

Department of Obstetrics and Gynecology

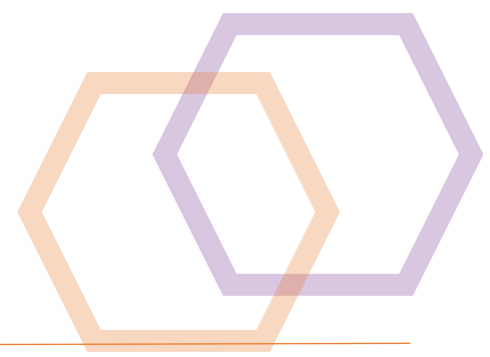
Annual Report

2021



UNIVERSITY OF
CALGARY

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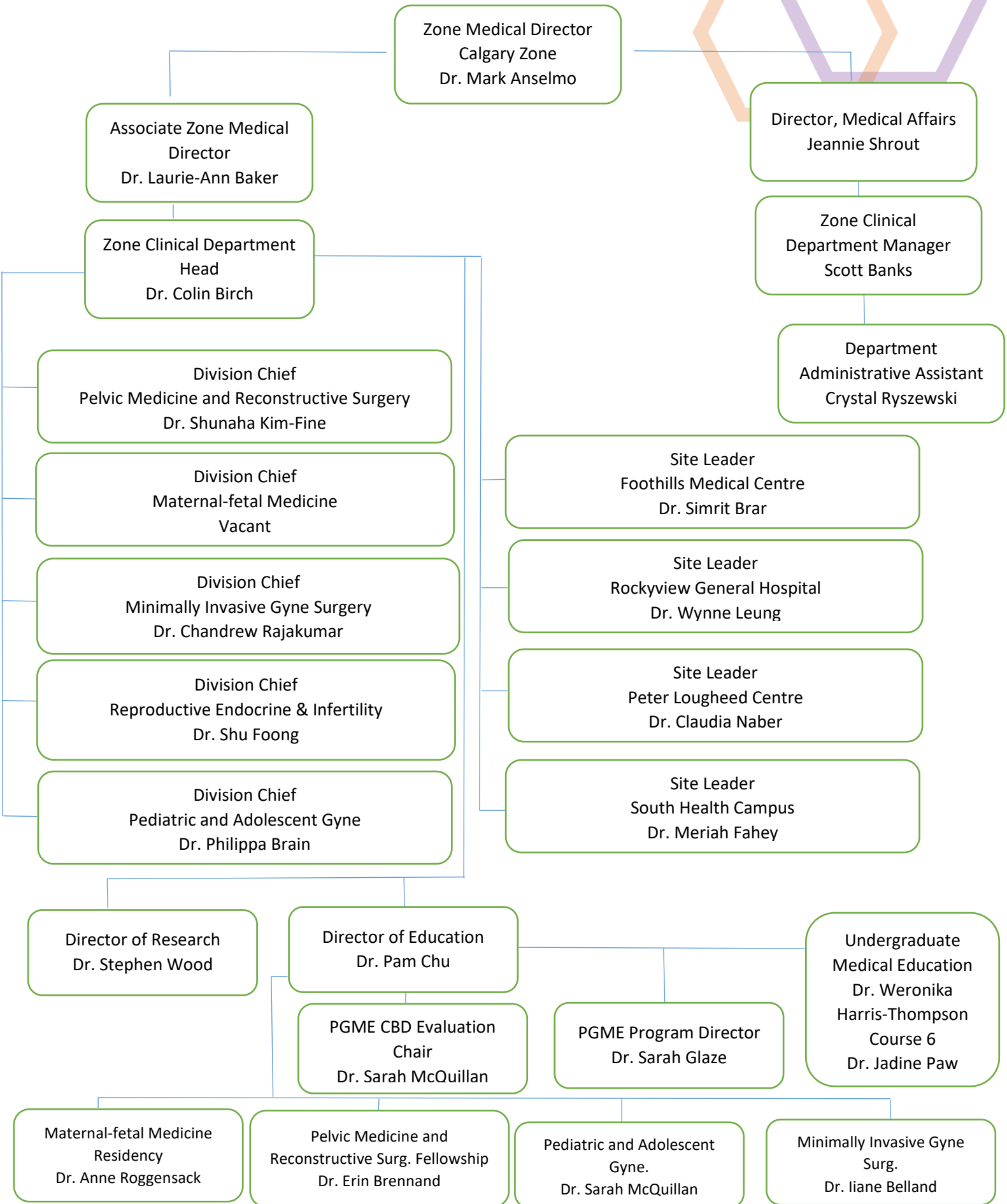
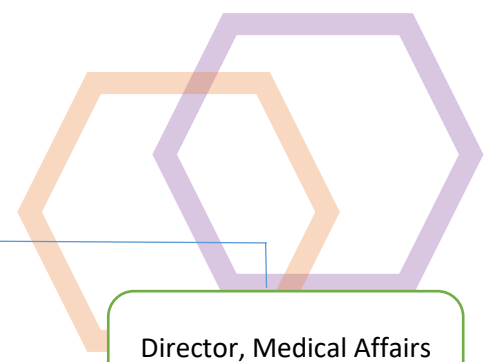
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Department Organizational Chart



Message from the Chair



It was my most profound hope in the 2021 Executive Summary that COVID would not be continuing to dictate both our work and personal lives. We are in the throes of perhaps the worst wave of this 'Covidgeddon' which is proving to be the most challenging due to the staffing challenges created by Omicron's infectivity. At this time, the sewers of Calgary are suggesting that we might have approached the precipice from which we will freefall to normalcy in whatever form that takes.

The Department has adapted and continued to lead the country in dealing with COVID ; from the leadership of Drs. Vreni Kuret and Eliana Castillo in the CanCOVID pregnancy project (Alberta had the highest number of COVID infected pregnant patients of any Canadian province) to the provincial webinars and even the crowd funding by Dr. Stephanie Cooper for O2 saturation monitors (my office has extra seating due to the boxes). It is without the commitment to excellence from the department that the women of Southern Alberta would have not received such comprehensive care.

During this time, we have increased our Research and Quality work to enhance the care that we provide. We are starting to see the ideas at one hospital being shared across the region, which is a change from the siloed approach of old. I cite, to highlight a few, the initiatives such as the PPH project, the use of triage for the post-partum patients (alleviating pressures on our emergency departments) and more recently the same day discharge for hysterectomy. We are led locally by Dr. Jackie Thurston and have provincial representation through Dr. Philippa Brain (Chair PPQAC) and Dr. Wynne Leung (Co-chair Quality Improvement for the Surgical SCN) with Dr. Gregg Nelson remaining a lead for ERAS. The local faculty have been involved in the development of the OB/GYN ERAS handbook which stands to become the Quality bible for our specialty.

Research has strengthened and the recruitment of Ransi Nyakarathna has and will facilitate support for resident and faculty research. Our latest Research Day, although virtual, was a great success and represented not just the interest in OB/GYN, but in Women's Health Research. It is a desire that philanthropic endeavors will allow the Department to be the umbrella for collaborations with researchers across other Institutes/Departments. I will be left with the thoughts of our guest speaker Dr. Sean Dowdy (Mayo Clinic. Rochester) describing research (and I paraphrase) as 'discovering what we don't know'.

Our education at all levels continues to excel which is a testament to the hours of poorly remunerated time that the members contribute to the development of future physicians. As CBD evolves, I acknowledge the extra commitment that has been undertaken by the Sarah's (Drs. Glaze and McQuillan) and team to ease the roll out to an already stretched faculty.

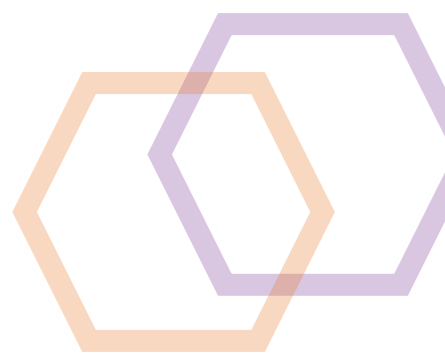
The role of Head is essentially to guide and help more junior members fulfil their potential. It has been worth the 'aggravation' to see the Department flourish and my goal at the outset was to see Calgary recognized as one of the top 3 places in Canada for those interested in Women's Health to work, learn, research and play. It is a testament to the engagement and energy of Department members that this goal has been achieved.

Again, I acclaim the 'backroom staff' without whom the Department would be lost and thank Crystal Ryszewski for the compilation of this annual report.

I was listening to the radio this morning and heard "Here comes the Sun' and the following lyrics encapsulates our last 2 years.

Little darling, it's been a long cold lonely winter
Little darling, it feels like years since it's been here

Little darling, the smile's returning to the faces
Little darling, it seems like years since it's been here



I submit the following report of the activities of the Department of Obstetrics and Gynecology for 2021.

Faculty

ADJUNCT ASSISTANT PROFESSOR

Valerie Prather

ASSOCIATE PROFESSOR

Colin Birch
Erin A. Brennand
Pamela Chu
Sarah J. Glaze
Amy Metcalfe

ADJUNCT PROFESSOR

Roger A. Pierson
Susan J. Ross

CLINICAL ASSISTANT PROFESSOR

Allyson J. Adolph
Kelly D. Albrecht
Bruce B. Allan
Liane M. Belland
Simrit K. Brar
Sheila C. Caddy
Anna Cameron
David F. Cenaiko
Rati Chadha
Christopher Cham
Viviana Chang
Stephanie Cooper
Ronald E. Cusano
Tara E. Daley
Stanley J. Davey
Jocelyn M. Donnelly
Shannon J. Dwinell
Pauline R. Ekwilanga
Meriah S. Fahey
Shu C. Foong
Sherri M. Gibbons
Tamas Gotz
Matthew V. Grossi
Brian Hauck
Paul A. Henning
Dorothy Igras Kulach
John D. Jeffery
Kathryn M. Kenny
Karla E. Khan
Shunaha Kim-Fine
Robert F. Krushel
Verena H. Kuret
Gail Lam
Kendra M. Lamb
Caroline Le Jour
Wynne I. Leung
Andrew W. Li
Katherine A. Lo
Charlene A. Lyndon
Aisling M. Mahalingham
Jaelene M. Mannerfeldt

ASSISTANT PROFESSOR

Katie H. Chaput
Chandrew Rajakumar
Anne M. Roggensack

CLINICAL ASSISTANT PROFESSOR

Fiona M. Mattatall
Duncan J. McCubbin
Sarah K. McQuillan
Jason K. Min
Magnus Murphy
Claudia G. Naber
Maryam Nasr-Esfahani
Titilayo F. Oluyomi-Obi
Candace P. O'Quinn
Nicole D. Paterson
Imran R. Pirwany
Eider Ruiz Mirazo
Ari P. Sanders
Jaime D. Schachar
Selma G. Scott
Michael B. Secter
Nancy Soliman
Joel Steed
Michelle Suri
Jackie L. Thurston
Chelsey R. Topping
Quynh M. Tran
Alese M. Wagner
James L. Watson
Donald G. Wilson
Benjamin C-M. Wong
Amy D. Zakariasen



CLINICAL ASSOCIATE PROFESSOR

Gregory T. Connors
Stanislaw M. Iwanicki
Joseph A. O’Keane
Jeffery K. Pollard
Albert M. Rosengarten
Dhea C. Wallace-Chau

CLINICAL LECTURER

Alison Carter Ramirez
Laura M. Coughlan
Allison D. Edwards
Weronika Harris-Thompson
Christina L. Kerr
Katrina L. Krakowski
Kovid Lee
Harry D. Mueller
Kayla L. Nelson
Christine F. Osborne
Jadine Paw
Jennifer E. Soucie
Lisa Teitelbaum

CLINICAL PROFESSOR

Philippa Brain

PROFESSOR

Prafull Ghatage
JoAnn M. Johnson
Gregory S. Nelson
Magali Robert
Stephen L. Wood



PHYSICIAN RETIREMENTS & RESIGNATION

Clinton Chow
Jennifer Walsh
Walter Moscovitz
Selma Scott
Donald Wilson

Gregory Connors



DEPARTMENT MANAGER

Scott Banks

ADMINISTRATIVE OFFICE(S)

Administrative Assistant to the Department Manager and Department Head

Crystal Ryszewski

Program Administrator, Residency Program

Karen McKeon

Program Administrator, Fellowship Program(s), UME

Katiane Ummels

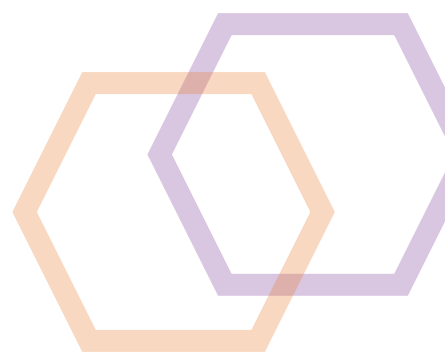
Clinical Administrative Support, Out of Country Birth Tourism

Val McNeill

Clinical Administrative Support

Jolanta Contreras

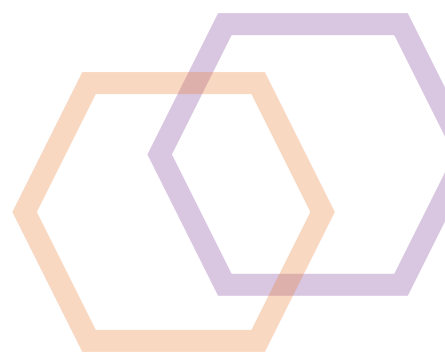




Site Updates



South Health Campus



Site Leader: Dr. Meriah Fahey



SHC Site Members:

Dr. Eider Ruiz-Mirazo

Dr. Jackie Thurston

Dr. Alese Wagner

Dr. James Watson

Dr. Amy Zakariasen

Dr. Sheila Caddy

Dr. Chandrew Rajakumar

Dr. Lisa Teitelbaum

Dr. Katrina Krakowski

Dr. Christine Osborne

Dr. Kayla Nelson

Dr. Bruce Allan

Dr. Sarah McQuillan

Dr. Kathryn Kenny



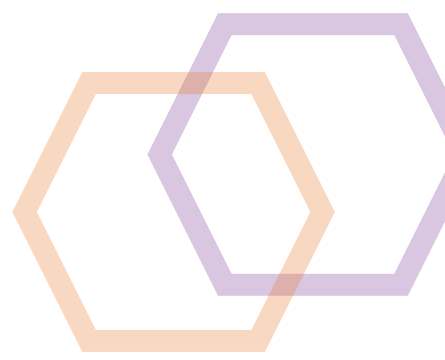
Highlights A big thank you to my entire team. This has continued to be a year of rapid change, last minute coverage for the sake of patient care, all adaption, all while maintaining excellence. I am incredibly proud of everyone for all they bring to the table every day and the ability to continue despite all the curve balls and adversity.

Much attention has gone to managing patient care despite the limitations that COVID and its restrictions pose. We look forward to stability and the ability to plan for the future.

Much of care has been provided virtually when in-person care could not or was better suited to safety than in-person care.

We continue to work toward expansion of services as staffing and capacity allows.

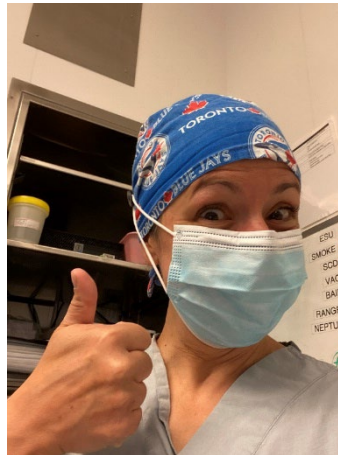




Challenges

Surgical wait times have continued to grow with the shutdowns. Thanks again to the team who have adapted quickly and reworked their entire schedules to accommodate patients when time becomes available, often on short notice. We will continue to try to maximize available resources to meet patient needs and look to new opportunities to access surgical services to address those waiting for care.

Procedure Room and Early Pregnancy Assessment Clinics have seen reductions in services due to a shortage in staffing. It is hoped that we can return to the usual level in service in 2022.



Workforce Planning The need to cover for symptomatic providers or those unable to work for other reasons has highlighted the limitations of a smaller work group. Though our group works very well together, flexibility and the ability to cover for these all-too-common needs for leave will see us looking for additional members to join our team.

Lisa Teitelbaum, Katrina Krakowski, Christine Osborne, and Kayla Nelson all began their appointments to South Health Campus in 2021 and hit the ground running.



Education and Research

QI/QA – Jackie Thurston’s work on Same Day Discharge for minimally invasive hysterectomy has been adopted as a zonal initiative and is work is already underway to be rolled out in 2022.

Research

A resident-led study is underway to look at the impact of oral iron replacement for optimization of the iron deficient patient (Dr. Rajakumar supervising).

A resident-led project is underway looking at outcomes from external cephalic version (Dr. Fahey supervising).

A fellow-led project is underway to study obstetrical care in Eden Valley (Drs. Kuret and Fahey supervising).

A resident-led project to study patient and provider perspective on the virtual patient care for hypertension in the postpartum period (Drs. Leung and Fahey supervising).

Future Directions and Initiatives

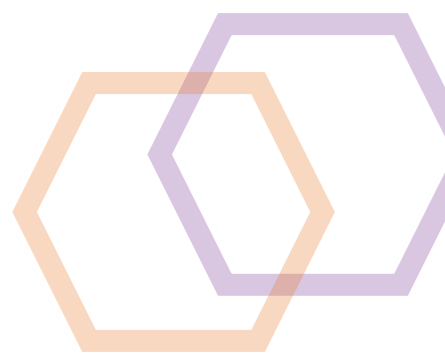
Home Hospital for Postpartum Hypertensive patients as a pilot program continues. We continue to adapt the program to provide a smooth transition from in-patient hospital care to outpatient care, optimizing patient needs/safety and cost to the system, in a way that providers can integrate into current practice.



Increase our surgical footprint, as high utilizers of resources at our site. CLEAR score, ASI, and our historical utilization will enable a shift to Women’s Health.



Rockyview General Hospital



Site Leader: Dr. Wynne Leung



RGH Site Members:
Dr. Viviana Chang
Dr. Jaelene Mannerfeldt
Dr. Fiona Mattatall
Dr. Albert Rosengarten
Dr. Carolyn Le Jour
Dr. Jocelyn Donnelly
Dr. Ingrid Kristensen

Dr. Caitlin Jago
Dr. Kovid Lee
Dr. Gail Lam
Dr. Weronika Harris-Thompson
Dr. Matthew Grossi
Dr. Paul Henning
Dr. Dhea Wallace-Chau
Dr. Katherine Lo

Accomplishments and Highlights

Our group has been very active this year in leadership roles. Highlights include Dr. Fiona Mattatall who is the Co-chair for the Transgender Working Group of the Society of Obstetricians and Gynecologists of Canada. Dr. Dhea Wallace-Chau is initiating a Peer Support Program for the Department of Obstetrics and Gynecology in conjunction with Well Doc Alberta. Dr. Wynne Leung has will be starting a new role as the Alberta Surgical Quality Improvement Lead, South Sector.

Challenges

The Covid-19 pandemic has been our biggest challenge. With the spring consolidation of South Health Campus, High River and Rockyview Maternity units, we faced significant workload changes while striving to provide the best care for our combined patients and welcoming our colleagues to the Rockyview. SHC and RGH OB call groups merged for a few months, and we were able to support each other as we managed a large number of pregnant patients with Covid-19. The later months of this year we struggled to balance the needs of our gynecologic patients and our obstetric patients as postpartum resource s were diverted to help with the overall hospital patient load. Our physicians have been tireless and consistent in their efforts to maintain high quality patient care even in this current crisis.



Workforce Planning

This year we saw the retirement of Dr. Charlene Lyndon from our call group. We had several excellent candidates apply to our site and will be welcoming Dr. Caitlin Jago in the new year, fresh from her Minimally Invasive Surgery Fellowship in Ottawa. Our staffing has been surprisingly good this year. We had anticipated more physician absences due to Covid-19 and therefore planned several backup systems. Luckily, everyone remained healthy for the most part and we have no planned changes to the group in the coming year.

Education and Research

We are excited to facilitate Dr. Ingrid Kristensen's QI project on fetal scalp sampling. We have continued to collect data as a site through the pandemic. We continue to meet regularly with our colleagues in Diagnostic Imaging to review difficult cases and improve our understanding and communication between departments. We are participating in the Zonal initiative to see postpartum patients in obstetrical triage, thus reducing the workload for the ED.

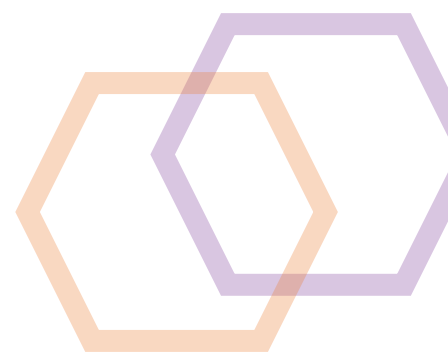
Future Directions and Initiatives

We have been invited to participate in the Complex Care Hub initiative through the Department of Internal Medicine. We hope to address the population of postpartum patients who develop hypertension and are at risk for preeclampsia or eclampsia. Our goal is to manage this population through the CCH allowing them to have "inpatient" level care while being at home. This would reduce the burden on the hospital and improve the monitoring and follow up of this population which is currently underserved.

Dr. Wallace-Chau's Peer Support Initiative is strongly supported by our group and we look forward to participating in its inception.

The RGH NSQIP collective has started collecting data on Cesarean Section patients. We hope to further adopt the NSQIP Surgical Site Infection bundle in the Labour and Delivery OR as the practice is now well established in the Main OR.

Peter Lougheed Centre



Site Leader: Dr. Claudia Naber

PLC Site Members:

Dr. David Cenaiko
Dr. Stan Iwanicki
Dr. Dorothy Igras-Kulach
Dr. Sherri Gibbons
Dr. Joel Steed
Dr. Kendra Lamb
Dr. Angela Deane

Dr. Liane Belland
Dr. Ari Sanders
Dr. Quynh Tran
Dr. Maryam Nasr-Esfahani
Dr. Andrew Li
Dr. Pauline Ekwalanga
Dr. Jadine Paw
Dr. Jaime Schachar

Accomplishments and Highlights

PLC Women's Health Clinic

The PLC Women's Health Clinic (WHC) is an outpatient clinic that offers pregnancy counselling and surgical management (D&C, D&E) for pregnancy loss, genetic terminations and terminations for choice up until 24 weeks gestational age. Patients can self-refer, and we also take referrals from ED, EPL, MW, GP, MFM and OBs in the city. We have RNs, Social Workers, Anesthesia services and Gynecologist who provide care at the WHC. We are also the main teaching site for residents who wish to pursue additional training for D&Es in Calgary.

The WHC has been renovated to allow us to perform surgical abortions on unit 23 and move out of the main OR. We have always had our own recovery unit as part of WHC. As of December 14, 2021 D&Cs and D&Es with sedation (by PLC Anesthesia) are being done on unit 23. So far, this transition has been smooth. The WHC can also still book a procedure as an 'E6' for more medically complicated patients that require the procedure to be done in the main OR (procedure done by WHC gynecologist/anesthesia). In addition to our current scope, we commonly fit in patients seen by PLC ED, PLC Gyne or EPL who need D&Cs in an outpatient capacity.

When WHC moved to the main OR, we were no longer allowed to insert IUDs under sedation. However, we are in discussions to restart in the new year. There are discussions with PLC Admin to increase the scope of WHC further, with plans to incorporate an official EPL clinic. Also allowing us to follow PUL and molar pregnancies.

MFM at PLC

In 2021, the new Maternal Fetal Medicine unit opened at the PLC, transitioning from the previous pilot project with Diagnostic Imaging to a dedicated MFM unit. The new unit, which is staffed by an MFM nurse and Perinatologist on a near-daily basis, has significantly improved access to timely obstetrical ultrasound and consultation. Feedback from nursing and obstetrical care providers has been very positive. In the new year, we hope to continue to work on processes for the unit and increase coverage.

Gyne Access OR room

Starting every Friday in 2022 (once we are at full OR capacity), we will be starting a Gyne Access OR room that will be overseen by Dr. Ari Sanders. The first case will be allocated to cesarean sections requiring main OR time. Remainder of time on this day will be filled with urgent gyne cases seen through clinic, emergency/ward consults. Cases preferably with an ACATS code suggested wait times of ≤ 6 wks. This will include: prophylactic/emergent cerclages, missed abortions, urgent hysteroscopy D&Cs, emergent TOAs, infected stage 4 endometriosis, infected or ruptured endometriomas. This will hopefully reduce having to book these cases in the evenings and weekends and help with OR wait times that have exponentially grown with the OR closures due to COVID.

Challenges

New challenge in 2022 will be how we are going to deal with our increasing and different surgical wait times between all our staff, especially now after having multiple OR shut downs due to COVID. Re-assigning OR based on contributions and surgical wait times is something we need to work on over the coming year.

Some of the senior resident surgical rotations were affected by the pandemic (PGY4 Sr Gyne) Wave 4. If their rotations were impacted due to OR closures, we may have been unable to evaluate their surgical skill adequately. If this was the case, the resident may be asked to return for an additional month when ORs are back at 100% capacity.

Loss of one postpartum unit due to COVID, we have had challenges of overflow postpartum patients with the drop in our postpartum capacity. Strategies have included placing postpartum mothers on our pediatrics unit. Ideally, we would be able to once again have our two postpartum units opened and functioning at full capacity as we did prior to COVID.

The PLC OR initiated OR closure at night from 2300 to 0700 in 2021. This has shown some challenges over the year and we are trying to adapt to this new protocol.

Workforce Planning

We are excited to have Angela Deane joining our group in July 2022. Her fellowship was extended for 6 months due to COVID. She will have a special interest in vaginal surgery skills. She will hold 0.5FTE. There is no doubt she will contribute greatly to medical education (FGM, vaginal surgery, Refugee health).

Education and Research

Education and Research

QI/QA-

-Ongoing audit at PLC by Dr. Nasr evaluating our Operative Vaginal Delivery rate and areas for improvement. Had a significant reduction of OVD rates at the PLC.

-NSQIP- Dr. Belland is involved with PLC surgical initiative to reduce surgical site infections.

Future Directions and Initiatives

Goals for the next year- we would like to be able to complete D&Cs in the L&D OR for urgent E0/E1 for D&C that present to triage/ED, especially now since the PLC main OR has night closures.

Reopen Unit 32- our second postpartum unit as we often have overcapacity issues with our postpartum unit.

Goals beyond the next year

We often encounter overcapacity issues on our L&D unit. Our new L&D unit has labor rooms that are not being utilized due to lack of funding. It would be great if we could use our L&D unit to its full potential.

