DEPARTMENT OF SURGERY

ANNUAL REPORT

July 1, 1999 - June 30, 2000

University of Toronto
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R.S. McLaughlin Professor and Chair - Dr. J.H. Wedge
Professor and Associate Chair - Dr. B.R. Taylor

Surgeons-in-Chief

Dr. J.H. Wedge – The Hospital for Sick Children
  Dr. Z. Cohen - Mount Sinai Hospital
  Dr. D. Jones - St. Joseph's Health Centre
  Dr. E. Poulin - St. Michael's Hospital
Dr. B. Goldman - Sunnybrook and Women’s College
  Health Sciences Centre
  Dr. I.J. Harrington - Toronto East General Hospital
  Dr. B.R. Taylor - James Wallace McCutcheon Professor
  and Chair – University Health Network

University Division Chairs

Dr. R.D. Weisel - Cardiac Surgery
  Dr. Z. Cohen - General Surgery
Dr. J. Rutka - Leslie Dan Professor and
  Chair of Neurosurgery
Dr. J. Waddell - A.J. Latner Professor and
  Chair of Orthopaedic Surgery
Dr. P. Neligan – Wharton Chair in Reconstructive Plastic Surgery
  Dr. S. Keshavjee - Thoracic Surgery (Acting)
  Dr. M.A.S. Jewett - Urology
  Dr. K.W. Johnston - R. Fraser Elliott Chair in Vascular Surgery
  Dr. M. Wiley – Anatomy
  Dr. L. Wilson-Pauwels - Biomedical Communications
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REPORT FROM THE CHAIR
Dr. John H. Wedge, R.S. McLaughlin Professor and Chair

Introduction

The 1990s were a decade of University budget cuts, reduction in medical school enrolment, corresponding cuts to the numbers of postgraduate trainees and removal of a substantial portion of the resource base of our teaching hospitals. Despite this, our Department has become much stronger from almost every perspective. We have been able to recruit superb young academic surgeons to our faculty and have been able to retain those who are critical to our academic programs. Our research funding more than doubled through the decade and this year surpassed sixteen million dollars. A substantial increase in publications listed in this report are, in part, a reflection of our success in obtaining external funds for our research.

The academic year began with the appointment of a new Dean, Dr. David Naylor, who led a Faculty of Medicine Planning Process, which has just been completed. The vision of our Faculty is to provide international leadership in health research and education. The strategic priorities and implementation goals are to build our Faculty, enrich the student experience, strengthen our academic programs, enhance our relationships and extend our reach, and to strengthen our infrastructure and resource space. Five research themes have been identified. These are: molecular health and applied genomics; models and mechanisms of human disease; improvement of health and function; health information technology and knowledge transfer; and a comprehensive program in imaging. The mission of our Faculty is to prepare future health leaders, contribute to our communities and improve the health of individuals and populations through the discovery, application and communication of knowledge. I believe that the Department of Surgery is well poised to exhibit leadership in the Faculty, not only due to our academic productivity, but also to our increasing reputation and recognition in the world of academic surgery.

Our Surgeon Scientist Program has stabilized at approximately 30 residents per year. We continue to receive generous support from the Faculty Postgraduate Education Office, the Surgical Alumni Fund and Johnson & Johnson. The Ontario Government Matching Program for graduate student support at the University of Toronto has been very successful. We have been able to fund our full allotment of awards. Nineteen out of thirty-two residents, enrolled in the Program as of July
2000, will have external fellowships from granting agencies, industry
or specialty societies. The residents are now being paid at the Ministry
of Health resident stipend level so they are no longer financially
disadvantaged by being enrolled in the Program. The Surgeon Scientist
Program is now essentially self-sustaining.

Dr. Tom Todd, Chair of the Division of Thoracic Surgery, has resigned
and departed for a new career in the Middle East. Dr. Robert Ginsberg,
Surgeon-in-Chief at the Mount Sinai Hospital prior to moving to New
York in 1990, has accepted the position as Chair of Thoracic Surgery
and will be joining us part way through the next academic year.

Dr. Michael Ameli has completed his term as Director of Continuing
Education in the Department and has been succeeded by Dr. Sender
Herschorn. With the Continuing Professional Development Program of
the Royal College and the trend to more exacting demonstration of
maintenance of competence, this portfolio will undoubtedly grow quite
substantially in both importance and responsibility in the next several
years. To reflect the change in emphasis of post-residency ongoing
learning, the name of the portfolio has been changed from continuing
surgical education to continuous professional development.

Finally, Dr. Alan Hudson, a distinguished member of this Department,
who was formerly Chair of the Division of Neurosurgery, has retired as
President and Chief Executive Officer of the University Health
Network. Dr. Hudson has been a consistent and tireless supporter of
this Department through the difficult times of the 90s and we are
greatly indebted to him for his long-term contribution to this
Department. Both Dr. Charles Tator and Dr. Hudson were named to
the Order of Canada in this academic year, reflecting well upon the
long-term academic productivity of our Division of Neurosurgery.

A very successful annual meeting of the Association for Surgical
Education was held in Toronto during the year of the Presidency of Dr.
Richard Reznick. A significant number of surgical educators from this
Department were highlighted at the meeting, reinforcing the leadership
role in education being provided by this Department in North America.
The Surgical Skills Laboratory based at the Mount Sinai Hospital has
been a resounding success in its initial two years. We are receiving
many visitors from around the world who regard this as the best model
to-date for teaching surgical skills. The Education Group is taking
good advantage of this laboratory to study the process of learning
technical skills.
Lastly, I would like to recognize two individuals who are serving in major positions of leadership in Canadian medicine. These are Dr. Hugh Scully of the Division of Cardiac Surgery who is President of the Canadian Medical Association and Dr. Bernard Langer, former Chair of this Department, who will take on the mantle of President of the Royal College of Physicians and Surgeons of Canada this September. My congratulations to both of them for representing this Department in such a distinguished manner.

**Visitors to the Department**

Dr. Robert Buckman, Professor, Toronto Sunnybrook Regional Cancer Centre, was the Kergin Lecturer. His topic was “How to teach medical students, residents and colleagues the delivery of ‘bad news’ to patients and families”.

Dr. Douglas Kondziolka, Professor of Neurological Surgery and Radiation Oncology and Co-Director, Center for Image-Guided Neurosurgery, University of Pittsburgh, was the John Palmer Lecturer on March 3, 2000. His topic was “Brain radiosurgery for neurosurgeons, body radiosurgery for body surgeons”.

Dr. Darracott Vaughan, Jr., Chair, Department of Urology, Cornell University, was the Gordon Murray Lecturer and the Gallie Bateman Judge on May 11, 2000. His topic was “Current approaches, diagnostic and therapeutic, for surgical adrenal disorders”. He also gave a lecture entitled “Contemporary stresses on academic surgery in the United States”.

**Departmental and External Awards and Honours**

Benjamin Alman and Jay Wunder (Orthopaedic Surgery) received the 2000 Orthopaedic Research and Education Foundation of the American Academy of Orthopaedic Surgeons Clinical Research Award (Kappa Delta Award). This is the premier award for an orthopaedic investigator in North America.

Mark Bernstein (Neurosurgery) won the A.R. Hudson award given annually to the best neurosurgical teacher at the University of Toronto.
Erin Boynton (Orthopaedic Surgery) received the Carroll Laurin Award from the Canadian Orthopaedic Foundation.

George Christakis (Cardiac Surgery) received the Dr. Marvin Tile Distinguished Service Award of the Department of Surgery.

Michael Cusimano (Neurosurgery), and Bernard Liebgott (Anatomy) won W.T. Aikins Awards for Individual Teaching Performance.

Tim Daniels (Orthopaedic Surgery) has been appointed as the Canadian representative on the International Committee for the American Orthopaedic Foot and Ankle Society (AOFAS).

Gail Darling (Thoracic Surgery) was awarded the 2000 E. Bruce Tovee Undergraduate Teaching Award.

Joel Fish (Plastic Surgery) won the 1999 PAIRO Excellence in Clinical Teaching Award for the University of Toronto.

Arnis Freiberg (Plastic Surgery) won the Arnis Freiberg Teaching Award.

Stephen Fremes (Cardiac Surgery) was appointed Senior Adjunct Scientist at the Institute for Clinical Evaluative Sciences.

Bernard Goldman (Cardiac Surgery) was awarded the 2000 E. Bruce Tovee Postgraduate Teaching Award.

Sender Herschorn (Urology) was elected as Deputy Canadian Delegate to the Societe Internationale d’Urologie. He also received the Dr. Marvin Tile Distinguished Service Award of the Department of Surgery.

Alan Hudson (Neurosurgery) was appointed to the Order of Canada.

Carol Hutchison (Orthopaedic Surgery) won the Dean A.L. Chute Award (the Silver Shovel).

Laurence Klotz (Urology) was elected Chair of the Global Genitourinary Group.

Ron Kodama (Urology) received the Dr. Marvin Tile Distinguished Service Award of the Department of Surgery.
Bernard Langer (General Surgery) has been appointed President of the Royal College of Physicians and Surgeons of Canada for a two-year term, starting September 2000.

Nizar Mahomed (Orthopaedic Surgery) has received the 1999 Canadian Orthopaedic Research and Education (CORE) Foundation Young Investigators Award.

Jim Mahoney (Plastic Surgery) assumed the Presidency of the Canadian Society of Plastic Surgeons.

Peter Neligan (Plastic Surgery) was elected President of the Canadian Microsurgical Society. He also won the W.K. Lindsay Research Resident Supervisor Award.

Eric Poulin (General Surgery) was appointed President of the Canadian Association of General Surgeons.

Sid Radomski (Urology) won the University of Toronto Surgical Skills Centre Distinguished Education Award.

Richard Reznick (General Surgery) is the 2000 recipient of the National Board of Medical Examiners (NBME) John P. Hubbard Award. The award is given to individuals recognized as making significant contributions to the pursuit of excellence in the field of evaluation in medicine.

Robin Richards (Orthopaedic Surgery) was elected President of the Canadian Orthopaedic Research Society for a one-year term.

Ted Ross (General Surgery) was given the Directors Award of the Peters-Boyd Academy.

Lorne Rotstein (General Surgery) has won the 1999-2000 Ross Fleming Surgical Educator Award given by the University Health Network for outstanding contributions in surgical education.

Robert Salter (Orthopaedic Surgery) won the Bristol-Meyers Squibb Award.

Joseph Schatzker (Orthopaedic Surgery) was elected President of the AO Foundation, Davos, Switzerland.
Emil Schemitsch (Orthopaedic Surgery) won the 2000 George Armstrong-Peters Prize.

Lloyd Smith (General Surgery) won a 2000 PAIRO Excellence in Clinical Teaching Award.

Charles Tator (Neurosurgery) was appointed to the Order of Canada.

Bryce Taylor (General Surgery) won the Colin R. Woolf Award for Long Term Contribution to Continuing Education.

Ian Taylor (Anatomy) has won a Dr. E. Mary Hollington Award for teaching with distinction in the pre-clinical or basic science portion of the curriculum. He has also won the Harry Whittaker Memorial Teaching Award. This award is given by the year one undergraduate medicine class to the teacher who gives encouragement and displays genuine concern for student well-being and, through personal commitment to quality teaching, provides practical and clear insights in the basic sciences during the first year of the undergraduate medical program.

Thomas Waddell (Thoracic Surgery) has been awarded the Second Alfred Blalock Research Scholarship, Young Faculty Award, from the American Association for Thoracic Surgery.

David Williams (Emergency Medicine) has received the American Astronautical Society's 1999 Melbourne W. Boynton Award for his "extraordinary contributions to the successful implementation of the STS-90 Neurolab mission and his leadership in developing innovative strategies for the advancement of space medicine and earth-based human health care and safety”.

Carin Wittnich (Cardiac Surgery) won the 2000 Lister Prize.

Jay Wunder (Orthopaedic Surgery) won the Robert Salter Teaching Award as voted by the residents to the outstanding teacher of the year.

Reviews, Searches and Appointments

Dr. Fred Brenneman was appointed Vice-President of the Trauma Program at the Sunnybrook and Women’s College Health Sciences Centre.
Dr. Michael Fehlings was appointed to the Robert O. Lawson Chair in Neural Repair and Regeneration at the University Health Network.

Dr. Christopher Forrest was appointed Head of the Craniofacial Program at The Hospital for Sick Children.

Dr. Stephen Fremes was appointed Head of the Division of Cardiac Surgery at the Sunnybrook and Women’s College Health Sciences Centre.

Dr. Steve Gallinger was appointed Head of Hepato-Biliary Pancreatic Surgical Oncology at the University Health Network and the Mount Sinai Hospital.

Dr. Brent Graham was appointed Director of the Hand Program in the Department of Surgery.

Dr. Allan Gross was appointed to the Bernard I. Ghert Family Foundation Chair in Reconstructive Orthopaedics at the Mount Sinai Hospital.

Dr. Sender Herschorn was appointed Director of Continuing Professional Development in the Department of Surgery.

Dr. Antoine Khoury was re-appointed Head of the Division of Urology at The Hospital for Sick Children.

Dr. Laurence Klotz was appointed Head of the Division of Urology at the Sunnybrook and Women’s College Health Sciences Centre.

Dr. Andres Lozano was appointed to the Tasker Chair in Functional Neurosurgery at the University Health Network.

Dr. Gianni Maistrelli was appointed Head of the Division of Orthopaedic Surgery at the Toronto East General Hospital.

Dr. Peter Neligan was appointed to the Wharton Chair in Reconstructive Plastic Surgery at the University Health Network.

Dr. Ori Rotstein was appointed to the Peter Crossgrove Chair in General Surgery at the University Health Network.
Dr. Emil Schemitsch was appointed Head of the Division of Orthopaedic Surgery at St. Michael’s Hospital.

Dr. John Trachtenberg was appointed Director of the Prostate Centre at the Princess Margaret Hospital of the University Health Network.

Promotions

Congratulations to the following members of the Department of Surgery whose academic contributions to the Department and to the University were recognized by promotions July 1, 1999.

Dr. Mark Cattral, Ms. Celia Godkin, Dr. Shafique Keshavjee, Dr. Paul Merguerian and Dr. Sid Radomski were promoted to Associate Professor.

Dr. Andres Lozano, Dr. James Rutka and Dr. Christopher Wallace were promoted to Full Professor.

Comings and Goings

Our Department was strengthened this year by the recruitment of the following: Dr. Robert Cartotto (Plastic Surgery) Sunnybrook and Women’s College Health Sciences Centre; Dr. David Fisher (Plastic Surgery) The Hospital for Sick Children; Dr. David Grant (General Surgery) University Health Network; Dr. Andrew Howard (Orthopaedic Surgery) The Hospital for Sick Children; Dr. Andrei Krassioukov (Research) University Health Network; Dr. Jack Langer (General Surgery) The Hospital for Sick Children; Dr. David Lindsay (General Surgery) St. Joseph’s Health Centre; Dr. Weiping Min (Research) University Health Network; Dr. Raja Rampersaud (Orthopaedic Surgery) University Health Network; Dr. Christopher Schlachta (General Surgery) St. Michael’s Hospital; Dr. Andrew Smith (General Surgery) Sunnybrook and Women’s College Health Sciences Centre; Dr. John Tsilias (Urology) University Health Network; Dr. Thomas Waddell (Thoracic Surgery) University Health Network and Dr. Cari Whyne (Research) Sunnybrook and Women’s College Health Sciences Centre.

The following have left the Department during the 1999-2000 academic year: Dr. Sandeep Agrawal, Dr. Michael Dan and Dr. Alan Hemming.
UNDERGRADUATE EDUCATION

Dr. William Tucker, Director

Though no longer the largest undergraduate medical program in North America, since the reduction from 252 to 177 students per year in 1992, the University of Toronto remains the largest program in Canada. Its effective functioning depends on a large faculty who teach at three academies, The Hospital for Sick Children, and several partially affiliated teaching hospitals, as well as the Medical Sciences Building. Recent initiatives in undergraduate medical education in the Faculty of Medicine as a whole include a virtually complete turnover of course directors, the re-design of courses to enhance the basic science content (especially in pharmacology, molecular biology and genetics) and an increased role for medical informatics (e-based education and evaluation).

Within our own Department, the teaching, acquisition and evaluation of technical skills remain somewhat problematic. Clearly, basic technical skills should be acquired by undergraduate medical students, and the Department of Surgery should have major input and responsibility in this area. It is clear that there are many good technical skills teaching initiatives in various surgical divisions at different academies, but the lack of uniformity in the programs, or consistent documentation, frustrates efforts at fair faculty-wide evaluation.

For the first time this academic year, the Faculty of Medicine moved to a pass/honours/fail system for student evaluations.

Dr. John Murnaghan organized and led a session to prepare middle-level surgical residents for their role in undergraduate teaching. The session took place on March 22, 2000, and 17 of the 18 residents completing the evaluation form indicated that the session had been worthwhile for them. Dr. Murnaghan and his faculty, including Drs. Ross, Hamstra, Tucker, Bohnen and Hodges (guest speaker, Department of Psychiatry) are to be commended for their efforts to improve undergraduate teaching by our surgical housestaff.

A faculty development workshop, again organized and chaired by Dr. John Murnaghan, was held on June 2, 2000, to orient new faculty to their roles as teachers in our Department. Drs. Wedge and Taylor and Ms. Dann from the Department of Surgery provided key information about the organization of the Department, its administration and the Faculty of Medicine promotions process. Drs. Hamstra, Bohnen,
Tucker, Darling and Ross joined Dr. Murnaghan in presenting the teaching mandate of the Department and strategies to assure its achievement.

The biannual meeting of the Canadian Undergraduate Surgical Education Committee (CUSEC) was held in Halifax from November 18-20, 1999. The University of Toronto participation by faculty, surgical education fellows and undergraduate students dominated the program. In particular, faculty members from our Department were involved in 10 of the 12 presentations at the pre-meeting workshop and delivered several of the key talks during the regular program.

The twentieth annual meeting of the Association for Surgical Education (ASE) was held in Toronto from May 3-6, 2000. Richard Reznick served as President of the Association for Surgical Education this year, and welcomed delegates from across Canada, the United States and the United Kingdom. Again, the University of Toronto was prominently represented amongst the presenters.

The Tovee Undergraduate Teaching Prize this year went to Dr. Gail Darling of the Division of Thoracic Surgery. In addition to an outstanding personal record for teaching performance, Gail has served for many years on the Undergraduate Education Committee of the Department, and in recent years has been the Course Director for the Art and Science of Clinical Medicine Year II Program (ASCM II), in which capacity she has served our Department extremely well.

Catherine Haywood, a PGY5 resident in the plastic surgery program, won this year’s D.R. Wilson Award for outstanding undergraduate teaching by a resident. It is well known and increasingly recognized that the residents contribute substantially to the education of our undergraduate students, particularly in the clerkship years, and their efforts, as well as the teaching by faculty members, are monitored in the regular debriefings conducted by Dr. Stan Hamstra, the Director of the Office of Surgical Education. Dr. Hamstra’s reports bolster the objective data available for assessment of the teaching performance of our residents and faculty.

I would like to thank the student and faculty members of the Undergraduate Education Committee for their input and guidance over the past year, and express our gratitude to John Wedge for his unwavering support and commitment to the undergraduate teaching program in the Department.
POSTGRADUATE EDUCATION

Dr. John Bohnen, Director

It has been my pleasure to take over Jameel Ali’s position as Director of Postgraduate Education on July 1, 1999. Jameel has presided over a large, well-organized and successful program of surgical education that has expanded tremendously under his leadership. Jameel had already informed me of Chairman Wedge’s profound commitment to postgraduate education and the outstanding administrative support of Tess Weber, Arin Defazio and Jean Defazio.

All of our CaRMS positions were filled for July 1999. In 1999-2000, we had 228 trainees in the surgical programs (cardiac surgery, general surgery, neurosurgery, orthopaedic surgery, plastic surgery, thoracic surgery, urology and vascular surgery residencies; and colorectal surgery, pediatric general surgery and surgical oncology fellowship programs). Twenty-eight residents were enrolled in the Surgeon Scientist Program.

Our residents fared well in Royal College exams. Twenty-three of 26 residents who sat the Principles of Surgery examination passed (88%), as did 29 of 30 candidates who attempted their fellowship examinations for specialty certification (97%). Congratulations to our trainees on these excellent results!

There have been several changes in training program leadership. Thanks to outgoing program directors Rick Pearl, Joseph Schatzker, Tom Todd and Bill Tucker, for their enormous contributions to the pediatric general surgery, orthopaedic surgery, thoracic surgery and neurosurgery training programs. Chris Wallace has taken the helm in neurosurgery after interim leadership by outgoing and incoming Chairs Charles Tator and Jim Rutka. Doug Hedden is the new program director for orthopaedic surgery; Jack Langer now leads the pediatric general surgery training program; Shaf Keshavjee became acting program director of the thoracic surgery program; and Lorne Rotstein has joined Marcus Burnstein as co-director for general surgery. Carol Swallow has become the program director of the general surgery oncology fellowship program. The cardiac surgery, plastic surgery, urology and vascular surgery programs thrive under the continued leadership of Charles Peniston, Ron Levine, Ron Kodama and Wayne Johnston respectively.
The divisional program directors chair their respective residency program committees, which include elected resident representatives. Overall direction at the department level comes from the Postgraduate Education Committee. The Core Surgery Committee oversees the Core Surgery Program, which trains first and second year residents in all aspects of surgical theory and practice. Stan Hamstra, Director of the Office of Surgical Education, co-ordinates the trainees’ evaluations of teaching programs and faculty members. Each surgeon receives a “teaching effectiveness score” based on residents’ feedback.

Surgeon teachers and trainees engage in many hours of educational collaboration in the operating room, at the bedside, in seminars, in practice oral exams, in research programs and in personal mentorship. Beyond these individual efforts, each division sponsors a large array of educational venues and events, including one dedicated half-day per week away from clinical duties. At the departmental level, the success of “showpiece” programs such as the Principles of Surgery lecture series, the Surgeon Scientist Program and the Surgical Skills Centre distinguish the University of Toronto for its outstanding breadth and depth of residency training.

Under the enthusiastic leadership of Martin McKneally, the Principles of Surgery lecture series provides junior residents with the knowledge of surgical science they need for clinical practice and success in the “POS” exam. Over a two-year cycle, leaders in fields within and outside surgical disciplines cover clinical and professional aspects of practice, ranging from electrolytes to ethics.

The Surgeon Scientist Program, led by Ori Rotstein, is unique to the University of Toronto. The Surgeon Scientist Program enables residents to attain MSc and PhD degrees in internationally recognized research programs in numerous disciplines including basic science, clinical epidemiology and surgical education.

The Surgical Skills Centre, under Carol Hutchison’s leadership, trains junior residents in basic operating room skills and theory in a controlled, laboratory setting, under the supervision of master teachers of surgical technique. In the last year, the Surgical Skills Centre has produced over 100 sessions for resident skills acquisition. Besides teaching junior residents basic skills, the Surgical Skills Centre provides advanced skills training for five surgical divisions and the Departments of Otolaryngology and Obstetrics/Gynecology.
The Department of Surgery has an active program in education research with Dimitri Anastakis chairing the Education Research Committee. Members of our Department play a major role in the Centre for Research in Education, where currently four surgical trainees are enrolled in MSc and PhD programs.

The Department of Surgery has sponsored or participated in a variety of special events for trainees such as orientation day for incoming PGY1’s in July, and Career Night in September for senior year medical students interested in surgery. Many such events were hosted by divisional programs, such as general surgery’s practice management symposium and urology’s communication workshop.

In the past year, numerous faculty members and residents were granted awards by hospitals, surgical divisions and the Department of Surgery for excellence in postgraduate teaching. Among them, Bernie Goldman received the Tovee Postgraduate Award for sustained, outstanding contributions to postgraduate training, and Catherine Haywood won the D.R. Wilson Education Prize for outstanding teaching of medical students by a surgical resident.

Some of last year’s challenges continue into the new academic term. Hospital closings, mergers and take-overs stress our capacity to organize stable rotations for residents. The newly ratified contract between the Professional Association of Interns and Residents of Ontario and Ontario’s teaching hospitals mandates a reduction of “on-call” frequency to one-in-three at home and one-in-four in hospital, protecting residents from overwork but causing concerns about the adequacy of their exposure to clinical emergencies. The University introduced, and then retracted a requirement for residents to pay tuition for their education while serving as professional caregivers. The dual nature of residency training has been acknowledged, and the tuition issue will be dormant in the near future. The tremendous success of the Surgeon Scientist Program continues to challenge the re-integration of research residents into the clinical stream.

