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Toronto Pulse

United in a Tradition of Leadership, Excellence & Discovery

Official Newsletter of the University of Toronto's Division of Vascular Surgery

Special Interest Articles:

- New U of T Advanced Aortic Surgery Fellowship
- Fellow Profile Dr. Rakesh Rambally
- Faculty Profile Dr. Mark Wheatcroft

What's inside:

Chair's Column

Let's get personal for a moment. The next time you walk past your local cancer centre pay attention to the signs, the branding and the message. I'll bet you won't have to look too hard to see reference to personalized or precision medicine. Our oncology colleagues have completely invested in these principles and it's easy to see why. The concept of personalized medicine involves therapeutic strategies that take individual variability into account. This strategy has resonated with patients, funding agencies, philanthropists and the government. In the U.S., President Obama announced a new precision medicine initiative in his 2015 State of the Union Address, and more recently we've seen these ideas reflected in Vice-President Biden's "moonshot" to cure cancer. All well and good, but what about vascular surgery? Let's see … making therapeutic decisions at the individual patient level … taking patient variability into account…whether its anatomy, comorbidities, genetic profile… isn't this what we do every day? Of course it is! We just haven't been as forthright in owning it, or broadcasting it. As we discussed at a recent City-Wide Rounds, we are further along the path to personalized vascular therapy than we think. In a practical sense, we do it every day, whether its custom devices for aortic therapy, applying data from registries and randomized controlled trials to individual patients, or using genetic information to make recommendations regarding medical, surgical or endovascular therapy, we regularly make recommendations "taking individual patient variability into account".
So the time has come for us to not only practice personalized medicine, but to own it, to broadcast it, to leverage it. Personalized Vascular Therapy, has a nice ring to it, eh?

Dr. Thomas Forbes

Introducing the Blair Foundation Vascular Surgery Innovation Fund

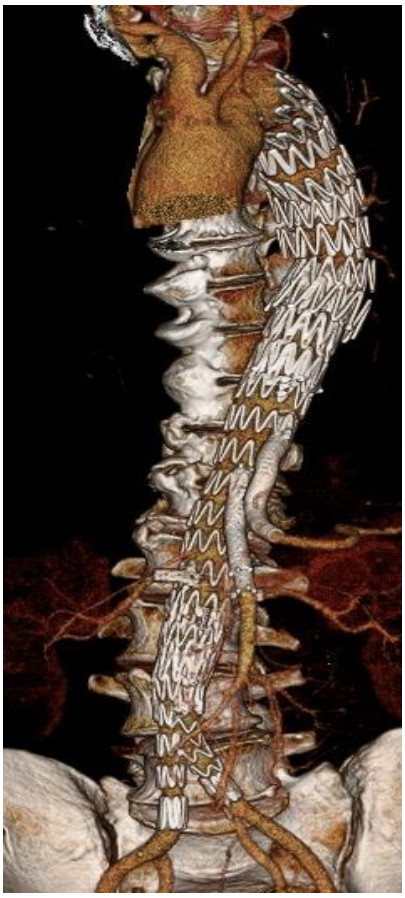
We are excited to announce the introduction of the Blair Foundation Vascular Surgery Innovation Fund at U of T. The Blair Foundation is enhancing its ongoing commitment to research and development within the Vascular Surgery community through a research fund with The University of Toronto, for a three year term.

This new commitment establishes the Blair Foundation Vascular Surgery Innovation Fund at the University of Toronto, which aims to support investigator sponsored research in vascular disease, with recipients subject to internal UofT peer review.

Special thanks to David Grieco, Senior Development Officer in the Office of Advancement in the Faculty of Medicine at U of T.

The inaugural grant competition is underway with an application deadline at the end of January. The goal of the Fund is to provide research support for the outstanding investigators within our U of T Division. Special thanks to William Blair and the Blair Foundation for their continued support of vascular surgery, and, specifically, our University of Toronto Division.

Training Tomorrow's Aortic Surgeons



The first U of T Advanced Aortic Surgery Fellow will begin a two year clinical and research fellowship in July 2016. The Fellowship is a joint educational program of the University of Toronto's Divisions of Cardiac Surgery and Vascular Surgery and is administered by Co-Program Directors, Drs. Chris Caldarone and Thomas Forbes. The Program Committee is also comprised of cardiac and vascular surgeons from St. Michael's Hospital, Sunnybrook and UHN.