Educational endeavors

Our site provides excellent medical education for all levels of learners. We contribute to the following directly onsite the PLC:

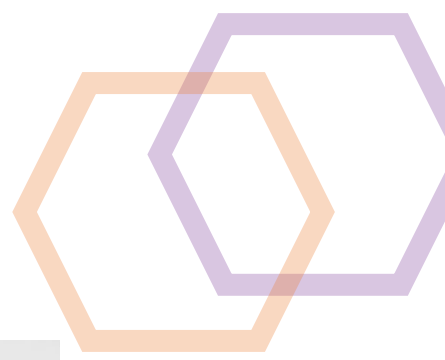
- Midwifery training (outpatient clinic, L&D)
- UME Clinical core (pre-clerkship) during Course 6
- UME pre-clerkship (shadowing, Med 440, electives)
- UME OBGYN clerkship
- PGME FM R3 (OB/women's health extra training)
- PGME EM residency(PGY 1 or PGY 3 OBGYN rotation)
- PGME FM residency (OBGYNE electives)
- PGME OBGYN residency (Mandatory rotations for PGY Jr Gyne, PGY 2 OB, PGY 3 Jr gyne, PGY 4 Sr gyne, PGY 4 MIS, PGY 5 Chief Resident)
- PGME OBGYN Women's Health Clinic elective (done with WHC staff)
- PGME OBGYN residency elective rotations

Members at our site also contribute to the following medical education opportunities off-site:

- UME Course 6 (small groups, lectures, physical exam session, anatomy)
- PGME EM residency Academic halfday teaching
- PGME OBGYN residency Academic halfday teaching
- PGME MFM fellowship teaching

Our members are nominated for teaching awards every year at the UME and PGME levels. Despite the on-going pandemic, we still had learners actively involved in PLC inpatient care (OR, L&D). Recently, we invited clinical clerks back to our outpatient clinic.

Foothills Medical Centre



Site Leader: Dr. Simrit Brar



FMC Site Members:

Dr. Michael Sexter
Dr. Aisling Mahalingham
Dr. Susan Baranowski
Dr. Laura Coughlan
Dr. Nancy Soliman
Dr. Shannon Dwinnell
Dr. Joseph O'Keane

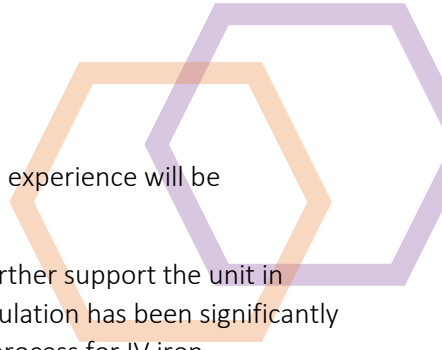
Dr. Stephen Wood
Dr. Kimber Thornton
Dr. Philippa Brain
Dr. Colin Birch
Dr. Jennifer Soucie
Dr. Stephanie Cooper
Dr. Michelle Suri
Dr. Kelly Albrecht

Accomplishments and Highlights

Covid has been and continues to be a significant issue. The Foothills Obstetrics & Gynecology team continues to provide exemplary patient centered care in very difficult times.

The Gynecology call schedule has become more streamlined. We have established a process to ensure patient safety and timely care by ensuring that there is one point of access. Handover with gynecology call has improved significantly though there are still improvements to be made.

OR reallocation was a significant issue with the postponements that occurred with Wave 4. Our team has worked tirelessly to ensure that postponed cases are completed. The pandemic in this capacity allowed for the development of creativity and flexibility among the chaos and the discovery of new ways of doing things. We developed an ad-hoc central triage system by which patients requiring urgent surgery were triaged to the first available time and first available surgeon. We completed many more surgeries efficiently and kept patients out of the emergency room. This effort would



not have been possible without the extensive support from the entire OR booking team. The experience will be invaluable in the move to a Department wide surgical central triage model.

The obstetrical team continues to utilize a second in house OB for triage when required to further support the unit in addition to readily available OB back up and a separate gynecologist on call. Our patient population has been significantly impacted by Covid and the number of births has increased. Despite this, we have created a process for IV iron optimization to ensure hospital resources (if required) are utilized efficiently and in a patient focused manner. We were also able to establish a hyperemesis protocol to eliminate inpatient management. Unfortunately due to Covid and staff reductions, these protocols have not been activated.

Connect Care brings a new Maternal Early Warning System. The FMC team (including nurses and Managers) has worked tirelessly to develop process to help support this initiative and much of this work has been used as the basis of provincial education. Specifically, updated paging guidelines, backup processes and escalation pathways were created. FMC will be trialing these escalation pathways prior to Connect Care Wave 5 launch to allow for socialization.

We have now had over a year of OB & Gyne Ambulatory Central Triage in the North Tower. This has been very successful in reducing overall wait times and improving timely access to care. We have utilized netcare e consult as well as specialist link to help facilitate this.

All clinics continue to employ virtual modes of care where appropriate with standardized templates for consent and access

Challenges

The initiation of Surgical Central Triage will be a challenge due to the distribution of AHS and private clinics. Preliminary working groups have been established to review the work required.

Resident coverage has been an ongoing issue particularly with Covid, the back up staff system and division of call schedules has ensured that patient care is not compromised.

Covid continues to be a challenge with the impact on OR postponement and reduction in staffing.

Connect care wave 5 launch will require the availability of significant support in an already fatigued group.

Workforce Planning

Dr. Kelly Albrecht left June 2021 to complete a 4 year Fellowship at Baylor University Texas.

Dr. Philippa Brain started her Sabbatical July 2021 to obtain a Certificate in Patient Safety at Oxford, UK.

We are pleased to announce the hiring of Dr. Kimber Thornton (0.5 FTE) who will practice share with Dr. Brar and Dr. Kristin Ambacher (0.6 FTE) who will practice share with Dr. Michelle Suri and Dr. Aisling Mahalingham.

Education and Research

The FMC WHAC QA/QI committee continues to do excellent work. A number of themes have emerged which are being addressed by the current processes.

The Postpartum Quality Council sponsored a Breastfeeding education day for all staff and residents. Breast feeding support for patients continues to be a high priority particularly with the reduced availability of nursing support. Creating strategies to support postpartum staff wellness has been beneficial.

The postpartum cesarean opioid prescribing standardization process is well established with process article being published within the JOGC.

Dr. Brain has initiated a QI project incorporating Total QBL and allowable blood loss and using transcutaneous HGB to help guide cost effective treatment of postpartum anemia.

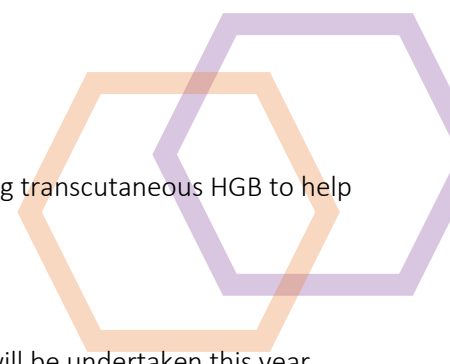
Future Directions and Initiatives

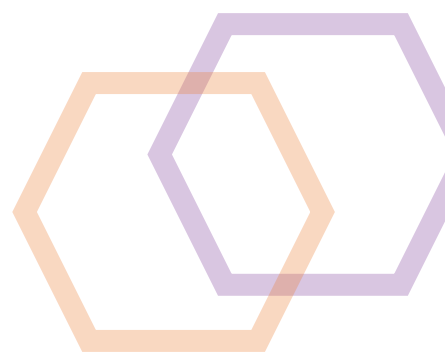
Standardized process for both verbal and written handover and compliance with the same will be undertaken this year.

In anticipation of Department wide surgical Central Triage, there is consideration of a trial period across a smaller group of providers.

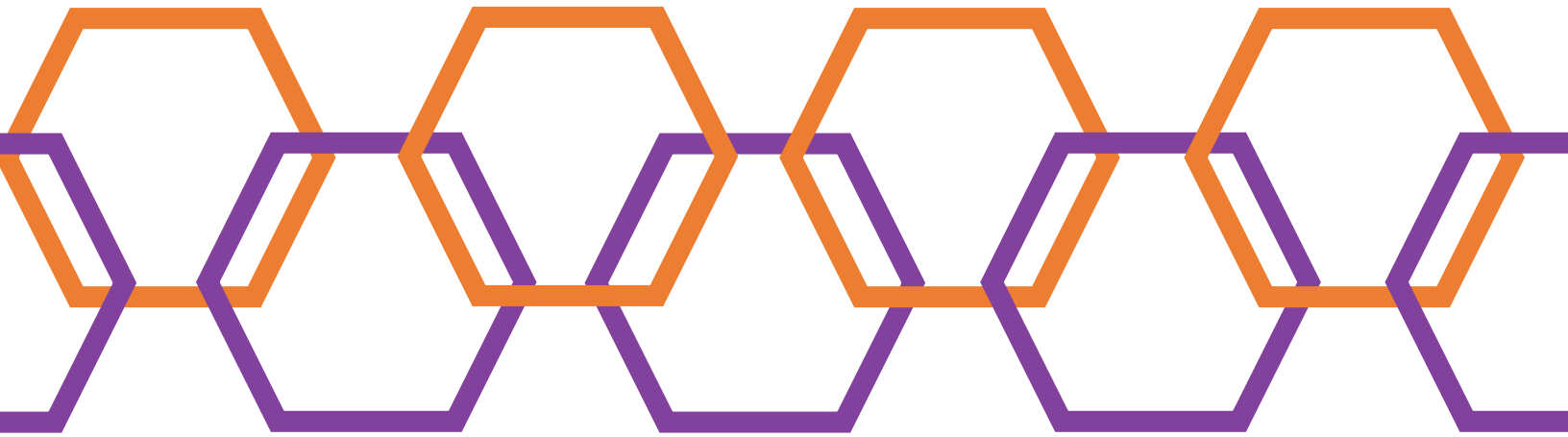
Further cross departmental initiatives between OBGYN and ER e.g. timing of surgery for ectopics.

Physician wellness has been a significant issue with the pandemic and this year we hope to create further strategies to reduce burn out and support physician wellness.





Section Updates



Pelvic Medicine and Reconstructive Surgery



Section Leader: Dr. Shunaha Kim-Fine

Section Members:

Dr. Erin Brennand
Dr. David Cenaiko
Dr. Katherine Lo

Dr. Colin Birch
Dr. Magali Robert
Dr. Magnus Murphy

Accomplishments and Highlights

Dr. Brennand won two CIHR grants in 2021 (Early Career Investigator in Maternal, Reproductive, Child & Youth Health; Project Grant. Dr. Kim-Fine was awarded a \$50 000 grant by the Patty Brisben Foundation as the PI for a multicenter prospective study.

Challenges


The COVID-19 pandemic resulted in strict restrictions on in-person care as well a total number of patient visits in AHS facilities. The subsequent reduction on access to care was, and continues to be, substantial. Our Section's ability to provide operative therapeutic interventions due to OR shut down not only severely affected patient care with waitlists now > 6 months for OR access, it also resulted in lack of hands-on learning opportunities for trainees.

Within the Pelvic Floor Clinic, which is housed in an outpatient AHS facility, AHS restrictions on hiring and replacing AHS staff, has lead to an increase in waitlist as there is a reduction in overall RNs and NP availability to see patients. We recently were able to obtain return of funding for the NP position.

Workforce Planning

Dr. Colin Birch continues to lead as our Department Head of OBGYN.

Dr. Magali Robert continues to lead as the Chair of the Chronic Pain with a cross-appointment in Anesthesiology, and as Medical Director of Calgary Chronic Pain Program. She remains a Member of Faculty of Graduate Studies, Member of



Neutral Chair Committee, Leader in Global Health Initiative. She is also a Member of Executive Committee of Department of Anesthesia (Sept 2020-ongoing), Chair Quality Council, Calgary Chronic Pain Centre (Oct 2019-ongoing), Co-Chair of Outcomes Committee, Alberta Pain Strategy (Sept 2019-ongoing), Bone and Joint Health SCN Core Committee (Nov 2019-onwards), Advisor for Alberta to Canadian Task Force on Chronic Pain (Oct 23, 2019)

Dr. Erin Brennand remains Fellowship Program director, in addition to serving on the Representative Forum Delegate for University of Calgary GFT Physicians at the Alberta Medical Association

Dr. Kim-Fine continues to serve as the Western Representative on the Executive Board of Canadian Society of Pelvic Medicine and Steering Committee member of Collaborative Research in Pelvic Surgery. She is also carrying on in her role as a ConnectCare Area Trainer in OBGYN.

The Section also advertised and began a search for a new Consultant in Pelvic Medicine and Reconstructive Surgery. This would be a 1.0 FTE with 0.8 clinical and 0.2 education / research allotment. Interviews have been concluded and as of this writing, deliberations for selection are underway. The position is expected to start sometime in late 2022. The overall goal is for the new individual to help transition for eventual succession as senior members reduce their clinical service and retire.

Education and Research

Education and Research

The start of 2021 saw our visiting PMRS fellow, Dr Breffini Anglim, complete her 6 months in Calgary and overall 2 year fellowship. She has returned to Ireland, where she and her husband welcomed a baby boy.

In November 2021, Dr. Jena Hall joined the PMRS Fellowship. A graduate of Queen's, Jena completed the Clinician Investigator program during residency with a Masters in Medical Education. Dr. Hall hopes to continue her research in medical education with the support of Department members who have complimentary interests and training related to Med Ed and Competency By Design.

Dr. Allison Edwards and Dr. Alison Carter Ramirez have had productive years as Senior fellows in 2021, collaborating on a series of surgical videos as well as completing their own first author manuscripts. Dr. Edwards' paper looking at impact of laparoscopic accessory port size and use of opioids in hospital and in the community after surgery has recently been accepted to the Journal of Minimally Invasive Gynecology (Impact Factor 4.132). Dr. Carter Ramirez's paper exploring the association of occupational load-bearing and the develop of POP in the midlife is currently under review. As we move into 2022, we wish both Allison and Alison well in their future careers.

Our Section will be recruiting 1-2 candidates for fellowship start dates in Fall 2022.

Dr. Kim-Fine worked closely with the Physician Learning Project and Specialist link to develop a new Clinical Pathway for Female Urinary Incontinence. The ultimate goal of this pathway is to facilitate the initiation of conservative therapies for Female Urinary Incontinence in the Medical Home with Family Physicians, with hopes that doing so will improve access for patients who require Specialist care.

The Pelvic Floor Clinic worked closely with the leadership of Women's Health Ambulatory Clinics to apply to the Calgary Health Trust to replace aging Urodynamics equipment and were successful in obtaining the funds. This will ultimately improve patient flow for specialized testing as the current equipment was end-of-life and would result in patient care having to be interrupted or postponed due to need for ongoing repairs. We are now currently applying for funding for replacing end-of-life cystoscopy equipment. We are grateful for the generous support of the Calgary Health Trust in addressing an oft-overlooked area of Women's Health

Research has continued to be productive within the Section, with two CIHR grants (Early Career Investigator in Maternal, Reproductive, Child & Youth Health; Project Grant) being awarded to **Dr. Erin Brennand** this year for studies related to

pelvic floor disorders. Recruitment for both studies is meeting expected targets, and has navigated the disruptions posed by the COVID19 pandemic well. These projects have created new collaborations and opportunities for trainees within the Dept of O&G, as well as graduate students from other departments.

Future Directions and Initiatives

In the immediate future, we are all working hard to address the backlog of patients who have already been booked and post-poned for OR cases due to the pandemic.

We are also looking forward to the rollout of Connect Care with hopes that it will improve care delivery without adding to administrative burden on the physicians and allied health care team members we all work with. This will certainly be a challenge.

We are planning to finalize the selection and recruitment of a new member to our Section in the coming year. We are also hoping to revise and re-publish updated patient educational materials as well as engage Family Physicians in improving access to care for female pelvic floor disorders in the community.



Pediatric and Adolescent Gynecology



Section Leader: Dr. Philippa Brain
Co-Chair CANPAGO

Section Members:

Dr. Sarah McQuillan – PAG Fellow Director / Western Rep CANPAGO

Dr. Jaelene Mannerfedt

Dr. Christine Osborne

Dr. Kayla Nelson

Accomplishments and Highlights

Administration highlights: Despite a climate of fiscal restraints and a global pandemic we have successfully progressed our program by:

- Implementation of PAG program at SHC with addition of two half days of clinic per month. This is a late adolescent young adult clinic and will allow us to follow patients with complicated congenital and acquired abnormalities of the genitalia. Includes clerical and nursing support
- Access to out-patient procedural room SHC for simple procedures in the later adolescents (IUD insertion, hymenorrhaphy)
- Development of a morning clinic at ACH by moving the virtual and Fellow's clinic to the morning. Increasing patient exposure for the fellow and reducing congestion of the multiple clinics in the afternoon. Enhanced virtual capability.
- Increased clerical support specific to Peds gyne (0.2 FTE): Provides support for OR booking and follow up appointment bookings. Clerical on site at clinic on Thursdays

Transgender Care:

- Development of multidisciplinary transgender gyne clinic at SHC, ongoing

Awards:

Dr. Philippa Brain: Nominated for ACH physician of the year 2021

Dr. Kayla Nelson: Karen Mann Catalyst Grant: Aimed at development of early faculty working in Med Ed and promoting mentorship (\$30,000)

Workforce Planning

PAG Providers:

Dr. Christine Osborne: Anticipated Mat leave Feb 2021

Dr. Brain will be on sabbatical until July 2022

Dr. Sarah McQuillan full time staff

Dr. Kayla Nelson full time staff

Dr. Jaelene Mannerfeldt Full time staff

We have an adequate number of clinical providers given the restriction of clinic space. We anticipate a reduction in clinical providers in 2022 due to sabbatical and maternity leaves. No further recruitment required.

Fellowship program is part of the North American match:

Successful candidate: Tara Justice

To start July 2022: Nada Warreth

Prolonged wait times: Will continue to address this area with evaluation of program with adjustments as stated above and development of SHC clinics, a formal QI request has been initiated.

Transgender Program: The formal request for a transgender program was halted with the UCP government. Drs McQuillan and Brain provide care for the postop trans females returning from Montreal and have requested a joint transgender clinic at SHC. The funding of gender reaffirming surgeries in Montreal is ad hoc and lacks coordination leading to last minute referrals and difficulty if postop complications arise. At the very least funding for a Transgender coordinator with timely referral for postop care as well as knowledge of care providers would greatly enhance the care for this population.

Education and Research

Development of Specialist Link pathways for common PAG problems to reduce waitlists:

- Labial adhesions
- Perception of abnormally appearing labia
- Menorrhagia
- Dysmenorrhea

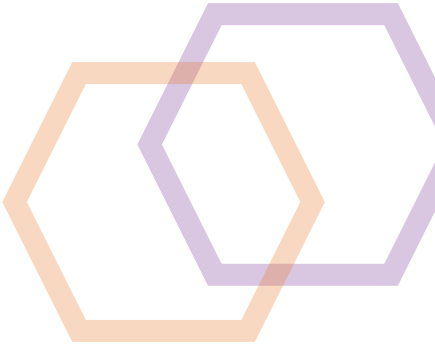
Formal QI process mapping of Clinic referrals to reduce clinic wait times

- **Postgraduate certificate in Patient Safety:** Philippa Brain, Oxford University, UK (Sabbatical, July 2021-July 2022)

Teaching:

- NASPAG Fellow Lecture Series:
 1. McQuillan S, Brain P: "To take or leave the Ovary?" Gonadectomy in the Pediatric and Adolescent Gynecology Population, Feb 2021
 2. McQuillan S, Deitrich J, Transverse vaginal Septum, Dec 2021



- 
- Teaching Sessions given to OBGYN Residents:
 - Abnormal Vaginal Bleeding
 - Developmental Delay and Gyne issues
 - Normal physiology of puberty,
 - Precocious and Delayed Puberty,
 - How to be Strategic and Organized in CBME- Resident Teaching and Q+A, August 2020
 - Pediatric General Surgery,
 - Amenorrhea,
 - Adolescent sexuality and contraception,
 - Abnormalities of the Repro Tract,
 - Genital Trauma and Sexual Abuse
 - Pediatric Urology,
 - Disorders of Sexual Differentiation, Mullerian Anomalies
 - Teaching Sessions given to Pediatric Residents:
 - Pediatric Chief teaching session on Pediatric and Adolescent Gynecology, Dr Kayla Nelson, Dr. Christine Osborne

Future Directions and Initiatives

Application for and alternate funding Plan:

An expression of interest for an AFP for Pediatric and Adolescent Gynecology is underway for full proposal in 2022. It is anticipated that this will enhance the recognition both financially and academically of the program at ACH and improve access to clinic space and funding.

Ongoing development of PAG Networks:

The Calgary program has developed a strong network of PAG providers in Western Canada. Monthly journal clubs include PAG providers in Vancouver, Victoria and Winnipeg. Joint research projects between Vancouver and Calgary PAG programs are already being developed, for example, fertility preservation in patients requiring chemotoxic agents as well as the DSD group developing a position statement on timing of gender corrective surgery in patients with DSD.

The Calgary PAG program is actively involved in the fellowship teaching sessions which include all PAG fellowship programs in North America.

All members of the PAG team are members of the North American Lit Serv connecting PAG experts in North America to discuss challenging clinical cases.

Canadian PAG providers are connected through CANPAGO with twice yearly national rounds. CANPAGO is reviewing access to these rounds through the SOGC website and local university websites providing PAG care

Reproductive Endocrine and Infertility

(Out-going) Section Leader: Dr. Joseph O'Keane



Dr. Shu Foong
Dr. Tom Gotz
Dr. Nicki Paterson

Section Members:

Dr. Jason Min

Dr. Ben Wong

Accomplishments and Highlights

Clinic Visits

The total number of new consultations seen at the clinic including male and female was 6,203 (4.6% increase). This is increased from 6,049 in 2020. There were 22,262 repeat visits over this interval, again contrasting with 2020 of 18,016. In 2021, 2,353 hysterosalpingograms (+33% vs 2020) and 1,944 sonohysterograms (+21% vs 2020) were performed.

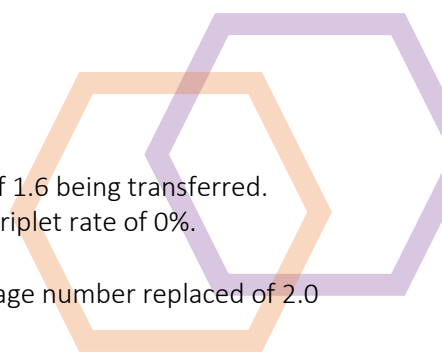
The average wait list from initiation of referral to consultation is approximately six to eight weeks. Urgent referrals such as patients requiring chemotherapy or extirpative surgery are generally seen on the day of referral. All patients receive a phone call from a booking clerk within one week of receiving the referral and a confirmatory fax is sent to the referring physician within a week of receipt of the referral. Currently, there is a minimal wait if a couple needs IVF or other infertility treatments, save a general 2-3 month wait for surgical treatments.

Clinical Services

1. In Vitro Fertilization

There is essentially no wait list for IVF as patients can have their cycle initiated almost immediately after investigations are completed. The total number of IVF cycles in 2021 was 1,314. This is a 32.2% increase from 2020. The overall average age of patients was 35.5. The average number of oocytes collected was 12.7. Conventional insemination was used to fertilize the oocytes in 21.5% and ICSI in 76.7%. The antagonist stimulatory protocol was used in 77% with conventional long agonist protocol used in 1.9%. The antagonist protocol has resulted in a dramatic decrease in the incidence of ovarian hyperstimulation with this now being a rare event. The flare protocol was used for poor responders in 21% of cycles. One hundred and fifteen (115) cycles (8.7%) were cancelled prior to oocyte retrieval due to poor stimulatory response; 57 of these were converted to IUI.

The overall clinical pregnancy rate per fresh embryo transfer was 41.5% in 346 patients up to the age of 35; a pregnancy rate of 33.6% in 230 patients between the ages of 36 to 39; 18.4% pregnancy rate in 159 patients 40 years of age or older.



There were 144 day two transfers completed, with an average number of embryos of 1.6 being transferred. Overall clinical pregnancy rate per embryo transfer was 12.5%; ongoing twin rate of 0% and triplet rate of 0%.

Fifty-six (56) embryo transfers were performed on day 3 cleavage stage with an average number replaced of 2.0 and a clinical pregnancy rate of 21.8%; ongoing twin rate is 0%.

Five hundred and thirty-five (535) embryo transfers were performed at the day 5 blastocyst stage. The average number transferred was 1.3 with an overall clinical pregnancy rate of 41.1%; ongoing twin rate of 7.8%.

In our high-prognosis single embryo transfer patients (defined as one day 5 embryo transfer, aged less than 36, with at least one cryopreserved embryo), the clinical pregnancy rate was 51.1%. There were 189 transfers performed in this category with an average age of 32 and ongoing twin rate of 2.1%.

Seventy-seven percent (77%) of IVF cycles were antagonist protocol cycles. One hundred and ninety-six (194) cycles that had agonist trigger instead of HCG and 97% of these had a subsequent freeze-all to minimize the risk of ovarian hyperstimulation. This protocol has essentially eliminated the risk of ovarian hyperstimulation syndrome at RFP.

Fifty-nine (59) anonymous oocyte donor cycles were performed with a clinical pregnancy rate of 61.4%.

There were four fresh donor oocyte cycles started in November 2021 due to the change in federal legislation regarding same. We completed 78 cycles for fertility preservation with oocyte vitrification, including 11 for oncology.

2. Frozen Embryo Transfer

We completed 1,142 frozen embryo transfers with an average number of embryos transferred of 1.3 and an overall clinical pregnancy rate of 43.5%. More specifically, the pregnancy rate was 45.3% in 811 patients at or under the age of 35; 40.5% of 252 patients aged 36 to 39; 34.2% of 79 patients 40 or older.

One thousand and eighty (1,080) vitrified blast cycles underwent embryo transfer with a clinical pregnancy rate of 44.5%; ongoing twin rate of 10.4% and triplet 0.2%.

We obtained a clinical pregnancy rate of 18.2% in 11 cycles with extended culture from two pronuclei to blast. The clinical pregnancy rate was 22.2% in 18 cycles with extended culture from day 3 to blast.

Overall, the number of babies born through the Regional Fertility Program now exceeds 17,948.

3. Intrauterine Insemination

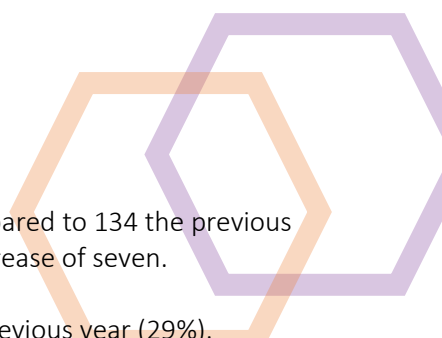
We performed 2,391 cycles of clomiphene / letrozole IUI in 2021.

4. Diagnostic Semen Laboratory

Four thousand seven hundred and sixty-eight (4,768) semen analyses were performed in 2021, an increase of 752 over 2020 (18.7%). Of these, 2,138 were from family physician referrals. Two thousand two hundred and seventy-eight (2,278) post-vasectomy semen analyses were completed, an increase of 511 over 2020 (29%). Of the semen analyses, 2,620 had immunobeads testing for anti-sperm antibodies, an increase of 611 over the previous year (30%).

There were 2,031 semen preps using partner sperm for IUI, an increase of 711 (53%) over 2020. There were 431 cycles of donor insemination, an increase of 132 (44%) over the previous year. For semen analysis for an IVF cycle, there were 629 performed which is 8 less than the previous year. Twelve ICSI preps were performed, five more than the previous year.

When combining Dr. Dushinski's and Dr. Bach's procedures, we completed 17 PESA and 36 TESA procedures in 2021, compared to 10 and 27 respectively for the previous year.



One hundred and ninety-three (193) patients elected to freeze sperm this year compared to 134 the previous year (44% increase). We were involved in 17 preparations for retrograde ejaculations, an increase of seven.

