On November 8, 1895, German Physics Professor Wilhelm Conrad Roentgen (1845-1923) worked in his darkened Wurzburg laboratory. His experiments focused on light phenomenon and other emissions generated by discharging electrical current in highly-evacuated glass tubes. These tubes, known generically as "crookes tubes," after the British investigator William Crookes (1832-1919), were widely available. Roentgen was interested in cathode rays and in assessing their range outside of charged tubes. To Roentgen's surprise, he noted that when his cardboard shrouded tube was charged, an object across the room began to glow. This proved to be a barium platinocyanide-coded screen too far away to be reacting to the cathode rays as he understood them. We know little about the sequence of his work over the next few days, except that while holding materials between the tube and screen to test the new rays, he saw the bones of his hand clearly displayed in an outline of flesh. It is impossible for observers accustomed to modern imaging to gauge the mixture of wonder and disbelief Roentgen must have felt that day.

(please see Radiology, pg.5)
Dear Editor,

It was good to see you on the MRHV Website. (I'm visible on the Society of Thoracic Surgeons Website). It has been many a year since Geoff Lehman and I visited with you at a delightful evening reception on the Plains of Abraham in Quebec City while at a meeting. I've retired from surgery in 1985 - going to law school at that time. Now I'm living in New Canaan, CT and busier than ever with health law and medical malpractice matters. Geoff is now in Naples, FL. My best wishes to you for the New Year.

Frank Coughlin, MD, FRCS '57 - Diploma Course '53-'57.

Dear Editor,

I enjoyed reading "The History of Medicine at McGill" in the Square Knot, authored by Dr. R.L. Cruess. I have recently obtained some information about Dr. Cox and the early use of x-rays at McGill, which I would like to share with you as a vignette on x-rays and the liaison of McGill University, Dr. Cox and Professor Puluj.

A historical event took place at McGill University in the MacDonald Physics Building on 7 February 1896 when the first x-ray plate was taken in Canada. Dr. John Cox (1851-1923) with Mr. King and Mr. Pitcher, technicians, used a Puluj tube and a fluorescein screen to produce an x-ray plate of a hand and of a leg with a bullet in it. It is of interest that the Puluj tube was of superior quality at that time, being used in Europe and also at Dartmouth College in New Hampshire in 1896. Cox was Professor of Physics at McGill and along with Dr. R.C. Kirkpatrick, Surgeon to the Montreal General Hospital, collaborated to produce an article in the Montreal Medical Journal in 1896 describing their experience with x-rays.

Puluj was born in Hrymaiviv, Ukraine and produced a vacuum tube in 1877; in 1879 and in 1886 he recorded the radiation phenomenon on a photographic plate. In 1889 he noted that photographic plates remained black when exposed to the cathode rays from his tube; however, he did not recognize the phenomenon as x-rays. It was left to Professor Roentgen of Wurzburg some seven years later to report to the world the x-ray phenomenon in December 1895. On 8 February 1896 Puluj x-ray photographs of high quality of a tuberculous area were published in French and Czech journals. On 3 April 1896 his x-ray photograph of the skeleton of a seven-month fetus was published in London, England.

The applications of these discoveries have truly revolutionized the practice of medicine in the world. Ukraine issued a stamp in honour of Puluj in 1995 and Austria also issued a stamp in 1995 depicting his cathode ray tube.

I was an orthopedic resident during 1965-66 at the Royal Victoria Hospital and Shriners Hospital in Montreal during the time when "Expo '67" was being constructed and was able to watch its construction from a distance on the hill above the "Royal Vic," a truly exciting time. I recall fondly my teachers, Richard Cruess, Gordon Petrie, Igor Bitenc, A. Butler, Bixby Wright, R.G. Townsend, W.E. Wilson, H.F. Moseley, Martin Entin and N.S. Mitchell, and to them I am grateful for the training I received.

References:

Ihor Mayba, M.D., FRCS

Dear Editor,

Happy Holidays from California. Thanks for keeping the issues up and getting to the West Coast. ♦

Stephen McCartney,
Vascular Fellow 1987-88, CV&T Department.

Upcoming Events

February 26, 1998
McGill University General Surgery Day
Invited Lecturer - Dr. Stewart M. Hamilton Chair, Department of Surgery, University of Alberta.

April 1-4, 1998

April 9, 1998
General Surgery Combined Rounds (held at 5:30 P.M. in Osler Amphitheatre, MGH) Jewish General team presenting.

May 14, 1998
Run-off competition for Fraser Gurd Research Day (1:00 - 4:00 P.M. in Archibald Amphitheatre, RVH).

May 14, 1998
General Surgery Combined Rounds (held at 5:30 in Osler Amphitheatre, MGH) Montreal General team presenting.

May 28, 1998
Fraser Gurd Day

June 4-5, 1998
Stikeman Visiting Professor Dr. Denton A. Cooley Texas Heart Institute.
THE RVH EMERGENCY DEPARTMENT
MUST STAY OPEN

Recently, the Clinical Integration Committee (CIC) has made a number of recommendations regarding its mission to establish the McGill University Health Centre (MUHC). We disagree with one of these. During the transition period, until we move into a new single facility in 2004, the plan is that there be a single merged Emergency Room and that this adult Emergency Room and the related Emergency Services be situated at The Montreal General Hospital. This would mean that the Emergency Department of the RVH would be closed. When these issues were discussed in the Jeanne Timmins Amphitheatre at the MNH in November and when again presented by the Chair, Doctor Sarah Prichard, in the RVH JSL Browne Amphitheatre on December 8th, there was much consternation by some of the MNH and RVH Staff.

There is no doubt that the Emergency Physicians of both the RVH and the MGH desire a single ER site as soon as possible. They desire a single department and integrated adult emergency services. When we move into the new “superhospital” in the year 2004, then we will have a unified Emergency Department. The debate is whether we should have unified emergency services in the interim (which means the closure of an Emergency Department) or whether we should have integrated emergency services until then.

It is our opinion that there should be serious reconsideration concerning the closure of the RVH Emergency Services for the following reasons:

1. The Emergency Rooms of the RVH are new and are “State of the Art”, as regards Ambulance Entrance, Receiving Rooms, Triage, 10 bed observation area, examination facilities and treatment rooms. It is situated in a new Centennial Building which also houses other Critical Care Areas.

2. It is a fallacy to consider that a Tertiary Care Hospital does not need a Portal of Entry into its Health System. There is always a need for Primary Care or Continuing Care to patients who have been treated in that building or facility or pavil-

ion. I do not want to use the term “institution” here as the whole MUHC is an institution of which we all are a part.

3. There would be a dereliction of our Community and Social Responsibilities to close another Emergency in Montreal at this time.

4. There would be an adverse effect on the MNH. It must be remembered that the Emergency Services of the RVH are also those of the MNH. Dr. André Olivier, Neurosurgeon-in-Chief, affirms that the MNH would become the only Neurological Centre in Canada without an Emergency Room. He fears the negative implications.

5. Closure of the RVH Emergency Department during the 7 year interval would toll the death knell to the RVH Department of Surgery. At the RVH, 90% of admissions to Medicine and 30% of those to Surgery are through the ER. In 1997, there were 1,459 Surgical Admissions. From April 1st to October 11th, 896 patients were admitted to Surgery, of which 72 went directly from the ER to the MOR.

6. It would be unfair to our benefactors who donated close to 7 million dollars towards the construction of this new Emergency.

We feel that it is better to have integrated Emergency Services during the planning of the MUHC rather than a unified Emergency at the MGH.

“THE DOCTOR IS IN COURT ON TUESDAYS AND WEDNESDAYS”
— The New Yorker
MUHC Appoints a New Chief

By E.D. Monaghan, M.D.

On December 12th, 1997, the Selection Committee appointed Dr. Hugh Mackay Scott as Executive Director for the super hospital which is expected to be built by the year 2004. Senator David Angus, a Montreal lawyer who chaired the Search Committee during the last few months of 1997, maintained that there were ten candidates interviewed for the job. McGill Principal, Bernard Shapiro, also was a member of the Selection Committee.

Hugh graduated from Queen's University in 1961. He is well known to our Department of Surgery, having worked in our surgical labs at the RVH with Drs. Lloyd MacLean, John Duff and Dwight Peretz in the mid 60s. Later he was Head of Medicine at the University of Sherbrooke Medical School and then became Associate Dean of Postgraduate Medical Education at McGill under Dr. R.L. Cnoss from 1983 to 1986. He then went to Bishop's University where he became Principal and Vice-Chairman. Since 1995, he has been Executive Director of the Royal College of Physicians and Surgeons in Ottawa. He is expected to take his post as Executive Director of the McGill University Health Centre on March 9th.

He will have quite a responsibility! The MUHC has a 400 million dollar annual budget and employs some 10,000 staff and 2,000 physicians and surgeons at its four hospital sites: The Montreal General, Royal Victoria, Montreal Neurological and Montreal Children's. It is expected to be one of the largest teaching hospitals in the country. The MUHC spokesperson, Chantelle Beauregard, informs us that a special committee is looking at possible sites for the new mega-centre. This Task Force is composed of McGill architecture Professor Bruce Anderson, Montreal Architect Philip Webster, and ex-Alcan President David Culver. Their decision would have to be approved by the Quebec government.

