UNIVERSITY OF TORONTO

THE surgical spotlight

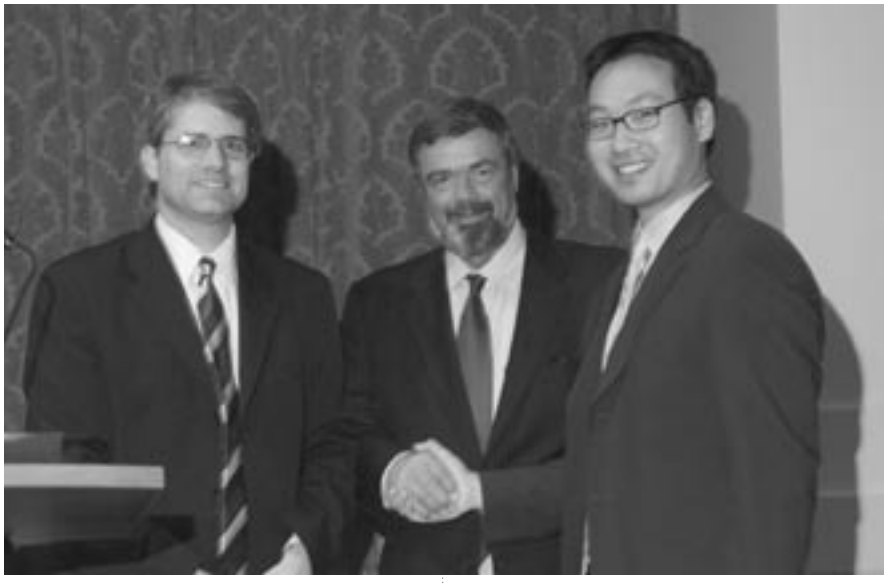
ON ALUMNI, FACULTY, RESIDENTS & FRIENDS

OF THE DEPARTMENT OF SURGERY SUMMER 2005

31st Gallie Day 2005

At the Liberty Grand Entertainment Complex

Recognizing Research by Surgical Residents



Benjamin Alman and Richard Reznick congratulate Michael Ko, winner of the Gallie-Bateman competition

This year's Gallie day was marked by a new program, which incorporated the poster presentation session into the morning activities. The combined session drew the largest attendance, and resulted in a more diverse crowd, representing the various disciplines and training backgrounds that are represented by our departmental members. Nine members of the surgeon-scientist training program presented their work in the oral portion of the program, and over fifty research trainees from a variety of backgrounds, working under the supervision of a member of the department, presented a scientific poster. Dr. David N. Herndon, the Jesse H. Jones Distinguished Chair in Burn Surgery, University of Texas, Galveston, was the Gordon Murray lecturer and Gallie Day judge. He commented on the extremely high quality of

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inside

The Call for Generalist Training Versus the Need for Focus

Richard Reznick

There is a "Great Canadian Debate" traversing this country. It is framed around the controversy surrounding a move by the Royal College of Physicians and Surgeons of Canada to consider altering the training pathways from what exists now, which is by in large direct entry into almost all specialties, to a new system which would see graduation from medical school followed by entry into one of a few base or core specialties, and then entry (by second match) into specialties or subspecialties.

The desire by the College to consider this change is birthed in concepts surrounding three perceived problems. First, the College is unhappy with an explosion of specialties and sub-specialties, all crying for direct entry. Second, there is a North American wide call for generalist training fueled in part, by physician shortages, especially in non-metropolis areas. Third, there is the valid concern about two interdependent phenomena; early career choice and lack of flexibility in changing one's specialty.

This debate is not new, but has now gained traction as recently the College has passed in principle, a motion to explore the feasibility of this approach. This is on the heals of an intensive study by the Canadian Medical Forum on a common PGY-1 year, a study that concluded against a mandatory common year in favour of one that is optional for students who are undecided on their career choice.[1]

As a member of council, I have been vocally against this notion. While many, especially amongst educational leaders in our department, hold my view it is by no means universal. There many surgical leaders who believe that entry after medical school into one, two or three years of "surgery in general" followed by subsequent specialization is a good idea. The College is currently holding a series of "stakeholder sessions" to gauge the consensus opinions of various communities. Suffice it to say, "our representatives" have, by in large, echoed my strong feelings that this would be a major step backwards. While there may be merit to "core experiences" for some specialties, such as medicine, for surgery, I believe, it has the potential to destroy many good things about our current training system.

First and foremost, I believe the model being proposed is pedagogically unsound. Virtually every piece of educational science over the last thirty years has informed us that the route to expertise is learning basic and complex skills in the domain in which they will eventually be applied. Having a prospective cardiac surgeon learn basic surgical skills on a neurosurgical service (which is what may happen with this model) is taking a giant step backward in time, and in so doing, ignoring a large body of educational literature that argues for contextual learning.[2-5] In this regard it may make more sense to look at a common curriculum for all who will eventually practice in a particular system, as opposed to all who will eventually practice in a conventional discipline.

Second, early surgical training will start to look similar to that in the UK, with no affiliations between junior housestaff and the majority of specialty staff. Our residents would loose the critical mutual interdependence with a defined cultural home.

Third, we will inevitably morph towards a two-tiered (American-style) system with two classes of citizens, ones who will have been promised (officially or unofficially) a specialty spot (categoricals), and those who have not (preliminaries).

Tragically, it could kill our surgeon scientist program, a program that has helped define this great department. Currently, most of our SSP trainees enter the lab after two years of training. They enter the research environment having had a reasonable grounding in their eventual specialty, h aving been exposed to potential faculty mentors, and having been assessed by our faculty to be certain, that from a developmental point of view; they are ready for the lab. With the model that is on the table, all this could disappear, jeopardizing a program that is critical to Canadian academic surgery.

Additionally, it would likely result in our residents doing less operating in their formative years, a notion that is antithetical to our current educational strategic plan.

Finally, and without question, it will lengthen training. Training is already way too long and in desperate need of streamlining.

We cannot ignore some of the real issues that have driven a desire of between 10% to 15% of our trainees to pursue career change. Not surprisingly, a similar number of students feel they have had to make career choices too early. Consequently we need to focus increased attention on career counseling for medical students, the timing of the Canadian Resident Matching Service match, credit granted for training completed by residents transferring to different residency programs, funding strategies that currently inhibit resident transfers, and re-entry opportunities for practicing physicians.[6]

We also cannot be dismissive of the call for generalism. But this mantra has many facets, and likely means different things for different specialties. It would be illogical to think that a liver transplant surgeon will be in a position to treat a broad array of common and general patient concerns in an urban academic health science centre. It is true, however, that we are not training enough individuals to provide "general" surgical services to non-urban and remote areas. We need to tackle theses problems system-wide, and stylize residencies that will meet these needs through specific educational programs.

This move afoot to consider a re-vamping of our residency structure is an important debate; perhaps the most important we have had in years with respect to postgraduate education. It is my belief, however, that the models being considered will not work for surgery and are retrogressive. Let's find solutions to the current problems that are pedagogically sound and are directed to the exact nature of the problem.

