

THE **surgical** spotlight



ON ALUMNI, FACULTY, RESIDENTS & FRIENDS
OF THE DEPARTMENT OF SURGERY SUMMER 2006

Jim Waddell completes successful 10-year term as Chair of Orthopaedic Surgery, Now on to Direct the Holland Centre

Jim Waddell has successfully completed his second five-year term as Chair of the Division of Orthopaedics. He describes the experience as the apex of his career because of the interaction with respected colleagues who practice the same craft. He has enjoyed hiring new faculty and watching them flourish as well as promoting the careers of earlier appointees of his predecessor Allan Gross. He has high respect for the CEOs of the hospitals who have been very thoughtful and effective in helping him to advance the programs of the orthopaedic division. He recalls with great affection



James Waddell

his opportunity to meet with residents for career planning and advice. He feels that the Senior Advisory Committee of division chiefs within the Department is an excellent open forum for reviewing and influencing Department decisions. Richard Reznick wrote: "The Department is grateful for Jim's superb leadership. His accomplishments have been many, and he leaves this position with the knowledge that the Division is strong from all perspectives and that his ten years of indefatigable effort have been universally appreciated."

Martin McKneally

For more about Jim and the Holland Centre see page 5

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Ben Alman appointed next Chair of Orthopaedic Surgery



Benjamin Alman

The new Professor and Chair of the Division of Orthopaedics for a five-year term commencing July 1, 2006 will be Benjamin Alman. Ben is currently the Head of the Division of Orthopaedic Surgery at HSC and Vice Chair, Research for the Department. Ben was born and raised in Philadelphia

and graduated in 1982 from the University of Pennsylvania. He attended Jefferson Medical School, and then completed two years of general surgery training at Pennsylvania Hospital, before leaving Philadelphia to pursue orthopaedic training at Tufts University and the New England Medical Center in Boston. After his orthopaedic surgery training he completed a fellowship at the Hospital for Sick Children in Toronto, and, then, in 1993 he returned to the New England Medical Center as an orthopaedic surgeon and to train in molecular pathology research. In 1996 he returned to the Hospital for Sick Children and the University of Toronto as a Surgeon-Scientist. Ben's clinical practice focuses on the care of children with syndromes, with spinal deformity, with neuromuscular disorders, and with tumours involving the bones, joints and soft tissues. Ben is a respected research scientist whose work focuses on the role of developmental signaling pathways in musculoskeletal tumours. This basic science work has identified novel treatments for these tumours. He is the principal investigator on several national research grants, and received a Canadian Research Chair in the first round of competition. He has over 60 peer reviewed publications in journals such as the *Proceedings of the National Academy of Sciences*, *Nature Genetics*, and *Lancet*. Ben is highly regarded for his scientific work. He has given over 100 presentations at international meetings or at invited lectures at various venues throughout the world. He supervises eight graduate students. He has

received numerous awards for his research work, including the Premier's Research Excellence Award, the Huene Award (for outstanding contributions to Pediatric Orthopaedics in North America), the OREF Research Award (the highest award for an orthopaedic investigator in North America, given jointly by the American Academy of Orthopaedic Surgeons, the Orthopaedic Research Society and the Orthopaedic Research and Education Foundation), and the Royal College Medal in Surgery.

Richard Reznick

ANNOUNCEMENT

The Centre for Faculty Development (CDF) is pleased to announce its registration schedule now posted online at the following URL address: <http://www.cfd.med.utoronto.ca/workshops.htm>.

These workshops are devoted to the enhancement of teaching skills and are offered throughout the academic year. Each workshop is free to faculty in the Faculty of Medicine. Registration is required.

If you are not a faculty member, but are active in the teaching of health professionals at the University of Toronto, please feel free to register for workshops. Your name will be placed on the waiting list. Within three weeks of the course date you will be notified if there is space available. If at that time you are still interested in attending, you will be fully registered for the session. A \$50 registration will apply to all non Faculty of Medicine participants.

Workshops meet the accreditation criteria of the College of Family Physicians of Canada and have been accredited for 3.5 MAINPRO-M1 credits per each workshop (unless otherwise noted). Workshops have also been approved as an Accredited Group Learning Activity under Section 1 of the Framework of CPD options for the Maintenance of Certification Program of the Royal College of Physicians and Surgeons of Canada - 3.5 hours per workshop (unless otherwise noted).

For questions/comments please contact: Hailey Garcia-Gonzalez at: garciah@smh.toronto.on.ca at: 416-864-6060 Ext. 3524.

Compact Between Resident Physicians and Their Teachers

For many of us, working in a teaching hospital enriches our professional lives principally through our interaction with our residents in training. The ability to pass on our knowledge and to be constantly challenged results in an extraordinarily fertile environment for continuous learning. The relationship between faculty and residents has changed dramatically in the last several decades, but at no time has the change been more profound than in the last five years. The factors that have governed this change have been many, but most notably include work hour restrictions and generational issues. As faculty, many of us have not yet been able to come to grips with an educational landscape that is changing forever. The fact that our residents do not log as many hours as we did in the hospital, and the fact that our residents are committed to combining a professional life with a rich and satisfying personal life, should not be viewed by faculty as some fundamental flaw in our residents' characters. Rather, it should be respected and embraced as a new and appropriate reality.

Recently, the Association of American Medical Colleges published a compact between resident physicians and their teachers.¹ This compact provides a prescription for faculty and resident responsibilities to each other and their patients. The three fundamental tenets of residency education were viewed to be excellence in medical education, the delivery of the highest quality patient care, and respect for resident's well being. Ten statements for both faculty and residents are enunciated in this publication. A review of these statements serves to help us define the relationship we should have with our residents in the future. Although some of these statements are of the "motherhood variety" I believe adhering to these principles will serve both faculty and residents well. In the



Richard Reznick

next few paragraphs I will paraphrase and comment on a few of the statements, statements which are profound in their simplicity.

In this compact faculty commit to acknowledging their important function as a role model. As faculty, we're probably unaware of just how profound is the influence we have on our trainees. Social psychologists of the last 50 years have shown over and over again that role modeling is perhaps the most powerful learning heuristic that exists. In this regard, the compact affirms that faculty will maintain the highest standards of care, respect the needs and expectations of patients, and embrace the contributions of all members of the healthcare team.

The faculty also agree to demonstrate respect for residents as individuals without regard to gender, race, national origin, religion, disability or sexual orientation. In a recent survey of residents regarding possible deterrents for women to enter into a surgical career, many women were dismayed by what they saw as "the surgical personality" and the persistence of an "old boys' club".² Without question we have come a long way to embrace a workplace that is free from bias and stereotyping. However, there is still a need to be vigilant about these issues, particularly now as we embark upon a program of incorporating more foreign trained physicians into our programs, and as our medical school class now exceeds 50% women.

The compact states that faculty will do their utmost to ensure that residents are not assigned excessive clinical responsibilities and are not overburdened with services of little or no educational value. As we approach an accreditation cycle, the age-old issue of service-to-education ratio is at the top of our agenda. This issue is complex and one that has polarized opinions. Often faculty have the opinion that there is educational value in every aspect of patient care. Residents, however, are often asked to do repetitive tasks that clearly can be done by other individuals, and often do not satisfy any specific educational objective. We need to be constantly mindful of striking the appropriate balance that acknowledges that residents indeed have a hybrid mandate; they are both students and service providers.

The compact emphasizes the need to evaluate each resident's performance on a regular basis, to provide appropriate verbal and written feedback, and to document achievement of the competencies required to

meet all educational objectives. These are the fundamental principles of any good educational process, but it is often striking how irregular we are at providing feedback. It is even more striking how a group of surgeons, not often known for their shyness, are indeed shy and reticent about providing honest appraisals when a resident is found lacking. We must commit to truth in our evaluations, and understand that the major element of Royal College certification is not the final examinations, but the attestation of competence of our residents by faculty who have spent five years supervising their training.