Hugh will face many challenges in his new role. He will face many rivalries and will have major chronic deficits to tackle as well as the building of a new super hospital. However, colleagues who have worked with him in the past when he was here as senior physician at the Royal Vic and Associate Dean of Medicine will remember the bilingual Scott to be very congenial and a proficient consensus-builder.

The Square Knot wishes him well. ◆

D r. Marc Pelletier, a 4th year cardiac surgery resident, is the recipient of the TSDA (Thoracic Surgery Directors Association) Resident Research Award for 1998, as his research work presented at the Society of Thoracic Surgeons Annual Meeting was judged as the best paper by a resident from those submitted by residents all over North America. His prize winning paper is entitled Angiogenesis and Growth Factor Expression in a Model of Transmyocardial Revascularization, which he carried out in Dr. Ray Chiu’s laboratory during his academic year as a third year resident in Cardiac Surgery. Among his collaborators were Dr. Julia Dorfman (4th year cardiac resident) and Dr. Carlos Li (clinical and research fellow in Cardiac Surgery). The name of the awardee was announced both at the TSDA meeting, and during the Plenary Session of the Society of Thoracic Surgeons to more than 3,000 cardiothoracic surgeons from all over the world attending the meeting of this Society, which is a leading organization in Cardiothoracic Surgery. Dr. Pelletier is to be congratulated for bringing this honor to himself, and to our Residency Program. ◆
He plunged into seven weeks of meticulously planned and executed experiments to determine the nature of the rays. He worked in isolation, telling a friend simply, "I have discovered something interesting, but I do not know whether or not my observations are correct." In fact, one wonders if Roentgen's experiments were as much to convince himself of the reality of his observations as to enhance the scientific data supporting the phenomenon.

Radiology
(continued from pg. 1)

On December 28, 1895, Roentgen gave his preliminary report, accompanied by experimental radiographs and by the now famous image of his wife's hand. By New Year's Day, he had sent the printed report to physicist friends across Europe. January saw the world gripped by "x-ray mania," and Roentgen acclaimed as the discoverer of a medical miracle. Roentgen, who won the first Nobel Prize in Physics in 1901, declined to seek patents or proprietary claims on the x-rays, even eschewing autonomous descriptions of his discovery and its applications.

Milestones in Radiology
1896: Within months following Roentgen's discovery, the first clinical radiographs in Canada were performed in the Rutherford Lab at McGill.
1913: First Plastic X-ray Film
1925-1930: Angiography & The First Usable Contrast Medium
1935: Canadian Association of Radiologists Formed
1949: First Image Intensifier
1952: First Clinical Ultrasound of Soft Tissue
1964: Shoe-fitting Fluoroscopes Abandoned
1969: The World's First Dedicated Chest Radiograph Machine Installed at the Royal Victoria Hospital
1970: Hounsfield & Cormack Developed Computed Tomography
1985: First Canadian High-Field MRI at MNI

McGill - Past & Present
Doctor J. Scott Dunbar, Chairman 1969-1972, an icon in Pediatric Radiology, founding member of the Society of Pediatric Radiology. This was the first subspecialty society in Diagnostic Radiology. Dr. Dunbar and associate Dr. Bernadette Nogrady well known internationally for their work in genitourinary radiology and his now famous "crescent sign".

1896, First X-Ray (Shoulder)

Dr. Robert G. Fraser, Chairman 1972-1976, consummate teacher, very active in many radiology organizations and is the founder of the Fleischner Society, an international and interdisciplinary group dedicated to the study of diseases of the chest. His most significant contribution to this field is the multi volume work Diagnosis of Diseases of the Chest, first published in 1970. This work has become the standard reference text in the field of pulmonary radiology and has been translated into approximately 20 languages.

Dr. Max J. Palayew, Chairman 1978-1987, a student of Dr. Benjamin Felson, only McGill Faculty of Medicine Department Chairman to be based at the Jewish General Hospital, past President of the Canadian Association of Radiologists, prolific teacher of chest radiology.


Dr. Ross Hill 1960-1994, Musculoskeletal Radiologist, teacher, prolific team-player who always represented McGill in the most honorable fashion possible. Past President of the Canadian Association of Radiologists and Member of the McGill Board of Governors.

Dr. Patrice M. Bret, Chairman 1992-1997, expert in Hepato-Biliary and Pancreatic Imaging, recruited a team of abdominal radiologists to create a division of international repute.

Technological Explosion
There has been, in the past three decades, a rapid growth in the capacity of physicians to "image" disease. This "medical-scientific phase" of radiology began with Hounsfield and Cormack's invention of CT. Thus also began the transition from analogue to digital imaging. The modern tomographic methods all provide sectional images in one or more planes, avoiding the superimposition of structures that still characterize a chest radiograph. Some techniques also use computer image processing but do not yield sectional data (e.g. digital subtraction angiography and magnetic resonance angiography). It is important, nevertheless, to note that the chest radiograph is still the most common radiological procedure.

Advanced three-dimensional imaging and new catheter techniques have led to the interventional radiological development. Led by Dr. Joachim Burhenne who described extraction of retained biliary stones through the t-tube tract, interventional radiology has matured into an important subspecialty which touches upon and often alters the management of many serious medical and surgical problems. As with surgery, the success of an interventional procedure often de-
PENDS NOT ONLY ON THE OPERATOR'S BACKGROUND, KNOWLEDGE, JUDGEMENT, AND FINESSE, BUT ALSO ON AN ASSOCIATED GRASP OF A WIDE RANGE OF ALTERNATIVE TECHNICAL MANEUVERS ON WHICH TO DRAW DURING MANAGEMENT OF A DIFFICULT CASE. MANY OF US REMEMBER THE DOUBT CAST BY MANY SURGEONS BY THE SUGGESTION THAT AN INTRA-ABDOMINAL ABSCESS CAN BE DRAINED WITH A 7-10 FRENCH PIGTAIL CATHETER INSERTED PERCUTANEOUSLY. THIS PROCEDURE, NOW COMMONPLACE, SUPPORTS VERY COMPLICATED SURGICAL PROCEDURES SEEN IN McgILL'S TERTIARY CARE CENTRE.

INTERVENTIONAL RADIOLOGY

- Vascular interventional procedures: For diagnosis and treatment of arterial hemorrhage, percutaneous balloon angioplasty, and thrombolysis are now performed routinely in all Mcgill hospitals.
- Biopsy and aspiration procedures using fluoroscopy, CT scan, and Ultrasound.
- Percutaneous abscess drainage. All are readily available day and night.

Collaboration between the departments of radiology and surgery has been extensive and strong. Following a trip to New York (1984), Drs. Mostafa Elhilali and Lawrence Stein performed the first percutaneous nephrostomies in Canada. Since that time, the approach to kidney stone disease and urinary tract obstruction has changed dramatically, the percutaneous approach to the urinary tract now avoiding the previously common open drainage procedures. Similarly, percutaneous biliary decompression for stones and tumours avoid complicated surgery.

Who would have thought that radiologists would replace the surgical porta caval shunt and its associated high mortality and morbidity! Dr. Roland Brassard has performed over 50 TIPS procedures, often in conjunction with the Mcgill Liver Transplantation Program.

RESEARCH IN THE FIELDS OF:

- MRI biliary imaging (Caroline Reinhold, M.D., Mostafa Atri, M.D., Patrice M. Bret, M.D.)
- Obstetrics and Gynaecology, the diagnosis and management of ectopic pregnancy (Mostafa Atri, M.D., Caroline Reinhold, M.D.)
- Hepatic CT imaging and the role of contrast material, very innovative work has been performed on the three-phase study of the liver by Drs. P.M. Bret, C. Reinhold and M. Atri.
- Musculoskeletal imaging, Drs. Reby Chhem and Jacqueline C. Hodge and collaborative work with the Department of Orthopaedics, Drs. Lawrence A. Stein and Nelson S. Mitchell have evaluated normal and abnormal knee motion.

Dr. Caroline Reinhold was the first Canadian recipient of the GE-AUR Scholarship (1996-1998) to support her cost-effectiveness and clinical outcomes study relating to MRCP and ERCP. She will receive a Masters Degree in Clinical Epidemiology following this work.

Service, research, and teaching are the hallmark of every academic department. Teaching of radiology at all levels is strong. Radiology Teacher-of-the-Year Awards have gone to Dr. Norman Just, Dr. Roland Brassard, Dr. Raquel delCarpio and Dr. Jacqueline C. Hodge. The new Mcgill medical school curriculum includes 500 hours of radiology teaching which commences in the first days of anatomy education. Mcgill students are exposed to more radiology than any other Canadian student!

THE FUTURE

We can assume that the sophistication of interventional procedures will increase such as percutaneous repair of aneurysms, complex endovascular procedures, seating of longer stents, and neurovascular procedures.

