. Two fellowship programs are also run through the section: a fellowship in pediatric

urology and a fellowship in reconstructive and functional urology. Members are involved in a variety of clinical trials and basic science research.

### ACCOMPLISHMENTS AND HIGHLIGHTS

- In January 2019, the section launched the Urology Central Intake (UCI) program, which simplifies the referral process, enhances closed-loop communication, reduces administrative burden, and provides patients with timely, specialized care. The UCI project won the Department of Surgery Innovation Award in June 2019.
- As part of the UCI program, the Section joined Specialist LINK and the Alberta Referral Directory. These resources improve communication and access between family physicians and urologists. Our team has been developing clinical pathways to be added to Specialist LINK to assist family physicians with patient treatment and triage.
- Two of our urologists, Drs. Darren Desantis and Kam Kaler, partnered with the Transplant program to provide cadaveric kidney recipient call coverage.



**17** *surgeons in the  
Calgary Zone*

**4,365** *urology  
cases completed  
in 2019*

**1,619** *urology cancer  
cases completed  
in 2019*

**41** *research  
publications*

*Dr. Kevin Carlson  
Section Chief of Urology*

- The Section played a critical role in developing province-wide order sets for urology for Connect Care.
- Our NSQIP team has been working to improve patient care. Over the past year, we have seen improved rates of post-procedure urinary tract infections, surgical-site infections, and returns to the OR. Our next NSQIP initiatives are to decrease rates of readmissions, venous thrombotic events, and pneumonia cases.
- We continue to expand our research program, with a focus on translational research and health services research.
- Section members have received a number of grants over the past year, including:
  - SUFU research grants, the Society of Urodynamics, Female Pelvic Medicine & Urogenital Reconstruction (Drs. Trafford Crump and Kevin Carlson).
  - OSR targeted-support grants (Drs. Bimal Bhindi and Trafford Crump).
  - OSR Section Funding Grant (Section of Urology).
- Dr. Bimal Bhindi was promoted to Clinical Assistant Professor.

- Drs. Geoffrey Gotto and Charles Metcalfe received UME Star Educator Awards from the University of Calgary.

## CHALLENGES AND WORKFORCE PLANNING

- In 2019, two adult urologists retired and one nurse practitioner resigned. This has put increased demand on our team, and we plan to recruit to replace these individuals in 2020. Also, the need for additional clinical, non-physician support is ongoing.
- The Section has been asked to provide urology call assistance for South Zone patients one weekend per month. This will add to our workload and put additional pressure on our surgeons.
- Increased efforts and engagement will be required in preparing for Connect Care.
- Urology Central Intake requires continued refinement and enhancement with the involvement of all Section members and Site Leadership.
- Dr. Carlson's term as Section Chief of Urology ends in 2020, so we will be recruiting for his replacement.

# SECTION OF VASCULAR SURGERY

*The Section of Vascular Surgery has eight members who deliver vascular surgical care primarily at the Peter Lougheed Centre. The section also provides emergency and urgent vascular surgery at the Foothills Medical Centre, Rockyview General Hospital, South Health Campus, and Alberta Children's Hospital. Ambulatory venous surgery is performed at the Canmore General Hospital. Our members see outpatients and provide elective surgery for aneurysms, extracranial carotid disease, peripheral vascular disease, and lymphatic disease. The section participates in multicentre, multinational, clinical, and FDA trials.*

## ACCOMPLISHMENTS AND HIGHLIGHTS

### Clinical Services

- Total of 14,000 outpatient visits per year.
- Over 1,400 elective surgeries:
  - 500 minor vascular procedures, including surgical management of varicose veins, A-V fistula creation, and indwelling chemotherapy access catheters.
  - 900 major vascular procedures including abdominal aortic aneurysm (AAA), thoracic aortic aneurysm (TAA), visceral aneurysms, carotid endarterectomy, lower extremity re-vascularizations (aorta bi-femoral bypass, axillary bi-femoral bypass) and infra-inguinal bypass.
- 20-40 combined procedures for complex oncologic resection and reconstruction and complex spine exposure.
- Over 240 emergency surgeries:
  - 50-70 ruptured AAAs and 20-30 TAAs and aortic dissections.
  - 150 acute ischemic limbs.
  - 20-40 vascular traumas.
  - 20-30 iatrogenic injuries in support of other surgical services.
- Elective AAA is now performed as day surgery.
- Approximately 50% of all endovascular aneurysm repairs can be discharged within 4 hours post-procedure.
- Vascular Surgery, Cardiac Surgery, Anesthesia, Cardiology, and Interventional Radiology have formed a multi-disciplinary clinic for the management of complex diseases of the aorta, which began seeing patients in November 2019.
- Vascular Surgery participates in the Specialist Link Program consulting on 300 calls per year.

