UNIVERSITY OF TORONTO

The Surgical Spotlight

ON ALUMNI, FACULTY, RESIDENTS & FRIENDS OF THE DEPARTMENT OF SURGERY

SPRING 2010

10 Questions from an Interview with Richard Reznick[1]

CURRENT SURGERY CHAIR TO ASSUME THE ROLE OF DEAN OF THE FACULTY OF HEALTH SCIENCES AT QUEEN'S UNIVERSITY

Cheryl and Richard Reznick

Q1: *Why are you leaving and going to Queen's University in July as the dean of the Medical School?*

A: This is one of the greatest surgical departments in the world, with spectacular talent in all disciplines and wonderful programs. I have been the chairman for nearly 8 years. I think that during the next two years I would participate in incremental changes, not transformative ones. We are all restless to some extent; restless for change, restless for a new challenge.

Eight years ago I was offered the opportunity to become dean at another medical school but took this job instead. So I've thought a lot about what it means to be a dean. I feel I am now poised and ready for a dean's role. The orbit of a dean is different; there is more involvement with government, with the boards of all the affiliated hospitals, and an opportunity to serve as the point of contact for the university with the Ministries of Education and Health. The enterprise is more complex; it includes all the basic science disciplines, and the deans participate more on the national stage. The 17 deans of medicine in Canada meet regularly and advocate for the research enterprise on a national level.

1 Richard Reznick and I concluded that we would collaborate on this interview in lieu of his final column. Richard, we thank you for all you have done for each of us. We wish you continued success in the next exciting iteration of your remarkable career. Ed.

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Q2: *Can you give some examples of opportunities you have had to participate in transformative change?*

A: I had the opportunity to revamp the licensure examination for physicians in Canada, introducing the OSCE exam. I was given the opportunity by Alan Hudson and Arnie Aberman to form the Wilson Centre. The Wilson Centre is now a research centre - its subject is education, but it is a research centre with significant publications, grants, eleven scientists and twenty graduate students per year. We have trained 30 surgeons to the Masters level in Education, many in skills-related activity. Brian Hodges is doing a spectacular job as director, expanding the programs I was privileged to start as the first director. Allan Okrainec and his international telesurgery program is a product of this focus, populating a new concept in international training (*Teaching Minimal Access Surgery in Africa Using Skype,* The Surgical Spotlight, Winter 2009; http://www.surgicalspotlight.ca/Article.aspx?ver=Winter_2009&f=AfricaSurgerySkype)

In the Wilson Centre, our checklist project on communication with Lorelei Lingard led to significant changes in the operating room and formed the basis for the international surgical checklist project, so well executed at the University Health Network by Bryce Taylor and his colleagues and at other sites throughout the world. (http://www.surgicalspotlight.ca/Article.aspx?ver=Winter_2009&f=Main) [All surgical readers will enjoy Atul Gawande's recently published book "The Checklist Project", in which Atul gives appropriate credit to Lingard and Reznick as initiators. Ed]. The important lesson from this project is that it is not enough to learn the motor skills required for performing an operation - it's critical to know how to make it all work safely.

I am extremely proud of our Surgical Skills Centre at Mount Sinai Hospital. This centre, under the leadership of Helen MacRae and stewardship of Lisa Satterthwaite, has become known world-wide. It has been a fantastic addition to our surgical education programs.

The new concept of a Competency Based Program for training surgical residents being developed in the orthopaedic division is the most exciting project I have had the opportunity to work on in my twenty-year career. It is currently at the proof of principle stage, but will potentially compete with the Halstedian model dominant throughout the world. Its goal is to meet the current challenges we face in training by creating a very different educational model. If we are to train surgeons who are better than we are, we will have to change, and change fundamentally.

Q3: *I know you don't like the word legacy because it is too pretentious. For the moment, what would you say best describes your most important contribution?*

A: I believe my most important contribution is helping to establish surgical education as a bona fide academic focus. Twenty years ago 98% of surgical chairs would have discouraged a young faculty member from pursuing education as an academic route. Today, almost all surgical chairs would be supportive.

In the microcosm of the department, my most important contribution has been to be the glue binding the department together. I've cared about each faculty member, and worked hard to help them. I think that if they were asked a two part question about caring and helping, they would probably answer 'yes' to both. Importantly, all our division heads and surgeons-in-chief do the same thing.

Q4: *How did that come about?*

A: During my first year, I met with every surgeon in the faculty. I took University Rounds and Gallie Day seriously to bind the department together, reminding us of our unity. I tried to be present in some division every week - at a dinner, a retreat, a fund raiser; providing the departmental glue.

Q5: *What are you proud of?*

A: The department has come together more. There is a sense of partnership, belonging and coherence around sensible goals like the Spine Program, the Integrated Trauma Program and the Bariatric Program. One hospital couldn't provide these programs in their entirety, but a consortium of up to five or six hospitals could. The bariatric program in particular is proving that we can work as a consortium of hospitals as "The University of Toronto Bariatric Surgery Program". It's a unique entity that we took to the government, and it was adopted and funded on the strength of a collective and comprehensive approach.

There is now near total compliance with our departmental practice plans. This is bringing about a cultural change to team practice instead of a solo practitioner mindset. Eighty new surgeons and scientists have been hired out of our faculty of 250. This has been incredibly rewarding. We brought Humber Hospital, Trillium, Credit Valley and North York Hospital into the University family, enhancing the sphere of Toronto surgical training. Our trainees need a breadth of experience that is best provided across a spectrum of hospitals.

I introduced the mandatory search process in order to bring all the right people together, so that when the memoranda of agreement of new surgeons are signed, all those necessary to help them reach their goal are at the table and committed to their success.

Q6: *What is the Karolinska prize* that you have recently received ?*

A: The Gunnar Hoglund and Anna – Stina Malmborg Foundation insightfully recognized that the Karolinska celebrates excellence in science and medicine with the Nobel prize, but medical education, the foundation of these disciplines, is not similarly recognized. They founded this prize to recognize contributions to medical education. I will be the fourth person to receive it, shared this year with Professor David Irby from the University of California in San Francisco.

Q7: *Who are the mentors and leaders you would like to have acknowledged?*

A: There are too many of them to list. I have been the beneficiary of career advice from many wise teachers and colleagues who endorsed and advanced my choices. I have also had the benefit of a superb executive committee in the Department and the remarkable common sense advice of our associate chair Bryce Taylor.

Q8: *How is the financial health of the Department?*

A: We have been extremely fortunate to receive over 40 million dollars in grants thanks to Ori Rotstein and more recently Ben Alman as vice-chairs for research. The finances of our department have been good despite a recession and constant pressures to contain costs. We were the first department to hire an advancement officer and this has helped keep the Department financially sound.

Q9: *Besides the glue, what management techniques brought the members of this complex Surgery Department on board and developed such a cohesive feeling of unity and common purpose?*

A: I made it flat, not hierarchical. To get things done I empowered people in their own territory. I think of my job as that of helper - helping division chiefs run their divisions or helping John Bohnen run his highly successful accreditation effort. There are no uphill battles where there are no hills, that's the advantage of a flat management program. At the start of my term, I asked the Banting office staff in our first meeting: "Do you know who your boss is?" I made it clear that the answer is: "Our two hundred surgeons. We are here to serve them".

Q10: *Any closing thoughts?*

A: Three words that come to mind are: privilege, hard work and fun. It has been a privilege to serve as chairman, the work has been hard and it has been fun [The fun test is a very reliable measure of competence. The only people who are having fun skiing the expert slopes or performing complex procedures are those who have the expertise to enjoy them. Ed.]

The support from my wife, Cheryl, has been dedicated, constant and amazing. I have never felt pulled two ways. Few people in the world experience that kind of support. It was always "I'll be there" - never "why aren't you here?"

M.M.

* See page 21 in Awards Section

Martin McKneally

In his recent Robert Stone lecture to the Department of Surgery, the distinguished research psychologist Anders Ericsson discussed an interesting and important aspect of performance at the expert level. In addition to deliberate practice, masters in skilled occupations have unique cognitive representations of the tasks they undertake. World class soccer players that Anders has studied know where every player is on the field, in the way that Wayne Gretzky knew where every hockey player was on the ice. In addition, there is a fourth dimension – the time dimension, projected forward. Gretzky knew not just where the puck was going, but where the players were going as well. Master chess players know what their opponents will do in response to certain moves, how they will counter them, and how their counter moves will change the board. This cognitive representation is so rich that it allows making predictive judgments many moves in advance.

Some analysts relate Tirone David's surgical expertise to his ability to "see surgical problems in three dimensions". This is an insufficient explanation. Ericsson's analysis focuses on the fourth dimension, providing a better insight. At a cognitive level, David sees what is coming far enough in advance that he anticipates rather than encounters problems. There is also a fifth dimension - seeing beyond the present reality to what might be ideal. That is the creative intuition that leads to advances beyond our current understanding, equipment, devices, and techniques.