NETWORKING AND PACS

(Picture Archiving & Communication Systems)

PACS has tremendous benefits and values outside of radiology as well as internally. The biggest benefit derived from a PACS is breaking the physical as well as time barrier for information exchange. The other benefits from PACS implementation is not the decreased operating cost in radiology. The radiology cost benefit, while significant, does not compare with the system-wide benefits of networking images throughout the MUHC. The department is aiming to operate in a totally flexible environment within three years! We will achieve greater cost-effectiveness through continuous process improvements and the way patients pass through our departments. We will play a developmental role in the structuring of clinical outcomes and critical pathways, develop more stringent guidelines and practice standards, and better assess the cost-effectiveness of our technologies. We will accentuate the non-invasive. Because of the steady growth of our elderly population and the expert care that they will require, Geriatric Radiology waits to be born and, as the best teachers about what we do and provide, Radiologists in all specialties will develop their roles as consummate educators of the growing cadre of primary care physicians and the "virage ambulatoire!"
Begning in April 1997, the Division of Surgical Research embarked on a wide-ranging exercise to completely restructure the graduate program in Experimental Surgery with a view to making it a more relevant and meaningful experience for both non-MD graduate students and our surgical residents.

**News from the Division of Surgical Research**

By Lawrence Rosenberg, MD, Director

Three complementary directions are being pursued. First, existing courses were reviewed and are in the process of being extensively revised or dropped completely. Second, a newly constituted Course Curriculum and Program Committee, under the direction of Dr. Anie Philip, is preparing to send proposals for several entirely new courses, including Signal Transduction and Experimental Design and Biostatistics for Basic Surgical Scientists, to the Faculties of Medicine and Research & Graduate Studies for their approval. The keystone Bench-to-Bedside course, coordinated by Dr. Pnina Brodt, has completed the initial phase of a two-year overhaul, and will reflect a more focused approach to presenting fundamental problems in surgical research, as well as an expanded section dealing with scientific writing, including the preparation of grant applications. Finally, an entirely new program in Surgical Epidemiology, under the direction of Dr. John Sampalis, is being readied for introduction in the next academic year.

Surgical Epidemiology in the Division of Surgical Research will be a three tiered program. At the most basic level, Dr. Sampalis has designed the course Experimental Design and Biostatistics, alluded to earlier. This course is targeted to students in the graduate program pursuing basic science research, and represents the minimum knowledge of statistics required for a degree (MSc or PhD) in Experimental Surgery. Next, and perhaps most exciting, is a six-month diploma program in Surgical Epidemiology (30 credits), with an orientation on technology assessment and outcomes analysis. This program will be offered initially only to surgical residents, especially those in General Surgery, who are required to complete 4 1/2 clinical years of training to fulfill the requirements to sit the examination of the American Board of Surgery. Finally, a Master's/PhD program in Surgical Epidemiology is also being readied to be sent for university approval next year.

The changes that are outlined above represent only a soupcoupe of what is to come. The transformation of the graduate program in Experimental Surgery will probably require another two to three years to be completed.

Anyone who is interested in obtaining additional information about any of the courses or programs discussed in this overview is encouraged to contact myself, Dr. Anie Philip or Dr. John Sampalis.

Under the direction of Dr. John Sampalis, trauma research in the Department has flourished and has evolved into one of the top ranking and successful injury research programs in the world. With over two million dollars in research funds and over 20 publications in high ranking journals including the Journal of Trauma, the McGill Trauma Research Program could certainly be considered among the successes of our Department.

The Quebec Trauma Registry which was created, centralized and coordinated at The Montreal General Hospital has become the envy of all Registries. With over 15,000 patients and 85% of the 99 hospitals participating, the Trauma Registry has become a source of data that is being used to direct the evolution of the Quebec Trauma Care System. The results of these studies are also having important impact on trauma care systems in the rest of Canada and the world.

Funding for research is extremely sparse these days. However, despite these difficult times, the Trauma Registry has received continued funding. In addition, a study will be conducted that will compare pre-hospital trauma care in Montreal, Quebec City, and Toronto. This will be the most important study on trauma care ever conducted in Canada since it will compare all possible systems. The results of this study will provide the necessary data to give a final answer to the ongoing debate surrounding pre-hospital trauma care. The study will be funded by the NHRDP.
McGill Staff Defrocked by Residents

By Daniel E. Swartz, M.D.

McCONNELL ARENA, DECEMBER 9, 1997

In an unprecedented coup de resistance, the defending champion staff hockey team was stripped of their title as the residents skated home with the second annual Rea Brown Cup after a final score of 6-3. Tensions were high at the outset when several members of the staff team taunted the residents with threats of unsatisfactory evaluations and remedial rotations.

The scoring opening at 9:15 in the first period in a three-man rush with resident Jeff Sankoff's high glove-side shot assisted by residents Marc Pelletier and Robby Stein caught staff goaltender Ken Shaw unawares. Less than two minutes later the residents potted their second from the point by defense man John Borkowski assisted from Tim Assimes with the residents now leading 2-0. Flawless goaltending by resident Tarek Razek kept the raucous staff team at bay. Staff player Kevin Lachapelle was sent to the penalty box at 17:41 for holding, but the period ended with the residents unable to capitalize on the power play. Staff players Peter McLeod, Larry Stein, Scott Delaney and captain Ash Gursahaney provided a resilient display of penalty killing.

The first ten minutes of the second period were scoreless despite numerous shots by the resident team against the impenetrable barrier named Ken Shaw. Picking up a loose puck at center ice, resident Vinay Badhwar picked through the staff defenses to score unassisted at 9:55 and take the lead 3-0. Resident Ted Lawson checked in on the scoreboard at 11:33 with a low corner shot assisted by Jeff Sankoff. Rallying back from their humble beginnings, the staff scored at 13:20 on a low wrist-shot from the hash marks by Ed Harvey assisted by Remi Chehade. Although containing the attack in the staff zone, brilliant efforts by residents Roman Jednik, JP Capolicchio and Sohrab Lutchmedial went unrewarded as they were stonewalled by goalie Ken Shaw ending the second period with the residents leading 4-1.

The final period opened with the staff team turning up the heat and intensity. Altering their strategy, the staff began double shifting star players Ed Harvey, Remi Chehade and Scott Delaney, but were left empty-handed due to the tight defense work of residents Brian Birchenough, Kent MacKenzie, Vidal Essebag and Dan Swartz with the seamless trappings by goaltender Tarek Razek. Caught for interference, Kent MacKenzie of the residents and Peter Goldberg of the staff team were sent off to serve time at 6:00 and 7:00 respectively. Efforts by staff players Jean-Francois Morin, Dave Fleischer and Jim Foxford went unrewarded as the residents potted their fifth at 14:55 on a point shot by John Borkowski from a drop pass by Ian Patterson and Sohrab Lutchmedial. Resident Ted Lawson found the hole in Ken Shaw's glove at 18:20 on an assist by Robby Stein to bring the score to a humbling 6-1. The staff scored two more goals on shots by Jim Foxford and Remi Chehade in the final minutes of the game. One final rush by the staff employing the unorthodox "Foxford plan of six men on the ice without pulling the goalie failed to yield a score. Resident team coach Andrew Seely declined the penalty call and the game ended triumphantly for the residents with a final score of 6-3.

Dr. Brown came onto the ice after the buzzer to present the coveted trophy to the residents. For their exemplary efforts in putting down the geriatric insurrection, residents John Borkowski and Vinay Badhwar were presented with the first and second stars of the game. Staff goaltender Ken Shaw received the third star for ... well because he's such a nice guy. The battle over but the war heating up, the staff were overheard plotting next year's revenge as they took refuge in their dressing room, cracking open their cache of Ben Gay and Ibuprofen.
Duck Huntin' Docs

A family practice doc, an internist, a surgeon, and a pathologist are out one day duck hunting. First up is the FP doc— he raises his gun to take aim at a flock of birds passing overhead and says to himself, "Looks like a duck, flies like a duck, quacks like a duck, it must be a duck." BANG! He bags himself a duck. The internist then steps up, raises his gun to take aim at a second flock of birds flying overhead. He says to himself, "Looks like a duck, flies like a duck, quacks like a duck, rule out quail, rule out pheasant, goose versus duck likely." BANG! He, too, bags himself a duck. A third flock of birds then flies overhead and the surgeon steps up and raises his gun at the flock. BANG! BANG! BANG! BANG! BANG! He fires multiple rounds at the flock and dead birds are dropping all around. The surgeon lowers his gun, walks over to one of the dead birds, picks it up, hands it to the pathologist and says, "Tell me if this is a duck."
The Surgical Education Corner
— By R. Zelt, MD, MEd, FRCS

The Corner is back after a brief absence from the last issue with more exciting news and positive changes taking place in Surgical Education at McGill.