1. Verma S, Clarke J. (2004). Report of the Working Group on the Common PGY Canadian Medical Forum. http://www.caro-acro.ca/caro/new/pdfs/Common.pdf
2. Charness, N. (1991). Expertise in chess: The balance between knowledge and search. In: KA Ericsson, & J. Smith (Eds.) *Towards a General Theory of Expertise: Prospects and Limits*. Cambridge University Press: NY, 39-63
3. Reeves LM, & Weisberg RW. (1999). The role of content and abstract information in analogical transfer. Psychological Bulletin, 115, 381-400.
4. Perkins DN, & Salomon G. (1989). Are cognitive skills context bound? Educational Researcher, 18, 16-25
5. Elstein AS, Shulman LS, Sprafka SA. (1990). Medical problem solving: A ten-year retrospective. Evaluation and the Health Professions, 13, 5-36.
6. Gutkin C. Common PGY-1 Training. http://www.cfpc.ca/cfp/2004/Oct/vol50-oct-vital-1.asp

Richard K. Reznick
R.S. McLaughlin Professor and Chair

David Naylor has been appointed as the next University of Toronto President (15th President). Dr. Naylor will step down as Dean, Faculty of Medicine effective mid-June, be working full-time as President-designate from September 1, 2005 and assume office as President on October 1, 2005.

Catherine Whiteside has been approved as Interim Dean, Faculty of Medicine, effective June 16, 2005 to June 30, 2006 or until the appointment of a New Dean.

(PLEASE NOTE: MORE ABOUT THESE IMPORTANT DEVELOPMENTS IN UPCOMING ISSUES)

(continued from page 1)

Benjamin Alman with McMurrich Award winner Michael Lekas

Gallie-Bateman poster session

This year's Gallie-Bateman poster session was well attended and highly competitive

the presented work, stating that it rivalled that of any international meeting he had attended. The trainee presentations were judged by a large panel of faculty members from both the clinical and non-clinical realms, who had difficulty selecting winners from the very high quality presentations.

Michael A. Ko (GenSurg), received the first prize in the Gallie competition for his work entitled "Sak/Plk4 is Haploinsufficient for Hepatocellular Carcinogenesis and Regulates p53", working under the supervision of Carol Swallow. Michael C. Lekas (CardSurg) received second place for his work "The Critical Role of the Angiopoietins in Neovascularization of the Ischemia Hindlimb: Therapeutic Angiopoietin-2 Gene Transfer Enhances Revascularization" which was performed in the lab of Duncan Stewart. Michael C. Lekas also received first place in the McMurrich Award, for the best poster presentation in a fundamental biology area for his poster entitled "Therapeutic Revascularization Induced by Angiopoietin-2 Gene Transfer is Synergistically Enhanced by Combination with VEGF Gene in the Rat Hindlimb Ischemia Model" also supervised by Duncan Stewart.

The two second place recipients of the McMurrich Award were Ananta Gurung, for his poster entitled "Elevated Beta-catenin and Tcf-dependent Transcription and the Formation of Hyperplastic Cutaneous Wounds in Mice Administered Lithium Chloride," and Sean Tjandra for his poster entitled "Type 1 Interferon Signaling Promotes Tumour Formation in Aggressive Fibromatosis." Both second place winners were supervised by Ben Alman. There was also a tie for third place, with Poney Chiang receiving third prise for his poster entitled "Mutational Analysis of AAA+ Motifs in Pseudomonas Aeruginosa Type IV Pilus Motor Proteins" supervised by Lori Burrows and Christopher Kim, receiving third prize for his poster "Maximizing Ventricular Function with Multimodal Cell-based Gene Therapy" supervised by Terrence Yau.

The Wyeth Award for best poster presenting an educational or clinical epidemiology project went to Jason Park for his poster " Skill Transfer from Colonoscopy Simulator to Real Patients: Results of a Randomized Controlled Study" supervised by Stanley Hamstra, Helen MacRae, and Richard Reznick.

The Gordon Murray lecturer, David Herndon, is an international leader in burn surgery, and an exemplary surgeon-scientist, having participated in fundamental science work for several decades. Joel Fish (PlasSurg)

commented on David's long-term commitment to providing exceptional hands on clinical care, especially for children as the head of the Shrine Hospital in Galveston. His Gordon Murray Lecture was entitled "Modulation of the Catabolic Response to Injury." The lecture outlined basic science studies which went on to change clinical care, but also spoke on the importance of clinical studies, and demonstrated how as these can show results that are opposite to the pre-clinical animal based investigations. Following the lecture, Benjamin Alman (OrthSurg), Peter Ferguson (OrthSurg), Christopher McCulloch (Dentistry), James Mahoney (PlasSurg), and David Herndon participated in a lively symposium on wound healing, entitled "Closing the Gap." Potential new wound healing therapies ranging from the application of new clinical modalities to the use of novel drugs and cell-based therapies were discussed.

Benjamin Alman
Vice Chair Research

Registration at the Liberty Grand

David Herndon, the Gordon Murray Lecturer/Gallie-Bateman Judge *(left)* and Richard Reznick *(right)*

Department of Surgery – Annual Awards

Honouring Outstanding Contributions of the Faculty and Residents

Stephen Fremes (CardSurg) Wins *Lister Prize*

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.

Bryce Taylor *(right)* presents the Lister Prize to Stephen Fremes (left)

Peter Dirks (NeurSurg) Receives the *George Armstrong-Peters Prize*

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

Benjamin Alman *(right)* presents the George Armstrong-Peters Prize to Peter Dirks *(left)*

***E. Bruce Tovee Teaching Awards* for outstanding teaching to David Backstein (OrthSurg) for Undergraduate Education and to David Latter (CardSurg) for Postgraduate Education.**

These teaching awards honour the outstanding past teachings of Professor Bruce Tovee.

William Tucker presents the Tovee Award to David Backstein for Undergraduate Education

William Tucker presents the Tovee Award to David Latter for Postgraduate Education

Steven Gallinger (GenSurg) Receives the *Charles Tator Surgeon-Scientist Mentoring Award*

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 trainee.

Charles Tator *(left)* presents the Charles Tator Surgeon-Scientist Mentoring Award to Steven Gallinger *(right)*

Stephen Lewis (OrthSurg) Awarded *Surgical Skills Centre Distinguished Education Award 2004-2005*

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.

Helen MacRae presents the Surgical Skills Centre Distinguished Education Award 2003-2004 to Stephen Lewis

Ian McGilvray (GenSurg) Receives the *2005 Bernard Langer Surgeon-Scientist Award*

This award is presented to an outstanding graduate of the Surgeon-Scientist Program who shows the greatest promise for a career in academic medicine.

Bernard Langer *(left)* presents the 2005 Bernard Langer Surgeon-Scientist Award to Ian McGilvray *(right)*

Peter Stotland (GenSurg Resident) Receives the *Donald R. Wilson Award*

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

Stanley Hamstra *(right)* presents the D.R. Wilson Award to Peter Stotland *(left)*

James Rutka provided piano entertainment at the Dinner and Awards Ceremony *(Mrs. Rutka looks on)*

Bob Bell Takes the Helm at UHN

Robert Bell

Bob was born in Wales and grew up in Windsor where he played high school football. He continued his career as a linebacker and end on the Varsity team at McGill where he played for three years before entering medical school. Inspired by Tony Dobel, the distinguished congenital heart surgeon, Bob originally planned to do cardiac surgery. In 1976, changes in the hospital system in Quebec prompted him to move to Ontario. He entered family practice. He worked for three years in Brampton as a family and emergency room doctor, "a wonderful foundation for a surgical career". Bob particularly enjoyed learning the art of interacting with patients to learn their needs, and sorting out how best to help them. He entered surgical training in Dr. Bob Salter's laboratory, working on cartilage regeneration and septic joint disease. Dr. Salter inspired him to pursue an academic career. His other mentors and teachers in orthopaedic surgery were Robin Sullivan, Jim Waddell, Alan Gross and Fred Langer. Following orthopaedic training at the University of Toronto, Bob spent two years at Massachusetts General Hospital in a surgical oncology fellowship working with Henry Mankin, the Chair of Orthopaedic Surgery at Harvard Medical School and Herman Suit, the Chair of Radiation Medicine in research.

