



# News**letter**

# THE PEDICLE

Division of Plastic Surgery | University of British Columbia | APR 2019 | ISSUE #7



Peter Lennox, MD, FRCSC

Every year when I sit down to write for the Pedicle, it is a time of reflection. It is an enlightening process to look at the achievements of the Division, the contributions that members have made, and the high and low points.

02	DOBC Section Update
04	Pearls & Perspectives
05	Resident's Corner
06	Fellowship Program
07	Undergraduate Education
08	How I Do It?
10	New Surgeon Spotlight
12	Achievements
16	Editor's Note / The Leech

## CHAIR'S REPORT

The centre point of the Division remains our training program. For the first time in many years, we will have one graduate this year, Dr. Tyler Omeis. Tyler is going to Toronto for a one-year hand and upper extremity fellowship and hopes to settle back in BC when he is finished. The annual resident CaRMS match occurred 1 March, and we are happy to introduce our new R1 residents who will start 1 July, Dr. Mike Carr, Dr. Ahmed Al Hosni (from Oman) and Dr. Paige Knight. Dr. Alex Seal has taken over the reins from Dr. Mark Hill as Program Director, and has been busy at work preparing us for the upcoming changes to Competency By Design, which will fundamentally change the way we educate and evaluate residents.

We continue to have well-subscribed fellowships in breast reconstruction, hand

and microsurgery, craniofacial surgery, paediatric surgery and aesthetic surgery in Kelowna. Dr. Erin Brown has continued in his role as Fellowship Director, and made a number of changes to the structure of the fellowships to improve the experience of fellows, as well as their interactions with residents. Erin has also embarked on a change in the pattern of his practice, which I believe will benefit multiple patients in BC. He is currently in Korea on a three-month "mini fellowship" and will spend time in Japan and Taiwan as well, learning about lymphedema surgery and how to build a successful lymphedema program. Currently, there are no structured lymphedema programs in Western Canada, and this will fill an unmet need in patient care. Erin has given up the role of Research Director with these new responsibilities, and this has

been taken over by Dr. Sheina Macadam.

We have successfully recruited two new surgeons to our group: Dr. Kathryn Isaac joined us in September 2018. Kathryn was trained in Toronto, and did fellowships at Harvard and Winnipeg, and will have a focus on breast reconstruction. Drs. Isaac and Macadam recently obtained \$1 million from a donor for a project to assess flows and efficiencies in the care pathway for breast reconstruction patients. Dr. Chris Doherty has been on faculty at Western for the last five years, and we are excited to have him join us in May with a focus on hand and upper extremity surgery. Dr. Jim Boyle retired from full-time practice 1 April, 2019. We anticipate keeping him around in a number of roles, however! We will update everyone with news about an event to celebrate Jim's

career and his contributions to plastic surgery at UBC, and in BC, in the near future.

Multiple division members continue to serve in non-clinical roles in plastic surgery. Dr. Rick Warren continues to contribute to aesthetic plastic surgery as a board member to ASAPS, and remains busy clinically and lecturing. Drs. Mat Mosher, Nancy Van Laeken, and I continue on the board of CSAPS (a large western representation!). Nick Carr and Alex Seal continue to contribute at the Royal College as members of the Specialty Committee. Our new recruit, Chris Doherty, is the President of Young Plastic Surgeons in CSPA. Dr. Sean Bristol continues to provide excellent leadership as Head of Plastic Surgery for Providence, and Cindy Verchere continues to lead

the ship at BCCH. Erin Brown was hired as the Deputy Editor of JPRAS this past year, and Nick Carr, Sheina Macadam and Jugal Arneja represent us on the editorial board of the CJPS now rebranded Plastic Surgery. Finally, Dr. Jugal Arneja has done an outstanding job as editor of The Pedicle and as the administrator of our internal academic grant program, which has distributed \$268,000 of internally raised money over the last few years to support research within and philanthropic international surgical care from the division.

The BCPFF Burn and Wound Healing Lab continues to be very busy and successful under the leadership of Drs. Aziz Ghahary and David Granville. They each have had multiple grants and publications, as well as clinical trials moving forward.

The relationship between the "downtown" academic centres and our colleagues elsewhere in BC continues to thrive. There have been multiple collaborative efforts in areas ranging from residency education to support and information sharing at the section level to deal with ongoing changes to plastic surgery in BC. Dr. Nancy Van Laeken has continued to provide leadership in the role of Section Head for Plastic Surgery in Doctors of BC.

Year over year our Division continues to grow and improve. Thank you to all of you who have provided support for the many components that make up a successful plastic surgery program. I am very aware and appreciative of the fact that it requires contributions from many people to develop a program of the calibre we have in BC. I look forward to your ongoing support in the future.

## DOBC SECTION UPDATE



Nancy Van Laeken, MD, FRCSC

The Section of Plastic Surgery within the Doctors of BC has had an interesting and busy year because of a number of new and old issues that required attention.

### ■ DOBC STRUCTURE:

There has been a new structural setup within the Doctors of BC where there is a Representative Assembly which meets and reports to the Board.

Dr. Owen Reid has been the Plastic Surgery Representative on that committee. Being a new entity, the Representative Assembly is still in the process of working out details related to its governance, its relationship to the Board, its role and its scope. In addition, there have been several opportunities for Dr. Reid to cast a vote on behalf of the Section. In most instances, Dr. Reid is comfortable representing the Section, but there are times when it would be advantageous if there was an efficient and effective way of soliciting the opinions of Section members prior to casting his ballot. Ideas on how this could be done will be discussed at the upcoming Section meeting.

**■ PHYSICIAN MASTER AGREEMENT:**

The PMA has yet to be ratified, but the provisional 3 year deal includes: a one-time \$7500 payment; annual general increases of 0.5%; considerable funding to address inter-sectional disparity; new annual funding for service contract / salaried docs; and a 17% increase in after-hours surcharges.

**■ MEDICARE PROTECTION ACT:**

On September 10, 2018, Medical Practitioners in the Province of British Columbia received a letter from Dr. Robert Halpenny, Chair of Medical Services Commission, advising us on the enforcement of extra billing rules in compliance with new amendments to the Medicare Protection Act brought forward by the current NDP government. This letter indicated that it is prohibited for physicians and surgeons in British Columbia to provide any services, to include materials, consultations, procedures, or surgery that would otherwise be covered in the MSP billing book.

The letter indicated that there would be fines of \$10,000 and up to \$20,000 for serial offenses with the ultimate penalty being de-enrollment of the practitioner. These amendments would have come in to effect on October 1st had there not been a successful injunction by the Cambie Surgery group. Subsequent to that, an appeal by the government was denied a second judge re-confirming the legal and ethical basis for the provision of private medical care. Just this past week, in response to the courts' decision, the NDP issued a cabinet order declaring that the amendments to the MPA would not come in to effect until March 2020 - after the presumed completion of the ongoing trial. Until then, it is business as usual.