Richard Reznick's cognitive representations of surgical education have allowed him to bring our department to a remarkable level of expertise. Like the outliers I have described in sports, chess, and surgery, Richard's synoptic view of what we are doing, what we should do in the future, and what ideal we can aspire to has been applied at all levels. Medical students are engaged in deliberate practice in the skills lab, surgical residents are perfecting their techniques through multiple iterations with expert feedback. Some of our residents are embarking on a new Competency Based Pathway of surgical training. Our 200 fellows have been reorganized under David Latter's guidance into a program of scholarship and skill building at a level that will bring even greater credit to our reputation for advanced training in surgery.

I came to a better understanding of this gift of cognitive vision combined with the ability to bring it into reality during my interview with Richard for this issue. He is a *realizateur* as well as a visionary. We have been enriched by this combination of extraordinary talents. We are sad to see him leave, and proud to see him go to a position of wider scope and greater impact. And we are resolute in our determination to have him come back often to enjoy and encourage the programs he has developed so well.

Our colleague David Latter has proven his ability to adapt and enrich the programs of the Department of Surgery. His willingness to take on the significant responsibility of interim chair is encouraging, comforting and greatly appreciated by the Department.

Ericcson's research is the original source of the maxim popularized by Malcom Gladwell that 10.000 hours of practice are needed to achieve expertise (see also http://www.surgicalspotlight.ca/Article.aspx?ver=Summer_2009&f=EditorColumn).

M.M.

"You're not going to put that there, are you?"

David Latter Appointed Acting Chair of Surgery

APRIL 30, 2010

Dear Colleagues,

David Latter

Academic Board has approved the appointment of Professor David Latter as Acting Chair of the Department of Surgery from May 19 to June 30, 2010, and Interim Chair of the Department effective July 1 to December 31, 2010. The current Chair, Professor Richard Reznick, has been appointed Dean of the Faculty of Health Sciences and Director of the School of Medicine at Queen's University effective July 1, 2010. He will be on administrative leave between May 19 and June 30, 2010. An advisory committee has been struck and has begun the search process for a new Chair of the Department of Surgery.

Professor Latter has taken major leadership roles in the Department of Surgery as the Vice-Chair Education, the Co-Chair Fellowship Education Advisory Committee, Post Graduate Medical Education, and the Program Director for Cardiac Surgery. He is a cardiac surgeon and holds the position of Vice-Chief of Surgery at St. Michael's. Professor Latter is an award winning teacher and is recognized nationally for his innovative contributions to both education and clinical practice. He has a special interest in mitral valve surgery and more recently, in innovative percutaneous aortic valve replacement. Professor Latter has been awarded numerous grants, published in peer reviewed journals and is active in professional activities both nationally and internationally.

Dean Catharine Whiteside

Please join me in thanking Professor Latter for assuming the important roles of Acting and Interim Chair while we begin the search process for a new Chair of the Department of Surgery.

Sincerely,

Catharine Whiteside, MD, PhD, FRCPC
Dean, Faculty of Medicine
Vice Provost Relations with Health Care Institutions

International Advances: What is John Wedge Up to Now?

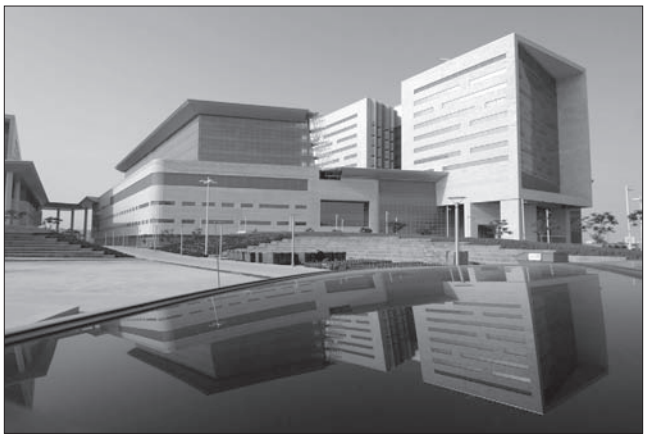
John Wedge

The international program of The Hospital for Sick Children packages and exports expertise developed at HSC for the benefit of children worldwide. The program currently includes: advising on a project to bring three children's hospitals together into one institution in Dublin, educating nurses in Ghana, developing and administrating a telehealth program in the Caribbean, breaking ground for a new hospital in Mumbai, and completing an ambitious program in Qatar in the Arabian Peninsula. The international program is well exemplified by the Qatar Project, which has been under way since 2004. Since completing his term as chairman of the Department of Surgery, pediatric orthopedic surgeon John Wedge has been chairing Sick Kids International Advisory Board. Using the expertise and brand of the Hospital for Sick Children, John, Cathy Seguin and their colleagues have been advising on the building of a 180 bed Children's Hospital in Qatar, which will open in 2012.

In addition, John continues a busy surgical practice treating complex hip problems in children and lecturing internationally. He has been in Qatar 13 times over

the last 6 years, generally staying two to fourteen days, depending on the mission. He is coordinating the development of the Operating Room, Imaging Suite, and Rehabilitation Program, based on designs at HSC and Bloorview Kids Rehab in Toronto. The new hospital has been designed by world class architects as have many of the buildings in Doha.

A medical school has been built by the government in collaboration with the Hamad Medical Centre. It graduated its first class of students in a joint venture with the Weill Cornell Medical School in New York City. A very progressive Emir, Amir Hamad bin Khalifa



The Hamid Childrens Hospital in Doha

al-Thani, is focusing the wealth of Qatar on education and research. The collaboration with The Hospital for Sick Children is managed by an advisory committee chaired by John and comprised of leaders in the administration of HSC.

The goal of the program is to develop the infrastructure and staff from the people of Qatar and to sustain the success of the enterprise through a continuing relationship with The Hospital for Sick Children. Revenue generated through the project will be used to offset the cost of humanitarian activities of the hospital, maintaining a neutral budget rather than making a profit or recruiting patients to Toronto. This well-organized enterprise replaces a loose network of humanitarian activities conducted independently by many members of HSC staff over past years, using vacation time and outdated equipment in an ad-hoc effort lacking a central plan.

Excellent staff have been recruited to lead the program on the ground in Qatar. Former HSC nurse managers of Surgery, the Emergency Room, the Operating Room and specialists in Research and Education have been hired to work in three month rotations. They will serve under the medical direction of pediatric nephrologist Denis Geary, who chaired Nephrology at HSC for the past 15 years. Qatari citizens who have trained in Canada and Europe will lead the clinical services.

Qatar is one of the wealthiest countries in the world with a GDP per capita of $86,000, based on its reserves of natural gas and its techniques for processing natural gas

The architecture of Doha

for transport in liquid form. The progressive philosophy of the Emir, the resources of the country and the excellent leadership provided by the HSC international team promise to develop and sustain a world class centre in Qatar that will be a magnet for patients in the region, analogous to the role that HSC fills in North America. The enterprise is being developed in collaboration with the HSC Research Institute. It has an excellent staff of well- trained business and management personnel in addition to the advisory board.

M.M.

SHARP MINDS SKILLED HANDS
CELEBRATING EXCELLENCE IN SURGERY

The Surgeon Scientist Program at 25 Years

The 25th anniversary of the Surgeon Scientist Program was celebrated with a gala dinner and a day of spectacular scientific presentations. There were many colorful reminiscences. I have tried to capture some of them in this incomplete account of a great program in academic surgery. Charles Tator divided the history of the Department into two eras "B.B and A.B." for events occurring before and after Bernie Langer's tenure as Chair. I will follow his taxonomy.

In the "B.B." era the highly respected clinical training program in the University of Toronto's Department of Surgery lacked an organized pathway for training academic surgeons. There were a few excellent research laboratories in the department, but there were still many residents assigned to research whose experience was sub-optimal. Some were required to do research as the price of admission to clinical training, even if they had no real interest. Most did only 1 year in research, some spending it in the hospital medical records department doing chart reviews.

After completion of clinical training in Toronto, Bernie Langer went to the United States for 6 months to study surgical oncology, followed by six months in Francis Moore's laboratory at the Peter Bent Brigham Hospital for basic research training in surgical physiology. Moore was more interested at that time in pioneering liver transplantation. This was the beginning of Bernie's career interest in liver surgery. He also got a clear idea of how a well developed surgical research program operated and how it might be integrated with academic clinical practice.


Bernard Langer

After joining the general surgery staff at TGH, Bernie worked with Bruce Tovee to put more emphasis on research training for new general surgery recruits. Because of the shortage of research laboratories in Toronto they sent surgeons to various places around the world to develop their research skills prior to joining the general surgery division. Wayne Johnston went to the U.K. to study vascular disease; Zane Cohen to London to study colorectal surgery at St. Mark's Hospital; Rudy Falk to the Karolinska Institute to learn immunology and transplantation; Bob Stone to New Jersey to study hepatic physiology. Paul Walker studied muscle physiology at the Karolinska in Sweden and vascular surgery at New York University.