The AAMC compact is a two way street. Just as there are expectations of faculty, there are expectations of our residents. For example, the compact articulates that residents, as physicians in training, learn most from being involved in the direct care of patients and from the guidance of faculty and other members of the healthcare team. Residents are to understand the need for faculty to supervise all interactions with patients. This element underscores the primacy of learning from direct patient contact. That is not to say that programs should not seek adjunctive environments for training; environments like the classroom, the skills laboratory and the library. However, regardless of how we structure our curricula, patient care must dominate, and direct experiential learning must be paramount.

The compact goes on to say that residents accept their obligation to secure direct assistance from faculty or appropriately experienced residents whenever they are confronted with high-risk situations or with clinical decisions that exceed their confidence or skill to handle alone. This is a point which we cannot emphasize often enough. Our resident colleagues often experience a schizoid contradiction in their role responsibilities. Our surgical culture promotes and rewards self-confidence, independence and action orientation. Contrasting this, the appropriate focus on patient safety has served to remind us all that there is no shame in calling for help and that we all would do well to respect our limitations. For residents, the buck does not stop with them.

Finally, in the compact residents affirm that they welcome feedback on their own performance and that they will provide candid and constructive feedback on the performance of their fellow residents, of students, and of faculty. Peer evaluation is possibly the most

potent and accurate method of assessment that we have. However, to date, peer evaluations have been unreliable, as residents and faculty alike are extremely reluctant to provide evaluative feedback about their colleagues. The recent advent of 360° evaluations as a commonly used tool in many organizations will likely change the way we will evaluate each other in the healthcare workplace. These evaluations will undoubtedly be formally extended to include nurses, other health care professionals and patients. Indeed, in Alberta, a formal program of this type of evaluation has become part of the ongoing maintenance of competence for all physicians.

The AAMC compact is not startling, nor is it filled with new concepts and innovative statements. It is straightforward yet deep in meaning, providing a set of “golden rules” that are well suited to the changing circumstances of residency education. If we as faculty and residents can adhere to them, we will strengthen and solidify the covenant of trust that characterizes the ideal learning environment.

Richard K. Reznick

R.S. McLaughlin Professor and Chair

1. <http://www.aamc.org/meded/residentcompact/residentcompact.pdf>
2. Gargiulo DA, Hyman NH, Hebert JC. Arch Surg. Women in surgery: do we really understand the deterrents? 2006 Apr;141(4):405-7

CORRECTION

In the Spring 2006 issue of the Spotlight we incorrectly identified Sunnybrook as one of two sites for implementing centres of excellence for vascular surgery. In fact, the two centres of excellence are St. Michael's Hospital and the University Health Network. We apologize for the error.

Holland Orthopaedic and Arthritic Centre of Excellence

When Bill Holland was treated at the Orthopaedic and Arthritic Institute, he immediately recognized the signs and symptoms of an undercapitalized high-value investment opportunity. As Chief Executive Officer of CI Mutual Fund, he has finely honed skills in diagnosis and treatment of the problems that have disabled this fine institu-



Bill Holland

tion, so highly prized by OAI surgeons for its efficiency. Investment was needed to rebuild the 50-year old hospital at 43 Wellesley Street, to renovate the infrastructure, open new operating rooms, recruit surgeons and other staff to help the institution realize its potential as a centre of excellence. Holland agreed with a previous analysis by the Ivy School of Management that resources should be put into the OAI, which was efficient because of its predictable program of elective surgery. This could be further enhanced by focusing exclusively on joint replacement and repair. The report's conclusion that introducing an emergency room and a level one trauma service to the program would destroy its efficiency was born out during the merger of the OAI with Sunnybrook and Women's College. Under the current system 50% of elective orthopaedic cases are cancelled, as they compete for beds and operating room space with urgent and emergent trauma cases. The Holland Centre's mandate will be high efficiency through-put combined with academic excellence. Its new Director, Jim Waddell has just completed a highly successful 10-year term as University Chair of Orthopaedic Surgery. The prognosis is extremely good for recovery from the merger, a form of bureaucratogenic management disease that has created nightmares for all three victims: Sunnybrook, Women's College, and OAI. Ineptitude in health policy decision making by highly respected leaders who are unprepared for making decisions of this magnitude and significance should inspire our resident surgeon scien-

tists to study, research and implement health policy and management, the new basic sciences of medicine.

Surgeon John Cameron points out that elective orthopaedic surgery, though highly cost-effective, is nonetheless expensive, resource intensive and less urgent and engaging than trauma, cancer and cardiac surgery. ("There are no deaths from sore joints.") The formation of the Holland Centre is well-timed as the indications for joint replacement are expanded and the boomer generation is arriving on the waiting lists. The Holland Centre will expand the staff from 8 to 14 surgeons. 25% of the anticipated 4100 joint operations per year will be complex cases, providing a valuable safety valve for other orthopaedic surgical colleagues in Ontario who can offload complicated and redo cases to the Centre. Four operating rooms at the Wellesley site will be renovated and two more will be added. Academic arthroplasty surgeons will be recruited who will be able to spend more time with well-screened and prepared patients. The system of screening and preparation of patients by advance practice physiotherapists and nurse practitioners will greatly accelerate the through-put and reduce the waiting list. Under the previous non-system, Cameron's waiting list swelled to 900 patients, nearly two years of waiting. Data like these delighted free market fundamentalists on the *Wall Street Journal* editorial staff as they campaigned against a universal national health insurance program for the United States.

The Holland Centre will provide funds for bricks and mortar, for academic chairs and \$600,000 for scholarships for surgical scientists to develop the leadership in orthopaedic surgery for the next generation. Orthopaedic elective cases other than joint replacement and reconstruction will primarily be directed from the Holland Centre to new dedicated elective operating room facilities at Sunnybrook. Hans Kreder, the new Head of Orthopaedic Surgery at Sunnybrook and Director of its Musculoskeletal Program will coordinate screening programs for arthritis, chronic disease management of osteoarthritis at Women's College, Inflammatory Arthritis Programs at Sunnybrook and surgery at the Holland Centre. The Musculoskeletal Program and the Holland Centre will be integrated into plans for the Toronto Central Local Health Integration Network.

The Holland Musculoskeletal Program that Hans Kreder will direct will emphasize access by self-referral -- similar to the Shouldice Clinic -- and by referral from the Family

Health Teams forming in the province. The vision of the program is to prevent arthritis by management of weight, nutrition and rehabilitation after injury and skillful reconstruction of ligaments and menisci. Early and active comprehensive treatment and education for arthritis should reduce the need for surgery. Advanced practice physiotherapists and physicians assistants, a new entity in the Ontario health care system, will help optimize patients for surgery. There will be active participation of non-surgical specialists including Gillian Hawker in the Osteoarthritis Clinic at Women's College and Mary Bell in the Inflammatory Arthritis Unit at Sunnybrook. Surgical care will be facilitated by referral from the assessment team to the next available surgeon. Patients will receive their anaesthetic nerve blocks before entering the operating room, reducing turnover time and enabling performance of five cases per day instead of the current two to three. Anaesthesia assistants will be advanced practice respiratory care technicians who will monitor patients in the operating room. Nurse practitioners will be first assistants. Kreder emphasizes that Bill Holland was interested in three things: immediate improvement in the waiting time, decreasing the need for arthritis surgery for example by reducing the problem of overweight – 53% of knee replacement patients have a body mass index over 30% whereas the average in the Canadian population is 22%. Holland is also funding two chairs and three PhD researchers in cartilage biology.

The Department of Surgery and all of those whose practice and treatment has benefited from Susanne and Bill Holland's gift are grateful for this contribution. Bill has told the MOH that the \$20 Million will not flow unless and until the arrival of the government's share of the funds needed to get this centre of excellence to the level that Richard Reznick, Hans Kreder, Jim Waddell and Holland himself have set for it. I hoped to interview him for this article, but like many of our readers, he would rather be back at work than spend time being interviewed or photographed. John Cameron told me that when Holland was asked to pose for a picture for the annual report of his company CI Mutual, he brought in three suits, three shirts and three ties so that he could get three years worth of photographs out of the way in the shortest possible time.