**■ COMPLIANCE LETTERS:**

Subsequent to the circulation of this notification, surgeons in British Columbia

were asked to sign a Letter of Compliance confirming that they were aware and comply with the restrictions under which they could provide private services to their patients.

A number of private facilities and hospitals who use private facilities insisted that their surgeons sign such as compliance letter and if they failed to do so they would no longer have access to operating time. At this time, there is an affidavit before the courts indicating that the enforcement of the compliance letter and any compliance under the Medicare Protection Act were in violation of the current injunction that is in place for what is known as the Brian Day Case.

It is hoped that the affidavit will be successful and that these compliance letters will no longer be required so that surgeons will be free to work in the facilities in which they have privileges and will be given access back to operating time that is so vitally required for their public patients, as well as their private patients.

**■ FEE SCHEDULE:**

In an attempt to be proactive, should in the future the Brian Day Case be unsuccessful and the government has authority to enforce their amendments to the Medicare Protection Act, Dr. Reid and Dr. Van Laeken met with the Doctors of BC, their lawyers, and the members from the Medical Services Commission to clarify grey areas so that there is a clear understanding of what compliance or noncompliance might mean. This involved evaluation of breast reduction, gynecomastia, liposuction, multiple stages for breast reconstruction, to name a few. This also includes the concerns expressed by the surgeons who may be providing both public and private services at one anesthetic.

At this time, it was recommended by the Medical Services Plan that it would be

easier to alter the preamble in the fee guide to allow for clarity by requesting MSP approval specifically if the surgeon wished to have the procedure covered. This is still in the state of negotiation and it is anticipated that this process will continue regardless of the result of the Brian Day Case so that there can be ongoing clarity in the future over what is and what is not considered an insured service.

**■ OFFICE OVERHEAD STUDY:**

All members of the Section of Plastic Surgery will have received a copy of the results of the overhead study. A number of surgeons have expressed disappointment in the result which was anticipated. To date, the impact of the overhead study is not clear. It will factor into the negotiations in the Physician Master Agreement and further information will be forthcoming on that after the negotiations are completed.

**■ MOCAP:**

Recent changes in the MOCAP agreement have downgraded all Health Authorities except Vancouver Coastal from level 1 to level 2 classification. The definitions of the classifications have also changed.

We should emphasize that Plastics is a core trauma service and needs to be level 1. It's recognized that VCH and Plastics Services at other major centres in BC are expected to provide the same service.

If they recognize there is a level 1 (VCH) and everyone else is level 2, they are acknowledging (and accepting) different levels of care for patients in different areas of the Province. This is a detriment to the patients (and VCH staff who would have to take on all level 1 cases) and will reduce patients access to timely care. Plastic Surgeons in all Health Authorities will be lobbying to change back to level one.

There are more unresolved issues to be addressed in 2019-2020.

## PEARLS & PERSPECTIVES



Mark Hill, MD, FRCSC

As one gets older and definitely if you have been a Program Director for Resident education, you feel obliged to share the “secrets of success” for a happy and fulfilling career.

On Resident graduation day each year I was Program Director, I picked a topic other than a clinical one, to provide “wisdom” and hopefully make our Residents better Surgeons, Doctors and citizens. I will briefly summarize these “wisdoms” which hopefully will stimulate some reflection in all of us.

### ■ SURGICAL OPTIMISM:

I define this as always having an attitude that you WILL make your treatment plan work, no matter how forbidding or difficult by keep moving forward for the benefit of your patient. *(I learned this from Harry Buncke)*

### ■ ATTENTION TO DETAIL:

What separates Plastic Surgeons from many other surgical specialties is exactly this. One must consider even the most minute details and make sure that they are carefully attended too. Very often this is the difference between a great outcome and a failure. *(I learned this from Les Chasmar)*

### ■ CARING:

Surgeons often forget that they are Doctors first and by showing a caring attitude for all patients builds trust and confidence in the patients. We are all Doctors first and without caring, no matter how good a technician you are, you will not be a good surgeon. *(I learned this from Geoff Blair)*

### ■ BE A TEACHER:

It's great to be taught but we often forget that the best payment to your mentors is to become a teacher yourself. It's what makes our specialty strong over time. It's easy to provide excellence in one's

clinical practice but that is not enough. *(I learned this from all my mentors over the years)*

### ■ BE A LEADER:

Hospitals, divisions, committees, societies can't exist without participants and leaders. The best of all of these have good leaders. Good leaders make good programs which in turn make great surgeons and ultimately good patient care. *(I learned this from Nick Carr and Ed Buchel)*

### ■ BE GOOD TO YOUR FAMILY:

Plastic Surgeons like to work hard and that makes us good. But there is a downside. Being a good family person helps build strong societies. We must work hard to be a good surgeon but we must equally work hard to be good to your family. *(I learned this from my wife Joan)*

### ■ BE GOOD TO YOURSELF:

Work hard but play hard. Balance your life to avoid burnout. You are no good to yourself, your patients or your family if you are not in optimum condition both physically and mentally. *(I learned this from Bing Gan)*

### ■ VOLUNTEER TO HELP THOSE LESS FORTUNATE:

Although we often complain about our own condition, we are the lucky ones in the World. There are many that can use our expertise but can never get it unless we give back to the world that has been so good to us. Projects that build sustainability are the most worthwhile and satisfying and will continue on after we are long gone. *(I figured this one out myself!)*



## RESIDENT'S CORNER 2019



Alex Seal, MD, FRCSC

I would like to take this opportunity to welcome you to the 2019 UBC Division of Plastic Surgery Research Day and to highlight some of the great things going on with our residents and the program. Research day in 2018 featured Dr. Heather Furnas as the visiting professor, and we look forward to learning from and spending some time with this year's VP, Dr. Mark Clemens.

Last year we congratulated Karen Slater and Leslie Leung, as they graduated

and transitioned on to fellowship. Karen moved to Scotland for a hand fellowship, and Leslie is in Toronto, also completing a fellowship in hand and wrist surgery. This year, a special welcome is extended to Annie Wang, from Toronto, and Zach Zhang, from Ottawa, who have joined our residency program and are our two new R1's. Both have already become outstanding members of our team and we look forward to big things from them over the next few years. At the other end, Tyler Omeis is graduating and pursuing a fellowship in Hand and Wrist surgery at the University of Toronto. Tyler has been an excellent resident over his 5 years and has transitioned into an exceptional surgeon and caring doctor. We wish Tyler the best during his fellowship and hope to be fortunate enough to have him back in B.C. in the future.