At the time Bernie became chair in 1982, there were a few excellent research laboratories in the department that provided good training but there were still many residents assigned to research whose experience was suboptimal. There was little general oversight of the quality of either the trainees or the supervisors across the department. To increase the research productivity of the department, Bernie set out to strengthen the research training base in Toronto by selecting out those residents with an interest in research and providing them with a structured program of sufficient length to prepare them for an academic career. He was influenced in this by his own poor experience in the research lab and by others like Alan Hudson who had already established an academic training model in neurosurgery, sending residents like Jim Rutka to research centers elsewhere at the end of clinical training for 2 or 3 years.

Charles Tator sought formal research training on his own, earning a PhD in neuroanatomy. Appointed initially to the clinical service at Sunnybrook, Charles commuted to a laboratory at the University of Toronto two days a week for two years.

Charles Tator

Bernie appointed Steven Strasberg as chair of the departmental research committee and asked him, with the help of Charles Tator, Rudy Falk, Nancy McKee and Bryce Taylor, then director of postgraduate education, to design a model for a separate academic training stream for surgeons. The concept was supported by the senior executive committee of the department, and the first trainee was Steve Gallinger. The "A.B." era was getting under way.

Funding was guaranteed by the department for the duration of training of the Surgeon Scientists. They were required to spend a minimum of two years, register for a degree in the Institute of Medical Science and complete the required courses to meet the standards of the School of Graduate Studies. A further requirement was that the supervisor have an appointment in the School of Graduate Studies. This raised the voltage of scientific competence in the Department and created a farm system for training academic surgeons for the department. Bernie: "We wanted people from great centers to come to Toronto to train in academic surgery in the way that many were already coming for clinical training, while Toronto trainees went elsewhere for their scientific training."

General Surgery adopted the program first, followed later by the other divisions. Funding was a major issue from the beginning. There were some research fellowships available from granting agencies and these selected residents were very competitive, but more was needed. The recently initiated departmental practiceplan provided Academic Enrichment Funds that divisions were able to use to support their own SSP trainees. The University of Toronto Surgical Alumni Association was also created at that time to facilitate fundraising from both staff and alumni, primarily to support the SSP. It was initially led by former surgery chairman Donald Wilson. Additional contributions from Johnson & Johnson, private donors, hospitals and the Faculty of Medicine allowed the program to accommodate increasing numbers of applicants over the years.

The program was given high visibility and was promoted in the department. It grew steadily and became a model for clinician investigator training programs at the University of Toronto. The surgical residents had the highest completion rate among graduate students (85%) of any department in the University. Many of them went on to receive PhDs.

Steven Strasberg adds illuminating background to the story of the origins of the SSP. "The Institute for Medical Science was instrumental in the success of the Surgeon Scientist Program. The IMS was started by Jack Laidlaw, Earnest (Bunnie) McCollough with Lou Siminovitch as a strong supporter. It was designed to train clinical scientists. It gave [graduate school supervisory] privileges to clinicians without having them cross appointed in a basic science department. This was critical since it allowed clinicians to design research training programs suitable for clinicians.

> Because it was part of the graduate school, SSP trainees had all the protections afforded to a graduate student to assure that their training was of high quality. There were strict criteria for graduation- papers, theses, excellent oversight in the form of thesis committees, and regular reviews.
>
> Steven Strasberg

Importantly, every individual applying to be a member of IMS and supervise students had to fulfill criteria of success in science before becoming a supervisor.

While I was on IMS council two important things happened. First, Dr. McCollough perceived a gap in the training of medical students – they weren't learning the scientific method. He thought up the concept of the Undergraduate Program in Medical Sciences (UPMS). The important thing about UPMS is that it was a program of IMS. [This led eventually to the MD/PhD. Program. Ed.] Secondly, there were a few surgeons who enrolled stu-

Steven Strasberg

dents in the MSc program of the IMS, but all were done as one year efforts. In order to do an MSc in one year a lot of the thinking had to be done by the supervisor. It was hard to teach the student think like a scientist. I had already personally decided not to take any more one year students.

It was just at that time that Bernie appointed me to head the research committee – he had just become chairman. He was supportive, but as it was a radical idea to train residents in science for a minimum of 2 years in the middle of the residency, he insisted that it go through the research committee and be approved enthusiastically. Many of the members of the committee became involved with the IMS and the SSP was recommended to the chairman with enthusiasm. Steve Gallinger was the first [graduate of the SSP]. There are many people to be thanked for the SSP but I want to get back to Jack Laidlaw and Bunnie McCollough. They were very different, but shared qualities of great intelligence, great vision and magnetism. They did everything for students. They carved the path – they held the light up for others to see the path. I can't ever think about them, and I do so frequently, without feeling the deepest appreciation."

When Nephrologist Mel Silverman became head of the IMS, he welcomed surgeons into the program and fostered the success of the SSP. Significantly, he was succeeded as Director of IMS by the exemplary academic surgeon, Ori Rotstein. The SSP program grew and was improved over the years by SSP directors Steven Strasberg, Richard Wiesel, Ori Rotstein and Ben Alman.

When Bernie was on the Council of Royal College of Physicians and Surgeons of Canada, he was involved in designing and charged with the implementation of a proposed Clinician Investigator Program based on the model of the Surgeon Scientist Program. The CIP now has the status of a new specialty within the Royal College. This model has been adopted by all the medical schools in Canada. The current director of the Clinician Investigator Program in Toronto is the able paediatric nephrologist Norm Rosenblum.

In the beginning, the fields of study for SSP trainees were basic biomedical research, surgical education and clinical epidemiology. The addition of health policy, management, bioengineering, nanotechnology and bioethics has expanded the spectrum of surgical scholarship in the SSP to a level unrivalled in the world.

Donations from the alumni, faculty and friends of the Department of Surgery are essential to the continuation of the SSP. Donors can contact Artur Cane in the Office of Advancement to contribute (phone no. 416-946-0019, e-mail artur.cane@utoronto.ca).

M.M. with notes from Alan Hudson, Bernie Langer, Steven Strasberg and Charles Tator

Mending Hearts and Building Bridges

Bernard Goldman

When Bill Bigelow introduced Bernie Goldman to leaders of cardiovascular surgery such as Michael DeBakey and Denton Cooley in the 1960s, he communicated a sense of the dynamic momentum of the specialty and a sense of history in the making. Bernie had been fascinated by cardio-pulmonary physiology as a medical student – he considered internal medicine or surgery as a career choice. After a rotation in California on a surgical service, he chose surgery, based on its pace and the opportunity it offered to fix the pathology he had been studying.

Toronto Surgical Chair Fred Kergin directed him into cardiac surgery. His significant mentors were Bigelow, Bill Mustard, Bruce Tovee, Griff Pearson and David Bohnen. They ensured that he travelled with the McLaughlin Fellowship, studying with Ronald Belsey in Bristol, England, and with Gerry Austen and Mort Buckley at the Massachusetts General Hospital. Bigelow also sent him to Cleveland, Palo Alto and Houston to bring new techniques back to Toronto. On his return, Bernie worked with Al Trimble to introduce coronary artery bypass.

In addition, he practiced vascular surgery at Mount Sinai Hospital. At that time, vascular surgery was an important part of cardiovascular surgical practice, including peripheral, aortic, carotid and portacaval surgery. He also introduced support of the failing heart with the intra-aortic balloon pump, a technique he had learned in Boston.

During his years at Toronto General Hospital he was supported and encouraged by Ron Baird. He enjoyed these years with partners Richard Weisel, Tirone David and Hugh Scully.

He followed the teaching techniques of Bruce Tovee, Griff Pearson and Bill Mustard - partnering with residents in the OR and ward. Their influence led Bernie to become a devoted teacher and colleague of his residents. He contributed to the training of most of the cardiac surgeons in Toronto and throughout the entire country. In addition, he trained ten cardiac surgeons currently practising in Israel. Like Norman Shumway, Mustard and Tovee, Bernie was a master first assistant who could develop the skills and confidence of his surgical residents from the opposite side of the table. He received the Tovee Award for Post Graduate teaching and many other accolades from former residents.

The deluge of coronary surgery in the 1970s overwhelmed the available facilities at Toronto General and St. Michael's Hospital. After 20 years at Toronto General, Bernie was asked to set up a cardiac service at Sunnybrook. University chairman Bernie Langer made sure that the new service at Sunnybrook would not be limited to the role of a coronary mill, but would take on all cardiovascular cases and train residents. The early success and remarkably low mortality established the Sunnybrook centre in the constellation of the University of Toronto's cardiac surgery program. The leaders of the institution at that time, Martin Barkin, Marvin Tile and Al Harrison helped to assure success. They set a "can do and must do" tone, developing a sense of pride in the institution as a complete academic centre which had been evolving from a Veterans' Hospital into a Trauma Centre.