The program flourishes because of the abilities and commitment of faculty and trainees. We will have the opportunity to demonstrate our activities to the Royal College accreditation team who will conduct our six-year review in April 2001.
CONTINUING MEDICAL EDUCATION
Dr. Michael Ameli, Chair C.M.E. Committee

This has been an interesting and productive year for the Department of Surgery in terms of continuing medical education, sponsoring a total of 19 courses. There has been a surge of interest in continuing medical education activities because of the current regulations from the Royal College of Physicians and Surgeons of Canada and a definite interest in obtaining credits for continuing professional development.

The Continuing Medical Education office in the Faculty of Medicine has continued to give very good service and has been very instrumental in many of the changes that have taken place in improving continuing medical education for physicians. Dr. Dave Davis and Sandra Leith, particularly, have been very helpful.

This is a year when many changes are going to take place. With the advent of continuing professional development, the Department of Surgery has decided to change the name of the Committee to the Continuing Professional Development Committee. A new Chair, Dr. Sender Herschorn, from Sunnybrook and Women’s College Health Sciences Centre, has been selected. The mandate of the Committee has been expanded significantly and will improve both the quality of continuing medical education for the University as a whole, and also for outside surgeons who require continuing professional development credits. The continuing professional development credits cover a multitude of continuing medical education activities and many of these will involve our Department. For the future, we will see a progressive interest in continuing medical education activities and continuing medical education will be much more responsive to surgeons in the community who will require continuing professional development credits, that may not be available at their local hospital.

Training of physicians, the advent of new surgical skills and remedial training, will all need to be part of the mandate of our Committee. Continuing professional development will definitely be a growth activity for the future, and it will be at the same level as undergraduate and postgraduate education at the University of Toronto.
RESEARCH

Dr. Ori D. Rotstein, Director

Research in the Department of Surgery continues to flourish. The Surgeon Scientist Program remains an important component of our Departmental activities. More than twenty-five surgical residents were involved in the past academic year, representing all the surgical specialties and working in the areas of fundamental biology, education, clinical epidemiology and health administration. The research work by these young individuals continues to bring local, national and international recognition to our Department, as evidenced by their excellent publications and their competitiveness for grants and awards. These are too numerous to fully list, but in aggregate, they demonstrate the quality of science being performed within the Department. Some noteworthy awards are as follows. At the Institute of Medical Science Research Day, Robert Gryfe was awarded the J.C. Laidlaw Prize for excellence in research and Ian McGilvray was a co-winner of the Salter-Siminovitch Award. Dr. Gryfe also tied for first place with Michael Borger for the 1999 CSCI/MRC Resident Research Award. Gideon Cohen was awarded the 1999 Canadian Research Award for Specialty Residents in the Division of Surgery of the RCPSC/CSCI/PAIRO. Finally, this year’s Bernard Langer Surgeon Scientist Award recipient, given to the most worthy recent graduate of the Surgeon Scientist Program, was David Hackam.

The Gallie-Bateman resident research competition was again a great success. This year’s competition was judged by Dr. E. Darracott Vaughan, Jr., the Cole Professor, Department of Surgery at Cornell University, New York. His Gordon Murray Lecture highlighting the management of adrenal masses was of great interest to all in attendance. Ten excellent resident papers were presented. Robert Gryfe and Sevan Hopyan were co-winners and Robin Boushey was runner-up at the Gallie-Bateman resident research competition. Eugene Wai was the inaugural recipient of the Wyeth-Ayerst Canada Incorporated Award for excellent research in the fields of medical education and clinical epidemiology. This past year, four residents were awarded scholarships as part of the Johnson & Johnson Medical Products Surgeon Scientist Fellowship Program. These were Tony Finelli, Howard Ginsberg, Laz Klein and Jennifer Macmillan. Johnson & Johnson have committed support for this Fellowship for the next ten years.
The George Armstrong-Peters Prize for best young investigator in the Department was awarded to Dr. Emil Schemitsch for his continuing productivity in orthopaedic research, while the Lister Prize for the best senior investigator was awarded to Dr. Carin Wittnich, citing her research contributions in the area of neonatal myocardial protection.

The Research Committee welcomed new members this year and thanked former members for their input on various issues. The Committee continues to co-ordinate the departmental research activities. The broad representation from across the Department has made it possible to develop a strong consensus regarding our research priorities and directions. In the past year, the Committee dedicated a retreat day to discussion of the role of non-clinician scientists in the Department, has initiated the development of a structured mentoring program, and has evolved surgeon scientist guidelines in conjunction with the new policy on tuition and maximum on-call mandates. The Committee also serves as a vehicle for dissemination of information on several important issues, including available funding sources, awards received and new opportunities. Finally, we are indebted to Val Cabral for her skilful administrative co-ordination of all aspects of the Departmental research activities.

In summary, this has been an excellent year for research in the Department of Surgery. We should continue to take great pride in the breadth and depth of our research accomplishments, while remaining cognizant of the importance of future research innovation as a means of providing excellence in patient care.
DIVISION OF CARDIAC SURGERY  
Dr. Richard Weisel, Chair

Cardiac surgery is a relatively new specialty and continues to evolve. An increasing number of patients who benefited from open-heart operations in the past are returning for further treatment of more advanced and complex cardiac pathology. Interventional cardiologists treat an ever-increasing proportion of patients with coronary artery disease and congenital heart defects, leaving only the more complex cases to be treated with surgery. In addition, those interventions are often palliative and eventually many patients need cardiac surgery. These changes in cardiac pathology, compounded with the continuous introduction of new operative techniques and devices to treat patients with cardiovascular disorders, make cardiac surgery very challenging, particularly for academic surgeons. In spite of these changes, the clinical outcomes of cardiac surgery at University of Toronto affiliated hospitals remain excellent.

St. Michael’s Hospital has accumulated extensive experience with off-pump coronary artery surgery. This technique of myocardial revascularization is also being employed at the other two hospitals with increasing frequency. Extensive laboratory investigations at St. Michael’s Hospital have resulted in a series of clinical investigations. Dr. Stephen Fremes was appointed Chief of the Division of Cardiac Surgery at the Sunnybrook and Women’s College Health Sciences Centre. He is actively recruiting new staff surgeons with an interest in both basic and clinical investigation. Both laboratory and clinical research continues to flourish at the Toronto General Hospital. The Congenital Heart Surgeons Database has been established at The Hospital for Sick Children. Numerous operative procedures conceived by cardiac surgeons from Toronto are now widely used globally. The academic presence of our faculty at national and international scientific meetings is among the top ones.

Resident Awards

Dr. Michael Borger - CSCI/MRC Resident Research Award, Postgraduate Medical Education, University of Toronto; Javenthey Soobiah Award, Postgraduate Medical Education, University of Toronto; Edward Christie Stevens Fellowship in Medicine, Postgraduate Medical Education, University of Toronto.
Dr. Gideon Cohen - Miriam Neveren Memorial Award, Postgraduate Medical Education, University of Toronto; Joseph M. West Family Memorial Fund, Postgraduate Medical Education, University of Toronto.

Dr. Vivek Rao - Chisholm Memorial Fellowship, Postgraduate Medical Education, University of Toronto; 2000 Canadian Research Resident Award, Royal College of Physicians and Surgeons of Canada/Canadian Cardiovascular Society.

Dr. Stacy O’Blences - Parke Davis Second Prize, Postgraduate Medical Education, University of Toronto; Wilfred Bigelow Prize, Division of Cardiac Surgery, University of Toronto; First Prize, Surgical Service Basic Science Research Competition, The Hospital for Sick Children; Finalist, Vivian Thomas Young Investigator Award, American Heart Association.
DIVISION OF GENERAL SURGERY
Dr. Zane Cohen, Chair

The Division of General Surgery at the University of Toronto changed leadership during the past academic year. Dr. Zane Cohen assumed the position from Dr. Bryce Taylor. Dr. Taylor had made very significant contribution to the Division of General Surgery and was responsible for developing some of the strongest programs. It is worth repeating that at the conclusion of Dr. Taylor’s term as Chair of General Surgery the external report of the General Surgical Division stated that “the Division of General Surgery at the University of Toronto is the standard against which all Canadian divisions should be measured”.

Extremely strong programmatic development has occurred within the Division over the years and was fostered during the past year. However issues such as budgetary constraints and resident issues, as well as the internal accreditation process and restructuring, appeared to come to the fore during the past year. Every member within the Division of General Surgery has now committed to the Faculty Matching Program, which was developed during this past year within the Division of General Surgery. This has allowed the Division some monetary flexibility in deciding on major issues. A Finance Committee for the Division was established consisting of Drs. Zane Cohen, Eric Poulin, Sherif Hanna and Lorne Rotstein.

The internal accreditation process of general surgery involved all staff and residents. Workload to education ratio was paramount in the minds of the interviewers and resident issues such as allocation of residents to their rotations, as well as last minute changes of these rotations, were addressed. The new PAIRO agreement, which changes the “on-call” of residents, will be a very major topic for our Division to solve during the next academic year. The official external accreditation of general surgery will take place in April 2001. Programs in colon and rectal surgery and surgical oncology, which are accredited by the Royal College without certification, were also reviewed internally. The Surgical Oncology Program was found to be exemplary. The Colon and Rectal Surgery Program had some minor weaknesses only.

Restructuring discussions continued during this past academic year. Major geographic changes are likely to be completed during the 2000-2001 academic year. The Sunnybrook Health Science Centre and Women’s College Hospital officially became the Sunnybrook and Women’s College Health Sciences Centre and Dr. Sherif Hanna has
officially been appointed Head of the combined Divisions of General Surgery at these institutions. St. Michael’s Hospital and The Wellesley Hospital have now officially merged with Dr. Eric Poulin becoming the Chief of Surgery at that combined institution. Dr. Marcus Burnstein continues in his role as Chief of General Surgery of the combined institution.

Postgraduate Training

The following residents were successful in completing the general surgical training program in the academic year 1999-2000: John Iskander, Peter Dauphinee, Michael Anderson, David Hackam, Todd Penner, Stephen Cassivi, Ayyan Niaz, David Smith, Larissa Temple, Lorraine Tremblay and Julia Jones. There was a 100% success rate in the Royal College fellowship examinations in general surgery.

The residents engaged in full-time research in the Surgeon Scientist Program during the 1999-2000 academic year were: Erin Kennedy (supervisor: Robin McLeod); George Oreopoulos (supervisor: Ori Rotstein); Robin Boushey (supervisor: Dan Drucker); Rebecca Gladdy (supervisor: Joyce Danka); Jennifer MacMillan (supervisor: Carol Swallow); Laz Klein (supervisor: Tom Lindsay); Priscilla Chu (supervisor: Joyce Danka). These residents were awarded a number of research scholarships as well as other important prizes for their work.

John Bohnen, the Director of Postgraduate Education, worked well with our Co-Program Directors to establish various principles for the allocation of our general surgical residents for the various rotations. The PGY1 and PGY2 years will have a much more structured schedule than previously and last minute changes to the rotations will be avoided, except for exceptional circumstances.

Dr. Lorne Rotstein was appointed as Co-Program Director in General Surgery along with Marcus Burnstein. Marcus’ dual role within the Colon and Rectal Surgery Program was recognized by the internal accreditation process as being excessive. Therefore, additional help was required within the program. Lorne Rotstein will take over as the Program Director for the Division of General Surgery on May 1, 2001. The Division is indebted to Robert Mustard and Ulo Ambus, who coordinated the PGY1 and 2 and PGY3, 4 and 5 seminars. Their places were taken on July 1st by Peter Chu and Lloyd Smith respectively.
Promotions

During the past academic year, Mark Cattral was promoted to the level of Associate Professor.

New Faculty

In 1999-2000, Drs. David Grant, Jack Langer, David Lindsay, Chris Schlacta and Andrew Smith joined our general surgical division. Recruitment plans for the academic year 2000-2001 include Paul Bernick at the Toronto East General Hospital, Peter Chu at the Sunnybrook and Women’s College Health Sciences Centre, Stan Feinberg at St. Joseph’s Health Centre, Philip Haigh at the University Health Network and Alan Dackiw and David Urbach at the University Health Network commencing January 1, 2001.

Honours and Awards

During the academic year, Bernie Langer became the President-Elect of the Royal College of Physicians and Surgeons of Canada. He will assume his presidency in September 2000. Eric Poulin was appointed President of the Canadian Association of General Surgeons. Dr. John Bohnen officially took over as Director of Postgraduate Education. Lloyd Smith won a PAIRO Award for resident teaching. David McCready became President of the Canadian Society of Surgical Oncology. Doug Wooster became President-Elect of the Canadian Society for Vascular Surgery. Bryce Taylor was awarded a Colin R. Woolf Award for commitment and achievement in postgraduate education. Richard Reznick was awarded the John T. Hubbard Award. Steve Gallinger won the Premier’s Research Excellence Award, as well as being appointed Director of the Hepatobiliary Surgery Program jointly at the University Health Network and Mount Sinai Hospital. Richard Reznick also received the James IV Travelling Fellowship, the sabbatical time to be taken during the summer of 2001.

There were numerous grants achieved by our faculty from the Medical Research Council of Canada, CIHR, Physicians Services Incorporated Foundation, National Cancer Institute of Canada, National Institutes of Health, Natural Sciences and Engineering Research Council, as well as many others. The total value of all grants received by our faculty during the academic year was $3,899,982.
A number of teaching awards were won during the academic year. Helen MacRae and Michael Goldberg won individual teaching excellence awards from the Wightman-Berris Academy. Peter Kim won the Chief Resident’s Best Teaching Award at The Hospital for Sick Children. Lorne Rotstein won the Ross Fleming Surgical Educator Award at the University Health Network. The remaining honours and awards are listed below.

Our surgical residents, particularly those in the Surgeon Scientist Program, were also extremely successful in their grant capture, as well as overall in their academic productivity. Rob Gryfe was a co-winner in the Gallie-Bateman resident research competition and won the CSCRI/Medical Research Council of Canada Resident Research Prize. Robin Boushey was runner-up in the Gallie-Bateman resident research competition and won the Star Medal for scholarship in anatomy, physiology and pathology. He also was awarded a Medical Research Council of Canada Fellowship, a Crohn’s and Colitis Foundation of Canada Research Fellowship, as well as a Terry Fox Research Fellowship. George Oreopoulos received an honorable mention in the Gallie-Bateman resident research competition and also received a fellowship from the Surgical Infection Society. David Hackam won the Bernard Langer Surgeon Scientist Award for overall excellence in research during his residency training. Erin Kennedy received both a Medical Research Council of Canada Fellowship and a Crohn’s and Colitis Foundation of Canada Fellowship. Rebecca Gladdy received a Medical Research Council Fellowship and a Hospital for Sick Children tuition bursary. Jennifer MacMillan received an Ontario Graduate Scholarship and an M.I.S. Merit Award, and Laz Klein received a Johnson & Johnson Surgical Scientist Program Award.

Special Events

The Society for University Surgeons held its annual meeting in Toronto and was hosted by Ori Rotstein. The Annual Assembly of General Surgeons took place in June. This event was once again organized by Steve Gallinger and is certainly a highlight as an academic day for our general surgical division. Steven Strasberg, an alumnus of our Division was the Bruce Tovee Lecturer and did an outstanding job in assessing the presentations and making the awards for best papers to Rob Gryfe, Karen Yap and George Oreopoulos.

The 40th Annual Update Course for general surgeons was held at the end of April of the year 2000. This was a two-and-a-half day session
devoted to a variety of topics – surgical oncology and laparoscopic surgery being highlighted. Visitors for the Update Course were Alfred Cohen from the Memorial Sloan-Kettering Cancer Center and John Hunter from the Emory University in Atlanta, Georgia. A very large number of local faculty both within general surgery and outside of general surgery took part in the sessions. The Update Course during this academic year provided our Division with the largest registration and the largest amount of corporate sponsorship in the history of the Update Course.
DIVISION OF NEUROSURGERY

Dr. James Rutka, Chair

This year, Dr. Charles Tator was honoured for his role as Chair of the Division of Neurosurgery from 1989–1999. Dr. Tator was also appointed as a member of the Order of Canada. Dr. Rick Moulton was appointed to the position of Division Head of Neurosurgery at St Michael’s Hospital having taken over from Dr. William Tucker, who stepped down after serving as Division Head for seven years.

To assist the new Chair, the following appointments were made: Dr. Chris Wallace, Program Director; Dr. Michael Cusimano, Course Director; Dr. Michael Fehlings, Research Director; Dr. Ab Guha, Neuro-oncology Committee Chair; and Dr. Mark Bernstein, Dan Chair Fund Executor for the Toronto Western Hospital site.

Resident Achievements

All three resident candidates passed the Royal College examinations and received their FRCSC degree: Drs. Wai Ng, Sagun Tuli, and Ahmed Alkhani.

Several residents received externally funded fellowships and awards during the year: Steve Casha – Cervical Spine Research Society Resident Fellowship and Ontario Neurotrauma Foundation Award; Howard Ginsberg – Medical Research Council of Canada Doctoral Research Award and Johnson & Johnson Fellowship; Abhaya Kulkarni – Physicians Services Incorporated Foundation Award and Congress of Neurological Surgeons Resident Award; Todd Mainprize – National Cancer Institute of Canada Research Fellowship; Nicolas Phan – Medical Research Council of Canada Fellowship, Elizabeth Arbuthnot Dyson Fellowship and Joseph M. West Family Memorial Fellowship; Michael Taylor - Preuss Award; Eve Tsai – Ontario Neurotrauma Foundation Fellowship and Joint Section on Trauma of the American Association of Neurological Surgeons Award.

Todd Mainprize and Michael Taylor were awarded a University of Toronto Open Fellowship in recognition of their excellent academic achievements in the laboratory. Michael Taylor also received a Clinician-Scientist Training Program Award – Research Training Centre, The Hospital for Sick Children.
Warren Ho successfully transferred to the PhD program within the Institute of Medical Sciences. Abhaya Kulkarni successfully defended his Master’s in clinical epidemiology and is now in the PhD program. Kamal Thapar successfully defended his PhD in the Department of Laboratory Medicine and Pathobiology.

Howard Ginsberg won this year’s Horsey Prize for best clinical research in the Division of Neurosurgery. The Morley Prize winners for best basic science research were Steve Casha (first prize) and Michael Taylor (second prize). Wai Ng was awarded second prize in the oral presentations at the University of Toronto, Trauma Research Day 2000. Eric Massicotte received the A.R. Hudson Resident Teaching Award.

Charles Matouk won the University Health Network’s Sopman Humanitarian Award.


Awards

Michael Cusimano – Ontario Neurotrauma Foundation; Peter Dirks – National Cancer Institute of Canada; Michael Fehlings – Ontario Neurotrauma Foundation grant; Medical Research Council of Canada/Canadian Neurotrauma Partnership Program, and Health Research Personnel Development Program Career Scientist Award; Ab Guha – American Brain Tumour Association Award, Natural Sciences and Engineering Research Council grant, Premier’s Research Excellence Award, Monsanto Biomedical Research Grant, National Cancer Institute of Canada, The Hospital for Sick Children’s Translational research grant, Heart and Stroke Foundation, Radiation Therapy Oncology Group Translational research grant, Gene Chip Discover grant, and American Cancer Society; Raj Midha – Ontario Neurotrauma Foundation; Paul Muller – National Institutes of Health/National Cancer Institute of Canada grant; Jim Rutka – Terry Fox New Frontiers Award, National Cancer Institute of Canada; Michael Schwartz – Ontario Neurotrauma Foundation.
New Funded Initiatives

Charles Tator Endowment Program for Spinal Cord Injury and Repair; Harold J. Hoffman/Shoppers Drug Mart Chair in Pediatric Neurosurgery - Chairholder, Robin P. Humphreys; James F. Crothers Family Fellowship in Peripheral Nerve Damage, Freeman Centre in Clinical and Molecular Endocrine Oncology.

Neurosurgery Lectureships

Botterell – Dr. Peter McLBlack, Brigham Women’s and Children’s Hospital; Keith – Dr. Arnold Menezes, University of Iowa; Hendrick – Dr. Tae Sung Park, University of Washington, St. Louis

Promotions

Andres Lozano, James Rutka, Chris Wallace – Full Professor

New Faculty Recruits

Phil Porter – University Health Network - vascular neurosurgery Kamal Thapar – University Health Network - skull base and epilepsy surgery.

Other Awards

Chris Wallace organized the Lougheed Microvascular Course for the neurosurgery residents on two occasions. Fred Gentili organized the Botterell Professorship. Ab Guha organized the 2nd Annual CBTnet Meeting. Mark Bernstein organized the Keith Lectureship with Michael Fehlings arranging the research presentations by the residents.

Mark Bernstein won the A.R. Hudson Faculty Teaching Award.

The number of publications by neurosurgery faculty and residents totalled 79, and there were 43 visiting professorships by the faculty.

Appointments

Fred Gentili has been appointed as a member of the University of Toronto Joint Centre for Bioethics. Mark Bernstein has become a member of the Joint Center for Bioethics at the University of Toronto. Chris Wallace and Jim Rutka were appointed co-chairs of the Host
Committee for the AANS 2001 meeting in Toronto. Ab Guha has been selected as neurosurgical representative to the Clinical Care Advisory Committee meeting of the National Neurofibromatosis Foundation. Fred Gentili has been appointed Head of the Royal College Examination Committee. Rick Moulton has been appointed as President of the Canadian Neurosurgical Society.
This past year has been an eventful one within the Division of Orthopaedic Surgery. Hospital restructuring continues to be an important influence on the Division with continuing plans at both St. Michael’s Hospital and Sunnybrook and Women’s College Health Sciences Centre for amalgamation of clinical services and surgeons from respectively the Wellesley Hospital site and the Orthopaedic and Arthritic Hospital site. It is anticipated that this restructuring will be complete at approximately the time that I finish as the Chair of the Division of Orthopaedic Surgery.

There has been a new Chair established in orthopaedic surgery at the Mount Sinai Hospital. This chair, The Bernard I. Ghert Family Foundation Chair in Reconstructive Orthopaedics, has been occupied by Dr. Allan Gross and it is anticipated that it will support the continued excellence in reconstructive orthopaedic surgery practiced at the Mount Sinai Hospital.

Dr. Joseph Schatzker, after many years of service as Program Director, stepped down from that position effective January 1, 2000 and the position has now been taken over by Dr. Douglas Hedden of The Hospital for Sick Children.

Two new staff appointments have been made in the Division over the past year. Dr. Andrew Howard has been appointed as an active staff member at The Hospital for Sick Children, and Dr. Raj Rampersaud to an active staff position at the University Health Network, Toronto Western Hospital. Dr. Rampersaud’s primary interest is in spine surgery and he has joined Dr. Michael Fehlings of the Division of Neurosurgery in the University Health Network Spine Program.

The Division has had a number of outstanding visitors in the past year, most particularly Dr. Stuart Weinstein as the Kennedy Visiting Professor and Dr. Regis O’Keefe as our Visiting Research Professor. Both visiting professors did an outstanding job and all faculty members were delighted with the contributions of the visitors to the academic excellence of our Division. In addition, the Austrian/Swiss/German Travelling Fellows visited in April and the ABC Travelling Fellows in June of 2000. Both groups of travelling fellows contributed their considerable experience and knowledge to residents and faculty alike over the course of the academic days set aside for their visit.
Members of the faculty and residents were recognized for excellence in orthopaedic surgery over the past year. Dr. Daniel Whelan received the Robin Sullivan Award for Excellence in Research at the Orthopaedic Research Day for his paper on “Pulmonary contusion and fat embolism”. Dr. Sevan Hopyan was co-winner of the Gallie-Bateman resident research competition for his presentation on “A mutant parathyroid hormone related protein receptor and uncoupled growth plate signals in Ollier’s disease”. Dr. Eugene Wai was the inaugural recipient of the Wyeth-Ayerst Canada Incorporated Award for excellence in research in clinical epidemiology. Dr. Joel Lobo won the poster prize at the Trauma Research Day for his work on “The biomechanics of fracture fixation”. Dr. Amir El Maraghy and Dr. Eugene Wai were awarded the Sanofi-Synthelabo Resident Research Award for the best resident presentations on Kennedy Day. Dr. Amir El Maraghy was voted by the faculty as the outstanding graduating resident and received the R.I. Harris Postgraduate Prize in recognition of this award.