Mark Hill has transitioned out of the roll of program director, after seeing the program through 8, (as he calls them), short years. He succeeded with many new initiatives to help shape and improve the UBC residency experience. Mark has left a lasting impact on many residents, including myself, and his hard work and

dedication will leave a lasting legacy for the program.

This is an exceptionally strong residency program, and there are a great number of dedicated faculty that are committed to help train the new group into top surgeons. With that said, there is always room to expand the experience and for improvement, and this will remain a focus for the Residency Program Committee. We are extending our training locations to help enrich the exposure to the breadth of plastic surgery, and provide an opportunity to our residents to participate in the great plastic surgery care taking place around the province. I would like to personally thank the members within our division, and those working outside of Vancouver, that dedicate their time and expertise to help teach our residents and help make UBC one of the best programs in the country.

*The football star Pele, summarizes it well:*

*"Success is no accident. It is hard work, perseverance, learning, studying, sacrifice, and most of all, love of what you are doing, or learning to do."*

### Residents 2019

Annie Wang - PGY-1



Zach Zhang - PGY-1



Jacques Zhang - PGY-2



Janine Roller - PGY-2



Nawaf Al Muqaimi - PGY-2



Sofie Schlagintweit - PGY-3



Daniel Demsey - PGY-4



Aaron Van Slyke - PGY-4



Stahs Pripotnev - PGY-4



Tyler Omeis - PGY-5



Diana Song - CIP



Peter Mankowski - CIP



## FELLOWSHIP PROGRAM



Erin Brown, MD, PhD, FRCSC

Eighty percent of graduating American Surgical Residents now apply for fellowship training, despite the opportunity costs associated with delaying independent practice. It would appear that an even greater proportion of graduating Canadian Plastic Surgeons seek fellowship training. However, unlike most Fellowships in the US, Canadian surgical fellowships do not lead to additional certification and appear to reflect a desire to obtain additional competence, confidence, and subspecialty skills for subsequent independent practice. UBC has demonstrated more than 20 years of commitment to this aspect of Plastic Surgery professional development. We offer subspecialty training in all of the major areas of Plastic Surgery (Breast Reconstruction, Craniofacial Surgery, Hand & Microsurgery, Paediatric Plastic Surgery, Aesthetic & Breast Surgery), other than Burn Surgery.

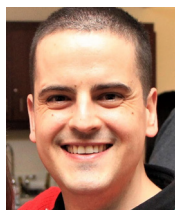
The philosophy of training at UBC remains to provide subspecialty level experiences to fully trained Plastic Surgeons, as opposed to "general" Fellowship programs (R6 year). UBC Plastic Surgery continues to evolve our delivery of training to reflect "universal challenges" recognized by the ACGME in the 1980s (impact on residency training, ensuring adequate skills and knowledge of graduating fellows and the experience of foreign-trained fellows). Given the ongoing development and expansion of Plastic Surgery Fellowship training in Canada I strongly believe that UBC should remain a leader in the promotion of the goals and standards of this critical component of professional development of our future colleagues.

### UBC Fellows July 1 2018 to June 30 2019



**JILL STONE**

Aesthetic Fellow  
Residency: University of Calgary  
July 1 to December 31, 2018



**PIETER VERMAAK**

Breast Reconstruction Fellow  
Craniofacial Fellow  
Residency: West Midlands Deanery, UK  
July 1, 2018 to June 30, 2019



**MARC SEIFMAN**

Craniofacial Fellow  
Residency: Monash University  
July 1, 2018 to December 31, 2018



**MUHAMMAD JAVED**

Breast Reconstruction Fellow  
Residency: Welsh Centre for Burns and  
Plastic Surgery, Wales Deanery Plastic  
Surgery Programme, UK  
January 1, 2019 to June 30, 2019



**CAITLIN SYMONETTE**

Hand & Microsurgery Fellow  
Residency: University of Western Ontario  
August 1, 2018 to June 30, 2019



**SILVIA KURTOVIC**

Aesthetic Fellow  
Plastic Surgery Residency: Duke University  
Medical Center, North Carolina  
General Surgery Residency: Cedar Sinai  
Medical Center, California  
January 1, 2019 to June 30, 2019

## UNDERGRADUATE UPDATE

I am delighted to write my first report as Undergraduate Director; it must be my first task to thank and congratulate Dr. Arko Demiancuk for his extraordinarily long service in this role.



Esta Bovill, MD, PhD, FRCSC

Dr. Demiancuk oversaw magnitudes of change in the approaches to undergraduate education, evaluation and curricula whilst successfully preserving the Division interest, motivation and quality in the face of what must have felt like an onslaught of relentless evolution.

One feature of modern educational theory is the principle of timely and multi-sourced feedback. Each of the ninety students passing through our service this year was subject to an eighteen point on-track / not-on-track computer based evaluation. Unfortunately, the risk of feedback fatigue and dilution on the part of the evaluators is grave. Often therefore, ironically, honest and useful appraisal remains given in the old fashioned face to face manner, on the ward, in the OR, in Emerg. But there is a positive.

I remember myself as a timid British MSI skulking at the OR door waiting for the sign-off signature from the Consultant, Mr. A. Dinosaur FRCS. My pass/fail would have depended on correct regurgitation of the sixteen differential causes of ulnar nerve entrapment. He would probably not know my name much less have seen me suture.

Post revolution, students (especially the best ones) demand feedback; they are forthright in asking for it and excited to hear both their strengths and weaknesses, genuinely seeking to improve both themselves as would-be surgeons and their chances of success. I believe this is an significant improvement

in the ethos of medical training. I also believe that what is potentially lost from decimating formal face to face education, must be preserved by sustaining our tenet of passing down knowledge from generation to generation. I consider this to be a particular strength of our Division. I'm not the only one. Turning the feedback tables, I have surveyed our students. Forty-five percent of visiting 4th year MSIs reported elevating UBC in their match ranking after their rotation here. The most common reason cited was the pastoral and educational guidance they were both offered and witnessed from the Residents and Faculty.

There are lots of other interesting 'learning opportunities' from this survey, but I will need to save them for future reports if I am going to last half as long as Arko.

## HOW I DO IT?

# Selecting the Most Appropriate Technique for Gender Affirming Masculinizing Chest Surgery



Krista Genoway , MD, FRCSC

Masculinizing chest surgery is among the most commonly preformed gender affirming surgical procedures. Patients seek “top surgery” as part of their gender transition in order to feel more congruent and aligned with their sense of self. Common patient goals include: an esthetically pleasing flat male contour, minimal or strategically placed scars, and a natural sensate nipple areolar complex. An overwhelming proportion of patients state their top priority is to have a flat chest.