The Sunnybrook surgeons, particularly Bernie, George Christakis and Steve Fremes developed a reputation as excellent teachers. Eventually, Bernie was asked to serve as chief of surgery at Sunnybrook. He encouraged orthopedics and neurosurgery to work together as a spinal surgery team and helped Fred Brenneman, then training at Cook County Hospital in Chicago, to establish and lead a world class trauma service at Sunnybrook. Bernie continued operating until age 70. He continued writing, editing, educational and other activities. He had a special interest in training surgeons and cardiologists to insert pacemakers and defibrillators correctly. As he began to withdraw from major operative surgery, he wrote insightfully about retirement. His thoughts on this subject were captured in an earlier issue of the Spotlight. (*Musings by Bernard Goldman- The Surgical Spotlight, Winter 2004-2005: 5-6, University of Toronto; http://www.surgicalspotlight.ca/Shared/PDF/Winter04-05.pdf*)

Bernie took on the responsibility of editing the Journal of Cardiac Surgery, raising its citation index and circulation significantly. With funding support from Medtronic Inc, he and his co-editor, Susan Belanger from the Department of History of Medicine, published a very successful history of cardiac surgery in Canada, now in its second edition (*Heart Surgery in Canada: Memoirs, Anecdotes, History and Perspective*) He has supported philanthropic causes in Israel, including chairmanship of Save a Child's Heart, a program that provides cardiac surgical care at no cost to children from Africa, China, Eastern Europe and the Middle East. They have so far done 2400 operations in Israel on children from 33 countries; 50% of them are from neighbouring Arab countries. The theme of the organization is "mending hearts and building bridges". They recently celebrated the treatment of their 1000th Palestinian patient. Bernie went to the West Bank city of Nablus this past fall to see post-operative patients. His busy fund-raising efforts have been very generously helped by a grateful Toronto patient.

The Bernard S. Goldman Chair in Cardiac Surgery has recently been established and filled by his distinguished successor as chief of cardiac surgery at Sunnybrook, Steve Fremes. In celebration of Bernie's contributions to his country as well as his specialty he was recently designated a Member of the Order of Canada.

Bernie's wife Fran is a musician, choir master and linguist; his son, Richard, is an expert in banking law and computers in Boston; his daughter, Kathy, is a singer and songwriter, currently studying at both Harvard and Boston University; his youngest daughter, Sari, a social worker and new mother, lives in Toronto. Bernie currently chairs a Ministry of Health working group on standalone angioplasty centres and serves on a surgical panel at The College of Physicians and Surgeons of Ontario.

M.M.

Pat Gullane: Member of Order of Canada

Patrick Gullane

"Please join me in congratulating Professor Patrick Gullane on his appointment as a Member of the Order of Canada. Pat is Chair of the Department of Otolaryngology - Head and Neck Surgery and is cross - appointed to our department of Surgery. A friend to all who know him, Pat has had a distinguished career as a surgeon and administrator. Pat went to medical school in Galway, Ireland and then trained in Otolaryngology – Head and Neck Surgery at the University of Western Ontario. After fellowships at the University of Pittsburgh and Columbia University in New York, he returned to Canada as a faculty member at the University of Western Ontario in London. He was recruited to U of T in 1983 and has distinguished himself as a world authority in head and neck cancer, with a specific area of expertise in skull-base surgery. We are proud that Pat is cross appointed to our Department and congratulate him on his magnificent achievements." These were Richard Reznick's words as he announced Pat Gullane's recent honor.

Pat described the appointment as "so unexpected and profoundly meaningful to me as a Canadian. Though I have been fortunate to receive honors from surgical and scientific societies in the United States, England and Australia, this appointment is the most meaningful".

The order of Canada's motto is Desiderantes Meliorem Patriam (They desire a better country). It recognizes contributions that have enriched the lives of others and made a difference to this country. They are inducted by the Governor General in her role as representative of the Queen. Members of the Order are the only regular citizens who are empowered to administer the Canadian Oath of Citizenship. Nominees are evaluated by an Advisory Council, chaired by the Chief Justice of Canada and including the Clerk of the Queen's Privy Council , the Deputy Minister of Canadian Heritage, the Chair of Canada Council for the Arts, the President of the Royal Society of Canada, the Chair of the Association of Universities and Colleges of Canada and five rotating members of the Order.

http://www.gg.ca/document.aspx?id=72

Q: *What was the contribution to surgery and the University of Toronto that the Advisory Council was recognizing?*

A: I believe they were focused on the clinical contributions to head and neck oncology and creating a learning environment to inspire young and dedicated trainees. We have been fortunate to attract outstanding residents and fellows over the past 30 years. Many of these superstars have been recruited as faculty members to the University of Toronto. Our Head and Neck fellowship is a combined program with the Department of Surgery, accredited by the Advanced Training Council of the American Head and Neck Society. It was the first program within Canada to be recognized. Over the years many international graduates have successfully completed advanced fellowship training in all aspects of head and neck oncology here and have returned to such countries as England, Ireland, the United States, Finland, Norway, Sweden, Japan. These trainees, and the numerous visiting professors who spent time with us, on returning to their countries adopted many of the philosophies that have helped to further enhance numerous academic programs in head and neck oncology internationally.

Q: *What is your main legacy at the University of Toronto?*
A: I feel my legacy has been the establishment of a major head and neck oncology program within the University Health Network and the University of Toronto facilitated through the generous donation of a grateful patient, Mr. Bob Wharton and his wife Gert. A combination of opportunity, vision of the institution and the University, the generosity of our donors, and finally support of the administration and dedication to the specialty of head and neck oncology helped realize my dream. This initiative was a further impetus for future donors to contribute to this subspecialty area, and in 2002 Dr. Mariano Elia, another grateful patient, donated $2.5 million to endow a Basic Sciences Chair dedicated to head and neck research.

A combination of generous donors, hospital and University focus, and finally the recruitment of outstanding faculty, many of whom had served as our fellows, resulted in the department's recognition and academic productivity that has made it one of the most attractive institutions in head and neck surgery in the world. So with this windfall I realized my dream of a very attractive academic unit that combines superior surgical care, radiation, medical oncology and research. The Divisions of Neurosurgery, Thoracic Surgery, Plastic Surgery, Pathology, Radiation and Medical Oncology, Dentistry, Prosthetics, and Microvascular Surgery all contributed significantly to this multidisciplinary program.

Q: *How did all this come about?*
A: Dr. Alan Hudson, then Surgeon-in-Chief was remarkably supportive of this success story. His leadership helped to integrate the Princess Margaret Hospital with the Toronto General Hospital. Alan and I developed an immediate relationship of trust. He said: "Let's make it a program integrated between Otolaryngology – Head and Neck Surgery and the Department of Surgery with you as chief and to include all of the other players. At that time Dr. Bernard Cummings, Chief and Chair of Radiation Oncology and Dr. Robert Bell, CEO of the Princess Margaret site helped enormously to facilitate the formation of head and neck oncology. I am indebted to the Jim McCutcheon Chair at the Toronto General Hospital, then held by Alan Hudson. This opportunity provided me a platform necessary to establish a multidisciplinary concept for head and neck oncology. I have often said: "if you can imagine it, you can achieve it; if you can dream it, you can become it". The dream came true. The great challenge and charge is to convince people in leadership positions that you are genuine in your goals and objectives to select and educate future leaders, then surround yourself with people more talented than you who generally will make you look good.

Q: *What were the turning points in your career and the turning points in the development of the program?*
A: In 1994 the spectacular success of the Thoracic Surgery Division with the first successful human lung transplantation lowered the profile of the other surgical programs including head and neck surgery. Then, by great fortune, I was the lucky recipient of some 8.5 million dollars that helped in the establishment of four chairs in Head and Neck Surgery and Oncology. Peter Neligan was selected as the Wharton Chair in Head and Neck Plastic and Reconstructive Surgery, Patrick Gullane as the Wharton Chair in Head and Neck Surgery, Brian O'Sullivan as the Bartley-Smith/Wharton Chair in Head and Neck Radiation Oncology and Fei-Fei Liu as the Mariano Elia Chair in Head and Neck Basic Science Research. The most important take home message here is the importance of sharing of fortune with other members of the team, and establishing close relationships with all the others. Those relationships then and even now are unprecedented.

Q: *Who were your role models and mentors?*
A: On completing my residency, I had the good fortune to take advanced training with some of the masters in head and neck surgery in both Pittsburgh and New York. Dr. John Conley, a magnificent Head and Neck Surgeon at Columbia University, and Dr. Sebastian Arena at the University of Pittsburgh both influenced my career greatly and I feel developed what was already in me - a passion to effect change, enhance patient care, minimize deformity and improve the quality of life of patients with head and neck malignancies. My other hero was Dr. Griff Pearson, who adopted me as a colleague, and whose advice and guidance helped enormously to enhance my career.

Q: *What is next for you?*

A: I have two more years as Chair of the Department of Otolaryngology – Head and Neck Surgery and as Otolaryngologist-in-Chief at the University Health Network. My goal is to help facilitate a succession plan that will help to further enhance this specialty. One of my great anxieties is that we have had it all over the past 25 years, but "if we snooze, we will lose". Incidentally, I had the best hobby I could find in life. To quote from the famous American comedian Johnny Carson on his final "Tonight Show" performance: "I am one of those lucky people in the world who found something I loved and enjoyed every moment of it". That certainly describes me in the arena of head and neck surgery.