M.M.

Marvin Tile Chair in Orthopaedic Surgery



Marvin Tile

Sunnybrook Health Sciences Centre Foundation has honoured Dr. Marvin Tile and his distinguished career with the establishment of the \$2 Million Marvin Tile Chair in Orthopaedic Surgery. Internationally-renowned orthopaedic surgeon, researcher and educator, Dr. Hans Kreder, has been appointed Inaugural Chair. Hans is Head of the Division of Orthopaedic Surgery of the Department of Surgery at Sunnybrook. The Marvin Tile Chair will support academic excellence including the recruitment and retention of the world's best clinicians, clinician researchers and scientists to foster advances in orthopaedic surgery.

"I have dedicated my career to innovating and improving orthopaedic surgery and it is an honour for me to leave a legacy through this Chair that will encourage others to achieve breakthroughs that will have global impact and set new standards of excellence for this field," said Marvin Tile, past-Chief of Orthopaedic



Hans Kreder

Surgery and past-Surgeon-in-Chief at Sunnybrook, a Professor of Surgery at the University of Toronto, and past-Chair of Sunnybrook Foundation. "I am proud to have Dr. Kreder appointed to this position. He is a distinguished clinician, accomplished scientist and talented teacher who will bring his passion and skill to this role and inspire others to follow his lead".

The Marvin Tile Chair in Orthopaedic Surgery was initiated by the Musculoskeletal Program at Sunnybrook (the Holland Orthopaedic & Arthritic Centre) and funded and endowed by generous gifts from the Foundation and its donor community. The lead gift was given by Mr. Ed Odette, and major gifts by Paul and Valorie Waitzer,

Lea Reichmann, Austin and Nani Beutel, the Hansjorg Wyss Foundation (US), Alexandre and Jeannine Raab, and Marvin and Esther Tile.

M.M.

The Kensington Centre of Excellence in Cataract Surgery



The Kensington Eye Institute is a highly focused new centre of excellence devoted exclusively to the surgical treatment of cataracts. The institute is rapidly expanding its service to shorten the waiting list for patients with cataracts in Ontario. The institute is one of the largest ophthalmic teaching facilities in Canada and the third largest cataract facility in the country. Located at the site of the former Doctors Hospital in the south annex neighbourhood at 340 College St., the clinic is a state-of-the-art medical facility financed by a combination of private funds from the Doctors Hospital (now Kensington) Foundation and operating funds from the Ministry of Health.



The Kensington Institute will provide learning opportunities for ophthalmology residents at the University of Toronto's teaching hospitals under Professor Jeff Hurwitz, Chair of Ophthalmology and Vision Sciences and Academic Director of the Institute. The clinic currently performs 37 operations per day in three operating rooms and will soon open a fourth. The Clinical Director, Juanita Strowbridge, who formerly worked in the operating room at the Orthopaedic and Arthritic Hospital, runs an extremely efficient operation. Juanita says that nursing morale is high and job satisfaction excellent. Chief Executive Officer Brian McFarlane, formerly CEO of the Doctors Hospital, points with pride to the smooth flow through the unit. The chairs in which patients receive their preoperative medication are wheeled into the operating room, then gently flattened into operating tables where surgeons and residents from the teaching hospitals perform surgery using state-of-the-art equipment. Patients next continue in a smooth loop to the recovery area. They are discharged within two to three hours of their arrival. Patient satisfaction is very high. Facility costs are low as there are no diagnostic or laboratory costs. Surgical packs are standardized and turnover time between cases is five minutes. Sean Singer, Medical Director of the Institute, Joe Mappa, President of the Toronto Academic Health Science Network, Jeff Morgenstern of the Independent Health Facilities Branch of the MOH, and Alan Hudson, CEO of the University Health Network when the Doctors Hospital merged with the UHN, can all share credit for this highly effective addition to Ontario's healthcare system. The facility will perform 6700 operations this year.

M.M.

32nd Gallie Day 2006

FRIDAY, MAY 5



Benjamin Alman

In the coming decades, new technologies will likely change the way we practice surgery. Miniaturized manufacturing, small particles to enhance imaging, and smaller biologic devices to treat disease are all possibilities. This year's Gallie Day focused on these new advances, and was built around the theme of nanotechnology. In a departure from previous years, the participants in the symposium entitled, "Size Matters: A Symposium on Nanotechnology in Surgery", were primarily from the Engineering Department. Ted Sargent, Warren Chan, and Paul Chow each spoke on different aspects of nanotechnology, including miniaturized manufacturing, novel imaging techniques, and a process to enhance commercialization of new high technology devices. Abdallah Daar, from our department, spoke on the promise of nanotechnology in the third world, pointing out the multiple ways in which miniaturized devices and low cost miniaturized manufacturing have tremendous potential to improve the quality of life in less developed countries. The theme was continued by Michael Apuzzo, the Gordon Murray Lecturer, who gave a multimedia presentation on the potential of nanotechnology in surgery, using current ongoing patient based research to illustrate. He presented intriguing clinical research on topics such as the development of novel nanotechnology based imaging techniques to localize brain tumours and small devices to target neoplastic cells. A series of review articles on nanotechnology in the recent years in the journal *Neurosurgery*¹ cover much of the material he presented for those who missed his talk, or want to be able to read

about this topic in greater detail. The symposium and Dr. Apuzzo's lecture provided a fascinating glimpse into what is possible for surgery in the near future. They pointed out the wide variety of opportunities that are available here in Toronto to participate in collaborations with engineers to perform research into the development of new technologies to improve treatments for our patients.



Richard Reznick and Michael J. Apuzzo (left) the Gordon Murray Lecturer

In addition to the new topic, Gallie Day was held in a different venue, the MaRS Collaborative Centre. There were close to 50 poster presentations, and along with the Gallie Day oral presentations from the surgeon scientist trainees, these highlighted the diverse high quality research being conducted in our department. There was a much larger than usual attendance, and for much of the day there was a standing room only crowd.



The Gallie-Bateman Prize was presented to Bradley Jacobs, and Alexandra Mihailovic and Danny Ramzy received a tie for second place. The McMurrich Award for best bench science work went to Karim Mukhida (I Mendez, Dalhousie),

and there was a tie for second place, with awards going to Deepak Kamnasaran (A Guha), Yan Chen (B Alman), Christopher Kim (T Yau), Ann Parr (C Tator), and Danny Ramzy (V Rao). There was a tie for first place for the Wyeth Award for best non-bench research between Cornelia M. Borkhoff (J Wright) and Carol-anne Moulton (R Reznick). The second place award went to Timothy Cheang (CHL Law) and Veena Guru (S Fremes).

Faculty research awards went to Robert Nam (Langer Surgeon Scientist Award), David Urbach (George-Armstrong Peters Prize), Jim Rutka (Tator Surgeon Scientist Mentoring Award) and Ben Alman (Lister Award).

Thanks to all the judges for the poster competition as well as the oral presentations. Thanks again this year to Andrea McCart, David Urbach and Val Cabral for their dedicated organization of the Day.

Benjamin Alman
Vice Chair Research

1 Leary, Scott P. M.D.; Liu, Charles Y. M.D., Ph.D.; Apuzzo, Michael L.J. M.D. Toward the Emergence of *Nanoneurosurgery*: Parts 1- III. *Neurosurgery*. Part I -- 57(4):606-634, October 2005; Part II -- 58(5):805-823, May 2006; and Part III -- 58(6):1009-1026, June 2006.

DEPARTMENT OF SURGERY
Annual Awards
HONOURING OUTSTANDING CONTRIBUTIONS
OF THE FACULTY AND RESIDENTS



Bryce Taylor (right) presents the **George Armstrong-Peters Prize** to **David Urbach** (GenSurg).

First awarded in 1912, the Armstrong-Peters Prize honours younger surgeons who have sustained continued productivity in basic science research.



Robin Richards (right) presents the **Charles Tator Surgeon-Scientist Mentoring Award** to **James Rutka** (NeurSurg).