On returning to Toronto, he operated at St. Michael's in a room adjacent to neurosurgeon Alan Hudson, who referred him his first patient. They were frequent visitors in each other's operating room, a broadening practice which Bob continued when he was at Mt. Sinai Hospital, visiting operating rooms in all disciplines of surgical oncology care. This proved to be excellent background for his new position. The lens of surgical oncology gave him a multidimensional view of patient care across many disciplines and a unique opportunity to learn from colleagues.

Bob built a musculoskeletal tumour program at Mt. Sinai which brought his department seven million dollars in peer-reviewed grants. He is proudest of his partners Jay Wunder, Peter Ferguson, Alan Gross, Ben Alman, Jim Waddell, and Sevan Hopyan, who have built an internationally renowned centre for sarcoma treatment. He is somewhat enthusiastic about improvements in health care in Ontario, particularly the changes that have been initiated through the waiting list project and the reorganization of Cancer Care Ontario as an agency for facilitating accountable high quality care. Hospitals should be funded at an appropriate rate on the basis of excellent outcomes, high quality care and appropriate volumes of cases – he credits Alan Hudson and his colleagues for emphasizing this accountability framework in the work of the Health Results Team. Bob believes that the Ministry of Health is doing a good job of responding to the needs of patients and physicians, but needs the guidance of informed practitioners.

Bob has completed the Advanced Management Degree in the executive management program at Harvard Business School, enjoying the stimulation of an amazing group of classmates and professors, an environment he describes as richly stimulating and occasionally humiliating. He has a renewed appreciation for the educated civil society of Ontario, its excellent workforce and the societal impact of its healthcare system, a principal attractant for the shift in manufacture of General Motors cars from Detroit to Ontario and the planned opening of the new Toyota plant. Bob's wife Dianna is a paediatrician who specializes in developmental disorders and autism. Their six children are Nicholas, who works in investment banking in Bermuda, Gabriella who teaches in Toronto, Simone and Jonathan who are biology students at McGill, Stefan who is studying business and Whitney who is a grade twelve student considering a career in law. The family loves the outdoors. They have biked through Denmark and canoed through the Temagami portages north of North Bay, a favourite summer pastime. This summer they will spend a week in the north country canoeing and then bicycle through New Zealand.

M.M.

Champion Archer Joins HSC Staff

Priscilla Chui and husband Kevin Pasma

Priscilla Chiu will finish her paediatric surgery fellowship in July, completing a very thorough education in surgery, critical care and immunology. Born in Hong Kong, she grew up in Thornhill with her parents and twin sister Peggy who is an architect. Her sister Pauline is a chemistry professor at Hong Kong University and her brother Nelson is a computer programmer in Markham. Her husband Kevin is a chartered accountant.

Priscilla was Ontario high school champion in archery and has been an active musician, playing piano, violin and organ as well as singing in a choir throughout her university career. She has continued to work at Knox Summer Camp where she teaches archery and currently works as the camp doctor during summer vacation. She started out as a pharmacology major, worked in biochemistry and neuroscience labs in the summer and entered Queen's medical school after two years of undergraduate training. While at Queen's Medical School she helped form "Queen's Medical Outreach" a student medical mission group. They participated in health care in Guyana, focusing on maternal health and immunization. She has continued her international work and last year went to Nepal where she operated on a variety of general surgical problems. While at Queen's she also met Peter Dirks, Andrew Howard, Alexandra Easson and Massey Beveridge, all of whom are now surgeons in the University of Toronto community.

Priscilla teaches archery

During her surgical residency Priscilla studied lymphocyte function in Jayne Dansko's lab, with a particular emphasis on the role of lymphocytes in the development of autoimmunity and lymphoma. Following general surgery residency she completed a paediatric critical care fellowship followed by a paediatric surgery fellowship, both at the Hospital for Sick Children. She has high praise for the Surgeon Scientist program which allowed her to develop a thorough grounding in immunology, learn the scientific method and complete her PhD. Her role models throughout her training have been Bob Filler, Barry Shandling, Dave Wesson, Siggy Ein and Rick Superina. She wants to focus on chest and airway surgery in her clinical work. She continues to manage the Bochdalek diaphragmatic hernia database. She has formed an airway working group with her ENT colleagues Vito Forte and Paolo Campisi. She will enter practice on July 1st as an attending surgeon at the Hospital for Sick Children with a cross appointment in Critical Care. A former aerobics trainer, she wonders if the 80 hour work week for residents will reduce the "stamina training" necessary for the development for practicing surgeons. She plans to manage a laboratory while maintaining an active clinical schedule and hopes to return to music when time allows.

M.M.

In Memoriam

Wilfred Gordon Bigelow

Wilfred G. (Bill) Bigelow died March 27, 2005 at 91. He is justly considered the father of heart surgery in Canada.

Bill was born the son of a country surgeon, in Brandon, Manitoba. After graduating in Medicine from the University of Toronto in 1938 he entered our surgical residency program. His interest in the effects of cold were first stimulated by the need to amputate a patient's frost-bitten finger and by his later experience with frost-bite in World War II. He served as a captain in the Royal Canadian Army Medical Corps in England and front-line surgical stations in Belgium. On his return in 1945, Prof. W.E. Gallie arranged for him to spend a year at Johns Hopkins with Richard Bing and Alfred Blalock. There he was exposed to the beginnings of heart surgery, realized the value of surgical research and became friends with many of the future leaders of American surgery.

Bill returned to Toronto in 1947 with a keen interest in the developing fields of cardiac and vascular surgery. He established a research laboratory at the Banting Institute where he began his experiments on hypothermia and demonstrated that the circulation could be interrupted safely at low body temperatures and the canine heart explored under direct vision. This allowed the first successful closure of an ASD in the human under hypothermic arrest in 1952. Bigelow would perform his first clinical procedure in 1953 and later resected only the second atrial myxoma reported using cold immersion. Total body cooling was used for over a decade until the heart-lung pump became more readily available and is still used daily as an adjunct to extracorporeal circulation for certain complex cardiac operations.

A side benefit of the canine hypothermia experiments was the observation of marked bradycardia on cooling and the need for an increased heart rate during rewarming and resuscitation. Bigelow, his research fellow John Callaghan and engineer Jack Hopps are credited with the concept and development of an external cardiac pacemaker and transvenous electrode. It is gratifying to learn that both Bigelow and Hopps would benefit from an implanted pacemaker in later life.

Bigelow was known for his tenacity and perseverance in research: a generation of surgical residents spent their research year in the basement of the Banting Institute in a futile attempt to extract a substance from hibernating groundhogs that could facilitate prolonged cooling in the human under physiologic conditions.[1] He was also a proud Canadian – in the early 1950's he shared a valve dilator with Eduard Gagnon in Montreal, mailing the instrument back and forth as needed. He supported and applied Arthur Vineberg's concept of internal mammary implantation for indirect re-vascularization and was the first to demonstrate that the artery stayed patent and supplied flow to the myocardium and collaterals to obstructed coronaries. In turn Canada honoured him with the Centennial Medal (1967), the Queen's Medal (1977) and the Order of Canada (1981). His peers honoured him, as president of the American Association of Thoracic Surgery (1974) and as an Honorary Member of the Society of Thoracic Surgeons (1973).