### Education

- Vascular Surgery's training program has two streams: a traditional two-year fellowship following a complete General Surgery residency and a direct five-year residency in Vascular Surgery.
- Vascular Surgery has eight to twelve off-service residents rotate through annually.
- Clerkships include 20-30 University of

Calgary students and 10-15 visiting clerkship electives from across Canada.

- Observerships in Vascular Surgery for first and second-year medical students are popular with 20 -30 students per year. Med 440 students make up an additional eight-ten observerships.
- Didactic lectures are taught to every medical student during their surgical clerkship.
- Weekly Vascular Surgery half-day and multiple General Surgery half-day lectures are conducted by section members.

### Research

- Clinical and basic science research is on-going in the Section of Vascular Surgery. Vascular Surgery trainees participate in these research projects, and some trainees choose to include an additional research year in their program.
- Partnerships between Vascular Surgery and Bio-Medical Engineering have been very productive and are championed by Dr. Randy Moore.
- On-going clinical trials include FDA sponsored device trials led by Drs. Moore, Samis, Nutley, Clark, Cantle, and Petrasek.
- Multinational, multicentre clinical trials for carotid surgery are led by Dr. Samis and the Division of Stroke Neurology.
- Bioengineering studies regarding explanted endovascular devices have led to several publications for Drs. Nutley and Samis.
- Vascular Surgery joined Interventional Radiology in FDA phase two and phase three trials with novel endovascular technology, such as drug-eluting stents and balloons.

### Members

- Section members are represented on the Senior Surgeon Policy Committee, Surgical Quality Committee, SUGEC, Surgical Executive Committee, Surgical Suites Advisory Committee, Peter Lougheed Centre (PLC) Leadership Committee, and Transfusion Committee.
- Vascular Surgery is represented in Connect Care with area trainers, super users, and a Medical Informatics Lead for Surgery in the Calgary Zone. They also participate in the Surgery Area Council and as Clinical Content Experts.
- Dr. Paul Petrasek has a leadership role in the Surgery SCN and has been Vascular Surgery's representative