The Charles Tator Surgeon-Scientist Mentoring Award is intended to honour individuals supervising participants in the SSP who emulate Professor Tator's qualities, namely excellence in research, commitment to SSP mentoring and dedication to promotion of Surgeon-Scientists. The intent of the award is to provide recognition for teaching contributions made by supervisors to SSP trainees.



Richard Reznick (right) presents the **Surgical Skills Centre Distinguished Education Award 2005-2006** to **Thomas Lindsay** (VasSurg).

The University of Toronto Surgical Skills Centre Distinguished Education Award for Outstanding Contributions demonstrates the Centre's commitment to surgical skills education. This award recognizes those individuals who have made exemplary, innovative contributions to teaching and learning in the Surgical Skills Centre over the past year.



Richard Weisel (right) presents the Lister Prize to **Benjamin Alman** (OrthSurg).

The Lister Prize in surgery is awarded to an investigator who has shown outstanding and continuing productivity of international stature as evidenced by research publications, grants held, students' trained and other evidence of the work produced.



John Bohnen (right) presents the **Donald R. Wilson Award** to **Sundeep Rai** (GenSurg Resident).

The Donald R. Wilson Award recognizes significant contributions by a resident surgeon for continued instructions of peers and medical students.



Benjamin Alman (right) presents the **2005 Bernard Langer Surgeon-Scientist Award** to **Robert Nam** (UroSurg).

The Bernard Langer Award is presented to an outstanding graduate of the Surgeon-Scientist Program who shows the greatest promise for a career in academic medicine.

Honouring the outstanding past teachings of Professor Bruce Tovee we are pleased to announce the following award winners:



John Bohnen (right) presents the **E. Bruce Tovee Teaching Award** for outstanding teaching in Postgraduate Education to **Jay Wunder** (OrthSurg).



David Backstein (right) presents the **E. Bruce Tovee Teaching Award** for outstanding teaching in Undergraduate Education to **Robin Richards** (OrthSurg).

Gallie-Bateman Research Presentations

FIRST PRIZE WINNER

W. Bradley Jacobs (NeurSurg Resident, Supervisors: F.D. Miller & D.R. Kaplan) Project: “p63 is an Essential Proapoptotic Protein During Neural Development”



Robin Richards, Brad Jacobs, Ben Alman and Richard Reznick (left to right)

SECOND PRIZE WINNERS

Alexandra Mihailovic (GenSurg Resident, Supervisor: P. Coyte) Project: “The Burden of Pediatric Injury in the Developing World: Methodology of Quantifying the Problem and Translating Research into Sustainable Solutions”



Alexandra Mihailovic and Ben Alman

Danny Ramzy (GenSurg Resident, Supervisor: V. Rao) Project: “Role of Endothelin-1 and Nitric Oxide Bioavailability in Transplant Related Vascular Injury: Comparative Effects of Rapamycin and Cyclosporine”



Danny Ramzy (left) and Ben Alman

Poster Awards



Andrea McCart, David Urbach and Sonja Finocchiaro, Wyeth Representative presented Poster Awards.

MCMURRICH AWARDS

FIRST PRIZE WINNER (SCORE 8.4 / 10)

Karim Mukhida – NeurSurg Resident,
Supervisor: I. Mendez, Dalhousie - SSP

SECOND PRIZE WINNERS (SCORES 8.0 / 10)

This year we had a few second prize awardees (all with the same scores at the end)

Deepak Kamnasaran – NeurSurg Student,
Supervisor: A. Guha

Yan Chen – OrthSurg Res Fellow,
Supervisor: B. Alman

Christopher Kim – CardVasc Student,
Supervisor: T. Yau

Ann Parr – NeurSurg – Research Resident Elective,
Supervisor: C. Tator

Danny Ramzy – GenSurg Resident,
Supervisor: V. Rao - SSP

**WYETH AWARDS
FIRST PRIZE WINNERS**

Cornelia M. Borkhoff – OrthSurg Student,
Supervisor: J. Wright

Carol-anne Moulton – GenSurg Resident,
Supervisor: R. Reznick - SSP

SECOND PRIZE WINNERS

Timothy Cheang – GenSurg Resident,
Supervisor: C. Law - SSP

Veena Guru – GenSurg Resident,
Supervisor: S. Fremes - SSP

DEDICATION TO EDUCATION

Richard Reznick presented the following faculty members with a Department of Surgery, University of Toronto, engraved wooden captain's chair, a token gift for their dedication to education as they complete their terms in the areas highlighted below:



Zane Cohen – GenSurg
**Surgeon-in-Chief,
Mount Sinai Hospital**



Sender Herschorn – UrolSurg
**Director, Continuing
Medical Education**



Peter Neligan – PlasSurg
**University Chair,
Division of Plastic
Surgery**



James Waddell – OrthSurg
**University Chair,
Division of
Orthopaedic Surgery**

**ENTERTAINMENT –
“The Marginal Donors”**



Nanotechnology Comes to Neurosurgery



Betty Kim

Fourth year neurosurgery resident Betty Kim is beginning a PhD in Biomaterials and Biomedical Engineering. Her supervisors include Jim Rutka from the Division of Neurosurgery, and Warren Chan from the Division of Chemical Engineering. Betty will be working with many chemical and electrical engineers and is excited about this interface. She will use nanoparticles to detect and monitor proteins and DNA in neurodegenerative diseases including cerebral spinal fluid abnormalities, tumours and sentinel bleeds from ruptured aneurysms. Her ultimate goal is to develop a rapid bedside hand-held-device for detection and diagnosis of neuronal diseases. Betty is also interested in selectively targeting nanoparticles to tumour cells. These nano-sized particles can be engineered to contain tumour killing drugs and imaging agents designed to detect cancer at its earliest stages or during tumour recurrence. Ultimately, these multi-functional particles may be used to delineate the boundaries of the tumour, allowing for real-time image-guided surgery and chemotherapy.

Nanoparticles are exquisitely manageable. They can emit various forms of energy such as light, heat or electric charge. They will enable rapid point of care detection of viruses, bacteria, genetic alterations and tumours without the time consuming, equipment intensive amplification steps that are the current standard for detection of abnormal DNA and proteins. We will be making diagnoses based on DNA barcodes scanners within 3 to 4 hours and learn to think in new terms, like zeptomolar (10^{-21} M) rather than millimolar (10^{-3} M) concentrations.

Betty received her undergraduate degree in Cell Biology and Anatomy from McGill. During this time she also did an enrichment year at Oxford University, studying Post-Colonial Literature by authors such as Rohinton Mistry, Salman Rushdie and Chinua Achebe, and at King's College, London, studying physiology, embryology and public health. She completed her medical degree at McMaster and began

her neurosurgery residency at Ottawa University where her mentors included Brien Benoit, Vasco DaSilva, Howard Lesiuk and Enrique Ventureyra. She spent a year at Brigham and Women's Hospital in Boston studying neuronal programmed cell death (apoptosis) with Robert Friedlander, publishing her work in *Nature*. She chose to pursue her research in Toronto in order to work with Warren Chan and James Rutka and because of the rich, collaborative research environment. Although she will be away from neurosurgery, she will continue to attend academic half-days and do hands-on dissections offered by her residency program twice a year. She credits Neurosurgery Program Director Chris Wallace for encouraging her to pursue a graduate degree and supporting her choice of engineering.

Betty immigrated with her family to Canada from South Korea when she was six. Her parents spoke no English and often had to work at three or four jobs at a time to support the family. Betty learned the importance of hard work, humility and compassion from their example. They are now retired and live in Waterloo. Her sister Diana lives in Montreal. Betty is the first doctor in her family; she is also a concert pianist and organist, and enjoys oil and acrylic painting.

M.M.