Bill Bigelow was an outstanding clinician, teacher, surgeon and administrator. He founded the first resident training program in cardiovascular surgery in Canada in 1960. He was the first Head of Cardiac Surgery at Toronto General Hospital and University Chairman of that program until his retirement at age 64. His career was built on intellectual curiosity, deep respect and caring for patients, a sense of humility about the risks and benefits of our endeavours and profound spirituality. He was a wonderful mentor who derived great satisfaction from the achievements of the more than 70 residents and fellows that he trained. He encouraged and enjoyed their accomplishments and followed their careers with great interest. For those of us who benefited from this association, "Uncle Bill" remained a role model, the epitome of surgeon-scientist, clinical teacher and caring physician.

1. His rivetting report of the unsuccessful quest is a reference standard of integrity and intellectual honesty in surgical research. See page 16. *MM*

Bernard S. Goldman,
Division of Cardiac Surgery

William G. Williams,
Division of Cardiac Surgery

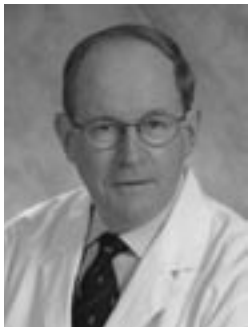
"Toronto Fest" at the Annual Meeting of the American Association for Thoracic Surgery

Tirone David

As part of the "Toronto Fest" cardiac surgical nurses from Toronto General and Toronto Western Hospitals were flown to the recent San Francisco meeting of the American Association for Thoracic Surgery which celebrated the presidency of Tirone David. His presidential address "For Everything There is a Season" emphasized the rapid rate of change, which he defined as progress, throughout the history of cardiothoracic surgery, and examined the implications of this acceleration: improved outcomes, difficulty in developing expertise where fewer procedures are required, subspecialization and centralization of care. He described Dr. Spencer Johnston's fable "Who Moved My Cheese?" as a warning to surgeons who resist change. He also discussed the "intangible aspects of patient care and excellence in clinical surgery". These depend on the interaction of knowledge, judgement, dexterity, caring and attention to detail. The meeting was a dramatic demonstration of Toronto's prominent role in the cardiac surgical world. In addition to the presidential address by Tirone, Dick Weisel gave the distinguished science lecture on Cardiac Regeneration, Bill Williams received the Dwight McGoon mentoring award from the Thoracic Surgical Residents Association, and Paul Fedak won the Lillehei research award for the best research paper by a resident. Nurses attending the meeting included Betty Watt and Ann Tattersall. The nurses felt justifiably proud to be part of "the best cardiac surgery division in the world". The contributions of Peter Munk and other contributors to the Toronto General and Western Hospital Foundation enabled the nurses to fly to San Francisco to attend the meeting. When I asked Mr. Munk to comment, he said, "It was all Tirone's idea. I provide the tools to enable him to do what he does." Enabling contributions from the Munk family include the Melanie Munk, Chair of Cardiac Surgery, the Munk Cardiac Unit which includes floors four, five and six of the clinical services building and endowment of the left-ventricular assist program. Mr. Munk praised Tirone's virtuoso performance, innovation, global leadership, magnetic personality, ability to absorb complex problems and find innovative solutions. He enjoyed hearing about the introduction to the presidential address. Richard Jonas, the Vice President of the AATS told the international audience that it was well known in Canada that "Wayne Gretzky was the Tirone David of hockey".

M.M.

Bill Williams Receives the Dwight McGoon Mentoring Award



William Williams

Bill Williams was recognized for his outstanding contributions as a mentor and teacher of residents and fellows at the 86th annual meeting of the AATS in San Francisco. The Dwight McGoon Mentoring Award of the Thoracic Surgery Residents' Association was presented by Rakesh Suri, President-elect of the Association and a graduate of the Gallie surgery program at the University of Toronto. The award, which describes Bill as the perfect role model, celebrates the memory of Dwight McGoon, a gifted surgeon at the Mayo Clinic and scholar whose broad-ranging intellect made him one of Bill's heroes. Bill described the training of congenital heart surgeons at the Hospital for Sick Children. Four fellows per year finish the program. Typically one is from the United States, one from the University of Toronto and two from elsewhere in the world. For those

committed to a career in congenital surgery he recommends a second year of training at another international centre to give them breadth of experience. Congenital heart surgery has become progressively more successful with mortality rates less than one percent for operations as complex as the Jatene arterial switch operation for transposition of the great vessels. Expectations are high for surgeons entering practice and Bill recommends that finishing fellows enter a program where they will continue to take on progressively more complex cases with furthering mentoring by senior surgeons. He foresees that cardiac surgical training will include more emphasis on catheter-based interventions as hybrid operations evolve. He anticipates that smaller units will coalesce, as complex surgical procedures are regionalized. His heroes and mentors include Don Wilson, Ron Baird, Bill Mustard and George Trusler, and of course Bill Bigelow, whose very different styles and approaches set the tone for our cardiac surgical training, which persists today.

Bill is a fourth generation physician. His grandfather and great-grandfather were general practitioners in Dresden, Ontario. His father was an orthopaedic surgeon at St. Joseph's Hospital in Toronto. His daughter Kelly is completing a family practice residency in Queen's and will enter practice as the fifth generation of Williams physicians. His son Daniel is an investment manager at the National Bank and his daughter Christine is a PhD immunologist doing a post-doctoral fellowship in cancer research at Harvard medical school. Bill's wife Gail, in addition to managing the family, has constructed and managed the database of the congenital heart surgery registry for the Hospital for Sick Children since 1982.

Bill supervises the Congenital Heart Surgeon's Society data centre which tracks the outcomes of specific diagnostic groups of infants admitted to any of sixty congenital heart programs in North America and two in South America. The publications from the CHSS data develop novel contributions to understand risk factors that impact outcomes for these infants. Bill is currently reading *The Princes of Ireland* by Edward Rutherfurd and recently finished *A Short History of Progress* by Ronald Wright.

M.M.

ANNOUNCEMENT

The Centre for Faculty Development (CDF) Fall Workshops and Stepping Stones Certificate Program

These workshops are offered to all members of the Faculty of Medicine, at the University of Toronto free of charge.

For questions/comments please contact: Dawn Carpenter at: carpenterd@smh.toronto.on.ca or by telephone at: 416-864-6060 Ext. 6546.

Register for workshops at http://www.cfd.med.utoronto.ca/workshops.htm.

Enroll in certificate program at http://www.cfd.med.utoronto.ca/steppingstones.htm.