In total, 10,412 semen evaluations were performed, an increase of 2,331 over the previous year (29%).

5. Other Services Provided

- Non-invasive prenatal testing
- Invitae carrier screening (CooperGenomics)
- Known donor oocyte (recommenced '21)
- Gestational surrogacy (recommenced '21)
- Embryo donation
- Preimplantation genetic testing for aneuploidy (PGT-A): this program has dramatically increased as now all 23 sets of chromosomes can be evaluated and this may be helpful in couples with recurrent IVF implantation failure.
- Preimplantation genetic testing for specific genetic abnormalities (PGT-M)
- Tubal, uterine, and endometriosis surgery
- Recurrent pregnancy loss
- Oncofertility (male and female)
- Oocyte and sperm preservation in transgender fertility preservation: Dr. Tom Gotz is currently leading this program. There have been a number of instances in clinic where female to male transgendered individuals have undergone ovarian stimulation, oocyte retrieval, and vitrification. In 2021, we had 101 referrals for transgender patients versus 65 in 2020.
- Vibrostimulation

Challenges

In 2021, the clinic came to terms with the COVID-19 pandemic and was able to reinstate all procedures with increased patient consultation and procedures with no significant discontinuation of services. Once again, all appropriate COVID-19 precautions were taken as outlined by AHS and CPSA standards. This included a patient questionnaire, patient and staff temperature testing, wearing of appropriate PPE, social distancing, cleaning protocols, etc. There was a 32% increase in the number of IVF cycles completed. Initial visits were seen in person in clinic, but all follow-up visits were conducted via telemedicine.

There was constant provision and updating of information regarding COVID-19 including vaccination advice for staff. All areas such as RNs, LPNs, embryology, DSL, and MDs were subdivided into teams to prevent possible disruption of clinical services.

Resident education improved significantly as residents could attend in-person consultation with access to DSL and the IVF laboratories.

Workforce Planning

The OR scheduling was reorganized as both Dr. Michael Secter and Dr. Ari Sanders (both sub specialists in laparoscopic and hysteroscopic surgical procedures) participated in triaging and performing surgery on our more complex patients. Dr. Jennifer Soucie also expedited surgical treatment for our patients. The wait list for surgery is approximately 2-3 months. Dr. Litzenberger is available to perform vibroejaculation on spinal cord injured patients. Dr. Scott retired in December of 2021. Dr. Gotz is taking over as Medical Director of DSL as of January 1st, 2022.

Education and Research

QA/QI Innovation / Initiatives

As with all challenges, new and improved protocols and innovative methods for delivery of services evolved. This was especially pivotal in the take-up of telemedicine. The only patients seen in person at RFP from March to October were patients for procedures and later in the year new consultations. This undoubtedly proved to have some benefits for patients, permitting easier access, minimizing travel and providing increased flexibility. This crisis precipitated new methods and protocols to permit work from home for physicians and staff. These trends will undoubtedly persist.

The critical role of social media and the RFP website were highlighted both in provision of accurate up to date information on clinic procedures, accessibility and COVID-19 updates. There are plans to renovate the RFP website in early 2022.

The rapid evolution of the COVID-19 virus was matched by the medical and scientific response in containing this pandemic particularly the speed at which vaccines have been procured. The infection control and protocols will protect our patients both from this virus and future potential infectious agents

Presentations

- September 2021: Hematology blood disorders – patient education rounds: Fertility in patients with sickle cell disease – **Dr. N. Paterson**
- November 1, 2021: U of C med school lecture: infertility - **Dr. N. Paterson**
- November 25, 2021: Clinical Pearls family medicine conference: Infertility and fertility – **Dr. N. Paterson**
- October 22, 2021: Current Obstetrical Management Services: Infertility & IVF Pregnancy – **Dr. J. O’Keane**

Maternal-fetal Medicine



(Out-going) Section Leader: Dr. Verena Kuret

Section Members:

Dr. Anne Roggensack
Dr. Shannon Dwinnell
Dr. Rati Chadha
Dr. JoAnn Johnson

Dr. Jaime Schachar
Dr. Candace O'Quinn
Dr. Nancy Soliman
Dr. David Somerset
Dr. Stephanie Cooper
Dr. Titilayo Oluyomi-Obi

Accomplishments and Highlights

- MFM cARP Ministerial Order from AHW was renewed for 2 years
- PLC MFM Unit has been established with full-coverage 5 days per week and weekend on call availability
- Telemedicine Program has been initiated by Dr Obi and Dr Cooper
- Calgary was the host (virtual) for the 17th ISUOG Virtual Internal Symposium 2021, with Dr Johnson as co-host and many Calgary MFM physicians participating as speakers/moderators
- MFM team continues to be instrumental in supporting care of pregnant patients with COVID-19 infection through clinical, imaging, surveillance and research. As well as providing valuable input in provincial and national care pathway policies.
- The ultrasound machine was replaced at SHC MFM with a new GE E10 Voluson. A new ultrasound machine (also GE E10 Voluson) was also purchased for the PLC MFM unit through funding provided by Calgary Health Foundation.

Challenges

- Due to staffing changes (retirements, sick leave, resignations) clinical service has been temporarily reduced at some peripheral sites due to lack of physician coverage
 - Staff burn-out is a significant issue
- Ongoing team discord
 - Dr Kuret resigned from MFM Section Head position, Dr Birch is interim Section Head

Given team challenges, only an external candidate will be considered for Section Head position at this time

Workforce Planning

- Dr Ian Lange retired Dec 31, 2020, but returned one last time to provide summer locum coverage.
- Dr Jo-Ann Johnson has completed a 1 year sabbatical dedicated to research and implementation of the Enhanced First Trimester Pre-eclampsia screening/management program
- Dr Walsh has resigned from the MFM cARP as of June 30, 2021. Dr O'Quinn, Dr Schachar, Dr Dwinnell and Dr Kuret decreased their cARP contracts.
- Dr Audrey Labrecque will be providing locum coverage in the spring 2022

A 0.5 FTE MFM cARP position has been posted.

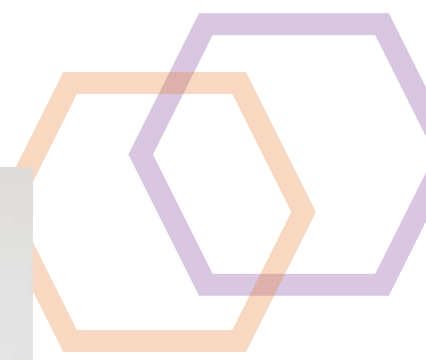
Education and Research

- The Alberta Health Services Calgary Zone Women's Health Maternal Fetal Medicine Quality Assurance Aggregate Working Group continues with regular QA reviews.

Future Directions and Initiatives

- Equipment: need to develop a 5-year plan for capital equipment (eg. US machine) maintenance, replacement, and procurement
- Needs assessment for SHC MFM and RGH MFM and adjust MFM program as needed
- Continue working with Dr Brain on FMC Day Unit and MFM's role in this initiative

Minimally Invasive Gynecologic Surgery



Section Leader: Dr. Chandrew Rajakumar

Section Members:

Dr. Alese Wagner

Dr. Ari Sanders

Dr. Katherine Lo

Dr. Liane Belland

Dr. Jackie Thurston

Dr. Michael Sector

Dr. Caitlin Jago

Accomplishments and Highlights

This year we welcome Dr. Caitlyn Jago to our membership and to the Rockyview General Hospital. Dr. Jago completed her Minimally Invasive Gynecologic Surgery through the AAGL under the mentorship of Dr. Sony Singh, University of Ottawa. In addition, she completed a second fellowship in Simulation and Medical Education. With Dr. Rajakumar newly appointed as Medical Director of the Advanced Technical Skills and Simulation Laboratory (ATSSL), Dr. Jago will co-administrate the OBGYN Simulation-based Medical Education half-days, held monthly.

Our members have been very active with invited presentations, journal clubs, PGME and UME educational events and notably, Dr. Ari Sanders was recently awarded the Golden Speculum Resident Teaching award at the Peter Lougheed Center.

Challenges

As with other surgical services the COVID-19 pandemic has caused major delays in delivery of care, both in initial consultation and time to surgery, for our patient population. This further worsens the disability associated with the conditions the MIGS group focuses on. Improved triaging algorithms and virtual consultations have been implemented to mitigate these setbacks.

The fallout from this pandemic demonstrates a significant healthcare deficit. Those who have delayed care due to congested hospitals and reservations of presenting to locations in which there may be greater risk for contracting the COVID-19 virus, now present in a more advanced or worsened state. This further taxes our resources and produces challenges in the delivery of timely care.

Operating room closures have significantly affected many suffering with disability and/or subfertility secondary to endometriosis. This is also the situation for patients traveling great distances within Alberta for their procedures.

A standing issue relating to delayed surgical care remains a paucity of operating room availability. In general, our group's completed procedures out of aCATS window is 50-75%. Despite decanting less-complex cases to our General GYN colleagues and distributing cases to Dr. Jago's new practice waitlists for surgery remain extremely high.

Workforce Planning

Looking to the future, there is a strong need for a second MIGS practitioner to support Dr. Selter at the Foothills Medical Center. There is a gap identified through analysis of the technicity index at FMC that we aim to support through future recruitment.

Education and Research

The MIGS group continues to demonstrate surgical excellence at our respective sites with each member demonstrating a technicity index (TI) of 97-100%, which are in far excess of each hospital's average TI.

Simulation and Virtual Surgery are innovative means of improving technical skills without risk of harm. These are employed at the ATSSL, University of Calgary and via Zoom sessions through CanSAGE.

Dr. Elizabeth Russell will be focusing her fellowship research project in the area of QI with her supervisor, Dr. Jackie Thurston.

Finally, Dr. Thurston is collaborating with the Department of Surgery and the Surgery SCN to develop a QI Dashboard. Following a pilot phase, this digital interface can be made available for use by the entire department of Obstetrics and Gynecology at the Cumming School of Medicine.

Future Directions and Initiatives

With growth of our MIGS division, the group will be sufficiently large to support a second fellow or focused clinical fellowships (ie endometriosis, chronic pain, fibroids, etc.). Advent of digital QI dashboard would allow virtual sharing of metrics across all sites and allow for analysis and specific feedback to division members. Finally and as always, our group aims to contribute as leaders and scholars with involvement in guideline development, scientific and educational publications, and assuming roles of governance and advocacy.



Gynecology - Oncology

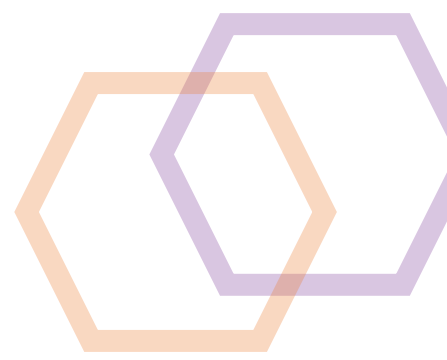
Section Head

Gregg Nelson MD PhD FRCSC
Professor



Deputy Section Head

Prafull Ghatage MD FRCSC
Professor



Section Members

Jill Nation MD FRCSC
Professor



Pam Chu MD FRCSC
Associate Professor



Sarah Glaze MD FRCSC
Associate Professor



Anna Cameron MD FRCSC
Clinical Assistant Professor

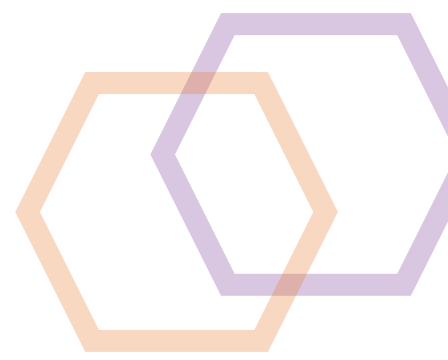


Steven Bisch MD FRCSC
Clinical Assistant Professor



Accomplishments and Highlights

The section of Gynecologic Oncology is composed of 7 members who are active in clinical gynecologic oncology, research, education and service. Dr. Gregg Nelson is Chief of Gynecologic Oncology. Dr. Prafull Ghatage is Gyn Tumour Group Lead, and also serves as Deputy Section Chief. Dr. Jill Nation is Medical Director of Colposcopy, Calgary Zone. Dr. Pamela Chu is Associate Dean, Office of Professionalism, Equity, and Diversity at the Cumming School of Medicine. Dr. Sarah Glaze is Program Director for the Department of Obstetrics & Gynecology Residency Program. Dr. Anna Cameron is Program Director for the Gynecologic Oncology fellowship program.



Division Statistics

| | |
|---------------------------------------|----------------|
| Number of Staff | 7 |
| Number of Publications | 34 |
| Number of Grants (Total Current) | 10 |
| Number of Grants (New in 2021) | 3 |
| Value of Grants for the Reporting Yrs | \$4,112,094.50 |
| Number of Presentations | 22 |
| Number of Book Chapters | 1 |

Clinical Highlights

Our team provides comprehensive gynecologic cancer care to patients across Southern Alberta. We are recognized as national leaders in the areas of radical abdominal debulking for ovarian cancer and HIPEC (heated intraperitoneal chemotherapy). This year we officially started our program in Sentinel Lymph Node mapping for endometrial, and cervical cancers. We are working with donors to fund a robotic gynecologic oncology program.

Research Highlights

From a research standpoint, our division was very active over the last reporting period with 34 peer-reviewed manuscripts published, over \$4,000,000 in total grant funding held, and 22 presentations.

New Recruitments

Dr. Steven Bisch officially joined our Division July 1, 2021 as Clinical Assistant Professor.

Appointments & Promotions

Dr. Glaze was promoted to Associate Professor effective July 1, 2021. Dr. Cameron took over from Dr. Ghatage as Program Director for the Gynecologic Oncology fellowship program effective Dec 1, 2021.

Awards and Recognitions

Dr. Gregg Nelson

Guest Professor, Lanzhou University, Lanzhou, China (Oct 1, 2021 – Sep 30, 2024)

Top Reviewer Award, 2020/2021, International Journal of Gynecological Cancer

Dr. Sarah Glaze

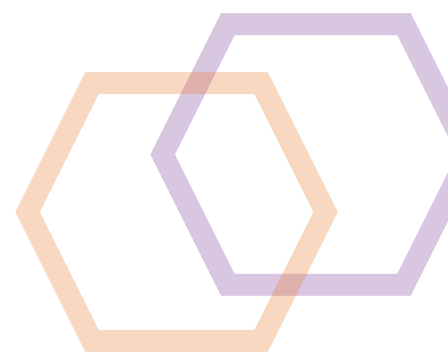
2021 Carl Nimrod Award (Resident Education), Society of Obstetricians & Gynecologists of Canada

Education and Research

Training Program

Our Royal College approved fellowship program attracts high quality applicants from Canada and abroad. We currently have 10 fellows in our program: Dr. Christina Ince, Dr. Jennifer Mateshaytis, Dr. Joni Kooy, Dr. Tamara Kuzma, Dr. Saida Bowe, Dr. Lawrence Woo, Dr. Ali Bassi, Dr. Kristen Black, Dr. Hanan Mal, and Dr. Sean Zhu.

Antenatal Community Care Program



Section Leader: Dr. Rati Chadha



Carrie Collier
Carolyn Campbell
Ann Marie McInnis

Accomplishments and Highlights

Overview of Accomplishments

The Antenatal Community Care Program (ACCP) provides prenatal care and clinical observation in the community for pregnant women with fetal and maternal complications, who might otherwise need to be admitted to an antepartum unit at any of the four Calgary hospitals. While maintaining a similar level of patient care, the provision of the community services offered by ACCP has saved the health system significant costs over the years. The program operates in Calgary Zone including various rural areas (Airdrie, Strathmore, Okotoks, Cochrane). A similar ACCP program operates in Edmonton Zone.

ACCP supports clients with high risk pregnancies with the following diagnosis:

- Hypertensive disorders in Pregnancy (HDIP)
- Pre term Labour (PTL)
- Premature rupture of membranes (PROM)
- Placenta Previa
- Antepartum Hemorrhage (APH)
- Fetal Surveillance
- Intrauterine Growth Restriction (IUGR)

This report captures data from the annual period 2021.

| ACCP Stats by diagnosis % of Cases - 2021 | | | |
|---|------|---------------------------|------------|
| PTL | 9% | Placenta Previa | 7% |
| HDIP | 51% | APH | 4% |
| PPROM | 12% | Fetal Surveillance / IUGR | 17% |
| Other | 0.9% | TOTAL Admissions: | 449 |

The highest primary diagnosis for admissions this year was gestational hypertension at 51%. The next most frequent requests for follow up include fetal surveillance, premature rupture of membranes, and preterm labour. The number of referrals for PROM was higher this year at 12% - vs 10% in 2020.

Clients are discharged from the program once they are at a safe gestational age, the physician deems the client to be

medically safe for discharge, or if the client goes into early labour. There are very few non-accepted clients, reasons for non-acceptance would only be those who:

- do not fit the above diagnostic categories
- have moved out of Calgary area
- decline service
- are unable to be contacted

1. COVID-19

Public Health in Calgary Zone continue to have many responsibilities during the pandemic, including supporting COVID testing and immunization. Through extra shifts, or per team availability, the ACCP team were able to contribute by supporting the Public Health COVID-19 immunization sites.

Additionally, ACCP offered a home O2 sats monitoring program with phone follow-up to COVID-19 positive pregnant patients that had been discharged from the Emergency Department.

2. New Fetal Monitors

ACCP obtained funding through both Calgary Health Foundation and AHS capital equipment to access five new fetal monitors. Orientation to the monitors took place in Spring 2021 and the monitors are now being used by the team to extend capacity. One of the new monitors is capable of monitoring triplets and all monitors will enable us to connect with the OBIX software required by the Connect Care system in the future.

3. Referral Process

All ACCP referrals are now facilitated through the Alberta Referral Directory (ARD). The referral form and home visit order set have been revised provincially and are accessible through the Alberta Referral Directory in preparation for Connect care: <https://albertareferraldirectory.ca/PublicSearchController?direct=displayViewServiceAtFacility&serviceAtFacilityId=1073569&pageNumberToDisplay=1&publicSearch=true>

4. Routine Nursing Standards

A Routine Nursing Standards reference guide was created with the purpose of providing a quick reference clinical tool for nursing standards in ACCP: <https://insite.albertahealthservices.ca/Main/assets/tms/phc/tms-phc-prenatal-accp-appendix-g-routine-nursing-standards-quick-reference.pdf>

5. Client Contacts:

ACCP Nurses had just over 8000 client care contacts involving care for 449 clients. Clients each received daily services - home visits and/or telephone contacts. Depending on their gestational age at admission, date of discharge and physician orders for type of service provided, there is a wide range in the frequency of contacts per client from 1-30 contacts. Over 2513 of these contacts were one to one visits (mostly in at the client's home) and 5712 were phone calls with the client.

Capacity continues to be high within the program and although there were surges at periods during the year, all eligible patients were admitted within 48 hours. Overall, our client caseload was similar to last year, 449 versus 440.

Challenges

1. Program Capacity

Program capacity at times exceeds client volume but overall has remained stable over the past few years. To impart information regarding the program to the obstetric providers in the city, we presented at Obstetrical Grand Rounds in the fall. In addition, we have circulated information packages to physicians and ACCP is on the Alberta Referral Directory.

2. Complex Casework

We continue to observe many clients struggling with social and economic challenges, especially due to hardships brought about by the COVID-19 pandemic. We continue to access social work support from within our Best Beginning team for patients and are able to offer resources such as food gift cards.

3. OBIX and Connect Care

The new software system chosen to link fetal monitoring within Connect Care is determined as OBIX. We understand that the Calgary Health Foundation will be supporting associated costs with implementing this system. At this time, Calgary is expected to be in Connect Care for Wave 8, towards the end of 2023.

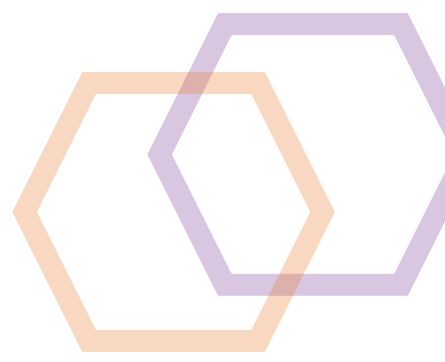
Workforce Planning

ACCP has 6.62 RN FTEs (full time equivalent) which has been consistent for a number of years. We work continuously to review capacity, workload and geographic coverage for clients. Our program RN FTE remains consistent at this time and we also benefit from a pool of casual RN's that we increased by orientating an additional three RN's to our program this year.

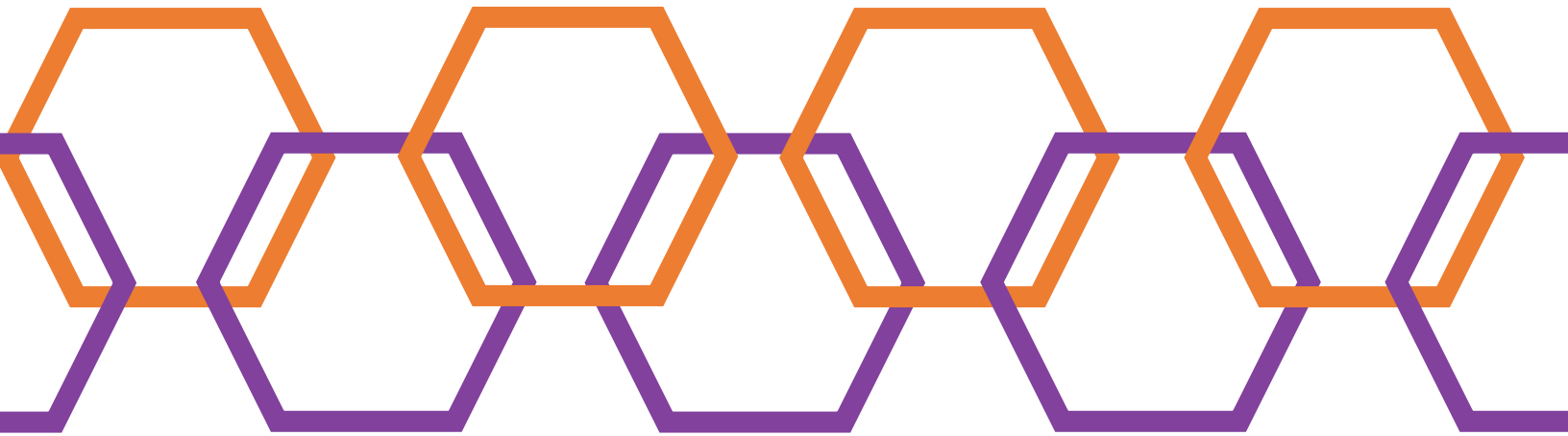
From a physician workforce perspective, we have benefitted from the Medical Director support and Dr. Chadha's assistance in raising awareness of the Program and helping with problem-solving and clinical consultation as well as education.

Future Directions and Initiatives

- Increasing the use of virtual healthcare with ACCP clients.
- Preparation as appropriate for Connect Care (including interim measures following wave 4 and 5 launches at acute sites).
- Updating of practice guidelines and evidence based approaches.
- Continually raise awareness of the populations we see – including clients from other zones, who are able to stay within the Calgary Area for monitoring.



Education



Residency Program

Program Director: Dr. Sarah Glaze



Program Administrator: Karen McKeon



DEPARTMENT OF OBSTETRICS and GYNECOLOGY RESIDENTS

2021-2022



Gabrielle Bonneville
PGY5



Vanessa
Di Palma
PGY5



Kyle Lafreniere
PGY5



Fang Yuan
(Violet) Luo
PGY5



Aysah Amath
PGY5



Kristin Ambacher
PGY5



Lauren Andrew
PGY5



Megan Blades
PGY5



Evan Genge
PGY5



Amanda Rohla
PGY5



Rachel Grant
PGY4



Mruganka Kale
PGY4



Courtney Manuel
PGY4



Monique
Marguerie
PGY4



Larissa
Padayachee
PGY4



Robin Whitty
PGY4



Rebecca
Herrera-Gonzalez
PGY3



Shaleeza
Kaderali
PGY3



Carmen Petrick
PGY3



Cody (Rope)
Smith
PGY3



Paxton Ting
PGY3



Xinye (Serena)
Wang
PGY3



Kathryn
Wilfong-Pritchard
PGY3



Rebecca
Carrigan
PGY2



Shannon
Fitzpatrick
PGY2



Erika Friebe
PGY2



Sarah Kent
PGY2



Eloise Passarella
PGY2



Tamila Shymansky
PGY2



Sylvie Bowden
PGY1



Danielle Chang
PGY1



Leah Rusnell
PGY1



Mary Thompson
PGY1



Gabrielle Wagner
PGY1



Cindy Xue
PGY1

Accomplishments and Highlights

We continue to survive and thrive during covid. Highlights of the program this year include a new research assistant, continuing our fatigue risk management initiative and a new wellness committee and initiatives.

Challenges

Covid continues to present many challenges to medical education. Another year of cancelled electives, reduced surgical volumes and isolation made for hard times for our residents. PGME is trying to decide if residencies will have to be extended in some circumstances.

CaRMs was held virtually for the first time in 2021. This was successful and expected to continue this was indefinitely.

Burnout has been on the forefront for residents and staff. We have become better at identifying this in our colleagues and ourselves and more are accessing resources and help. We launched a wellness committee led by Dr. Thorton and a number of residents to work on creating resources for our group.

Workforce Planning

We have kept our incoming residents at 6; this may be re-evaluated in the future. We currently have 33 residents in our program.

Dr. McQuillan, our CBD chair, was also named as assistant PD for the surgical foundations program but she will continue on in her capacity in the OBGYN program.

Education and Research

We are so pleased that we now have a research assistant working with our residents to help improve resident research output. QI projects continue with the help of Dr. Thurston who has improved this aspect of the curriculum.

We have undertaken a reworking of our curriculum for the CBD stream lead by Dr. Nelson.

We continue with our fatigue risk management pilot and have presented our findings at a number of national conferences this year. We have shown improvement in the fatigue and burnout levels in our residents with some of these initiatives.

Future Directions and Initiatives

The national Truth and Reconciliation commission has highlighted the need for improvements in medical education with respect to Indigenous and anti-racism content. I am working on the national and local levels to make these important changes to our curriculum content - this is an important goal for the year ahead.

Accreditation at the U of Calgary will take place in September 2022 and successfully completing this process will be another goal on the forefront this year.



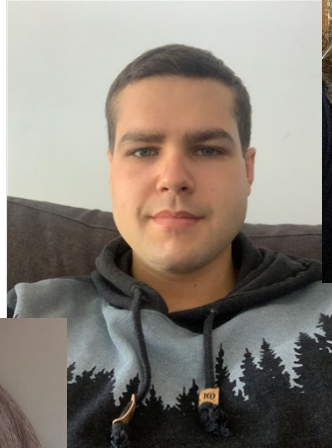
Maternal-fetal Medicine Residency Program

Program Director: Dr. Anne Roggensack

Program Administrator: Katiane Ummels

Residents: Dr. Patrick O'Farrell

Dr. Genevieve Quesnel

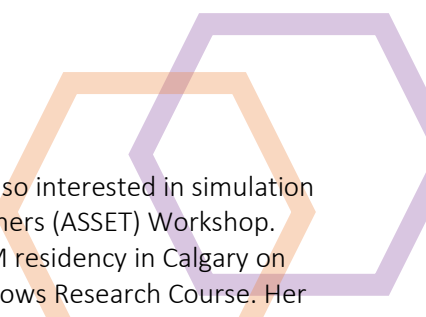


Accomplishments and Highlights

The University of Calgary Maternal-Fetal Medicine Residency Program has continued to develop and grow this last year. It has been exciting to see our program continue to grow, and to see our graduates become MFM colleagues across Canada. We continue to be very successful in the annual Royal College MFM Sub-Specialty Committee annual "match" for MFM residency positions, and this last year was no exception.