The opportunity afforded me at the Toronto General Hospital/Princess Margaret Hospital and the University of Toronto was unprecedented. I am indebted to the support provided by Drs. David Naylor and more recently Cathy Whiteside in their role as Dean. Their untiring support and counsel helped enormously in the success of head and neck surgery within our University as did the resources provided by the University Health Network under the leadership of Alan Hudson, Tom Closson and Bob Bell. In addition, I am extremely grateful to Bryce Taylor for his unselfish support and trust, providing the resources to care for the most complex patients in head and neck oncology in Canada. I take this opportunity to thank my many associates both in surgical, radiation and medical oncology and in addition the other support services including the members of my department all whom have helped to increase the global impact of our discipline.

My hope for the future is for the continuing development of a seamless relationship with the other hospitals within the University system. Like Richard Reznick, my role was to harmonize the disparate programs. Following my chairmanship, I hope to be an ambassador for the Department of Otolaryngology – Head and Neck Surgery, the University Health Network and the University of Toronto in helping to facilitate fundraising for all of the surgical disciplines. In particular I would like to further support the establishment of endowed chairs, as I have seen their positive impact on recruitment and program growth. My fear is that the future will be costly as robotics and other expensive technology is introduced. The goal will be to enhance the profile of the University of Toronto, its affiliated hospitals and all the disciplines I have been fortunate to work with. To know the road ahead, ask those coming back.

M.M.

Palmer Lecture: Surgical Treatment of the Obesity Epidemic

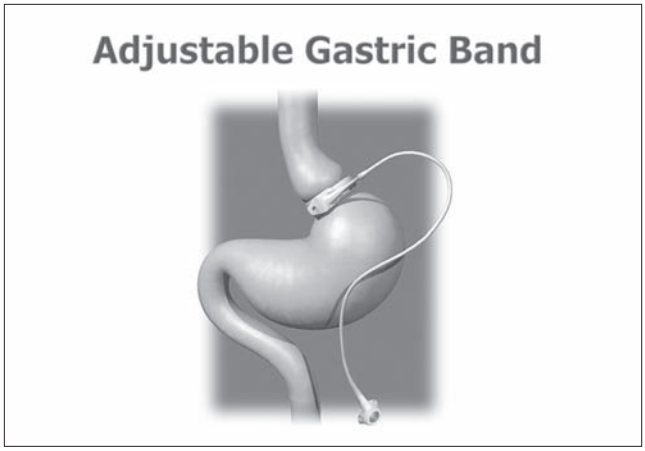
Aurora Pryor

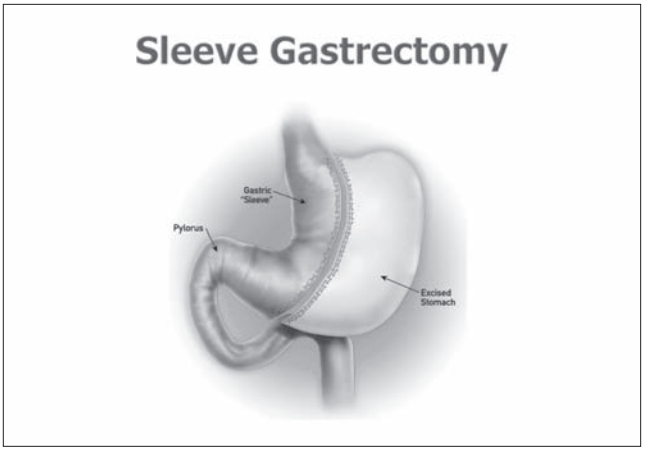
The 2010 Palmer lecture was given by Aurora Pryor, Associate Professor of Surgery at Duke University Medical Center and co-Director of the Duke Metabolic and Weight Loss Surgery Program. Aurora received a biomedical and electrical engineering degree at Duke University and subsequently completed her medical and surgical training there. She is Chief of General

John Angus Palmer completed the Gallie Course in General and Plastic Surgery in Toronto and fellowship training at the University of Edinborough and St Marks. He was a master surgeon, an astounding technician, a thoughtful clinician and gifted teacher. His expertise covered a very broad range of general, head and neck, endocrine and cancer surgery.

John had numerous and eclectic interests outside of surgery: his family, painting, collecting art, collecting and refinishing antiques, carving decoys, anatomy, skiing and boating, to name a few. He also mixed a mean pitcher of Martinis. As a centennial project in 1967, he and his family dismantled a pioneer log house and reconstructed it near their family cottage in Dwight, Ontario. They then opened it to the public as a charming antique shop.

Lorne Rotstein





Surgery at Durham Regional Hospital, an inventor, a teacher, and an expert in bariatric surgery

Aurora first documented the obesity epidemic in North America, then explained that there are two classes of operative treatments for obesity – restrictions and diversions. Gastric restrictions use adjustable bands or sleeve reduction to create a sensation of fullness after the residual small gastric pouch is filled. Afferent vagal fibers from the proximal stomach that remain in continuity transmit a message of satiety after only a small meal following these procedures. Combined diverting procedures involve some re-routing of the gastrointestinal tract. These procedures, including Roux –en-Y reconstruction or a duodenal switch are more complex, but offer a more reliable rate of sustained weight reduction. She favors the Roux-en-Y procedures because of the dramatic cures of diabetes - powerful evidence that is evident even a day or two after surgery. (Perioperative Safety in the Longitudinal Assessment of Bariatric Surgery, N Engl J Med 2009; 361:445-54). John Palmer performed the first bariatric surgical procedure in Canada as one of his many innovative contributions. The operation was a stapled gastric restriction procedure.

Among the 3,500 bariatric operations performed at Duke (600 procedures per year), 17% are restrictive operations and 81% are diversions. There is a 70% long- term stable weight loss rate with the Roux-en-Y procedure. Associated with that weight loss is significant reduction in medical co-morbidities associated with obesity, such as diabetes or hypertension. Overall the 30-day mortality of primary bariatric surgery in the Duke series is 0.25%. In a large series followed at McGill University, comparing surgery with medical care in obese patients, the five year mortality is 0.68% in patients treated surgically and 6.17% with medical care alone. The benefits of surgery are striking: 76.8% complete resolution of diabetes and 86% improvement in control of diabetes. Blood pressure is reduced, hospitalizations are reduced, return to work among disabled morbidly obese Medicaid patients is 37%. Complications include anastomotic leak, thromboembolism and marginal ulcers.

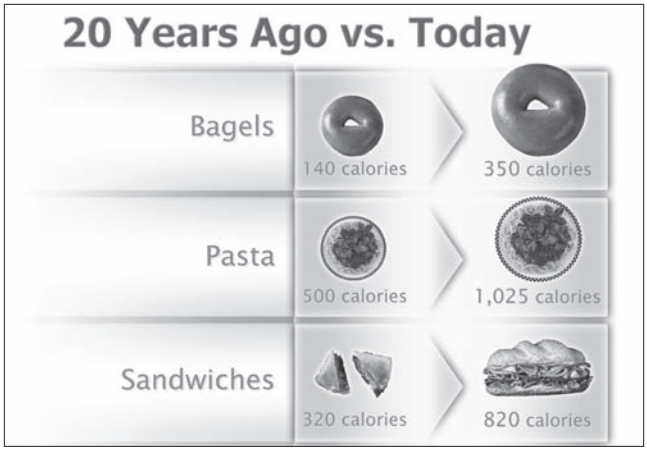
Steps to reduce the risk of surgery include careful anticoagulation, preoperative weight loss and blood pressure control. All patients are treated with proton pump inhibitors, as the incidence of marginal ulcers was 4.7% in the initial series. One of the complications of restrictive operations using adjustable bands is slippage of the band in 5-10% of patients.

Centers of excellence in Bariatrics are becoming more widespread in the United States; they are required by many insurance payers in order to qualify for reimbursement. A large centre such as the Duke Centre provides a stable team of caregivers including psychologists, nurse practitioners, dieticians, surgeons and dedicated operating teams. Such centres require devotion of considerable operating time and space to the program.

The University of Toronto Bariatric Program will use a more distributed hub and spoke model. There will be one central program but the operations will be distributed among five or six hospitals. (See also *New Bariatric Surgical Program Established at University of Toronto,* The Surgical Spotlight, Spring 2009**;**

http://www.surgicalspotlight.ca/Article.aspx?ver=Spring_2009&f=ChairColumn)

During a spirited and well–timed discussion period, **Jack Langer** asked about the use of bariatric surgery in children. The Duke program is just starting a paediatric program; there are important questions about the effect



of the operation on development to be answered from experience.

Andy Smith asked about warning labels, analogous to those on cigarette packages. The widespread use of high fructose corn syrup in many foods and the supersizing of commercially available portions present a health hazard. Labeling has only begun to be practiced, but warning does not yet appear on packaging. **Richard Reznick** asked about non-surgical interventions - apparently there are endoluminal sleeves that can be introduced by gastroscopy and gastric balloons to fill the stomach. Experience with these is very preliminary.

David Urbach asked about the best way to develop a program. Aurora felt that starting with simpler operations to develop proficiency and good results had been helpful at Duke. **Kyle Anstey** asked about performing bariatric surgery in developmentally or cognitively impaired patients. Because of potential problems with management in the longer term, Aurora recommended that accepting these patients for surgery be delayed until the program is better developed.