SEPTEMBER

Teaching 101 - 2 Part Workshop
Participants must attend both sessions
Tuesday, September 20 (Part 1) 8:00 a.m. - 12:00 p.m.
Tuesday, September 27 (Part 2) 8:00 a.m. - 12:00 p.m.
Helen P. Batty, Department of Family and Community Medicine, UofT
Danny Panisko, Department of Medicine, UofT

OCTOBER

Teaching Internationally Trained Health Professionals
Thursday, October 6 from 8:30 a.m.-12:00 p.m.
Tuesday, October 11 from 1:30 - 5:00 p.m. (repeat of above session)
David Tannenbaum, Department of Family and Community Medicine, UofT
Anita Rachlis, Department of Medicine, UofT

Dealing with Conflict in Clinical Education
Friday, October 28 from 8:00 a.m.-12:00 p.m.
(repeat workshop from 2003-2004)
Sharon Switzer-MacIntyre, Department of Physical Therapy, UofT
Susan Wagner, Department of Speech-Language Pathology, UofT

Patrick Gullane: Excellence in Head and Neck Surgery

Patrick Gullane

Pat Gullane, Professor of Surgery and Chairman of the Department of Otolaryngology – Head and Neck Surgery, served this year as the President of the Head and Neck Society and the Society for Skull-Base Surgery. Throughout his career Pat has focused on treatment of cancers of the head and neck and complex reconstructive procedures. He spoke with great enthusiasm about the advances that have dramatically increased survival and reduced complications in this technically challenging domain of surgery. Magnetic Resonance Imaging has smoothed direct referral of acoustic neuromas to highly specialized centres. Imaging has also allowed some centres like ours and the Mayo Clinic to follow some acoustic neuromas without treatment – 30% do not change under observation. One-third will soon be treated with the Gamma Knife, an image-guided focused radiotherapeutic technique that is currently being introduced at the Toronto Western Hospital through a generous $4 million grant from Joey and Toby Tanenbaum. The Tanenbaums are distinguished Toronto benefactors of culture, science, universities and hospitals. Mr. Tanenbaum is a Member of the Order of Canada, and Chairman and CEO of Jay-M Enterprises Ltd. Mrs. Tanenbaum directs the family's charitable foundation. The Gamma Knife delivers radiation therapy under stereotactic guidance to targeted areas with precise margins of less than 1mm, minimizing damage to surrounding normal tissue. Patients receive the single-dose treatment as a day procedure that is non-invasive, safe, more comfortable than conventional surgery and associated with lower treatment costs.

The combination of concurrent radiotherapy and chemotherapy has dramatically improved the survival and diminished the need for surgical treatment for the six to seven hundred head and neck cancer patients referred each year to Princess Margaret Hospital. When needed, salvage operations are more challenging after treatment, requiring the skills of multiple colleagues for complex tissue transfers requiring the integrated skills of general, thoracic and plastic surgeons. Lorne Rotstein, Andrew Pierre, and Peter Neligan enable salvage and reconstruction with a rich array of tissue transfers, such as fibular free flaps for reconstruction of the jaw and greater gastric curvature free flaps for reconstruction of the pharynx.

Head and neck cancers originating in the orbit or ear that transgress the skull base were once inoperable. Through the pioneering work of Fred Gentili and his colleagues the survival rate is now 54%. Elevating the brain off the skull base gives Pat, John Irish and Peter Neligan access to resect and reconstruct without injury to neural structures. To date 243 patients have been treated.

Pat grew up in Galway, Ireland and received his medical degree there. He completed residency at the University of Western Ontario between 1970 and 1975. His teachers and mentors included the great Canadian neurosurgeon Charles Drake, and Robert McFarlane in plastic surgery. He then spent three years in subspecialty training on a McLaughlin Fellowship, which was crucial to his pursuit of additional training. He spent one year in head and neck facial plastic surgery in Pittsburgh with Sebastian Arina, one year in New York City with John Connolly "the father of head and neck surgery" and a final year at New York University with John Marquis Converse studying reconstructive surgery with an emphasis on skull base problems. After establishing a highly respected head and neck service at the University of Western Ontario, Pat was recruited to the Toronto General Hospital in 1983.

The dramatic changes that Pat has brought about at the University Health Network began with his recruitment to Toronto General Hospital. Surgeon-in-Chief Griff Pearson was a very helpful and supportive colleague as were Bernie Cummins and Lorne Rotstein who fostered the head and neck project in a spirit of collaboration instead of in opposition. A similar approach with the thoracic division helped develop a centre of excellence in airway surgery. Three chairs in head and neck oncology were established through a $6 million grant from Robert Wharton, a prominent

real estate developer and cancer survivor. Pat underlined the important contribution of Alan Hudson pioneering the idea of merging forces from many disciplines despite significant resistance. Surgical oncology, now led by John Irish blossomed with the support of Bob Bell at PMH, bringing to an end an era of unidisciplinary management dominated by radiation therapy.

Pat was a cross-country runner and squash player in his school days. He enjoys traveling, skiing and golfing with his son John who is a scholar-athlete at Upper Canada College. John and a grateful patient talked Pat into learning golf five years ago and this has become an avid interest. His daughter Kira is a champion synchronous skater. Pat's Centre of Excellence in Head and Neck Surgery attracts fellows from all over the world. He has served as visiting professor in 33 countries, has over 200 peer-reviewed publications and has published eight books in his specialized field. He is currently *reading The Flight of the Leisure Class* by Richard Florida and Thomas Friedman's illuminating account of globalization *The World is Flat.*

M.M.

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.

Dr. Brian Maki came to Toronto in 1983 after completing a Masters' degree in Mechanical Engineering at MIT. His first project was a study of balance in amputees and the elderly with the intention of reducing falls. He has continued to develop this theme through to the present day.

Brian is an extraordinarily competent scientist. I remember when he completed his doctoral thesis under my supervision in 1987 – he was the only graduate student I ever met who had absolutely no errors (not even a missing period) in his thesis draft when it was submitted for examination. His extraordinary ability to focus and his insistence on impeccable quality for research and design has earned him a reputation as the leading investigator into the biomechanics of balance and falls in the world.

Brian Maki

Brian has received continuous support from the MRC and CIHR since 1987; he holds a Senior Investigative Career Award with CIHR, and is currently the Principal Investigator on a prestigious CIHR NET (New Emerging Team) award into balance and mobility.

Brian's research ranges from very basic studies of balance control to important applied studies that have resulted in the revision of building codes and the design of falls prevention products. An innovative balance enhancing shoe insole will shortly be coming onto the market under the name of "Sole Sensor". Dr Maki is a full professor with a primary appointment within the Department of Surgery. This appointment to the Department is in keeping with the important role that he is playing in the prevention of falls and the reduction in injuries requiring surgical intervention. Brian's research team is located at the Centre for Studies in Aging at Sunnybrook and Women's Health Science centre where he has a laboratory equipped with unique custom built moving platforms that allow him to disturb balance in very controllable ways

Geoffrey Fernie
Research, Toronto Rehabilitation Institute

NEW STAFF

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

Mark Erwin

Dr. Mark Erwin got a BA at York University in 1980. This was followed by his Doctor of Chiropractic Medicine in 1984 and a PhD in Medical Science from the University of Toronto, Institute of Medical Science in May of 2004. His particular research area of interest concerns intervertebral discs biology, growth factor and extra cellular matrix interaction. Mark is currently working in a post-doctoral program at the University of Toronto and Toronto Western Hospital supervised by Drs. Rob Inman and Jane Aubin. His work has been presented at various international meetings including the Orthopaedic Research Society, International Cartilage Repair Society, American College of Rheumatology Annual Meetings, as well as an upcoming podium presentation at the ECM VI Excellence in Spine, Spinal Motion Conference to be held in Davos, Switzerland (July 2005).

He has several manuscripts currently under review, his work is the subject of a patent through the UHN business development office and belongs to many medical and scientific associations. He is the recipient of an MRC Fellowship, two Connaught Scholarships and two Merit awards at IMS during his graduate studies and he is currently the only existing CIHR/CCRF Chiropractic Research Chair in Canada. His clinical interests concern mechanical spinal disorders and he is the rehabilitation co-ordinator for Mirvish Productions and other theatrical and athletic organizations.

In his spare time (what there is) he is an avid gardener, athlete, pet owner (a beautiful yellow lab), loves gourmet cooking and is an avid, earnest but newbie oeniphile.