Bob Mustard, Principles of Surgery Proprietor

Since the Fall of 2002 Dr. Robert (Bob) Mustard has run, evaluated and improved the Principles of Surgery lecture series for PG1 and PG2 "Core Surgery" residents. The POS lectures are a shining showpiece of the department's educational offerings to residents. Bob had a tough act to follow,



Robert Mustard

Martin McKneally, who introduced a broader blend of topics, awards for best lecturers, and clockwork precision.

Bob runs the lectures the way he does most things - hands on. He attends the lectures personally. Further, Bob has solved the perennial problem of getting errant lecturers

to supply questions for the Practice POS Exam each resident takes yearly as a tune-up for the real thing: Bob creates the entire 100-question exam himself! Bob won't share his secrets to exam question generation - something he does regularly for fellowship and undergrad exams locally and nationally. He is probably the most prolific "generator" ever seen, for an art that too often goes unrecognized.

Bob is the perfect teacher to run the POS series. He is widely respected as a "surgeon's surgeon," with voluminous knowledge, great surgical judgment, and a go-to guy for general surgeons in southern Ontario. He has served as a surgical intensivist, trauma team leader, TPN service, fellowship examiner, and perennial member of the Test Committee in General Surgery. Bob holds the unofficial world record for number of emergency tracheostomies (single-year and career). An Undergraduate Tovee Award winner, Bob's understands surgical education. He is probably the only faculty member in the department who could actually pass the Royal College POS Exam on a day's notice.

Thanks Bob!

John Bohmen
Professor and Vice Chair, Education

Scientists in Surgery

Approximately 15% of our surgical faculty are individuals who are non-MDs and work as full-time scientists. These individuals are significant contributors to the research effort of our Department. This section will endeavour to profile excellence in research among the scientists in our Department.



Alexander Velumian

Alexander Velumian, known to colleagues as Sasha, is an Assistant Professor in Surgery and Physiology and a Research Neuroscientist in the Division of Neurosurgery of the Toronto Western Hospital. His area of expertise is cellular electrophysiology of the central nervous system using intracellular microelectrode and patch clamp recording techniques and fluorescence imaging. Sasha

was first appointed to our Department in 2004, and his research activities are within the Spinal Cord Injury Program headed by Michael Fehlings.

Sasha graduated from the Moscow State University in Russia in 1973. He received his PhD in 1979 from the I.M. Sechenov Institute of Evolutionary Physiology and Biochemistry of Russian Academy of Science in Leningrad (now St. Petersburg). He was a Senior Scientist (1986-1997), and then Leading Scientist (1997-1998) in the same institute. In 1993, he received his Doctor of Science Degree in Physiology (this is the highest scientific degree in Russia and some European countries) for studies of neuronal mechanisms of the embryonic spinal cord.

Sasha came to Canada in 1992 as a Visiting Scientist to work with Dr. Peter Carlen at the Toronto Western Hospital. He then moved to the US to work as a Senior Scientist with Johnson and Johnson at the R.W. Johnson Pharmaceutical Research Institute in San Diego. He returned to Toronto in 2001 to join the spinal cord injury research team at the Toronto Western Hospital which is lead by Michael Fehlings.

Sasha's research interests are broadly focused on the basic mechanisms of signal transmission in the CNS. This interest has been applied to spinal cord injury by examining glial-axonal interactions and the role of periaxonal glia in maintaining axonal function. His recent studies using combined electrophysiology and fluorescence imaging are focused on the role of intra-myelin communication pathways in myelin maintenance and repair. Using the injection of hydrophilic fluorescent dyes into individual oligodendrocytes or into the internodal myelin, these studies provide the first assessments of the diffusional properties of the CNS myelin sheath and uncover the 3D organization of intra-myelin cytoplasmic networks. In a recently approved grant from the Heart and Stroke Foundation of Canada with Michael Fehlings, he will apply these approaches to understand the role of hypoxic/ischemic components of spinal cord injury in axonal dysfunction, specifically in terms of the role of axonal K⁺ channels that are normally concealed under the myelin sheath but become exposed after injury.

Michael Fehlings
Division of Neurosurgery

Trauma Outreach Training of Costa Rican Physicians:

A REPORT FROM ST. MICHAEL'S HOSPITAL



Jameel Ali (right) and Dr. Chris Kaufmann, Director, International ATLS Promulgation Program, American College of Surgeons

Members of the Trauma Team at SMH and University of Toronto surgical residents recently hosted nine physicians and two potential trauma coordinators from Costa Rica in the Advanced Trauma Life Support Program. The program is conducted over five days and is attended by members of the American College of Surgeons Committee on Trauma. The program has been introduced in over 45 countries, but many developing countries like Costa Rica, which would definitely benefit from such a program, miss out because of limited financial resources. The project received financial support from the St. Michael's Hospital Trauma Program and Human Concerns International, with additional help from the Medical Media Department of St. Michael's Hospital, Anja Robb of the U of Toronto OSCE Standardized Patient Unit and the St. Mike's vivarium staff. The program was endorsed by the Federal Ministry of Health and the Costa Rican Consulate in Toronto with visa support from the Canadian Embassy in Guatemala. The program consisted of lectures, small group discussions, demonstrations, simulated trauma

patient scenarios utilizing mannequins, surgical models and trained standardized patients as well as educational sessions on teaching skills. The instructors trained at this University of Toronto teaching hospital are now able to train other doctors and help establish a trauma training network aimed at improving survival among trauma victims throughout Costa Rica. The physicians expressed their gratitude to Mr. Jeff Lozon, the CEO who observed them in training and wished them well in their continuing efforts to improve trauma care in their country.

This Trauma Outreach Training Program is part of the multidimensional trauma training initiatives which I direct at St. Michael's Hospital and includes the TEAM [Trauma Evaluation and Management] Program for senior medical students, The Advanced Trauma Life Support Program for surgical, ENT and family practice residents from the University of Toronto and the Advanced Trauma Operative Management [ATOM] for senior general surgery residents. The success of these programs depends on considerable assistance from many people who are faculty at St. Mikes and the University of Toronto as well as paramedical staff such as our nurse coordinator, Mary Howard to whom I am very grateful.

Jameel Ali, Director, Advanced Trauma Life Support Program and member of the International ATLS Promulgation Committee



Costa Rican physicians and local ATLS faculty at St. Michael's Hospital, UofT

NEW STAFF

The Department of Surgery warmly welcomes the following individuals who have joined our Department.

The Division of General Surgery, University Health Network, is excited to announce the recruitment of two new Faculty members, Erin Kennedy and Allan Okrainec as of July 1, 2006.



Erin Kennedy

Erin Kennedy is a graduate of U of T, where she obtained her MD in 1995, Summa Cum Laude, entered the General Surgery Residency Training Programme in 1995, the Surgeon Scientist Programme in 1997, and obtained her PhD in 2002. Erin was awarded her FRCSC in 2004 and will complete a 2 year Surgical Oncology

Fellowship in the Department of Surgery on June 30, 2006. In addition to joining the Division of General Surgery at UHN, Erin will become a member of the Department of Surgical Oncology at Princess Margaret Hospital and pursue her strong interest in colorectal cancers. Her job description will have a 45% research commitment and Erin will concentrate her work on Outcomes Research, in collaboration with Robin McLeod and David Urbach.

Allan Okrainec is a graduate of McMaster University, where he obtained his MD in 2000 and completed the General Surgery Training Programme in 2005. He obtained his FRCSC in 2005 and is presently completing a fellowship in Minimally Invasive Surgery with Gerald Fried at McGill University. Allan will be based at the Toronto Western Hospital where he will be clinically mentored by David Urbach and Jaime Escallon. He will also pursue his strong interest in surgical skills acquisition, use of simulations in training, and surgical education by enrolling in the Masters of Education at the University of Chicago and will be mentored in his research by Helen MacRae, David Backstein and Richard Reznick.