Allan Okrainec asked about surgery in the elderly. Duke has no cut off, but the province of Ontario has recommended that surgery be offered only to those who are under 60 years of age. There is not yet sufficient experience to know how valuable the surgery will be in non-obese diabetics. It is interesting to note that gastric surgery, once a very significant part of general surgery practice, has been eclipsed in recent years because of effective pharmacotherapy for peptic ulcer and reflux disease. The obesity epidemic has returned gastric surgery to a prominent place in surgical practice.

M.M

Thanksgiving and Remembrance of Bob Salter


Robert Salter

Dr. Robert Bruce Salter CC, OOnt, FRSC, MD, MS FRCSC, FACS Professor Emeritus of Orthopaedic Surgery and Senior Scientist Emeritus The Research Institute, The Hospital for Sick Children died peacefully at home on 10 May 2010. Born in Stratford Ontario, 15 December 1924,

Bob graduated from the University of Toronto in 1947 and worked for two years at the Grenfell Medical Mission in Newfoundland / Labrador before pursuing post- graduate training in orthopaedic surgery at the University of Toronto. After a year as a McLaughlin Fellow in London, England, he returned to Toronto in 1955 to join the surgical staff at The Hospital for Sick Children and the Hospital's Research Institute. His appointments included Head of the Division of Orthopaedic Surgery, Surgeon-in-Chief, Professor and Head of the Division of Orthopaedic Surgery at the University of Toronto, President of the Canadian Orthopaedic Association, and President of the Royal College of Physicians and Surgeons of Canada.

An active and funded researcher until his death, Bob developed a procedure to correct congenital dislocation of the hip, pioneered Continuous Passive Motion (CPM) for the treatment of joint injuries (which has been used in the treatment of 9,000,000 patients worldwide), and co- developed a classification of growth plate injuries in children. His textbook of orthopaedic surgery, Disorders and Injuries of the Musculoskeletal System is used throughout the world. For his work, Dr. Salter was recognized as a "University Professor" at the University of Toronto.

Richard Reznick

Bob Jackson: Pioneer of Arthroscopy and the Paralympics

Bob Jackson

Robert (Bob) Jackson passed away this winter. He brought modern arthroscopy techniques to North America and was influential in the development of the Canadian Paralympics program. He was a professor in our division and worked on staff at the Toronto General and Toronto Western until 1985, after which he became Chief of Surgery at the Orthopedic & Arthritic Hospital. He moved from Toronto to Dallas in 1992, but recently returned to Toronto in retirement. His work in sports medicine and the Paralympics was internationally recognized, and in 1994 Sports Illustrated named Bob one of the 40 most influential individuals in sports, the only physician on their list. He will be missed by all who knew him and by our Orthopaedic community. For more on his outstanding career, see http://www.dr-robertwjackson.ca/

Ben Alman

Memorial Tribute to Shafie Fazel

Shafie Fazel

We will terribly miss Shafie – he had such extraordinary promise as an academic cardiac surgeon!

Shafie arrived in Toronto as the Gold Medalist of his medical school class and he quickly demonstrated his incredible work ethic. He learned what he needed to learn and contributed immeasurably to each of the services on which he rotated. In his third year he joined our research laboratory and brought both amazing energy and an understanding of what must be accomplished. His MSc in Immunology provided him with the tools he needed to succeed. His need for perfection and his astonishing attention to details resulted in incredible research studies intended to regenerate the heart after a myocardial infarction. He was extremely productive during his PhD, but more important he continued to direct studies in the laboratory after he returned to clinical training.

During his rotations as a senior resident he again demonstrated his capability and attention to details. Both at Stanford and in Toronto he was believed to be able to develop into an academic cardiac surgical superstar.

We will miss Shafie – such promise, such promise!

Richard Weisel MD, FRCSC
Director of Toronto General Research Institute
Mentor and friend of Shafie Fazel MD, MSc, PhD

(To contribute to Shafie Fazel Cardiovascular Surgery Research Fund in his honor please call Sima Shah, toll free 1-877- 846- 4483. Ed.)

TO THE EDITOR

Christian Bang

I would like to comment on Professor Richard Reznick's concerns about surgical training in Canada.

Upon completion of my residency in Denmark, I was keen to experience a new training environment. While taking a course in New York, I learned about Toronto; I was advised that its microsurgical centre was world class. I applied for a position in Toronto and during 2001 and 2002 I spent a total of one year as a microsurgical fellow in plastic surgery at the Toronto General Hospital. I was not disappointed for a single second with my experience. Dr. Peter Neligan and Dr. Ralph Manktelow acted as my mentors. Indeed, they have both been the most important colleagues throughout my career, clinically and personally. Several other surgeons also contributed greatly

to my extraordinary Toronto experience. It was gratifying and stimulating to work with a team of skilled surgeons, all of whom took part in the clinical and theoretical training. In many ways, my year in Toronto represented an important turning point in my life, and it is with great gratitude that my family and I reflect upon that time in our lives.

I fully acknowledge the concerns outlined in Dr. Reznick's article. To bolster his argument, I would like to describe the Danish post-graduate training, which is similar to that in other European countries. In my opinion, there are two key differences between the Danish and the Canadian systems.

Firstly, the Canadian post-graduate educational system is characterized by the very serious way in which students, residents and staff work together. The students and residents are regarded by the staff as valuable resources, and in many ways, as colleagues. This creates an inspiring environment in which residents, at an early age, may take part in the department's diagnoses of patients and treatments at an advanced level.

Secondly, the Canadian physicians work significantly more hours than their Danish counterparts. Whether positively or negatively, the very strong union culture within Denmark significantly influences the residents' lives. One of my younger colleagues is a resident at a university hospital and currently is on-call every fifth weekend as well as once a week. As a result of this schedule, he works only three days a week (including his on-call time). He has six weeks of vacation time plus four extra days off due to the fact that he has young children. An additional five weeks are scheduled for courses. A system thus structured fosters deep frustration amongst the doctors. Surgical training suffers dramatically. Under the existing system, it is impossible to acquire the necessary surgical skills and clinical bedside experience. A common complaint expressed by Danish patients is that they meet too many different physicians. Consequently, there is a lack of continuity in the care and treatment of the patients, and no significant doctor-patient relationship can be established.

The pendulum has swung too far in Denmark. Ultimately, it is the patients who suffer when there is insufficient post-graduate education and very stringent restrictions on physician working hours.

Christian Bang
chr.bang@sol.dk
Odense, Denmark

NEW STAFF

Jean- Francois Boileau

We are delighted to welcome **Dr. Jean Francois Boileau** to the University of Toronto and Sunnybrook Health Sciences Centre team of Surgical Oncologists. Dr. Boileau holds a medical degree and a Master's degree in Biomedical Sciences and Clinical Research from University of Montreal. He completed his General Surgery training at the University of Montreal and a fellowship in Surgical Oncology at the University of Toronto. He has worked as staff surgeon at the Centre Hospitalier Universitaire de Montreal (CHUM) before being recruited to the University of Toronto in September 2009.

Dr Boileau's research interests are in breast cancer. The main focus of his research aims at using primary systemic therapy, or neoadjuvant therapy, as a more efficient way to study the effects of systemic treatments in people with breast cancer. The three main axes of his research program are: 1) Determining who will derive the most benefit from systemic therapy by identifying predictors of response to primary systemic therapy in higher risk subgroups of breast cancer patients, 2) Evaluating new systemic treatments in the neoadjuvant setting within randomized controlled trials and 3) Eliminating the barriers to the use of primary systemic therapy by better defining the use of sentinel node biopsy and radiotherapy in this setting. The goal is to better understand the complexities of tumor response to systemic therapy in order to deliver treatments that will be increasingly tailored and personalized.

Dr Boileau is the principal investigator of the SN FNAC Trial, a Canadian multicentre study evaluating the accuracy of sentinel node biopsy in node positive breast cancer patients that have received neoadjuvant chemotherapy. He is also principal investigator for the NSABP at the Sunnybrook Odette Cancer Centre, a collaborative group that leads some of the most influential studies evaluating the use of neoadjuvant treatments in breast cancer. In addition, he is leading a Canadian predictive oncology effort that is interested in studying

the genomic and proteomic predictors of response to neoadjuvant chemotherapy in triple-negative and Her2 positive breast cancer.

Andy Smith
Division Head, General Surgery
Sunnybrook Health Sciences Centre

Gregory H. Borshel

The Division of Plastic & Reconstructive Surgery at the Hospital for Sick Children is pleased to announce the appointment of **Dr. Greg Borschel** to its staff and to warmly welcome his wife, Dr. Tina Mullick Borschel and their two children, Anjali and Nikhil back to Toronto.

Dr. Borschel comes to our division as one of the bright young stars in the field of Plastic & Reconstructive Surgery having spent the past 3 years on staff at Washington University, St. Louis, Missouri under the guidance of a former Toronto professor, Dr. Susan Mackinnon. Dr. Borschel's recruitment is a heartwarming return to familiar ground as he spent a year as a fellow in Pediatric Plastic Surgery at the Hospital for Sick Children in 2005 to 2006 before taking his staff position in St. Louis.

