It is a privilege for me to write on behalf of the Orthopaedic Section for the yearbook in 2011–2012.

In 2012 we recruited Dr. Heather Barske after fellowships that she completed at the University of Rochester in New York as well as the University of British Columbia in Vancouver, both in foot and ankle surgery. She will be a welcome addition and assist Dr. Allan Hammond in complex foot and ankle problems. Heather will be practicing at the Pan Am Clinic, as well as the Victoria Hospital with some call contributions at the Concordia Hospital.

Dr. Tod Clark has become program director in the last year and Tod has done an excellent job in running the program so far with the capable assistance of Michelle Elands. Michelle herself is also a new recruit to the Orthopaedic Section and we really appreciate her ongoing organizational skills.

Congratulations to Dr. Jack McPherson who has moved on to be interim head of the Department of Surgery. Jack has done a very capable job in running the very busy multiple aspects of the Department of Surgery. We are thankful to Jack for his efforts.

Over the past two years, we have had two Orthopaedic Academic Days. One in 2011 with visiting professor Dr. Bob Bourne from the University of Western Ontario who has an extensive background in academic arthroplasty. Dr. Bourne was recently awarded the Order of Canada as one of our most distinguished orthopaedic statesman in the country. This year we had Dr. Bob Marx from New York enlighten us. Bob is extremely well known for his work in sport medicine and epidemiology.

Also this past year, we had an Orthopaedic Skills Lab with visiting professors Dr. Danny Whelan (University of Toronto), Dr. Bruce Levy (Mayo) and Dr. Laurie Hiemstra (Banff) with a focus on knee surgery. All contributed highly to the program.

Orthopaedic Research continues to blossom within the Section with multiple efforts through the Concordia Hospital and the Orthopaedic Innovation Centre under the leadership of Martin Petrak, the Pan Am Foundation under the leadership of Dr. Jeff Leiter and Spine Research with the assistance of Dr. Dean Kriellaars at the Health Sciences Centre. Trauma Research also continues to improve under the leadership of Dr. Ted Tufescu, and Paediatric Research under Drs. Brian Black, Paul Jellicoe and Virginie Pollet.

I would also like to commend Drs. Mike Goytan and Eric Bohm for promotion to associate professor. This is testimony of their commitment to teaching, research and administration within the Section.

We thank you all for your efforts in making this one of the most well-rounded and stable Orthopaedic Sections in the country. We came through a recent internal review without any major criticisms. We are in extremely good shape on a go forward basis. Please keep up the great work.
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Patient Care

The volume of patients treated by the Department of Surgery’s 23 orthopaedic surgeons and 16 residents currently practicing within the Section of Orthopaedics continues to grow and expand. We performed a total of 6,384 surgeries in 2011 with an anticipated total of 6,510 in 2012, a 1.9% increase.

In 2011, 38,721 patients were seen in clinic, and in 2012, the total is anticipated to reach 42,586. Clinical visits increased in almost all areas in 2012 including HSC Adult Trauma by 8%, Diabetic Foot by 32.5%, HSC Paediatric by 13.3% and Pan Am Clinic by 9.7% for a total increase of 9% over 2011.

The core of our commitment is patient care. These are not just numbers and percentages; they are adults and children that were in need of specialized treatment. Our service includes expertise in all aspects of health care pertaining to the musculoskeletal system as a result of injury or disease of bones, joints, muscles, tendons and ligaments. Orthopaedic surgeons use both surgical and non-surgical means to treat trauma, sports injuries, degenerative diseases, infections, tumours, congenital conditions and joint reconstruction. As you will read in this yearbook, our surgeons share their skills in Manitoba and abroad through research projects, publications, presentations and participating in activities like Operation Walk.

*Does not include clinical procedures
Complex Spine Case Study

Dr MJ Goytan

History

A 9 year old male presents with right sided neck pain. His initial radiographs (01/02) are interpreted as normal. He returns 3 weeks later with a painful torticollis. His pain is poorly managed with oral analgesia and cervical orthosis can not be applied. He is admitted to hospital for further management.

A CT scan (03/04) is performed which reveals a lytic lesion involving the lateral mass of C1. There is vertical migration of the odontoid and brain stem compression. The odontoid process on axial cuts sits within the foramen magnum and eccentric to the left. An MRI confirms the CT findings.

Stage I

The child is brought to the operating room for a closed reduction under a general anaesthetic (GA) with motor and sensory evoked potential monitoring (MEP/SSEP). A vest is applied. Eight pins are placed into the skull to secure the halo, with gradual longitudinal traction followed by extension the deformity is corrected with spinal cord monitoring and fluoroscopic guidance (06). To maintain the reduction of the deformity corrected the halo is attached to the vest to maintain the correction (05). A transoral biopsy of C1 under the same anaesthetic reveals an eosinophilic granuloma (07).

A post operative CT scan (08/09/10) confirms an anatomic reduction of the occiput-C1 and C1-C2 articulation.

Stage II

Due to the significant loss of bone at C1 and instability seen at the occiput-C1 and C1- C2 articulations and potential for a catastrophic neurologic injury that could result in sudden death, the patient and his family are counseled for a posterior occipitocervical fusion to restore functional integrity of the upper cervical spine.