DIVISION OF SURGICAL EDUCATION
Foremost on the list of positive developments is the newly created Division of Surgical Education in the Department of Surgery. McGill's newest division will oversee all educational efforts in the Department of Surgery in either a leadership or advisory role. The organization of the new division will be as follows:

UNDERGRADUATE
Manage the Introduction to Clinical Medicine (ICM-C) and Principles of Medicine (POM) programs encouraging a close working relationship between the teaching hospitals and the Faculty of Medicine. Our programs will be reviewed and improvements made to ensure a healthy mix of horizontal and vertical integration of learning materials.

CORE SURGERY
Manage the Core Surgery program - the first two residency years of all our surgery programs here at McGill.

SUBSPECIALTIES:
Play an advisory role to the surgical subspecialties at McGill. Areas of teaching expertise among our surgery programs will be identified and shared. Streamlining of services will be encouraged.

RESEARCH
A PhD will be hired to help manage this arm of the new division. Areas of research will be identified and faculty encouraged to participate in education related research activity.

FACULTY DEVELOPMENT
A close working relationship will be encouraged between our new division and the Office of Faculty Development under the direction of Yvonne Steinert. Our own Larry Conochie is a member of her team and will head up this arm of the new division created to provide learning experiences to our staff on surgical education issues.

The search for a Director for the new division is in its final stages and will be announced in the next issue of the Knot.

UNDERGRADUATE SURGERY
Undergraduate surgery has continued to develop and improve within McGill's new medical school curriculum. We have just begun our third year of Introduction to Clinical Medicine (ICM-C) and Principles of Medicine (POM) and our feedback has been very positive. Ron Zelt has stepped down as Unit Head of ICM-C and has handed the reigns over to Sarkis Meterissian from General Surgery at the Royal Victoria Hospital. Sarkis has taken over with much energy and enthusiasm for teaching. He will enroll in McGill University's new Clinical Educators program the fall and spend a year improving his surgical education skills.

CORE SURGERY
Core Surgery has undergone major changes this year with a complete revamping of our entire program. As the Royal College of Canada studies Core Surgery across Canada, McGill is taking the lead developing an exciting new program to prepare our junior residents to enter into their specialty training programs. Here are some facts concerning the new program.

- There are currently 56 residents in the first two years of our specialty programs and the number is increasing.
- To help the residents learn the principles of surgery, we have developed a unit based learning program lasting two years. Units range in length from 3 to 7 weeks and each unit has been assigned a clear set of objectives governing its learning experiences. Staff from all specialties have agreed to head the various units and serve as the organizers of the learning experiences during their respective units. Teaching will be focussed on practical issues, stressing hands on and interactive learning experiences.
- A surgical skills program is being developed and will undergo pilot trials before the end of this academic year. There will be an emphasis on dry bench teaching and a "back to basics" approach to improving the technical skill of our residents. We will be reviewing the operative experiences of our junior residents and will formulate a set of guidelines to increase their operative exposure.
- We have begun the task of developing a set of objectives for the clinical rotations in Core Surgery. When beginning a three month rotation in Orthopedic Surgery, for example, residents will receive a clear set of learning objectives and an outline of their intends learning experiences. Methods of ensuring the objectives will be developed and the entire process evaluated with the aid of the computerized PET program.
- All unit heads will be using computer presentation software (eg. Powerpoint) to present their learning
> experiences during the first six months of our program. Others will be encouraged to develop their computer skills and use cutting edge educational methodology to teach the Principles of Surgery.

**RESEARCH IN SURGICAL EDUCATION**

The search committee has completed its interview with PhD candidates. Once the Division Director is named, he or she will help choose the person to head the research arm of the new division. This person will be identified in the next issue of the Knot along with the areas of research McGill's team will pursue.

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**Core Surgery: Principles of Surgery Learning Program**

*MCGILL UNIVERSITY, DEPARTMENT OF SURGERY*

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<td><strong>SURGICAL SKILLS</strong></td>
<td>3 wks</td>
<td>3 wks</td>
<td>3 wks</td>
<td>3 wks</td>
<td>7 wks</td>
<td><strong>BREAK</strong></td>
<td>4 wks</td>
<td>3 wks</td>
<td>6 wks</td>
<td>4 wks</td>
<td></td>
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| BREAK | Unit 10 Postop Care Six Pt | Unit 11 Septic Infections | Unit 12 Legal & Ethical Issues Bilestasis, Eipid | Unit 13 Transplant Implant | Unit 14 Hemolyse's Shock | SUMMER BREAK |
| **SURGICAL SKILLS** | 4 wks | 4 wks | 4 wks | 4 wks | 3 wks |

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**Good ... Quick ... Cheap...**

The three best attributes of a project is that it be a good project, quickly done and cheap. But there is a dilemma:

- Good and Quick = Not Cheap
- Good and Cheap = Not Quick
- Quick and Cheap = Not Good

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**Were You There? 1970 Official Opening of Mammography Clinic - RVH**

(Left to right) Dr. Frank Grainger looks on as Dr. Rolla Wilson points out an interesting finding in an X-ray film to Dr. Henry Shibata.

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**H. ROCKE ROBERTSON VISITING PROFESSOR IN TRAUMA SURGERY**

Congratulations to all the residents who presented cases during the 3rd Annual H. Rocke Robertson Day on Jan 22, 1998, Canada's only Trauma Visiting Professor Day. The quality of the talks was excellent and talks were given by residents from all surgical specialties.
At the 3rd Annual H. Rocke Robertson Day on January 22nd, Dr. David Mulder was recognized for his appointment to the Order of Canada to a full house in the Osler Amphitheatre. The Order of Canada recognized people who have made the difference to our country. From local citizens to national and international personalities, all Canadians are eligible for the Order of Canada - our country's highest honour for lifetime achievement. Created in July 1, 1967, the Order of Canada is the centerpiece of our national honours system, which includes orders, decorations and medals. The Order is a fraternity of merit that recognizes significant achievement in important fields of human endeavour. The Latin motto, *desiderantes melorem patrim* proclaims the aspirations of members of the Order of Canada who, in their lives work, have demonstrated that "they desire a better country."

Dr. Mulder was recognized for the leadership role he has played in the development of a trauma care system in Québec as a member of the Trauma Committee of the Province of Quebec and his lifelong devotion to surgery and health care. The thunderous applause and lengthy standing ovation in his honour were a testament to his contributions to McGill. The word on the street has it that his standing ovation eclipsed that for Maurice Richard at the Forum a few years back but this cannot be confirmed at this time.

For more information on the Order of Canada, see the Governor General's website at: www.gg.ca

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Until recently, athletic related concussion was an issue not fully addressed by the neurosurgical literature. Current interest has grown to the extent that entire sessions at neurosurgical international meetings are devoted to this topic. My clinical and research practices reflect this interest and as such, I have recently opened the Neurosurgical Sport Medicine Clinic at McGill. With the help and support of Drs. David Mulder and Vincent Lacroix as well as other members of the sport medicine team, I have been able to establish this clinic held weekly at the McGill Sport Medicine Clinic, devoted to the neurosurgical care of injured athletes. In this clinic, I see members of various sport groups in the vicinity including McGill Varsity, Montreal Alouettes, Montreal Canadiens as well as Olympic contestants. This clinical association provides a unique opportunity to pursue research in the field of concussion, particularly in the areas of neuroimaging and neuropsychological correlates.

While providing specialized care for the athlete, we will also offer further training for fellows, graduate students and residents in both sport medicine and neurosurgery and establish a data base for ongoing research. Our goals for this work are to contribute to the growing field of neurosurgical sports medicine from both clinical and academic perspectives.

Karen M. Johnston, MD, Ph.D., FRCSC
McGill Division of Neurosurgery & Sport Medicine Clinic
Dr. Jeffrey Barkun has been named a Member of the Conseil d'évaluation des technologies de la santé du Québec on the recommendation of the Ministre de la Santé et des Services sociaux.

KUDOS!!

Dr. Ray Chiu has been elected to the Canadian Institute of Academic Medicine, and appointed to the Editorial Board of the Journal of Thoracic and Cardiovascular Surgery. He was an invited speaker at a symposium on “What’s New and Innovative in Cardiothoracic Surgery” in Minneapolis, USA on October 25th, 1997; an invited lecturer at the International Symposium on the Management of Patients with End-stage Heart Failure at King Fahad Hospital, Riyadh, Saudi Arabia on December 3rd and 4th, 1997; and a guest lecturer at the Asian Pacific Congress of the International College of Surgeons in Taipei, Taiwan on December 14th, 1997. At that time, he also served as a Visiting Professor at Chang Gung Memorial Medical Center in Kaoshiung, Taiwan, assisting them in setting up the Master of Science Program for Surgical Research headed by one of his previous research fellows, Dr. George Chuang.

Dr. Nicolas V. Christou and his wife Katina visited Vancouver and Whistler from November 25th to 30th. The reason for this trip is that Nick was the Royal College Visiting Professor at the UBC Department of Surgery 13th Annual Surgical Update on Sepsis in Surgery. Their visit was hosted by Drs. Richard Finley and Nis Schmidt. He gave three addresses: 1) The Delayed Type Hypersensitivity Response in Surgery: What Have We Learned in 25 Years?; 2) How Sepsis Affects Host Defense; and 3) Host Defense Mechanisms in Surgical Patients: Friend or Foe?