Our excellent residents are the highlight of our program:

- 1) **Dr. Audrey Labrecque.** Dr. Labrecque (from Université de Montréal) began her residency in Calgary in September 2019. Dr. Labrecque has a clinical interest in Obstetric Hematology and focused on clinical experiences and research in this area during her residency. Dr. Labrecque worked with hematologist Dr. Leslie Skeith on a metanalysis on the complications of ASA in pregnancy and with Drs. Somerset and Soliman on a customized birthweight standard for a Canadian population: Calgary, AB. Dr. Labrecque served as the National MFM Resident Representative for the development of the MFM Competence By Design Curriculum. During residency, Dr. Labrecque undertook a Postgraduate Diploma in Clinical Epidemiology (with McMaster University), which she successfully completed in December 2021. Following completion of her MFM residency in September 2021, Dr. Labrecque returned home to start her MFM practice at CHU Sainte-Justine in Montréal, QC.
- 2) **Dr. Patrick O'Farrell.** Dr. O'Farrell (from McGill University) began his MFM residency in Calgary on July 1, 2021. Dr. O'Farrell successfully completed the U of C Residents and Fellows Research Course. His research with Dr. Kuret

- 
- involves the impact of COVID-19 infection on fetal heart rate tracing. Dr. O'Farrell is also interested in simulation education, recently completing the Advanced Skills for Simulation Educators and Teachers (ASSET) Workshop.
- 3) **Dr. Genevieve Quesnel.** Dr. Quesnel (from University of Saskatchewan) began her MFM residency in Calgary on September 27, 2021. Dr. Quesnel successfully completed the U of C Residents and Fellows Research Course. Her research with Drs. Kuret and Fahey centers on pregnancy outcomes, obstetrical experiences, and barriers to prenatal care for Indigenous women. Dr. Quesnel was selected to be the Resident Representative for both the SOGC Maternal-Fetal Medicine and Diagnostic Imaging Committees.
 - 4) **Dr. Gabrielle Bonneville.** We are pleased to announce that Dr. Bonneville (from our own University of Calgary) matched to our program in the September 2021 MFM match. Prior to residency, she is undertaking a graduate certificate in Precision Health: Quality and Safety Leadership Specialization at the University of Calgary. She will begin her MFM residency with us on August 1, 2022

Our regular Internal Review was conducted virtually on November 10, 2020, with the report received by the program in April 2021. The reviewers identified several strengths of the program, including:

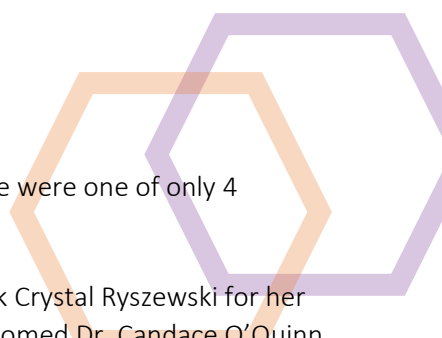
- The flexibility, responsiveness, and potential for individualization of residency curriculum.
- The program's support for successful resident research and successful dissemination.
- Achieving balance between education and service, with emphasis placed on resident wellness.
- The availability of support services to facilitate resident success, including career planning, fatigue risk management, and support for electives).
- The program is extremely well-prepared for the CBD transition (including faculty development, an operational Competence Committee, and implementation of new assessment methods).

Indeed, the reviewers found that "the MFM program stands out from others in terms of its high degree of preparation for its upcoming transition to CBD." Reviewers also commented that "residents report they are happy and well-supported," that they "appreciate the emphasis on resident wellness," and that "the program director is hardworking, enthusiastic, highly capable, and knowledgeable ... she cares deeply about the residents and demonstrates concern for their well-being." There were no domains identified that did not meet the accreditation standard.

We continued to refine our approach to delivering our curriculum, in response to feedback from residents, the residency training committee, and the section of MFM. Given our long preparation for CBD, our residency was able to be a leader in the national curriculum development process. Our local curriculum has already undergone a transformational change, demonstrating good fit with principles for CBD, while remaining adaptable, as individualization of training is part of our philosophy. We have continued to innovate and improve our process for resident assessment and feedback, transitioning to much more frequent low-stakes assessment, including direct observation of procedures and clinical skills and access to on-demand assessments. We continue to utilize a Competency Committee assessment approach and have found this method superior for tracking resident progress and for providing valuable and more specific feedback to residents.

Our academic program continues to evolve in response to resident feedback. Half-days include a variety of experiences, from preceptor-led sessions and case-based discussions, to webinars and self-study, to simulation. Academic activities have continued throughout the pandemic utilizing a virtual format for our academic half-day and rounds. Residents frequently participate in presenting sectional rounds including Fetal Diagnosis and Therapy Rounds, Fetal Pathology Rounds, and the new Obstetric Internal Medicine / MFM Rounds. Residents continue participate in collaborative learning with the Diagnostic Imaging residents. Residents also present Department of Obstetrics and Gynecology Grand Rounds during their residency. Residents lead MFM Journal Club, which is being held now with greater frequency (6x per year) in a new virtual format. Our residents continue to have a 100% success rate on the Royal College MFM exam

Given the pandemic, we continued our novel virtual application process, including a virtual "coffee" with current MFM residents, a virtual "coffee" with the Program Director, a (low tech but effective) virtual tour, individual virtual meetings with faculty regarding possible research mentorship, a resident presentation at the virtual interview, and utilizing electronic survey tools for file and interview assessments. We had 4 applicants this year, and they all expressed positive



feedback with our robust virtual process. Our program continues to be highly competitive; we were one of only 4 Canadian MFM programs that filled all available positions this year.

This year, we welcomed our excellent new program administrator Katiane Ummels. We thank Crystal Ryszewski for her years of service to the program and support during the transition process. We have also welcomed Dr. Candace O'Quinn to our Residency Program Committee, expanding our RPC.

Challenges

We are fortunate that the COVID pandemic has not significantly impacted MFM resident learning. Of our clinical experiences, only our inpatient MFM rotations were significantly impacted, as changes were made to the FMC antepartum inpatient rounding and care, and periodically limiting outpatients presenting to the FMC inpatient unit. We are confident that future inpatient clinical experiences will be less impacted by these temporary changes.

We continue to address limitations of physical space that could impact MFM resident learning with respect to our FMC MFM unit and a dedicated MFM resident library / office.

Plans for expansion of AHS MFM services have been challenging. Government-led changes to the physician funding framework, alternate relationship plans, and diagnostic imaging contracts contribute to an uncertainty that is outside our residency's locus of control. It is a challenging time to lead a residency program with a diverse academic and clinical faculty who participate in both alternate payment and fee-for-service streams. While as a section we are committed to education and know there will remain a high volume of high-risk Albertan patients who need our care, there remains unknowns regarding the future of healthcare and funding in Alberta. If there are challenges to be faced by our faculty, there is the risk that there will also be challenges for our residents and their learning experiences. The process of MFM physician recruitment to the AHS cARP MFM program continues.

Workforce Planning

There remains physician leadership opportunities within the MFM residency program, particularly in the role of CBD Lead / Competence Committee chair (roles presently assumed by the Program Director).

Future Directions and Initiatives

The MFM Residency is presently funded for up to 2 positions per year. In most recent years, given the volume of learners in our department, we have elected to either 1 or 2 positions to optimize the experience for our MFM residents. The current and upcoming national need for MFM physicians is unknown, and it is hoped that planned research may better inform our need for training MFMs.

MFM will transition to MFM in July 2022. We are well-prepared for this with our current curriculum and approach to assessment. Now that EPAs have been finalized, work continues for our program preparation, with access to Mainport expected later in the spring. Our MFM faculty has attended department Grand Rounds on aspects of CBD, but as the process continues, we will also look to present CME on CBD in-house to our MFM residents and faculty.

Gyne-Oncology Fellowship Program

Program Director: Dr. Anna Cameron

Program Administrator: Judy McFadzen



Accomplishments and Highlights

Mohammed Al-Ruwaisan – Successfully passed the Gynecologic Oncology Royal College Fellowship exam in September of 2020 and completed his fellowship in March 31, 2021. He is now a Consultant at King Saud Medical City in Riyadh, Saudi Arabia.

Daniyah Badrun – Completed her fellowship in September, 2021. She is now an Associate Consultant in Gyn Oncology at the National Guard Hospital (King Abdulaziz Medical City) in Riyadh Saudi Arabia.

Joni Kooy – Completed a Master of Science and Health Care Quality from Queens University in November 2020. Successfully passed the Gynecologic Oncology Royal College Fellowship exam in September of 2021 and will complete her fellowship in April 2022.

Christina Ince - Completed her Master of Science in Gender, Policy and Inequalities from the London School of Economics in December 2020. She will be completing her fellowship in June 2022.

Christa Aubrey – Completed her Gynecologic Oncology Fellowship at the end of June 2021. Successfully passed the Gynecologic Oncology Royal College Fellowship exam in September of 2021. She is now an assistant professor at the University of Alberta in the Department of Obstetrics and Gynecology.

Rachelle Findley - Completed her Gynecologic Oncology Fellowship at the end of June 2021. Successfully passed the Gynecologic Oncology Royal College Fellowship exam in September of 2021. Currently locuming at Canadian Universities as a Gynecologic Oncologist and pursuing a Master of Health Administration.

Jennifer Mateshaytis – Started her Gynecologic Oncology fellowship in July 2020 and completed her Master in Health care Quality date of completion June 30th, 2021.

Tamara Kuzma - Started her Gynecologic Oncology fellowship in October of 2020 and is currently in her second year with completion planned for October 2022.

Saida Bowe- Started her Gynecologic Oncology fellowship in October of 2020 and is currently in her second year with completion planned for November 2022.

Hanan Mal - Started her Gynecologic Oncology fellowship in January 2021 and will be starting her second year with completion planned for December 2022.

Lawrence Woo - Started his Gynecologic Oncology fellowship in April 2021 with completion planned for March 2023.

Sean Zhu - Started his Gynecologic Oncology fellowship in July 2021 and is currently doing his research year with a Master in Biostatistics.

Ali Bassi - Started his Gynecologic Oncology fellowship in Oct 1, 2021.

Challenges

The Covid Pandemic has been an ongoing challenge with some decrease in the workload. However, to date this has not caused a decrease in surgical experience.

The residency program is moving to a competency based curriculum starting in July 2022.

The time-based program is also going through external review and accreditation in September of 2022.

Educational Planning

We will continue to work to secure funding for residents to have an extra-year for a research fellowship.

Joni Kooy, Christina Ince will be completing their Gynecologic Oncology residencies in the Spring of 2022. Tamara Kuzma, Hanan Mal and Saida Bowe will be completing their Gynecologic Oncology residencies in the Fall of 2022.

Jonathan Cluett will be starting a 3 year fellowship (2 clinical residency years and a fellowship research year in July of 2022).

Hesham Sait will be starting a 2-year clinical residency in October of 2022. The funding for his fellowship is from Saudi Arabia.

The goal of the program is to have 6 to 7 trainees (clinical residents and research fellows).

Education and Research

Please see the research report from the Division of Gynecologic Oncology with respect to ongoing research and publications.

Educational endeavors will include QI initiatives to ensure the CBD curriculum enhances learning for the residents.

A robust curriculum for didactic sessions will be implemented in the next 6 months and this will transition into the CBD curriculum. A dedicated educational half day will also be created. Within this curriculum there will be cadaver labs twice per year, a research curriculum, journal clubs and critical case rounds.

Future Directions and Initiatives

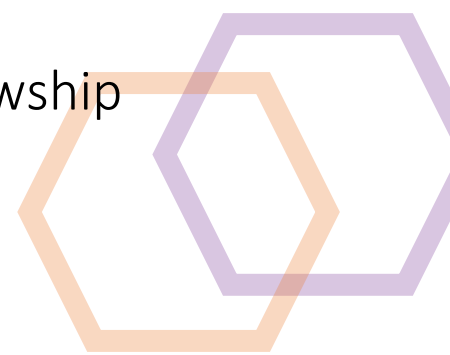
Gynecologic Oncology will transition to a CBD curriculum as of July 2022. Accreditation for the time-based residency program will take place in September 2022.

The development of the new curriculum highlighted in the prior section will be the focus of the next year.



Minimally Invasive Gynecologic Surgery Fellowship

Program Director: Dr. Liane Belland



Assistant Program Director: Dr. Katherine Lo



Program Administrator: Katiane Ummels



Current Fellow: Dr. Elizabeth Russell

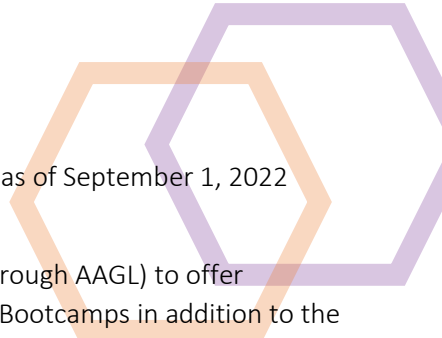
Accomplishments and Highlights

Accomplishments and Highlights

The MIGS Fellowship has now had its first 2 year academic Fellow, Dr. Meghan O'Leary, complete her fellowship as of August 31, 2021. She started her Masters of Education in Health Professions through John Hopkins University during her fellowship with an expected completion date of 2023 due to ongoing course work. Dr. O'Leary is now on Faculty at McMaster University with a position as a Minimally Invasive and Advanced Gynecologic Surgeon at St. Joseph's Hospital in Hamilton, Ontario. She will be heading the surgical education for the Department and developing their Endometriosis Clinic. Prior to exiting fellowship, Dr. O'Leary presented award winning videos at CanSAGE and AAGL and published articles of clinical interest including AVM vs. Enhanced Myometrial Vascularity (with Dr. Ari Sanders).

The incoming 2 year academic MIGS Fellow is Dr. Elizabeth Russell. She started as of September 1, 2021 and comes with a Masters in Public Health. She will be focusing her research efforts on a Quality Improvement project with Dr. Jackie Thurston as her supervisor.

The MIGS Division has also expanded its recruitment for 2022 due to demand for opportunities for ongoing training from community surgeons. We are pleased that Dr. Craig Morton who completed residency at the University of Calgary will be the inaugural 1 year Clinical Fellow. He is currently on staff as a generalist OB/GYN in St. John, NB, but is seeking additional surgical training to improve care and access in his community. He will be starting Fellowship on May 1, 2022.



A second 2 year Fellow, Dr. Lauren Andrew, will be starting her academic Fellowship in MIGS as of September 1, 2022 with staggering of her clinical duties as she gets her research underway.

The MIGS Fellowship in Calgary joins 13 other Canadian programs (11 through CanSAGE, 3 through AAGL) to offer positions for Fellowships in MIGS. This has been formalized with a Curriculum and bi-annual Bootcamps in addition to the CanSAGE conference held yearly.

The MIGS Fellow has been the lead along with the senior Gynecology rotation resident for the “BAG” rounds (Better At Gynecology) which take place virtually on a monthly basis at the PLC with attendance by all residents at that site in addition to PLC MIGS staff. Through the direction of the MIGS Division Lead, the MIGS Fellow participates in all aspects of simulation half days for the residents. The MIGS Fellow has provided independent Gynecology call for departmental support as needed.

Challenges

Disruptions in surgical services continue to be major obstacle to ongoing Fellowship Training. However, the timing of the latest fourth wave provided an opportunity for the Fellow to focus on research until surgical services ramped up yet again. Having a single Fellow during this time has ensure adequate surgical volume to be maintained. This will be monitored closely with the addition of additional Fellows. Care has been taken to stagger the start dates and responsibilities to ensure adequate surgical exposure with increasing Fellows.

Workforce Planning

Dr. Caitlyn Jago has arrived and is now an additional preceptor for the Fellowship with a much needed focus on pain. Dr. Angela Deane will be completing an 18 month MIS Fellowship at North York Hospital in Toronto with a strong focus on vaginal surgery and prolapse surgery. She will join the PLC group in mid 2022.

Education and Research

Dr. Elizabeth Russell will be focusing her research project on a QI initiative to be determined with her supervisor, Dr. Jackie Thurston.

Future Directions and Initiatives

The addition of additional Faculty to the MIGS Fellowship will allow us to start focusing Fellows on particular areas of expertise/interest while achieving the competencies expected of a MIGS Fellowship as evidenced by the joining of Dr. Russell and Dr. Thurston for research.

The demand from community General Gynecologists for additional surgical training to address gaps and increase competencies far outnumbers the capacity of our fellowship to accommodate these requests for training. We are looking at alternatives to address this need outside of Fellowship streams.

Pediatric and Adolescent Gynecology Fellowship

Program Director: Dr. Sarah McQuillan



Assistant Program Director: Dr. Philippa Brain



Program Administrator: Katiane Ummels

Current Fellow: Dr. Tara Justice

Accomplishments and Highlights

Academic Highlights:

- **Postgraduate certificate in Patient Safety:** Philippa Brain, Oxford University, UK

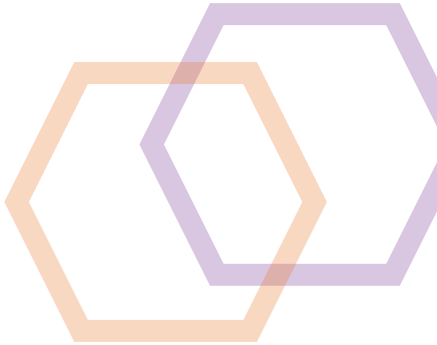
Committee Involvement:

- Resident Program Committee: Dr. Sarah McQuillan, Dr. Kayla Nelson
- Educational Committee: Dr. Sarah McQuillan

Teaching:

- NASPAG Fellow Lecture Series:
 - McQuillan S, Brain P: "To take or leave the Ovary?" Gonadectomy in the Pediatric and Adolescent Gynecology Population, Feb 2021
 - McQuillan S, Deitrich J, Transverse vaginal Septum, Dec 2021
- Teaching Sessions given to OBGYN Residents weekly at noon as well as during Academic Half Day (topics covered):
 - Abnormal Vaginal Bleeding
 - Developmental Delay and Gyne issues
 - Normal physiology of puberty,
 - Precocious and Delayed Puberty,
 - Pediatric General Surgery,
 - Amenorrhea,
 - Adolescent sexuality and contraception,
 - Abnormalities of the Repro Tract,
 - Genital Trauma and Sexual Abuse
 - Pediatric Urology,



- 
- Disorders of Sexual Differentiation, Mullerian Anomalies
 - Resiliency in Residency – Special Half Day Session Dec 2021
 - PAG Chief Resident Review (November 2021)
 - How to Study for the Royal College (Dr. Nelson July 2021)
 - PAG Simulation (November 2020 and February 2022)
 - Teaching Sessions given to Pediatric Residents:
 - Pediatric Chief teaching session on Pediatric and Adolescent Gynecology, Dr Kayla Nelson, Dr. Christine Osborne

Future Directions and Initiatives

We have accepted Dr. Nada Warreth an Irish Resident with an interest in PAG who will be starting in July 2022.

Pelvic Medicine and Reconstructive Surgery Fellowship

Program Director: Dr. Erin Brennand



Program Administrator: Katiane Ummels



Current Fellows: Dr. Allison Edwards

Dr. Alison Carter Ramirez

Dr. Jena Hall



FPMRS/Urogynecology Fellowship 2021 Annual Report

The FPMRS/Urogynecology Fellowship Program had a great 2021, despite the ups and downs of the COVID19 pandemic. The start of 2021 saw us saying good-bye to Dr. Breffini Anglim, who was our visiting fellow from Ireland for 6 months. Dr. Allison Edwards and Dr. Alison Carter Ramirez (known as “the A team”) continued into the second year of their fellowship.



While OR closures were a source of disappointment to the entire team, both fellows used the days when they were not in the OR to contribute meaningfully to the Section's research. In addition to recruiting to the two on-going cohort studies (MUST and HUPPS), Dr. Edwards undertook an analysis of how laparoscopic port size impacted opioid use in the first 24 hours after surgery and after discharge, as well as completing video abstract submissions to CanSAGE and IUGA conferences.



Dr. Carter Ramirez undertook a project looking at the risk of developing pelvic organ prolapse (POP) for women exposed to heavy lifting and pushing in the workplace using 9 years of longitudinal annual follow-up data from the Study of Women's Health Across the Nation (SWAN), and also started her own cohort study of women who undergo peri-urethral bulking with Bulkamid (COAPBT).

In fall 2021, when public health restrictions eased, our group took a short "mini-retreat" at Sparkling Hill in Vernon, BC to relax & recharge, connect with prior fellows like Dr. Emily Sandwith (now in Victoria, BC), "attend" the American Urogynecologic Association virtual meeting together (made much more interesting while sampling the local wine).



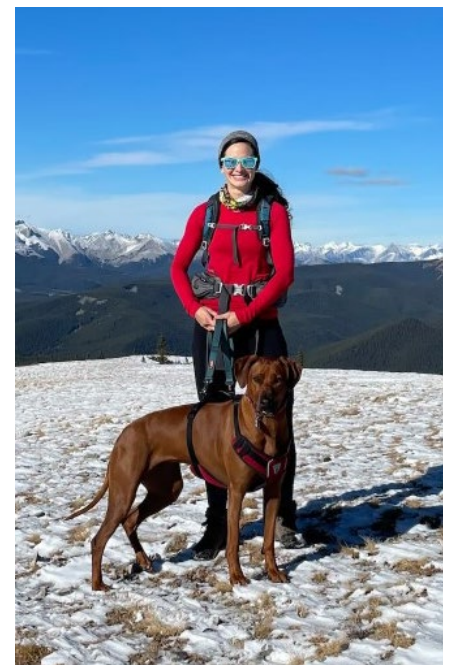
Shortly thereafter, we welcomed Dr. Jena Hall as the 3rd fellow in our program. Dr. Hall is a graduate of Queen's University, where she undertook the Clinical Investigator Program and graduated with a Masters in Medical Education. Dr. Hall has contributed meaningfully to the development of Competency By Design (CBD) for Obstetrics & Gynecology, and we know she will make meaningful changes to medical education in FPMRS throughout her career.



Dr. Edwards will be completing her fellowship in May 2022, and will be starting her practice at the Sturgeon Community Hospital in St. Albert, Alberta. We will miss her terribly, but know that she will continue to collaborate with our group here on innovations in research, clinical care and education.

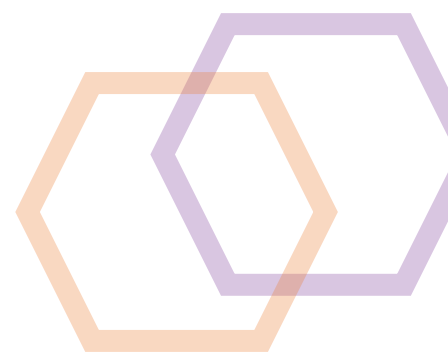
Dr. Carter Ramirez will complete her fellowship at the start of September 2022 and we are delighted to announce that she was the successful candidate in our Section's recent job posting. Dr. Carter Ramirez brings to our team a never ending amount of passion for women's health, new ideas for research and advocacy, a truly fantastic surgical skill set and the ability to provide care for women *en español*.

The Fellowship Program at the University of Calgary remains one of the most competitive in the country, leading in fellowship research and surgical training for pelvic floor conditions. We recognize that a bit part of what makes Calgary such a great place to train are the exceptional trainees who bring their energy, enthusiasm and compassionate clinical care to our team.



Course 6 - UME

Program Lead: Dr. Jadine Paw



Accomplishments and Highlights

Course 6 continues to have strong clinical teachers from the Department of OBGYN. This past year, 13 Department members provided lectures, and many more participated in small group teaching and clinical core. There are 15 Obstetrics lectures and 15 Gynecology lectures, and 4 of these lectures were provided by GFT members from our Department. Our lecturers are chosen based on their strong teaching ability and their lectures have always been very highly rated.

A highlight and proud achievement of this year's Course 6 is the addition of EDI. An EDI lecture as it pertains to the past history of OBGYN and current challenges was given by Dr Chu and Dr Ince (gyne onc fellow). In addition to that, all the small group materials were updated to include EDI elements, and the vocabulary changed in lectures, small groups and exams to be gender-inclusive. An unsolicited written comment from a student reflects this: 'thank you for all the effort to make this course gender inclusive. As a queer student it helps me feel like I belong here'.

At the time of submission for this report, the stats and student ratings from Course 6 have yet to be released. Our course has always been highly rated and the unofficial feedback from students have been very positive. Once these stats have been released, I will add to and amend this report.

Challenges

Unfortunately, recruitment for small groups remains a challenge. We had to rely on more non-OBGYN small group preceptors this year than ever before in Course 6. Dr Paw had to recruit preceptors last minute to fill in gaps, and relied on residents to fill these gaps. Many non-OBGYN preceptors are Master Teachers (from Dept of Psychiatry, Internal medicine, Family Medicine). Considerable time has been spent to update all small group guides so that any preceptor, regardless of specialty, can lead the small group. The small groups were also modified to be Zoom-appropriate. Of the 144 total small group sessions, 64 were covered by OBGYN attendings. 10 were covered by fellows in our Department, 9 covered by Sr OBGYN Residents, 3 covered by an OBGYN locum, and the rest (58) covered by non-OBGYN teachers. Further breakdown of small group sessions contributions: 6 sessions taught by FMC staff, 16 sessions taught by PLC staff, 24 sessions taught by RGH staff, 10 sessions taught by SHC staff. In terms of subspecialty, 4 sessions were taught by Gyne Onc staff, 2 sessions were taught by MFM staff, 1 session taught by Urogyne staff, 1 session taught by REI staff. If we look at GFT members, they contributed to 12 of the 144 small group sessions (5 from MIS, 4 from Gyne Onc, 2 from MFM, 1 from Urogyne).

Workforce Planning

Dr Sandra Peacock started as the new Breast Section Lead this year. She will continue in this role.

Appointments: Dr Kayla Nelson has been identified as a potential replacement for Dr Schachar for Exam Chair. This position will be advertised by the UME. The start date will be for the 2022 Course 6.

Retirements/resignations: Dr Jaime Schachar has resigned from her position as Exam Chair at the end of this course.

Course 6 as it stands will end after 2022. RIME (Re-Imagining Medical Education) will change how the Undergraduate medical curriculum will be delivered. It is still unknown how OBGYN/womens health will fit in, and what leadership will be required from the Department of OBGYN.

Education and Research

We will continue to examine how to best deliver important OBGYN material to the UME pre-clerkship students. We have increased the use of innovative education techniques such as 'flipped classroom' in our course this year (added AUB and Contraception to our flipped classroom repertoire).

As mentioned, all the small groups were updated to include EDI and gender inclusive cases and examples. In addition to that, the 'complicated obstetrics' and 'AUB' small groups were completely replaced.