Greg received his undergraduate degree in Chemistry and Biology magna cum laude in 1993 from Emory University before moving to Johns Hopkins School of Medicine, Baltimore for his MD training. In 1997, he enrolled in the Integrated Plastic Surgery Program at the University of Michigan, Ann Arbor under another Toronto graduate, Dr. Bill Kuzon, during which time he completed a Postdoctoral Research Fellowship within the Functional Tissue Engineering Laboratory and the Muscle Mechanics Laboratory, University of Michigan. After graduation in 2005, he and his family moved to Toronto for sub-specialty training in Pediatric Plastic Surgery at the Hospital for Sick Children under Dr. Christopher Forrest.

In his short career, Greg has built up an impressive array of accolades, not the least of which is the American Association of Plastic Surgeons / KLS Academic Scholarship Award given only every two years to an outstanding new surgeon. A review of his curriculum vitae suggests that the accomplishments Greg has received would place him at the end of an illustrious career, not at the start. He has rapidly developed an international reputation in the area of peripheral nerve injuries and repair and has accumulated over 100 peer-reviewed scientific presentations, 25 scientific papers, 17 book chapters, peer-review funding from NIH, several patents and a book – not bad for the first 3 years!

Having Greg join our staff has been instrumental in recruiting Dr. Tessa Gordon to the Division of Plastic & Reconstructive Surgery at the Hospital for Sick Children. Tessa has an international reputation as a basic scientist in the field of peripheral nerve injury and repair. Her studies of neurophysiology, nerve regeneration, electrical stimulation and novel surgical paradigms have attracted international attention.

Greg's clinical practice will focus on pediatric peripheral nerve injuries, upper extremity and microsurgery. As a surgeon-scientist in the SickKids Research Institute, his research is devoted to improved understanding and outcomes in peripheral nerve injury using growth factor delivery systems and the use of type I collagen conduits for the repair of nerve gaps.

He holds cross - appointments in the Institute of Medical Sciences and the Department of Biomedical Engineering. With Dr. Howard Clarke and Dr. Tessa Gordon, Greg is forming the SickKids Pediatric Peripheral Nerve Unit which will provide a true interdisciplinary approach to the management of pediatric peripheral nerve injuries.

In his spare time, Greg is very much the family man but is known to have a passion for exotic automobiles.

The Division of Plastic & Reconstructive Surgery at the Hospital for Sick Children is thrilled to have Dr. Borschel join its ranks as it goes from strength to strength and is currently the largest division of pediatric plastic surgeons providing full time care to infants, children and young adults in North America.

Christopher R. Forrest,
Division of Plastic Surgery

Jeremy Hall

The Division of Orthopaedic Surgery at St. Michael's Hospital is delighted to announce the appointment of **Dr. Jeremy Hall**.

Jeremy is a Surgeon Educator who joined the Division of Orthopaedic Surgery at St. Michael's Hospital in July 2009. His clinical interests include complex orthopaedic trauma reconstruction and upper extremity reconstruction.

Jeremy graduated from the University of Toronto Medical School and Orthopaedic Residency Program in 2004. He undertook a fellowship with Dr. Michael McKee at St. Michael's Hospital in Upper Extremity Reconstruction, Trauma and Ilizarov Reconstruction. Thereafter, he worked as a Clinical Associate at St. Michael's for 4 years. During that time, he completed his M.Ed at the Ontario Institute for studies in education (OSIE/U of T).

Jeremy's research interests center around education and simulation as well as clinical trials. He was involved in the development of the fracture module of the groundbreaking Competency Based Curriculum in Orthopaedic Surgery and is well known for his teaching.

Jeremy enjoys playing hockey in his spare time. He, his wife Shari and daughter Madeline enjoy spending quality time at the cottage.

Emil Schemitsch
Division Head, Orthopaedic Surgery
St. Michael's Hospital

Dr. M. Lucas Murnaghan studied at Queen's University in Kingston, Ontario where he completed his undergraduate and medical degrees. His orthopaedic residency was completed at the University of British Columbia. During that time he participated in a one-year elective in medical education and concurrently obtained his Masters of Adult Education. His fellowship training continued in Vancouver, with a fellowship in Arthroscopy and Athletic Injuries. His paediatric fellowship training included six months at Royal Children's Hospital in Melbourne, Australia and a one-year fellowship at Texas Scottish Rite Hospital for Children in Dallas, Texas.

M. Lucas Murnaghan

Dr. Murnaghan's main area of clinical interest is the orthopaedic care of athletic injuries in the paediatric, adolescent and collegiate athlete. His clinical practice in Toronto is based at The Hospital for Sick Children where his practice includes general pediatric orthopaedics with a sub-specialty interest in paediatric athletic injuries and the use of arthroscopy in the management of a wide spectrum of pathologies. His practice extends to the adolescent and young-adult athlete with a busy clinical practice at Women's College Hospital. He is the consultant orthopaedic surgeon for the MacIntosh Clinic at the University of Toronto with a close association with a number of varsity, provincial and national teams.

Dr. Murnaghan's research interests to date have spanned a variety of clinical areas within pediatric orthopaedics including trauma, developmental dysplasia of the hip and Apert Syndrome. He has made medical and surgical education an area of specific interest with current research focused on inter-professional education and surgical decision-making. He holds an appointment at the Research Institute at The Hospital for Sick Children as a Project Investigator and is a member of the Wilson Centre as a Clinician/Educator Researcher.

Dr. Murnaghan is devoted to education at the medical student, resident and fellowship level**.**

Benjamin Alman
Orthopaedic Division
The Hospital for Sick Children

Fiona Webster

Dr. Fiona Webster joins the Holland Musculoskeletal program at Sunnybrook Health Sciences Centre as a Knowledge Translation Scientist with a particular emphasis on hip & knee arthroplasty and traumatic bone and joint injury. She holds a PhD in sociology from the University of Toronto (2009) and has trained

primarily in qualitative and ethnographic approaches to health services research and knowledge translation/implementation science (KT). She is leading several innovative studies that utilize social science theory and methods to develop more effective strategies for integrating the uptake of evidence-based knowledge in the delivery of surgical care that are sensitive to clinical, policy and patient standpoints.

Fiona comes to Sunnybrook most recently from the Canadian Institutes for Health Research (CIHR) where she worked as the Assistant Director of Knowledge Translation at the Institutes of Circulatory and Respiratory Health and Population and Public Health. Prior to that she was an Associate Scientist at London Health Sciences Centre where she researched the delivery of stroke care through the Ontario Stroke Strategy.

Fiona is cross-appointed to the Department of Health Policy, Management and Evaluation where she teaches qualitative research methods, is a general member of the Wilson Centre, and has developed a module on KT for the Institute for Medical Sciences MSC1010/11Y course.

Hans Kreder
Orthopaedic Surgery and Health Policy Evaluation & Management
Holland Musculoskeletal Program,
Sunnybrook Health Sciences Centre

Welcome to Alina Gaspar

With this issue our new assistant editor, **Alina Gaspar**, joins the Surgical Spotlight.


Alina Gaspar

Alina comes to us with a background in management and a master's degree in languages focused principally on English and Latin. She is proficient in multiple languages including English, French, Italian, Latin and her native Romanian. She is currently learning the arcane languages of surgery and bioethics. Moving the Spotlight office to the Banting building and our search for a new assistant editor delayed our production schedule. We are grateful to Alina for reawakening our newsletter from its hibernation.

Ed.

HONOURS / AWARDS / ACCOMPLISHMENTS

Michael Taylor (Neurosurgery) has been named the 2010 Royal College of Physicians and Surgeons of Canada Medalist in Surgery. Michael and colleagues recently published this award winning work, entitled *Multiple recurrent genetic events converge on control of histone lysine methylation in medulloblastoma*, in *Nature Genetics*. The Department of Surgery has done well in the Royal College Medal award. As the Department celebrates the 25th anniversary of the Surgeon Scientist Program, it is noteworthy that in the last twenty-five years faculty members have won the Royal College Medal 14 times.

Michael also was awarded a 5 year grant from the National Institute of Health for his project on "Medulloblastoma and Metastases".

Kellie Leitch (Orthopaedics) received the Order of Ontario for her contributions as a Paediatric Orthopaedic surgeon and a national voice for children's health in Canada.

Abdallah Daar (Department of Surgery and Dalla Lana School of Public Health) has been elected as the founding chair of the Global Alliance for Chronic Diseases. The Alliance was created in June 2009 to support clear and coordinated research funding priorities in the battle against chronic, noncommunicable diseases, including cardiovascular disease and stroke, cancer, diabetes, and chronic respiratory diseases. CNCDs account for 60% of all deaths worldwide, of which 80% occur in low- and middle-income countries.

Andres Lozano (Neurosurgery) has been awarded the seventh annual Donald Calne Lectureship by the Parkinson Society Canada. Dr. Lozano's research is focused on developing novel surgical treatments for neurological and psychiatric disorders particularly for Parkinson's disease and depression.

Michael Fehlings (Neurosurgery) has been elected to be Vice-President and President-Elect of the Cervical Spine Research Society, one of the most prestigious academic international spine societies.