Drs. Hélène Flageole and Jean-Martin Laberge in collaboration with Dr. Bruno Piedboeuf from Quebec City were successful in obtaining a three year MRC Grant for their research on Temporary Fetal Tracheal Occlusion to Treat Diaphragmatic Hernia.

Dr. Peter Goldberg, Associate Physician at the RVH and Associate Professor of Medicine at McGill, has been appointed Director of the Intensive Care Service at the RVH effective November 1, 1997.

Dr. Jean-Martin Laberge presented a paper at the Canadian Association of Pediatric Surgeons meeting entitled Prenatal Diagnosis of Congenital Cystic Adenomatoid Lung Malformations: The Canadian Experience. He was also a Visiting Professor to the Schneider Children’s Hospital, Long Island Jewish Medical Center to Dr. Pelah’s course on “The Surgical Treatment of Anorectal Malformations” from November 17-19, 1997. The title of his lecture was The Anterior Sagittal Approach for Imperforate Anus Repair.

Dr. Jonathan Meakins was the 1998 Jonathan E. Rhoads Lecturer. The title of his lecture was Host Defense, Infection & Nutrition: Yesterday, Today & Tomorrow.

Dr. John Sampalis has received a five year salary support Medical Scientist Award from the Medical Research Council of Canada. He was also awarded an NHRDP Scholar’s Grant which he declined in favour of the MRC. Also under his supervision, Dr. Toni Ferrario and Dr. Andreas Nikolis presented papers at recent meetings of the American Association for the Surgery of Trauma and the Trauma Association of Canada at the annual Royal College meeting.

Dr. Adi Yoskovitch presented a paper entitled Cystic Thyroid Lesions in Children at the Canadian Association of Pediatric Surgeons meeting in Banff in October 1997 with Dr. Jean-Martin Laberge as the senior author. The paper was accepted for publication in the Journal of Pediatric Surgery.

<table>
<thead>
<tr>
<th>MGH RESEARCH INSTITUTE 1997 AWARDS</th>
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<tr>
<td>The MGH Research Institute, one of the largest in Canada, presented its awards for 1997 at the Saint-James Club as follows:</td>
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<tr>
<td>Arsenaught, Denise</td>
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<td>Chevrette, Mario</td>
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<td>Evans, David C.</td>
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<td>Fried, Gerald</td>
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<td>Guy, Pierre</td>
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<td>Harvey, Edward</td>
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<td>Johnston, Karen</td>
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<td>Li, Maria</td>
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<td>Nguyen, Dao</td>
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<tr>
<td>Tanguay, Simon</td>
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<td>Rosenberg, Lawrence</td>
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</table>
Dr. Craig Baldry and Ms. Patricia Daigle were engaged in Paris on November 5th, 1997. The wedding is planned for September 1998.

 Achievements Residents & Fellows

Dr. Talat Chughtai was happily engaged to Miss Ayesha Ajmal in December. Ayesha is a final year medical student at Sindh Medical College in Karachi, Pakistan. Talat along with Dr. Nathan Sheiner have a paper in press for the Annals of Thoracic Surgery entitled Successful Repair of Aorto-Eosophageal Fistula Secondary to Traumatic Pseudoaneurysm.

Dr. Mohammed M. Elahi, research fellow in the Division of Plastic and Reconstructive Surgery at the RVH, was awarded the 1997 Resident Research Award jointly sponsored by the CSCI and the MRC for his work entitled A New Predictive Modality of Cranial Bone Thickness. In addition, he was awarded a $12,000 grant from the Canadian International Development Agency and the WHO to carry out a study examining Pediatric Hearing Loss in Rural Pakistan. At the conclusion of his residency, he will commencing a two years Plastic Surgery Fellowship at UCLA on July 1, 1998. His work was under the supervision of Dr. M.L. Lessard.

Dr. Graham Elder (PGY-3 Ortho) and his wife Andrea Reibmay welcome their new daughter, Emily born on December 27th, 1997, weighing 7 pounds 3 ounces at the Royal Victoria Hospital.

Holly Faria

Congratulations to Dr. Julio Faria and Lilyann Chao on the birth of their daughter Holly Nicole who was born at the Jewish General on November 8th, 1997.

Congratulations to Dr. Liane Feldman and Hillel Rosen on the birth of their son, Zachary born January 25th, 1998, weighing 7 pounds, 1 ounce at the RVH.

Dr. Jonathan Fridell and Dr. Jennifer Schwartz got married on November 9, 1997 in Montreal. They honeymooned in Jamaica.

Congratulations to Dr. Murad Husein and Nasrin Vellani who got married on Jan. 3rd, 1998 in Toronto and honeymooned in Bora Bora.

Dr. Annie Morissette and Marc-Andre Fontaine got engaged on December 27th, 1997 in Repentigny, Quebec.

Dr. Andrew Seely and Kathy Patterson were married on September 6th, 1997 in Aylmer, Quebec.

An October 1998 wedding is planned for Dr. Kayvan Taghipour-Khiabani and Dr. Katy Barin who were engaged in Paris on June 22nd, 1997. He presented a paper entitled Blood Flow in Repaired Thoracic Aneurysms with Dr. Alain Colson at the joint meeting of the French Society of Plastic and Reconstructive Surgery and the French Maxillofacial Society held in St. Petersburg, Russia. This paper is the result of a series of experiments performed at the RVH Microsurgical Laboratories under the supervision of Dr. Carolyn L. Kerrigan.

Dr. Joe Tector and his wife Kelly Dowd welcomed an early baby boy, Thomas Andrew born on January 12th, 1998 weighing 8 pounds at the RVH, brother to David and Haley.

Jennifer Swartz and Jonathan Fridell

New Appointments

Dr. David Evans has been appointed Assistant Professor in the McGill Division of General Surgery effective September 1997. He was also appointed CTU Director of Trauma Services at the MGH.

Dr. Dominique Shum-Tim has been appointed Assistant Professor in the McGill Division of Cardiotoracic Surgery effective January 1st, 1998. He returns from Boston where he did a clinical and research fellowship in pediatric cardiac surgery. He will be situated at the Montreal Children's Hospital.
RESIGNATION OF DR. PIERRE DUPUIS AS PROGRAM DIRECTOR AND APPOINTMENT OF NEW PROGRAM DIRECTOR

Dr. Pierre Dupuis stepped down as Program Director, Division of Orthopaedic Surgery, McGill University at the end of the year 1997.

Resignation of Dr. Pierre Dupuis

I would like to take the opportunity to personally thank Dr. Dupuis on behalf of the Division for his great commitment, his enthusiasm for the teaching and the changes which he brought into the program for the well-being of the residents and the Division. We know that he continues to consider resident teaching as one of the most noble duties of an academic surgeon.

Effective January 1, 1998, the new Program Director will be Dr. Michael Tanzer, Associate Professor in the Division of Orthopaedic Surgery at McGill and Deputy Chief, Department of Orthopaedics at The Montreal General Hospital. He can be assured of all the necessary support he will need for this demanding task.

Dr. Max Aebi,
Professor & Chairman,
McGill Division of Orthopaedic Surgery.

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A Navy Story

This is the transcript of an ACTUAL radio conversation of a US naval ship with Canadian authorities off the coast of Newfoundland in October 1995. Radio conversation released by the Chief of Naval Operations 10-10-95.

**Americans:** Please divert your course 15 degrees to the North to avoid a collision.

**Canadians:** Recommend you divert YOUR course 15 degrees to the South to avoid a collision.

**Americans:** This is the Captain of a US Navy ship. I say again, divert YOUR course.

**Canadians:** No. I say again, you divert YOUR course.

**Americans:** THIS IS THE AIRCRAFT CARRIER USS LINCOLN, THE SECOND LARGEST SHIP IN THE UNITED STATES ATLANTIC FLEET. WE ARE ACCOMPANIED BY THREE DESTROYERS, THREE CRUISERS AND NUMEROUS SUPPORT VESSELS. I DEMAND THAT YOU CHANGE YOUR COURSE 15 DEGREES NORTH, THAT'S ONE FIVE DEGREES NORTH, OR COUNTER-MEASURES WILL BE UNDERTAKEN TO ENSURE THE SAFETY OF THIS SHIP.