Faculty recognition for excellence by outside groups included the Kappa Delta Award (the Orthopaedic Research and Education Foundation Clinical Research Award) to Drs. Ben Alman and Jay Wunder. Dr. Erin Boynton received the Carroll Laurin Award from the Canadian Orthopaedic Foundation for her continued research work. Dr. Tim Daniels was appointed the Canadian representative on the International Committee of the American Orthopaedic Foot and Ankle Society in recognition of his clinical and academic expertise in this field.

Dr. Carol Hutchison was once again recognized for her excellence in teaching by being awarded the Silver Shovel Award. Dr. Robin Richards was elected President of the Canadian Orthopaedic Research Society for a one-year term. Dr. Jay Wunder was recognized for his excellence in teaching by receiving the Robert Salter Teaching Award – an award voted on and presented by the residents to the outstanding faculty teacher each year.

Dr. Ian Harrington stepped down after ten years of service as the Chief of Orthopaedic Surgery at the Toronto East General Hospital and was succeeded by Dr. Gianni Maistrelli currently an Associate Professor in the Department of Surgery.

Overall, this has been a very successful year for the Orthopaedic Division. New staff appointments indicate a growing interest in
academic orthopaedic surgery at this University. Grant support is up substantially over the past year, and our faculty members continue to be recognized by their international peers for their contributions in orthopaedic surgery.
DIVISION OF PLASTIC SURGERY
Dr. Peter Neligan, Wharton Chair in Reconstructive Plastic Surgery

Research

Dr. Zvi Margaliot successfully completed and defended his MSc thesis and returned to the clinical stream in July 2000. Two residents entered the Surgeon Scientist Program. Dr. Rob Shenker, under the supervision of Drs. Peter Neligan and Cho Pang, and Dr. Alexis Armour under the supervision of Drs. John Semple and Kim Woodhouse. The annual Resident Research Day was on March 31, 2000. The best clinical paper was won by Dr. Catherine Haywood for her paper entitled “Exploring cortical plasticity following free functioning muscle transfer in the upper extremity: Using functional magnetic resonance imaging and transcranial magnetic stimulation” and the best research paper was won by Dr. Joan Lipa for her paper entitled “The retinacula cutis of the face”. The University of Toronto was extremely well represented at the annual meeting of the Plastic Surgery Research Council in Seattle in May 2000. Dr. David O’Donovan (research fellow in plastic surgery under the supervision of Drs. Christopher Forrest and Cho Pang) won the Snyder Award for the best paper presented by a fellow or resident in plastic surgery. The title of Dr. O’Donovan’s paper was “Role of cytoprotection in the prevention of radiation induced craniofacial bone growth inhibition: Evaluation in an infant rabbit model.” Dr. O’Donovan also won the Shenaq Award for the best paper presented by an international fellow for the same paper. Dr. O’Donovan’s project is the subject of an MD thesis which he has prepared for the National University of Ireland, University College, Dublin. Dr. Claire Black (research fellow under the supervision of Drs. Peter Neligan and Cho Pang) won the Hardesty Award for the best poster at this meeting for her paper entitled “Effect of nicotine on endothelial function in human skin flap.” Dr. Black is also submitting her project as the subject of a thesis towards an MD degree at Queen’s University in Belfast. Dr. Manuel Gomez (supervisor Dr. Joel Fish) received an American Burn Association Award for the best presentation at the Canadian Special Interest Group at the Association for his project “The Ross Tilley burn score: An outcome predictive score in Canadian burn patients”. Dr. Peter Neligan was awarded the W.K. Lindsay Resident Research Supervisor Award.
Teaching

The achievements of both residents and staff was celebrated by receipt of several awards during the year. Drs. Marc Dupere and Nancy de Kleer received the Harrison Award for the best resident teachers at the Sunnybrook and Women’s College Health Sciences Centre. Dr. Catherine Haywood was the recipient of the D.R. Wilson Award for the best resident teacher within the Department of Surgery. This award was presented on Gallie Day. Dr. Arnis Freiberg won the Arnis Freiberg Teaching Award for the best faculty teacher.

Several courses were held in the new Surgical Skills Laboratory this year. The two-day dissection workshop was held on November 25 – 26, 1999. This was attended by both University of Toronto and McMaster University residents and fellows. A workshop on facial implants and injectables in plastic surgery was also held in the Surgical Skills Laboratory. The Hoyle Campbell Visiting Professor for the year 2000 was Dr. Neil Ford Jones of the University of California, Los Angeles. Dr. Jones spent two days with the residents, as well as acting as one of the judges at the annual Resident Research Day.

New Appointments

Dr. David Fisher was appointed to The Hospital for Sick Children and has taken over as Head of the Cleft Program. Dr. Christopher Forrest was appointed Head of the Craniofacial Program at The Hospital for Sick Children.

Four residents graduated from the program this year. Drs. Damir Matic, Catherine Haywood, Joan Lipa and Richard Hopper. Dr. Matic is pursuing a clinical fellowship in craniofacial surgery at the Johns Hopkins University. Dr. Hopper is pursing a craniofacial fellowship at the New York University and Dr. Lipa an oncologic reconstruction fellowship at M.D. Anderson Cancer Center. Dr. Haywood has been appointed to the staff of the Peel Memorial Hospital.
DIVISION OF THORACIC SURGERY
Dr. Shaf Keshavjee, Acting Chair

Clinical

All thoracic surgeons on University Avenue are now based at the University Health Network, providing an active and busy teaching service for the thoracic surgical trainees. The full breadth of thoracic surgical disease is treated at the University Health Network, making it the largest and most comprehensive training program in the country. The Lung Transplant Program has continued to grow experiencing the busiest year ever in the history of the Program with over 40 transplants performed this year. After the successful addition of a Pediatric Lung Transplant Program and a Heart-Lung Transplant Program, we are now embarking on a Living-Related Lung Transplant Program. The Lung Volume Reduction (LVR) Program, now under the direction of Dr. Thomas Waddell, has completed a randomized trial in lung volume reduction for end-stage emphysema. The Lung Volume Reduction Program, the University Health Network Pulmonary Hypertension Program, the Cystic Fibrosis Programs and the Lung Transplant Programs have been more closely integrated to provide seamless care for patients with end-stage lung disease.

Teaching and Research

Dr. Gail Darling has completed her third year as Course Director of the Arts and Science of Clinical Medicine Course. The thoracic surgery research laboratory continues to be productive with numerous grants, publications, presentations at international meetings and a continued attraction of both University of Toronto surgical scientist trainees and international fellows. The breadth of expertise provided by the principal investigators, Dr. Shaf Keshavjee (Director), Dr. Mingyao Liu and Dr. Thomas Waddell, provide an exciting and stimulating research environment for trainees ranging from undergraduate students to post-doctoral fellows.

Retirements and Recruitments

Dr. Thomas Waddell was appointed as an Assistant Professor in January 2000. In addition to playing a major role in both lung transplantation and thoracic oncology, he has his own laboratory focusing on basic investigations in the field of xenotransplantation. Dr.
Waddell has obtained peer-reviewed funding of almost half a million dollars in his first year on our faculty!

Dr. Tom Todd has left the University of Toronto to assume the position of Chief of Surgery at the Shaikh Khalifa Medical Centre in Abu Dhabi, United Arab Emirates – he appears to be enjoying his new lifestyle! Dr. Tim Winton has moved to the Division of Thoracic Surgery in Edmonton.

Dr. Shaf Keshavjee has served as Acting Chair, Division of Thoracic Surgery and Head of the Division of Thoracic Surgery at the University Health Network, as well as Program Director for thoracic surgery. Dr. Robert Ginsberg, originally from Toronto, who has been working in New York as the Chief of Thoracic Surgery for the past ten years, has been recruited to the position of Chair of Thoracic Surgery, University of Toronto and Head, Division of Thoracic Surgery, University Health Network, starting January 1, 2001.

Awards and Honours

Dr. Shaf Keshavjee: Canada’s Top 40 under 40 Award; three-year Medical Research Council of Canada grant; three-year Canadian Cystic Fibrosis Foundation grant. Dr. Mingyao Liu: three-year renewal of his previously held Medical Research Council of Canada grant; a new five-year CIHR grant and the Premier’s Research Excellence Award. Dr. Gail Darling: E. Bruce Tovee Award for Undergraduate Teaching. Dr. Tom Waddell: American Association for Thoracic Surgery Research Fellowship; Thoracic Surgery Foundation for Research and Education research grant; Crann Foundation Award; Canadian Foundation for Innovation Major Infrastructure Award. Dr. Jonathan Cardella successfully defended his MSc thesis under the supervision of Dr. Mingyao Liu, and Dr. Stefan Fischer successfully defended his MSc thesis under the supervision of Dr. Shaf Keshavjee.

Visiting Professors and Meetings

The 29th Annual Thoracic Surgery Refresher Course was a well-attended success once again, with Visiting Professors Anthony Yim (Hong Kong), Philippe Daretevelle (France) and Lary Kaiser (United States). In addition, a symposium on “Current Concepts in the Management of Stage III Lung Cancer” was held in conjunction with the American Association for Thoracic Surgery meeting in Toronto.
This multidisciplinary meeting brought together an international faculty of leaders to present the state-of-the-art in advanced lung cancer.

Invited Lectures

Dr. Shaf Keshavjee was an invited lecturer at the American Thoracic Society meeting, San Diego, California; the Division of Cardiothoracic Surgery, University of California Los Angeles; the International Society of Cardiothoracic Surgeons XIIth meeting in Awaji, Japan; the Royal College of Surgeons meeting in Montreal; the Canadian Association for Transplantation in Mont Tremblant, Quebec; the Third South American Transplant Society meeting in Uruguay; the Northeastern Brazilian Society of Thoracic Surgery in Brazil, and the Canadian Pulmonary Hypertension Society in Toronto. Dr. Mingyao Liu was an invited lecturer at the University of Waterloo, Department of Chemical Engineering; the Jinan Hospital in China; Kyoto University in Japan, and at the Ray Wu Scientific Retreat in Cape Cod, United States. Dr. Thomas Waddell was an invited lecturer at the Canadian Transplantation Society, Mont Tremblant, Quebec, and the Canadian Pulmonary Hypertension Symposium in Toronto. Dr. Gail Darling was an invited speaker at the Canadian University Surgical Education Committee meeting held in Halifax in November 1999. Dr. Michael Johnston was an invited lecturer at the Queen Elizabeth II Health Sciences Centre, Dalhousie University; the Canadian Association of Thoracic Surgeons annual meeting in Toronto, and the Ottawa Civic Hospital/University of Ottawa in April 2000.
Faculty Appointments, Promotions, Honours and Changes

This year the Division’s faculty consisted of nineteen geographic full-time surgeons, four senior surgeons and one PhD scientist. Faculty continued their global scope and visited most Canadian provinces, many United States and international universities and attended meetings all over the world. Leadership was provided in international clinical trials and various national and international urological organizations. Dr. Grant Farrow completed thirty-four years of clinical practice at the Toronto General Hospital and retired at the end of the year.

Dr. Lori Burrows, PhD, continues as Director of the Centre for Infection and Biomaterials Research at the University Health Network, Toronto General Hospital, which now houses eleven members, including a surgical scientist resident.

Dr. Lesley Carr officially moved her office to the Sunnybrook campus of the Sunnybrook and Women’s College Health Sciences Centre where she continues to direct the Urology School for the residents.

Dr. Neil Fleshner was a co-investigator on two National Cancer Institute of Canada awards, including a case-control study of PSA screening in preventing deaths from prostate cancer and the role of serum IGF-1 levels and AR receptor genotype in prostate cancer diagnosis. He organized a meeting with international scope on nutrition and prostate cancer.

Dr. Magdy Hassouna continues with his neuromodulation research and nerve stimulation program.

Dr. Sender Herschorn, Deputy Chair of the Division, stepped down as Head at the Sunnybrook and Women’s College Health Sciences Centre. He was appointed the departmental Director of Continuing Professional Development (formerly known as Continuing Medical Education). He was awarded the Faculty postgraduate teaching award and the Marvin Tile award for distinguished service in the Department of Surgery.

Dr. John Honey continued as Director of the Urolithiasis and Lithotripsy Program at the University and Head of Urology at St.
Michael’s Hospital. The Wellesley-Central Hospital became a site of St. Michael’s Hospital and the stone program will move to the Bond Street site. He is a co-investigator on a Kidney Foundation of Canada grant and a Heart and Stroke award. A scholarship was inaugurated in his name at St. Michael’s Hospital and Dr. Ken Pace, a fellow in endourology and laparoscopy was the recipient of the first annual scholarship. The team performed the first laparoscopic donor nephrectomy in Ontario in collaboration with the Minimal Access Therapeutics Division at St. Michael’s Hospital.

Dr. Keith Jarvi continued to lead the Andrology Program with peer-reviewed funding and supervises a fellow, a post-doctoral student, and a surgical scientist resident.

Dr. Michael Jewett continued as Chair of the Division and Head of Urology at the University Health Network. He was awarded a Kidney Foundation of Canada research grant as a principal investigator and is a co-investigator on several National Cancer Institute of Canada awards. He led a team at the University Health Network that performed the first robotic laparoscopic radical prostatectomy in Canada.

Dr. Tony Khoury was invited as a visiting professor to ten medical universities/international meetings, is leading two clinical trials, supervised two fellows, who won prizes for their work, and leads the Pediatric Urology Fellowship Program, which is considered one of the top programs in North America, with two fellows per year entering the program. He has received research funding from The Hospital for Sick Children Research Institute, the Kidney Foundation of Canada, and Materials and Manufacturing Ontario. The hospital division underwent a successful five-year review by Dr. Jim Mandell.

Dr. Laurence Klotz became the Head of Urology at the Sunnybrook and Women’s College Health Sciences Centre. He continues as Chair of the Canadian Uro-Oncology Group (CUOG)/National Cancer Institute of Canada Clinical Trials Group GU Site Committee, as well as the Global GU Group. He also continues as Editor-in-Chief of the Canadian Journal of Urology and was elected to the executive of the Society of Urological Oncology.

Dr. Ron Kodama continued as the Program Director of the Division. He was awarded the Marvin Tile award for distinguished service to his hospital Department of Surgery.
Dr. Gordon McLorie became President of the Canadian Urological Association, an honour that the faculty has not held for more than ten years.

Dr. Paul Merguerian left the Division in April for a new position in Fresno, California.

Dr. Sid Radomski won the Surgical Skills Centre Teaching Award for best surgical teacher. He conducts the very popular hands-on part of Urology School, and is developing the minimally invasive surgery program at the University Health Network.

Dr. Rob Stewart moved his laboratory and practice to St. Michael’s Hospital in July, where he continues with his vascular biology research.

Dr. John Trachtenberg continues as Director of the Prostate Centre at the Princess Margaret Hospital and is now President of the Canadian Academy of Urological Surgeons. He is a co-investigator on several grants. The Prostate Centre was awarded a Clinical Research Program award at the Princess Margaret Hospital and launched its website. The annual and very successful continuing professional development meeting for prostate diseases (ICPC) will be held again in 2001.

Dr. John Tsihlias joined the Faculty in July at the University Health Network, Princess Margaret Hospital after further uro-oncology training at MD Anderson Cancer Center and set up his laboratory to study prostate cancer biology.

**Academic Events and Divisional Awards**

Our Charles J. Robson Visiting Professor this year was Dr. Ian Thompson, Chair of the Division of Urology at the University of Texas at San Antonio.

Research Day 1999 was held in conjunction with the Robson Visiting Professorship. The awards for best presentations were: Resident Basic Research Award – Dr. R. Nam; Resident Clinical Research Award – Dr. S. Sharir, honourable mention – Dr. T. Finelli; Urology Fellow Research Prize – Dr. G.P. Capolicchio, honourable mention – Dr. W. Farhat.

The annual graduation ceremony (TURP 1999 for Toronto Urology Party) took place at the Badminton and Raquet Club in June. The
Faculty was introduced to the new PGY1’s and the graduates. The achievements of faculty and residents were also recognized, as well as acknowledgement of retirees and new faculty members. Our guest was the City of Toronto Chief Planner, Paul Beresford. Dr. Sender Herschorn received the Postgraduate Faculty Teaching Award by the senior residents. Dr. Ron Kodama received the A.W. Bruce Undergraduate Faculty Teaching Award for the sixth time, and Dr. Munir Jamal was awarded the Resident Undergraduate Teaching Award as the best resident teacher.

The Ontario Government W.K. Kerr Scholarship in Science and Technology was established with donations from faculty and friends. The endowment is $300,000 and it will provide an annual postgraduate scholarship of $15,000. This is the second scholarship fund for urology with almost $1,000,000 in the Toronto Hospital Foundation Graduate Student Scholarship in Urological Research Fund.

The Paul Starita Scholarship was awarded to Ben Beheshti for studies in prostate cancer at the University Health Network, Princess Margaret Hospital in the Department of Pathology.

**Postgraduate Education**

Dr. Ron Kodama continued as Program Director with Dr. Leslie Carr organizing Urology School. Graduates of the program in 1999 were Drs. Nicholas Logarakis, Munir Jamal and John Preiner, and all were awarded their fellowships from the Royal College. We will welcome four new PGY1’s in July - Drs. Andrew Caters and Kurt Eger, University of British Columbia; Dr. Leslie Dean, University of West Indies, and Dr. Aaron Blumenfeld, University of Toronto. There were a total of eighteen residents in the program. In addition, there were eleven fellows in clinical and research positions.

The fifth Urology Fair for resident selection, which is a national event, was held on January 9th in Toronto with all programs sending interview teams and all the Canadian fourth year students interested in urology attending. Twenty-one applicants were interviewed for three positions.

Drs. Eddie Matsumoto and Tony Finelli continued in the Surgeon Scientist Program to study for their MSc in education under the supervision of Dr. Stan Hamstra (co-supervisor, Dr. Sid Radomski) and
in microbiology and biomaterials under Dr. Lori Burrows (co-supervisor, Dr. Keith Jarvi) respectively.

Dr. Rob Nam was awarded the Astra Zeneca-CUOG Research Award for this year and Dr. Ricardo Rendon, fellow with Dr. Jewett, won it for next year. Dr. Ben Chew was also awarded the third annual Struthers Scholarship for studies in stone disease.

The University of Toronto/St. Michael’s Hospital Endourology Fellowship has been approved by the Endourology Society as a recognized fellowship program, one of a few in North America. Dr. Kenneth Pace, the first fellow in the program with Dr. Honey, was awarded the Northeastern Section of the American Urological Association’s Graduated Urologist Award to begin developing a laparoscopic donor nephrectomy program at St. Michael’s Hospital, the first of its kind in Ontario. He is also pursuing an MSc degree in clinical epidemiology at McMaster University.

Dr. Pramod Reddy, fellow at The Hospital for Sick Children, won First Prize Research Award for his paper titled “Regeneration of functional bladder substitutes using large segment (>44cm²) acellular matrix allografts in a porcine model: Long term results” at the American Academy of Pediatrics (Urology). Dr. Walid Farhat, also a fellow at The Hospital for Sick Children, won the Canadian Urological Association Prize Essay contest for his paper titled “The dysfunctional voiding symptom score: Quantitative standardization and follow-up of voiding behaviours in children”.

Continuing Professional Development (formerly CME)

The Urology Update was held in November under the able direction of Dr. Sender Herschorn, Director of Urological Continuing Medical Education and co-direction of Dr. Laurie Klotz. Once again, it proved extremely successful. The next update is scheduled for November 2000.
DIVISION OF VASCULAR SURGERY
Dr. K. Wayne Johnston, R. Fraser Elliott Chair in Vascular Surgery

Honours

Dr. Rubin is the Wylie Scholar in Academic Vascular Surgery. Dr. Johnston continues as Editor-in-Chief of the Journal of Vascular Surgery and the R. Fraser Elliott Chair in Vascular Surgery. Dr. Lindsay is the President of the Peripheral Vascular Surgery Society.

Research

Dr. Lindsay has Physicians Services Incorporated Foundation grant support to continue his studies of the mechanism of remote organ injury following repair of ruptured aortic aneurysms. Dr. Kucey, with Dr. Tu, is funded by a grant from the Canadian Heart and Stroke Foundation to evaluate carotid endarterectomy in the community. He is supervising two clinician scientists. With a grant from the Canadian Heart and Stroke Foundation, Dr. Rubin continues his study of factors influencing human neutrophil function. In collaboration with Drs. Wright and Merchant, the Medical Research Council of Canada has funded a study of the role of magnetic resonance imaging for the evaluation of ischemic extremities. Dr. Kalman, with Dr. Irvine and others, has ongoing grant support from the Canadian Heart and Stroke Foundation, to determine the efficacy of interventions in smoke cessation and also exercise therapy. Dr. Johnston has a Medical Research Council of Canada grant to support his basic research programs with Professors Richard Cobbold and Matadial Ojha (Biomedical Engineering) in Doppler ultrasound and hemodynamics studies.

Education

Dr. Goldberg received the Wightman-Berris undergraduate teaching award and Dr. Rubin received a nomination. Dr. Lossing’s core lectures in vascular surgery continue to be very highly evaluated. Dr. Kalman organized the very successful 4th Toronto Vascular Surgery Symposium. He is Chair of the Royal College Examination Committee in Vascular Surgery. Dr. Wooster chairs a group that is developing the next version of the Vascular Self-Evaluation Program (a continuing medical education program for vascular surgeons) and developed guidelines for a self assessment program for the maintenance of certification initiative for the Royal College. Dr. Wooster is a member
of the Vascular Advisory Committee of the American College of Surgeons. He also chairs the Vascular Surgery Residency Committee and is Director of Medical Education at the St. Joseph’s Health Centre.

Administration

Dr. Walker is Vice-President of the Toronto General Hospital. Dr. Ameli completed his term as Chair of Continuing Medical Education for the Department of Surgery. Dr. Johnston completed his term as Chair of the Clinician Scientist Committee at the Medical Research Council of Canada. Dr. Tanner is Chair of the Specialists Coalition and was an Ontario Medical Association negotiator.

New Programs

Dr. Maggisano, in collaboration with Dr. Kucey and others, has introduced several technical modifications to improve the safety of thoracoabdominal surgery.
DIVISION OF BIOMEDICAL COMMUNICATIONS

Dr. Linda Wilson-Pauwels, Chair

This year marks an exciting expansion of the professional Master of Science in Biomedical Communications (MScBMC) curriculum. A new optional program of study includes combining the MScBMC with the Postgraduate Certificate in Computer Animation at Sheridan College. This unique partnership provides Biomedical Communications students the opportunity to specialize and receive a certificate in state-of-the-art, 3-dimensional computer animation applications on workstation platforms in a renowned training program at Sheridan College.

The principal rationale for creating this combined program is the increasing professional demand and job market availability for Biomedical Communications graduates with skills in advanced 3-D computer animation. Neither the University of Toronto, nor other post-secondary institutions in Toronto presently offer the calibre of professional training in 3-D computer animation provided at Sheridan College.

Currently, Biomedical Communications students acquire skills in animation using software on a microcomputer platform. The Sheridan College program will extend these skills into the application of advanced animation software on a computer workstation platform. The Sheridan College animation course content has been adapted for the Biomedical Communications students in four new graduate courses that are jointly listed in the Institute of Medical Science and the School for Animation, Arts and Design at Sheridan College. The courses are co-directed by faculty cross-appointed to both institutions. The Master’s project is the culmination of advanced work completed in the four joint courses.

The main advantage of the Combined Optional Program for the Biomedical Communications students is the development of advanced skills in 3-D computer animation within the MScBMC program without lengthening the time to degree completion. Students who enter this Combined Optional Program will pay a combined fee for both institutions that will be less than the sum of the fees for the individual programs.

Sheridan College will benefit from the Combined Optional Program by expanding their animation content, now focused on entertainment, into
the area of biomedical communications; the target audience being mainly industry involved in medical applications. This partnership will create innovative research and education opportunities utilizing advanced 3-D computer animation in the departments affiliated with biomedical communications.