Sender Herschorn (Urology) has been awarded the 2010 Lifetime Achievement Award in recognition of "significant contributions and leadership in the field of voiding dysfunction by the Society of Urodynamics and Female urology at their annual meeting in St. Petersburg Florida. Professor Herschorn delivered the Blaivas Lecture entitled *What have we learned about the use of bowel in urologic reconstruction in the past 30 years?*

Richard Reznick (Chair, Department of Surgery) has been awarded the 2010 Karolinska Institutet Prize for Research in Medical Education. "This international prize is awarded for outstanding research in medical education. The purpose of the prize is to recognize and stimulate high-quality research in the field, and to promote long-term improvements in educational practice. Professor Reznick's research in surgical education is focused on patient safety practice. He facilitated the development of a checklist that today is used globally to reduce surgical complications. His research has been instrumental in the assessment and training of surgical skills and their transfer from simulated to clinical environments. Professor Reznick's focus on non-technical safety aspects such as team communication and interprofessional collaboration has been highly influential in the promotion of safer surgery practice."

Stefan Hofer was recently appointment as Editor of the Journal of Plastic, Reconstructive and Aesthetic Surgery, which is the former British Journal of Plastic Surgery. Stefan is the first non-British Plastic Surgeon to hold this position.

The laboratory of **Darius Bagli (**Division of Urology at Hospital for Sick Children) was awarded an American Urological Association Foundation Fellowship (AUAF) entitled: "Epigenetic Responses to Uropathogenic E.coli Urinary Tract Infection", to support a research fellow for 2010-2011. These fellowships are based on competitive grant applications, and are very difficult to obtain outside of the U.S.

David Backstein (Division of Orthopaedics) and Subodh Verma (Division of Cardiac Surgery) have been elected co-winners of the Silver Shovel Chute Award. The winner is selected by the fourth year class as the undergraduate teacher who is deemed to have demonstrated excellence in overall clinical teaching in the undergraduate medical program.

General Surgery Resident **Bharat Sharma** received a PSI Grant for her study titled "*Comparing three different Non - Technical Skills Assessment Tools in the Post Operative Setting*". Bharat's supervisor is Teodor Grantcharov.

Andrea Covelli, resident in general surgery, has been awarded the Canadian Breast Cancer Foundation Fellowship grant for the 2010 funding year. She is currently in the SSP, PGY-3.

Wigdan Al-Sukhni, general surgery resident in the Surgeon-Scientist Program, has been awarded a Vanier CIHR Canada Graduate Scholarship. This $50,000/year award will support her as she continues her PhD project entitled *"Validation and characterization of candidate Familial Pancreatic Cancer genes"*. Her supervisor is Steven Gallinger, Division of General Surgery.

Oleh Antonyshyn (Plastic and Reconstructive Surgery) was awarded the William K. Lindsay Faculty Research Mentor Award**,** 2010.

Christopher Forrest (Plastic and Reconstructive Surgery) received the Arnis Freiberg Faculty Teaching Excellence Award, 2010.

Mary-Helen Mahoney and Ryan Neinstein (Plastic Surgery) won the Mentor Canada Prize for Best Clinical Paper Award, 2010

Karen Cross (Plastic and Reconstructive Surgery) received the Best Basic Science Award, University of Toronto, 2010.

Karen Wong (Plastic and Reconstructive Surgery) received the Best Clinical Paper Award, University of Toronto 2010

John Edward (Plastic and Reconstructive Surgery) was awarded the De Toro Scholarship, University of Toronto, 2010

Shaf Keshavjee (Thoracic Surgery) received a $1,750,000 grant from the Ministry of Research and Innovation entitled *Molecular and Genomic Diagnostics to Improve Outcomes in Lung Transplantation* (GL2-01-019)

D.J. Cook (Neurosurgery) won the Cerebrovascular Disease Award from the Section on Cerebrovascular Surgery of the AANS/CNS for his work "Immunomodulatory effects of the PDS-95 inhibitor NA-1 following middle cerebral artery occlusion in the rat and cynomolgus macaque".

Michael Cusimano won a 5 year CIHR Strategic Team Grant in Applied Injury Research Study for his work on "Traumatic Brain Injury & Violence: Reducing the risks, improving the outcomes".

Michael Fehlings has received funding from Tyco Healthcare Group LP (d/b/a Covidien) for his project "Examination of the therapeutic potential of self-assembling nanofibers in spinal cord injury".

Carlo Santaguida won the Codman Neurotrauma Fellowship.

Gelareh Zadeh received a BrainCHILD grant for her project "role of bone marrow derived progenitor cells in tumor vascularization".

Gelareh Zadeh received a Canadian Brain Tumor Foundation Grant for her project "Discovery of biomarkers to guide individualized therapy of brain metastasis".

Ali Zahrai (Orthopaedic Surgery) has received the T.R. Sullivan Award for best presentation at the Division of Orthopaedics Research Day.

Isaac Moss (Orthopaedic Surgery) has been awarded the Lawson Family Post-Graduate Fellowship

Harith Abbas (Orthopaedic Surgery) has been awarded the Lawson Family Post-Graduate Fellowship for junior trainees.

Erion Qamirani (Orthopaedic Surgery) has been awarded the Lawson Family Post-Graduate Fellowship for junior trainees.

Daniel Whelan (Orthopaedic Surgery) has received the Orthopaedic Chair's Teaching Award for contributions to orthopaedic education as voted by the residents.

Rashid Jinnah (Orthopaedic Surgery) has received the Dr. Borna Meisami Post-Graduate Award in Orthopaedic Surgery for most compassionate resident as selected by the faculty.

Jaskarndip (Jas) Chahal PGY 5 (Orthopaedic Surgery) has won **The Robert Jackson prize** for the best resident paper on Sports Medicine.

Isaac Moss PGY 5 (Orthopaedic Surgery) has received **The R. I. Harris award** for best resident's presentation as selected by the visiting professor.

Mehdi Sadougi PGY 5 (Orthopaedic Surgery) won **The CBI** (Canadian Back Institute) **award** for the best resident presentation on the spine topic.

William Kraemer (Orthopaedic Surgery PD) has received **The "PGME Excellence in Teaching Award for Development and Innovation in Post Graduate Education"**

AIKINS AWARDS

What a Department! This year we celebrate three of our faculty who are the recipients of Aikins awards**. Mike Wiley** (Division of Anatomy), **Peter Ferguson** (Division of Orthopaedics) and **Ron Kodama** (Division of Urology) all won the Aikins this year. This award is the most prestigious award in undergraduate medical education in our entire Faculty. And considering that there are thousands of eligible teachers, to have three members of our Department win this award in one year is astounding. We should take enormous pride in this Department's commitment to UGME and take vicarious pride in the accomplishments of Mike, Ron and Peter.

I would be remiss if I did not acknowledge the outstanding contributions of our educational administrators in the Department - David Latter, David Backstein, Ron Levine, Sid Radomoski and Terry Axelrod.

Richard Reznick

PROMOTIONS

Michael Taylor was promoted to the rank of Associate Professor, Division of Neurosurgery, University of Toronto.

Bill Tucker was promoted to Full Professor in the Division of Neurosurgery, University of Toronto.

Eric Massicotte was promoted to the rank of Associate Professor, Division of Neurosurgery, University of Toronto

Tom Waddell has been promoted to Full Professor and **Dr. Yaron Shargall** has been promoted to Associate Professor in the Division of Thoracic Surgery at the University of Toronto.

University of Toronto Neurosurgeon Named President of the American Association of Neurological Surgeons

James T. Rutka

James T. Rutka, MD, PhD, FRCS was named President of the American Association of Neurological Surgeons (AANS) at the AANS Annual Meeting in Philadelphia, May 1-5, 2010.

He received his medical degree from Queen's University Medical School in 1981, followed by residency in Neurosurgery at the University of Toronto and research studies at the Brain Tumor Research Center at the University of California at San Francisco, where he also received his PhD in Experimental Pathology. He pursued clinical and research fellowships in Nagoya and Tokyo Japan 1990.

His primary research and clinical interests relate to the treatment of pediatric brain tumors, as well as the surgical treatment of epilepsy in children. Jim Rutka was a driving force behind the formation of the Labatt Brain Tumor Research Centre, and B.r.a.i.n.child, a support group for families whose children are undergoing treatments for brain tumors.

He has been on the Neurosurgical Staff at the Hospital for Sick Children in Toronto since 1990, Chairman of the Division of Neurosurgery since 1999.

The Deadline for the Summer 2010 Surgery Newsletter is July, 9, 2010. All members of the Department are invited to submit items, articles, pictures, ideas or announcements. You may reach us by:

voice mail: **416-978-8909**
e-mail: **alina.gaspar@utoronto.ca**.

Please provide your name and telephone number so that we may contact you if we have any questions.

The Department of Surgery
Banting Institute
100 College Street
Room 211
Toronto, Ontario, Canada
M5G 1L5

Editor: Martin McKneally
Phone: 416-978-8909
E-Mail: martin.mckneally@utoronto.ca

Assistant Editor: Alina Gaspar
Phone: 416-978-8909
E-Mail: alina.gaspar@utoronto.ca

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