Dr Paw also worked with Dr Amy Bromley (Pathology) to re-vamp the entire Pathology curriculum in Course 6. The level of material was too complicated and advanced for the level of a UME pre-clerk student. We replaced the pathology lectures and incorporated them into the clinical lectures as a 'clinical pathology correlation' lecture. This was done for the following topics: pelvic mass, AUB, breast cancer, pap/cervical screening. The pathology small groups were all removed and replaced with pathology CARDS session, and a new pap clinical small group was created (to replace the pap pathology small group). Important pathology elements that were previously covered in pathology small groups were incorporated in the updated clinical small groups (AUB, pap, pelvic mass/pain).

Future Directions and Initiatives

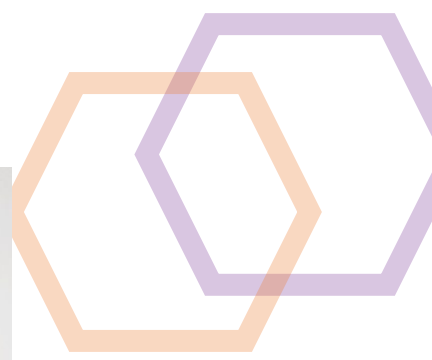
Goals for the next year: no big changes planned for 2022 as it will be the last year of Course 6. We will maintain our high standard to deliver OBGYN material to the UME students. We will work to ensure that OBGYN is an important part of the new RIME curriculum.

Goals beyond the next year: RIME curriculum. It is currently uncertain how womens health will be covered or distributed. Dr Paw has already reached out to the leads of RIME so that our Department can contribute to the development of the womens health curriculum and ensure it is adequately represented.

Clerkship - UME

Program Lead: Dr. Weronika Harris-Thompson

Program Administrator: Katiane Ummels

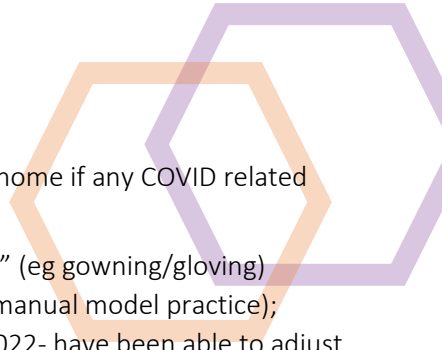


Accomplishments and Highlights

- Strong appreciation for O&G Faculty including staff and residents with honour roll and Gold star awards (awards night cancelled due to COVID Jan 2022)
- Core clerkship teaching team continues to provide hands on and ZOOM teaching; use of a “core team” allows excellent knowledge of curriculum objectives, resources used, case flow and key learning points, as well as consistency amongst knowledge transfer to students across different rotations. Thank you to the Core team including: Dr Ingrid Kristensen, Dr Dhea Wallace-Chau, Dr Jaelene Mannerfeldt, Dr Aisling Mahalingham, Dr Kathryn Kenny , Dr. Kayla Nelson (and Dr Harris-Thompson). Their ongoing dedication to teaching is much appreciated.
- 2021 has been a somewhat “on hold” year with much of our efforts in clerkship focused on maintaining quality educational experiences on L&D/OR/in patient focus as COVID has continued to limit outpatient clinic time for students
- Able to resume in person clinical skills teaching 1.5 days since July 2021 with enhanced COVID protocol (though on hold again now January 2022, have shifted to ZOOM case-based review)
- Challenges during OR closures met by faculty taking students into clinics as able to accommodate which was highly appreciated
- Able to shift and offer some elective time on L&D/OR this year
- Favorable O&G rating 4.09/5 in 2021 (though down from 4.3 prior year) despite all the required changes to our rotation over the last 2 years
- **Thank you to clerkship committee** : Dr. Weronika Harris-Thompson (Clerkship Director), Dr. Kathryn Kenny (Evaluator Coordinator / SHC rep until November 2021), Dr. Aisling Mahalingham (FMC reps), Dr. Paul Henning (RGH rep), Dr. D Igras (PLC rep), Dr. D McCubbin (Medicine Hat rep), as well as our resident reps (Dr Evan Genge, Dr Mruganka Kale, Dr Paxton Ting). We had two student representatives, and we thank them for their contributions ,Brook Comrie and Jungmin Park. Also thank you to Crystal and Andrea Ancelin at UME for their support.

Challenges

- Changes in scheduling secondary to COVID19; rotation adjusted to 4 week in hospital rotation. Teaching done with combination of in person 1.5 days and structured cases/teaching modules on OSLER

- 
- Frequent accommodations/adjustments to schedules to encourage students to stay home if any COVID related symptoms but also allow them to complete rotation in a timely manner
 - Simulation teaching scaled back a few things that could not be made “COVID friendly” (eg gowning/gloving) removed but proceeded with SVD, tear repair, cervical exam models, pelvic exam/bimanual model practice); cancelled with increased transmission omicron COVID cases/prevalence in January 2022- have been able to adjust to ZOOM teaching to cover the cases. Teaching hands-on skills redirected to clinical rotation only.

Workforce Planning

- Dr. Kathryn Kenny stepped down as evaluation coordinator November 2020; Dr Kayla Nelson has been hired to replace her and we are excited to have her join our team
- Dr. Kyle Lafreniere has taken over for Dr Kenny as Site Lead for Clerkship at SHC (until Dr Kenny back from her leave)
- Will likely be hiring 2-3 additional Core Clerkship teachers for upcoming year (notice to be sent out shortly)
- UME restructuring administrative support- Andrea Ancelin moved away from O&G January 2021 and Tania Pander taking over

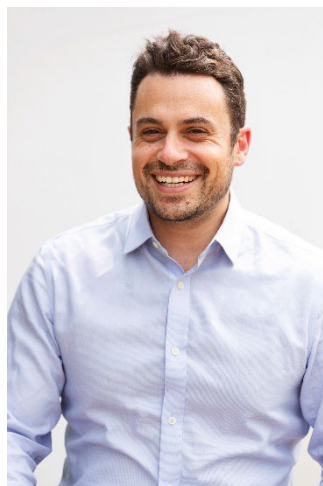
Future Directions and Initiatives

- Clerkship rotation shifting to 4+2 week block for class 2023, starting February 28th, 2022; this change directed by UME. Clerkship committee involved in planning, will be 4 week inpatient time (as is currently), and then 2 week block clinic time that will be preceptor based. Will have ½ day hands-on teaching at beginning of 2 week block and continue with 1.5 days for 4 week block.

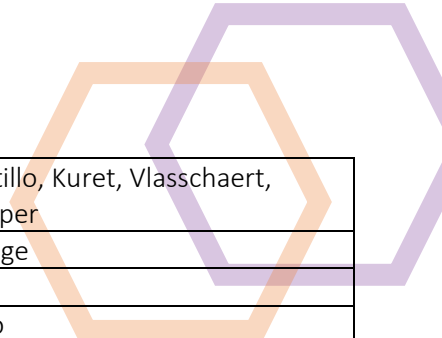
Continuing Medical Education



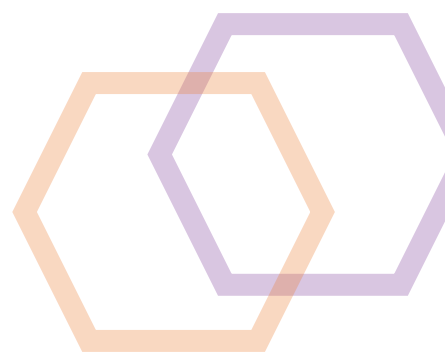
Program Coordinator: Dr. Michael Secter



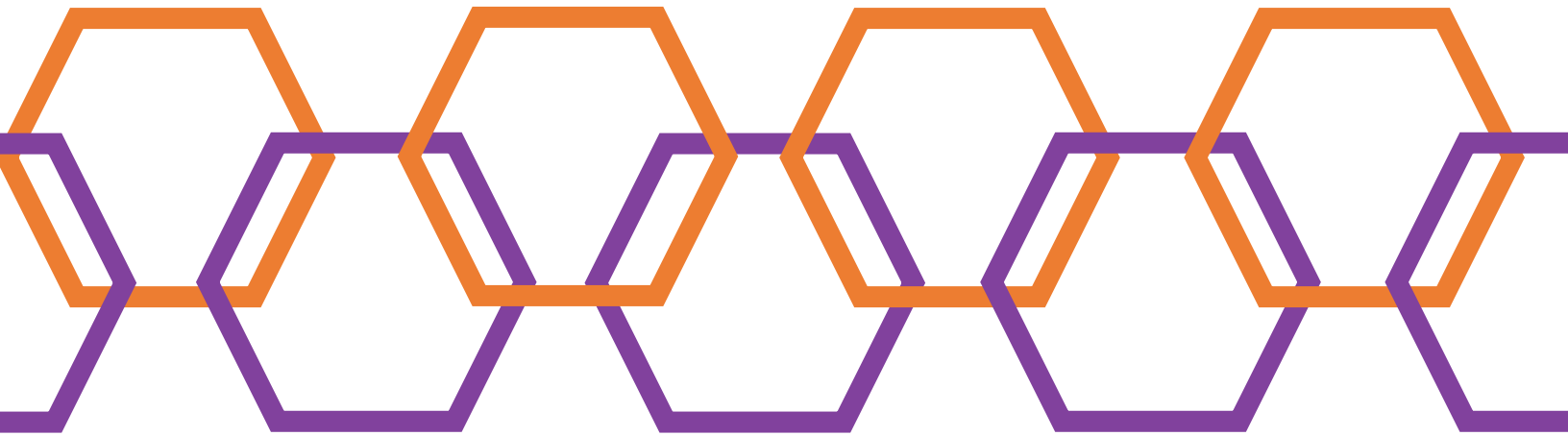
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| Jan 8 | Prolapse, Prisoners, and Preemies: an update on pessary use in pregnancy | Edwards , Carter-Ramirez |
| Jan 15 | Perioperative anemia and iron deficiency | R and C Lett |
| Jan 22 | To push, or not to push? | Kaderali, Amath |
| Jan 29 | Management of Twin Pregnancies: SOGC Guidelines | Elad Mei-Dan |
| Feb 12 | Scorecards in Gynaecology | Shirreff |
| Feb 19 | Aspirin – Miracle drug to prevent preterm birth | Ting |
| Feb 26 | Neuropathic Pain in Women’s Health”. | Rajakumar |
| March 5 | DOS | |
| March 12 | Pediatric Gynecology for the Generalist | McQuillan, Osborne, Brain |
| March 19 | Dienogest for the treatment of primary dysmenorrhea | Wilfong-Pritchard |
| March 26 | Female Reproductive Health in Kidney Disease | Dumanski |
| April 16 | COVID-19 VACCINATION IN PREGNANCY IN ALBERTA – UPDATE Spring 2021 CME – UNIVERSITY OF CALGARY | Castillo, Kuret |
| April 23 | Hypertension following pregnancy – a local perspective | Lewis, Hawkins |
| April 30 | Can olanzapine reduce nausea for our post-operative patients? | Petrick |
| May 7 | Too Much of a Sugar High | Wang |
| May 14 | Ten Way to Up Your Game as a Surgical Educator | O’Leary |
| May 21 | Growing Pains: The Fetal Growth Curve Dilemma | Labrecque |
| May 25 | Special Rounds – COVID webinar | Cooper |
| May 28 | Increasing the success and safety of outpatient labour induction using individualized care plan | D’Souza |
| June 4 | DOS – M&M Rounds | |
| June 11 | ASPIRE PLUS: Practice Assessment in Uterine Fibroids | Belland |
| June 18 | Surgical menopause | Shirreff |
| June 25 | Clinical pearls in obesity for Obsgyn | LeJour |
| Sept 10 | Maternal Early warning system | Brar |
| Sept 17 | Health in Color: Black women, racism, and maternal health | Dayo, Christy |
| Sept 24 | Patient’s first, but what’s next? Relation culture even during a pandemic | Horton |



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|--------|--|--------------------------------------|
| Oct 1 | Pandemic Update – Maternal Management | Castillo, Kuret, Vlasschaert, Cooper |
| Oct 8 | Pitocin in Motion | Genge |
| Oct 24 | Reducing trauma from birth – COVID edition | Luo |
| Nov 5 | Diet and Endometriosis | Jago |
| Nov 12 | Severe maternal morbidity at FMC an 18 month review | Brain, Coughlan |
| Nov 19 | Genetics and stillbirth | Lauzon, |
| Nov 26 | Preterm Labour – What we know and where we need to grow | Blades |
| Dec 3 | ACCP: A safe alternative to hospital for high-risk pregnancy | ACCP |
| Dec 10 | Handling avoidance in Pelvic Pain treatment | Robert, Miller, William |
| Dec 17 | Centennial discourse on caesarean birth choice | McDonagh Hull |



Committees

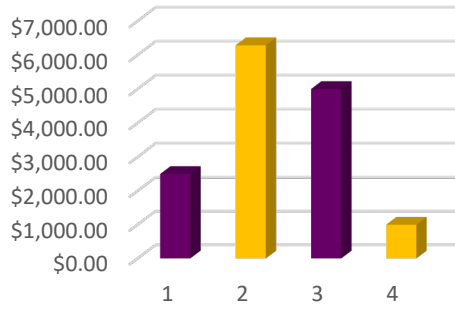


Department Education and Research Fund Committee

Lead: Dr. Jennifer Soucie



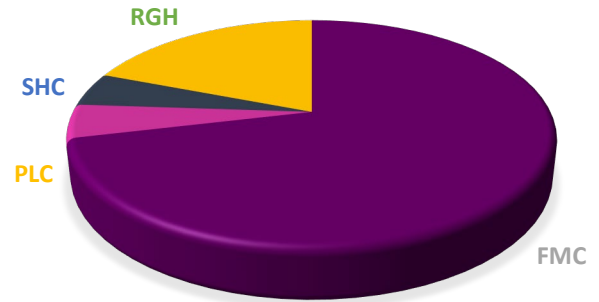
DEAR Amounts 2021 Requested



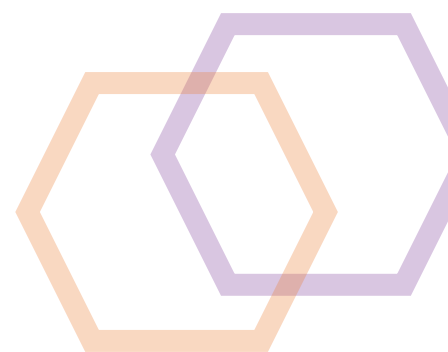
DEAR Amounts 2021 Amounts Paid



2021 DEAR FUND CONTRIBUTIONS



Perinatal Mortality Review Committee



Lead: Dr. Pauline Ekwalinga



Section Members:

Dr. Allison Denesuk

Dr. Astrid Tupper

Dr. Angela Tarazona Ramirez

Dr James Watson

Dr. Anne Roggensack

Dr. Stephen Wood (HIE)

Dr. Nicole Halasa

Dr. Andrew Li (Dr. Quynh Tran covering)

Dr. Aisling Mahalingham

Dr. Carolyn Yoo

Dr. Viviana Chang

Dr. Elaine Chan

Dr. Julie Lauzon

Wendy Wood

Accomplishments and Highlights

Committee has been meeting monthly via zoom which seems to be working. Dr. Stephen Wood has added some HIE cases which look promising to be incorporated into the PNM in the future.

The Committee received confirmation of section 9 this year and work toward moving more in line with expectations laid out provincially.

Challenges

The challenge is always to have charts prepped for review. Almost every month at least one site does not have charts pulled despite lots of notice.

Education and Research

Every review is educational for the committee members. Letters are sent to the family physician of the reviewed patients as well as their obstetrical care provider, provided that information is available to the committee.

Future Directions and Initiatives

Goals for the next year – To add 2 HIE cases each month.



Policy

Program Lead: Megan McQuiston



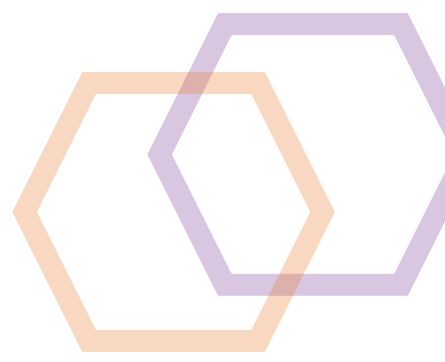
Accomplishments and Highlights

2021 brought a continued focus on COVID-19. The Calgary Zone Women's Health COVID-19 website was maintained with the most current version of zone tools and resources, as well as links to AHS and non-AHS COVID documents, tools and education links.

With Connect Care upcoming, a shift from zonal women's health policies to provincial policies was needed. A provincial Women's Health Policy working group (for which I am the co-lead) was formed as a sub-committee of MNCY. New protocols posted in the spring were: Assessment and Management of Antepartum Vaginal Bleeding, and Entonox Administration (a collaboration with the ESCN). Wave 4 of COVID interrupted our progress somewhat, but we are back on track! You can expect to see drafts of Unscheduled Cesarean Section; Assessment of Hypertension in Obstetrical Triage; and Oxytocin Induction in your inboxes soon! I encourage all Physicians who provide obstetrical care to consider providing feedback on these documents, as many of them can be ordered by you, for nurses to perform independently. Future work for the provincial group includes: adaptation of the FMC PPH project for provincial application, Modified Early Obstetric Warning Systems (MEOWS), Bladder Management, Stillbirth, Cervical Ripening and Magnesium Sulfate.

At the Zonal level work continued. A Postpartum Hypertension (inpatient) document was posted early in the year, as well as a document guiding appropriate placement of off service patients in maternity units. A major initiative – seeing postpartum patients returning to hospital in the OB triage area was implemented early in the year. The initiative was supported by development of process maps for nursing care of patients with urinary retention, PPH, hypertension, spinal headache, infection, abdominal pain and breast concerns. Overall staff and patients have been pleased with the improved continuity of care.

I am currently working with Dr Lois Donovan, from the Diabetes in Pregnancy program to finalize a document outlining consultation and ordering processes for patients with diabetes in pregnancy. It is expected to be posted in January or February of 2022. The FMC PPH project will be spread throughout the Calgary Zone this spring, making quantification of blood loss the standard for all obstetrical patients. A small working group is updating the current Non-Obstetrical Surgery in Pregnant Patients Guideline, which is expected to be complete in the Spring of 2022.

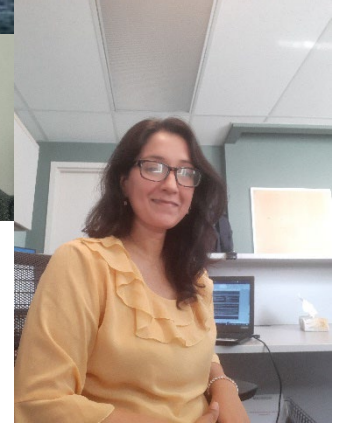
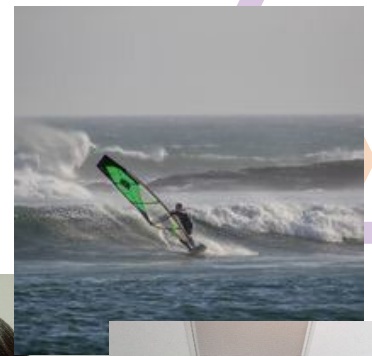
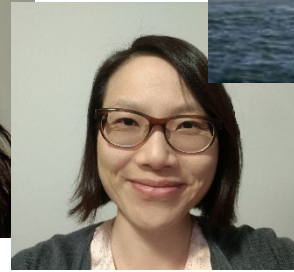


Research



Lead: Dr. Stephen Wood

Research Administrator: Jenny Woo



RESEARCH OFFICE(S)

Research PhD

Amy Metcalfe

Perinatal Epidemiologist

Katie Chaput

Research Coordinator(s)

Janice Skiffington

Teresa MacGowan

Resident Research Coordinator

Ransi Nayakarathna

Research Administrative Assistant

Jenny Woo

Data Analyst

Selphee Tang

Accomplishments and Highlights

2021 Christie Day was held virtually this October due to the Delta variant spiking case numbers.



The John Jarrell Invited Lecturer this year was Dr. Sean C. Dowdy MD a consultant in the division of Gyne-oncology at the Mayo Clinic. Dr. Dowdy provided a lecture on Advancing the strategic imperatives of quality, safety, and experience no matter the challenge.



The lunchtime lecture was provided by Dr. John Jarrell, now retired member of the Department of obstetrics and gynecology, Calgary. His presentation on The paradox of ovarian compression in hysteria was very informative.

P3 Cohort

Program Team Lead: Janice Skiffington
Program Coordinator: Teresa Macgowan



Amy Bergeron – Research Nurse
Mikyla Stehmeier – Research Nurse
Chloe Pekarsky – Social Media Coordinator

Shazia Dharamsi – Research Assistant
Indira Alvarez – Research Assistant

Premature or preterm birth (before 37 weeks of pregnancy) affects approximately 8% of births in Canada impacting children and families.

The goal of the P3 cohort study is to:

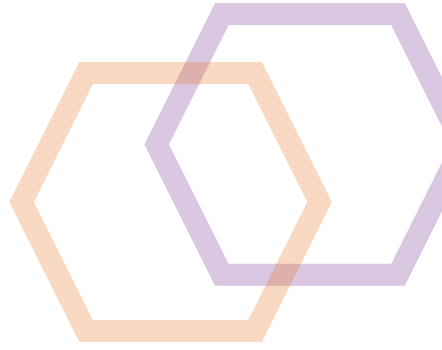
- Predict which women will deliver preterm;
- Provide opportunities to prevent preterm birth;
- Improve health outcomes for children who are born preterm and their families; and
- Help families cope following the birth of a preterm child

Peter Lougheed Centre

Ari Sanders:

Ongoing Research:

1. Randomized Controlled Trial: Presacral Nerve Block Following Hysterectomy. Principle Investigator: Dr. Mara Sobel (Completed at Mount Sinai Hospital, Toronto) Work submitted for publication
2. Randomized Controlled Trial: Prevention of Isthmocele after Cesarean Section Trial. Principle Investigator: Dr. Mara Sobel (Ongoing at Mount Sinai Hospital, Toronto)
3. Retrospective Observational Study: Post-operative voiding function after total laparoscopic hysterectomy with uterine morcellation. Principle Investigator: Dr. Ari Sanders (Ongoing at PLC, FMC, RGH, data collection complete).
4. Retrospective Observational Study: A retrospective analysis of urinary retention after laparoscopic non-nerve sparing definitive surgery for stage III and IV endometriosis. Principle Investigator: Dr. Liane Belland (Completed at PLC) Work submitted for publication
5. Systematic Review: Myomectomy in Pregnancy. Principle Investigator: Dr. Ari Sanders (ongoing)

- 
6. QI Project: Postoperative Opioid Optimization After Benign Hysterectomies: A comprehensive survey of the current state of postoperative opioid prescribing after benign hysterectomies in Calgary. Principle Investigator: Dr. Jackie Thurston (ongoing at PLC & SHC)
 7. SOGC Guideline - Adenomyosis
 8. SOGC Technical Update - Cesarean Scar Defects
 9. AAGL Guideline - Pre/Intraop measures to reduce blood loss at MIS Myomectomy

Publications 2021:

1. Ambacher K, Secter M, Sanders AP. The use of progestin subdermal implants in the management of endometriosis-related pain symptoms - a systematic review. (Work submitted, minor revision Current Medical Research and Opinion)
2. O'Leary M, Sanders AP. Enhanced myometrial vascularity - the time has come for individualized treatment of focal uterine pathology. *Fertility and Sterility* 2021;116(3):691-92.
3. Sanders AP, Hobson SR, Kobylanskii A, Papillon Smith J, Allen L, Windrim R, Kingdom J, Murji A. Internal iliac artery ligation - a contemporary simplified approach. *American Journal of Obstetrics & Gynecology* 2021;225(3):339-40.
4. Ting P, Sanders AP. Uterine Defect after Open Maternal-fetal Surgery. *Journal of Minimally Invasive Gynecology* 2021;28(4):739-740.
5. Sanders AP, Shirreff L. Parasitic fibroid involving the external iliac vessels. *Journal of Obstetrics and Gynaecology Canada* 2021;43(10):1123.

Invitations to Present 2021

1. Sanders AP, Bedaiwy M. Cesarean Scar Defects - Indications & Approaches to Management. Canadian Society for the Advancement of Gynecologic Excellence Annual Clinical Meeting, Virtual Conference, September 2021
2. Sanders AP. Cesarean Scar Defects Part 1 - Prevalence, Presentation, & Diagnosis. Egyptian Foundation of Reproductive Medicine & Embryology Scientific Conference & Expo, Cairo Egypt, June 2021.

Additional Presentations 2021

1. (ORAL) Warshafsky C, Chaikof M, Stere A, Li Q, Huszti E, Hartman A, Sanders AP, Murji A, Sobel M. Preventing isthmocele after Cesarean section (PICS): a pilot randomized controlled trial. Canadian Society for the Advancement of Gynecologic Excellence Annual Clinical Meeting, Virtual Conference, September 2021.
2. (ORAL) Ambacher K, Secter M, Sanders AP. The use of progestin subdermal implants in the management of endometriosis-related pain symptoms - a systematic review. Canadian Society for the Advancement of Gynecologic Excellence Annual Clinical Meeting, Virtual Conference, September 2021.
3. (VIDEO) O'Leary M, Secter MB, Sanders AP. Laparoscopic-assisted myomectomy during the second trimester of pregnancy. Canadian Society for the Advancement of Gynecologic Excellence Annual Clinical Meeting, Virtual Conference, September 2021.
4. (POSTER) Marguerie M, Carrigan R, Lo K, Belland L, Secter M, Sanders AP. Post-operative voiding function after total laparoscopic hysterectomy with vaginal vs abdominal morcellation. Canadian Society for the Advancement of Gynecologic Excellence Annual Clinical Meeting, Virtual Conference, September 2021.

Liane Belland:

Research/Videos:

1. Laparoscopic Technique for Extraction of the Large AbdominoPelvic Mass
K. Ambacher, M. O'Leary, L. Belland
Video Abstract presentation at CanSAGE and AAGL

2. A retrospective analysis of urinary retention after laparoscopic definitive surgery for Stage III and IV endometriosis without explicit nerve sparing techniques.