*Dr. Gregory Samis*  
*Section Chief of Vascular Surgery*

**8** *surgeons in the  
Calgary Zone*

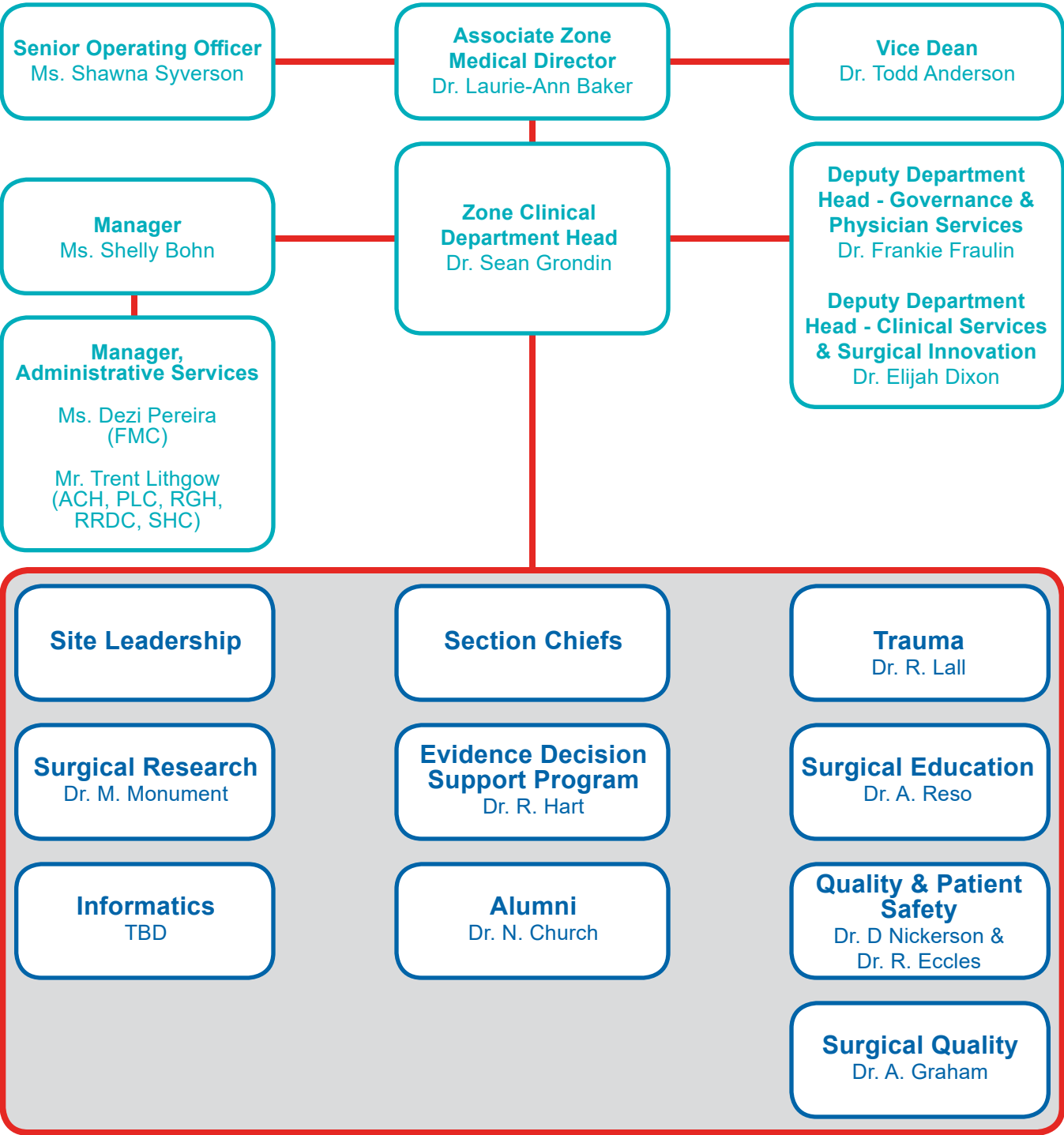
**14,000** *outpatient visits  
per year*

at the AMA. Dr. Petrasek is also on the Executive of the Canadian Society of Vascular Surgery.