Many techniques have been described for gender affirming masculinizing chest surgery. These techniques include; Free nipple graft / double incision, concentric circular / periareolar, keyhole, button hole, lollipop or fishmouth incisions. When selecting the ideal surgical technique four areas to consider are the presence of the

**FIGURE 1**

Complete mastectomy without removal of the IMF

1



2



**FIGURE 2**

Scar placement below the pectoralis major muscle in double incision technique

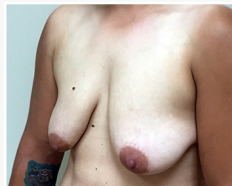
**FIGURE 3**

Pre & Post Operative Concentric Circular Technique

3



4



**FIGURE 4**

Pre & Post Operative Free Nipple Graft Technique



inframammary fold, the proposed scar location, the nipple areolar complex position and breast size / ptosis. In order to obtain a flat male contour the IMF must be removed. Any remnants of the fold will result in the appearance of a feminine chest even after a complete mastectomy has been preformed (*figure 1*). Access to the IMF is easiest via the free nipple graft technique. Unless the patients chest is extremely narrow minimal keyhole scar techniques prove challenging to access the medial and lateral breast boarders.

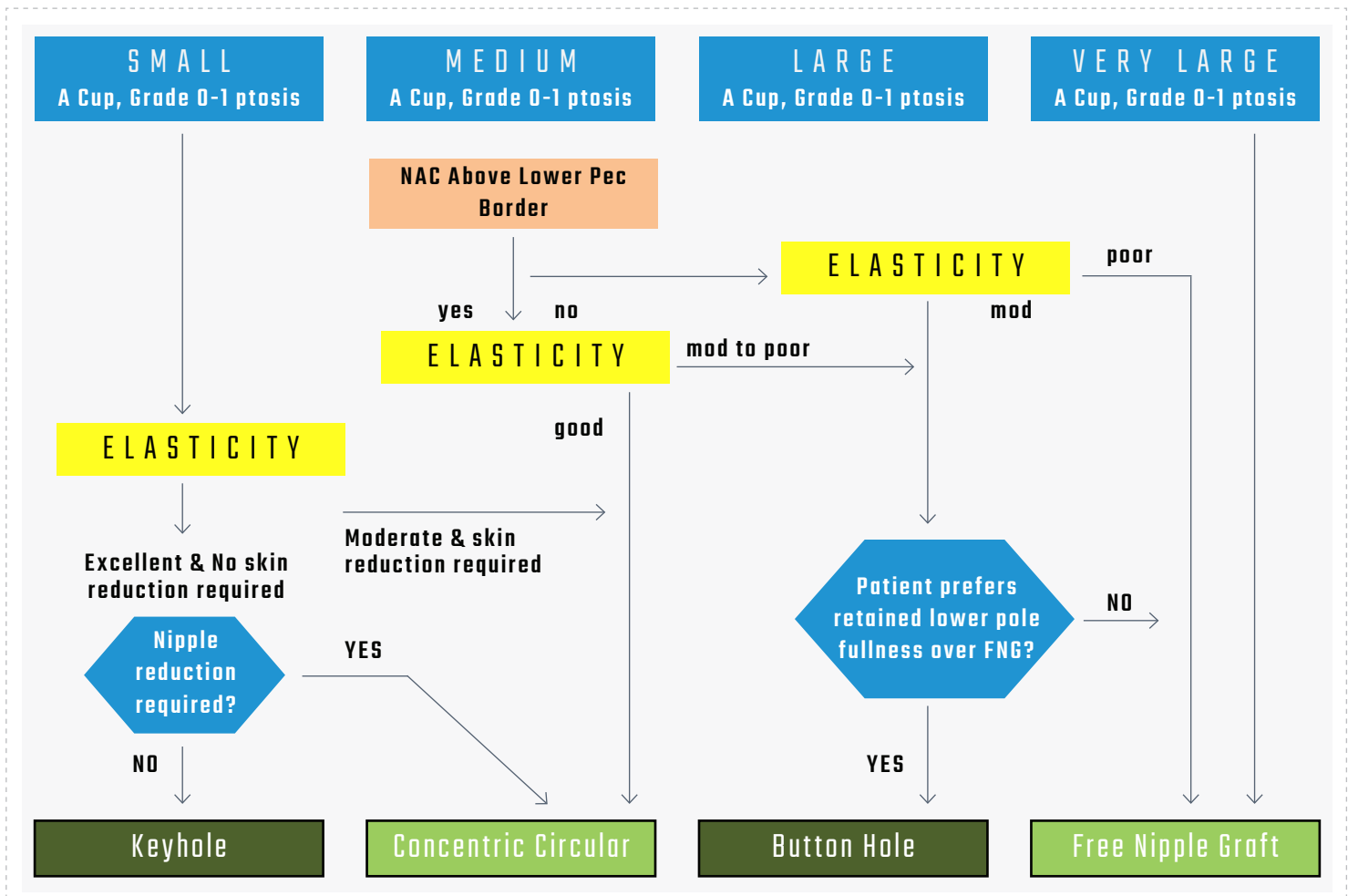
Scar location is an important consideration. Ideally fewer or well-placed scars produce the most natural and aesthetic chest. A key anatomic landmark of the male chest is the lower boarder of the pectoralis major muscle, not the IMF. Scars placed along this landmark produce a natural contour (*figure 2*)

Nipple placement is important in creating an esthetic male chest. Many techniques have been derived to help guide this placement. Utilizing the contour of the pectoralis major muscle can be helpful. The cis-male nipple frequently sits 1cm above the lower lateral boarder of the pectoralis major muscle. These landmarks and intra-operative visualization with the patient in

the upright position can aid in localizing the male nipple position. With the concentric circular technique an eccentric skin excision pattern can be utilized to slightly reposition the NAC. However, this repositioning is limited and poor nipple position may preclude a concentric circular technique even in small-breasted patients.

Breast size and ptosis are one of the most important factors in determining the ideal surgical technique. Patients with a nipple areolar complex above the lower boarder of the pectoralis major are often good surgical candidates for the concentric circular technique (*figure 3*). Patients with the NAC below the lower boarder of the pectoralis major despite breast size are better suited to a free nipple graft technique (*figure 4*). Similarly patients with larger breasts (>C cup) are better suited to a free nipple graft technique unless they are willing to accept fullness in the lower chest.

While individual patient factors ultimately dictate the ideal surgical technique for gender affirming chest construction, the proposed algorithm presents a reliable, reproducible approach to optimizing surgical outcomes in this patient group.