**Canadians:** This is a Light House.

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CONGRATULATIONS

The following passed the qualifying exams of the Royal College of Physicians and Surgeons of Canada in 1997 for the following Surgical Specialties

**GENERAL SURGERY**
- Dr. Mohammed A.H. Al-Zahrani, Dr. Sarah Bouchard,
- Dr. Stephanie Elizabeth Helmer, Dr. Brian Douglas Mott,
- Dr. Zafer Mohammed Rasim, Dr. Sadeesh Kumar Srinathan,
- Dr. Sameer A. Softa

**CARDIOThoracic SURGERY**
- Dr. Renzo Cecere, Dr. Gary Chris Salasidis

**NEUROSURGERY**
- Dr. Laura Susan Paré

**ORTHOPEDIC SURGERY**
- Dr. Salem Awwad T. Al-Shammari, Dr. John Antoniou,
- Dr. Ram Prasad Aribindi, Dr. Mark Lewis Burman,
- Dr. Paramjeet Singh Gill, Dr. Jonathan Daniel Glassman,
- Dr. Delphine France Glorieux, Dr. Khalid Farouk Jamjoom

**PLASTIC SURGERY**
- Dr. Ezat Hashim, Dr. Stephen Costas Nicolaidis,
- Dr. Mitchell Andrew Stotland

**UROLOGY**
- Dr. Gianpaolo Capolicchio, Dr. Joseph Jonah Itovitch,
- Dr. Duc Sieu Ngo, Dr. Richard Sioufi
R. JOSEPH S. GRUSS
THE THIRD ANNUAL H. ROCKE ROBERTSON
VISITING PROFESSOR IN TRAUMA • JANUARY 22, 1998

The McGill Department of Surgery welcomed Dr. Joseph S. Gruss as its 3rd H. Rocke Robertson Visiting Professor in Trauma. He is Professor, Department of Surgery of the Division of Plastic Surgery at the University of Washington in Seattle. He is also Chief of Craniofacial, Plastic and Reconstructive Surgery at the Children's Hospital and Medical Center in Seattle.

At the Montreal General Hospital Surgical Grand Rounds on Thursday morning, his topic was Advances in the Management of Craniofacial Trauma. There was standing room only in the Osler Amphitheatre. Dr. Gruss gave an outstanding and memorable presentation relating his experience of over 20 years and 2,000 cases with craniofacial trauma. The first part of his career was at the Sunnybrook Medical Centre in Toronto and since 1991, he has been in Seattle, Washington.

He enunciated his six basic principles in the management of these complex injuries as follows:

1. Immediate primary repair.
2. Extensive exposure.
3. Rigid internal fixation with small plates and screws. It is important to buttress the “4 pillars” of the mid-face.
4. Liberal use of bone grafting (calvarium mainly).
5. Suspension of soft tissues to avoid “sagging.”
6. Attention to the telecanthus.

He was introduced by Dr. Harvey Brown and thanked by Dr. David Mulder.

The winners of this session were:

1. Dr. V.J. Balasingam
2. Dr. Vinay Badhwar
3. Drs. Subhas Gupta & Shayne Burwell

In the afternoon during Surgical Grand Rounds at the Montreal Children's Hospital, his topic was New Approaches to Pediatric Facial Trauma.

HONOUR TO DR. D.S. MULDER
It is noteworthy that, after the Trauma Lecture by Dr. Gruss, Dr. Ron Zelt with the aid of computer projected slides paid tribute to Dr. David Mulder upon the occasion of being appointed to the Order of Canada. Dr. Marc Pelletier also bestowed congratulations on behalf of the McGill Surgery Residents. Dr. Mulder was given a prolonged standing ovation.

<table>
<thead>
<tr>
<th>During the day, Dr. Gruss heard case presentations by the residents as follows:</th>
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<tbody>
<tr>
<td>Facial fractures</td>
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<td>Forearm amputation</td>
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<td>Cardiopulmonary bypass: Increasing use in trauma</td>
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<tr>
<td>Experimental studies of gliosis</td>
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<td>Sacral fracture and nerve root compression</td>
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<td>Vascular injury associated lower extremity trauma</td>
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<td>New techniques in supracondylar femur fracture fixation</td>
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<td>Ocular eye bag injury</td>
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<td>Transected tendons due to penetrating injuries</td>
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<tr>
<td>Blunt diaphragmatic injury in 9 year old multitrauma patient</td>
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<tr>
<td>Pediatric renal trauma</td>
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<td>Evolution in the management of complex intestinal and duodenal injury: Damage control to discharge</td>
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First Sino-Canada International Surgical Conference (SISC)

Dr. David Mulder and Dr. Chen, Editor of Modern Surgery from Beijing, China, co-chaired the First Sino-Canada International Surgical Conference which was held on October 30-31, 1997 at The Montreal General Hospital. This two-day event was aimed at initiating 'grass-root' intellectual exchanges among surgical colleagues from both countries. It provided the opportunity for the nine visiting professors from various regions of China and the staff and residents from the McGill Department of Surgery to interact with each other and to share their academic interests and clinical experiences. We hope that this will be the beginning of a long and mutually beneficial relationship. ◆

Victor Chu, M.D.

D

r. Anne Moore ended her term as Resi-
dency Program Director in August, a position which she has
held for the last five years. We wish Anne well and thank her
for her dedication, enthusiasm and energy which she injected
into our pro-
gram both lo-
cally and
nationally. I
personally wish
to express my deepest gratitude for her loyalty and for always
managing to deal with matters professionally and, of course,
with a healthy dose of humour.

News from the Chairman of Anaesthesia

By Franco Carfi, M.D.

I am pleased to announce that Dr. Jane Henderson, Asso-
ciate Professor and staff member in Anaesthesia at the
Montreal Children's Hospital, accepted the appointment as
Program Director as of September 1, 1997. Jane has been
in our department since 1988 and over the years has be-
come increasingly more active in her teaching commit-
ments. Jane is enrolled in the Teaching Scholars Program
for Educators in the Health Sciences at McGill. This is a rig-
orous program which encourages the professional develop-
ment of faculty interested in medical education. Jane plans
to share the expertise she will acquire with her colleagues.
This will benefit our teachers, residents and the overall man-
agement of the program. ◆

Were You There? Nov. 1965

A nail shot from a stdd gun and deeply embedded
in a patient's buttrock is removed by Surgeons of the RVH
Accident Service.

Dr. Mohammad S. Chughtai, Chief Resident in Surgery,
holds nail removed from patient.

Actual size of nail is shown by above scale.
Looking down from the podium, I suddenly saw a familiar face. I was not expecting to find someone I know since I was giving an invited lecture on Surgical Therapy for Heart Failure at the King Fahad National Guard Hospital in Riyadh, Saudi Arabia. I looked at him again and recognized that he was Ghassan Baslaim, our recent graduate of the McGill Cardiothoracic Surgical Residency Program. Ghassan just returned to Saudi a few months ago following seven and a half years of residency training at McGill, both in General Surgery and Cardiothoracic Surgery. He was universally liked and appreciated as a gentleman and a competent resident. He was pleased to see me again and told me that he came to Riyadh looking for a staff position in Cardiac Surgery. He was undergoing a trial period at the King Faisal Specialist Hospital and Research Centre in Riyadh, one of the major cardiac centers in the Kingdom of Saudi Arabia. It turned out that the Chief of Cardiac Surgery in this hospital, Dr. Zohair Al-Halees, and I had met before at another meeting in Nice, France as we share interest in an experimental procedure known as "Dynamic Cardiomyoplasty for Heart Failure". Dr. Al-Halees is a leading congenital heart surgeon in that region, performing more than 500 congenital heart operations yearly. I had the opportunity to tell him how we felt about Ghassan at McGill and that he could become a valuable member of his team. I was therefore very pleased that after a few weeks following my return to Montreal, I received a letter from Dr. Al-Halees stating that Ghassan had been officially appointed to the staff of that institution.

While in Riyadh, I was also able to introduce Ghassan to Dr. Alex Bayes, the Head of the Cardiac Surgery Service at the King Fahad Hospital. Alex is another true gentleman who finished training in Cardiovascular and Thoracic Surgery at McGill University in 1985. I was happy to see these two McGill graduates successful and contributing to the care of cardiac surgery patients in Saudi Arabia.

Talking about Alex, he told me an interesting story after his chief, Dr. Rod Landymore, who was the Chief of Cardiac Surgery at the University of Nova Scotia, took me on a tour to the Bedouin camp in the outskirts of Riyadh. It was spectacular to see thousands of camels and the tents of the nomads scattered among them over many square miles of desert land. Alex said last year he took his youngest daughter, who was visiting from Calgary, to see these camels. He was asked whether his attractive 17 year old daughter was married, and when he replied that she was single, he was offered two camels for her. He said he was very disappointed this year when he brought his two older daughters there and got no offers. Alex and his wife would not answer my question whether he ever accepted the previous offer.

These delightful and capable graduates are our ambassadors to the world, and represent the deep international commitments of McGill University, and an important heritage of our Department.

Ray C.-J. Chiu, M.D., Ph.D.
Chairman, Division of Cardiothoracic Surgery

Dr. Chiu and Dr. Baslaim

Dr. Baslaim with one of his patients.
INTRAVENOUS MORPHINE FOR EARLY PAIN RELIEF
IN PATIENTS WITH ACUTE ABDOMINAL PAIN
Steven Pace, MD, Thomas F. Burke, MD
Madigan Army Medical Center, Fort Lewis, WA, Department of
Emergency Medicine Academic Emergency Medicine 3(12):
1086-1092, 1996.