Allan Okrainec

Lorne Rotstein
Hospital Division Head, General Surgery
University Health Network

George Oreopoulos grew up in Toronto and began his Undergraduate Degree in Biology at MacMaster University. In addition to being on the Dean's Honour list he completed his first and second-degree Black-belt in Shotokan Karate during this time. Following medical school at the University of Toronto he was admitted to the General Surgery Program. He spent two years in the Surgical Scientist Program in the laboratory of Ori Rotstein. He completed his Masters Degree at the Institute of Medical Science winning several awards both locally and internationally, including awards from the American College of Surgeons, the Surgical Infection Society, the Upjohn Award from the Annual Assembly of General Surgeons in Toronto, and a Canadian Society for Clinical Investigation/Medical Research Council Resident Award.

After completing his general surgery training George began a two-year fellowship in the Division of Vascular Surgery and completed his Certificate of Special Competence in Vascular Surgery at the Royal College in September 2004. He joined the staff at St. Joseph's Health Centre in 2004. In January 2006 he moved from St. Joseph's Health Centre to Toronto General Hospital/ University Health Network in the reorganization of vascular surgery within the downtown teaching hospitals.

George will be an assistant professor, a surgeon teacher and will be pursuing minimally invasive therapies including laparoscopic aortic surgery and venous ablation. His wife, Amrit, is a nephrologist at St. Joseph's Health Centre. They have a two-year-old son, Dimitrios. We welcome George to the Division of Vascular Surgery.

Thomas Lindsay
University Division Chair, Vascular Surgery

ANNOUNCEMENT

FAMILY NEWS

In future issues of *The Surgical Spotlight* we would like to include a section on our families. Please send birth and marriage announcements with photographs, as well as any other family news you would like to share with the Department of Surgery community to jean.defazio@utoronto.ca.



Khalid Syed

Khalid Syed will be joining the Division of Orthopaedic Surgery at the Toronto Western Hospital in July 2006 as a Surgeon-Teacher with a clinical interest in hip and knee replacement as well as foot and ankle surgery. Khalid obtained his MD at the University of Toronto and is also a graduate of the U of T Orthopaedic Residency Training

Program. He did a one year fellowship in arthroplasty and trauma with Jim Waddell and Emil Schemitsch at St. Michael's Hospital and then did a further year fellowship with Nizar Mahomed in hip and knee arthroplasty at the Toronto Western Hospital. This last year he has been a Clinical Associate in Orthopaedics at the Western.

Khalid is proficient in English, Urdu and Hindi. He is married to a family physician who practices in Toronto. They have one son.

Rod Davey

*Hospital Division Head, Orthopaedic Surgery
University Health Network - Toronto Western Hospital*

The Division of Urology and The Department of Surgery is proud to announce the appointment of its newest member, **Armando J. Lorenzo**, as staff urologist and Assistant Professor of Surgery at the University of Toronto effective July 2006.



Armando Lorenzo

Many will already know Armando as he has just completed a spectacular two years as Clinical and Research Fellow within the Urology Division. He brings a rare blend of personal style, intelligence, and compassion to the practice of a diverse and multi-faceted specialty which includes care of genital anomalies, kidney-bladder hydrodynamic function, and renal transplantation in children.

Armando is a native of Panama, where he completed medical studies graduating at the top of his class. He completed his Urology Residency at the University of

Texas Southwestern Medical School, in Dallas, Texas and began his fellowship at SickKids in 2004. Armando has consistently won top medical and urological honours in his native Panama, the U.S., and Canada. Most recently he was the recipient of an American Urological Association Research Fellowship for 2006-2007, where he has been working with Darius Bagli in the field of bladder pathomechanics. Equally versed in the language of basic science and outcomes research, he will be specializing in the latter following completion of an MSc in Epidemiology through the Faculty of Medicine Department of Health Policy, Management and Evaluation, beginning this Fall. Well published in several areas of Urology, Armando also has a keen interest in enhancing minimally invasive surgical alternatives for patients, and establishing a field of outcomes research in Pediatric Urology which has not formally existed up to now. Armando is a gifted technical surgeon with an inquiring mind, and boundless enthusiasm for improving the life of the young patients we all care for. Please join us in welcoming him to our community

Antoine Khoury

*Hospital Division Head, Urology Surgery
The Hospital for Sick Children*



"No, Thursday's out. How about never—is never good for you?"

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Martin McKneally

Disruptive Innovations

In the business world, mainstream technologies sometimes overshoot what average customers want or need in order to satisfy their most demanding customers. As they add new features, they become more complex and cumbersome. Innovative technologies that begin at performance levels substantially below mainstream products, but provide advantages in price or convenience, can enter the market and constructively disrupt the status quo. Harvard Business Professor Clay Christensen illustrates his theory of disruptive innovation using the example of the slow, clunky personal computers that were introduced in the 1980s. They had only one advantage at the outset -- portability. Over time they adapted nimbly to the market and eventually surpassed the needs and demands of average customers, while maintaining the great advantage of convenient access that mainframe computers lack. Only the mainframes can figure out how to encrypt your credit card with prime numbers, but you need your email and slides at the meeting.

Similar disruptions are occurring in the physical plants and personnel of the health care world. Centres of excellence in cataract and joint surgery, unencumbered by the complexity of large multipurpose hospitals are being developed to outperform the mainstream venues in their particular niche. By maintaining close relationships with their "mothership" hospitals, they can immediately transfer the very few patients who might develop problems perioperatively despite careful screening. Only one of the 2500 patients treated so far at the Kensington Eye Institute was transferred to an emergency room -- for an apparently abnormal EKG. The mothership had the capability to recall a previous cardiogram proving that there had been no change.

Similarly, physician's assistants, recently authorized in Ontario under the current government, are harvesting veins and closing chests in the United States. Nurse practitioners are performing pelvic examinations, proc-

toscopies and assisting in surgery, often better than physicians bored by these important but routine tasks. When they assist in surgery, they free up family physicians who can then perform more appropriate professionally and personally rewarding activities.

Nurses are pursuing opportunities that were unavailable in an earlier more rigid era of the mainstream culture. Jane MacIver, a nurse practitioner on the heart failure service at Toronto General Hospital with Vivek Rau and Heather Ross, is currently pursuing a PhD in bioethics to examine the end of life issues she faces when the time comes to turn off the implantable artificial heart. She will not be diverted from her clinical role as a nurse practitioner. Pathways like this are disrupting the mainstream philosophy that has held nursing to a career-limiting mainstream trajectory. Combining her clinical work with ethics research in heart failure patients, Jane represents a new species of clinician scientists in the nursing profession. The clinician scientist model in surgery, introduced two decades ago during Bernie Langer's tenure as Chairman, may itself be undergoing a new disruption as nanotechnology enters into our curriculum -- illustrated by the work of Betty Kim, Jim Rutka and our Gallie lecturer Michael Apuzzo.

As Clay Christensen emphasizes in his New York Times bestselling book *The Innovator's Solution* the balance of disrupting and sustaining technologies should be carefully nurtured. Family doctors and anaesthesiologists should have nothing to fear from nurse practitioners, physician's assistants and nurse anaesthetists. Neither they nor the large multipurpose hospital and the mainframe computer will disappear. They will be reserved for more urgent and complex problem-solving and they will integrate the highly efficient subunits that are evolving around them. This is a dynamic and encouraging time in medicine. Nonsystems are approaching integration into systems, and the health care budget is becoming recognized as an investment -- rather than simplistically misrepresented as an expense to be minimized.

Martin McKneally
Editor

Sandro Rizoli – Winner of the Royal College Medal in Surgery

On behalf of the Department of Surgery, I am delighted to have the opportunity to congratulate Sandro for being selected as the winner of the Royal College Medal in Surgery this year. Sandro came to Toronto following his General Surgery training in Brazil to do a trauma fellowship under the supervision of Fred Brenneman at Sunnybrook Hospital. He was sufficiently enamored with the opportunities here at the University of Toronto that he decided to remain here, understanding that he would have to totally re-train in General Surgery in order to pursue his career aspirations here. That decision, made over a decade ago, has paid enormous dividends for our Department and our University, as Sandro has evolved into an outstanding Academic Surgeon and an internationally recognized figure in the field of Trauma and Critical Care Surgery.