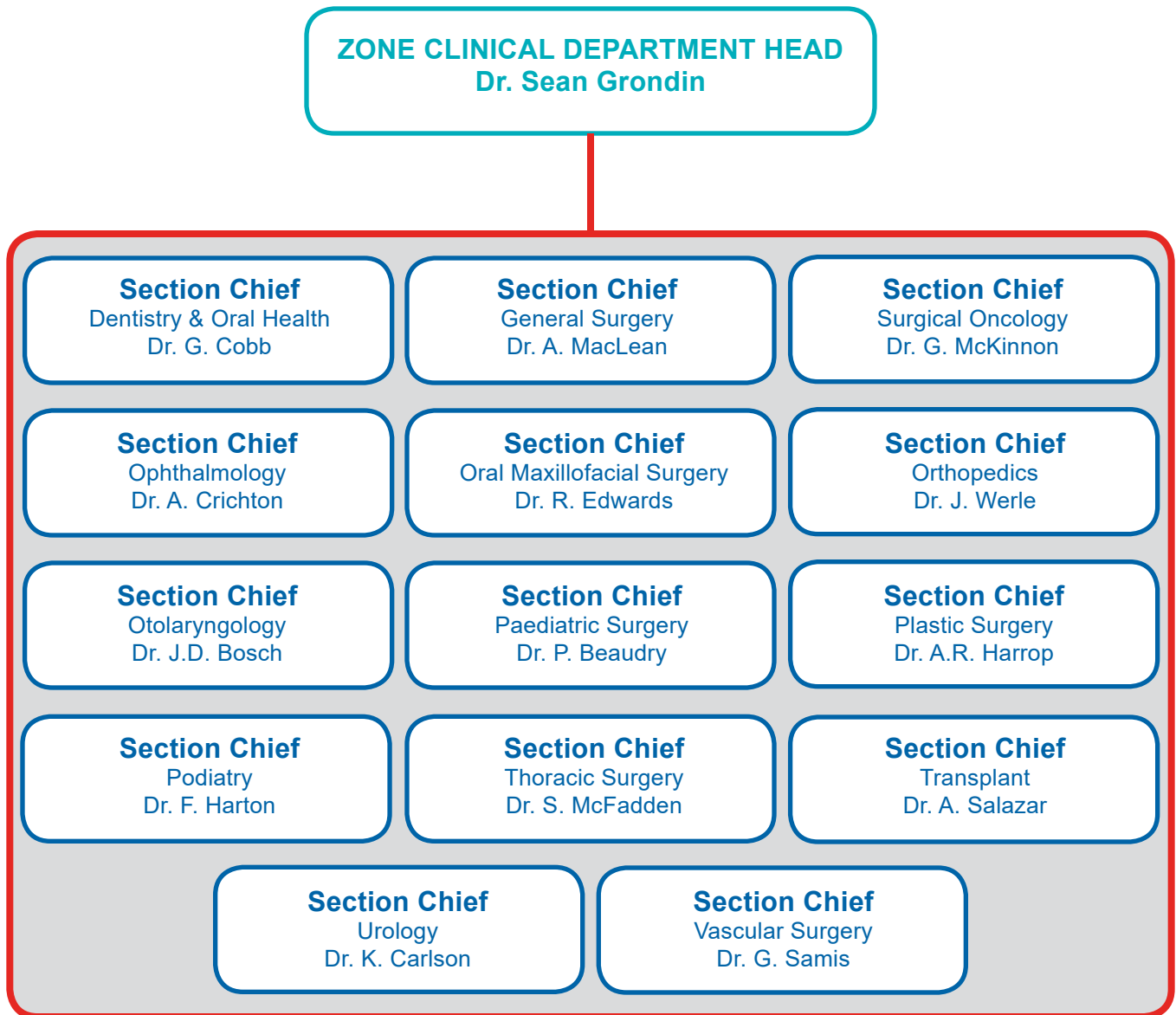
- Dr. Marie-France Guimond has been the Chief Examiner at The Royal College of Canada, Vascular Surgery, for seven years.
- Dr. Paul Cantle is an Editor of The Journal of Endovascular Management of Trauma.
- Dr. Kenton Rommens joined the section in November 2019 after completing a Helios Sponsored Fellowship in Complex Aortic Surgery in Houston.