Future goals include attracting industry support for research initiatives in interface design and visualization.
DIVISION OF ANATOMY  
Dr. Michael Wiley, Chair

On July 1, 1999, seven members of the Department of Anatomy and Cell Biology transferred their primary academic appointments to the Department of Surgery to form the new Division of Anatomy. Thirteen academic, technical and administrative staff make up the new division, located in the Medical Sciences Building.

The newest member of the Division is Dr. Cindi Morshead. Dr. Morshead is Director of the neuroanatomy course for physical therapy and Director of the gross anatomy course developed for students in the new Radiation Sciences Program. Her research interests are in neuroscience and neural stem cells, in particular.

Dr. David Cormack retired on June 30th, after 33 years of service to the University of Toronto. Dr. Cormack was in charge of the histology component of the structure and function and metabolism and nutrition courses and is author of the ninth edition of “Ham’s Histology”, “Essential Histology” and “Clinically Integrated Histology”.

Dr. Ian Taylor has won this year’s E. Mary Hollington Award for teaching with distinction in the pre-clinical part of the curriculum and the Harry Whittaker Memorial Teaching Award.

Our new Division carries the legacy of the Department of Anatomy for excellence in providing education in gross anatomy, neuroanatomy, embryology and histology. Part of this legacy is a tradition of producing educational materials including many of the most widely used texts in the discipline. This year saw the completion of the third edition of “The Anatomical Basis of Dentistry” by Professor Bernie Liebgott and the release of the 10th edition of “Grant’s Atlas of Anatomy”, now edited by Professors Anne Agur and Ming Lee. Co-incident with the release of the latest edition of the atlas was a major renovation of the JCB Grant Museum that displays the anatomical specimens with which Grant first developed the atlas.

With the growth of electronic multi-media as a teaching resource, the Division has strengthened its collaboration with the Division of Biomedical Communications to develop several interactive programs to support anatomy education.
“Functional Neuroanatomy: An Interactive Neuroanatomy Atlas”, produced by Professor Patricia Stewart was used for the second time in the brain and behaviour course of first year medicine. This year’s version includes 3-dimensional movies showing deep structures in the brain, rotating within a transparent cortex, as well as seven animations depicting sensory and motor pathways. The program was enthusiastically received by our medical students and has been adopted in the neuroanatomy course at the University of British Columbia as well. The “Interactive Anatomy Lab Companion”, produced by Professors Mike Wiley and Nick Woolridge was introduced as a part of a new approach to laboratory teaching for students in Arts and Science and Radiation Sciences. These students can now schedule their own lab study periods using a resource area where they have access to microscopes, plastinated prosections, and computer work-stations connected to the web. The students in both programs gave this approach to laboratory study high ratings in their annual course evaluations.

The application of interactive multimedia in education is rapidly expanding. In the coming year, the Division plans to increase its focus on the development, application and evaluation of the new technologies in anatomy education.
SURGICAL ALUMNI ASSOCIATION  
Dr. Charles Tator, President

One of the vital functions of your Surgical Alumni Association is to support the academic activities of the young investigators in our Department. We do this through several avenues, the most important of which is to provide support to our surgical residents enrolled in the Surgeon Scientist Program. In the 1999-2000 academic year, your Alumni Fund supported the following residents enrolled in the Surgeon Scientist Program: Alexis Armour, Tony Finelli, Laz Klein, Hari Mallidi, Eddie Matsumoto, Rob Shenker and Eve Tsai.

Since its inception, the Alumni Association has supported about 75 surgical residents in this way. Indeed, we have become well-recognized around the world for our major support of the research training of our trainees.

Another way we support our young investigators is through the awarding of the University of Toronto Surgical Alumni Scholarship to a recent faculty member. This award was instituted in 1998 and Dr. Carol Swallow was the first recipient. The second award was made in 1999 to Dr. Peter Dirks. This Alumni Association has become an active participant in promoting academic activities among its young investigators.

Through the generous giving of alumni and current faculty, we have built up our endowment funds, which support the Fellowship and Scholarship programs. At the present time the Surgeon Scientist Program Fellowship Endowment has $249,479 and the John Provan Educational Endowment has $136,916. We continue to seek the support of alumni and current faculty to build these endowment funds. Currently, many of you are on long-term pledges to the Surgical Alumni Fund, most of which have been eligible for matching by the University of Toronto. The matching opportunity has been extended to 2001, and so there is still time for those who wish to take advantage of this dollar-for-dollar match.

We also support in a small way other academic initiatives, and this year we provided a small grant to members of the Janes Club to help them publish an historical account of their activities. Our Surgical Alumni Newsletter is published twice yearly and reaches almost 2,000 alumni and faculty. Thank you Robin Humphreys for your excellent editorship of our newsletter.
Dr. David McCready, Head of Surgical Oncology for the Central East Cancer Care Ontario Region (CCOR) organized the first of what promises to be annual Surgical Oncology Network Updates for the surgeons of this region. The Central East CCOR is the largest in Ontario and Dr. McCready has done an admirable job of organizing surgical networks and discussion groups within this region. The first update was a joint venture of the CCOR, Toronto Sunnybrook Regional Cancer Centre and Princess Margaret Hospital. In addition to a spirited discussion of the development of surgical oncology services within the CCOR, Dr. McCready presented a valuable continuing medical education program related to sarcoma, melanoma and breast cancer management. A second organizational meeting for the CCOR surgical oncology group followed this meeting. Termed a “townhouse” meeting, more than 30 surgeons from community, as well as academic health science centres, discussed issues such as the implementation of the CCO Pancreatic Surgery Task Force Report. Patients across our region will benefit substantially from better organization of surgical oncology services and Dr. McCready deserves our appreciation for the work done to this point.

The General Surgery Oncology Fellowship Program underwent its initial internal and external Royal College review, and achieved full approval with glowing commentary from the external reviewers. The success of this program in its first two years is the result of the organizational and educational efforts of Dr. Carol Swallow, Program Director. Dr. Swallow had developed a very successful curriculum that is shared by radiation oncology residents, as well as fellows in other departmental surgical oncology fellowship programs. She has received support from Drs. Andy Smith and Sharif Hanna at the Sunnybrook and Women’s College Health Sciences Centre, as well as Drs. Lorne Rotstein, Steven Gallinger, Jean Couture and David McCready at the Princess Margaret Hospital. This program is an excellent example of inter-institutional collaboration within the University and Dr. Swallow is to be congratulated for the success of this program.

Dr. Steven Gallinger was appointed Head of Hepato-Biliary Pancreatic Surgical Oncology at the University Health Network and the Mount Sinai Hospital. In this position, Dr. Gallinger will be responsible for development of patient centred multidisciplinary clinical care, as well
as the academic program in HPB oncology at the two hospitals. The appointment of surgical oncology heads for each of the cancer site groups is a long-term goal of the program and Dr. Gallinger’s appointment is an initial step in this direction.

Drs. Ulo Ambus and Dr. Tim Winton are leaving the University after productive surgical oncology careers. Dr. Ambus will be developing a breast surgery program in Abu Dhabi and Dr. Winton is moving to Edmonton for a division head position in thoracic surgery.
THE HOSPITAL FOR SICK CHILDREN

Surgeon-in-Chief – Dr. J.H. Wedge

HEADS OF DIVISION

Dr. W.G. Williams – Cardiac Surgery
Dr. J. Langer – General Surgery
Dr. R. Humphreys – Neurosurgery
Dr. W. Cole – Orthopaedic Surgery
Dr. R.M. Zuker – Plastic Surgery
Dr. A. Khoury – Urology

The Hospital for Sick Children has been a major beneficiary of the loosening of the Federal purse strings for support of biomedical research. We anticipate the creation of twenty-five Canada Research Chairs over the next five years and the Canadian Foundation for Innovation is supporting important projects within the matrix structure of the Research Institute. The number of endowed chairs based at the Hospital has increased quite substantially. Dr. Robin Humphreys has been appointed to the Shoppers Drug Mart-Hoffman Chair in Neurosurgery. This recognizes Robin’s leadership in international pediatric neurosurgery. Dr. James Wright has been appointed Head of Population Health Sciences in the Research Institute and has as his mandate a major expansion to the infrastructure for clinical research.

Dr. David Fisher has been appointed to the Division of Plastic Surgery to replace Dr. Hugh Thomson and will focus on cleft lip and palate surgery. Dr. Andrew Howard has joined the Division of Orthopaedic Surgery to replace Dr. Mercer Rang. Dr. Tony Khoury has been reappointed as Head of the Division of Urology.

Renegotiation of the Surgical Alternate Funding Plan has commenced and it is anticipated that there will be a major enhancement, which will allow us to add surgeons to those areas that have realized significant increases in the volumes and acuity of children with surgical problems.
As can be seen from this year’s report, academic productivity has made another quantum leap, both in external research funding and peer-reviewed publications. Residents in the Surgeon Scientist Program, based at The Hospital for Sick Children, have won numerous awards for their presentations at national and international meetings.

DIVISION OF CARDIAC SURGERY

Dr. J.G. Coles - Associate Professor  
Dr. G.S. Van Arsdell - Assistant Professor  
Dr. W.G. Williams – Professor (Division Head)  
Dr. C. Wittnich - Associate Professor (Research)

PUBLICATIONS


INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES


Williams WG: Park City Conference on Pediatric Cardiovascular Disease, Salt Lake City, Utah, February 2000. (1) Hypertrophic obstructive cardiomyopathy: The Toronto experience, (2) Optimal choice of right ventricle to pulmonary artery conduits.


Williams WG: Charleston Symposium on Congenital Heart Disease, Charleston, South Carolina, April 2000. (1) Surgical issues in adults with congenital heart disease, (2) Update of Congenital Heart Surgeons Society database.

Williams WG: Brazilian Congress of Pediatric Cardiology, Belo Horizonte, Brazil, November 1999. (1) Trends in tetralogy surgery, (2) Late correction of transposition: Preparing the left ventricle for a switch, (3) Left ventricular outflow tract obstruction/hypertrophic obstructive cardiomyopathy, (4) Managing the adult with congenital heart disease.


RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics


HONOURS RECEIVED

Wittnich C: Lister Prize, Department of Surgery, University of Toronto, May 2000.
DIVISION OF GENERAL SURGERY

Dr. S.H. Ein - Associate Professor
Dr. A.H. Fecteau - Assistant Professor
Dr. R.M. Filler - Professor
Dr. T. Gerstle - Assistant Professor
Dr. P.C.W. Kim - Assistant Professor
Dr. J. Langer – Professor (Division Head)

PUBLICATIONS


RESEARCH AND INVESTIGATIONS
Senior Investigator's Name Appears in Italics


HONOURS RECEIVED

Kim PCW: Chief Resident's Best Teacher Award, The Hospital for Sick Children, June 2000.

DIVISION OF NEUROSURGERY

Dr. P.B. Dirks - Assistant Professor
Dr. J.M. Drake - Associate Professor
Dr. R.P. Humphreys – Professor (Division Head)
Dr. J.T. Rutka - Professor

PUBLICATIONS


INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES


Dirks PB: National Ad Hoc Meeting of Review of Treatments for Pediatric Severe Head Injury, Lake Louise, Alberta, April 2000. Role of decompressive craniotomy in pediatric severe head injury.


Drake JM: Congress of Neurological Surgeons, Boston, Massachusetts, November 1999. (1) Managing shunt complications, (2) Pediatric update for the general neurosurgeon.


Humphreys RP: Congress of Neurological Surgeons, Boston, Massachusetts, November 1999. Craniofacial surgery: What have we learned?

Humphreys RP: American Association of Neurological Surgeons, Atlanta, Georgia, December 1999. Moderator: Scientific session V.


RESEARCH AND INVESTIGATIONS


**DIVISION OF ORTHOPAEDIC SURGERY**

- **Dr. B.A. Alman** - Assistant Professor
- **Dr. W.G. Cole** – Professor *(Division Head)*
- **Dr. D.M. Hedden** - Associate Professor
- **Dr. A. Howard** - Assistant Professor
- **Dr. M.C. Rang** - Professor
- **Dr. R.B. Salter** - Professor
- **Dr. J.H. Wedge** - Professor
- **Dr. J.G. Wright** - Associate Professor

**PUBLICATIONS**


**INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES**

**Alman BA:** University of Vermont Familial Cancer Center, Burlington, Vermont, November 1999. Colon cancer and fibromatosis: Common roles for beta-catenin and wingless signaling.

**Alman BA:** Lawson Research Institute, University of Western Ontario, London, Ontario, March 2000. Developmental pathways in musculoskeletal neoplasia.

**Alman BA:** University of Ghent, Ghent, Belgium, November 1999. Developmental pathways in musculoskeletal neoplasia.

**Alman BA:** Toronto Rett Syndrome Association, Toronto, Ontario, September 1999. Making people better not just different: The role of the orthopaedic surgeon in Rett syndrome.

**Alman BA:** British Columbia Children's Hospital, Vancouver, British Columbia, May 2000. Wingless signaling in neoplasia.

**Cole WG:** American Society for Bone and Mineral Research, St. Louis, Missouri, September 1999. Chair: Mouse and human genetic studies of skeletal dysplasias.

**Cole WG:** Canadian Arthritis Network, Toronto, Ontario, June 2000. Genetic disorders of ligaments and cartilage that produce premature osteoarthritis.


Cole WG: International Conference on Osteogenesis Imperfecta, Montreal, Quebec, August 1999. Surgical treatment of the upper limb in osteogenesis imperfecta.

Cole WG: Jacob Katz Memorial Lecturer, Pediatric Orthopaedic Club, New York, New York, September 1999. The heterogeneity of osteomyelitis of childhood.

Cole WG: International Pediatric Orthopaedic Think Tank, Montreal, Quebec, October 1999. (1) Update on osteogenesis imperfecta, (2) Perspectives on treating recurrent dislocation of the patella.


Wright JG: Canadian Arthritis Network, Toronto, Ontario, January 2000. Methodologies and outcomes (theme V) meeting development of a new co-morbidity index to adjust for those conditions which, in addition to the primary diagnosis, predict future functional decline.


Wright JG: Visiting Professor, University of Western Ontario, London, Ontario, March 2000. (1) How many orthopaedic procedures should we be performing?

RESEARCH AND INVESTIGATIONS


Development of a new co-morbidity index to adjust for those conditions which, in addition to the primary diagnosis, predict future functional decline. *Wright JG*: Canadian Arthritis Network ($16,000 1999 - 2001).


Molecular pathology of cartilage neoplasia: The role of parathyroid hormone related protein and Indian hedgehog. *Alman BA, Wunder JS:* Medical Research Council of Canada ($318,000 2000 - 2003).


**HONOURS RECEIVED**

*Alman BA:* American Academy of Orthopaedic Surgeons Clinical Research Award (Kappa Delta Award), December 1999.

*Alman BA:* Pediatric Orthopaedic Society Award, May 2000.

DIVISION OF PLASTIC SURGERY

Dr. H.M. Clarke - Associate Professor
Dr. D. Fisher - Assistant Professor
Dr. C.R. Forrest - Associate Professor
Dr. W.K. Lindsay - Professor
Dr. J.H. Phillips - Assistant Professor
Dr. R.M. Zuker – Professor (Division Head)

PUBLICATIONS


INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Clarke HM: World Congress on Pediatric Intensive Care, Montreal, Quebec, Canada, June 2000. (1) Emergency care of burn patients, (2) Chair: How I manage burn patients.


Zuker RM: Visiting Professor, Icholov Hospital/Tel Aviv Medical Centre, Tel Aviv, Israel, July 1999. (1) The role of microsurgery in facial paralysis reconstruction, (2) The Canadian health care system.

Zuker RM: Baylor College of Medicine, Houston, Texas, October 1999. Advances in facial paralysis reconstruction with the aid of microsurgery.


Zuker RM: Visiting Professor, University of Southern California, Los Angeles, California, November 1999. The use of the gracilis muscle in Volkmann's ischemic contracture of the forearm in children.


RESEARCH AND INVESTIGATIONS


**DIVISION OF UROLOGY**

**Dr. D.J. Bagli** - Assistant Professor  
**Dr. A.E. Khoury** - Associate Professor (*Division Head*)  
**Dr. G.A. McLorie** - Associate Professor

**PUBLICATIONS**


INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES


Khoury AE: Societe Internationale d’Urologie, Sharjah, United Arab Emirates, November 1999. (1) Innovations in hypospadias, (2) Where is pediatric urology heading in the third millennium?


The Hospital for Sick Children


RESEARCH AND INVESTIGATIONS


Stretch induced activation of a local renin-angiotensin system (RAS) promotes bladder fibrosis through the receptor for hyaluronic acid (RHAMM). Bagli DJ, Capolicchio JC: American Foundation for Urologic Disease ($32,000 1999 - 2000).

HONOURS RECEIVED

Bagli DJ: First Prize Research Award, American Academy of Pediatrics (Urology), October 1999.

Khoury AE: First Prize Research Award, American Academy of Pediatrics (Urology), October 1999.

MOUNT SINAI HOSPITAL

Surgeon-in-Chief – Dr. Zane Cohen

HEADS OF DIVISIONS

Dr. R.S. McLeod – General Surgery
Dr. A.E. Gross – Orthopaedic Surgery
Dr. M. Buckspan – Urology

The Department of Surgery at the Mount Sinai Hospital continues to work in a collaborative fashion with a single practice plan. The programmatic development that has been achieved over the past several years has continued in the areas of orthopaedic oncology (sarcoma), reconstructive orthopaedics and andrology. Within general surgery, the sub-specialty groups include colon and rectal surgery, hepatobiliary and pancreatic surgery, head and neck endocrine oncology and breast surgery. Clinically, vascular surgery and plastic surgery are also represented.

General Surgery

There have been significant achievements by members of the general surgical staff. Dr. Steven Gallinger continues to head the Familial Gastrointestinal Cancer Registry and has received two National Cancer Institute of Canada grants, as well as a recent Premier’s Excellence Award. Dr. Robin McLeod received Crohn’s and Colitis Foundation of America funding for a randomized controlled trial comparing suture techniques in Crohn’s disease. This is a multicentre North American trial which includes 16 centres. Tony MacLean, one of the colorectal fellows, won the Canadian Association for General Surgeons Research Award for Clinical Sciences and Erin Kennedy, a Surgeon Scientist Program resident, was awarded a Medical Research Council of Canada fellowship.

Dr. Carol Swallow was awarded a Physicians Services Incorporated Foundation grant for “Modulation of immunosuppression and hepatic fibrogenesis by fetuin, an endogenous TGF-beta 1 antagonist”. Jennifer MacMillan, another of our Surgeon Scientist Program residents was awarded the 1999 Johnson & Johnson Medical
Products Surgeon Scientist Fellowship. In addition and importantly, Dr. Carol Swallow, who is the Program Director for Surgical Oncology, organized the Royal College accreditation for surgical oncology. The program was approved with high praise. Dr. Jean Couture participated in an intergroup trial designing a randomized controlled trial for rectal cancer. Dr. Helen MacRae received an Association for Surgical Education grant to assess laparoscopic skills.

Drs. Michael Goldberg and Helen MacRae received Wightman Berris Academy Teaching Awards, as did Dr. Carol Hutchison. Evidence-based reviews in surgery will start in September 2000, sponsored by the Canadian Association of General Surgeons. It includes all 16 general surgery residency programs. Dr. Robin McLeod is Committee Chair and Dr. Helen MacRae is a committee member. Dr. Robin McLeod also participates in the clinical epidemiology course given by the American College of Surgeons.

Dr. Zane Cohen was appointed Chair of the Division of General Surgery at the University of Toronto and continues in his last year as Surgeon-in-Chief at the Mount Sinai Hospital. Dr. Steven Gallinger was appointed Head of the Hepatobiliary Oncology Program at the University Health Network and the Mount Sinai Hospital.

During the academic year 1999-2000, unfortunately Dr. Earl Myers died. A lectureship in his name will be established. Dr. Phillip Haigh will be recruited to the University Health Network and the Mount Sinai Hospital starting July 1, 2000. It is hoped that the Breast Program at the Mount Sinai Hospital and the Princess Margaret Hospital will be a collaborative project with both Drs. David McCready and Phillip Haigh doing breast work at the two institutions.

Urology

Clinically, the internationally recognized program in andrology continues. The major component of this program is male factor infertility. There is also a very strong program in male sexual dysfunction and this is clearly an area of regional expertise. A new clinical area of the aging male (andropause) represents a significant commitment on the part of the Department of Surgery to expand this clinical program.
The Division of Urology remains a strong centre for teaching for fellows, residents and students. Currently, there has been an expansion to two fellows in training – one clinical and one in basic science – and a core resident in the Andrology Training Program.

There is a strong research basis in both basic and clinical science within the Division of Urology. There are three major areas within the basic science realm. These are genetics of male infertility, which is National Institutes of Health funded, detection of atypical bacteria in prostatitis, which is National Institutes of Health funded, and sperm DNA integrity, including apoptosis and aneuploidy. There is a strong clinical research program with approximately 12 papers per year being published from the Division of Urology in clinical research, as well as presentations at national and international meetings. In particular, both Drs. Keith Jarvi and Armand Zini have been visiting professors at a number of different sites throughout North America in the past year.

During this academic year, the University of Toronto Andrology Update Series, directed by Dr. Keith Jarvi, was initiated and the Division of Urology has taken a leading role in organizing the Canadian Fertility and Andrology satellite meeting in Toronto.

Orthopaedic Surgery

This is an extremely strong division in the programmatic areas mentioned above. The research that has emanated from this division has been exemplary. Dr. Erin Boynton has received an Arthritis Society Junior Scholarship grant and a Lauren Award of Orthopaedic Research from the Canadian Orthopaedic Foundation. Dr. Aileen Davis has received a grant from the Arthritis Society looking at predictors of outcome following revision total hip arthroplasty. This is a renewal grant. She has also received a Clinician Scientist Award from the Ontario Ministry of Health and the Canadian Institute for Health Research for methodologies for evaluation of function in revision arthroplasty and extremity sarcoma patients. Dr. Allan Gross has been appointed to the Bernard I. Ghert Family Foundation Chair in Reconstructive Orthopaedics at the Mount Sinai Hospital. Dr. Carol Hutchison continues her excellent work as Director of the Surgical
Skills Centre at the Mount Sinai Hospital, and is a co-investigator on a Physicians Services Incorporated Foundation grant evaluating the effectiveness of a two-year curriculum in a surgical skills centre. She also received a Wightman Berris Academy Teaching Award, as mentioned above, and a Dean A.L. Chute Award for excellence in overall teaching. Dr. Jay Wunder received a Medical Research Council of Canada grant for molecular pathology of chondrosarcoma, an R.B. Salter Teaching Award from the Division of Orthopaedic Surgery at the University of Toronto, and a Kappa Delta/OREF Research Award from the American Academy of Orthopaedic Surgery, together with Ben Alman from The Hospital for Sick Children. Dr. Robert Bell was appointed Vice-President at the Princess Margaret Hospital. He will continue his clinical sarcoma work at the Mount Sinai Hospital. Dr. Bell was also responsible for the publication of a sarcoma chapter within the Oxford Textbook of Oncology.

The entire Department remains committed to academic pursuits. There have been a multitude of awards. The grant capture has been excellent, as has been the publication record and the presentations at scientific meetings and visiting professorships. Visitors from around the world have come to the Mount Sinai Hospital to view the programs mentioned above.
DIVISION OF GENERAL SURGERY

Dr. Z. Cohen - Professor
Dr. J. Couture - Assistant Professor
Dr. S. Gallinger - Associate Professor
Dr. M.R. Goldberg - Associate Professor
Dr. I.H. Koven - Associate Professor
Dr. H.M. MacRae - Assistant Professor
Dr. R.S. McLeod - Professor (Division Head)
Dr. I.B. Rosen - Professor
Dr. S. Sidlofsky - Assistant Professor
Dr. C.J. Swallow - Assistant Professor

PUBLICATIONS


INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES


Cohen Z: John David Rosin Memorial Lecturer, Greater Baltimore Medical Centre, Baltimore, Maryland, May 2000. (1) Advances and controversies in the management of ulcerative colitis, (2) Surgical and genetic aspects of familial polyposis.