# NEW SURGEON SPOTLIGHT KATHRYN ISAAC



Kathryn Isaac, MD, FRCSC

## Clinical Office address:

808-1200 Burrard St  
Vancouver, BC V6Z 2C7

## Get in touch

Phone: 604-336-9488  
Fax: 604-336-9489

## Getting to Know Dr. Kathryn Isaac

### Q. WHERE YOU DID MEDICAL SCHOOL, RESIDENCY AND FELLOWSHIPS AND ANY OTHER DEGREES; WHAT ARE YOUR AREAS OF CLINICAL AND RESEARCH INTEREST?

I completed my undergraduate degree in Genetics at the University of Toronto. It was close to family and a great program so I stayed for another 9 years, completing medical school and residency. It was then time to explore and study elsewhere. I was fortunate to train at Boston Children's Hospital, completing a fellowship in Pediatric Craniofacial surgery and Vascular Anomalies, and then stayed to pursue a Masters of Public Health at Harvard University. Lastly, to complete my desired subspecialized training, I completed a Microsurgery fellowship in Winnipeg.

My main clinical interests are reconstructive breast surgery and lymphatic surgery. My research interests are founded in the fields of decision science, comparative effectiveness research, and health outcomes research. I plan to evaluate, develop, and propagate value-based care in breast reconstruction. Additionally, I am excited to study and contribute to the field of lymphatic anomalies and lymphatic surgery.

### Q. WHAT DO YOU SEE AS THE GREATEST CHALLENGE YOU HAVE FACED IN STARTING PRACTICE?

With a new job, in a new city, my husband and I are enjoying building a new home together here in Vancouver. The greatest challenge with starting a practice has been, oddly enough, living away from family. It is a big change and when there are so many new events occurring at once, you quickly learn what you easily adapt to and what you need to change and adjust to.

### Q. HOW DID YOU ENDEAVOR TO MANAGE IT?

Strong relationships, lots of facetime calls, and flights and flights.

### Q. WHAT ADVICE WOULD YOU GIVE CURRENT RESIDENTS AND FELLOWS ABOUT THE TRANSITION TO PRACTICE?

Difficulties are opportunities. Be kind to yourself.

### Q. WHERE DO YOU SEE THE PRACTICE OF MEDICINE GOING OVER THE COURSE OF YOUR CAREER?

Medicine has yet to capitalize on the opportunities of artificial intelligence. I anticipate there will be collective efforts to integrate information with AI that will advance the field of medicine and the delivery of care.

### Q. WHAT OPERATION DO YOU THINK WE WILL NOT BE DOING IN THE FUTURE THAT WE ARE DOING NOW?

The Charles procedure.

# PROTECT YOUR INCISIONS



## The PREVENA™ Incision Management System:

is intended to manage the environment of surgical incisions and surrounding intact skin in patients at risk for developing post-operative complication, such as infection, by maintaining a closed environment via the application of negative pressure wound therapy system to the incision. The PREVENA™ Dressing skin interface layer with silver reduces microbial colonization in the fabric.

## PREVENA™ Therapy can help:

- Hold incision edges together
- Remove fluids and infectious materials
- Act as a barrier to external contamination
- Deliver continuous negative pressure at -125mmHg up to 7 days

For more information, please visit [prevenatherapy.com](http://prevenatherapy.com)  
or call 1-800-668-5403 to schedule a meeting with  
your local KCI Representative

NOTE: Specific indications, contraindications, warnings, precautions and safety information exist for PREVENA™ Therapy. Please consult the applicable PREVENA™ System Clinician Guide instructions for use prior to application. This material is intended for healthcare professionals.

Copyright 2019 KCI Licensing, Inc. All rights reserved. Unless otherwise noted, all trademarks designated herein are owned or licensed by KCI Licensing, Inc., KCI USA, Inc., Systagenix Wound Management, Ltd., or Crawford Healthcare, Ltd. PRA-PM-CA-00064 (02/19)

## ACHIEVEMENTS



Sheina Macadam, MD, MHS, FRCSC

2018 was another productive year for the residents and staff of the UBC Division of Plastic Surgery. Our division and labs published a total of 27 journal articles in peer-reviewed publications and were awarded \$300,000 in grants. Our Pediatric group and Wound Healing Lab tie for the highest number of publications at 10 each! Dr. Douglas Courtemanche was awarded the Children's & Women's Medical Staff Association Recognition Award for his commitment to patient & family advocacy. Dr. Richard Warren continues his tenure as the 2017-2019 Traveling Professor for the American Society for Aesthetic Plastic Surgery. Dr. Erin Brown was selected to be the Deputy Editor for the Journal of Plastic, Reconstructive and Aesthetic Surgery. Drs. Sheina Macadam, Kathryn Isaac and Andrea MacNeill (General Surgery) were successful in securing a one million dollar donation to the breast reconstruction program. These funds will be used to improve the breast cancer patient journey via creation of a multidisciplinary clinic and to create a provincial research database.

### Congratulations!

**CONGRATULATIONS TO OUR MEMBERS WHO CONTINUE TO ENHANCE THE REPUTATION OF THE UBC DIVISION OF PLASTIC SURGERY. WE WOULD LIKE TO HIGHLIGHT THE FOLLOWING INDIVIDUALS:**

GRANTING AGENCY	TITLE	AMOUNT	PI
OPSEI SUMMER STUDENT RESEARCH PROGRAM GRANT	OUTCOMES OF PHARYNGEAL FLAP SURGERY IN PATIENTS WITH VELOPHARYNGEAL INSUFFICIENCY	\$3,200	DR. JUGPAL ARNEJA
MEDICAL ALLIED STAFF ENGAGEMENT SOCIETY (MASES)	BENCHMARKING MRI WAIT TIMES TO ENHANCE SERVICE DELIVERY TO PEDIATRIC PATIENTS IN BRITISH COLUMBIA AND THE YUKON	\$29,426	DR. JUGPAL ARNEJA
BC CHILDREN'S HOSPITAL RESEARCH INSTITUTE, EVIDENCE-TO-INNOVATION SEED GRANT	DOES TIMING MATTER? EARLY VS. LATE TYMPANOSTOMY TUBES PLACEMENT IN INFANTS WITH CLEFT LIP AND PALATE: A PILOT STUDY	\$5,000	DR. JUGPAL ARNEJA
UNIVERSITY OF BRITISH COLUMBIA SUMMER STUDENT RESEARCH PROGRAM GRANT	SURGICAL CORRECTION OF VELOPHARYNGEAL DYSFUNCTION IN CHILDREN WITH 22Q11.2DS DELETION SYNDROME	\$4,725	DR. DOUGLAS COURTEMANCHE
BC CHILDREN'S HOSPITAL FOUNDATION RARE DISEASE FOUNDATION MICROGRANT	SURGICAL CORRECTION OF VELOPHARYNGEAL DYSFUNCTION IN CHILDREN WITH 22Q11.2DS DELETION SYNDROME	\$3,450	DR. DOUGLAS COURTEMANCHE
UNIVERSITY OF BRITISH COLUMBIA SUMMER STUDENT RESEARCH PROGRAM GRANT	SUCCESSES AND CHALLENGES OF TRANSITION FROM PEDIATRIC TO ADULT CARE FOR INDIVIDUALS WITH 22Q11.2DS	\$3,200	DR. DOUGLAS COURTEMANCHE
BC CHILDREN'S HOSPITAL FOUNDATION RARE DISEASE FOUNDATION MICROGRANT	DESCRIBING THE POPULATION OF PATIENTS WITH 22Q11.2DS	\$5,000	DR. DOUGLAS COURTEMANCHE
UNIVERSITY OF BRITISH COLUMBIA SUMMER STUDENT RESEARCH PROGRAM GRANT	LONG-TERM OUTCOMES OF PATIENTS WITH UNRESECTABLE ARTERIOVENOUS MALFORMATIONS: A 25-YEAR CHART REVIEW	\$3,200	DR. DOUGLAS COURTEMANCHE