T. Lin, P. Ting, A. Sanders and L. Belland

Department Research Day Abstract Presentation

3. Management of Endometriosis-Associated Ascites.

L. Andrew, M. O'Leary and L. Belland

Presented as a video abstract at CanSAGE and e-poster for AAGL

4. Clara Christie Research Day 2021 Oral Presentation. October 15, 2021

Postoperative voiding function after total laparoscopic hysterectomy comparing vaginal vs. abdominal morecellation

M. Marguerie, R. Carrigan, K. Lo, L. Belland, M. Sector and A. Sanders

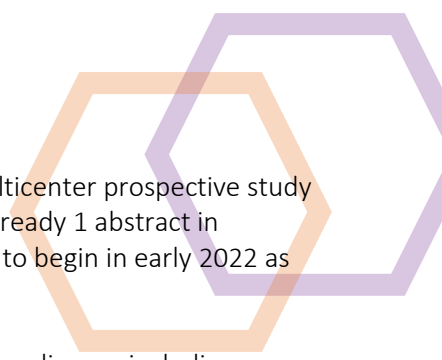
Presentations:

- 1) Ask The Expert: Medical Management of Uterine Fibroids: May 3, 2021. CanSAGE Webinar.
- 2) Plenary Talk: The role of the GnRH agonist and receptor agonist in contemporary management of endometriosis and fibroids. May 11, 2021 National Strategy Meeting on GnRH agonist/receptor antagonists (Abbvie).
- 3) PLC OR Suite Grand Rounds (with Dr. A. Sanders): Minimally Invasive Gynecologic Surgery: Laparoscopy (Part 1). May 28, 2021
- 4) Breaking Bad: Manipulating Hormones in Endometriosis and Fibroids. MIGS Fellow Educational Webinar. June 3, 2021
- 5) The Masked Surgeon Best Video Award: CanSAGE 2021. Routine Anterior Colpotomy Prior to Ligation of the Uterine Arteries at the time of Laparoscopic Hysterectomy.
- 6) Emergency Medicine Grand Rounds: Improving Gynecologic Care in Emergency Medicine. October 21, 2021
- 7) Choosing Wisely: Medical Management of Uterine Fibroids and Endometriosis. UofC Department of OB/GYN Resident Academic Night. December 1, 2021

Pelvic Medicine and Reconstructive Surgery

Dr. Magali Robert remains an example for our Section in her research productivity with numerous grants including:

1. Alberta Back Care Pathway (ABCp), Canadian Chiropractor Association and Alberta Bone and Joint SCN.(2020) (\$120,000) - Edmonton West Primary Care Network (EWPCN) & Alberta Health Services' Calgary Chronic Pain Centre (CPC). PI: Gregory Kawchuk, site lead: Magali Robert, Ted Findley
2. Evaluation of APP for pain management in transitional pain service.Can Health West Network (2020-2022) (\$250,000) Executive sponsor: Tracey Wasyluk, Rob Tangay, Program/Clinical Sponsor: Magali Robert, Key system evaluator: Kathryn Birnie
3. Evaluating the efficacy of intranasal oxytocin on pain and function among individuals who experience chronic pain: A multi-site, placebo-controlled, blinded, sequential, within-subjects crossover trial. CIHR operating grant (2020-2024) \$696,152 PIs: J. A. Rash & T. S. Campbell, Co-Investigators: D. Flusk; A. MacInnes, M. Nasr-Esfahani, P. Poulin, M. Robert & Y. Yi, Collaborators: L. Cooper
4. The association between the route of administration of postmenopausal hormone therapy and hypertension in women in Alberta .Sofia Amed, Jennifer Marie MacRae (PI), Amy Metcalfe, Kare Nerenberg, Magali Robert (CO-I)
5. Cosm (industry funded) Predictive modeling for pessary use (July 2020-ongoing) \$7000. PI: Magali Robert




Dr. **Kim-Fine** was awarded a \$50 000 grant by the Patty Brisben Foundation as the PI on a multicenter prospective study with the Consortium of Research in Pelvic Surgery in the Society of Pelvic Surgery. There is already 1 abstract in submission and recruitment for the randomized control trial portion of the study is expected to begin in early 2022 as contracts and subcontracts are being signed and IRB-approvals are coming in.

Our members also represented our Section in multiple presentations with varied venues and audiences including:

- April 8, 2021 Calgary Health Trust, “Let’s Talk about Your Pelvic Floor” Podcast – S. Kim-Fine
- Jun 24, 2021 Pelvic Floor physio for urogynecology and pelvic pain, presented with Melanie Morin. SOGC 2021, Annual Meeting (Virtual meeting) – M. Robert
- Jun 26, 2021 Botulinum toxin in Urogynecology – Pain, interstitial cystitis, over active bladder. SOGC 2021, Annual Meeting (Virtual presentation) = M. Robert
- Oct 22 2021 Post Partum voiding dysfunction, COMS Workshop, Obstetrical Seminars (virtual presentation) – M. Robert
- Oct 26 2021 Handling avoidance in pelvic pain treatments: Team interventions. Chronic Pain Centre Semiar, co presenter Colleen Miller, Judith William (virtual presentation)
- Dec 10, 2021 Handling avoidance in pelvic pain treatments: Team interventions. Grand Rounds, Department of Obstetrics & Gynecology, co presented with Colleen Miller, Judith William (virtual presentation) – M. Robert
- Dec 12, 2021 “Sex Care is Self Care” Patty Brisben Foundation Podcast – S. Kim-Fine

Section Publications in 2021

1. Edwards A, Carter Ramirez A, Scime N, **Kim-Fine S, Brennand EA**. Does size matter? Opioid use after laparoscopy for apical pelvic organ prolapse using an 8mm versus 10-12 accessory port. *Journal of Minimally Invasive Gynecology*. 2021. E pub Dec 17 2021
2. Scime NV, Brown HK, Metcalfe A, **Brennand EA**. Prevalence of Hysterectomy by Self-Reported Disability Among Canadian Women: Findings from a National Cross-Sectional Survey. *Womens Health Rep (New Rochelle)*. 2021 Nov 29;2(1):557-565.
3. Scime NV, Ramage K, **Brennand EA; Calgary Women’s Pelvic Health Research Group**. Protocol for a prospective multisite cohort study investigating hysterectomy versus uterine preservation for pelvic organ prolapse surgery: the HUPPS study. *BMJ Open*. 2021 Oct 4;11(10):e053679. doi: 10.1136/bmjopen-2021-053679.
4. Shah F, Ramage K, **Brennand EA**, Walker LM. Pelvic Organ Prolapse Takes Up Space in the Bedroom: A Mixed Method Exploration of the Circular Sexual Response Cycle in Women With Pelvic Organ Prolapse. *Female Pelvic Med Reconstr Surg*. 2021 Nov 10.
5. Walter JE, **Brennand EA**, Lemos N, Cundiff GW; Canadian Society of Pelvic Medicine Mesh Complications Writing Group. Corrigendum to 'Canadian Society of Pelvic Medicine Response to the Collège des Médecins du Québec Rapport d'Enquête' [*Journal of Obstetrics and Gynaecology Canada* 43/3 (2021) 298-299]. *J Obstet Gynaecol Can*. 2021 May;43(5):650. doi: 10.1016/j.jogc.2021.03.008.
6. Anglim BC, Ramage K, Sandwith E, **Brennand EA; Calgary Women’s Pelvic Health Research Group**. Postoperative urinary retention after pelvic organ prolapse surgery: influence of peri-operative factors and trial of void protocol. *BMC Womens Health*. 2021 May 11;21(1):195. doi: 10.1186/s12905-021-01330-4.
7. Chaikof M, McDermott CD, **Brennand E**, Sanaee M. Patients Seeking "Vaginoplasty" Deserve Assessment and Treatment by Experts in Female Pelvic Medicine and Reconstructive Surgery. *Aesthet Surg J*. 2021 Mar 12;41(4):NP148-NP149.
8. Rash, J. A. Campbell, T. S., Cooper, L. K., Flusk, D., MacInnes, A., Nasr-Esfahani, M., Mekhael, A. A., Poulin, P. A., **Robert, M.**, Yi, Y. Evaluating the efficacy of intranasal oxytocin on pain and function among individuals who experience chronic pain: Protocol for a multisite, placebo-controlled, blinded, sequential, within-subjects cross Trial. *BMJ Open*, 2021; 11:e05503
9. Graves L, Green C, **Robert M**, Cook J. Methamphetamine Use in Pregnancy: A Call for Action; *J Obstet Gynaecol Can*, 2021 Aug 43(8):1001-1004
10. Cannabinoids and bladder symptoms in Multiple Sclerosis; **Kim-Fine S**, Greenfield J, Chaput KH, **Robert M**, Metz LM. *Mult Scler Relat Disord*, 2021 Jun, 23;54:103105

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11. Anglim BC, Ramage K, Sandwith E, **Brennand EA, Calgary Womens Pelvic Health Research Group**. Postoperative urinary retention after pelvic organ prolapse surgery; Influence of peri-operative factors and trials of void protocol; *BMC Womens Health*, 2021 May 11;21(1):95.
 12. Linda McLean, Kevin Varette, Kaylee Brooks, Marylene Charette, Marie-Andrée Harvey, **Magali Robert**, Kevin Baker, Andrew Day, Vincent della Zazzera, Eric Sauerbrei, Robert Brison. Pelvic Floor muscle training as an adjunct to midurethral sling: a single-blinded randomized trial; *International Urogynecology Journal*. 2021 Mar 3:1-1.
 13. Harvey MA, Lemieux MC, **Robert M**, Shulz J. Guideline No. 411: Vaginal Pessary Use; *Journal of Obstetrics and Gynaecology Canada*. 2021 Feb 1;43(2):255-66. <https://doi.org/10.1016/j.jogc.2020.11.013>.
 14. Harvey MA, Lemieux MC, **Robert M**, Shulz. Directive clinique No. 411 : Utilisation des pessaires. *Journal of Obstetrics and Gynaecology Canada*. 2021 Feb 1;43(2):255-66. <https://doi.org/10.1016/j.jogc.2020.11.012>
 15. Kaylee C. L. Brooks, Kevin Varette, Marie-Andrée Harvey, **Magali Robert**, Robert Brison, Andrew Day, Kevin Baker, Vincent Della Zazzerra, Eric Sauerbrei, Linda McLean. A model identifying characteristics predictive of successful pelvic floor muscle outcomes among women with stress urinary incontinence; *International urogynecology journal*. 2021 Mar; 32(3):719-28.
 16. Flynn, M. J., Campbell, T. S., **Robert, M.**, Nasr-Esfahani, M. & Rash, J. A. Intranasal Oxytocin as a Treatment for Women's Chronic Pelvic Pain: A Randomized Feasibility Study; *International International Journal of Gynecology & Obstetrics*. 2021 Mar; 152(3):425-32. <https://doi.org/10.1002/ijgo.13441>
 17. Sandwith E, **Robert M**. Rug-pee: the prevalence of urinary incontinence among female university rugby players; *International Urogynecology Journal*. 2021 Feb; 32(2):281-5.
 18. **Kim-Fine S**, Antosh DD, Balk EM, Meriwether KV, Kanter G, Dieter AA, Mamik MM, Good M, Singh R, Alas A, Foda M, Rahn DD, Rogers RG. Relationship of postoperative vaginal anatomy and sexual function: a systematic review with meta-analysis. *Int Urogynecol J*. 2021 Aug;32(8):2125-2134. doi: 10.1007/s00192-021-04829-4. Epub 2021 May 14. PMID: 33988785.
 19. Edwards A, Ramirez AC, Scime NV, **Kim-Fine S, Brennand EA**. Does size matter? Opioid use after laparoscopy for apical pelvic organ prolapse using an 8mm versus 10-12mm accessory port. *J Minim Invasive Gynecol*. 2021 Dec 17:S1553-4650(21)01325-X. doi: 10.1016/j.jmig.2021.12.007. Epub ahead of print. PMID: 34929399.
 20. Antosh DD, Dieter AA, Balk EM, Kanter G, **Kim-Fine S**, Meriwether KV, Mamik MM, Good MM, Singh R, Alas A, Foda MA, Rahn DD, Rogers RG. Sexual function after pelvic organ prolapse surgery: a systematic review comparing different approaches to pelvic floor repair. *Am J Obstet Gynecol*. 2021 Nov;225(5):475.e1-475.e19. doi: 10.1016/j.ajog.2021.05.042. Epub 2021 Jun 2. PMID: 34087227.

Our Section membership has continued to provide service to the greater academic community as reviewers for Grant competitions including: CIHR Sex & Gender Committee: Fall 2021 Reviews (6 reviews), CIHR: Sex & Gender Committee: Spring 2021 Reviews (5 reviews), both by **Dr. Magali Robert** and the CIHR's POR Transition to Leadership program by **Dr. Erin Brennand**.

Drs. **Magali Robert, Erin Brennand and Kim-Fine**, are also active in serving as reviewers on numerous journals including: *International Urogynecology Journal*, *Neurology and Urodynamics*, and *Female Pelvic Medicine and Reconstructive Surgery*.

Pediatric and Adolescent Gynecology

Accepted, in press, in revision Peer-Reviewed Manuscripts:

- Brander, E, Vincent, S, and S.K. McQuillan. [Transverse Vaginal Septum Resection: Technique, Timing and the Utility of Dilation. A Scoping Review of the Literature](#). *Journal of Pediatric and Adolescent Gynecology*. Sept 2021.
- Osborne, O., Nelson, K. and S.K. McQuillan. *Journal of Pediatric & Adolescent Gynecology Pediatric and Adolescent Gynecology in North America: Transfer of Care Practices*. JPAG. Sept 2021 with revisions.
- Nelson, K, Osborne, C. and S.K. McQuillan. Pregnancy and Placenta Increta in a Non-Communicating Uterine Horn. JPAG. Aug 2021.
- Rosenthal, M. and S.K. McQuillan. 5 Things to Know about Adolescent Contraception. *Canadian Medical*

Association Journal. Aug 2021.

- Rosenthal, M. and S.K. McQuillan. [What do I need to know about the etonogestrel-releasing contraceptive implant \(Nexplanon\)?](#) Pediatric and Child Health. May 2021.

For Publication:

- Osborne, C., Nelson, K., and S.K. McQuillan. Pediatric and Adolescent Gynecology in North America: Transfer of Care Practices. Accepted with Revision Aug 2021. JPAG.
- Osborne, C, Litt, M., Reynolds, K., Foong, S. and S.K McQuillan. A Quality Improvement Study: Addressing Fertility Preservation in Female Pediatric Oncology Patients in Calgary, Canada.
- Osborne, C., and S.K McQuillan. The Use of Gonadotropin Releasing Hormone Agonists with Add-Back in Adolescent Patients with a Vaginal Septum: A Systematic Literature Review
- Statement on Pediatric and Adolescent Gynecologic Care During and After the COVID-19 Pandemic, Spitzer R, Brain P, revision pending.
- Revision Gender Affirming Vaginoplasty Surgery for Female Transgender Patients Osborne, C., McQuillan, S., Millar, D. & Brain, P. Submitted Transgender Health (2020).

Ongoing Research Projects:

- The Calgary PCOS Algorithm: A Quality Improvement Study The protocol for all of the patients meeting the criteria of irregular bleeding, hirsutism, or query PCOS from the family MDs has been applied. All patients were sent back bloodwork to be entered into the study. Peggy and I then have gone through each patient chart and referred them to Gyne vs Endo. 49 patients currently enrolled in the study
- Nelson KL, McQuillan SK, Brain, PH, Osborne, CO; Preoperative Vaginal Dilation Prior to Surgical Management of Transverse Vaginal Septums". Ongoing
- Pediatric and Adolescent Gynecology Transfer of Care in North America RedCap survey went out to NSPAG 60 people have filled out a survey. *Current Status: Start of Data Collection from RedCap*
- Osborne, C McQuillan SK A Quality Improvement Study: Addressing Fertility Preservation in Female Pediatric Oncology Patients in Calgary, Canada.
- Osborne C, McQuillan SK, The Use of Gonadotropin Releasing Hormone Agonists with Add-Back in Adolescent Patients with a Vaginal Septum: A Systematic Literature Review
- Osborne C The Role of Men in Family Planning: Rethinking Masculinity
- Nelson KL, McQuillan SK; "Pediatric and Adolescent Gynecology Virtual Appointments for Children with Developmental Delay- Family Perspectives". Ongoing
- Nelson KL, Regehr, G, Gringerich, A; "Residents as Supervisors: A Cognitive Lens on How Senior Residents Make Entrustment Decisions". Masters thesis awaiting ethics.
- Whitty, Robin, Osborne, Christine: Evaluation of referrals for cosmetic labial abnormalities.

Working Group: Disorders of Sexual Differentiation, UBC (Drs. Brain, Osborne)

Project Title: Creation of a Position Statement Against Early Cosmetic Surgical Correction for Atypical Genital Anatomy in the Setting of DSDs

National Presentations:

"Care of the Neo-Vagina", Dr. Philippa Brain: SOGC National meeting, June 2021

Maternal Fetal Medicine

| Local PI | Projects | Funding (amount) | Agency |
|---------------|--|---|---|
| Somerset 2021 | <ol style="list-style-type: none"> 1. Creating a customized fetal growth chart for Alberta – will it improve sensitivity and specificity for predicting true IUGR? 2. Association of aneuploidy with first trimester megacystis (published) 3. Outcome following selective embryo-reduction (published) | | DEAR |
| Soliman 2021 | <ol style="list-style-type: none"> 1. Outcomes in MCDA twins with sIUGR diagnosed before 24 weeks 2. Creating a customized fetal growth chart for Alberta – will it improve sensitivity and specificity for predicting true IUGR? (with D. Somerset, J Schachar and Audrey Labreque) 3. Incidence and timing of fetal growth restriction in fetuses with 2VC and PRUV and no other associated anomalies (with D. Somerset and M. Kale) 4. Serum complement levels to determine the risk of pre-eclampsia and adverse outcomes in patients with APLA (with L. Skeith) 5. Platelet GLUT3 expression in patients at low and high risk of pre-eclampsia (with A. Lee et al) 6. Creation of a local AIP database (with J. Soucie and S. Dwinell) 7. QI project for standardization of anti-coag for nephrotic range proteinuria 8. Prospective study: the benefits and risk of a 36 week growth follow up scan in low risk FTS patients (substudy of IMPRESS with J. Johnson) 9. Alshaikh, B. Cheung, P.Y. Soliman, N. Brundler, M.A. Yusuf, K. Impact of Lockdown Measures during COVID-19 Pandemic on Pregnancy and Preterm Birth. Am J. Perinatol: Nov 2021. 10. Berndl, A. Ladhani, N. Wilson, RD. Basso, M. Jung, E. Tarasoff, L. Angle, P. Soliman, N. Labour, delivery and post-partum care for people with physical disabilities. SOGC clinical Practice Guideline: JOGC: Feb 21, 2021. 11. Timing of Delivery for Twins affected by Growth Discordance and Growth Restriction: An individual Participant Data Meta-analysis: SMFM conference, 2022 (multi-center collaboration) 12. Navigating the Grey zone: Improving clinical practice recommendations for late preterm antenatal corticosteroids: incorporating a decision support tool to tackle the uncertain balance of risks and benefits: Multicenter trial 13. SNACs: A single dose of antenatal corticosteroids: a randomized trial for women at risk of preterm labour: grant awarded, starting local REB application- site co-lead 14. Invited speaker: Sick cell foundation of Alberta: Annual General Meeting | <p>DEAR-2000</p> <p>DEAR-2000</p> <p>Peter Lougheed research award</p> <p>ACHRI funding pending</p> <p>CIHR</p> <p>CIHR</p> | <p>43,000</p> <p>400,000 among 6 sites</p> <p>2.3 Mil across 24 sites</p> |

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| Oluyomi 2021 | <ol style="list-style-type: none"> 1. Assessment of antenatal prediction of outcome in congenital diaphragmatic hernia in a tertiary center (collaboration with neonatology and pediatric surgery) – to be submitted for publication 2. Creation of local guidelines for management of maternal and fetal disorders 3. Systematic review on cervical pessaries (to be submitted for publication) 4. MFM Telemedicine Initiative | Yes | DEAR, HIROC, GRANT |
| Kuret 2020 | <ol style="list-style-type: none"> 1. Canadian Surveillance of COVID-19 in Pregnancy: Epidemiology, Maternal and Infant Outcomes PI - National: Dr Deborah Money, Professor, Obstetrics & Gynecology, University of British Columbia. Pan-Canadian Surveillance Program. Co-Leads – Provincial, AB: Dr. Kuret and Dr E. Castillo 2. Pregnancy During the COVID-19 Pandemic: Maternal – Infant Dyad Epidemiology, Comorbidities and Outcomes in Alberta, Canada. PI: V Kuret, E Castillo 3. Canadian COVID-19 Vaccine Registry for Pregnant and Lactating Individuals (COVERED): An evaluation of Safety, Effectiveness, and Acceptability. PI - National: Dr Deborah Money, Professor, Obstetrics & Gynecology, University of British Columbia. Pan-Canadian Surveillance Program. Co-Leads – Provincial, AB: Dr. Kuret and Dr E. Castillo 4. Improving the Impact of Vaccinations for Mother-Infant Health. Co-PI: E Castillo, V Kuret 5. Impact of COVID-related restrictions on maternal and infant health. PI – Dr Amy Metcalfe. Co-Applicant: V. Kuret 6. Encouraging vaccine confidence among pregnant and breastfeeding Canadians. PI – National: Barrett J, Co-Applicants: V. Kuret 7. Supporting Canadian Health Service Users with Decision-Making on COVID-19 vaccination during pregnancy and lactation. PI: Barrett J. D'Souza R. Co-investigators: V Kuret 8. Obstetrical Ultrasound Outreach to High Needs Community PI: M Fahey, Research Team: V. Kuret 9. Evaluating Point of Care Influenza Immunization for Pregnant Women Calgary Health Region: An Intervention to Improve Outcomes for Mothers and Infants. PI: Dr Castillo, Co-Investigator V. Kuret | <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> | <p>CIHR, PHAC</p> <p>DEAR, Depart of Ob/Gyne</p> <p>PHAC</p> <p>CHF</p> <p>CIHR</p> <p>NSERC</p> <p>Immunization Partnership Fund</p> <p>CHF</p> <p>CIRN</p> |
| Johnson 2021 | <ol style="list-style-type: none"> 1. Johnson, Walsh. Enhanced First Trimester Screen (EFTS): implementation study 2. Johnson, Walsh et al. The Implementation of Preeclampsia Screening and Prevention Study (The IMPRESS Study) 3. Slater DM, Leijser, LM, Metcalfe, A Johnson, J. Predicting preterm birth- The role of early maternal biomarkers. Yes Yes Yes DEAR CHF CHF 4. Chuan, Anderson, Nerenberg, Johnson et al Epidemiology of Preeclampsia. 5. Castillo E, Kuret V, et al. CANCOVID-AB: Alberta Provincial Surveillance Program for COVID-19 and Pregnancy. | <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> | <p>DEAR</p> <p>CHF</p> <p>CHF</p> <p>CIHR</p> <p>DEAR</p> <p>CIHR</p> |

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| | <ol style="list-style-type: none"> 6. Nerenberg K, Anderson T, Johnson, J et al. Alberta Post-Preeclampsia Longitudinal Evaluation Study (APPLES) 7. Bourdges M, Walsh J, Johnson J. First trimester screening for open spina bifida: Validation of measurement technique of the posterior fossa landmarks for open spina bifida in the first trimester. 8. Kao C, Silang K, Okun N, Johnson J. The feasibility of the 12-14 week fetal anatomy scan. 9. Soliman N, Johnson J, et al. The Clinical Utility of a Routine 36 week Growth Scan in the Low Risk Obstetrical Population | | |
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Publications in Submission:

1. The Canadian Surveillance of SARS-CoV-2 in Pregnancy: Maternal and Perinatal Outcomes. A Albert, E McClymont, G Alton, I Boucoiran, E Castillo, DB Fell, **V Kuret**, V Poliquin, T Reeve, H Scott, A Sprague, H Abenheim, G Carson, K Cassell, J Crane, C Elwood, C Joynt, A Kotaska, P Murphy-Kaulbeck, S Saunders, P Shah, J Snelgrove, J van Schalkwyk, MH Yudin, D Money. JAMA
2. Fear of COVID-19 among pregnant individuals and associations with mental health and pregnancy outcomes. Giesbrecht, GF, Rojas, L. Patel, S, **Kuret, V**, Tomfohr-Madsen L, Lebel, C. Journal of Affective Disorders.
3. Comparing adverse neonatal and maternal outcomes of sexually transmitted infections and co-infections in pregnancy: a cross-sectional study. L Felske, E Castillo, V Kuret, A Metcalfe.

Publications

1. Kao C, Lauzon J, Brundler M-A, Tang S, **Somerset D**. Perinatal outcome and prognostic factors of fetal megacystis diagnosed at 11–14 week's gestation. Prenatal Diagnosis. 2020;1–8. <https://doi.org/10.1002/pd.5868>
2. **O'Quinn C**, Cooper S, Tang S, Wood S. Is antenatal diagnosis of marginal or velamentous placental cord insertion associated with adverse perinatal outcomes? *Obstetrics & Gynecology*, 2020, 135(4): 953-959

Other activities:

Dr Johnson – co-chair 17th International ISUOG Symposium 2021

Dr Kuret – COVID in Pregnancy Leadership

- Metis Nation of Alberta, Invited Guest (Nov 3, 2021), 'Q&A Session COVID-19 in Pregnancy'
- Provincial Town hall with Dr Hinshaw, Invited Guest (Oct 27, 2021), 'Vaccines, pregnancy and fertility telephone town hall'
- Alberta Doula Association, Invited Guest (Oct 13, 2021) 'COVID-19 Vaccination in Pregnancy'
- Calgary Health Trust, Virtual Women's Health Series, Invited Guest (Sept 29, 2021) "COVID-19 vaccine impact on fertility, pregnancy & breastfeeding"
- Calgary Health Trust, Virtual Women's Health Series, Invited Guest (May 25, 2021) "COVID-19 Vaccines Impact on Moms & Babies Webinar"
- The Rounds Table – Healthy Debate Podcast, Invited Guest (Dec 2020) Episode 21 "COVID-19 and Pregnancy with Dr. Kuret"
- University of Calgary, Department of Obstetrics & Gynecology, Invited Speaker, Grand Rounds (October 2020) "A Long & Winding Road: Alberta's Experience Caring for COVID-19 Mother-Infant Dyads"
- University of Calgary, Department of Obstetrics & Gynecology, Invited Speaker, Grand Rounds (March 2020) "Obstetrical Management Consideration in COVID-19 Infection"

Minimally Invasive Gyne-Surgery

Peer-reviewed Publications in 2021:

Retained Products of Conception Sequestered in an Isthmocele.

Moreira AV, **Wagner A**, **Thurston J**, Birch C, **Rajakumar C**.

J Obstet Gynaecol Can. 2021 Jun 29;S1701-2163(20)30537-5.

Technicity in Canada: A Nationwide Whole-Population Analysis of Temporal Trends and Variation in Minimally Invasive Hysterectomies.

Chen I, Mallick R, Allaire C, Bajzak KI, **Belland LM**, Bougie O, Cassell KA, Choudhry AJ, Cundiff GW, Kroft J, Leyland NA, Maheux-Lacroix S, **Rajakumar C**, Randle E, Robertson D, Thiel JA, Tulandi T, Yong PJ, Laberge PY; Canadian Women's Investigators for Surgical Excellence in Research (CanWISER) Collaboration. J Minim Invasive Gynecol. 2021 May;28(5):1041-1050.

Stepwise approach to the laparoscopic excision of bladder endometriosis.

Nguyen DB, Arendas K, **Jago CA**, Warren J, Singh SS.
Fertil Steril. 2021 Oct 15;S0015-0282(21)01985-3. PMID: 34663509

Outcomes of enhanced recovery after surgery (ERAS) in gynecologic oncology - A systematic review and meta-analysis.

Bisch SP, **Jago CA**, Kalogera E, Ganshorn H, Meyer LA, Ramirez PT, Dowdy SC, Nelson G.
Gynecol Oncol. 2021 Apr;161(1):46-55. PMID: 33388155

Laparoscopic excision of pericardial and diaphragmatic endometriosis.

Nguyen DB, Gilbert S, Arendas K, **Jago CA**, Singh SS.
Fertil Steril. 2021 Mar;115(3):807-808. PMID: 33272621

Bowel surgery for endometriosis: A practical look at short- and long-term complications.