RESEARCH AND INVESTIGATIONS


Neurotensin receptor expression in colorectal and duodenal neoplasms in FAP. Gallinger S: Sanofi Pharmaceuticals ($50,000 1998 - 1999).

Pre-clinical studies of cyclooxygenase-2 (COX-2) inhibitors in mouse models of intestinal neoplasia. *Gallinger S*: Merck Frosst Canada Incorporated/Medical Research Council of Canada/PMAC ($120,000 1997 - 1999).


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**DIVISION OF NEUROSURGERY**

Dr. I.B. Schacter – Assistant Professor

**DIVISION OF ORTHOPAEDIC SURGERY**

Dr. R.S. Bell - Professor
Dr. E.L. Boynton - Assistant Professor
Dr. A.E. Gross – Professor *(Division Head)*
Dr. C.R. Hutchison - Assistant Professor
Dr. F. Langer - Associate Professor
Dr. E.A. Silverstein - Assistant Professor
Dr. J.S. Wunder - Assistant Professor

**PUBLICATIONS**

**Davis AM, Punniyamoorthy S, Griffin AM, Wunder JS, Bell RS:** Symptoms and their relationship to disability following treatment for lower extremity tumors. Sarcoma: November 1999: 3: pp 73-77.


**Gross AE:** Guest Editor (Section 1: Symposium, Musculoskeletal Allografts). Clinical Orthopaedics and Related Research: February 2000: pp 371.


INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Bell RS: University of Alberta Hospital, Edmonton, Alberta, December 1999. (1) Local management of soft tissue sarcoma: Randomized clinical trials, historical studies and cell therapy, (2) Outcomes following tumor reconstruction at the knee: Stress shielding and prosthesis selection.


Boynton EL: Heinrich-Heine-Universitat Dusseldorf, Dusseldorf, Germany, August 1999. The role of PE surface chemistry in total joint replacement failure.


Gross AE: John Manley Lecturer, Long Island Jewish Hospital, Albert Einstein School of Medicine, Long Island, New York, May 2000. Fresh osteochondral allografts for post-traumatic defects.
**Wunder JS:** Visiting Professor, Max-Delbruck Centre for Molecular Medicine, Humboldt University, Berlin, Germany, April 2000.
(1) Molecular interactions and their effect on outcome in osteosarcoma, 
(2) Management of soft tissue sarcoma and its complications, 
(3) Wound healing initiatives to decrease complications in soft tissue sarcoma.

**Wunder JS:** Canadian Sarcoma Group, Toronto, Ontario, February 2000. Micro array analysis for sarcomas.

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**RESEARCH AND INVESTIGATIONS**

*Senior Investigator's Name Appears in Italics*


**HONOURS RECEIVED**

**Gross AE**: Bernard I. Ghert Family Foundation Chair in Reconstructive Orthopaedics, April 2000.


**Wunder JS**: Robert B. Salter Teaching Award, Division of Orthopaedic Surgery, University of Toronto, November 1999.
DIVISION OF PLASTIC SURGERY

Dr. N.H. McKee - Professor

PUBLICATIONS


DIVISION OF UROLOGY

Dr. M.B. Buckspan - Associate Professor (Division Head)
Dr. K. Jarvi - Associate Professor
Dr. A. Zini - Assistant Professor

RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics

ST. JOSEPH’S HEALTH CENTRE

Surgeon-in-Chief – Dr. D. Jones

HEADS OF DIVISIONS

Dr. C.J. Burul – General Surgery (July 1, 1999 – April 2, 2000)
Dr. M. Kliman – Orthopaedic Surgery
Dr. R.H. Levine – Plastic Surgery
Dr. A. Marcuzzi - Urology

There were two departures from our Department this year. Dr. Claude Burul moved to the United Arab Emirates in May 2000, and Dr. Lloyd Smith joined the surgical staff at the Toronto Western Hospital on July 1, 2000.

On April 3, 2000, Dr. Tom Harmantas was appointed Head of the Division of General Surgery. He became Assistant Chief of Staff/Vice-Chair M.A.C. at the St. Joseph’s Health Centre effective April 1, 2000.

For the past year, Dr. Douglas Wooster has served as secretary of the Medical Staff Association at the St. Joseph’s Health Centre and Dr. Christopher Compeau has served as treasurer.

Dr. Ronald Levine continues as Program Director of the Division of Plastic Surgery, University of Toronto.
DIVISION OF GENERAL SURGERY

Dr. M. Baida – Assistant Professor
Dr. C.J. Burul – Assistant Professor (Division Head:
    July 1, 1999 - April 2, 2000)
Dr. C. Compeau - Lecturer
Dr. T. Harmantas – Assistant Professor (Division Head:
Dr. D.P. Jones – Associate Professor
Dr. D. Lindsay – Lecturer
Dr. R. Louch - Lecturer
Dr. L.C. Smith – Assistant Professor
Dr. E.H. Spratt – Associate Professor
Dr. D. Szalay – Assistant Professor
Dr. D. Wooster – Associate Professor
Dr. M. Yaman – Assistant Professor

PUBLICATIONS


INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES


DIVISION OF ORTHOPAEDIC SURGERY

Dr. M. Kliman - Lecturer (Division Head)
Dr. G. McDonald - Lecturer
Dr. M.W. Roscoe - Lecturer
Dr. M. Wood - Lecturer

DIVISION OF PLASTIC SURGERY

Dr. J.C. Fielding - Lecturer
Dr. R. Knowlton - Lecturer
Dr. R.H. Levine – Associate Professor (Division Head)

DIVISION OF UROLOGY

Dr. A. Marcuzzi – Lecturer (Division Head)
Dr. J.H. Wait - Lecturer
The two sites of St. Michael’s Hospital have entered the final phase of the consolidation process and it is expected that the institution will reside on one site by the end of this calendar year. To comfortably accommodate the extra staff and services, four extra floors are currently being added to the Victoria Wing. In the meantime, in order to streamline patient care and administrative programs, preparations are being made to transfer all perioperative services from the Wellesley site to temporary quarters at the Bond Street site by the end of October. This move will include the Intensive Care Unit, Emergency and Anesthesia Departments, as well as involve the reactivation of five operating rooms in the old Bond surgical suite so that continuity of patient care can be maintained until the addition to the new surgical facility has been completed.

Notable achievements were attained by a number of our divisions during this transition period. The Cardiac Division made substantial progress in minimally invasive cardiac surgery, successfully performing over 500 cases of beating heart coronary artery bypass grafts since the beginning of the year. The Transplantation and Minimally Invasive Surgery Teams jointly performed the first live donor nephrectomy in Ontario, and it is anticipated that this Program will significantly increase the live donor base and, consequently, decrease the waiting list for recipients. As a Department, our surgeons were awarded 32 new research grants, published some 84 articles, and were invited to give over 126 presentations worldwide.
Those enjoying personal accomplishments this year included Dr. John Bohnen, who became the Hospital’s Medical Director of the Health Information Research Unit and was also named Outstanding Lecturer for his Principles of Surgery course on surgical infections. Academic recognition was also given to Dr. Wally Peters, who received the Mentor Prize from the Canadian Society of Plastic Surgeons and Dr. Gary Salasidis, who was given a Tutor Award for PBL. Two divisions saw a change in leadership with Dr. Rick Moulton being appointed as Head of the Division of Neurosurgery and Dr. Emil Schemitsch, who assumed the direction of the Division of Orthopaedic Surgery. Dr. Schemitsch was also the recipient of the University of Toronto George Armstrong-Peters Prize for outstanding research. Outside appointments were realized by Dr. Eric Poulin, who was named to the editorial board of the Canadian Journal of Surgery, and Dr. Robin Richards, who was elected President of the Canadian Orthopaedic Research Society.

It is anticipated that this upcoming academic year will see the end of the Restructuring Commission’s directives, where the staff and services of the former Wellesley and St. Michael’s Hospitals will be completely unified and situated on a common campus. While further growing pains have still to be endured, the staff, as a whole, is looking forward to the centralization of activities and the resultant improved efficiency of our programs and services.

**DIVISION OF CARDIAC SURGERY**

- Dr. D. Bonneau - Associate Professor
- Dr. L.E. Errett - Assistant Professor *(Division Head)*
- Dr. D.A. Latter - Associate Professor
- Dr. Y. LeClerc - Assistant Professor
- Dr. J.K.Y. Yao - Assistant Professor

**PUBLICATIONS**


INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Errett LE: Stikeman Symposium on Cardiothoracic Surgery, Montreal, Quebec, June 2000. (1) Socioeconomic status is a risk factor in cardiac surgery even in universal comprehensive health care system, (2) Staphylococcus aureus nasal carriage is a factor in sternal infection that can be treated.

Errett LE: Baxter Young Cardiac Surgeons of Canada, Cancun, Mexico, March 2000. Off pump CABG is better than conventional CABG.

Errett LE: Canadian Arrhythmia Symposium, Cancun, Mexico, January 2000. Pacemaker and ICD implants: Surgical techniques and complications.

Latter DA: Deborah Heart and Lung Institute, Brown Mills, New Jersey, September 1999. Cardiac transplant.

Latter DA: Canadian Cardiac Surgeons, Quebec City, Quebec, October 1999. Moderator: Alternative to coronary bypass surgery.


RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics


DIVISION OF GENERAL SURGERY

Dr. J. Ali - Professor
Dr. J.M.A. Bohnen - Associate Professor
Dr. M.J. Burnstein - Associate Professor (Division Head)
Dr. J. Koo - Associate Professor
Dr. L.J. Mahoney - Associate Professor
Dr. J. Mamazza - Assistant Professor
Dr. D.I. McRitchie - Assistant Professor
Dr. R.A. Mustard - Assistant Professor
Dr. E.C. Poulin - Professor
Dr. C.M. Schlachta - Lecturer

PUBLICATIONS


INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

**Ali J:** Sacre Coeur Hospital, Montreal, Quebec, September 1999. Advanced trauma life support course instructor update.

**Ali J:** Dalhousie University, Halifax, Nova Scotia, April 2000. Advanced trauma life support instructor course.

**Ali J:** Hopital du Sacre de Montreal, Montreal, Quebec, February 2000. Advanced trauma life support instructor course.

**Ali J:** McMaster University, Hamilton, Ontario, June 2000. Advanced trauma life support instructor course.

**Ali J:** Arabian Gulf University, Bahrain, Saudi Arabia, March 2000. Advanced trauma life support provider course.

**Ali J:** Hamad Medical Corporation Health Centre, Qatar, Saudi Arabia, April 2000. Advanced trauma life support provider course.

**Ali J:** University of Panama, Panama, South America, November 1999. Director: Provider and instructor courses in advanced trauma life support.

**Ali J:** American College of Surgeons, San Francisco, California, October 1999. International advanced trauma life support presentation of revision for new text.

**Ali J:** International Surgical Society, Vienna, Austria, August 1999. Moderator: Comparison of trauma management among PGY-I surgery residents after the advanced trauma life support course using a trauma mannequin.


**Burnstein MJ:** American Society of Colon and Rectal Surgeons, Boston, Massachusetts, June 2000. Moderator: Colonoscopy, laparoscopy, polyps.

**Burnstein MJ:** Course on Gastroenterology and Digestive Endoscopy, Toronto, Ontario, September 1999. New treatments for anal sphincter dysfunction.

**Burnstein MJ:** Course on Gastroenterology and Digestive Endoscopy, Toronto, Ontario, December 1999. New treatments for anal sphincter dysfunction.


**Mamazza J:** Canadian Association of General Surgeons, Montreal, Quebec, September 1999. (1) Outcome of laparoscopic colorectal resection in octogenarians, (2) Needlescopic surgery: A logical evolutionary step from conventional laparoscopic surgery, (3) What is the learning curve for laparoscopic colorectal resections? (4) The septic complications of elective laparoscopic colorectal resection, (5) Laparoscopic gastric surgery: Preliminary results.

**Mamazza J:** Society of American Gastrointestinal Endoscopic Surgeons, Atlanta, Georgia, March 2000. (1) Needlescopic surgery: A logical evolutionary step from conventional laparoscopic surgery.

**Poulin EC:** Society of American Gastrointestinal Endoscopic Surgeons, Atlanta, Georgia, March 2000. (1) A simple clinical model for predicting conversion to open surgery in laparoscopic colorectal resections, (2) The septic complications of elective laparoscopic colorectal resection.


RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics


HONOURS RECEIVED

Bohnen JMA: Outstanding Lecturer, Postgraduate Principles of Surgery Course, Department of Surgery, University of Toronto, May 2000.

DIVISION OF NEUROSURGERY

Dr. M.D. Cusimano - Associate Professor
Dr. R.J. Moulton - Associate Professor
Dr. P.J. Muller - Professor
Dr. R.G. Perrin - Associate Professor
Dr. H.S. Smyth - Assistant Professor
Dr. W.S. Tucker - Associate Professor (Division Head)

PUBLICATIONS


INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Cusimano MD: Royal College of Physicians and Surgeons of Canada, Montreal, Quebec, September 1999. Injury prevention in the community: Neurological trauma prevention.


**Perrin RG**: ISPN, Salt Lake City, Utah, September 1999. 
Neurosurgical aspects of AIDS.

**RESEARCH AND INVESTIGATIONS**

*Senior Investigator's Name Appears in Italics*

A feasibility study for a neurotrauma surveillance database in Ontario. 
*Tator C, Cusimano M, Verrier M, Walker J, Williams J, McLellan B*: 
Ontario Neurotrauma Foundation ($71,600 1999).

An analysis and dissemination of current neurotrauma incidence and 

Cerebral auto regulation in severe head injury. *Moulton RJ*: Ontario 
Neurotrauma Foundation ($25,000 1998 - 2000).

How effective is an injury prevention program at lessening injuries in 
children? *Cusimano M, Chipman M, Kalnins I, Freedman B, 
McRae A*: St. Michael's Hospital Foundation ($9,630 2000 - 2002).

Implementation and evaluation of a neurotrauma injury prevention 
program into Ontario's healthy living curriculum: A controlled trial. 
*Cusimano MD, Chipman M, Kalnins I, Freedman B*: Ontario 
Neurotrauma Foundation ($600,000 2000).

Photodynamic therapy: Basic and clinical science studies: Prospective 
clinical trials in the use of photodynamic therapy (PDT) for the 
treatment of malignant brain tumors. *Muller PJ, Huetzel F, Chopp M, 
Hitchcock M, Patterson M, Singh G, Wilson B*: National Institutes of 

Specification of the visual-spatial abilities relevant to surgical training. 
*Hamstra S, Anastakis D, Cusimano M, Caminiti M, Matsumoto E*: 

Stress reaction of the neurosurgical patient: Protein catabolism and 
cerebral salt wasting in the neurosurgical care unit. *Singh S, Cusimano 
MD, Halperin M*: Physicians Services Incorporated Foundation 
($13,000 1999 - 2000).

**DIVISION OF ORTHOPAEDIC SURGERY**

Dr. E.R. Bogoch - Associate Professor  
Dr. T.R. Daniels - Assistant Professor  
Dr. D.E. Hastings - Professor  
Dr. R.J. McBroom - Assistant Professor  
Dr. M.D. McKee - Assistant Professor  
Dr. R.R. Richards - Professor (*Division Head*)  
Dr. E.H. Schemitsch - Associate Professor  
Dr. J.P. Waddell - Professor

**PUBLICATIONS**


INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES


Richards RR: Alpha Club, Cancun, Mexico, February 2000. (1) Rotator cuff tear pathology: Intrinsice etiology, (2) Humeral shaft fractures: Nail or plate?


Schemitsch EH: International Society for Fracture Repair Workshop, Ulm, Germany, September 1999. (1) Moderator: Fundamental factors in fracture healing, (2) Assessment of blood supply in repair of the devascularized tibia.


Schemitsch EH: AO Pelvic Course, Toronto, Ontario, April 2000. Anterior approaches to the pelvis.


Waddell JP: Canadian Orthopaedic Association, Edmonton, Alberta, June 2000. (1) Ian Macnab memorial lecture, (2) Instructional course lecture: Alternatives to and in total knee arthroplasty.


RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics


An investigation of the influence of fat embolism and hypotension on pulmonary pathophysiology. Schemitsch EH, Richards RR: Orthopaedic Trauma Association ($90,000 1999 - 2000).

Assessment of biological reconstruction methods in repair of the devascularized canine tibia. Schemitsch EH: Canadian Orthopaedic Foundation ($15,000 1999 - 2000).


Humeral shaft fractures: What are we doing and is it working? Kreder HJ, McKee MD: Institute for Clinical Evaluative Sciences ($10,000 2000 - 2002).


HONOURS RECEIVED

Schemitsch EH: George Armstrong-Peters Prize, Department of Surgery, University of Toronto, May 2000.
DIVISION OF PLASTIC SURGERY

Dr. L.G. Douglas - Assistant Professor
Dr. J.L. Mahoney - Associate Professor (Division Head)
Dr. W.J. Peters - Professor

PUBLICATIONS


INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES


Mahoney JL: Wake Forest University School of Medicine, Hilton Head, South Carolina, June 2000. Vacuum closure and management of wounds.


RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics


HONOURS RECEIVED

Mahoney JL: Best Clinical Practice Poster, Canadian Association of Wound Care, November 1999.

Mahoney JL: Best Research Initiatives Poster, Canadian Association of Wound Care, November 1999.


DIVISION OF UROLOGY

Dr. R.J.D. Honey - Assistant Professor (Division Head)
Dr. A.G. Keresteci - Associate Professor
Dr. R.J. Stewart - Assistant Professor

PUBLICATIONS


**Honey RJ, Pace K:** The current management of ureteral stones. Canadian Journal of Continuing Medical Education: May 2000: 12(5): pp 89.


**RESEARCH AND INVESTIGATIONS**

*Senior Investigator's Name Appears in Italics*


DIVISION OF VASCULAR SURGERY

Dr. F.M. Ameli - Associate Professor (Division Head)
Dr. A.G. Lossing - Associate Professor

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES


Ameli FM: Canadian Society for Vascular Surgery, Quebec City, Quebec, September 1999. Patient satisfaction with same-day minimally-invasive varicose veins surgery.


SUNNYBROOK AND WOMEN'S COLLEGE HEALTH SCIENCES CENTRE

Surgeon-in-Chief – Dr. B. Goldman
Surgeon-in-Chief (Orthopaedic and Arthritic Campus) –
Dr. J. Cameron
Surgeon-in-Chief (Women’s College Campus) - Dr. H.L.A. Lickley

HEADS OF DIVISIONS

Dr. S.E. Fremes – Cardiac Surgery
Dr. S. Hanna – General Surgery (Sunnybrook Campus)
Dr. T. Ross – General Surgery (Women’s College Campus)
Dr. M. Schwartz – Neurosurgery
Dr. J. Cameron – Orthopaedic Surgery
(Orthopaedic and Arthritic Campus)
Dr. T. Axelrod – Orthopaedic Surgery (Sunnybrook Campus)
Dr. J. Semple – Plastic Surgery
Dr. S. Herschorn - Urology (July 1, 1999 – December 31, 1999)
Dr. L. Klotz - Urology (January 1, 2000 – June 30, 2000)
Dr. R. Maggisano – Vascular Surgery

Introduction

During the past academic year, the Department of Surgery at the Sunnybrook and Women’s College Health Sciences Centre has faced several challenges relating to the merger of the three legacy institutions. There is now functional integration of all surgical divisions across the separate sites. The Surgical Services Task Force has dealt with co-ordination between campuses with movement of patients, procedures, and surgeons to optimize utilization and efficiency during the transition period. Facility planning for additional new operating rooms in the future expanded Sunnybrook campus has been assisted by the long range planning and development document elaborated by the Department and the surgical divisions. Budget reductions and resource limitations in the face of increasing clinical demand and acuity have impacted on service. It is anticipated that recommendations of an external critical care review and consolidation of the departmental mission will contribute to improved patient flow and realization of our clinical and academic goals.
Honours, Awards and Appointments

Drs. Fred Brenneman, Paul Marks and Stewart Wright were each promoted to the rank of Assistant Professor.

Dr. Bernard Goldman was presented with the Department of Surgery E.B. Tovee Award for Postgraduate Teaching. Drs. Sender Herschorn, Ron Kodama, and George Christakis each received the Dr. Marvin Tile Distinguished Service Award of the Department of Surgery. Dr. Mitchell Brown received the Department of Surgery Distinguished Educator Award for Outstanding Contribution of Surgical Skills Education. Dr. Joel Fish was given the 1999 PAIRO Excellence in Clinical Teaching Award for the University of Toronto. Dr. Laurence Klotz was elected Chair of the Global Genitourinary Group, a consortium of GU Oncology Clinical Trial Groups from around the world. Jenny Choi, working with Drs. Rob Cartotto and Joel Fish, won the Moyer Award for best student presentation at the 32nd annual American Burn Association meeting. Dr. Manuel Gomez was awarded the best presentation award from the Canadian Special Interest Group at the same meeting. Dr. Stephen Fremes was appointed Senior Adjunct Scientist at the Institute for Clinical Evaluative Sciences and was appointed Head, Division of Cardiac Surgery in January 2000, after an external search. Dr. Gopal Bhatnagar was appointed Head of the new Division of Cardiac Surgery at the Trillium Health Centre scheduled to open in November. Dr. Sender Herschorn was elected as Deputy Canadian Delegate to the Societe Internationale d’Urologie. Dr. George Christakis was President of the Medical Dental Staff at the Sunnybrook and Women’s College Health Sciences Centre and subsequently President of SHUTC. Dr. Joseph Schatzker was University of Cordoba Extraordinary Visiting Member of Faculty and President of the AO Foundation, Davos, Switzerland. Dr. Joel Finkelstein received the International Society for the Study of Lumbar Spine Fellowship and the Leranbaum Award for Short Term Specialized Training in Cancer Care. Dr. Ted Ross was given the Directors Award of the Peters-Boyd Academy. Dr. Laurence Klotz was appointed Head of the Division of Urology in January 2000. Dr. Labib Abouzahr was appointed to the surgical staff in cardiac surgery at McMaster University.

The A.W. Harrison Resident Awards for Undergraduate Teaching were presented to Dr. Owen Prowse (plastics), Dr. Dennis Dipasquale (plastics), and Dr. Edward Matsumoto (urology). Dr. Sender Herschorn has been appointed Director of Continuing Professional Development
for the University Department of Surgery. An office for International Health for the University Department of Surgery has been sited at the Sunnybrook and Women’s College Health Sciences Centre, and Dr. Massey Beveridge was appointed the Surgical Co-ordinator. The Orthopaedic and Arthritic Foundation has established the Marvin Tile Professorship in Orthopaedic Surgery. The first Visiting Professor was Dr. Dana Mears, who spoke on the role of primary arthroplasty in acetabular fractures. Dr. Marvin Tile continues in his important role as Chair of the Sunnybrook Foundation. Dr. Fred Brenneman was appointed Vice-President of the Trauma Program.

SUNNYBROOK CAMPUS

Education

For the 1999-2000 academic year, Sunnybrook campus staff surgeons provided 208 hours of pre-clerkship teaching. Sunnybrook housestaff and fellows provided 38 hours of pre-clerkship teaching, and Women’s College campus staff surgeons provided 120 hours of pre-clerkship teaching.

At the Sunnybrook campus, there were four staff who were PBL tutors for Year 2 Foundations of Medical Practice and two staff who were PBL tutors for Year 1 Brain and Behavior. Sunnybrook campus surgeons did 186 hours of Year 3 (phase I) clerkship seminar teaching and 75 hours of Year 4 (phase II) clerkship seminar teaching.

Division of Cardiac Surgery

Cardiac surgery is one of the key divisions of the Heart and Circulation Program, now known as the Schulich Heart Centre at the Sunnybrook and Women’s College Health Sciences Centre. The Division of Cardiac Surgery at the Sunnybrook campus performed a volume of approximately 1200 open-heart cases in 1999-2000. The key theme of the past year has been transitions. Dr. Bernard Goldman has stepped down as Division Head after 10 years. Dr. Stephen Fremes, who started at Sunnybrook with Dr. Goldman and was serving as the Acting Head, was selected as the new Division Head. Dr. Gopal Bhatnagar, who joined the Division in 1996, has been selected as the Division Head of the new open-heart unit sited at the Trillium Health Centre. Dr. Bhatnagar transferred his educational portfolio, which he had managed extremely well, to Dr. Charles Cutrara (undergraduate
education within Sunnybrook and postgraduate education for the cardiac surgery residents at the university level). Dr. George Christakis has served as Head of SHUTC during the tri-hospital merger and will continue in this position.