Traditional dogma discourages the use of opioid analgesics in
the early evaluation of pa-
tients with acute abdominal
pain, for fear of interfering
with accurate evaluation and
diagnosis. The dogma that dictates against using opioid analge-
sia is not evidence-based. It is possible that the judicious
use of analgesia in patients with acute, atraumatic abdominal
pain actually enhances diagnostic accuracy by permitting de-
tailed examination of a more co-operative patient.

This study attempted to determine whether I.V. morphine sul-
phate (MS) analgesia affects evaluation or outcome for pa-
tients with acute abdominal pain. The hypothesis is that the
judicious use of titrated doses of I.V. MS for early pain relief in
patients with acute, atraumatic abdominal pain would 1) pro-
vide adequate pain relief; 2) enhance diagnostic accuracy; and
3) result in no serious diagnostic or treatment error when
compared with normal saline (NS) placebo.

ABSTRACT
Objective: To determine whether morphine affects evalua-
tion or outcome for patients with acute abdominal pain.

Methods: Prospective, double-blind, placebo-controlled ad-
ministration of morphine sulfate (MS) or normal saline (NS) in
the setting of acute abdominal pain. The study was performed
at a military ED with an annual census of 60,000 visits. Pa-
tient > or = 18 years old who had abdominal pain for < or
= 48 hours were included. Patients who were allergic to MS
or who had systolic blood pressures < 90 mm Hg were ex-
cluded. The physicians indicated a provisional diagnosis, a dif-
ferential diagnosis, and a provisional disposition. Study
solution was titrated to the patient's assessment of adequate
analgesia (up to a volume equivalent of 20 mg of MS); pain
response was monitored using a visual analog scale (VAS). The
patients were followed until diagnosis occurred or symptoms
resolved.

Results: Of 75 patients enrolled, 71 completed the study; 35
patients received MS and 36 received NS. More than half (44;
62%) of the patients were admitted from the ED; 28 patients
underwent surgery. The VAS pain level improved more for the
MS group, 3.9-2.8 cm, than it did for the NS group, 0.8-1.5
cm (p<0.01). Study solution dose was less in the MS group
than it was in the NS group, 1.5-0.5 mL vs 1.8-0.4 mL
(p<0.01). There was no difference between the groups when
comparing accuracy of provisional or differential diagnosis
with that of final diagnosis. Differences between provisional
and actual dispositions were the same in all groups. There
were 3 diagnostic or management errors in each group.

Conclusions: When compared with saline placebo, the ad-
ministration of MS to patients with acute abdominal pain ef-
efectively relieved pain and did not alter the ability of
physicians to accurately evaluate and treat patients.

Were You There?
December 1965
This Was the Start of
the Cedars of Lebanon
Cancer Fund

Mrs. Harley Chamandy presents cheque in memory of her late husband to Dr. J. Gilbert Turner, Executive
Director of the Royal Victoria Hospital, to be used in the fight against cancer. Looking on at left: Mr.
Eddy Chamandy, an uncle; Dr. Edward J. Tabah; and at extreme right, Mr. Joseph Chamandy.
Royal Victoria Hospital Research Laboratories
Christmas Party, December 5th, 1997

Bottom row Lt. to Rt.: Dr. Peter Metrakos, Ziba Aalamanian, Dr. Jeff Barkun, Dr. Nick Christou, Louise Chartrand, Dr. Jean Tchervenkov, Dr. Nancy Morin.
Top row Lt. to Rt.: Myriam Fernandez, Diane Cunningham, Dr. Andrew Seely, Dr. Jose Pires, Dr. Jonathan Fridell, Marie Monaghan, Betty Giannias, Dr. Shuqing Liu, Mary Bouldadakis, Dr. Xuwu Chen


About one hundred Surgeons from many states and Canada took part in a 5-Day Course on Practical Surgery of the Hand with the object of updating their knowledge in this important field. The Chairman of the Course was Dr. Martin A. Entin, Surgeon-in-Charge, Plastic Surgery, RVH. A distinguished faculty of international authorities on Surgery of the Hand presented latest developments in the treatment of injuries of tendons and nerves, reconstruction of deformities due to arthritis, Dupuytren's Contracture, etc. A program was arranged for the wives of the doctors attending this course to show them places of interest in Montreal and the Laurentians.

(Left to right) Drs. Raoul Tubiana, Paris, France; Harold Kleinert, Louisville, Kentucky; Martin Entin, Erik Moberg, Gothenburg, Sweden; Alfred Swanson, Grand Rapids, Michigan. Not present for this photograph was Paul Brand of Carville, Louisiana.

The First Molson Medical Informatics Visiting Professor

DAVID M. KAUFMAN, Ed.D., DALHOUSIE UNIVERSITY
November 27-28, 1997
Hosted by Dr. David M. Fleiszer, Dr. Kaufman presented two lectures in the Meakins Amphitheatre. The first was entitled Overcoming Obstacles in Medical Education: The Role of Medical Informatics. The second address was entitled Virtual Reality in Higher Education.

David M. Kaufman
As one of the two crew medical officers for the NeuroLab mission, scheduled to launch in April of this year, I will have the honor to become one of the small group of physicians to have practiced medicine in space. The efforts of this small group reflects a wealth of expertise accumulated over the past thirty years through ground based research and previous space flights. The future exploration of space will depend largely upon an increased understanding of human function and performance in microgravity as well as the development of new medical technologies in support of long duration space flight.

Operational space medicine has been an integral part of the space program prior to the first flights of the Mercury spacecraft in the early sixties. Project Mercury, was designed specifically to determine if humans could survive the rigors of space flight. The Gemini program built on the experience of Mercury successfully demonstrating that not only can humans survive in space, they can perform useful work as well. During the Gemini program, a number of important physiological changes were observed in astronauts during and after a mission. A decrease in red cell mass of approximately 5-20% from baseline was noted as was a loss in bone density muscle strength and exercise capacity. Post-flight orthostatic intolerance was noted in a number of astronauts.

The world watched in awe as Neil Armstrong walked on the lunar surface of Tranquility base, at 10:56 EDT July 20, 1969. The mission was a tremendous feat, among the greatest human achievements in the twentieth century, demonstrating incredible technological and medical capabilities to support a space flight to the moon in which the crew traveled a return distance of 760,000 km. There were three distinct biomedical goals of the Apollo program which included ensuring the safety and health of the crew, preventing the possible contamination of earth by potential extraterrestrial organisms and lastly, to study a number of specific physiologic effects of space flight. The biomedical observations of Apollo reaffirmed those of the Mercury and Gemini programs and included new descriptions of the phenomenon of space motion sickness. Of special interest was the absence of microorganisms in the materials returned from the lunar surface and the Apollo 14 crew was the last to undergo a post-flight quarantine.

In 1973, NASA launched the 100 ton Skylab module into orbit providing the first opportunity to study the problems of habitability and physiologic adaptation to space flight over long periods. The three Skylab missions lasted 28,59 and 84 days respectively, providing a wealth of biomedical data. Dr. Joe Kerwin MD was the scientist-pilot aboard the 28 day Skylab 2 mission and provided a number of clinical observations of importance in defining the future role of physicians in space.

The Canadian Space Agency first became involved in space medicine when the initial group of astronauts was hired in 1983. Dr. Gary Gray, of the Defense and Civil Institute for Environmental Medicine in Toronto, became the first flight surgeon supporting the Canadian astronauts. Roberta Bondar MD was the first Canadian physician-astronaut to fly in space aboard the IML-1 mission in January 1992 and Bob Thirsk MD, a graduate of the McGill University Faculty of Medicine, the second when he flew on the LMS flight in June 1996.

As the first Canadian physician-astronaut trained as a Mission Specialist, I will have the unique opportunity on the STS-90 mission to both conduct scientific experiments as well as practice clinical medicine. Two members of every crew are chosen by the commander as crew medical officers (CMOs). Additional training is provided to ensure that all CMOs have acquired the specific clinical skill set required to support a short duration shuttle mission. A series of courses is given 3 - 4 months prior to launch which includes training in the use of the shuttle orbiter medical system, medical diagnostics, telemedicine, the management of common medical and surgical emergencies, resuscitation and stabilization and the emergency dental procedures. CMO training includes flights aboard the KC-135, dubbed the "vomit comet" by the astronauts, to practice medical procedures in a microgravity environment.

There are many interesting aspects to microgravity, not the least of which is the need to restrain items in the immediate work environment. This is particularly important in space medicine as the CMO must ensure that the patient and equipment are properly restrained during assessment and treatment. The absence of gravity does, however, allow the unique advantage of being able to rapidly position a patient in virtually any possible position to facilitate examination. In attempting to visualize the posterior pharynx, for instance, if one is unsuccessful the patient may be quickly repositioned upside down!

Typically, Velcro straps are used to hold both patient and physician in place. Non-sterile instruments are restrained.
either in the pockets of one of the medical kits, similar to those of a paramedic, or with special straps of either Velcro or elastic. Sterile instruments are usually left in sterilized kits until needed and can be tucked back into the sterile kit when not in use. Preparation of a sterile field may be performed with self-adhesive drapes and topical betadine.