The Fellowship provides specialized and advanced training in open and endovascular surgery for thoracoabdominal aortic pathologies (including aneurysms and dissections), beyond that of Cardiac Surgery and Vascular Surgery residency training. The Fellowship will take place in a multidisciplinary, multispecialty, multihospital, academic environment where the best surgical treatment (open and/or endovascular repair) is chosen for each patient.

The Advanced Aortic Fellow will rotate among three academic hospitals: St. Michael's Hospital, Sunnybrook and UHN. During his/her rotation at each hospital the Fellow will participate in all aspects of the planning, surgery (endovascular and open) and postoperative care of all patients with elective and emergent thoracoabdominal aortic pathologies presenting to that hospital. Coordination of clinical activities between the hospitals and Divisions have made this fellowship possible.

A research component is an important and exciting part of the Fellowship and several opportunities exist in basic and clinical science research depending on the Fellows background and career interests.

We're excited to welcome our first fellow in July.

This unique fellowship would not be possible without the generous support of our industry partners including **Cook Medical**, **Gore** and **LivaNova** (formerly Sorin). Thank you for your enthusiastic support.

An eventful trip to Toronto for one patient

You never know who you'll meet in the Toronto hospitals! Her Royal Highness The Princess Edward Countess of Essex visited UHN in the fall and one of our patients from northern Ontario had the opportunity to meet her and have a chat. The meeting was captured in this photograph and tweeted by UHN CEO Dr. Peter Pisters.

With having a life-saving vascular procedure and meeting royalty, our patient says she'll have to visit Toronto more often!

Fellow Profile – Dr. Rakesh Rambally

Describe your surgical background and current practice?

Dr. Rakesh Rambally

I completed my general surgery residency from the University of The West Indies (in Trinidad &Tobago) in December of 2013. Since then I have taken up a consultancy post as a general surgeon. A general surgeon's practice in Trinidad & Tobago includes the management of traumatic vascular injuries, vascular access for hemodialysis, varicose veins and infrequent lower limb salvage procedures. I am also involved in the training of medical students and surgical residents from the University of the West Indies.

What is the status of vascular surgery in Trinidad &Tobago ?

The majority of our nation's population of 1.3 million seek health care at our public institutions and are not able to access the services of a vascular and endovascular surgeon and are thus deprived of this specialized care. Too numerous are the instances that we cannot intervene as the possible harm done without the surgical expertise and know-how greatly outweighs the benefits. For example less than 2% of patients who have had a major amputation have had any attempt at limb salvage. Aortic & Carotid interventions are the rarity despite a higher incidence of cardiovascular disease and stroke than North America.

Why did you come to the University of Toronto ?

Since Banting and Best Nobel Prize in 1923, U of T has been Canada's leading centre of excellence for innovation in medicine and research. My goals of conducting original research and collaborating in the development of curriculum and training of medical students and surgical residents. It is with this mindset that U of T would be the best fit for me to grasp the fundamentals of vascular surgery.

What do I hope to take back home and its potential impact on the citizens back home ?

I have been requested and supported by my department to twin the initiation of a vascular and endovascular service at my tertiary, public and teaching hospital with my further vascular development. I would like to take back the necessary skill set needed to offer the endovascular option which is quickly becoming the standard of care for most vascular occlusive disease.

U of T Vascular Surgery in the News

Dr. Elisa Greco was profiled in December's SVS Member Spotlight in the Vascular Specialist. Congratulations Dr. Greco

SVS Member Spotlight

Canadian Member Aids Patient with First Use of Graft in Toronto

Vascular surgeon and Society for Vascular Surgery member Dr. Elisa Greco is the first – and thus far only – physician in Toronto, Ontario, Canada, to use a hybrid vascular graft for dialysis access.

Health Canada approved the use of the device earlier this year, Dr. Greco said. It has been available commercially in the United States since mid-2011 but as of late October, it had been used only a handful of times in all of Canada.

Because of her employment of the graft, one of Dr. Greco's dialysis patients in Toronto has spent the past several months free from complications.

Dr. Greco's patient is in her mid-50s and undergoes dialysis in Toronto three times a week. She had been coming in once a month for angioplasty procedures on her fistula, which was failing because of multiple areas of stenosis. The patient also has no other fistula options on either arm.