The Division has continued to be very active in clinical research. Drs. Stephen Fremes and George Christakis have had a leadership role in peer-reviewed, multicentre, randomized clinical trials, with Sunnybrook campus serving as the co-ordinating centre. The funded research has complemented the clinical areas of excellence, namely radial artery conduits for coronary surgery (supported by the Medical Research Council of Canada), myocardial protection (supported by the Medical Research Council of Canada), and alternative prostheses for aortic valve replacement (supported by the Heart and Stroke Foundation of Ontario). Dr. Stephen Fremes now has an adjunct appointment at the Institute for Clinical Evaluative Sciences to help facilitate cardiac surgery outcomes research. Dr. Gopal Bhatnagar is the surgical representative of an industry-sponsored angiogenesis gene therapy trial for patients with end-stage ischemic heart disease.

Division of General Surgery

General surgery at the Sunnybrook campus has continued its focus on trauma and oncology. Drs. Sherif Hanna and Hensley Miller have participated actively in the Trauma Program directed by Dr. Fred Brenneman. The use of ultrasound in the diagnosis of abdominal trauma has been supported by grants and has been reported upon. Specific interests in oncology are hepatobiliary, breast and GI cancers. Dr. Sherif Hanna was instrumental in opening a Liver Tumor Clinic at the Toronto Sunnybrook Regional Cancer Centre. He continues his clinical work in liver cryosurgery.

Dr. Andrew Smith joined the staff July 1st, 1999 and has contributed significantly to teaching programs and to the area of GI cancers, especially colorectal cancers. He has established a database for colorectal cancer and is active in the Toronto Sunnybrook Regional Cancer Centre.

The Surgical Flow Through Unit (level II care) has been successful over the past year in facilitating the care of critically ill general surgery patients, especially those with cancer.
Functional planning for the new Henrietta Banting Breast Centre at the Sunnybrook campus is well under way with the involvement of Drs. Lavina Lickley, Claire Holloway and Glen Taylor. In May 2000, surgeons at the Women’s College campus and the Sunnybrook campus agreed to appoint Dr. Sherif Hanna as the joint Chief of the two Divisions in order to facilitate amalgamation and recruitment.

Division of Neurosurgery

The Division of Neurosurgery has been active in a number of subspecialty areas. Dr. Mahmood Fazl has pursued his special interest in spinal surgery in addition to maintaining a busy clinical practice. The acquisition of a new image-guidance system for spinal use will enhance our divisional activity in that domain.

Dr. Mahmood Fazl has been a teacher in the problem-based learning curriculum. Dr. David Rowed has continued to be active in skull based surgery and aspects of intra-operative monitoring. In collaboration with colleagues in otolaryngology, he continues to treat patients with acoustic neuromas from across Canada. He too is a problem-based learning teacher. Dr. Rajiv Midha has peer-reviewed funding for his laboratory research in repair and regeneration of peripheral nerves and, in addition has secured a very generous bequest from the Crothers family. He attracts a wide referral of clinical cases in this subspecialty. Dr. Michael Schwartz has continued his work in radiosurgery and has established collaboration with medical imaging colleagues in the evaluation of brain arteriovenous malformations using an innovative method of MR angiography. He has continued to study the outcome of patients after traumatic brain injury.

David Houlden, Ph.D., has attracted peer-reviewed funding and graduate students for clinical research into aspects of neurophysiological monitoring for operative procedures and for the prediction of outcome after spinal cord and brain injury. He continues to provide neurophysiological monitoring for several surgical services.

Division of Orthopaedic Surgery

The two Divisions of Orthopaedic Surgery continue to work to develop the strategic plans and directions of the new combined Division. All parties involved are enthusiastic about the clinical, academic, teaching and research possibilities of this amalgamation.
Dr. Cari Whyne, Biomechanical Engineer, joined the Division in January 2000 and has been busy upgrading the Biomechanics Laboratory at the Sunnybrook campus.

Dr. Marvin Tile will retire from active surgical practice in July 2000, but will continue on as a non-operative consultant within our combined Division. Dr. Tile was Co-Chair of the 10th Toronto Pelvic and Acetabular Fracture Course.

Dr. Joseph Schatzker completes his second year term as Chair of the AO Foundation. He has achieved the status of Professor Emeritus at the University of Toronto, and continues on in active clinical and surgical practice.

Dr. Terry Axelrod was the Co-Chair of the Biannual AO Hand Course in Davos, Switzerland. He has accepted the role as Vice-Chair of the Royal College of Physicians and Surgeons of Canada Examination Board in Orthopaedic Surgery.

Dr. David Stephen was invited faculty to the annual Winnipeg Orthopaedic Symposium. He served as the Co-Chair to the Biannual University of Toronto Foot and Ankle Symposium and the 10th Toronto Pelvic and Acetabular Fracture Course. He has been successful in achieving funding for clinical and biomechanics research.

Dr. Hans Kreder continues to have success in supervising a multitude of clinical epidemiology studies. He was Co-Chair of the 10th Toronto Pelvic and Acetabular Fracture Course. He continues as a member of the American Association of Orthopaedic Surgeons Outcomes Committee and has been asked to join the OTA Coding and Classification Committee.

Dr. Joel Finkelstein has successfully initiated the spine trauma database with external funding support. He has developed a multidisciplinary clinic with the Division of Radiation Oncology for the management of spinal metastases with peer reviewed funding for prospective studies. He has been successful in achieving funding for biomechanical studies on the cervical and lumbar spine.

**Division of Plastic Surgery**

In 1999-2000, the Division of Plastic Surgery at the Sunnybrook and Women's College Health Sciences Centre has continued to expand and
develop its programs. The Craniofacial Program is now the busiest adult craniofacial program in Canada. Dr. Oleh Antonyshyn (Director of Craniofacial Programs) has continued his research in 3-dimensional facial analysis with five publications and is a recipient of a $59,000 grant from Stryker Canada.

Dr. Jeff Fialkov has received a Leibinger educational grant for $50,000 to establish the Maxillofacial Skills Laboratory for the teaching of residents and fellows. Dr. Fialkov has received two additional grants, Physicians Services Incorporated Foundation and ASERF, for tissue engineering and facial anatomy.

Along with Dr. Antonyshyn and Dr. Fialkov, Dr. Paul Binhammer participated in a $138,000 AO Foundation grant for an international multicentre outcome study on zygoma fractures. Dr. Binhammer is also a co-investigator in an outcomes study on carpal tunnel syndrome funded by Workplace Safety and Insurance Board.

The Ross Tilley Burn Unit is now the largest burn unit in the country with 186 admissions in 1999. Dr. Joel Fish was a co-investigator on a Medical Research Council of Canada grant establishing a national burn care network.

Dr. Rob Cartotto has had an excellent first year in the Burn Unit and has been heavily involved in the teaching program.

Dr. Mitch Brown continues his research efforts in research in surgical skills with a two-year Physicians Services Incorporated Foundation grant for $82,000. Dr. Brown also won the Department of Surgery, Distinguished Educator Award for Outstanding Contribution to Surgical Skills Education.

Dr. John Semple has headed the Tissue Engineering Initiative with the development of two multi-million dollar infrastructure proposals at the provincial and federal levels to fund the development of a tissue engineering platform at the Sunnybrook and Women's College Health Sciences Centre. He was also a platform leader “Soft Tissue Applications” at the recent Tissue Engineering Industry Day at the University of Toronto. Dr. Semple was a visiting professor at the University of New Brunswick and guest speaker at the Atlantic Breast Health Conference in St. John, New Brunswick.
Surgical Oncology

Surgical oncology is one of the four major programs within the Toronto Sunnybrook Regional Cancer Centre and the Sunnybrook and Women’s College Health Sciences Centre. The program is organized along site-based lines, with representation from all divisions of surgery as well as otolaryngology and obstetrics and gynecology.

Dr. Ralph Gilbert (ENT) is the Director of Surgical Oncology and Dr. Carol Sawka is Medical Director of the Cancer Program and Chief Executive Officer of the Toronto Sunnybrook Regional Cancer Centre; both work closely with the Department of Surgery.

Involvement of the surgeons at the Sunnybrook campus includes: the breast site group (Dr. Glen Taylor and Dr. Hensley Miller); the GI site group (Dr. Sherif Hanna and Dr. Andrew Smith); the uro-oncology site group (Dr. Laurie Klotz and Dr. Neil Fleshner); the skin site group (Dr. John Semple, Dr. Oleh Antonyshyn and Dr. Jeff Fialkov); the CNS site group (Dr. Michael Schwartz) and the melanoma site group (Dr. John Semple and Dr. Jane Salter).

At the Women's College campus, the breast group consists of Dr. Lavina Lickley, Dr. Claire Holloway and Dr. Ted Ross. The GI group consists of Dr. Ted Ross and the skin group and melanoma group, Dr. John Semple.

Trauma Program

The Trauma Program, under the leadership of Dr. Fred Brenneman, has experienced another increase in trauma patient volumes during this past year caring for over 900 seriously injured patients, most with an injury severity score greater than 15. The Trauma Program continues to be the largest trauma centre in Canada, due to clinical expertise. This high volume provides many opportunities for trauma research and educational experiences for residents and fellows. The Trauma Program is multidisciplinary and involves members of numerous departments beyond surgery including anesthesia and medicine, and all divisions within the Department of Surgery.

Division of Urology

Members of the Division of Urology continue to report their clinical and research efforts in a significant number of publications. Dr. Sender
Herschorn is the director of the annual University of Toronto Urology Update. He continues his research activities in urinary incontinence and male erectile dysfunction. Dr. Lesley Carr has joined the Division with interests in women’s pelvic health.

Dr. Laurence Klotz is active in national and international cancer organizations, is the principle investigator in a National Cancer Institute of Canada trial in prostate cancer, is Chair of the Canadian Uro-oncology Group and the National Cancer Institute of Canada GU Group, and is the Editor-in-Chief of the Canadian Journal of Urology. Dr. Neil Fleshner has maintained peer-reviewed funded research endeavours in prostate cancer and recently became principle investigator for an international trial of micronutrients in prevention of prostate cancer. He and Dr. Klotz are active in the uro-oncology site at the Toronto Sunnybrook Regional Cancer Centre and are working with the Foundation to develop a prostate centre. Dr. Ron Kodama is Program Director for the University Urology Program, and continues his active role in education as Chief Examiner for the MCCQE Part II, and as Co-ordinator of MOCOMP for the Canadian Urological Association. Dr. Lesley Carr has assumed responsibilities for MOCERT within the Department of Surgery at Sunnybrook.

ORTHOPAEDIC AND ARTHRITIC CAMPUS

Significant teaching activities have continued with emphasis on the Clinical Fellowship Program, focussed elective experience for orthopaedic residents, and orthopaedic electives for family practice residents. Continuing education has also been provided to practicing orthopaedic surgeons from Canada and abroad, in advanced orthopaedic surgical techniques through the Arthroscopy Learning Centre and the Spine Learning Centre that were established in partnership with private enterprise. The Arthroscopy and Sports Medicine Fellowship was re-accredited by the Arthroscopy Association of North America.

There has been ongoing development of clinical research activities through participation in multicentre studies, in collaboration with Toronto colleagues, on the outcomes of joint replacement surgery. There have also been expanded private partnerships in the conduct of controlled clinical trials related to pharmaceutical and technical advancements.
The combined orthopaedic unit from the Orthopaedic and Arthritic campus and the Sunnybrook campus participated in the development of a strategic plan for the Orthopaedic and Arthritic Institute. The Institute’s mission is to be the international leader in musculoskeletal care, first choice for patients, benchmarked by researchers and renowned among educators. It will focus on core areas of excellence in joint replacement, spine care and osteoarthritis.

The Orthopaedic and Arthritic Foundation established the Dr. Marvin Tile Visiting Professorship in Orthopaedic Surgery and a Chair in orthopaedic epidemiology research is in development.

WOMEN’S COLLEGE CAMPUS

Clinical services, staffing and teaching in the Department of Surgery at the Women’s College campus have remained stable during the 1999-2000 year.

In the Division of Urology, Dr. Lesley Carr moved her main office to the Sunnybrook campus. She does, however, maintain an office at Women’s College and provides clinical services to this campus.

The surgeons continued their teaching activities, contributing to the training of general and plastic surgery residents, and participating in undergraduate teaching.

They taught in the Foundations of Medical Practice (PBL), the Art and Science of Clinical Medicine (ASCM), and assisted with Year 3 oral exams and Year 4 OSCE’s. The general surgeons also ran bedside clinics for Year 3 students from the University Health Network and Women’s College. The general and plastic surgeons provided clinical experiences for Peters-Boyd Year 3 and Year 4 students, as well as a number of elective students. Dr. Ted Ross continues in his role as University of Toronto Surgical Clerkship Supervisor for Year 3 and Year 4.

Dr. Lavina Lickley and Dr. Claire Holloway continue to be involved in the NSABP STAR protocol study of tamoxifen and raloxifene for breast cancer prevention. Dr. Lickley is the principal investigator for this study for the Women’s College campus of the Sunnybrook and Women’s College Health Sciences Centre with satellite centres at the Toronto Sunnybrook Regional Cancer Centre, the North York General
Hospital and the Toronto General Hospital. Dr. Holloway is participating in a project involving novel radio pharmaceuticals for radio-guided surgery of intraductal carcinoma (DCIS), funded by the Canadian Breast Cancer Research Initiative. Dr. Holloway and Dr. Lickley have been working closely with researchers at the Toronto Sunnybrook Regional Cancer Centre and the Women’s College campus to examine multiple aspects of DCIS, involving molecular biology to assess progression of disease to invasive cancer and new and exciting methods of imaging to determine extent of disease in the breast. Dr. Holloway is also involved in a metastatic breast cancer genome anatomy project. Dr. Lickley is a co-principal investigator with Dr. Maureen Trudeau and Dr. John Blondal, in a study of 10-year survivors of breast cancer.

During this transitional phase, we strive to provide the best possible service for our patients and an excellent learning experience for our medical students and residents.
ORTHOPAEDIC AND ARTHRITIC CAMPUS

DIVISION OF ORTHOPAEDIC SURGERY

Dr. H.U. Cameron - Associate Professor
Dr. J.C. Cameron - Assistant Professor (*Division Head*)
Dr. M.H.G. Ford - Lecturer
Dr. J.D. Gollish – Lecturer
Dr. H. Hall - Professor
Dr. R.M. Holtby - Assistant Professor
Dr. B.W. Malcolm - Assistant Professor
Dr. P.H. Marks – Assistant Professor
Dr. J.J. Murnaghan - Assistant Professor
Dr. C.S. Wright – Assistant Professor

PUBLICATIONS


INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

*Cameron HU:* Visiting Professor, Canadian Orthopaedic Association, St. John's, Newfoundland, July 1999. (1) Fixation options for primary hip arthroplasty, (2) Proximal femoral fixation for primary hip arthroplasty.


RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics

Indications and results of a fixed axis fully constrained prosthesis. Cameron HU: Orthopaedic and Arthritic Hospital ($800 1995 - 1999).


Long-term follow-up of the results of the international total hip. Cameron HU: Orthopaedic and Arthritic Hospital ($1,000 1995 - 1999).


Study of the influence of the Crowe rating on the outcome of total hip replacement in congenital hip dislocation. Cameron HU: Orthopaedic and Arthritic Hospital ($1,000 1995 - 1999).

The gasket theory in joint replacement: Fact or fiction. Cameron HU: Orthopaedic and Arthritic Hospital ($1,000 1995 - 1999).

Total knee replacement following patellectomy. Cameron HU: Orthopaedic and Arthritic Hospital ($1,000 1995 - 1999).

SUNNYBROOK CAMPUS

DIVISION OF CARDIAC SURGERY

Dr. G. Bhatnagar - Lecturer
Dr. G.T. Christakis - Associate Professor
Dr. C. Cutrara - Lecturer
Dr. S.E. Fremes - Associate Professor (Division Head)
Dr. B.S. Goldman - Professor

PUBLICATIONS


INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES


Goldman BS: Canadian Society of Interventional Cardiologists, Quebec City, Quebec, October 1999. The future of coronary revascularization: Tomorrow's promise, the debate: Will the catheter dominate?

RESEARCH AND INVESTIGATIONS

*Senior Investigator's Name Appears in Italics*


HONOURS RECEIVED

Goldman BS: E.B. Tovee Award for Postgraduate Teaching, Department of Surgery, University of Toronto, May 2000.
DIVISION OF GENERAL SURGERY

Dr. F.D. Brenneman - Assistant Professor
Dr. S.S. Hanna - Assistant Professor (Division Head)
Dr. A.W. Harrison - Professor
Dr. H.A.B. Miller - Associate Professor
Dr. A. Smith – Assistant Professor
Dr. G.A. Taylor - Associate Professor

PUBLICATIONS


INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

**Brenneman FD:** Royal College of Physicians and Surgeons of Canada/Trauma Association of Canada, Montreal, Quebec, September 1999. Abdominal ultrasound in trauma.

**Brenneman FD:** Paramedic Trauma Conference, Toronto, Ontario, October 1999. Penetrating trauma.

**Brenneman FD:** North Network, Parry Sound, Ontario, September 1999. Preparation for transfer of patients who have suffered major trauma.


**Brenneman FD:** Canadian Association of Medical Radiological Technologists Conference, June 2000. Trauma patient: Imaging during the initial assessment.

**Brenneman FD:** Trauma Rounds, Hotel-Dieu Grace Hospital, Windsor, Ontario, November 1999. Trauma ultrasound.


RESEARCH AND INVESTIGATIONS

*Senior Investigator's Name Appears in Italics*


DIVISION OF NEUROSURGERY

Dr. M. Fazl - Assistant Professor
Dr. R. Midha - Assistant Professor
Dr. D.W. Rowed - Associate Professor
Dr. M.L. Schwartz – Professor (Division Head)

PUBLICATIONS


INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Fazl M: International Association for the Study of Pain, Vienna, Austria, August 1999. Spinal cord mapping with evoked responses for accurate localization of the dorsal root entry zone.


Midha R: Uniformed Services University of the Health Sciences, Bethesda, Maryland, June 2000. (1) Principles of nerve regeneration and repair, (2) Hands on cadaver dissection: Peripheral nerve.


RESEARCH AND INVESTIGATIONS
Senior Investigator's Name Appears in Italics


**DIVISION OF ORTHOPAEDIC SURGERY**

Dr. T.S. Axelrod - Associate Professor *(Division Head)*
Dr. J.A. Finkelstein - Assistant Professor
Dr. G.A. Hunter - Professor
Dr. H.J. Kreder - Assistant Professor
Dr. J. Schatzker - Professor
Dr. D.G.S. Stephen - Assistant Professor
Dr. M. Tile - Professor

**PUBLICATIONS**


INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES


Schatzker J: Visiting Professor, University of Cordoba, Cordoba, Argentina, August 1999. (1) Rings and cages in acetabular reconstruction, (2) New developments in fracture surgery, (3) Update on fractures of the distal femur.


**RESEARCH AND INVESTIGATIONS**

*Senior Investigator's Name Appears in Italics*


Arthroscopic debridement for knee arthritis: What are we doing, and is it useful? *Kreder HJ, Wai E, Williams J: Institute for Clinical Evaluative Sciences ($10,000 1999 - 2000).*

Developing a consistent method of evaluating malrotation following tibial fracture nailing. *Kreder HJ, Stephen DGS, Schemitsch EH, McKee M: Smith and Nephew Richards ($5,000 1998 - 1999).*


The at-home early discharge (AHEAD) project for hip fracture patients. 

The Canadian arthritis network. *Cruz TF, Kreder HJ, 124 other co-investigators: Network Centres of Excellence ($3,800,000 1998 - 2002).*


The determination of tibial malrotation following intramedullary nailing. *Kreder HJ, Stephen DGS, Schemitsch EH, McKee MD: Smith and Nephew Richards ($10,000 1998 - 1999)*.

The functional consequences of femoral malrotation as measured using limited CT scanning following IM nailing. *Kreder HJ, Stephen DGS, Schemitsch EH, McKee M: Smith and Nephew Richards ($10,000 1999 - 2000)*.


**HONOURS RECEIVED**


**Finkelstein JA**: Lermanbaum Award, January 2000.
DIVISION OF PLASTIC SURGERY

Dr. O. Antonyshyn - Associate Professor
Dr. P. Binhammer - Lecturer
Dr. R.C. Cartotto - Assistant Professor
Dr. J. Fialkov - Assistant Professor
Dr. J.S. Fish - Assistant Professor
Dr. J.L. Semple – Associate Professor (Division Head)

PUBLICATIONS


INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES


Cartotto RC: Canadian Association of Burn Nurses, St. John's, Newfoundland, September 1999. The major achievements in burn care in the past 100 years.


Semple JL: Visiting Professor, Walter Reed Army Institute of Research, Lima, Peru, September 1999. High altitude frostbite: Pathophysiology and management.


RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics


Comparison of allevyn versus acticoat as a skin graft donor site dressing. *Cartotto R*, Innes M: Research and Development Health Research Foundation/Canadian Institutes of Health Research ($4,048 2000).


HONOURS RECEIVED

**Cartotto RC**: Moyer Award, American Burn Association (with Choi J, Cooper A, Gomez M, Fish J), March 2000.
DIVISION OF UROLOGY

Dr. L.K. Carr - Lecturer
Dr. N.E. Fleshner - Assistant Professor
Dr. S. Herschorn - Associate Professor (Division Head: July 1, 1999 – December 31, 1999)
Dr. L.H. Klotz - Associate Professor (Division Head: January 1, 2000 – June 30, 2000)
Dr. R.T. Kodama - Assistant Professor

PUBLICATIONS


INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES


Kodama RT: St. Lawrence Urological Group, Pinehill, Quebec, February 2000. (1) Pelvic trauma and presentation of interesting urologic cases, (2) Recent advances in lower urinary tract reconstruction, (3) Reconstructive principles and tissue transfer techniques, (4) The management of anterior urethral structures, (5) Treatment of urethral carcinoma.

RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics

A double-blind, randomized, fixed-dose, placebo controlled study to assess the efficacy and safety of sildenafil in preventing erectile dysfunction in patients who have undergone a bilateral nerve sparing radical prostatectomy. Herschorn S: Pfizer Canada ($60,000 1999).

A prospective phase 3 randomized trial comparing intermittent versus continuous androgen suppression for patients with PSA progression in the clinical absence of distant metastases following radiotherapy for prostate cancer. Klotz LH, Crook J: National Cancer Institute of Canada/Hoechst Marion Roussel ($2,800,000 1997 - 2002).


A randomized, double-blind, placebo-controlled study of IC351 (LY450190) administered "on demand" to patients with male erectile dysfunction. Herschorn S: Eli Lilly ($25,000 1999).


DIVISION OF VASCULAR SURGERY

Dr. D.S. Kucey – Assistant Professor
Dr. R. Maggisano – Assistant Professor (Division Head)

PUBLICATIONS


INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES


RESEARCH AND INVESTIGATIONS

Senior Investigator’s Name Appears in Italics

WOMEN'S COLLEGE CAMPUS

DIVISION OF GENERAL SURGERY

Dr. G.Y. Hiraki - Assistant Professor
Dr. C.M.B. Holloway - Assistant Professor
Dr. L. Lickley - Professor
Dr. T.M. Ross - Associate Professor (Division Head)

PUBLICATIONS


INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES


RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics


DIVISION OF PLASTIC SURGERY

*Dr. M.H. Brown - Assistant Professor
Dr. J.L. Semple - Associate Professor (Division Head)*

PUBLICATIONS


INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES


Semple JL: Visiting Professor, Walter Reed Army Institute of Research, Lima, Peru, September 1999. High altitude frostbite: Pathophysiology and management.


RESEARCH AND INVESTIGATIONS


DIVISION OF UROLOGY

Dr. J.G. Connolly - Professor
The Toronto East General Hospital has had a successful year under the guidance of its new Chief Executive Officer, Mr. Ronald Mulchey. Mr. Mulchey was recently given a solid vote of confidence by the hospital staff and hospital board after completing his first two years as Chief Executive Officer.