Sandro entered the Gallie Program in General Surgery in 1995. Early on in his training, he was recognized as being a superior individual, both in his surgical skills and also in his potential as a future contributor to our profession. In 1997, Sandro took time out of his clinical training and joined our laboratory group as part of the Surgeon Scientist Program. He completed his PhD in less than 3.5 years, having made extraordinary contributions to our understanding of fluid resuscitation for hemorrhagic shock during his doctoral training. In particular, through his basic research on the effects of hyperosmolar solution on immunological responses, he suggested their use as being potentially beneficial to patient outcome in the setting of hemorrhagic shock. Using animal models, he was the first to clearly demonstrate that hypertonic saline solutions used during resuscitation from hemorrhagic shock were able to mitigate organ injury, particularly in the

lung. Furthermore, his work elucidated some of the fundamental mechanisms whereby hypertonicity might impact on the immune system to exert this salutary effect. Specifically, he defined the cellular mechanisms whereby hypertonic solutions were able to alter intracellular signaling cascades within inflammatory cell and as a result, prevent their injurious effects on organ systems. This work was published in high profile basic science and clinical science journals, including *Journal of Immunology*, *American Journal of Physiology*, *Journal of Biological Chemistry*, *Journal of Trauma* and the *Journal of Surgical Research*. His remarkable productivity as a graduate student attests to his intellect, his perseverance, and his commitment to hard work.

Following completion of the clinical residency program, Sandro joined the Faculty at Sunnybrook Hospital. He quickly established himself as a capable general and trauma surgeon, as well as a highly effective resident and student educator. His research activity has evolved such that it now focuses on patient-oriented translational research. The work for which he was awarded his Royal College Medal, was a randomized, controlled double-blinded study evaluating the ability of hypertonic saline to modulate the immune response in trauma victims. In this “Proof of Principle” trial, hypertonic saline was shown to beneficially modulate the immune response, essentially mirroring his findings in the animal setting. This clinical trial was published in the *Annals of Surgery* in January 2006. This work set the stage for a larger clinical trial focused on defining an outcome benefit. Sandro is a co-investigator in the NIH-CIHR funded Resuscitation Outcomes Consortium, whose inaugural study will investigate the clinical benefit of hypertonic saline administered in the prehospital setting to trauma victims with hemorrhagic shock in a large multicentred trial.

In less than a decade, Sandro’s contributions as a “bench to bedside” researcher have already had considerable impact on the field of Trauma/Critical Care, with considerable potential for broader implication on patient care. Simply stated, he has established his credentials as a productive and high quality “translational researcher” in the area of trauma/critical care research.

To the extent that past performance predicts future successes, Sandro is now well positioned to continue

his excellent work. He has all the personal attributes required to succeed: he is a passionate researcher, an excellent communicator, a creative thinker and above all, an extraordinarily hard worker. As a clinician, he is an excellent diagnostician, an outstanding technical surgeon, and a superb surgical teacher. His decision making is routinely evidenced-based, yet he regularly applies a strong spirit of scientific enquiry to his approach to patient management.

Congratulations to Sandro for his recent award and best wishes for continued successes.

*Ori D. Rotstein,
Surgeon-in-Chief, St. Michael's Hospital*

HONOURS/AWARDS/ ACCOMPLISHMENTS

Congratulations to the following Faculty members of the Department of Surgery who were promoted this year. These promotions will take effect July 1, 2006.

Promoted to Assistant Professor

Christopher Compeau - ThorSurg
Mary Keith – Research
Kirk Lo – UrolSurg

Promoted to Associate Professor

Michael Borger – CardSurg
Mitchell Brown - PlasSurg
Walid Farhat – UrolSurg
Robert Maggisano – VasSurg
John Phillips – PlasSurg

Promoted to Full Professor

Christopher Forrest – PlasSurg
Keith Jarvi – UrolSurg
Michael Johnston – ThorSurg
David Rowed – NeurSurg
John Semple – PlasSurg

Jameel Ali (GenSurg) has been awarded the 2005 Dr. Arthur Squires Teaching Award presented on November 9, 2005, by The Squires Club in recognition of his dedication as a Physician and Teacher and for passing on his skills and knowledge to the new generation, in the pursuit of medical excellence.

John Bohnen (GenSurg) has been chosen to receive the 2006 Lois H. Ross Resident Advocate Award from the Professional Association of Interns and Residents of Ontario (PAIRO). The award, established in 1997, recognizes individuals in the province who consistently advocate on behalf of residents and resident issues within their role as either an administrator, teacher or clinician.

Robert Cartotto (PlasSurg) was named as a recipient of a 2006 Professional Association of Interns and Residents of Ontario (PAIRO) Excellence in Clinical Teaching Award. This award, which is one of only two given throughout the UofT, recognizes Rob's superb commitment to reaching residents.

Brent Graham (OrthSurg) was presented with the Arni Freiberg Teaching Excellence Award in recognition of outstanding contributions to plastic surgery resident education.

Sender Herschorn (UrolSurg) has been reappointed for a second five-year term as University Division Chair, Urology starting July 1, 2006.

Sender has also been awarded the 2005-2006 Peters-Boyd Academy Award for Clinical Teaching. This award was previously presented to Sender in 1997-1998 and in 2000-2001.

Mingyao Liu (Research) has been awarded the 2006 Mel Silverman Mentorship Award from the Institute of Medical Science, presented by Mel Silverman at IMS Scientific Day, May 9, 2006. Annually awarded to an IMS graduate faculty member who has served as an outstanding mentor and role model for graduate students and who has contributed in a significant way to the IMS Graduate Program.

Ian McGilvray (GenSurg) was presented with the 2006 Allan Bruce Robertson Junior Investigator Award from the Clinical Research Society of Toronto at the Institute of Medical Science (IMS) Scientific Day, May 9, 2006.

John Murnaghan (OrthSurg) was presented the 2006 Helen Batty Award in Faculty Development at the Education Achievement Day on June 5, 2006 in the category of Program Excellence for Resident as Teacher Day.

Peter Neligan (PlasSurg) was presented with the W.K. Lindsay Research Supervisor Award in recognition of significant contributions to the nurturing of plastic surgery residents at the Visiting Professor Dinner, Sutton Place Hotel on Friday, April 28, 2006.

Richard Reznick (GenSurg) was named the inaugural recipient of the President's Teaching Award at the May 4, 2006 Academic Board Meeting. As one of five award winners, Richard will receive stipends of \$10,000 a year for five years to further his work and will automatically become a member of the Teaching Academy, established as a result of President David Naylor's renewed emphasis on teaching. The academy not only recognizes outstanding role models in teaching but will itself set an example in our efforts to enhance our teaching mission.

Michael Tymianski (NeurSurg) is a recipient of the Ontario Ministry of Research and Innovation 2006 Early Research Award.

Taufik Valiante (NeurSurg) received the 2006 Ross Fleming Surgical Educator Award at the University Health Network.

Taufik is also the recipient of the 2006 Alan Hudson Teaching Award for faculty, May 26, 2006.

Christopher Wallace (NeurSurg) received the Wightman-Berris Academy Postgraduate Teaching Award.

Karen Cross (PlasSurg Resident) is the recipient of the Tau Omicron Phi Prize for Best Research Paper for project titled: "Serial Monitoring of Burn Wound Viability using Near Infrared Spectroscopy (NIRS): An Interim Report" presented at the Visiting Professor Dinner, Sutton Place Hotel, Friday, April 28, 2006.

Karen was also presented the Mentor Systems Graduate Scholarship in Plastic Surgery.

Bradley Jacobs (NeurSurg Resident) has been awarded the 2006 Canadian Research Award for Specialty Residents for his manuscript entitled: "P63 is an Essential Proapoptotic Protein During Neural Development". The purpose of the award is to provide national recognition for original work by postgraduate trainees.

Selig Krajden (PlasSurg Resident) was presented with the Mentor Prize for the Best Clinical Paper titled: "Disability and Pain Outcomes Following Traumatic Upper Extremity Peripheral Nerve Injuries" at the Visiting Professor Dinner, Sutton Place Hotel, Friday, April 28, 2006.