J. Roderick Davey
Hospital Division Head, Orthopaedic Surgery

Manuel Gomez

Dr. Manuel Gomez was born and raised in Columbia. He went to medical school at the University of Cauca where he obtained his MD degree in 1975. He subsequently trained as a general surgeon in Venezuela before moving with his family to Canada in 1991. Manuel worked as a research fellow and research assistant at the Toronto Western Hospital in the Department of Anesthesia from July 1991 until he joined the Ross Tilley Burn Centre in January 1995. He completed a clinical fellowship as well as a clinical research fellowship before assuming his current role as a Research Associate. Manuel has been extremely productive in facilitating quality clinical research at the Centre. He has become an integral part of the Plastic Surgery Training Program and has helped many residents bring their research projects to publication. For all of these reasons, we are particularly pleased to now be in a position to formally appoint Manuel Assistant Professor in the Division of Plastic Surgery as a non-clinician scientist. We look forward to many more years of quality contributions from Manuel and we are extremely happy to welcome him to the division.

Peter Neligan
Division Chair, Plastic Surgery

Martin McKneally

"Intellectual humility in medical practice and research"

Bill Bigelow's presidential address to the Society of Vascular Surgeons under this title is a classic in academic surgery. As a surgeon scientist in the residency program at the University of Minnesota in the 1960s I was inspired by the unalloyed, unapologetic intellectual honesty of his report. Bigelow and his colleagues spent nine years in relentless pursuit of an irresistibly sound idea, the isolation of a hormone that would enable a period of hibernation, allowing them to repair cardiac defects during hypothermic cardiac arrest. The story of the discovery of insulin by a surgeon relentlessly pursuing a similar biologic hypothesis must have been a dominant conceptual model framing their search. (Frederick Banting's quest is brilliantly recounted in Michael Bliss' acclaimed book *The Discovery of Insulin*.) Bigelow's groundhog farm, with 400 resident animals trapped by surgeon scientists like Griff Pearson, provided the hibernating animals from which the coveted hormone would be recovered. A nearby example of Bigelow's writing as it appeared in the journal *Surgery* illustrates his exemplary clear, direct surgical writing style, though it is prepped and sterilized by the usual procedures of surgical journals. He has draped off the press excitement in preparation for a media event that was cooly cancelled when the true identity of the mythical hibernin was confirmed. His books *Mysterious Heparin* and *Cold Hearts* are classics that should be required reading for graduates of the Gallie program. Intellectual humility is "a modest opinion of the importance of one's thinking". It is related to integrity, "the virtue that distinguishes uncompromising adherence to moral and ethical principles; soundness of character." (Webster's Dictionary) Bill Bigelow set a standard of elegance in technique, thinking and conduct that remains the hallmark of the cardiac division.

"When we were flushed with success at having pioneered two concepts in a few years, [deep hypothermia and cardiac pacing] our attention was turned to perfecting a safe technique. "Perhaps," we thought, "hibernation held the key." Research into the phenomenon started with great resolve and self-assurance. What happened during the next nine long years may be of interest.

The groundhog was selected for study. It was observed that he could be simply cooled in ice water at any time of the year to a body temperature of 5 degrees C, and be revived. At this temperature, he tolerated interruption of the circulation and cardiotomy for two hours with no ill effect.

A groundhog farm was established and housed as many as 400 groundhogs. The first four years were involved in a study of the anatomy, physiology, and biochemistry of the phenomena of hibernation. This did not yield the clue, but it was decided that their remarkable tolerance to low body temperature was due to a humoral factor – probably endocrine in origin ...

... You can imagine the excitement and industry in our laboratory at this juncture. Applications were made, with a good deal of red tape, through the University, for a patent for this substance – which, after much thought, was named "hibernin." Our chemists, working into the night, readily synthesized a sufficient quantity of hibernin to allow extensive research and a few judicious clinical applications.

Three articles were written describing this work. It was decided, however, not to submit these for publication, since they contained such an important announcement, until we had completed further acute and survival experiments in different animals, carried out proper toxicity studies, and applied this to man.

A picture of the team was taken in view of the impending announcement to the scientific world. We also took a picture of the first three guinea pigs

to be cooled to a body temperature of 5 degrees C with hibernin (controls died at 18 degrees C.)

Three or four months of further intensive research found the study at a point where publication was justified. Just at that time, a very interesting letter was received from the patent office in Washington which stated that 1-butyl-2-butoxy-carbonyl-methyl-phthalate had been patented 20 years before as a plasticizer – a chemical that maintains pliability of plastic tubes ...

... there was only one short bit of plastic tubing, a connector about one inch long, that had been used in the extraction process. However, before submitting these articles for publication, and as a last step, it was decided to wait and carry out two final experiments. Extraction was carried out without contact with plastic tubing; conversely, plastic tubing was cut up, put into water, and extracted by the same technique. The results were a bit shattering. There was no hibernin obtained from the first experiment but, with dismay, hibernin was extracted in the solution containing pieces of plastic tubing. In fact you could buy our precious hormone by the barrel ...

... in general, the more advanced an education one acquires, the greater the tendency to a narrow horizon. This means a reduction in one's open-mindedness and receptiveness. If this is true it is very important that we become aware of this pitfall in the pursuit of knowledge ...

... Perhaps the quality of intellectual humility depends upon the teaching environment. If so, there is a real responsibility for all of us."

W. G. Bigelow, "Intellectual humility in medical practice and research", **Surgery,** ***Jan. 1969,vol. 65, no. 1, pp. 1-9.***

Its international reputation that flourishes today had its origin in the pioneering work of Bigelow and his colleagues. His example and spirit live on.

In his chairman's column Richard Reznick raises the issue that has profound implications for surgical trainees – *the generalist versus specialist dilemma*. Should we try to alter the trend toward narrow specialization from the outset of surgical training? Proponents of generalist training can argue convincingly that an education in surgery that is "a mile deep and a centimetre wide" is dangerously limiting as technology shifts. The disruptive displacement of cerebral angiographers, once the elite of radiology, by contemporary imaging techniques is a striking example. It can certainly be argued that narrowing the scope of knowledge and skill required for surgical practice would help accommodate the trend toward increasing restriction of residency training hours, and there will be, as there are today, surgeons who specialize in trans-sphenoidal hypophysectomy or skull base surgery. But will the lack of a broader education in "surgery in general" limit the specialists' options as technology changes practice?

In a sense Pat Gullane and Bob Bell illustrate the level of excellence that can develop through either the generalist or the specialist approach at surgical training. From the outset Pat was focused on advanced, highly specialized techniques for treating head and neck cancer. Yet he broadened his scope to include a wide range of the surgical spectrum in his current practice. Bob Bell bases his insight and understanding of surgical oncology and management of a large scale health care enterprise on his early broad experience as a family doctor and emergency room physician.

So what should we do about surgical training? Let's not overreact with a radical revision. I suspect and hope that we will evolve toward a more varied, less categorical approach with more elective exposure to complementary fields. Neurosurgeons need more interventional neuroradiology training. Cardiac and vascular surgeons need training in catheter based techniques.

As science advances the principles of surgery will evolve. They will illuminate specialties across a broad range of practice as cell based therapy, molecular genetics and nanotechnology enter every domain of surgical practice. Educators like Richard Reznick will necessarily

adapt their skills labs to accommodate surgeons in practice who will need to retool. A striking current example of the need in this area is the queue of spine surgeons who are waiting to learn prosthetic disc replacement at the Johnson & Johnson Skills Lab in Cincinnati. As the emphasis in surgical education shifts toward career-long learning, basic training may lengthen or shorten as it adapts to blend with the elective programs teaching specialized skills within and outside the university setting. Accommodation of re-entry trainees will be an interesting challenge for surgical educators and hospital managers who have long relied on an outdated service model of continuous production of newly graduating residents with current but stale-dated skills.