## UBC DIVISION OF PLASTIC SURGERY

GRANTING AGENCY CONT.	TITLE	AMOUNT	PI
BC CHILDREN'S HOSPITAL FOUNDATION RARE DISEASE FOUNDATION MICROGRANT	LONG-TERM OUTCOMES OF PATIENTS WITH UNRESECTABLE ARTERIOVENOUS MALFORMATIONS: A 25-YEAR CHART REVIEW	\$5,000	DR. DOUGLAS COURTEMANCHE
OPSEI SUMMER STUDENT RESEARCH PROGRAM GRANT	REVIEW OF VASCULAR ANOMALIES	\$1,600	DR. DOUGLAS COURTEMANCHE
BC CHILDREN'S HOSPITAL RESEARCH INSTITUTE, EVIDENCE-TO-INNOVATION SEED GRANT	OPIOID PRESCRIBING PATTERNS FOR CHILDREN IN BRITISH COLUMBIA	\$10,000	DR. DOUGLAS COURTEMANCHE
VANCOUVER COASTAL HEALTH RESEARCH INSTITUTE (VCHRI)	INNOVATORS' CHALLENGE AWARD	\$94,876	DR. AZIZ GHAHARY
iCORD/ RICK HANSEN INSTITUTE GRANT	A PILOT CLINICAL STUDY OF TREATING PRESSURE ULCERS IN PATIENTS WITH SPINAL CORD INJURY	\$22,500	DR. AZIZ GHAHARY
MITACS INC. / ACCELERATE / IRONWOOD CLAY COMPANY INC GRANT	INVESTIGATING THE EFFECT OF IRONWOOD CLAY ON SKIN FIBROBLASTS AND IMMUNE CELLS	\$30,000	DR. AZIZ GHAHARY
iCORD/RICK HANSON INSTITUTE SEED GRANT	PRESSURE INJURIES IN SCI PATIENTS: A NEW THERAPY FROM AN OLD DRUG	\$20,000	DR. DAVID GRANVILLE
UNIVERSITY OF BRITISH COLUMBIA SUMMER STUDENT RESEARCH PROGRAM GRANT	HEADS OR TAILS: WHAT IS THE BEST SPLIT THICKNESS SKIN GRAFT DONOR SITE?	\$3,200	DR. SALLY HYNES
BC CHILDREN'S HOSPITAL RESEARCH INSTITUTE, CLINICAL & TRANSLATIONAL RESEARCH SEED GRANT	IDENTIFICATION OF REJECTION-RESISTANT FIBROBLASTS FOR THE IMPROVEMENT OF TRANSPLANTATION OUTCOMES AND WOUND HEALING.	\$10,000	DR. SALLY HYNES
E2I (EVIDENCE TO INNOVATE) BCCH SEED GRANT	3D SURFACE IMAGING TO EVALUATE CLEFT USING LIP MANAGEMENT THERAPIES	\$5,650	DR. PETER MANKOWSKI
CSPS EDUCATIONAL FOUNDATION GRANT FOR A SURGICAL MISSION		\$2,500	DR. STAHS PRIPOTNEV
UBC DIVISION OF PLASTIC SURGERY ACADEMIC GRANT	MALAR BAGS AFTER LOWER LID BLEPHAROPLASTY AND FACELIFT: A RANDOMIZED CONTROLLED TRIAL OF THE EFFECTS OF TACROLIMUS	\$5,000	DR. STAHS PRIPOTNEV
2018 RESIDENT DOCTORS OF BC INNOVATION FUND	INNOVATION IN TECHNOLOGY: VIRTUAL REALITY IN SURGICAL TRAINING	\$2,500	DR. DIANA SONG
2018 RESIDENT DOCTORS OF BC INNOVATION FUND	RESIDENT PROJECTS: VIRTUAL REALITY IN ADDRESSING PHYSICIAN BURNOUT	\$2,500	DR. DIANA SONG
UNIVERSITY OF BRITISH COLUMBIA SUMMER STUDENT RESEARCH PROGRAM GRANT	EVALUATION OF INTERNAL ROTATION AND ELBOW FUNCTION FOLLOWING THE SUP-ER PROTOCOL IN CHILDREN WITH BIRTH RELATED BRACHIAL PLEXUS INJURIES	\$3,200	DR. CINDY VERCHERE
BC CHILDREN'S HOSPITAL RESEARCH INSTITUTE, EVIDENCE-TO-INNOVATION SEED GRANT	A QUANTITATIVE EVALUATION OF THE IMPACT OF PRESURGICAL ORTHOPAEDICS WITH TAPING ON FACIAL MORPHOLOGY IN THE CLEFT LIP AND PALATE POPULATION	\$5,650	DR. CINDY VERCHERE
2018 RESIDENT DOCTORS OF BC INNOVATION FUND	PATIENT CARE HEALTH CARE SYSTEM ADVANCEMENT	\$2,500	DR. ANNIE WANG