Jago CA, Nguyen DB, Flaxman TE, Singh SS.
Best Pract Res Clin Obstet Gynaecol. 2021 Mar;71:144-160.

Mental Health and Maternal Mortality-When New Life Doesn't Bring Joy.

Jago CA, Crawford SG, Gill SJ, Gagnon L.
J Obstet Gynaecol Can. 2021 Jan;43(1):67-73.e1. PMID: 32978085

The use of progestin subdermal implants in the management of endometriosis-related pain symptoms - a systematic review.

Ambacher K, **Secter M**, **Sanders AP**.
(Work submitted, minor revision *Current Medical Research and Opinion*)
Presented as an oral abstract at CanSAGE

Enhanced myometrial vascularity - the time has come for individualized treatment of focal uterine pathology.

O'Leary M, **Sanders AP**.
Fertility and Sterility 2021;116(3):691-92.

Internal iliac artery ligation - a contemporary simplified approach.

Sanders AP, Hobson SR, Kobylanskii A, Papillon Smith J, Allen L, Windrim R, Kingdom J, Murji A.
American Journal of Obstetrics & Gynecology 2021;225(3):339-40.

Uterine Defect after Open Maternal-fetal Surgery.

Ting P, **Sanders AP**.
Journal of Minimally Invasive Gynecology 2021;28(4):739-740.

Parasitic fibroid involving the external iliac vessels.

Sanders AP, Shirreff L.
Journal of Obstetrics and Gynaecology Canada 2021;43(10):1123.

Non-peer-reviewed Presentations and Publications:

Laparoscopic Technique for Extraction of the Large AbdominoPelvic Mass

K. Ambacher, M. O'Leary, **L. Belland**

Video Abstract presentation at CanSAGE and AAGL

A retrospective analysis of urinary retention after laparoscopic definitive surgery for Stage III and IV endometriosis without explicit nerve sparing techniques.

T. Lin, P. Ting, **A. Sanders** and **L. Belland**

Department Research Day Abstract Presentation

Management of Endometriosis-Associated Ascites.

L. Andrew, M. O'Leary and **L. Belland**

Presented as a video abstract at CanSAGE and e-poster for AAGL

Postoperative voiding function after total laparoscopic hysterectomy comparing vaginal vs. abdominal morcellation

M. Marguerie, R. Carrigan, **K. Lo**, **L. Belland**, **M. Secter** and **A. Sanders**

Clara Christie Research Day 2021 Oral Presentation. October 15, 2021

Presented as a poster at CanSAGE

Transanal Anterior Rectal Resection for Colorectal Endometriosis

Gange E, McBeth P and **Rajakumar C.**

Presented as a video abstract at CanSAGE

Preventing isthmocele after Cesarean section (PICS): a pilot randomized controlled trial.

Warshafsky C, Chaikof M, Stere A, Li Q, Huszti E, Hartman A, **Sanders AP**, Murji A, Sobel M.

Presented as an oral abstract at CanSAGE

Laparoscopic-assisted myomectomy during the second trimester of pregnancy.

O'Leary M, **Secter MB**, **Sanders AP.**

Presented as a video abstract at CanSAGE

Gyne-Oncology

Research Grants

Dr. Gregg Nelson (\$3,707,268)

A perioperative glycemic management pathway for reducing length of stay in Alberta surgical patients. Partnership for Research and Innovation in the Health System (PRIHS) Competition, Alberta Innovates, \$1,287,838 (Apr 1, 2021 – Mar 31, 2025), Co-Investigator

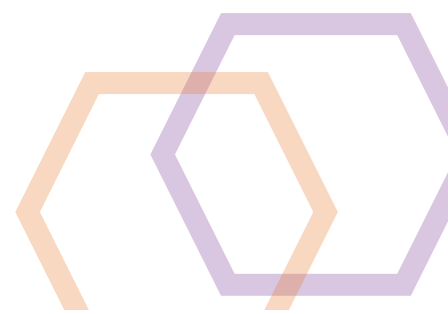
FORGE – Fe deficiency and Outcomes in the Recovery of Gynecologic oncology ERAS, Pharmacosmos (Denmark), \$175,000, Co-Principal Investigator


Implementation of BE FIT (elder-friendly Bedside reconditioning for Functional ImprovemenTs) following Surgery Study, Partnership for Research and Innovation in the Health System (PRIHS) Competition, Alberta Innovates, \$947,735 (Apr 1, 2020 – Mar 31, 2024), Co-Lead

Perioperative Care in Neonatal Abdominal Surgery: Implementation of an Enhanced Recovery After Surgery (ERAS®) Guideline, MNCY SCN Health Outcomes Improvement Fund II (HOIFII) Grant Competition, \$185,695 (Apr 1, 2019 – Mar 31, 2022), Co-Principal Investigator

Alberta First Nations Cancer Strategy & Practice Change Implementation Initiative, Canadian Partnership Against Cancer (CPAC), \$805,000 (Apr 1, 2019 – Mar 31, 2022), Co-Lead

Impact of Maternal Cancer and In-Utero Exposure to Chemotherapy on Long-Term Child Health, CIHR Project Grant, \$306,000 (Mar 1, 2018 – Mar 1, 2021), Co-Applicant





Dr. Anna Cameron (\$1,287,838) A perioperative glycemic management pathway for reducing length of stay in Alberta surgical patients. Partnership for Research and Innovation in the Health System (PRIHS) Competition, Alberta Innovates, \$1,287,838 (Apr 1, 2021 – Mar 31, 2025), Co-Principal Investigator

Dr. Prafull Ghatage (\$360,000)

Cancer Surgery Alberta (breast, rectal and ovarian cancer), 2019-2022 (\$270,000)

Medical Cannabis in Gyn Oncology, Communities of Practice (CoP), Society of Gynecologic Oncology of Canada, 2019-2022 (\$90,000)

Dr. Steven Bisch (\$175,000)

FORGE – Fe deficiency and Outcomes in the Recovery of Gynecologic oncology ERAS, Pharmacosmos (Denmark), \$175,000, Co-Principal Investigator

Dr. Pam Chu (\$24,826.50)

Royal College Strategic Initiative Grant, 2020-2021 (\$24,826.50)

Dr. Sarah Glaze (\$20,000)

Fatigue Risk Management Grant (Implementation and Evaluation in a residency program), Royal College of Physician and Surgeons of Canada, 2020-2021 (\$20,000)

Publications

Peer Reviewed Manuscripts 2021 (34)

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Wilson RD, Nelson G. Maternal and fetal hypothermia: more preventive compliance is required for a mother and her fetus while undergoing cesarean delivery; a quality improvement review. *J Matern Fetal Neonatal Med*. 2021 Oct 24:1-14. doi: 10.1080/14767058.2021.1993816. Epub ahead of print. PMID: 34689687.

Wilson RD, Nelson G. Maternal and fetal hypothermia: more preventive compliance is required for a mother and her fetus while undergoing cesarean delivery; a quality improvement review. *J Matern Fetal Neonatal Med*. 2021 Oct 24:1-14. doi: 10.1080/14767058.2021.1993816. Epub ahead of print. PMID: 34689687.

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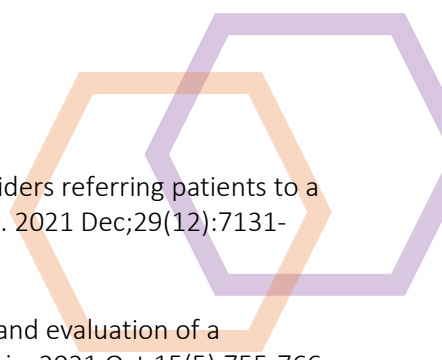
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Ince C, Temple-Oberle C, Leitao MM Jr, Coriddi M, Nelson G. Immediate lymphatic reconstruction: the time is right to prevent lymphedema following lymphadenectomy for vulvar cancer. *Int J Gynecol Cancer*. 2021 Jun;31(6):943. doi: 10.1136/ijgc-2021-002666. Epub 2021 Apr 15. PMID: 33858955.

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Tessier-Cloutier B, Coatham M, Carey M, Nelson GS, Hamilton S, Lum A, Soslow RA, Stewart CJ, Postovit LM, Köbel M, Lee CH. SWI/SNF-deficiency defines highly aggressive undifferentiated endometrial carcinoma. *J Pathol Clin Res*. 2021 Mar;7(2):144-153. doi: 10.1002/cjp2.188. PMID: 33125840; PMCID: PMC7869930.

Book Chapters

Nelson G, Ljungqvist O. Enhanced Recovery After Surgery (ERAS) – Concept and Purpose, in *Textbook: Multi-Disciplinary Management of Hepato-Pancreato-Biliary Diseases*, Springer Nature, 2021

Presentations/Invited Addresses

Dr. Gregg Nelson (18)

Implementation of ERAS across the entire healthcare system (Euroanaesthesia 2021, European Society of Anaesthesiology and Intensive Care, Munich, Germany, December 18, 2021)

Cost-Benefit Analysis of Large-Scale Implementation of ERAS – The Alberta Experience (Asia Partnerships in ERAS - Taiwan/ Philippines/Singapore, November 27, 2021)

Role of preoperative optimization within Enhanced Recovery After Surgery: Ferric derisomaltose and Outcomes in the Recovery of Gynecologic oncology ERAS (FORGE) Trial (National Scientific Advisory Meeting in Obstetrics & Gynecology, Pfizer Canada, November 17, 2021)

ERAS – Meet the Experts (28th Annual Conference of the Association of Gynaecologic Oncologists of India, November 14, 2021, Kolkata, India)

ERAS update in Gynecology (ERAS USA 4th Annual Congress, November 11, 2021, New Orleans, LA)

ERAS for Ovarian Cancer/HIPEC (FIGO World Congress of Gynecology & Obstetrics, October 27, 2021, Sydney, Australia)
Communities of Practice (CoP) in Enhanced Recovery After Surgery (ERAS) (Society of Gynecologic Oncology of Canada Virtual Open House, October 20, 2021)

Enhanced Recovery After Surgery (ERAS) in Alberta, Canada: Achievements, challenges, and future directions (Surgical Grand Rounds, Lausanne University Hospital - CHUV, September 21, 2021, Lausanne, Switzerland)

Challenge: ERAS Implementation (10 Year ERAS Celebration Symposium, Lausanne University Hospital - CHUV, September 17, 2021, Lausanne, Switzerland)

ERAS implementation in gynecologic surgery (2021 International Academic Conference on Enhanced Recover After Diseases & Ambulatory Surgery, September 11, 2021, Lanzhou, China)

ERAS in Gynecologic Oncology Surgery (2nd Augusto P. Sarmiento Cancer Institute Summit, The Medical City, August 19, 2021, Manila, Philippines)

Immediate lymphatic reconstruction: the time is right to prevent lymphedema following lymphadenectomy for vulvar cancer (European Society of Gynaecological Oncology, ESGO eAcademy, July 10, 2021)

Hot Topic - Is Endocervical Curettage Useful? (Plenary Session Debate, 17th World Congress, The International Federation of Cervical Pathology and Colposcopy, Hyderabad, India, July 4, 2021)

ERAS in Gynecologic Oncology (2nd Annual Meeting of the Turkish ERAS Society, June 12, 2021)

ERAS Implementation (Presenter and Co-Chair, ERAS Society Webinar, June 12, 2021)

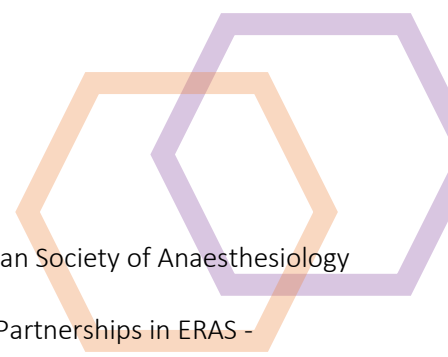
ERAS implementation as a quality indicator and recommendations for change management (11th International Charité-Mayo-Conference, May 7, 2021, Berlin, Germany)


Perioperative Opioids and ERAS (Panelist, ERAS Society Webinar, April 24, 2021)

COVID-19 – North American perspective (ERAS Society Webinar, February 27, 2021)

Dr. Sarah Glaze (2)

Surviving to Thriving - Fatigue Risk Management in Residency Education (Royal College of Physicians and Surgeons of Canada, November 2021)





Management of Fatigue in OBGYN residency (International Conference in Residency Education, April 2021)

Dr. Steven Bisch (2)

Outcomes Assessment of ERAS in Obstetrics & Gynecology (4th Annual Congress ERAS USA, New Orleans, LA, Nov 2021)

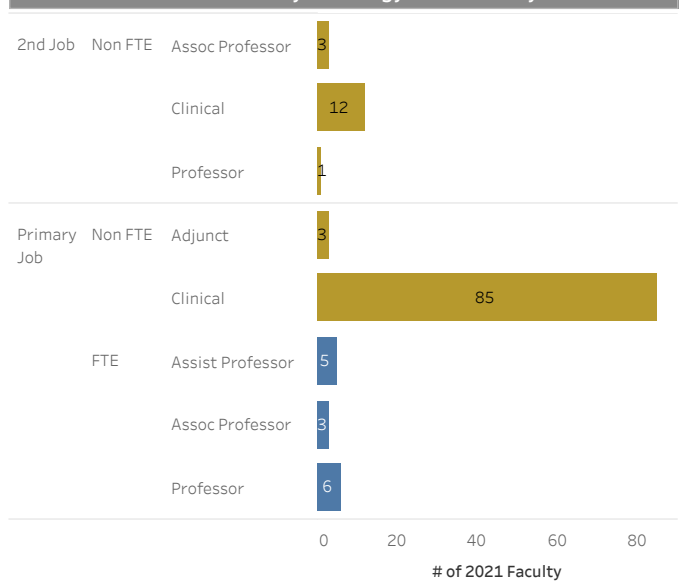
Enhanced Recovery After Surgery: More Than Just an Order Set (Department of Obstetrics & Gynecology, University of Laval, Laval, QC, Mar 2021)

Obstetrics & Gynaecology 2020-2021 Annual Report

Annual # of Faculty ¹

| | | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|---------|-----------|-----------|-----------|------------|------------|------------|------------|------------|------------|
| ^{1.1} Obstetrics & Gynaecology | Non FTE | 55 | 78 | 83 | 90 | 97 | 101 | 105 | 104 | 104 |
| | FTE | 11 | 13 | 12 | 12 | 14 | 14 | 16 | 14 | 14 |
| Dept Total | | 66 | 91 | 95 | 102 | 111 | 115 | 121 | 118 | 118 |
| ^{1.2} Basic Sciences | Non FTE | 224 | 232 | 227 | 238 | 249 | 250 | 261 | 257 | 424 |
| | FTE | 130 | 127 | 125 | 125 | 133 | 140 | 141 | 142 | 142 |
| ^{1.3} Clinical with AARP | Non FTE | 1,134 | 1,262 | 1,393 | 1,557 | 1,750 | 1,852 | 1,916 | 1,986 | 2,192 |
| | FTE | 236 | 227 | 223 | 221 | 224 | 215 | 217 | 219 | 220 |
| ^{1.4} Clinical without AARP | Non FTE | 1,012 | 1,158 | 1,235 | 1,298 | 1,393 | 1,469 | 1,509 | 1,513 | 1,687 |
| | FTE | 149 | 154 | 152 | 156 | 156 | 160 | 164 | 163 | 163 |
| ^{1.5} CSM | Non FTE | 2,254 | 2,523 | 2,716 | 2,938 | 3,224 | 3,402 | 3,517 | 3,598 | 4,030 |
| | FTE | 522 | 513 | 505 | 507 | 518 | 519 | 526 | 529 | 530 |

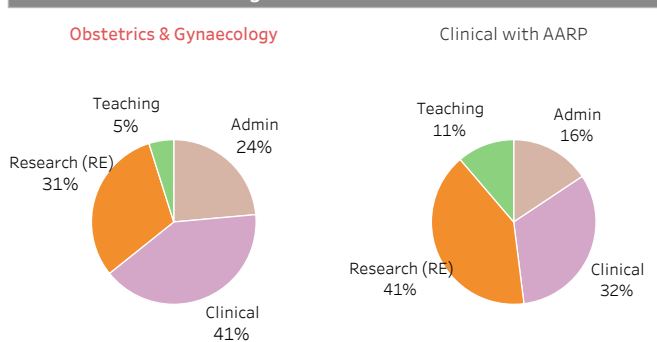
Obstetrics & Gynaecology 2021 Faculty ²



Obstetrics & Gynaecology Research Revenue ³

| | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|---------------|---------------|---------------|---------------|---------------|
| Alberta children's hospital foundation | | | \$50K | \$50K | |
| Alberta health services | \$300K | | | | |
| Alberta innovates - health solutions | \$424K | | \$302K | \$158K | \$0K |
| Boston scientific corporation | \$36K | \$44K | | | \$16K |
| Calgary health trust | | | | \$114K | \$1,000K |
| Canadian association of gastroenterology | \$18K | \$44K | \$44K | \$26K | \$0K |
| Channel medsystems inc | | \$201K | \$20K | | |
| CIHR | \$142K | \$269K | \$375K | \$395K | \$399K |
| Government of alberta / alberta health services | | | | \$78K | |
| Multiple sources | \$117K | \$153K | \$92K | \$151K | \$266K |
| Other | \$94K | \$16K | -\$3K | \$35K | \$109K |
| SSHRC | | | | \$125K | \$148K |
| University of laval | \$148K | | | | |
| Obstetrics & Gynaecology.. | \$1.3M | \$0.7M | \$0.9M | \$1.1M | \$1.9M |

Avg FTE Time Allocation ⁴



Research Revenue per FTE ⁵

| | 2017 | 2018 | 2019 | 2020 | 2021 |
|-------------------------------------|---------------|---------------|---------------|---------------|---------------|
| Obstetrics & Gynaecology | \$91K | \$52K | \$55K | \$81K | \$138K |
| Basic Sciences | \$313K | \$373K | \$424K | \$439K | \$427K |
| Clinical with AARP | \$425K | \$497K | \$545K | \$471K | \$451K |
| Clinical without AARP | \$177K | \$188K | \$211K | \$223K | \$223K |
| CSM Dept Total | \$302K | \$346K | \$384K | \$370K | \$359K |

CSM Research Revenue ⁶

| | 2017 | 2018 | 2019 | 2020 | 2021 |
|-----------------------|---------------|---------------|---------------|---------------|---------------|
| Basic Sciences | \$42M | \$52M | \$60M | \$62M | \$61M |
| Clinical with AARP | \$63M | \$70M | \$77M | \$66M | \$62M |
| Clinical without AARP | \$28M | \$30M | \$35M | \$36M | \$36M |
| Other | \$32M | \$46M | \$42M | \$49M | \$63M |
| CSM Total | \$164M | \$198M | \$213M | \$214M | \$222M |

CIHR Annual Funding \$ Paid as a % of National ⁷

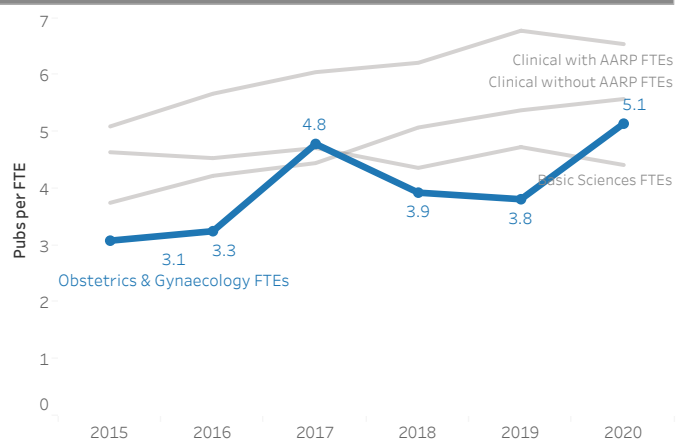
| | 2017 | 2018 | 2019 | 2020 | 2021 |
|---------------------------------------|--------------|--------------|--------------|--------------|--------------|
| Obstetrics & Gynaecology.. | 0.02% | 0.03% | 0.04% | 0.04% | 0.05% |
| Basic Sciences | 1.63% | 1.74% | 1.83% | 1.88% | 3.20% |
| Clinical with AARP | 1.32% | 1.42% | 1.71% | 1.64% | 2.33% |
| Clinical without AARP | 0.59% | 0.68% | 0.83% | 1.08% | 1.82% |
| CSM | 3.45% | 3.77% | 4.28% | 4.48% | 4.48% |

Obstetrics & Gynaecology 2015-20 Bibliometrics

Annual Publications ¹¹

| | | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---------|--------------|--------------|--------------|--------------|--------------|--------------|
| 2nd Job | Non FTE | 7 | 5 | 12 | 9 | 15 | 13 |
| Primary Job | Non FTE | 18 | 21 | 30 | 24 | 23 | 35 |
| | FTE | 37 | 39 | 67 | 55 | 61 | 72 |
| Obstetrics & Gynaecology Total | | 55 | 60 | 96 | 83 | 88 | 107 |
| Basic Sciences | Non FTE | 432 | 495 | 546 | 502 | 631 | 610 |
| | FTE | 580 | 567 | 627 | 611 | 667 | 627 |
| Clinical with AARP | Non FTE | 582 | 746 | 853 | 923 | 995 | 930 |
| | FTE | 1,136 | 1,253 | 1,355 | 1,336 | 1,471 | 1,433 |
| Clinical without AARP | Non FTE | 794 | 837 | 848 | 1,005 | 1,109 | 1,173 |
| | FTE | 570 | 659 | 694 | 812 | 882 | 909 |
| CSM Total | | 2,950 | 3,173 | 3,430 | 3,670 | 3,984 | 3,980 |

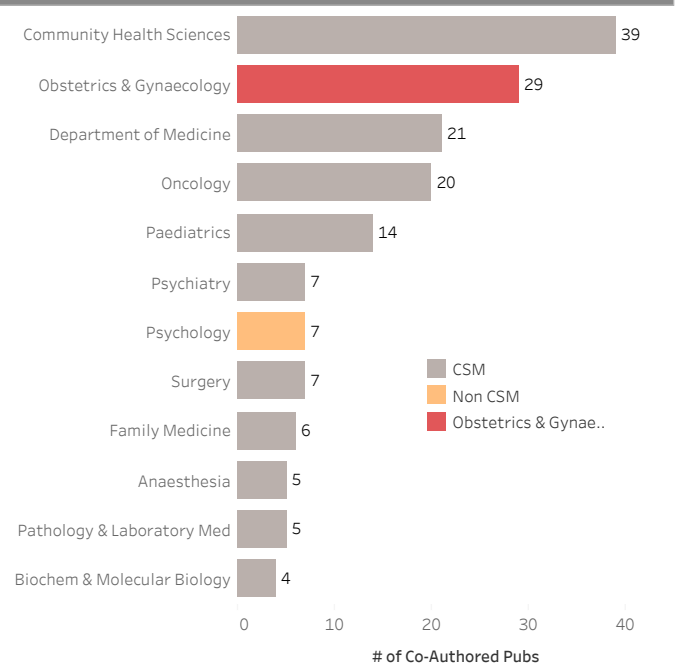
Annual Pubs per FTE ¹²



Annual First/Last Author Pubs ¹³

| | | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 |
|---|---------|--------------|--------------|--------------|--------------|--------------|--------------|
| 2nd Job | Non FTE | 3 | 3 | 5 | 4 | 6 | 6 |
| Primary Job | Non FTE | 7 | 10 | 14 | 9 | 9 | 13 |
| | FTE | 20 | 21 | 33 | 25 | 36 | 43 |
| Obstetrics & Gynaecology Total | | 28 | 30 | 48 | 36 | 50 | 58 |
| Basic Sciences | Non FTE | 208 | 228 | 244 | 218 | 227 | 228 |
| | FTE | 302 | 310 | 315 | 274 | 338 | 314 |
| Clinical with AARP | Non FTE | 248 | 294 | 338 | 357 | 420 | 358 |
| | FTE | 591 | 589 | 627 | 605 | 606 | 596 |
| Clinical without AARP | Non FTE | 368 | 399 | 376 | 441 | 465 | 474 |
| | FTE | 279 | 296 | 299 | 364 | 375 | 404 |
| CSM Total | | 1,749 | 1,844 | 1,910 | 1,992 | 2,139 | 2,090 |

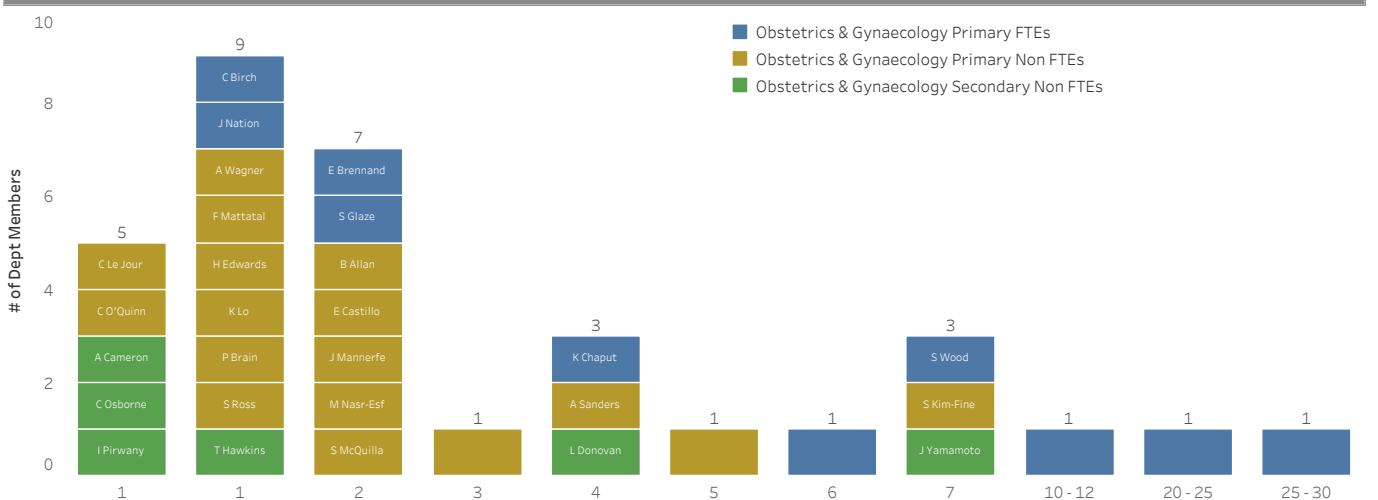
2020 Obstetrics & Gynaecology Collaborative Depts ¹⁴