Dr. Greco's procedure has meant an end to the angioplasty procedures. "Since putting in this graft she has not had any problems with her dialysis access and has not had to come in any extra time for secondary procedures," Dr. Greco said.

Among other uses, the hybrid graft permits access for hemodialysis

DR. GRECO

in patients with compromised veins, permitting better blood flow. (It also can be used for lower extremity bypass procedures.)

Dr. Greco, who specializes in renal access, said venous anastomosis is a frequent issue in her patient population. It results in stenosis, which leads to reduced flow and possible thrombosis. Patients then must undergo a fistulogram to pinpoint the site of the narrowing, followed by balloon dilation or insertion of a stent.

"If it happens once, it usually recurs," said Dr. Greco of access difficulties. "It's a problem, and it's a cost to the (health) system" for repeated appointments, stays and other associated medical costs.

Pre-emptively inserting the hybrid graft should prevent the complication of stenosis, said Dr. Greco, an SVS member whose research interests include vascular enhanced recovery, research in education and wound management in diabetic foot ulcers. Though inserting the stent punctures the vein, it is essentially a minimally invasive procedure, she said.

"The vein doesn't go through the same trauma as if the graft were hand-sewn," she added. "It's a proactive procedure, so hopefully there will be less need for re-intervention."

New Goerc Scholarships for SSTP Residents

Dr. Trisha Roy
Vascular Surgery PhD student enrolled in Surgeon Scientist Training Program

The U of T Department of Surgery's Surgeon Scientist Training Program is a unique program where surgical residents receive top notch research training as they pursue a career as an academic surgeon. Many of our current faculty are graduates of this program, including the Division Heads at the 3 academic hospitals, Drs. Al-Omran (SMH), Dueck (SB) and Lindsay (UHN).

Currently there are three U of T vascular surgery residents enrolled in the SSTP including Dr. Trisha Roy (supervised by Drs. Andrew Dueck and Graeme Wright), Dr. Mohamad Hussain (supervised by Dr. Mohammed Al-Omran), and Dr. Sean Crawford (supervised by Drs. Thomas Forbes and Cristina Amon). Next year they will be joined by Dr. Konrad Salata who will also be supervised by Dr. Al-Omran.

In support of these future leaders and academic vascular surgeons we are extremely excited to announce the introduction of a scholarship program. This was made possible through the generous donation from the estate of Mr. Frank Goerc. We are very grateful for the generosity of the family and would also like to thank David Grieco, Senior Development Officer in the Office of Advancement in the Faculty of Medicine at U of T for stewarding this gift.

These Goerc Scholarships will be awarded annually and will ensure the continued support of our SSTP residents, tomorrow's leaders in academic vascular surgery.

Dr. George Oreopoulos
U of T Vascular Surgery Residency Program Director

Awards

Congratulations to Dr. George Oreopoulos

Dr. Oreopoulos' leadership and expertise in surgical education has been recognized with his appointment as the Director of Postgraduate Surgical Education for University Health Network. He was also awarded the 2015 Ross Fleming Award for Excellence in Surgical Education.

Congratulations to Dr. Ahmed Kayssi

Dr. Ahmed Kayssi & Dr. David Armstrong (University of Arizona)

Dr. Kayssi, a final year vascular surgery resident in the U of T training program, was awarded a 2016 Detweiler Travelling Fellowship by the Royal College of Physicians & Surgeons of Canada. This Fellowship is intended to improve the quality of medical and surgical practice in Canada by enabling the recipient to visit other medical centres to study or gain experience in the use or application of new knowledge or techniques or to further the pursuit of a project relevant to clinical practice or research. Ahmed plans on visiting U.S. centres to gain experience in advanced, multidisciplinary limb salvage techniques and strategies.

Faculty Profile – Dr. Mark Wheatcroft


Dr. Mark Wheatcroft

Dr. Wheatcroft is an Assistant Professor of Surgery with a clinical practice at St. Michael's Hospital and leads the U of T Vascular Surgery Fellowship Program.

Where were you born?
MW: Chesterfield, United Kingdom

Tell us about your family?
MW: My wife Allison, and my 2 fantastic children, Thomas (13) and Ellena (10).