## AWARDS

<b>DR. DOUGLAS COURTEMANCHE</b>	<ul style="list-style-type: none"> <li>2018 C&amp;W Medical Staff Association Recognition Award - The Children's &amp; Women's Medical Staff Association.</li> </ul>
<b>DR. DANIEL DEMPSEY</b>	<ul style="list-style-type: none"> <li>Best Poster ABA Annual Meeting. Improved outcomes of renal injury following a burn injury. Chicago, 2018</li> </ul>
<b>DR. AZIZ GHAHARY</b>	<ul style="list-style-type: none"> <li>Robert B. Lindberg Basic Science Best Paper American Burn Association. Does Split Thickness Graft Grow from Bottom Up in Large Burn Injury?</li> </ul>
<b>DR. DIANA SONG</b>	<ul style="list-style-type: none"> <li>Best Plenary Presentation in Education Research. Department of Surgery 24th Annual WB and MH Chung Research Day Title: Imaging- Based 3D Printing for Improved Presurgical Planning.</li> </ul>
<b>DR. RICHARD WARREN</b>	<ul style="list-style-type: none"> <li>Travelling Professor for the American Society for Aesthetic Plastic Surgery 2017-2019 Whitaker Lecturer, University of Pennsylvania</li> </ul>

## PUBLICATIONS

<b>BURNS</b>	<ul style="list-style-type: none"> <li>Papp A, Sikora S, Evans M, Song D, Kirchhof M, Miliszewski M, Dutz J. Treatment of Toxic Epidermal Necrolysis by a Multidisciplinary Team. A Review of the Literature and Treatment Results. Burns 2018;44:807-815.</li> <li>Pripotnev S, Papp A. Split Thickness Skin Graft Meshing Ratio Indications and Common Practices. Burns 2018;43:1775-1781.</li> </ul>
<b>WOUND HEALING LAB/BASIC SCIENCE</b>	<ul style="list-style-type: none"> <li>Elizei SS, Pakyari M, Ghoreishi M, Kilani R, Mahmoudi S, Ghahary A. IDO-expressing fibroblasts suppress the development of Imiquimod-induced psoriasis-like dermatitis. Cell Transplant. 2018;(3):557-570.</li> <li>Farrokhi A, Pakyari M, Nabai L, Pourghadiri A, Hartwell R, Jalili RB, Ghahary A: Evaluation of detergent-free and detergent-based methods for decellularization of murine skin. Tissue Eng Part A. 2018;24(11-12):955-967.</li> <li>Haage A, Goodwin K, Whitewood A, Camp D, Bogutz A, Turner CT, Granville DJ, Lefebvre L, Plotnikov S, Goult BT, Tanentzapf G. Talin autoinhibition regulates cell-ECM adhesion dynamics and wound healing in vivo. Cell Rep. 2018;25(9):2401-2416.</li> <li>Jalili RB, Kilani RT, Li Y, Khosravi-Maharlooie M, Nabai L, Wang EHC, McElwee KJ, Ghahary A. Fibroblast cell-based therapy prevents induction of alopecia areata in an experimental model. Cell Transplant. 2018;(6):994-1004.</li> <li>Malic C, Logsetty S, Papp A, Izadpanah A, Cheng H, Cooper M, Bussieres A, Nickerson D, Perreault I, Jeschke M: The development of a treatment pathway for dermal regeneration matrix. Burns. 2018;44(7):1767-1774.</li> <li>Mohammadreza Pakyari, Ali Farokhi, Reza B. Jalili, Ruhangiz T. Kilani, Erin Brown and Aziz Ghahary. Local expression of indoleamine 2,3 dioxygenase prolongs allogenic skin graft take in a mouse model. Advances in Wound Care 2018;8(2): 58-70.</li> <li>Papp A, Hartwell R, Evans M, Ghahary A: The safety and tolerability of topically delivered kynurenic acid in humans. A Phase 1 Randomized Double-Blind Clinical Trial. J Pharm Sci. 2018;107(6):1572-1576.</li> <li>Russo V, Klein T, Lim DJ, Solis N, Machado Y, Hiroyasu S, Nabai L, Shen Y, Zeglinski M, Zhao H, Oram C, Lennox PA, Van Laeken N, Carr NJ, Crawford RI, Franzke CW, Overall CM, Granville DJ. Granzyme B is elevated in autoimmune blistering diseases and cleaves key anchoring proteins of the dermal-epidermal junction. Sci Rep. 2018;8(1):9690.</li> </ul>

**PUBLICATIONS CONT.****WOUND  
HEALING  
LAB/BASIC  
SCIENCE**

- Shen Y, Zeglinski M, Turner C, Raithatha S, Wu Z, Russo V, Oram C, Hiroyasu S, Nabai L, Zhao H, Bozin T, Westendorf K, Kopko I, Huang R, Arns S, Tan J, Zeng H, Boey A, Liggins R, Jaquith J, Cameron D, Papp A, Granville D. Topical Small-molecule granzyme B inhibitor improves remodeling in a murine model of impaired burn wound healing. *Exp. Mol. Med.* 2018;50:68-78.
- Zhang Y, Warnock GL, Ao Z, Park YJ, Safikhan N, Ghahary A, Marzban L: Amyloid formation reduces protein kinase B phosphorylation in primary islet beta cells which is improved by blocking IL-1beta signalling. *PLoS One.* 2018;13(2):e0193184.

**BREAST**

- Seal S, Hewitt MK, Brasher PMA, Martin M, Lennox PA, Macadam SA. Pre-operative and postoperative assessment of rectus abdominis muscle size and function following deep inferior epigastric perforator (DIEP) surgery. *Plast Reconstr Surg* 2018;141(5):1261-1270.
- Van Slyke AC, Carr M, Carr N. Not all breast implants are equal: A 13-year review of implant longevity and reasons for explantation. *Plast Reconstr Surg.* 2018;142(3), 281e-289e.

**PEDIATRIC**

- Bjornson L, Bucevska M, Tilley P, Verchere C. Is it safe to re-access sodium bicarbonate bottles for use in minor surgery? *J Ped Surg.* 2018;53(11):2290-2293.
- Dahiya A, Courtemanche R, Courtemanche DJ. Multidisciplinary cleft palate program at BC Children's Hospital: Are we meeting the standards of care? *Plastic Surgery.* 2018;26(2):85-90.
- Felton M, Lee JW, Balumuka DD, Arneja JS, Chadha NK. Early placement of ventilation tubes in infants with cleft lip and palate: A systematic review. *Otolaryngol Head Neck Surg.* 2018;158(3):459-464.
- Gorman J, Zbarsky SJ, Courtemanche RJM, Arneja JS, Heran MKS, Courtemanche DJ. Image guided sclerotherapy for the treatment of venous malformations. *CVIR Endovascular.* 2018;1(1):2.
- Klassen AF, Riff KWW, Longmire NM, Albert A, Allen GC, Aydin MA. Psychometric findings and normative values for the CLEFT-Q based on 2434 children and young adult patients with cleft lip and/or palate from 12 countries. *CMAJ.* 2018;190(15):E455-E462.
- Malhotra AK, Amed S, Bucevska M, Bush KL, Arneja JS. Do adolescents with gynecomastia require routine evaluation by endocrinology? *Plast Reconstr Surg.* 2018;142(1):9e-16e.
- Mijovic H, Henkelman E, Goldfarb DM. "Finding Gory" – Bringing home an unwanted aquatic traveler. *Paediatrics & Child.* 2018;20(20):1-3.
- Roller JM, Courtemanche RJM, Courtemanche DJ. A review of validated quality-of-life patient-reported outcome measures in pediatric plastic surgery. *Plast Reconstr Surg.* 2018;142(5):694e-707e.
- Shih JG, Knox ADC, Zhygan N, Courtemanche DJ, Fish JS, Brown MH. Towards the assessment of core procedural competencies amongst Canadian plastic surgery residents. *Plast Reconstr Surg.* 2018;142(6):958e-967e.
- Tang J, Arneja JS. Are dog bites a problem of nature or nurture? *Plastic Surgery,* 2018;26(4):297-298.