As in terrestrial surgery, adequate pain control, visualization and hemostasis are critical determinants of success in the management of a surgical emergency. Local anesthetics and regional blocks are performed whenever possible for pain control during a procedure. In the shuttle program there is no capability for the administration of a general anesthetic, any situation requiring this capability would result in an immediate return to earth. Intraperitoneal or intramuscularly administered general anesthetics have been used successfully for animal surgery in space with no apparent need to alter the dose administered to produce anesthesia.

Hemostasis may be achieved with direct pressure quite easily. In microgravity, capillary and venous bleeding forms a collection of blood adherent to the skin/tissue surface by virtue of the surface tension of a liquid, prior to formation of a clot. Arterial bleeding may result in droplets of blood departing the wound site which may travel significant distances until they impact upon a firm surface. As in terrestrial surgery, hemostasis in space may be problematic. Indeed, epistaxis can present significant problems both with the control of bleeding as well as contamination of the spacecraft if the patient and CMO are not careful.

Wound repair may be undertaken with the use of tissue adhesives such as Histoacryl or conventional repair with sutures or staples. On STS-90, we will be using a tissue adhesive for wound closure in the first survival surgery done on animals in space. The primary advantage is ease and rapidity of use, compared to the time required to suture or staple the wound in microgravity.

Instrument control, particularly the management of "sharps" is critical in preventing injuries when working inside a closed glovebox or surgical isolation chamber with another operator. Unrestricted sharps present a potential hazard and it is important for both operators to maintain situational awareness throughout a procedure. I have had the opportunity to perform a number of surgical procedures on animals in microgravity aboard the KC-135, the most complex of which was a laminectomy in rats, and have found that the feel of the instruments and tissues is the same as in terrestrial surgery. It will be interesting to see if this changes in space as there is some evidence to suggest alterations in proprioception and other sensory/motor changes that take place in astronauts during space flight.

Performing a surgical procedure inside the general purpose workstation (GPWS), the glovebox we will be using aboard STS-90, makes tissue visualization more difficult and has a tendency to make the operator feel remote as the procedure is often accomplished at an arms length. We use magnifying loupes to enhance visualization of the operative field when performing detailed dissections and have been successful in performing complex procedures with minimal difficulty.

There are many exciting developments that will take place in medical and surgical practice to support the human exploration of space. Novel non-invasive diagnostic techniques will play an important role as will diagnostic and therapeutic telemedicine. Surgical simulators and remote telerobotic surgery offer tremendous promise in both terrestrial and space medicine. Canada is uniquely positioned to offer a number of innovative technologic solutions to some of these problems in support of the space station program and further human exploration of this remaining frontier.

During a space flight, members of the crew are given the opportunity to bring a small number of items with them. I will be bringing items from the Montreal Neurological Institute and the McGill Faculty of Medicine. I am looking forward to returning them to McGill and sharing the excitement of the mission with the McGill community after the mission. Without the excellent training that I received at McGill as an undergraduate, graduate and medical student, I would not have had the fortunate opportunity to participate in such a mission.

Editor's Note:
The Square Knot wishes him well in this intrepid space adventure. We are looking forward to further reports from him.
Every year, Jacqueline McClaran and Jonathan Meakins hold a lamb roast for the McGill Division of General Surgery in their scenic apple orchard at Covey Hill in the Eastern Townships. Last summer on a beautiful sunny June 21st, 1997, in a pastoral setting, guests enjoyed an idyllic vista, the good food and each other's company.

Meakins Lamb Roast

Staff who attended were Drs. S. Meterissian, P. Metrakos, H. Sigman, B.G. Thompson, D. Owen, N. Christou, G. Fried and their spouses. The residents included Sara Bouchard, Antonio Di Caro, Lorenzo Ferri, Jonathan Fridell, Steven Paraskevas, Marc Pelletier, Patrick Robinson, Andrew Seely, Joseph Tector, Prithvi Legha, Adel Taha, Najma Ahmed, Brian Mott, Toni Ferrario, Tarek Razek, Jose Pires, Vinay Badhwar and their guests. Cathy Torchia, Rita Piccioni, Maria Betancourt and their families also attended.

EDM
The following quotes were taken from actual medical records as dictated by physicians:

**Taking Histories...**

- By the time he was admitted, his rapid heart had stopped, and he was feeling better.
- Patient has chest pain if she lies on her left side for over a year.
- On the second day the knee was better and on the third day it had completely disappeared.
- She has had no rigors or shaking chills, but her husband states she was very hot in bed last night.
- The patient has been depressed ever since she began seeing me in 1983.
- Patient was released to outpatient department without dressing.
- I have suggested that he loosen his pants before standing, and then, when he stands with the help of his wife, they should fall to the floor.
- The patient is tearful and crying constantly. She also appears to be depressed.
- Discharge status: Alive but without permission.
- The patient will need disposition, and therefore we will get Dr. Blank to dispose of him.
- Healthy appearing decrepit 69 year old male, mentally alert but forgetful.
- The patient refused an autopsy.
- The patient has no past history of suicides.
- The patient expired on the floor uneventfully.
- Patient has left his white blood cells at another hospital.
- The patient's past medical history has been remarkably insignificant with only a 40 pound weight gain in the past three days.
- She slipped on the ice and apparently her legs went in separate directions in early December.
- The patient experienced sudden onset of severe shortness of breath with a picture of acute pulmonary edema at home while having sex which gradually deteriorated in the emergency room.
- The patient had waffles for breakfast and anorexia for lunch.
- Between you and me, we ought to be able to get this lady pregnant.
- The patient was in his usual state of good health until his airplane ran out of gas and crashed.
- Since she can't get pregnant with her husband, I thought you would like to work her up.
- She is numb from her toes down.
- While in the ER, she was examined, X-rated and sent home.
- The skin was moist and dry.
- Occasional, constant, infrequent headaches.
- Coming from Detroit, this man has no children.
- Patient was alert and unresponsive.
- When she fainted, her eyes rolled around the room.

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**The System**

What methods suggested  What administration approved  What purchasing ordered

What was delivered  As maintenance installed it  What was required
T
he First Provincial Level I Trauma Conference was hosted by Hôpital Sacré-Coeur on October 31st, 1997. Representatives from the four Level I Trauma Centres in Quebec, including Sacré-Coeur, l'Enfant-Jesus, Charles Lemoyne and The Montreal General Hospital presented interesting trauma cases.

Level 1 Trauma Conference

The Montreal General Hospital was represented by a team led by Dr. David Evans (CTU Director of Trauma at the MGH), with cases being presented by residents Talat Chughtai and Atif Khan. Dr. Chughtai presented a case of blunt liver trauma, while Dr. Khan presented a case of multiple thoraco-abdominal gunshot wounds.

Dr. Harold Rocke Robertson died in Ottawa on February the 8th at the age of 85. We all mourn the passing of this former Principal and Vice-Chancellor of McGill University. He was an internationally renowned Surgeon and was Surgeon-in-Chief at the MGH from 1959 until 1962.

Dr. Robertson graduated first in his class from McGill Medical School in 1936. He studied Surgery at the Royal Infirmary in Edinburgh from 1938 until 1939. During World War II, he started off as a Lieutenant in the Second Canadian Surgical Unit, participated in the Sicily Campaign and returned to Montreal as a Lieutenant-Colonel. As a result of his war experience he was interested in "wounds, and wound infections." He received the Lister Prize from the University of Edinburgh.

He moved to Vancouver where he helped found the University of British Columbia Medical School and came to Montreal in 1959. In 1962, he became the first McGill graduate to serve as the University's Principal. During his tenure, McGill expanded rapidly in students, teaching faculty and budget. He received numerous honorary degrees including being named a Companion of the Order of Canada in 1969.

He is survived by his wife, Rolly and, children Tam, Ian, Bea and Stuart.

Dr. Robertson was an outstanding leader, a gentleman and a fine surgeon whose life touched many of us.

Gillies, Dr. Deirdre May MacLeod died at her home in Westmount on May 2nd, 1997. Dr. Gillies obtained her MB, ChB from the University of Edinburgh and her Diploma in Anaesthesia at McGill in 1955. Dr. Gillies joined the Department of Anesthesia at McGill in 1957 and moved up to the ranks of Associate Professor in 1977. She held the position of Anaesthetist-in-Chief at the Queen Elizabeth Hospital from 1973 until her retirement in 1993. An Award for Excellence in the Teaching of Anaesthesia was set up in her name by the McGill Department of Anaesthesia in September of 1996 as part of their 50th anniversary.
Tie one on for McGill!

The McGill Department of Surgery invites you to tie one on for the old school!

The McGill blue silk tie and scarf with CREST, SQUARE KNOT and FLEAM are available for purchase from the Alumni Office as follows:

McGill Dept. of Surgery Alumni, Montreal General Hospital
1650 Cedar Avenue, Room C9 126, Montreal (Quebec) H3G 1A4
Telephone: (514) 937-6011, ext. 2028
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