Surgeons rich in specialized knowledge will need to learn some of the classical stories and lessons, like Bigelow's and Banting's adventures in the pursuit of real and imaginary hormones to prepare them to deal, with integrity and humility, with the continuing and novel challenges they will encounter in the steadily complexifying, fascinating world of surgical practice.

Martin McKneally
Editor

Grant's Atlas Editor Anne Agur Wins Award for Individual Teaching Performance

Anne Agur

"Dr. Anne Agur deserves recognition for her long-term commitment to excellent teaching and her skills in providing optimal learning opportunities to students in the Faculty of Medicine."

No wonder that Dr. Agur is this year's W.T. Aikins award winner for individual teaching performance in a small group environment!

Anne is a graduate of the Occupational Therapy program at the University of Toronto. After completing a master's degree in Anatomy, she was appointed to the Department of Anatomy as a Lecturer with cross appointments to the Departments of Occupational Therapy, Physical Therapy and Biomedical Communications. She was promoted to Associate Professor in 1992. From 1995 - 1997, she took a special leave of absence to work on her Ph.D. degree through the Institute of Medical Science completing it in 2001. She was admitted to the Graduate Faculty of the Institute of Medical Science. Anne became a member of the Department of Surgery in 2000, when the Department of Anatomy merged with Surgery to form the Division of Anatomy.

Anne has co-authored a text in Gross Anatomy, is Editor of Clinical Anatomy, the journal of the American Association of Clinical Anatomists, and has taken over the editorship of the famous Grant's Atlas of Anatomy. She has also managed to develop significant research initiatives in the area of computer modeling of muscle architecture and activity in health and disease.

Anne is completely dedicated to education and generous with her time in teaching. She provides students with a clear and organized style of communication which is greatly appreciated by students in undergraduate and CME courses alike. She also provides support to teaching assistants and laboratory instructors so that they are better able to help students. Anne shows genuine concern for students, both for their educational development and their personal well being. Her insight and passion make her well suited to the position of Director of the PASS program in the Faculty of Medicine and a noteworthy recipient of this award.

Michael Wiley
Division Chair, Anatomy

Award Bestowed on Jameel Ali for Development of the TEAM Program

Jameel Ali

Dr. Jameel Ali received the W. T. Aikins Award in the category of Course/Program Development and Co-ordination this year. He was nominated by Drs. Bohnen and Reznick and a final year medical student, Melanie Makhija. The Department is very proud of Dr. Ali's success, which is richly deserved.

Jameel has had a career long interest in trauma surgery and improving the management of trauma victims. He has been instrumental in spreading ATLS teaching to many Third World sites and has played an active role in the American College of Surgeons Committee on Trauma, including developing materials for the ATLS course.

Jameel recognized that the teaching of trauma to undergraduates was not as well organized in the past as trauma instruction for practicing physicians. In 2001/02, he developed a program called TEAM (Trauma Evaluation and Management) specifically for use in undergraduate trauma education. This course involves an instructor guide, student manual, a CD with instructional slides, a DVD with videos, and lecture material.

The TEAM course has been extremely well accepted by our undergraduate students. The course has also received accolades from a number of international sites where it is now in regular use.

The Aikins Award was bestowed on Dr. Ali specifically for his development of the TEAM program, which represents only one of his numerous contributions to the teaching of trauma care and the improvement of trauma systems internationally.

W.S. Tucker
Director, Awards & Internal Evaluation

Abdallah Daar Wins Avicenna Prize for Ethics in Science

Abdallah Daar

Abdallah S. Daar was chosen as the laureate of the Avicenna Prize for Ethics in Science 2005 by the Director-General of UNESCO, Koïchiro Matsuura, upon the recommendation of a jury which met on 22 March 2005 in Bangkok, Thailand. This Prize is intended to reward the activities of groups and individuals in the field of ethics of science.

Dr Daar, from the Sultanate of Oman, previously held the Chair of Surgery at Sultan Qaboos University, Sultanate of Oman. He is currently Professor of Surgery and of Public Health Sciences at the University of Toronto, where he is also Director of the Program in Applied Ethics and Biotechnology and Co-Director of the Canadian Program on Genomics and Global Health at the University of Toronto Joint Centre for Bioethics, and Director of Ethics and Policy at the McLaughlin Centre for Molecular Medicine.

His significant contribution to research in the ethics of science and technology engages in depth with issues at the crossing point of science and ethics, technology and society. The impressive breadth of his publications ranges from more traditional issues such as living donor transplantation to newer concerns such as the use of stem cells, genomics and xenotransplantation.

The Prize owes its name to the renowned 11th-century physician and philosopher of medieval Islam Abu Ali al-Husain Ibn Abdallah Ibn Sina (980-1038), known in Europe as Avicenna. Like Avicenna, Abdallah is a "grand vizier, physician, philosopher" who knows how to spend time with his students and friends in festive enjoyment. "Avicenna was a restless student who never forgot his love of enjoyment in part enabled by his bodily vigour." (Wikipedia)

M.M.

HONOURS/AWARDS/ ACCOMPLISHMENTS

Congratulations to the following Faculty members of the Department of Surgery whose promotions, effective July 1, 2005, have been approved.

Promoted to Associate Professor
Fred Brenneman – GenSurg
Peter Dirks – NeurSurg
Paul Marks – OrthSurg
Andrew Smith – GenSurg
David Stephen – OrthSurg
David Urbach – GenSurg
Herbert von Schroeder – OrthSurg

Promoted to Full Professor
John Bohnen – GenSurg
Mark Cattral – GenSurg
Michael Cusimano – NeurSurg
Karen Davis – RES
Fred Gentili – NeurSurg

Benjamin Alman (OrthSurg) has been selected as the Clinical Research Society of Toronto Senior Research Award winner for 2005.

Thomas Bell (PlasSurg) received the Arni Freiberg Teaching Excellence Award in recognition of outstanding contributions to plastic surgery resident education, presented on April 1, 2005 at the Plastic Surgery Visiting Professor Dinner, Sutton Place Hotel.

Joel Fish (PlasSurg) received the W.IK. Lindsay Research Supervisor Award in recognition of significant contributions to the nurturing of plastic surgery residents, presented on April 1, 2005 at the Plastic Surgery Visiting Professor Dinner, Sutton Place Hotel.

Ab Guha (NeurSurg) has been awarded the Humanitarian of the Year Award by the Indo-Canadian Chamber of Commerce (ICCC).

Ren-Ke Li (Research) was elected as a member of the National Heart, Lung and Blood Institute Review Committee for Cell-Based Therapy.

Andres Lozano (NeurSurg) has been appointed as Ex-officio Board Liaison to Joint Section on Stereotactic and Functional Surgery, American Association of Neurological Surgeons, 2005-2007.

Helen MacRae (GenSurg) has been awarded the Excellence in Postgraduate Medical Education Award for Development and Innovation (2004-2005) presented at Educational Achievement Day on Tuesday, May 24, 2005.

Nizar Mahomed (OrthSurg) is the recipient of the Wightman-Berris Academy – Undergraduate Teaching Award.

Peter Neligan (PlasSurg) has received the 2004 Distinguished Service Award from the Plastic Surgery Education Foundation (PSEF). This award recognized Dr. Neligan's contributions to technology initiatives within the Plastic Surgery Education Foundation.

Ori Rotstein's (GenSurg) first term as Director, Institute of Medical Science, has been extended by one-year to June 30, 2006.