The hospital building plan is well underway with completion of new operating room facilities expected early next year. Thirteen new surgical suites will address the growing demand for technologically advanced procedures. Plans are well underway for new out-patient facilities and an MRI suite. The Toronto East General Hospital will also offer expanded pediatric services through its designation as a level two regional child health care centre.

The Department of Surgery continues to provide training for family practice and emergentology residents, as well as active participation in the teaching of postgraduate surgical trainees in general surgery and orthopaedic surgery.

Dr. Ian Harrington completed his ten-year term as Head, Division of Orthopaedic Surgery on January 1, 2000 and was recognized for his contributions to the Toronto East General Hospital at the hospital staff appreciation dinner in May 2000. He, Mr. Martin McPolin and Mr. Gary James were the winners of the Yvon Peltier Poster Award for “Rigid plaster dressing: A simple pylon technique following below knee amputation” at the Canadian Society of Orthopaedic Technologist`s meeting in April 2000.

Dr. Wayne Tanner, Chair of the Specialists Coalition of Ontario and Section Chair for Vascular Surgery of the Ontario Medical Association, was a member of the Ontario Medical Association team that negotiated
a new contract with the Ministry of Health for Ontario physicians in May 2000. An important item in the agreement was the payment of physicians and surgeons for emergency work.

Dr. Gary Stoik has taken a leave-of-absence from the Toronto East General Hospital in order to work as a thoracic surgeon in Adis Ababa.

Dr. Robert Mackenzie has been appointed Medical Director for the Ambulatory and Community Services at the Toronto East General Hospital.

Dr. Gianni Maistrelli discussed the importance of offset in total hip arthroplasty and functional osseo-integration of implants at the Italian Hip Society annual meeting in Rome, Italy, October 1999. He also discussed balancing the valgus knee and knee osteotomies at the Strategies in Hip and Knee Joint Reconstruction Symposium in Toronto, June 2000. As well, he was a participant in the Challenges of Total Hip Replacement in Madrid, Spain, June 2000.

Dr. Maistrelli, Dr. Peter Weiler and Dr. Kellie Leitch were co-presenters of a paper entitled “The outcomes and economic costs of bilateral staged versus simultaneous total knee arthroplasty” at the Canadian Orthopaedic Association meeting in Edmonton, Alberta, June 2000.

Dr. Paul Wong remains active in orthopaedic research and recently has had two papers published in peer reviewed journals regarding the classification for failed hip arthroplasty and morselised allograft with roof ring re-enforcement.

Dr. Laura Tate attended the Canadian Medical Association Leadership Workshop for Medical Women, November 1999 and the AO-ASIF Hand and Wrist Fracture Course in Colorado Springs.

The Department of Surgery has formulated a policy to be used as a guide for treatment of Jehovah Witness patients with regards to the use of blood and blood substitutes.

The Toronto East General Hospital is in its 71st year of providing care for East York residents. A new surgical suite re-development, the addition of complex continuing care services, a new maternal and newborn care centre, a newly established ambulatory and community care health service and the addition of magnetic resonance imaging will
enhance the hospital’s ability to respond to the needs of its community. The hospital plans to continue to function as a community-teaching centre for family practice, medicine, general and orthopaedic surgery trainees.

DIVISION OF GENERAL SURGERY

Dr. V. Campbell – Lecturer
Dr. T. Gilas – Assistant Professor
Dr. R. Mackenzie – Assistant Professor
Dr. G.L. Stoik – Assistant Professor
Dr. W. R. Tanner – Lecturer
Dr. R.A. Zeldin – Assistant Professor (Division Head)

DIVISION OF ORTHOPAEDIC SURGERY

Dr. I.J. Harrington - Associate Professor
Dr. W.J. Kraemer - Lecturer
Dr. G.L. Maistrelli - Associate Professor (Division Head)
Dr. P.J. Weiler - Lecturer
Dr. P. Wong - Lecturer

PUBLICATIONS


HONOURS RECEIVED

Harrington IJ: Yvon Peletier Poster Award, CSOT, Toronto, Ontario, April 2000.

DIVISION OF UROLOGY

Dr. W.C.F. Forder - Lecturer
Dr. R.D. MacMillan – Assistant Professor (Division Head)
UNIVERSITY HEALTH NETWORK

Surgeon-in-Chief - Dr. B.R. Taylor

HEADS OF DIVISIONS

Dr. T.E. David - Cardiac Surgery
Dr. O.D. Rotstein - General Surgery
Dr. M. Bernstein – Neurosurgery
Dr. J.R. Davey - Orthopaedic Surgery
Dr. P. Neligan - Plastic Surgery
Dr. T.R.J. Todd – Thoracic Surgery (July 1, 1999 – December 31, 1999)
Dr. M.A.S. Jewett – Urology
Dr. K.W. Johnston - Vascular Surgery

The University Health Network completed its first academic year under the new organizational structure. Surgical services were offered at the Toronto General Hospital, the Toronto Western Hospital and the Princess Margaret Hospital.

Cardiac Surgery

The Division of Cardiac Surgery under the leadership of Dr. Tirone David was one of the few cardiac divisions to meet provincial volume targets in patient care, and boasted excellent clinical results as documented by the Cardiac Care Network. Ten clinical fellows received training in advanced cardiac surgery, a total of 58 national and international surgeons having applied. Drs. Richard Weisel, Terry Yau, Charles Peniston and Chris Feindel were all successful in obtaining peer-reviewed funds from both the Medical Research Council of Canada and the Heart and Stroke Foundation of Canada. This work resulted in a large number of peer-reviewed papers being published. In addition, of note was the election of Dr. Hugh Scully as President of the Canadian Medical Association as well as President-Elect of the Canadian Cardiovascular Society. Dr. Tirone David assumed the office of Secretary of the American Association for Thoracic Surgery. In addition, Dr. Viv Rao was this year’s winner of the Royal College Medal for Resident Research.
General Surgery

Dr. David Grant was welcomed as Surgical Director of Transplantation at the University Health Network, adding experienced surgical leadership to that important program.

Strong grant capture by Dr. Andras Kapus (Medical Research Council of Canada scholar), Dr. John Marshall (Medical Research Council of Canada grant), Dr. Ori Rotstein (Medical Research Council of Canada grant) and Dr. Mark Catral (Juvenile Diabetes Foundation), marked a successful year in investigation. Dr. Richard Reznick was given the Hubbard Award by the National Board of Medical Examiners. Dr. Lorne Rotstein won the Ross Fleming Teaching Award, and Dr. Bryce Taylor was awarded the Colin Woolf Award for Continuing Medical Education. In addition, Dr. Bernie Langer was elected President of the Royal College of Physicians and Surgeons of Canada, his term to begin in September 2000. At the end of the academic year, the Peter Cossgrove Chair in General Surgery was inaugurated at the University Health Network with Dr. Ori Rotstein as the first recipient. Dr. Lorne Rotstein was appointed Co-Director of the General Surgery Training Program, with a plan to replace Dr. Marcus Burnstein in 2001. Dr. David Hackam won the Bernard Langer Surgeon Scientist Award for resident research after working in Dr. Ori Rotstein’s laboratory during his general surgery residency.

Neurosurgery

The prodigious academic achievements of the Division of Neurosurgery continued. There are currently a total of three chairs held by members of the Division: The Robert O. Lawson Chair in Neural Repair and Regeneration (Dr. Michael Fehlings); the Tasker Chair in Functional Neurosurgery (Dr. Andres Lozano); and the Ricard Chair in Cerebrovascular Surgery (Dr. Chris Wallace). Many research grants were awarded to Drs. Ab Guha, Michael Tymianski, Charles Tator, Michael Fehlings, and Andres Lozano. The Division continues to recruit aggressively, and awaits the arrival of two new academic surgeons in July 2000 to contribute to established programs.

Clinically, the Division is developing innovative treatments including the intra-operative magnet, out-patient craniotomy for tumor, out-patient stereotactic brain tumor biopsy, out-patient lumbar discectomy, and deep brain stimulation procedures for new indications.
In the past year, Dr. Charles Tator was awarded the Order of Canada, and Dr. Mark Bernstein received the A.R. Hudson Award which is given annually to the best neurosurgical teacher at the University of Toronto. Drs. Andres Lozano and Christopher Wallace were promoted to Full Professor as of July 1, 1999.

**Orthopaedic Surgery**

Dr. Raj Rampersaud, a specialist in radio-guided spinal surgery, was recruited to the Orthopaedic Division and the Spine Program in October of 1999. The Sports Medicine and Arthroscopy Program continued to be very active clinically in such high profile areas as care of the Toronto Blue Jays, Toronto Argonauts, Toronto Maple Leafs, and the National Ballet of Canada. The Orthopaedic Division also actively participated in the Arthritis Program in collaboration with the rheumatology service. The Lower Extremity Arthritis Program was developed and is closely linked with the Arthritis Centre of Excellence. Research in outcomes, biomechanical studies, prosthesis evaluation and epidemiology of arthritis was actively pursued. Dr. Brent Graham was officially appointed as the Director of the Hand Program at the University Health Network.

**Plastic Surgery**

The Division of Plastic Surgery continued to collaborate on a number of fronts. Dr. Peter Neligan in his new position in the Wharton Chair in Reconstructive Plastic Surgery supported the Head and Neck Cancer Program under the directorship of Dr. Pat Gullane. The Division of Plastic Surgery also made significant contributions to surgical education and to the Hand Program. Dr. Dimitri Anastakis was the Head of Surgical Programs at the Toronto Western Hospital, as well as an active researcher in the field of surgical education. In addition, Dr. Arnis Freiberg won the Arnis Freiberg Teaching Excellence Award.

Dr. Peter Neligan was elected President of the Canadian Microsurgical Society, and also won the W.K. Lindsay Resident Research Supervisor Award.
Thoracic Surgery

Dr. Tom Waddell was recruited to the Division on January 1st, 2000, and joins Dr. Shaf Keshavjee in the field of pulmonary transplantation. Dr. Waddell has undergone training in xenotransplantation, and will also be a major contributor to the Living Related Donor Program. The Lung Transplantation Program exceeded its provincial targets in the 1999-2000 year.

The University of Toronto Program also played a significant role in the lung reduction surgery clinical trial which will be completed shortly. Dr. Tom Todd departed for Abu Dhabi in February 2000, and at the end of the academic year, negotiations were underway with a prospective new leader and Chair of the Division of Thoracic Surgery.

Dr. Tom Waddell won the Young Faculty Award of the American Association for Thoracic Surgery, and Dr. Shaf Keshavjee’s laboratory continued its success with grant capture, peer-reviewed papers, and national and international presentations. Dr. Keshavjee himself was elected to Canada’s “Top 40 Under 40” prestigious group, and Dr. Gail Darling won the E. Bruce Tovee Undergraduate Teaching Award.

Urology

Dr. John Tsihlias was recruited as a uro-oncologist after further training at M.D. Anderson Cancer Centre in Houston. The Prostate Centre at the Princess Margaret Hospital was opened under the direction of Dr. John Trachtenberg, and immediately became a very successful unit. Dr. Trachtenberg and his colleagues developed a web site for prostate cancer, tools for improved decision-making and education for patients, and a psychosocial support program for prostate cancer patients. In addition, Dr. Michael Jewett and colleagues initiated a program in minimally invasive radical prostatectomy which has been successful in its early stages. The program of neuromodulation of bladder function at the Toronto Western Hospital with the use of implanted nerve stimulators continued with successful results under the direction of Dr. Magdy Hassouna, who was also appointed Director of Postgraduate Education at the University Health Network. Finally, Dr. Sid Radomski won the Surgical Skills Centre Teaching Award for his contributions to the technical curriculum.
Vascular Surgery

The Division maintained its pre-eminent position in Canadian vascular surgery. Dr. Wayne Johnston continues with his work in advanced diagnostics, Dr. Tom Lindsay and Dr. Paul Walker in the area of ischemia/reperfusion injury, and Dr. Barry Rubin in his work on cardiomyocyte cytotoxicity and neutrophil phospholipid metabolism. The Division members held high profile positions, with Dr. Wayne Johnston as Editor-in-Chief of the Journal of Vascular Surgery, Dr. Peter Kalman as Past-President of the Canadian Society of Vascular Surgery, Dr. Tom Lindsay as President-Elect of the Peripheral Vascular Surgical Society, and Dr. Paul Walker as Vice-President of the Toronto General Hospital.

DIVISION OF CARDIAC SURGERY

Dr. S.J. Brister - Associate Professor
Dr. R.J. Cusimano - Assistant Professor
Dr. T.E. David – Professor (Division Head)
Dr. C.M. Feindel - Associate Professor
Dr. L.L. Mickleborough - Professor
Dr. C.M. Peniston - Assistant Professor
Dr. A.C. Ralph-Edwards - Lecturer
Dr. H.E. Scully - Professor
Dr. R.D. Weisel - Professor
Dr. T.M. Yau - Assistant Professor

PUBLICATIONS


David TE: Aortic valve surgery: Where we are and where we shall go. Journal of Heart Valve Disease: September 1999: 8: pp 495-498.


INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES


David TE: Cleveland Clinic Foundation, Cleveland, Ohio, September 1999. (1) Follow-up after Ross procedure, (2) Special consideration for Marfan's valves: Valve sparing procedures, (3) Papillary muscle rupture, right ventricular infarction, and ventricular septal ruptured: Complications of myocardial infarction.

David TE: American College of Cardiology, Snowmass, Colorado, January 2000. (1) Minimally invasive surgery: Is the pump here to stay?, (2) Mitral valve repair or replacement: Matching the patient to the procedure and the condition, (3) Humanizing the aortic valve and outflow mechanism: Is the Ross failing?


David TE: Rodman E. Taber Lecturer, Michigan Society of Thoracic and Cardiovascular Surgeons, Bay Harbor, Michigan, August 1999. Aortic valve surgery.


David TE: European Association for Cardiothoracic Surgery, Glasgow, Scotland, September 1999. Results of surgery for aortic root aneurysm in patients with the Marfan syndrome.

David TE: Klinik und Poliklinik Fur Herz-Und Thoraxchirurgie, University of Kolin, Kolin, Germany, April 2000. Teleconference and lectures on aortic valve replacement with Toronto SPV.
David TE: Hanover Medical School, Hanover, Germany, September 1999. (1) Aortic valve-sparing operations, (2) Aortic valve replacement with stentless valves.

David TE: Centro Cardiologico Fondazione Monzino, University of Milan, Milan, Italy, April 2000. (1) Functional anatomy of the aortic valve, (2) Aortic valve sparing operations, (3) Aortic valve replacement with Toronto SPV.


David TE: Learning From Experience Symposium, Glasgow, Scotland, September 1999. Twelve years of experience with the Toronto SPV valve.


Feindel CM: Association des Chirurgiens Cardiovasculaires et Thoraciques du Quebec, Mont Tremblant, Quebec, June 2000. (1) Aortic valve sparing procedures, (2) Toronto stentless valve experience.


Mickleborough LL: Du Centre Cardio-Thoracique De Monaco, Monte Carlo, Monaco, November 1999. Medical and surgical left ventricular remodeling: The Canadian experience.


Peniston CM: Far Eastern Memorial Hospital, Taipei, Taiwan, May 2000. (1) Toronto stentless valve, (2) Toronto stentless valve insertion: Workshop, wet lab.


Peniston CM: Cathay General Hospital, Kaohsiung City, Taiwan, May 2000. (1) Toronto stentless valve, (2) Toronto stentless valve insertion: Workshop, wet lab.

Peniston CM: Cheng Hsin Hospital, Kaohsiung City, Taiwan, May 2000. Toronto stentless valve.

Peniston CM: National Taiwan University, Taipei, Taiwan, May 2000. Toronto stentless valve.

Weisel RD: Visiting Professor, University of Minnesota, Minneapolis, Minnesota, October 1999. (1) Cell therapy to restore ventricular function, (2) Cell transplantation to improve heart function and induce angiogenesis.


Weisel RD: Visiting Professor, Cleveland Clinic Foundation, Cleveland, Ohio, March 2000. Cell transplantation: A novel treatment for the failing heart.


**Weisel RD:** American Heart Association, Atlanta, Georgia, November 1999. Developing interactions with industry and venture capital.

**Weisel RD:** Canadian Cardiovascular Society, Quebec City, Quebec, October 1999. The cardiac workforce in Canada: Where do we go from here?


**Yau TM:** Young Cardiac Surgeons of Canada, Cancun, Mexico, March 2000. Determinants of increased risk in redo aortic valve replacement.

**Yau TM:** Canadian Cardiovascular Society, Quebec City, Quebec, October 1999. (1) Chair: Myocardial revascularization, (2) Chair: Cardiopulmonary bypass, (3) Chair: Pediatrics.

**Yau TM:** Canadian Surgeons Club of Canada, Scottsdale, Arizona, April 2000. Update on gene therapy and cell transplantation.

**RESEARCH AND INVESTIGATIONS**

*Senior Investigator's Name Appears in Italics*


Cerebral protection by insulin for cardiac surgery. **Peniston CM, Weisel RD, Naylor CD, McLean RF:** Heart and Stroke Foundation ($131,584 1999 - 2001).

Insulin cardioplegia for poor left ventricular function. **Yau TM, Weisel RD:** Heart and Stroke Foundation ($69,000 1999 - 2001).

Magnetic resonance imaging for ischemic heart disease. **Merchant N, Mickleborough LL:** Medical Research Council of Canada ($37,613 1999 - 2000).


DIVISION OF GENERAL SURGERY

Dr. R.A. Affifi - Lecturer  
Dr. U. Ambus - Associate Professor  
Dr. M.S. Cattral – Associate Professor  
Dr. L. Chaikof - Instructor  
Dr. D. Grant - Professor  
Dr. P.D. Greig - Professor  
Dr. H.S. Himal - Associate Professor  
Dr. B. Langer - Professor  
Dr. J.C. Marshall – Associate Professor  
Dr. R.E. Mathews - Assistant Professor  
Dr. D.R. McCready - Associate Professor  
Dr. R.K. Reznick - Professor  
Dr. L.E. Rotstein - Associate Professor  
Dr. O.D. Rotstein - Professor (Division Head)  
Dr. B.R. Taylor - Professor  
Dr. H.A.E. Weizel - Associate Professor  

PUBLICATIONS


INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES


Greig PD: Royal College of Physicians and Surgeons of Canada/Canadian Association of General Surgeons, Montreal, Quebec, September 1999. Liver tumors: Resect or transplant?

Greig PD: International Hepato-Pancreato-Biliary Association, Brisbane, Australia, May 2000. (1) Neoral or FK506 as primary immunosuppression following liver transplantation, (2) Optimal therapeutic monitoring for neoral following liver transplantation.


Marshall JC: Symposium on Intensive Care Medicine, Grindelwald, Switzerland, February 2000. (1) Clinical trials in sepsis: Have we failed and how can we do better? (2) The multiple organ dysfunction syndrome, (3) Apoptosis: What is it, and why is it important for the intensivist?, (4) Panel: How to run the intensive care unit as an enterprise, (5) Panel: Essential monitoring in severe sepsis, (6) Panel: Clinical trials in the intensive care unit: How much can we expect?


Marshall JC: Society of Critical Care Medicine, Orlando, Florida, February 2000. (1) Organ dysfunction in ARDS: Incidence, prevention, and management, (2) The optimal hematocrit in the critically ill, (3) Organ dysfunction as an outcome in sepsis trials, (4) Pro- and anti-inflammatory strategies in sepsis: Do we know where we are?


Reznick RK: Association for Surgical Education, Toronto, Ontario, May 2000. Presidential address: I am a good teacher, maybe even a really good teacher: Is that okay?


Reznick RK: Royal College of Physicians and Surgeons of Canada, Montreal, Quebec, September 1999. Preparing for a career in surgical education.

Reznick RK: McMaster University, Hamilton, Ontario, December 1999. She can't cut her way out of a wet paper bag.

Rotstein LE: Royal College of Physicians and Surgeons of Canada, Montreal, Quebec, September 1999. (1) Be it resolved that primary hyperparathyroidism is best treated by a limited, minimalist, focused surgical intervention, (2) Is conventional surgical management of primary hyperparathyroidism unduly morbid?


Rotstein OD: McGill University, Montreal, Quebec, February 2000. Immunomodulation using novel resuscitation strategies in the trauma patient.


Rotstein OD: World Congress on Trauma, Shock, Inflammation and Sepsis: Pathophysiology, Immune Consequences and Therapy, Munich, Germany, February 2000. Pancreatitis: Inflammation or infection or both?

Rotstein OD: Canadian Forces Operational Medicine Conference, Quebec City, Quebec, November 1999. Pharmacology: Recent advances in trauma unit.


Taylor BR: British Columbia Surgical Society, Vancouver, British Columbia, May 2000. (1) Treatment of metastatic and recurrent colorectal cancer, (2) Pancreatic cancer: What should be done, and who should be doing it? (3) Speech recognition technology: Is it for real?

RESEARCH AND INVESTIGATIONS


A randomized controlled trial to assess the need for breast radiation in addition to tamoxifen in women 50 years of age and over with node negative breast cancer. *Fyles AW*, Manchul LA, McCready DR, Trudeau ME: Ministry of Health ($68,319 1999 - 2000).


Randomized clinical trial of conventional dose tacrolimus and steroids compared with reduced dose tacrolimus and steroids in liver transplant patients. Lilly LS, Greig PD, Levy GA, Cattral MS, Grant DR, Girgrah N: Wyeth-Ayerst Research Canada Incorporated ($200,000 2000 - 2001).


Three year randomized multicentre study of the efficacy and safety of RAD versus MMF in liver transplantation. Levy GA, Greig PD, Cattral MS, Lilly LS, Grant DR, Girgrah N: Novartis Pharmaceuticals Corporation ($60,000 2000 - 2001).

HONOURS RECEIVED

Langer B: Duncan Graham Award, Royal College of Physicians and Surgeons of Canada, September 1999.


Reznick RK: John P. Hubbard Award, National Board of Examiners, March 2000.

Reznick RK: Northwest Society of Colon and Rectal Surgeons Award, September 1999.


Taylor BR: Colin Woolf Award for Continuing Medical Education, University of Toronto, May 2000.
DIVISION OF NEUROSURGERY

Dr. M. Bernstein – Professor (Division Head)
Dr. M.G. Fehlings - Associate Professor
Dr. J.F.R. Fleming - Professor
Dr. F. Gentili - Associate Professor
Dr. A. Guha - Associate Professor
Dr. A.M. Lozano - Professor
Dr. C.H. Tator - Professor
Dr. M. Tymianski - Assistant Professor
Dr. M.C. Wallace - Professor

PUBLICATIONS


INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES


Fehlings MG: McGill University/Montreal Neurological Institute, Montreal, Quebec, May 2000. Current concepts in the pathophysiology and treatment of acute spinal cord injury: From gene to the operating room.


Fehlings MG: Altschul Conference in Neurobiology, Saskatoon, Saskatchewan, August 1999. Role of inflammatory mediators in the pathophysiology of acute spinal cord injury.


Wallace MC: Harvard Medical School of Medicine, University of California, San Francisco, California, May 2000. (1) AVM’s: Treatment goals, combined therapy, (2) Discussion: AVM’s.


Wallace MC: St. John's Convalescent Hospital/West Park Hospital, Toronto, Ontario, October 1999. Treatment of ischemic and hemorrhagic stroke.

RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics


Investigation of changes in potassium and glutamate ion channel activity in glial cells after SCI: Patch clamp studies in adult rat spinal cord slice. *Fehlings MG, Zhang L*: Ontario Neurotrauma Foundation ($80,000 1999 - 2000).


Neuroprotection of the injured spinal cord: Role of the mGluR1 receptor. *Fehlings MG*: Physicians Services Incorporated Foundation ($140,000 2000 - 2002).


Role of the mGluR1 metabotropic glutamate receptor in the pathophysiology of central nervous system trauma. *Fehlings MG*, Baker A: Ontario Neurotrauma Foundation ($163,300 2000 - 2003).


HONOURS RECEIVED

Bernstein M: Alan Hudson Teaching Award, University Health Network, June 2000.


Tator CH: A.R. Hudson Teaching Award, Division of Neurosurgery, University of Toronto, May 2000.

Tator CH: Appointed a Member of the Order of Canada, January 2000.