Adrian Laxton (NeurSurg Resident) received the 2006 Warren Ho Memorial Scholarship, May 26, 2006.

Daniel Martin (PlasSurg Resident) was awarded 3rd finalist at the Gallie Day Competition for project titled: "Application of an Angiogenic Biomaterial Improves Wound Healing in Diabetic Mice".

Nicolas Phan Cong (NeuSurg Resident) is the recipient of the 2006 Alan Hudson Teaching Award for Residents, May 26, 2006.

Peter Stotland (GenSurg Resident) to be award the Canadian Association of General Surgery (CAGS) / Tyco Healthcare Resident Award for Teaching Excellence. The award to be presented at the Resident Luncheon on September 8, 2006 in Calgary during the Canadian Surgery Forum.

Gilbert Tang (CardSurg Resident, Supervisor: R. Weisel) has recently been accepted to the 2-year MBA Program at the Harvard Business School (HBS) this Fall, after which he will return to Toronto to complete the Cardiac Surgery Residency Program.

Patrick Tawadros (GenSurg Resident, Supervisor: O. Rotstein) has been awarded the American College of Surgeons Wyeth Resident Research Scholarship for 2006-2008 for project titled: "Mechanisms of Macrophage Activation Following Oxidative Stress".

Patrick was also:

- Awarded First Place at the Surgical Infection Society Meeting in San Diego, April 6, 2006 for his poster presentation on: "The Role of Ceramide Generation and P13 Kinase Activation in Oxidant-induced Macrophage Priming".
- Runner-up / Poster Prize at the Institute of Medical Science (IMS) Alan Wu Poster Competition at Scientific Day, May 9, 2006.

Artur Gevorgyan (PlasSurg Research Fellow, Supervisor: C. Forrest) is the recipient of the Shenaq International Research Award, given for the best paper by a graduate of a foreign medical school (non-North American) presented at the Plastic Surgery Research Council, Dana Point, CA, May 17-20, 2006. The award has been given to a Sick Kids / UofT fellow for the 3rd time since the award's inauguration in 2000.

Artur also received Honourable Mention / Laidlaw Prize at the Institute of Medical Science (IMS) Scientific Day, May 9, 2006.

Robin Humphreys (NeurSurg Alumni) has been named Chair of the Grants Advisory Committee of the SickKids Foundation. He continues as Co-chair for the Foundation's Gifts and Estate Planning Committee.

CORRESPONDENCE

Letters to the Editor are welcomed to keep the community informed of opinions, events and the activities of our surgeons, friends and alumni.

GRANTS / FELLOWSHIPS

Members of our Department received more than 18% (9 of 49 – plus one additional faculty member who will be starting with us in January) of all of the grants awarded by the Heart and Stroke Foundation. Listed below are the successful recipients:

John Coles - CardSurg
James Eubanks - NeurSurg
Michael Fehlings - NeurSurg
Christopher Feindel - CardSurg
Stephen Fremes – CardSurg
Ren-Ke Li - Research
Vivek Rao – CardSurg
Glen Van Arsdell – CardSurg
Subodh Verma – CardSurg Resident
Richard Weisel - CardSurg

Nancy Baxter (GenSurg) is the recipient of a CIHR Grant Award for project titled: "Effectiveness of colonoscopy for the Prevention of Colorectal Cancer and Mortality from Colorectal Cancer: A Population-based Case Control Study".

Mark Bernstein (NeurSurg) received a CIHR Grant for his project: "States of Mind: Emerging Issues in Neuroethics".

Fehlings, Michael (NeurSurg) has received a Physician Services Incorporated Foundation Operating Grant Award (\$134,500), June 2006 for project titled: "Neuroprotection of the Injured Spinal Cord Through Inhibition of FAS-mediated Apoptosis".

Ab Guha (NeurSurg) received a NCIC Grant Award for his project titled: "Functional Analysis of GATA6 in Human Gliomas: A Novel Tumour Suppressor Gene Identified from Genetically Engineered Murine (GEM) Glioma Model by Gene-trapping".

Andrew Howard (OrthSurg) is the recipient of a CIHR Grant Award (\$98,583) for project titled: "Children's Traffic and Road Injury Prevention (TRIP) Team".

Mary Keith (Research) is the recipient of a 2006 Canadian Diabetes Association Operating Grant Award for project titled: “Can Innovative Dietary Strategies Complement Medical Management to Reduce Cardiovascular Risk Factors in Diabetics Following Coronary Artery Bypass Graft Surgery?”

David Latter (CardSurg) has been appointed to the newly created position of Director, Clinical Fellowship Affairs, Department of Surgery, UofT.

Robert Nam (UrolSurg) has been awarded a CIHR Operating Grant (\$708,000 over 3 years) on January 2006 as PI for project titled: “Individual Risk Assessment for Prostate Cancer Using Risk Factors, Tumour Markers and New Biomarkers”.

Robert has also been awarded:

- A CIHR New Investigators Award Salary Support, March 2006.
- A NCIC Research Grant (\$462,000 over 3 years as PI with co-applicants: L. Klotz, J. Trachtenberg, M. Jewett, A. Toi and S. Narod) for project titled: “Cross-Canada Assessment of a New Nomogram Prediction Tool for Prostate Cancer Screening”.

Carol Swallow (GenSurg) is the recipient of a NCIC Grant Award (\$359,691) for project titled: “Plk4 and Chromosomal Instability in Carcinogenesis”.

Katalin Szaszi (GenSurg) is the recipient of a NSERC Grant Award (\$144,000) for project titled: “Regulation of Epithelial Paracellular Permeability by Apical Transport Processes”.

Charles Tator (NeurSurg) and **Greg Hawryluk** (NeurSurg Resident) have received full approval for funding of a McLaughlin Centre for Molecular Medicine Scientist Training Fellowship.

Thomas Waddell (ThorSurg) is the recipient of a CIHR Grant Award (\$75,000) for project titled: “The Role of Marrow Stromal Cells in Prevention of Chronic Lung Allograft Rejection”.

Cari Whyne (Research) is the recipient of a NSERC Grant Award (\$132,000) for project titled: “Modeling Thin Bone Structures in the Human Skeleton”.

Ratan Bhardwaj (NeurSurg Resident) has been granted Post-doctoral Research Fellowship Awards from both the CIHR and the Heart and Stroke Foundation.

Gregory Hawryluk (NeurSurg Resident) received the Codman Neurotrauma Research Fellowship at the AANS Annual Meeting in San Francisco, California, April 25, 2006 for his project titled: “Transplantation of Neural Stem Cells and Tissue Engineering Approaches to Repair Chronic, Severe Spinal Cord Injury”.

Adrian Laxton (NeurSurg Resident) was awarded the 2006 NREF/Medtronic Research Fellowship from the AANS for his project titled: “Modulation of Cognitive Function with Deep Brain Stimulation”.

Charles Matouk (NeurSurg Resident) was awarded a McLaughlin Centre for Molecular Medicine Medical Scientist Training Fellowship for 2 years.

Nicolas Phan Cong (NeurSurg Resident) was awarded a McLaughlin Centre for Molecular Medicine Medical Scientist Training Fellowship for 2 years.

Ann Parr (NeurSurg Research Resident Elective) has just received a CIHR Research Fellowship for her research work in the laboratory of Charles Tator.

Gilbert Tang (CardSurg Resident, Supervisor: R. Weisel) has received a PSI Foundation Grant (\$20,000) for project titled: “Creation of a Biengineered Heart Patch by Stem Cell Recruitment”.

Gilbert is also the recipient of the Johnson and Johnson Surgical Scientist Fellowship.

The deadline for the Fall 2006 Surgery Newsletter is August 15, 2006. All members of the Department are invited to submit news items, articles, pictures, ideas or announcements. You may reach us at:

***voice mail: 416-978-8177, fax: 416-978-3928 or
e-mail: jean.defazio@utoronto.ca.***

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

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