# LEADERSHIP

## DEPARTMENT OF SURGERY

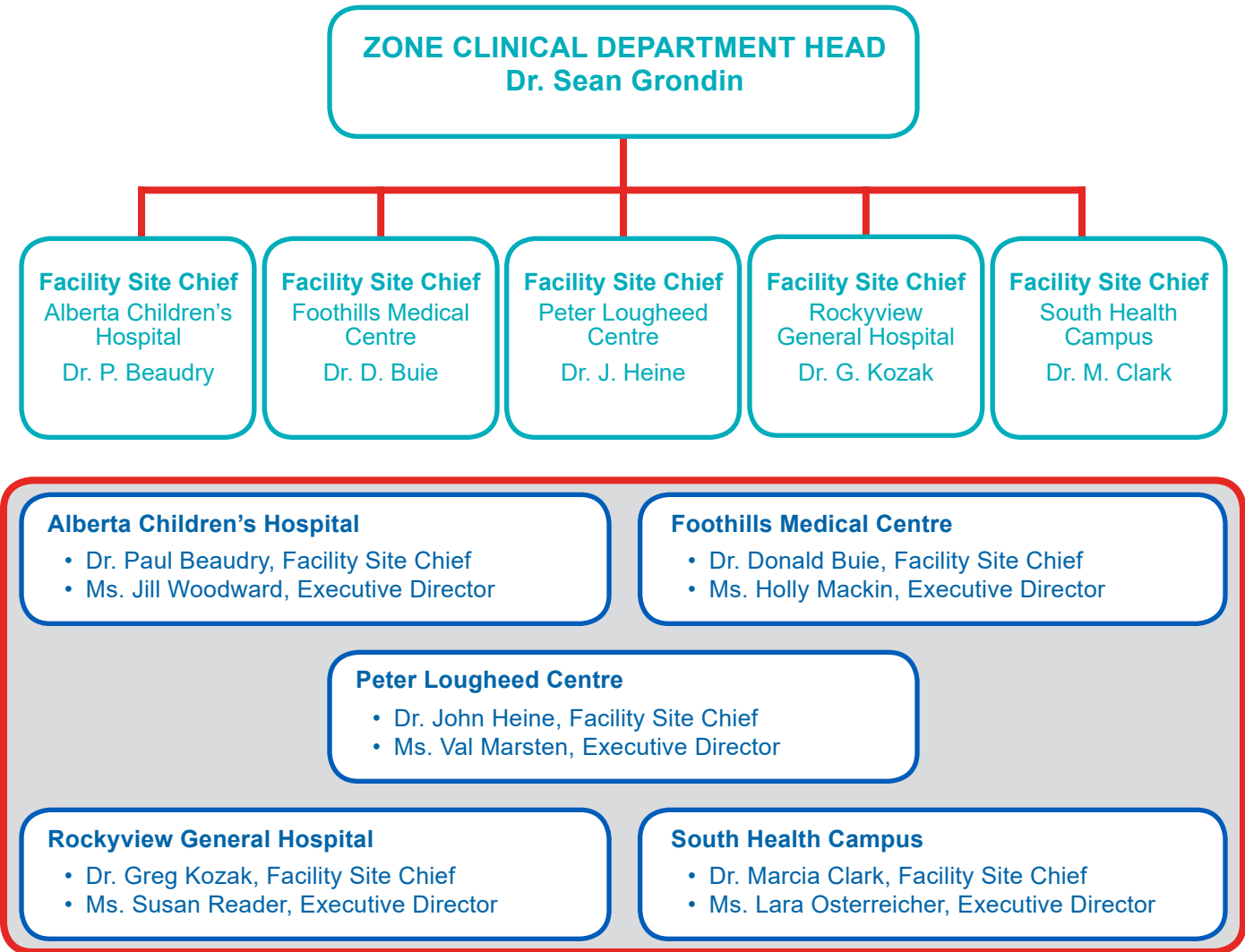


# SECTION CHIEFS DEPARTMENT OF SURGERY



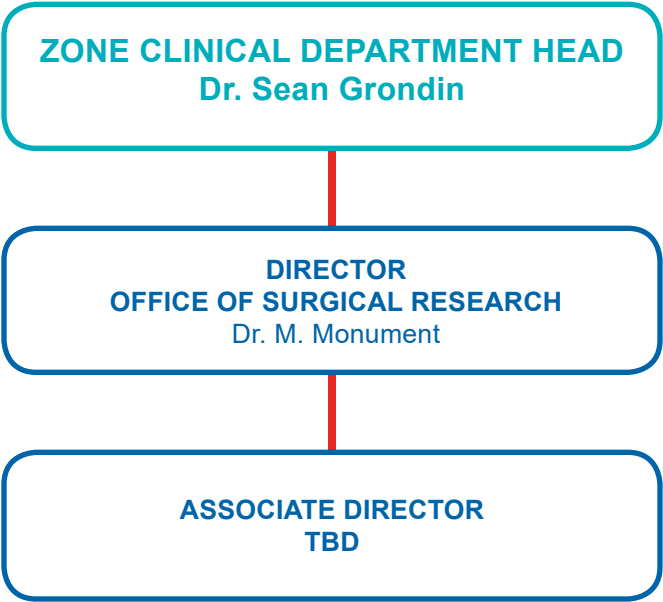
# SITE LEADERSHIP

## DEPARTMENT OF SURGERY

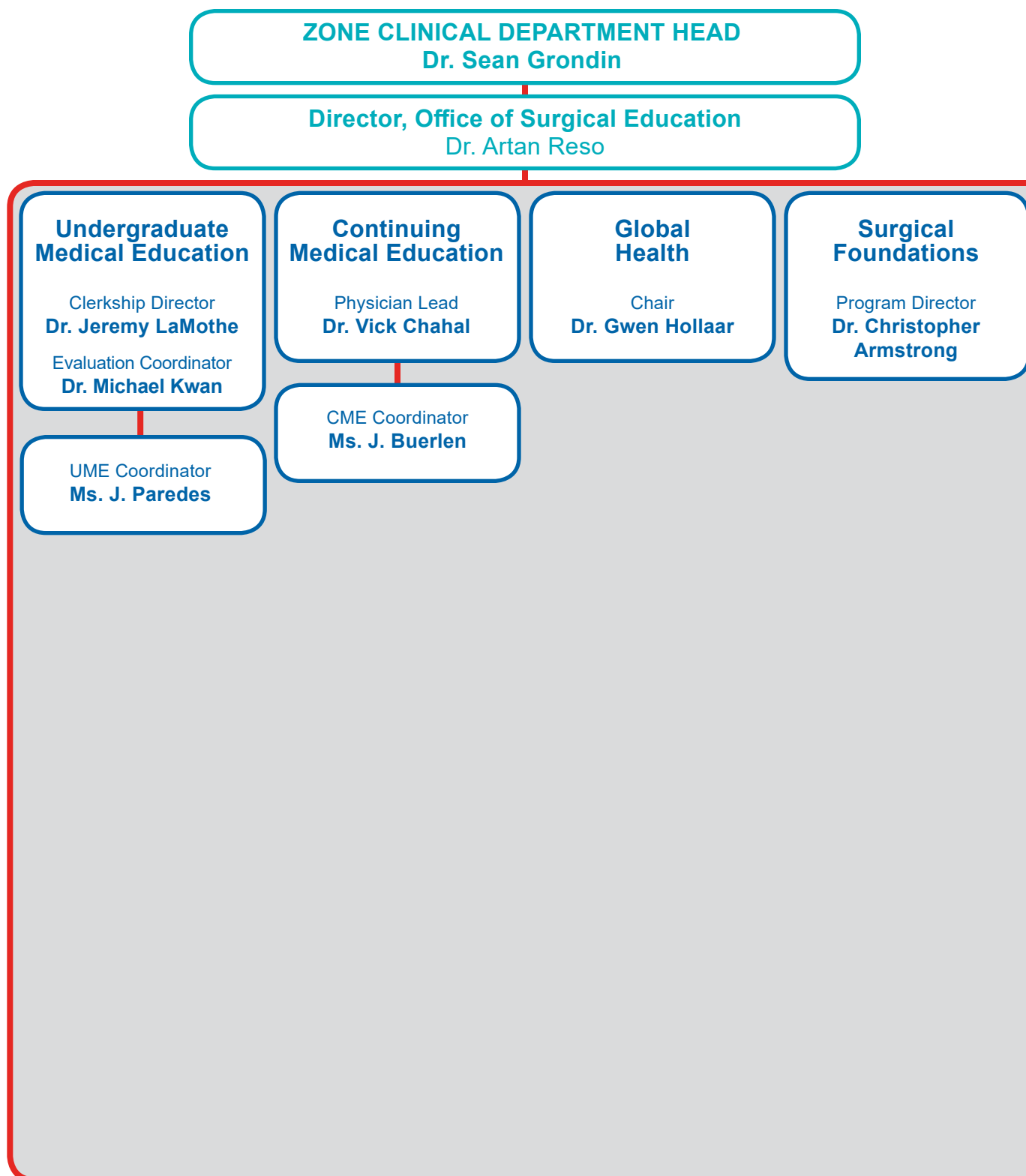


# SURGICAL RESEARCH

## DEPARTMENT OF SURGERY



# SURGICAL EDUCATION DEPARTMENT OF SURGERY



### Post Graduate Surgical Training Committee

Chair  
Dr. Lloyd Mack

Residency Program	Program Director
Colorectal Surgery	Dr. W. Donald Buie
Dentistry and Oral Health	Dr. Graham Cobb
General Surgery	Dr. Ryan Rochon
Ophthalmology	Dr. Chris Hanson
Orthopaedic Surgery	Dr. Ian Le
Otolaryngology	Dr. James Brookes
Paediatric General Surgery	Dr. Steve Lopushinsky
Plastic Surgery	Dr. Duncan Nickerson
General Surgical Oncology	Dr. Lloyd Mack
Thoracic Surgery	Dr. Colin Schieman
Vascular Surgery	Dr. Jeff Clark