Who were your mentor(s)?
MW: My first exposure to vascular surgery was with Mr Sandy Jenkins at the Royal Infirmary Edinburgh. He was a great "old school" surgeon, hugely respected, and was definitely part of the reason I chose to do vascular surgery. Mr Sewa Singh was the chief vascular surgeon in Doncaster and essentially trained me in open vascular surgery. He is the most honest (sometimes brutally!) physician I have met and a very shrewd surgeon and leader, a great role model. Finally, there are all the great surgeons I met on my fellowship and now have the privilege of working with. In particular Dr Lindsay and Dr Lossing were superb mentors for EVAR and open aortic surgery and Dr Campbell was a magnificent mentor in my first year on Staff at St Mike's.

What are the biggest changes you've noticed during your career?
MW: The endovascular revolution; it was already underway when I started but not widespread. Many people could not understand why I was choosing vascular surgery as a career, predicting its imminent demise to endovascular techniques performed by radiologists. How wrong were they?!

What are the biggest challenges or opportunities that exist for a young vascular surgeon?
MW: The biggest challenge I think remains striking the optimal work-life balance. Despite trainee working hours reducing and training methods becoming more focused and efficient, vascular surgery remains (and always will be) a demanding, time consuming and often stressful specialty. Being able to successfully balance work with a busy family life is a challenge I'm still working on.

What are your hobbies in your spare time?
MW: Road cycling. It is a demanding sport but can take you to some of the most beautiful places / scenery. It does take up a lot of time achieving the fitness required to compete, but tearing along in a pack of 100 riders is an awesome feeling. The underlying bike technology, sports physiology and nutrition are also fascinating academic areas. I ride as much as my time will allow and try to get a decent ride in most mornings before work. My favorite ride was last summer in the French Alps when I climbed the legendary Alpe d'Huez alongside my son, Thomas.

What is your favorite sports team?
MW: I'm a bit unusual in that I've never really had a team or a sport that I avidly support / watch, instead favoring to be out on my bike at every opportunity. In the last few years British Cycling has done an amazing job of promoting and cleaning up the sport from the scourge of performance enhancing drugs and so I support their riders wholeheartedly.

Upcoming Events & Meetings

Feb 18th	U of T Vascular Surgery City-Wide Rounds, University Club of Toronto
April 22 2 23rd	Winnipeg Vascular & Endovascular Symposium, Winnipeg, Manitoba
April 26-29th	Charing Cross Symposium, London, UK
May 1st	Abstract Submission Deadline for Research Day
May 5th	U of T Vascular Surgery City-Wide Rounds, University Club of Toronto
May 7th	National Capital Vascular Symposium, Ottawa, ON
May 13th	Gallie Day
May 25th	Pacific Northwest Endovascular Conference, Seattle, Washington
June 3rd	U of T Vascular Surgery Research Day, University Club of Toronto
June 8-11	SVS Vascular Annual Meeting, National Harbour, MD

This year's K. Wayne Johnston Lecturer will be Dr. Melina Kibbe from Northwestern University in Chicago

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We welcome your support

K. Wayne Johnston Lecture in Vascular Surgery – This is held annually at our Research Day and gives our faculty and residents the opportunity to learn from a world leader in our specialty.

Division of Vascular Surgery Chair's Fund – This fund allows for continued support of our residency and fellowship programs, research support and continuing medical education and professional development.

Donations can be made online at donate.utoronto.ca/surgery or by cheque to:
The Office of Advancement
c/o David Greico
6 Queen's Park Crescent West
Toronto, ON M5S 3H2

Congratulations to Dr. Clint Robbins, Peter Munk Chair in Aortic Disease & U of T Vascular Surgeons Drs. Barry Rubin, John Byrne & Cale Zavitz (resident) & colleagues, including Dr. Maral Ouzounian, our colleague from the Division of Cardiac Surgery. This research team has their work featured on the cover of February's Nature Immunology. Dr. Robbins and colleagues were able to show that arteries are colonized by macrophages from different origins. Congratulations & well done!

Contribute to our Newsletter

Story ideas, articles, photos or comments are welcome for upcoming issues, please send them to vascular.admin@utoronto.ca or thomas.forbes@uhn.ca

Moving, or do you know someone else who would like to receive this newsletter? Please let us know.

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