DIVISION OF ORTHOPAEDIC SURGERY

Dr. J.R. Davey - Assistant Professor (Division Head)
Dr. B.A. Graham - Assistant Professor
Dr. J.D. Graham - Assistant Professor
Dr. N. Mahomed - Assistant Professor
Dr. K.W. Marshall - Assistant Professor
Dr. A. Miniaci - Associate Professor
Dr. D.J. Ogilvie-Harris - Associate Professor
Dr. R. Rampersaud - Lecturer
Dr. H.P. von Schroeder - Assistant Professor
Dr. T.A. Wright - Assistant Professor

PUBLICATIONS


INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Davey JR: Cleveland Clinic Course in Orthopaedics, White Sulphur Springs, West Virginia, June 2000. (1) Femoral offset restoration, (2) Avoiding dislocation following THR.


Mahomed N: Canadian Orthopaedic Association, St. John's, Newfoundland, July 1999. Post-operative strategies to minimize transfusion.

Mahomed N: The Arthritis Society, Toronto, Ontario, March 2000. When is surgery necessary?


Marshall KW: Quebec Orthopaedic Association, Mount St. Anne, Quebec, September 1999. Non-arthroplasty management of knee OA.

Marshall KW: University of Nebraska, Omaha, Nebraska, September 1999. Non-arthroplasty management of knee OA.


RESEARCH AND INVESTIGATIONS


**HONOURS RECEIVED**

DIVISION OF PLASTIC SURGERY

Dr. D.J. Anastakis - Assistant Professor
Dr. T.A.B. Bell - Lecturer
Dr. A. Freiberg – Professor
Dr. B.A. Graham – Assistant Professor
Dr. R.T. Manktelow - Professor
Dr. P.C. Neligan - Associate Professor (Division Head)
Dr. H.P. von Schroeder – Assistant Professor

PUBLICATIONS


Carroll CMA, Pathak I, Irish J, Neligan PC, Gullane PJ:

Chiodo AA, Gur E, Pang CY, Neligan PC, Boyd JB, Binhammer PM, Forrest CR:

Hopper RA, Griffiths S, Murray J, Manktelow RT:

Manktelow RT:

Manktelow RT, Zuker RM:

Manktelow RT, Zuker RM:


INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES


**RESEARCH AND INVESTIGATIONS**

*Senior Investigator's Name Appears in Italics*


HONOURS RECEIVED


Neligan PC: W.K. Lindsay Resident Research Supervisor Award, University of Toronto, May 2000.

DIVISION OF THORACIC SURGERY

Dr. G.E. Darling - Assistant Professor
Dr. M.R. Johnston - Associate Professor
Dr. S.H. Keshavjee - Associate Professor (Acting Division Head: January 1, 2000 – June 30, 2000)
Dr. M.F. McKneally - Professor
Dr. T.R.J. Todd - Professor (Division Head: July 1, 1999 – December 31, 1999)
Dr. T.K. Waddell - Assistant Professor
Dr. T.L. Winton - Assistant Professor

PUBLICATIONS


INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES


Darling GE: Canadian Association of Thoracic Surgeons, Montreal, Quebec, September 1999. Chair symposium: Update in lung transplantation.


Keshavjee SH: Royal College of Physicians and Surgeons of Canada, Montreal, Quebec, September 1999. Reperfusion injury.


Keshavjee SH: Canadian Association for Transplantation/Canadian Transplant Society, Mont Tremblant, Quebec, March 2000. Lung resuscitation and criteria for lungs.


RESEARCH AND INVESTIGATIONS


A phase III comparison between concurrent chemotherapy plus radiotherapy and concurrent chemotherapy and radiotherapy followed by surgical resection for stage IIIa (N2) nonsmall cell lung cancer. Darling G: National Cancer Institute of Canada (per patient) ($1,300 2000).
A randomized trial of mediastinal lymph node sampling versus complete lymphadenectomy during pulmonary resection in the patient with N0 or N1 (less than hilar) nonsmall cell lung cancer. Allen M, Darling G, Ginsberg R: American College of Surgeons Oncology Group (per patient) ($1,500 2000).


**HONOURS RECEIVED**

**Darling GE:** E.B. Tovee Award for Undergraduate Teaching, Department of Surgery, University of Toronto, May 2000.

**Keshavjee SH:** Canada’s “Top 40 Under 40” Award, May 2000.
DIVISION OF UROLOGY

Dr. G.A. Farrow - Assistant Professor
Dr. M. Hassouna - Associate Professor
Dr. M.A.S. Jewett – Professor (Division Head)
Dr. S.B. Radomski - Associate Professor
Dr. M. Robinette - Associate Professor
Dr. J. Trachtenberg - Professor
Dr. J. Tsihlias - Assistant Professor

PUBLICATIONS


INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES


RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics


Randomized controlled study of neoadjuvant reversible androgen withdrawal therapy in the surgical management of localized prostate cancer. *Jewett MAS*: Canadian Urologic Oncology Group ($64,000 1993 - 2001).

Randomized controlled study of three versus eight month neoadjuvant hormone therapy prior to prostatectomy in localized prostate cancer. *Jewett MAS*: Canadian Urologic Oncology Group ($33,000 1996 - 2000).
The role of intravesical capsacin in the management of neurogenic bladder of patients with spinal cord lesion. *Hassouna M*: Canadian Spinal Research Foundation ($45,000 1999 - 2000).


**DIVISION OF VASCULAR SURGERY**

*Dr. K.W. Johnston – Professor (Division Head)*
*Dr. P.G. Kalman - Associate Professor*
*Dr. T.F. Lindsay - Assistant Professor*
*Dr. B.B. Rubin - Assistant Professor*
*Dr. P.M. Walker - Professor*

**PUBLICATIONS**


INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES


Johnston KW: Albert Einstein College of Medicine/Montefiore Medical Centre, New York, New York, November 1999. How to apply the result of the United Kingdom small aneurysm study to the management of an individual patient.


Johnston KW: Canadian Society for Vascular Surgery, Quebec City, Quebec, September 1999. United Kingdom small aneurysm study: Application of the results to the management of an individual patient.


Lindsay TF: Canadian Society for Vascular Technology, Toronto, Ontario, April 2000. (1) Role of vascular ultrasound in clinical management: What ABI's provide? (2) Information that duplex provides: When are they clinically relevant, (3) When will a patient need surgery or conservative management?


RESEARCH AND INVESTIGATIONS
Senior Investigator's Name Appears in Italics


The role of phospholipase A2 in neutrophil activation during myocardial ischemia. *Rubin BB*: Heart and Stroke Foundation ($114,000 1997 - 1999).
DIVISION OF ANATOMY

Dr. A. Agur - Associate Professor  
Dr. B. Liebgott - Professor  
Dr. C.M. Morshead – Assistant Professor  
Dr. J.A. Saint-Cyr - Associate Professor  
Dr. P.A. Stewart - Professor  
Dr. I.M. Taylor - Professor  
Dr. M.J. Wiley – Professor (Division Head)

PUBLICATIONS


INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Saint-Cyr JA: National Residents Seminar on Movement Disorders, Alliston, Ontario, February 2000. (1) Neuroanatomy, normal and pathophysiology of the basal ganglia, (2) Neuropsychology of basal ganglia.

**RESEARCH AND INVESTIGATIONS**
*Senior Investigator's Name Appears in Italics*


Deep brain stimulation effects on task-driven fMRI. *Saint-Cyr JA*: Natural Sciences and Engineering Research Council ($64,000 2000 - 2004).


**HONOURS RECEIVED**


*Taylor IM*: E. Mary Hollington Award for teaching in the pre-clinical curriculum, University of Toronto, June 2000.

*Taylor IM*: Harry Whittaker Memorial Teaching Award, University of Toronto, June 2000.
DIVISION OF BIOMEDICAL COMMUNICATIONS

D. Aldrich - Assistant Professor
K. Brine - Assistant Professor
K. Chorney - Lecturer
S. Gilbert - Professor
C. Godkin – Associate Professor
I. Healey – Lecturer
J. Jenkinson - Lecturer
N. Joy - Professor
L. Lax - Assistant Professor
M. Mackay - Associate Professor
L. Magdenko - Lecturer
D. Mazierski - Assistant Professor
S. Nancekivell - Assistant Professor
P. Reid – Lecturer
Dr. J. Semple – Associate Professor
Dr. S. Tulk - Assistant Professor
T. Watkinson - Assistant Professor
Dr. L. Wilson-Pauwels – Associate Professor (Division Head)
N. Woolridge - Assistant Professor

AUTHORSHIP (Textbooks, Journals, Theses or Papers)


JOURNAL ILLUSTRATIONS


TEXTBOOK ILLUSTRATIONS


**MEDICAL LEGAL ILLUSTRATIONS**
*(storyboard and digital output)*


**MULTIMEDIA/HYPERMEDIA**

**Website Development**

**Jenkinson J:** The Prostate Centre Website, 2000 - ongoing, [http://www.prostatecanada.net](http://www.prostatecanada.net)

**Lax L, Spero L:** Canadian Association for Medical Education Website, 1999 - ongoing, [http://dante.med.utoronto.ca/came](http://dante.med.utoronto.ca/came)

**New Media Design**


**Projection Media**

Anastakis D: Deltoid reconstruction with free muscle transfer slide presentation (Mackay MB: 4 illustrations).

Carlsen L: Rhytidectomy slide presentation (Mackay MB: 7 illustrations).

McKee M: Lateral collateral ligament tears of the elbow slide presentation (Mackay MB: 6 illustrations).
Video


Feature Film Storyboards

Fuque A, Brine K: Bait, Castle Rock.

Lemmon K, Brine K: Caveman Valentine, Universal.

O’Haver T, Brine K: Getting over Allison, Miramax.

Surjik S, Brine K: Bull, TNT/ Warner.

HEALTH COMMUNICATIONS


Chorney K: 11 illustrations on a poster to educate patients about the respiratory system and asthma. Merck Frosst/Headcan, Toronto, 1999.


SELECTED MEDICAL LEGAL ILLUSTRATIONS


Chorney K: 12 illustrations on a nine-panel courtroom exhibit on fracturing of the ankle joints: Artery Studios Incorporated, for Toronto Law Firm, Toronto, 2000.
Chorney K: 4 illustrations on two courtroom exhibits which detail brain injury, and concept of spinal fractures: Artery Studios Incorporated, for Ontario Law Firm, Toronto, 1999.


Chorney K: 3 illustrations on a courtroom exhibit on concepts of future long-term risks to the left eye: Artery Studios Incorporated, for Toronto Law Firm, Toronto, 1999.

PHYSICIAN EDUCATION


Aldrich D: 5 illustrations for print and projection depicting the pathogenesis of hepatitis C infection in the liver. Science and Medicine Canada, Markham, 2000.

INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Aldrich D: Art, Media and Non-Sense Lecture Series, Cleveland, Ohio, February 2000. Perception, emotional response and the present tense.

Gilbert S: Johns Hopkins School of Medicine, Baltimore, Maryland, April 2000. The history of embryological illustration at the Department of Art as Applied to Medicine.

Mazierski D: Association of Medical Illustrators, Atlanta, Georgia, July 1999. Developing and evaluating a digital anatomy lab.


HONOURS AND AWARDS

Aldrich D: Biomedical Communications Director's Award for Outstanding Contribution to the Profession of Medical Illustration, Division of Biomedical Communications, University of Toronto, September 1999.

Jenkinson J: Certificate of Appreciation for Excellence in Teaching, Division of Biomedical Communications, University of Toronto, April 2000.

Lax L: Biomedical Communications Director's Award for Innovation in Teaching, Division of Biomedical Communications, University of Toronto, September 1999.

Mazierski D: Certificate of Appreciation for Excellence in Teaching, Division of Biomedical Communications, University of Toronto, May 2000.
RESEARCH

Dr. C.E. Bayliss - Professor
Dr. L.L. Burrows - Assistant Professor
Dr. D.W. Courtman - Assistant Professor
Dr. K.D. Davis - Assistant Professor
Dr. M. Dennis – Associate Professor
Dr. J.H. Eubanks - Assistant Professor
Dr. L.G. Farkas - Associate Professor
Dr. G.R. Fernie - Professor
Dr. R.M. Gorczynski - Professor
Dr. S.J. Hamstra - Assistant Professor
Dr. P.J. Holliday - Research Associate
Dr. D.A. Houlden - Assistant Professor
Dr. W.D. Hutchison - Assistant Professor
Dr. A. Kapus - Assistant Professor
Dr. A. Krassioukov – Assistant Professor
Dr. R.K. Li - Associate Professor
Dr. M. Liu - Assistant Professor
Dr. G.L. Lukacs – Assistant Professor
Dr. B.E. Maki - Associate Professor
Dr. C.Y. Pang - Professor
Dr. J.S. Sandhu – Assistant Professor
Dr. G.A. Tait - Assistant Professor
Dr. E. Theriault - Assistant Professor
Dr. J.A. Wade - Professor
Dr. C. Whyne - Assistant Professor
Dr. C. Wittnich - Associate Professor

PUBLICATIONS


Davis KD, Kwan CL, Crawley AP, Mikulis DJ: Electrical nerve stimulation can be used as a tool in fMRI studies of pain and tingling-evoked activations. Pain Research and Management: May 2000: 5: pp 81-86.


**Walsh AG, Matewish M, Burrows LL, Monteiro M, Perry MB, Lam JS:** Genetic and chemical analysis of waaP and waaG of Pseudomonas aeruginosa: Lipopolysaccharide core phosphates are essential for cell viability. Molecular Microbiology: February 2000: 35: pp 718-727.


INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES

Davis KD: Israel Pain Society, Herzelia, Israel, August 1999. Can functional MRI be used to "see" acute or chronic pain?

Davis KD: International Brain Research Organization, Jerusalem, Israel, August 1999. Can functional MRI be used to "see" pain?


Farkas LG: Center for Neuropsychiatric Outcome and Rehabilitation Research, Glen Oaks, New York, April 2000. (1) Anthropometric landmarks of the head and face: The technique of identification of the soft and bony landmarks, (2) Basic anthropometric methods of the craniofacial complex: Demonstration of the linear projective, surface area, and angular measurements (inclinations and angles).


Li R-K: Visiting Professor, Cardiovascular Research Institute, Washington, D.C., June 2000. Autologous bone marrow and heart cell transplantation strategies for achieving myocardial angiogenesis and myogenesis.

Li R-K: Visiting Professor, Cleveland Clinic Foundation, Cleveland, Ohio, June 2000. Cell transplantation for cardiovascular disease.


Li R-K: European Society of Cardiology, Barcelona, Spain, August 1999. Fetal cardiomyocytes transplantation.


Maki BE: Centre for Rehabilitation Medicine/Emory University Medical School, Atlanta, Georgia, December 1999. Compensatory stepping, aging and falls.

Maki BE: Georgia Institute of Technology, Atlanta, Georgia, December 1999. Control of compensatory stepping and grasping: Effects of aging and stroke.


RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics


Balance control in Parkinson's disease: Biomechanical benefits resulting from the use of an "independence dog". *Maki BE*, McIlroy WE: SmithKline Beecham Pharma Incorporated ($6,000 1999).


Creation of viable graft material through tissue engineering for congenital heart surgery. Li R-K: The Hospital for Sick Children Foundation ($130,000 1998 - 2000).


Human studies of pain and temperature sensation. Davis KD: Medical Research Council of Canada ($251,314 1998 - 2001).


Neuronal contribution to delayed onset muscle soreness (DOMS). Theriault E: Natural Sciences and Engineering Research Council ($60,000 1996 - 2000).
Planning and organization of the International Conference on Technology and Aging to be held in conjunction with a federal/provincial/territorial meeting of ministers responsible for senior citizens. Fernie GR: Ministry of Energy/Science and Technology Ontario Seniors' Secretariat ($150,000 2000 - 2001).


**HONOURS RECEIVED**

**Fernie GR**: Best New Canadian Product for 2000 Canadian Hardware and Building Materials Show, April 2000.

**Liu M**: Scholarship Award, Medical Research Council of Canada, July 1999.

**Wittnich C**: Lister Prize, Department of Surgery, University of Toronto, May 2000.
EMERGENCY MEDICINE

Dr. P.A. Arnold - Assistant Professor  
(University Health Network)  
Dr. L. Fulton - Lecturer  
(Sunnybrook and Women's College Health Sciences Centre)  
Dr. B.A. McLellan - Associate Professor  
(Sunnybrook and Women's College Health Sciences Centre)  
Dr. S. Reicheld - Instructor  
(University Health Network)  
Dr. D. Saslove - Instructor  
(St. Michael's Hospital)  
Dr. D. Williams - Assistant Professor  
(Sunnybrook and Women's College Health Sciences Centre)

RESEARCH AND INVESTIGATIONS

Senior Investigator's Name Appears in Italics


CROSS APPOINTMENTS

Dr. A.J. Baker - Assistant Professor (Anesthesia)
   Dr. B.V. Bapat - Assistant Professor (Laboratory Medicine and Pathobiology)
Dr. P. Birek – Associate Professor (Dentistry)
Dr. A. Campbell – Assistant Professor (Medicine)
   Dr. J. Carson - Assistant Professor (Family and Community Medicine)
Dr. A. Damyanovich – Assistant Professor (Medical Imaging)
   Dr. J.E. Davies - Associate Professor (Dentistry)
Dr. A.M. Davis - Assistant Professor (Physical Therapy)
   Dr. W.A. Demajo - Assistant Professor (Anesthesia)
Dr. D. DePetrillo - Professor (Obstetrics and Gynecology)
   Dr. F. DiCosmo - Associate Professor (Botany)
   Dr. R.J. Eby - Lecturer (Medicine)
   Dr. V.L. Fornasier - Associate Professor (Laboratory Medicine and Pathobiology)
Dr. R. Gilbert - Assistant Professor (Otolaryngology)
Dr. M. Greenberg - Associate Professor (Pediatrics)
   Dr. M.D. Grynpas - Associate Professor (Laboratory Medicine and Pathobiology)
Dr. P.J. Gullane - Professor (Otolaryngology)
Dr. B. Harvey - Assistant Professor (Public Health Sciences)
   Dr. J. Irvine – Associate Professor (Medicine)
   Dr. G. Jackowski - Assistant Professor (Laboratory Medicine and Pathobiology)
   Dr. M.G. Johnston - Associate Professor (Laboratory Medicine and Pathobiology)
Dr. W. Kucharczyk - Professor (Medical Imaging)
   Dr. G.A. Levy - Professor (Medicine)
Dr. A. McDonald - Assistant Professor (Medicine)
   Dr. D.A.G. Mickle - Professor (Laboratory Medicine and Pathobiology)
Dr. M. Milner - Professor (Rehabilitation Science)
Dr. W. Montanera - Assistant Professor (Medical Imaging)
Dr. S. Narod - Associate Professor (Public Health Sciences)
   Dr. C.D. Naylor - Associate Professor (Medicine)
Dr. M. Ojha - Assistant Professor (Rehabilitation Sciences)
   Dr. K.P.H. Pritzker - Professor (Laboratory Medicine and Pathobiology)
Dr. R. Rameseshan – Lecturer (Radiation Oncology)
Dr. G. Regehr - Assistant Professor (Psychiatry)
Dr. P. Ritvo - Assistant Professor (Public Health Sciences)
Dr. A. Romaschin - Associate Professor (Laboratory Medicine and Pathobiology)
Dr. A.S. Slutsky – Professor (Medicine)
Dr. B. Steinhart - Instructor (Medicine)
Dr. D.E. Stewart - Professor (Psychiatry)
Dr. K.G. terBrugge - Professor (Medical Imaging)
Dr. R. Willinsky - Associate Professor (Medical Imaging)
Dr. G.J. Wilson - Professor (Laboratory Medicine and Pathobiology)
Dr. T.W. Wu - Professor (Laboratory Medicine and Pathobiology)

PUBLICATIONS


INVITED VISITS TO OTHER HOSPITALS/UNIVERSITIES


Damyanovich A: Canadian NMR Summer Institute, Waterloo, Ontario, July 1999. (1) NMR in biomedicine I: Body fluids and tissue extracts, (2) NMR in biomedicine II: In vivo spectroscopy.


Gilbert R: Visiting Professor, University of Alberta, Calgary, Alberta, April 2000. Recent advances in head and neck reconstruction.


Gullane PJ: Joint Shanghai/Hong Kong Surgical Convention, Hong Kong, China, January 2000. (1) Reconstruction of the oral cavity, (2) Facial nerve management in parotid cancer, (3) Subglottic tracheal stenosis, (4) Soft tissue sarcoma in the head and neck.


Gullane PJ: Canadian Society of Surgical Oncology, Toronto, Ontario, April 2000. (1) Targeting HMG-CoA reductase induces a pronounced apoptotic response in HNSCC, (2) Tumor derived cell lines: Re-evaluating a potential therapeutic approach.


Gullane PJ: University of Montreal, Montreal, Quebec, April 2000. Thyroid: Diagnosis and management.

Kucharczyk W: Brigham and Women's Hospital/Harvard University, Boston, Massachusetts, October 1999. (1) Basic principles of MRI, (2) Radiology of white matter diseases, (3) Imaging in hemorrhagic conditions.

Kucharczyk W: University of Minnesota, Minneapolis, Minnesota, September 1999. (1) Intracranial vascular malformations and fistulae, (2) A pattern recognition approach to the differential diagnosis of white matter disease.

Kucharczyk W: ISMRM, Denver, Colorado, April 2000. (1) Spin gymnastics I, (2) Spin gymnastics II.


Levy GA: World Congress in Pediatric Intensive Care, Montreal, Quebec, June 2000. Designer organs.


Levy GA: Canadian Transplant Society, Mont Tremblant, Quebec, March 2000. Xenotransplantation in the new millennium.


Naylor CD: International Conference on the Scientific Basis of Health Services, Toronto, Ontario, October 1999. Getting evidence into practice: What have we learned and what do we do next?


Pritzker KPH: Canadian Connective Tissue Conference, Quebec City, Quebec, May 2000. A novel articular cartilage molecule: Time course of dimethyldifluoropyrrole release from cartilage with acid hydrolysis.


Slutsky AS: South Brazilian Congress of Intensive Care, Porto Algre, Brazil, October 1999. (1) Lung injury induced by ventilation: An overview, (2) Mechanical ventilation as a cause of systemic organ dysfunction, (3) High frequency ventilation is dead? (4) Clinical trials in protective strategies.

Slutsky AS: Stanford University, Palo Alto, California, January 2000. (1) Mechanical ventilation: From barotrauma to biotrauma to bedside, (2) Ventilator-induced lung injury: From basic science to the bedside.


Stewart DE: Royal College of Physicians and Surgeons of Canada, Montreal, Quebec, September 1999. Plenary education session on resident harassment and intimidation.


Wilson GJ: Canadian Cardiovascular Society, Quebec City, Quebec, October 1999. Discussant: Workshop: Ischemic pre-conditioning.

RESEARCH AND INVESTIGATIONS

Senior Investigator’s Name Appears in Italics


Factors influencing dietary adherence in women at elevated risk for breast cancer. Irvine J: Princess Margaret Hospital Foundation ($100,000 2000 - 2001).


Role of glycolysis in preventing anoxic damage to neuronal function. *Tian GF*, Baker AF: St. Michael's Hospital Health Sciences Research Centre ($10,000 1999 - 2000).


The social science of novel biotechnology integration theme of CANVAC. *Irvine J:* Medical Research Council of Canada/Canadian Network for Vaccines and Immunotherapeutics of Cancer and Chronic Viral Diseases ($482,000 2000 - 2004).


Women's Health Institute. *Bellam P,* Grant K, Stewart D: Medical Research Council of Canada/Canadian Institutes of Health Research ($45,000 1999 - 2000).


**HONOURS RECEIVED**

*Naylor CD:* Heart and Stroke Foundation of Canada Lecturer, Canadian Cardiovascular Society, October 1999.

*Naylor CD:* Kenneth Brown Professorship, Division of Cardiology, University of Toronto, September 1999.

*Pritzker KPH:* Distinguished Service Award, Department of Laboratory Medicine and Pathobiology, University of Toronto, July 1999.

*Stewart DE:* Simon Bolivar Gold Medal for contribution and commitment to international women's health, July 1999.