### Office of Surgical Fellowship

Director  
Dr. Amin Kherani

Fellowship Program	Program Director
Gen. Surgery - Endocrine	Dr. Adrian Harvey
Gen. Surgery - HPB	Dr. Francis Sutherland
Gen. Surgery - Trauma	Dr. Paul McBeth
Gen. Surgery - Upper GI	Dr. Neal Church
Ocular Oncology	Dr. Ezekiel Weis
Ophthalmology - Glaucoma	Dr. Patrick Gooi
Ophthalmology - Oculoplastics	Dr. Karim Punja
Ophthalmology - Retina	Dr. Amin Kherani
Ophthalmology - Retina	Dr. Geoff Williams
Orthopaedic - Arthroplasty (Joint Reconstruction)	Dr. James Powell
Orthopaedic - Arthroscopic/ Banff Sport Medicine	Dr. Mark Heard
Orthopaedic - Upper Extremity	Dr. Ian Lo

Fellowship Program	Program Director
Orthopaedic - Combined Orthopaedic & Neuro-Surgery Spine	Dr. Fred Nicholls
Orthopaedic - Foot & Ankle	Dr. Jeremy LaMothe
Orthopaedic - Hand & Wrist	Dr. Gurpreet Dhaliwal
Orthopaedic - Paediatric Spine	Dr. Fabio Ferri-de-Barros
Orthopaedic - Trauma	Dr. Robert Korley
Otolaryngology - Advanced Head & Surgical Oncology	Dr. Robert Hart
Plastic Surgery - Hand, Wrist & Peripheral Nerve	Dr. Justin Yeung
Plastic Surgery - Microsurgery	Dr. Christiaan Schrag
Plastic Surgery - Oncology	Dr. Claire Temple-Oberle
Transplant	Dr. Mauricio Monroy-Cuadros
Urology - Oncology	Dr. Geoffrey Gotto
Urology - Paediatrics	Dr. Bryce Weber
Urology - VESIA/ Reconstructive & Functional Urology	Dr. Richard Baverstock Dr. Kevin Carlson

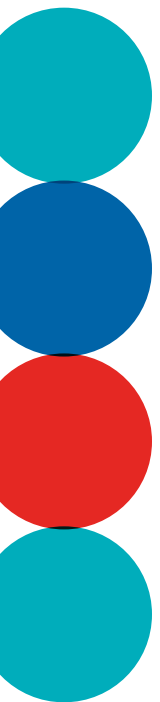
# PROMOTIONS

The Department of Surgery is pleased to report the following clinical and GFT promotions. Please join us in congratulating our members as we recognize their hard work and achievements.

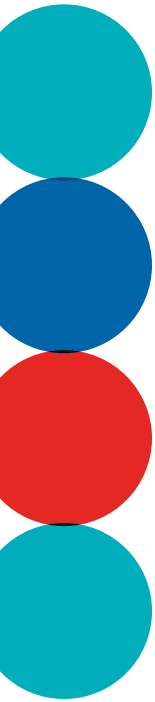
**Chad G. Ball**, Clinical Professor  
**Bimal Bhindi**, Clinical Assistant Professor  
**Nicholas M. Desy**, Clinical Assistant Professor  
**A. Robertson Harrop**, Clinical Professor  
**Kelly D. Johnston**, Clinical Assistant Professor  
**Karim Manji**, Clinical Assistant Professor  
**Jennifer Matthews**, Clinical Assistant Professor  
**Duncan A. Nickerson**, Clinical Associate Professor  
**May Lynn Quan**, Professor  
**Prism S. Schneider**, Clinical Associate Professor  
**Christiaan Schrag**, Clinical Associate Professor  
**Justin Yeung**, Clinical Assistant Professor











**CUMMING SCHOOL  
OF MEDICINE**