Michael Schwartz (NeurSurg) et al Y.M. Andrade-Souza, G. Zadeh, M. Ramani, M.N. Tsao won 3rd place for their Poster Presentation titled: "Testing the Radiosurgical-based AVM Score and the Modified Spetzler-Martin Grading System as Predictors for Radiosurgical Outcome" at the 2005 AANS Annual Meeting in New Orleans, Louisiana.

Michael Taylor (NeurSurg) has been award the 2005 Schweizguth Prize by International Society for Pediatric Oncology (SIOP).

Christopher Wallace (NeurSurg) received the 2004-2005 A.R. Hudson Neurosurgery Faculty Teaching Award, presented at the E.B. Hendrick Lectureship, May 26-27, 2005.

Richard Weisel (CardSurg) served as the Chairman of the National Heart, Lung and Blood Institute Review Committee for Cell-Based Therapy.

Carin Wittnich (Research) has been awarded the Annual Graduate Faculty Teaching Award for Sustained Contribution to Excellence in Graduate Teaching (2004-2005) presented at Educational Achievement Day, Tuesday, May 24, 2005.

Lorenzo Ferri (ThorSurg Resident) is the recipient of the Wightman-Berris Academy – Postgraduate Teaching Award.

Brent Howley (PlasSurg Resident) received the Mentor Award for the Best Clinical Paper titled: Cervical Spine Injuries in Association with Craniomaxillofacial Fractures" presented on April 1, 2005 at the Plastic Surgery Visiting Professor Dinner, Sutton Place Hotel.

Daniel Martin (PlasSurg Resident) has received the Mentor Systems Graduate Scholarship in Plastic Surgery, presented on April 1, 2005 at the Plastic Surgery Visiting Professor Dinner, Sutton Place Hotel.

Sheila Singh (NeurSurg Resident) has been chosen as the winner of the 2005 Canadian Research Award for Specialty Residents, Division of Surgery, for manuscript titled: "Identification of Human Brain Tumour Initiating Cells".

Sheila is also:

- The recipient of the 2004-2005 Warren Ho Memorial Scholarship Award, presented at the E.B. Hendrick Lectureship, May 26-27, 2005
- Winner of the 17th Annual Andrew Sass-Kortsak Award.

Subodh Verma (CardSurg Resident) with the Cardiac Surgery Division at St. Michael's Hospital received a donation ($240,000) from Mr. Doug Martin towards the further development of Translational Atherosclerosis Research Programs.

Subodh has also been selected as a young investigator at the American College of Cardiology 2005 for paper titled: "Nocturnal Hemodialysis Restores Abnormal Endothelial Progenitor Cell Biology in End Stage Renal Disease".

Kyle Wanzel (PlasSurg Resident) received the John Edward De Toro Scholarship for the Best Research Paper titled: "An Analysis of Visual-Spatial Ability and Cortical Activation Patterns in Surgical Residents", presented on April 1, 2005 at the Plastic Surgery Visiting Professor Dinner, Sutton Place Hotel.

Sarah Woodrow (NeurSurg Resident) has been awarded the Byron Cone Pevehouse Award at the Annual Meeting of the American Association of Neurological Surgeons for project titled: "Practice Patterns Amongst Women Neurosurgeons in North America.

Gelareh Zadeh (NeurSurg Resident) received the 2004-2005 A.R. Hudson Resident Teaching Award, presented at the E.B. Hendrick Lectureship, May 26-27, 2005.

Robert Salter (Professor Emeritus of OrthSurg and Senior Scientist Emeritus of the Research Institute of The Hospital for Sick Children) has received the 2005 Award from the Paediatric Orthopaedic Society of North America in recognition of his many contributions to the diagnosis and treatment of children with developmental dysplasia of the hip. This is the third award that Dr. Salter has received from the Society

GRANTS & FELLOWSHIPS

Benjamin Alman (OrthSurg) has been awarded a National Cancer Institute of Canada Grant for his project titled: "Beta-Catenin in Aggressive Fibromatosis: Molecular Pathology and Implications for Therapy".

Lori Burrows (Research) has been awarded a five-year Natural Sciences and Engineering Research Council Grant for project titled: "Pleotropic Effects Due to Loss of Single Peptidoglycan Remodeling Enzymes".

John Coles (CardSurg) and Gregory Hannigan (Cancer Research) have been awarded a two-year Heart and Stroke Foundation of Ontario Grant for their work on: "Integrin-linked Kinase (ILK) Induces Adaptive Remodeling in Dilated Cardiac Failure".

Michael Cusimano (NeurSurg) received a grant from the Ontario Neurotrauma Foundation for his work on: "An Internet-based Intervention for Depression in Mild Traumatic Brain Injury Patients: A Pilot Study".

Ori Rotstein (GenSurg) received a Physicians' Services Incorporated (PSI) Foundation Grant for his project: "Hypertonic Preconditioning for Liver Ischemia/Reperfusion Injury: A Novel Protective Strategy".

James Rutka (NeurSurg) and **Michael Taylor** (NeurSurg) have received a three-year National Cancer Institute of Canada (NCIC) Grant (150.000 per year) for their work titled: "Role of Hedgehog Signaling in the Pathogenesis of Medulloblastoma".

James has also received a three-year National Cancer Institute of Canada (NCIC) Grant ($150,000 per year) for his work titled: "The Role of Cytoskeletal GTPases in Astrocytoma Migration".

Emil Schemitsch (OrthSurg) received a Physicians' Services Incorporated (PSI) Foundation Grant for his project: "Cell-based VEGF Gene Transfer to Promote Fracture Healing".

Michael Taylor (NeurSurg) received a two-year fellowship from the American Brain Tumour Association for his project: "Identification of Novel Medulloblastoma Oncogenes Using Functional Genomics".

Michael has also received a Connaught New Staff Matching Grant ($30,000) for his work: "Using Functional Genomic Techniques to Study the Molecular Pathogenesis of Medulloblastoma".

Carol-Anne Moulton (GenSurg HPB Oncology Clinical Fellow, Supervisor: G. Regehr and R. Reznick) is the recipient of a Johnson and Johnson Medical Products – Surgeon Scientist Fellowship for 2004-2005.

Daniel Martin (PlasSurg Resident, Supervisors: J. Semple and M. Sefton) is the recipient of a Johnson and Johnson Medical Products – Surgeon Scientist Fellowship for 2004-2005.

Danny Ramzy (GenSurg Resident, Supervisor: V. Rao) received a Physicians' Services Incorporated (PSI) Foundation Grant for his project: "Hypertonic Saline for Cardiac Transplantation".

Patrick Tawadros (GenSurg Resident, Supervisor: O. Rotstein) is the recipient of a Johnson and Johnson Medical Products – Surgeon Scientist Fellowship for 2004-2005.

Subodh Verma (CardSurg Resident) received a renewal of his grant titled: "Endothelial Progenitor Cells and PPAR" from the Heart and Stroke Foundation ($66,000).

Subodh with co-applicant Chris Chan received a new grant from the Heart and Stroke Foundation ($130,000) for project titled: "Noctural Hemodialysis, Cardiovascular Risk and Progenitor Cell Biology".

George Zogopoulos (GenSurg Resident) was selected for the 2005-2007 Society of University Surgeons – Ethicon Scholarship Grant Award ($60,000).

"Summer's coming. How does pre-med camp sound?"

The deadline for the Fall 2005 Surgery Newsletter is August 1, 2005.
All members of the Department are invited to submit news items, articles, pictures, ideas or announcements. Your may reach us by:

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

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

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