**EDUCATION**

- Lammers D, Zhang Z, Povieriena I, Pipe A. Students working against tobacco: A novel educational program to improve Canadian medical students' tobacco counselling skills. *Can Med Ed J.* 2018;9(2):e72.

**LOWER  
EXTREMITY**

- Nickel K, Van Slyke AC, Knox A, Wing K, Wells N (2018). Tissue expansion for severe foot and ankle deformities: a 16-year review. *Plastic Surgery.* 2018;26(4), 244-249.

**HAND**

- Seal A, Stevanovic M. Free Functional Muscle Transfer for Thumb Opposition. *Plast Reconstr Surg Glob Open.* 2018;6(5):e1736.



Jugpal Arneja, MD, MBA, FRCSC

*Competition has been shown to be useful up to a certain point and no further, but cooperation, which is the thing we must strive for today, begins where competition leaves off.*

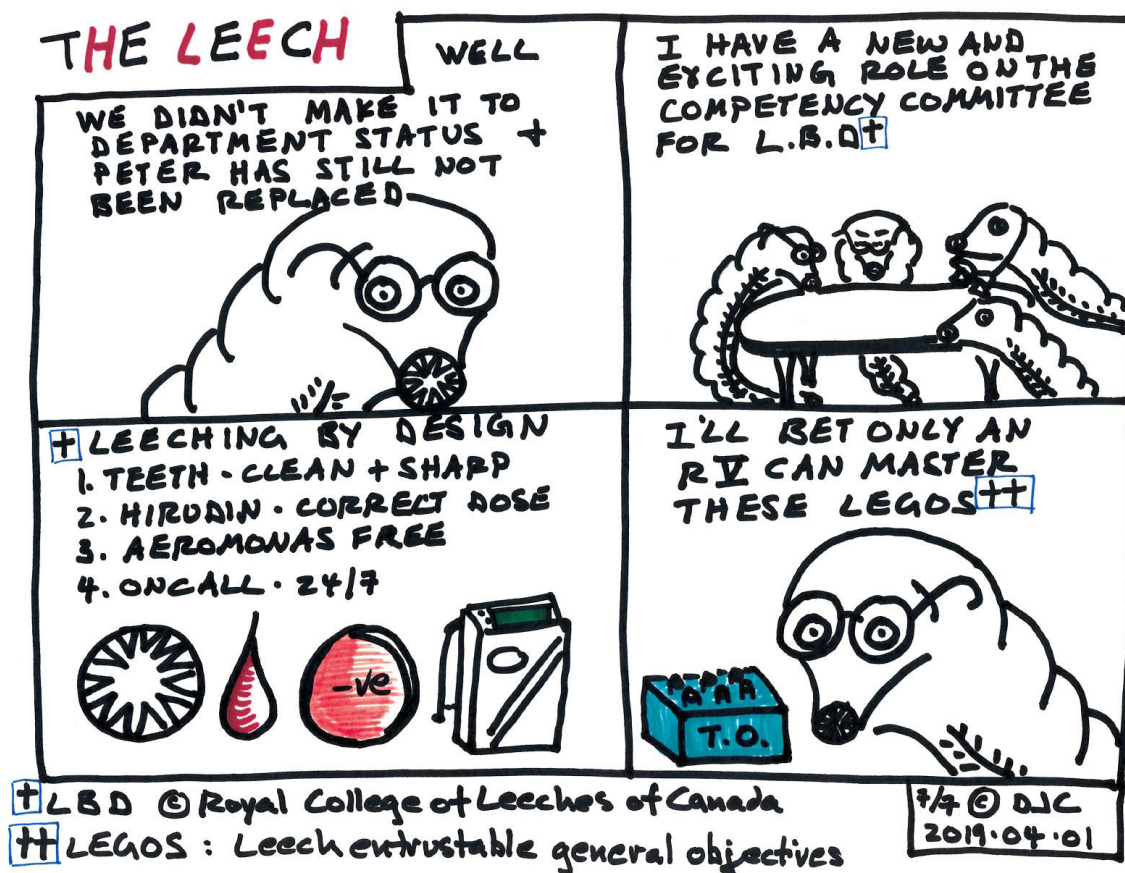
*-Franklin D. Roosevelt*

## EDITOR'S NOTE

Plastic surgery is unique in the world of surgery in that our specialty does not "own" an anatomical region. More and more specialties in both the aesthetic and reconstructive world seem to surgically creep into our domain and in fact have the opportunity to assume procedures plastic surgeons once pioneered. Notwithstanding transplantation, the one and only Nobel Prize awarded to a plastic surgeon (and something we never really owned), aesthetic surgery, microsurgery, burn surgery, hand surgery, breast reconstruction, and even pediatric plastic surgery all now have our surgical subspecialty colleagues in the mix.

Although Socialized Health care systems inherently stifle innovation as patients cannot access in a timely way services already insured (so how is it possible to pay for new programs), as Roosevelt notes, collaborative participation certainly can keep us in the innovation mix. The preceding pages show clear clinical and research examples of the same; plastic surgery stakeholding in team-based programs such as genitourinary reconstruction, lymphedema/vascular anomalies, burns, cleft/craniofacial, and breast reconstruction paves the way for a bright future. The competitive "medispa" model of plastic surgical practice may well be sustainable for the individual practitioner, but likely doesn't portend sustainability for the specialty, given the opportunity cost calculus at play. As an esteemed mentor of mine once articulated, if you are not at the table, you are probably on the menu!

Many thanks to Acelity for sponsoring this edition of the Pedicle, to Mo, Parm, and Norine for all they do, and to our colleagues, trainees and most importantly our patients, for making us better.



## Support Us

If you are interested in financially supporting any of the UBC Division of Plastic Surgery Programs please contact Maureen Berard at 604.875.4084.