Immediate Impact Papers ¹⁵

| | | Basic Sciences | Clinical with AARP | Clinical without .. | CSM Total | Obstetrics & Gynaecology |
|--------------------|---------|----------------|--------------------|---------------------|------------|--------------------------|
| Primary Job | Non FTE | 41 | 141 | 128 | 317 | 7 |
| | FTE | 143 | 379 | 153 | 853 | 12 |
| Grand Total | | 165 | 436 | 245 | 977 | 19 |

of Publications by 202021 Obstetrics & Gynaecology Faculty in 2020 ¹⁶



DEFINITIONS

| Number | Metric | Definition | Source |
|--------|---|---|--|
| 1 | Annual # of Faculty | <p>Headcounts of CSM Faculty based on their appointment on March 31 in a given year</p> <ul style="list-style-type: none"> • FTE (GFT) - Full Time Continuing Academic Faculty with non-zero Full time Equivalent (FTE) <p>1.1 Obstetrics & Gynaecology # of UCalgary Faculty with an academic appointment in Obstetrics & Gynaecology on March 31 of a given year</p> <p>1.2 Basic Sciences</p> <ul style="list-style-type: none"> a) Biochemistry & Molecular Biology b) Cell Biology & Anatomy c) Community Health Sciences d) Microbiology Immunology & Infectious Diseases e) Physiology & Pharmacology <p>1.3 Clinical with AARP</p> <ul style="list-style-type: none"> a) Cardiac Sciences b) Clinical Neurosciences c) Family Medicine d) Medicine e) Paediatrics <p>1.4 Clinical without AARP</p> <ul style="list-style-type: none"> a) Anaesthesia b) Critical Care Medicine c) Emergency Medicine d) Medical Genetics e) Obstetrics & Gynaecology f) Oncology g) Pathology & Laboratory Medicine h) Psychiatry i) Radiology j) Surgery <p>1.5 CSM UCalgary Faculty with an academic appointment in the Cumming School of Medicine on March 31 of a given year</p> | HR Systems & Reporting |
| 2 | 2021 Obstetrics & Gynaecology Faculty by Rank | Headcounts of UCalgary Faculty with Obstetrics & Gynaecology academic appointment on March 31 2021, broken down by Rank and FTE (GFT) level | HR Systems & Reporting |
| 3 | Research Revenue Obstetrics & Gynaecology | Annual sum of CSM Research Revenue for projects assigned to Obstetrics & Gynaecology, broken down by top 10 Sponsors. | Cognos/Research Accounting |
| 4 | Avg Time Allocation | <p>Avg Time Allocation (Position Summary) for FTE (GFT) faculty in most recent reporting year</p> <p>Note: updated data for this metric was not available, and previous years data was used</p> <p>See note (1) for Department Groups</p> | Academic Reporting Online |
| 5 | Research Revenue per FTE | Annual sum of CSM Research Revenue for projects assigned to dept/dept group (note 3/6), divided by the number of FTE (GFT) Faculty (note 1) | Research Revenue (see note 3) FTEs (See note 1) |
| 6 | CSM Research Revenue | Annual sum of CSM Research Revenue for projects assigned to the department groups in note (1) | Cognos/Research Accounting |
| 7 | CIHR Funding Paid as a % of National | <p>Annual sum of CIHR Funding Dollars paid to Investigators with an academic appointment in a CSM Dept/Dept group on March 31 of a given year, divided by total annual CIHR dollars awarded.</p> <p>Note, CIHR dollars are filtered for Research Support Fund (RSF) eligible programs</p> | Stats Canada |

DEFINITIONS II

| Number | Metric | Definition | Source |
|--------|---|---|--|
| 11 | Annual Publications | Annual sum of unique publications by UCalgary Faculty with an academic appointment in a dept/dept group on March 31 of a given publication year - For Dept Groups definition, see note (1) - For Primary/ Secondary job definition, see note (2) - For FTE/ non-FTE job definition, see note (1) | Web of Science Core Collection, filtered for Address = 'Calgary' |
| 12 | Annual Publications per FTE | Annual sum of unique FTE publications (note 11) by divided by the number of FTEs (note 1) | Publications (see note 11) FTEs (note 1) |
| 13 | First/Last Author Publications | Annual sum of unique publications (note 11) where the UCalgary Dept/Dept Group member is a first or last author listed on the manuscript | see note 11 |
| 14 | Collaborative Departments | Sum of unique publications (note 11) in 2020 by Obstetrics & Gynaecology members, broken down by the co-author's UCalgary department(s) | Publications (see note 11) Co-Author Department (see note 1) |
| 15 | Immediate Impact Papers | Sum of unique publications published in 2016-20 by 2016-20 Faculty that have been cited > 49 times | see note 11 |
| 16 | # of Publications by 2021 Faculty in 2020 | Histogram showing Obstetrics & Gynaecology faculty in March 2021, and the number of papers published they published in 2020. - Horizontal axis is the bin # of publications - Vertical axis is the # of Obstetrics & Gynaecology members | see note 11 |

Publication List

Outcomes of enhanced recovery after surgery (ERAS) in gynecologic oncology – A systematic review and meta-analysis. S.P. Bischa, *, C.A. Jago b, E. Kalogera c, H. Ganshorn d, L.A. Meyer e, P.T. Ramirez e, S.C. Dowdy c, G. Nelson a, *Gynecologic Oncology*, December 2020

Methamphetamine Use in Pregnancy: A Call for Action. Lisa E. Graves, MD;¹ Courtney R. Green, PhD, MSc;² Magali Robert, MD, MSc;^{3,4,5,6} Jocelynn L. Cook, PhD, MBA^{2,7}, *J Obstet Gynaecol Can* 2021;000(000):1–4

Changes in the Frequency of Cesarean Delivery in Nulliparous Women in Labor in a Canadian Population, 1992–2018 Stephen Wood, MD, and Selphee Tang, BS *Obstetrics Gynecology Vol. 137, No.2, February 2021: pages 263-70*

A case series of aggressive angiomyxoma: Using morphologic type and hormonal modification to tailor treatment Joni Kooy a, *, Vanessa Carlson b, Lana Sa ˇ ciragi ´ c, Summit Sawhney d, Gregg Nelson a, *Gynecologic Oncology Reports*, Available online 5 April 2021

Opportunities and Challenges for the Next Phase of Enhanced Recovery After Surgery A Review Olle Ljungqvist, MD, PhD; Hans D. de Boer, MD, PhD; Angie Balfour, RN, MSc; William J. Fawcett, MBBS; Dileep N. Lobo, MS, DM; Gregg Nelson, MD, PhD; Michael J. Scott, MB, ChB; Thomas W. Wainwright, BSc, MCSP; Nicolas Demartines, MD,) *JAMA Surgery Published online April 21, 2021*

Evaluating Progestogens for Preventing Preterm birth International Collaborative (EPPPIC): meta-analysis of individual participant data from randomised controlled trials. The EPPPIC Group* Participant data from randomized controlled trials: LesleyAStewart Mark Simmonds Lelia Duley Alexis Llewellyn Sahar Sharif Ruth AEWalker Lucy Beresford Kath Wright Mona M Aboulghar Zarko Alfirevic Azam Azargoon Rashmi Bagga ElhamBahrami Sean CBlackwell Steve NCaritisC Andrew Combs Jennifer MCroswell Caroline A Crowther Anita FDasKay Dickersin Kristina CDietz Andrew Elimian William AGrobman Alexander Hodkinson Kimberley AMAurel David SMcKenna Ben WMolKelle Moley Jamie Mueller Anwar Nassar Jane ENorman John Norrie John M O'Brien Raphael Porcher Shalini Rajaram Line Rode Dwight JRouse Carol Sakala Ewoud Schuit Marie-Victoire Senat Sahar Sharif Mark Simmonds Joe LSimpson Katherine Smith Anne Tabor Elizabeth A Thom Melanie Avan OsEvelyn PWhitlock Stephen Wood Tom Walley *Lancet* 2021; 397: 1183–94 Online April 15, 2021

Implications for management of ovarian cancer in a transgender man: Impact of androgens and androgen receptor status. Christa Aubrey a, Nathalie Saad b, Martin Köbel c, Fiona Mattatall d, Gregg Nelson e, Sarah Glaze e, * *Gynecologic Oncology* YGYNO-978345; No. of pages: 5; 4C: 4

What do I need to know about the etonogestrel-releasing contraceptive implant (Nexplanon)? Margot A. Rosenthal MD¹, Sarah K. McQuillan MD² *Paediatrics & Child Health*, 2021, 1–2

Importance of Enhanced Recovery After Surgery (ERAS) Protocol Compliance for Length of Stay in Ovarian Cancer Surgery Jose Luis Sa ´ nchez-Iglesias, MD, PhD¹, Natalia R. Go ´mez-Hidalgo, MD¹, Asuncio ´n Pe ´rez-Benavente, MD, PhD¹, Melchor Carbonell-Socias, MD, PhD¹, Susana Manrique-Mun ´oz, MD, PhD², Monica Pamies Serrano³, Pilar Gutie ´rrez-Barcelo ´⁴, Melissa Bradbury, MD, PhD¹, Gregg Nelson, MD⁵, and Antonio Gil-Moreno, MD, PhD^{1,6}. *Gynecologic Oncology Published online: 06 June 2021*

Improving interprofessional handover on labor and delivery: A needs assessment study. Wynne I. Leung, Crystal Emery & Rylan Egan. *Journal of Interprofessional Care Published online: 14 Jun 2021*

Maternal perceptions of cesarean birth care: A qualitative study to inform ERAS guideline development. Krista Wollny RN, MN, Amy Metcalfe PhD, Crystal Corrigan RD, MPH, Ashely Drobot MPH, Loreen Gilmour PhD, Stephen Wood MD, MSc, R. Douglas Wilson MD, Leah Gramlich MD, Gregg Nelson MD, PhD. *Wiley Birth* 2021:00::1-8

Enhanced recovery after surgery in gynecologic oncology: time to address barriers to implementation in low- and middle-income countries Gregg Nelson,¹ Adrian Alvarez,² Pedro T Ramirez³. *Nelson G, et al. Int J Gynecol Cancer* 2021;0:1–2. doi:10.1136/ijgc-2021-002841

Is Endocervical Curettage Useful? A Review Tamara Kuzma¹ • Gregg Nelson¹ *Indian Journal of Gynecologic Oncology* (2021) 19:48 Published online: 25 June 2021

Evaluation of the Fetal Therapy Evidence in Lower Urinary Tract Obstruction: Would an ERAS Guideline Improve Outcomes? R. Douglas Wilson Gregg Nelson. *Fetal Diagn Ther* DOI: 10.1159/000517624 Published online: July 28, 2021

Enhanced myometrial vascularity—the time has come for individualized treatment of focal uterine pathology. Meghan O’Leary, M.D. Ari P. Sanders, M.D., M.Sc. *Fertility and Sterility* Volume 116, Issue 3, September 2021, Pages 691-692

Pregnancy in transgender men Kimberley G.S. Thornton MD BKin, Fiona Mattatall MD MSc *CMAJ* 2021 August 23;193:E1303. doi: 10.1503/cmaj.210013

Evaluating the efficacy of intranasal oxytocin on pain and function among individuals who experience chronic pain: a protocol for a multisite, placebocontrolled, blinded, sequential, withinsubjects crossover trial Joshua A. Rash,¹ Tavis S. Campbell,² Lynn Cooper,³ David Flusk,⁴ Aaron MacInnes,⁵ Maryam Nasr-Esfahani,^{6,7} Anastasia A. Mekhael,¹ Patricia A. Poulin,^{8,9,10} Magali Robert,^{6,7} Yanqing Yi¹. *Rash JA, et al. BMJ Open* 2021;11:e055039. doi:10.1136/bmjopen-2021-055039

Maternal and fetal hypothermia: more preventive compliance is required for a mother and her fetus while undergoing cesarean delivery; a quality improvement review R. Douglas Wilson & Gregg Nelson. *The Journal of Maternal-Fetal & Neonatal Medicine*. Published online: 24 Oct 2021. <https://doi.org/10.1080/14767058.2021.1993816>

Canadian Enhanced Recovery After Surgery (ERAS) Cesarean Delivery Perioperative Management Survey K. Matovinovic Kaja Matovinovic, BSc;¹ Amy Metcalfe, PhD;² Alon D. Altman, MD;³ R. Douglas Wilson, MD;² Gregg Nelson, MD, PhD.² *J Obstet Gynaecol Can* 2021;000(000):1-5

Implementation of a restrictive opioid prescription protocol after minimally invasive gynecologic oncology surgery Soyoun Rachel Kim,^{1,2} Stephane Laframboise,² Gregg Nelson,³ Stuart A McCluskey,⁴ Lisa Avery,⁵ Nastasia Kujbid,² Aysha Zia,² Marcus Q Bernardini,² Sarah Elizabeth Ferguson,² Taymaa May,² Liat Hogen,² Paulina Cybulska,² Geneviève Bouchard-Fortier^{2,6}. *Kim SR, et al. Int J Gynecol Cancer* 2021;0:1-5. doi:10.1136/ijgc-2021-002968

Patients’ perspectives of prehabilitation as an extension of Enhanced Recovery After Surgery protocols. Chelsia Gillis, PhD, RD* Marlyn Gill, MSW* Leah Gramlich, MD S. Nicole Culos-Reed, PhD Gregg Nelson, MD, PhD Olle Ljungqvist, MD, PhD Franco Carli, MD, MPhil Tanis Fenton, RD, PhD. *Can J Surg* 2021 November 2; 64(6). doi: 10.1503/cjs.014420


Protracted clinical course of an AFF1 fusion positive uterine smooth muscle tumor causing diagnostic confusion over a course of 15 years Christa Aubrey a,* , Hanan Mal b , Martin Kobel c , Cheng-Han Lee d , Gulisa Turashvili e , Stephen Yip f,g , Amy Lum g , Gregg Nelson h. *Gynecologic Oncology Reports* Volume 38, November 2021, 100890

Prostaglandins in biofluids in pregnancy and labour: A systematic review. Eilidh M. Wood¹ , Kylie K. Hornaday¹ , Donna M. Slater^{1,2*}. *PLoS ONE* 16(11): e0260115.

Pharmacotherapeutic prophylaxis and post-operative outcomes within an Enhanced Recovery After Surgery (ERAS®) program: A randomized retrospective cohort study Richard H. Parrish, II, Rachelle Findley, Kevin M. Elias, Brian Kramer, Eric G. Johnson, Leah Gramlich, Gregg S. Nelson. *Annals of Medicine and Surgery* (2022)

Fear of COVID-19, mental health, and pregnancy outcomes in the pregnancy during the COVID-19 pandemic study Fear of COVID-19 and pregnancy outcomes G.F. Giesbrecht a,b,c,d,* , L. Rojas a,b , S. Patel d , V. Kuret e , A.L. MacKinnon b,d , L. Tomfohr-Madsen a,b,d , C. Lebel b,f. *Journal of Affective Disorders* Volume 299, 15 February 2022, Pages 483-491

Outcomes of a Breech Birth Program in Canada, Quality Assurance Project. Meriah Fahey MD *Journal of Obstetrics and Gynaecology Canada* Volume 43, Issue 6, June 2021, Pages 721-725



ERAS Society Recommendations for Improving Perioperative Care in Low- and Middle-Income Countries Through Implementation of Existing Tools and Programs: An Urgent Need for the Surgical Safety Checklist and Enhanced Recovery After Surgery Ravi Oodit¹ • Bruce Biccard² • Gregg Nelson³ • Olle Ljungqvist^{4,5} • Mary E. Brindle^{6,7}. *World J Surg*
Published online: 28 August 2021

Satisfaction and continuation with LNG-IUS 12: findings from the real-world Kyleena satisfaction study. Dale W. Stovall, Keith Aqua, Thomas Römer, Gilbert Donders, Terje SørDAL, Brian Hauck, Eric Saucedo de la Llata, Helena Kopp Kallner, Julie Salomon, Michal Zvolanek, Ann-Kathrin Frenz, Tanja Böhnke & Anja Bauerfeind. *The European Journal of Contraception & Reproductive Health Care*, 26:6, 462-472, DOI: 10.1080/13625187.2021.1975268

Protracted clinical course of an AFF1 fusion positive uterine smooth muscle tumor causing diagnostic confusion over a course of 15 years Christa Aubrey a,* , Hanan Mal b , Martin Kobel c , Cheng-Han Lee d , Gulisa Turashvili e , Stephen Yip f,g , Amy Lum g , Gregg Nelson h. *Gynecologic Oncology Reports Volume 38, November 2021, 100890*

An undergraduate medical curriculum framework for providing care to transgender and gender diverse patients: A modified Delphi study Rachel H. Ellaway · Nicole L. Thompson · Claire Temple-Oberle · Danièle Pacaud · Helena Frecker · Theodore J. Jablonski · James Demers · Fiona Mattatall · Joe Raiche · Andrea Hull · Rabiya Jalil. *Perspect Med Educ (2022) 11:36–44*

Impact of a Clinical Intervention to Decrease Opioid Prescribing in a Postcesarean Delivery Simrit Brar, MD; Shanaya Aujla, RN; Selphee Tang, MSc; Rob Thompson, MD; Amy Metcalfe, PhD. *J Obstet Gynaecol Can 2021;-(-):1e5*

Relationship of postoperative vaginal anatomy and sexual function: a systematic review with meta-analysis. Shunaha Kim-Fine¹, Danielle D Antosh², Ethan M Balk³, Kate V Meriwether⁴, Gregg Kanter⁵, Alexis A Dieter⁶, Mamta M Mamik⁷, Meadow Good⁸, Ruchira Singh⁸, Alexandriah Alas⁹, Mohamed Foda¹⁰, David D Rahn¹¹, Rebecca G Rogers¹².
PMID: 33988785 DOI: 10.1007/s00192-021-04829-4

Grants

Dr. Leslie Skeith

2021 Peter Lougheed Research Award Competition

Department of Medicine TITLE OF THE RESEARCH PROJECT: Complement and coagulation activation in antiphospholipid syndrome and pregnancy AWARD AMOUNT: \$43,781.00

Dr. Joann Johnson

Predication and Prevention of Preeclampsia: An Implementation Pilot Study

CIHR grant \$300,000

The First Trimester Scan Feasibility Study \$5000

Dr. Stephen Wood

HIROC Safety Grant Award \$17,500 for the Alberta Provincial Surveillance Program for Moderate to Severe Neonatal Hypoxic-ischemic Encephalopathy (HIE)

- We received the notice of this award in Nov 2020, but didn't receive funds until 2021

Calgary Heath Foundation Grant for the Alberta Provincial Surveillance Program for Moderate to Severe Neonatal Hypoxic-ischemic Encephalopathy (HIE)

- 2021 – \$209,180.00 (Year 1)
 - 2022 – \$250,268.00 (Year 2)
 - 2023 – \$150,542.00 (Year 3)
 - 2024 – \$140,088.00 (Year 4)
 - 2025 – \$144,258.00 (Year 5)
- (\$894,336 total)

Dr. Erin Brennand

CIHR Project Grant \$150,000

Five Years after the Mid-Urethral Sling Tensioning (MUST) Trial

CIHR Early Career Investigator in Maternal, Reproductive, Child and Youth Health Grant \$99,244

Sex, Drugs and Chronic Pain after Pelvic Organ Prolapse Surgery

Dr. Amy Metcalfe

2022-2024 Alberta Innovates – AICE Concepts

IMPROVE – Virtual HEALTH (Healthy Eating Active Living through Technology @ Home) 4 Moms

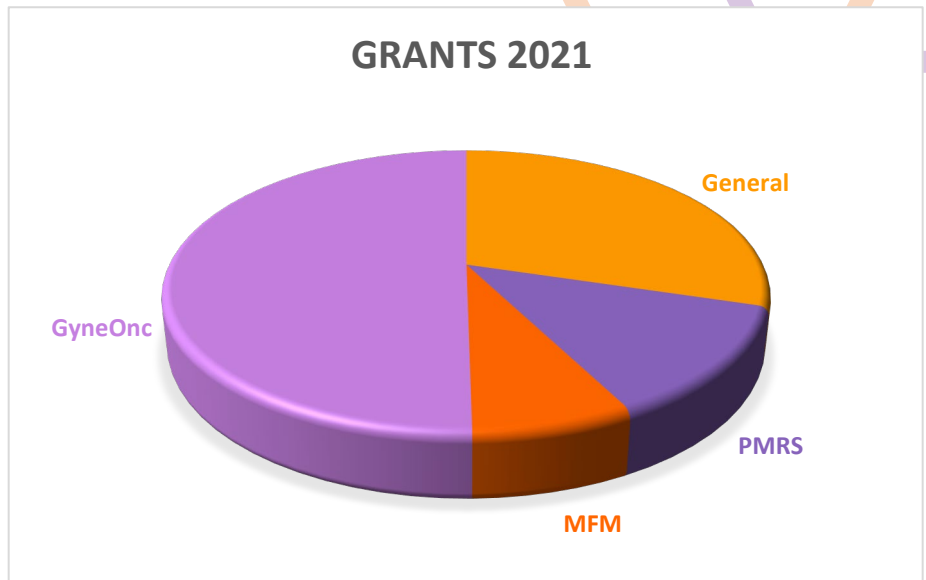
Amount Received: \$572,185

PI: Kara Nerenberg

Co-I: Sonia Butalia, Simrit Brar, Sapna Chawla, Stephanie Cooper, Cathy Eastwood, Bonnie Eckert, Anna Gagliardi, Michelle Grinman, Doug Hamilton, Patrice Lindsay, Maitreyi Kothandarama, Mamas Mamas, **Amy Metcalfe**, Judeah Negre, Collen Norris, Ann Pederson, Leanne Reimche, B Satchwill, Chad Saunders, Lianne Tomfor-Madsen, Shelley Vallaire, Meghan Vlasschaert

2021-2022 CIHR: Understanding and mitigating the impacts of COVID-19 on children, youth and families

Impact of COVID-related restrictions on maternal and infant health



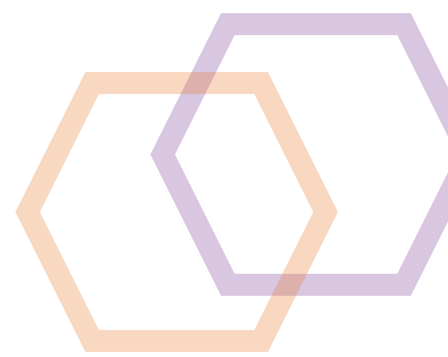
Amount Received: \$150,000

PI: **Amy Metcalfe**

PKU: Deb McNeil

Co-I: Eliana Castillo, Verni Kuret, Kara Nerenberg, Radhmilla Parmar

Collaborator: Gary Teare, Kristin Klein



2021-2023 Calgary Health Foundation

Post-marketing surveillance for COVID-19 vaccination in pregnancy in Alberta: improving the public health impact of vaccinations for mother-infant health

Amount Received: \$250,000

PI: Eliana Castillo

Co-I: Jeff Bakal, Julie Bettinger, Cathy Eastwood, Anna Funk, Deshayne Fell, Jia Hu, Jim Kellner, Jeff Kwong, Shannon MacDonald, **Amy Metcalfe**, Maria Santana, Susan Smith, Larry Svenson, Otto Vanderkooi, Tyler Williamson

Collaborator: Gary Teare, Kristin Klein

2021-2024 CIHR Project Scheme

Improving maternity outcomes by engaging stakeholders in a holistic assessment of the social and clinical determinants of severe maternal morbidity in Canada – a feasibility study

Amount Received: \$321,300

PIs: Rohan D'Souza, Isabelle Malhame

Co-Is: Jon Barrett, Jocelyn Cook, Suzie Dzakpasu, Deshayne Fell, KS Joseph, Stephen Lapinsky, **Amy Metcalfe**, Beth Murray-Davis, Heather Scott, Prakesh Shah, Leslie Skeith

Collaborator: Gary Teare, Kristin Klein

2021-2023 CIHR Operating Grant: ECIs in Maternal, Reproductive, Child and Youth Health

Sex, drugs and chronic pain after pelvic organ prolapse surgery: investigating patient and clinician priorities related to pelvic floor surgery in Canada

Amount Received: \$99,244

PI: Erin Brennand

Co-Is: Sofia Ahmed, Colin Birch, Shunaha Kim-Fine, **Amy Metcalfe**, Kaylee Ramage, Magali Robert, Natalie Scime, Lauren Walker

Collaborator: Gary Teare, Kristin Klein

2021-2023 BMO Endowed Research Award in Healthy Living; Child Health and Wellness Grand Challenge Catalyst Competition

Amount Received: \$199,709

Measure what matters: identifying key indicators to align health and social policy and service delivery with child health and well-being

PIs: Brent Hagel, Jennifer Zwicker, Shelly Russell-Mayhew, Kelly Schwartz, Lynden Crowshoe, Heather Boynton

Co-Is: Gina Dimitropoulos, Deineria Exener-Cortens, **Amy Metcalfe**, Suzanne Tough

2021-2023 University of Calgary International Researcher Partnership Workshop Grant

Amount Received: \$10,000

Prevention of heart disease after pregnancy – an international collaboration

PI: Kara Nerenberg

Co-Is: Sofia Ahmed, Ann Celi, Sapna Chawla, **Amy Metcalfe**, Janet Rich-Edwards, Ellen Seely

2021-2025 Canadian Institutes of Health Research Project Scheme

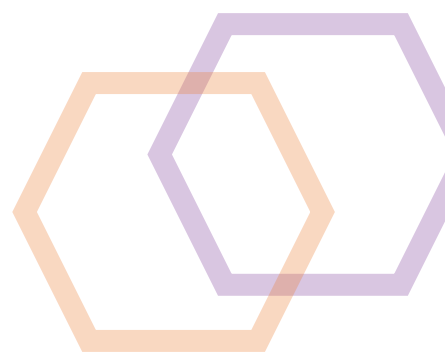
Amount Received: \$742,052

A prospective cohort study evaluating peripartum anticoagulation management among pregnant women with VTE and its impact on patient outcomes

PIs: Leslie Skeith, Isabelle Malhame, Ann Kinga Malinowski

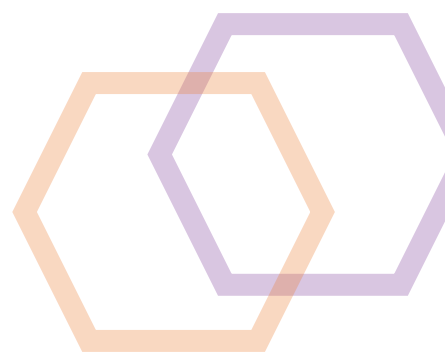
Co-Is: Shannon Bates, Wee-Shian Chan, Lorraine Chow, Lisa Duffett, Darine El-Chaar, Paul Gibson, Gregoire Le Gal, Adrienne Lee, **Amy Metcalfe**, Marc Rodger, Nadine Shehata, Camille Simard, Vicky Tagalakakis, Stephen Wood

Collaborator: Gary Teare, Kristin Klein



| | |
|-------------------|----------------|
| Skeith, Leslie | \$43,781.00 |
| Wood, Stephen | \$17,500.00 |
| | \$894,336.00 |
| Metcalfe, Amy | \$572,185.00 |
| | \$150,000.00 |
| | \$250,000.00 |
| | \$321,300.00 |
| | \$199,709.00 |
| | \$10,000.00 |
| | \$742,052.00 |
| Brennand, Erin | \$150,000.00 |
| | \$99,244.00 |
| Robert, Magali | \$120,000.00 |
| | \$250,000.00 |
| | \$696,152.00 |
| | \$7,000.00 |
| Kim-Fine, Shunaha | \$50,000.00 |
| Johnson, JoAnn | \$300,000.00 |
| | \$5,000.00 |
| Soliman, Nancy | \$4,000.00 |
| | \$43,000.00 |
| | \$400,000.00 |
| Kuret/Castillo | \$20,000.00 |
| Oluyomi-Obi, Titi | \$17,500.00 |
| Nelson, Greg | \$3,707,268.00 |
| Cameron, Anna | \$1,287,838.00 |
| Ghatage, Praful | \$360,000.00 |
| Bisch, Stephen | \$17,500.00 |
| Chu, Pam | \$24,826.50 |
| Glaze, Sarah | \$20,000.00 |

10.7
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The Stats