Again under a GA with MEP and SSEP monitoring, a posterior occipitocervical fusion is successfully performed. The instrumentation consists of a C2 pars screws with C3 and C4 lateral mass screws which are connected by a rod to a 2 hole occipital plate (11/12). An iliac crest allograft is sutured to the spinous process of C2 and sutured to the occiput with a single midline screw.

Outcome

Pain free mobility at 6 months postoperatively. No local or systemic evidence of the eosinophilic granuloma.
July 13, 2011 marked the one-year anniversary of the Orthopaedic Innovation Centre.

The Orthopaedic Innovation Centre (OIC) at the Concordia Hip and Knee Institute (CHKI) is a not-for-profit corporation that works with the Concordia Joint Replacement Group Arthroplasty Surgeons to support musculoskeletal medical device innovation in Manitoba by providing biomedical engineering, medical device consulting services, product testing, validation, contract research and small-scale 3D additive manufacturing solutions. The OIC aims to create novel medical technologies in a collaborative and multidisciplinary environment that can be eventually licensed to new or existing companies for commercialization and global distribution.

The OIC and CJRG received funding from Western Economic Diversification and Manitoba Innovation Energy and Mines in March 2011. Since then, new facilities at the CKHI include a hip and knee tribology (wear) simulator laboratory, implant retrieval and analysis lab, biomaterials testing lab, finite element analysis cluster computing lab, scanning electron microscope lab, reverse engineering capabilities and various metrology facilities.

Board of Directors

Martin J. Petrak, President
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Ariel Dujovne
(CEO – Pega Medical Inc.)
Several projects have been initiated and completed and produced eight journal publications at various stages of publication (published, submitted, to be submitted), 13 peer-reviewed abstracts, and the fabrication of devices required in the medical imaging industry.

“novel medical technologies for global distribution”

Thanks to Dr. Brian Black, Section of Orthopaedics Paediatric Surgery, one of the first OIC projects, Project Oreo, involved the development of a polycarbonate 3D printed implant for a K9 with a missing patella from a previous patellectomy. A dog patella was reverse-engineered from a cadaveric specimen, redesigned and then printed using the OIC’s new Fused Deposition Modeling (FDM) process. The polycarbonate patella device was eventually implanted in collaboration with Dr. Bailey (Atlantic Veterinary College, Charlottetown, PEI). The surgery was a success!

Ongoing projects focus on biocompatible polymeric material development, hip and knee tribology research, finite element analyses of wear in total knee replacements, medical device testing and surveillance and patient-specific medical device development.

Another OIC facility will include a 2000 square foot metrology space to be located at the Concordia Hospital, which will be used for medical device evaluation and validation. The facility is scheduled to be completed by April 2013.

Operation Walk

From October 17 – 24, 2012, we had the privilege of leading the first Operation Walk Winnipeg mission to a developing country. Operation Walk was first started a decade ago by Dr. Larry Dorr, a prominent surgeon in Los Angeles. Since that time, Operation Walk has mentored teams to provide life-changing joint replacement surgery to patients in the developing world whose families are too poor to afford the cost of the procedure.

Thomas Turgeon / Medical Director, Operation Walk Winnipeg

Operation Walk Winnipeg, working in co-operation with Concordia Foundation, is now the 12th Operation Walk team and the second in Canada to be established for this cause. Operation Walk has provided hip and knee replacement surgeries at no charge to patients on four continents and continues to expand.

Our mission in October was to the Roberto Calderon Hospital in Managua, Nicaragua. The facility is a teaching hospital that does offer joint replacement surgeries, but is only able to perform 90 joint replacements per year due to the limited funding from the impoverished Nicaraguan government. Local orthopaedic surgeons have large lists of patients in dire need of surgery, but with such meager resources available, are unable to provide them with the care that would so dramatically alter their lives. The local surgeons, orthopaedic residents, nurses and administrators welcomed us with open arms to their facility to assist them in the care of their patients.

The patients that presented to Operation Walk were an amazing group of people. Ranging in age from 39 to 85 years, all had been suffering with debilitating arthritis for at least five years with many having lived in pain for decades. They came, supported by their families, to a group of caregivers that, for the most part, didn’t speak their language and whom they had not met before. They trusted us with their bodies and their wellness and asked for our help. For many patients, there was a sense of desperation that this was their only chance to regain their mobility and independence.
As a Canadian, accustomed to a fairly robust social support network, this was particularly poignant as for Nicaraguans and so much of the developing world loss of independence and mobility can easily drive a patient and their family deeper into the dark hole of poverty. Despite or perhaps because of the adversity that these patients had experienced, they were a phenomenal group to work with. Many walked 100 feet the same day as the surgery with little pain medication. The determination and drive shown by these patients was unlike anything that the team had seen before. To see a patient who knows no English speaking to her healthcare team and pointing to her new knee replacement with tears rolling down her cheeks saying, “gracias, gracias, gracias,” was a powerful and moving moment for everyone.

In all, the team was able to accomplish 49 joint replacements in just over three days of operating. Many of the patients had already gone home by the time we left two days later. Department of Surgery members who participated in the mission included Drs. Hedden, Bohm, Crosby and Turgeon as principle surgeons, and Drs. Ames and Marsh as surgical assistants. Our members who participated in the mission left two days later. Department of Surgery had already gone home by the time we days of operating. Many of the patients were a phenomenal group to work with. The determination and drive shown by these patients was unlike anything that the team had seen before. To see a patient who knows no English speaking to her healthcare team and pointing to her new knee replacement with tears rolling down her cheeks saying, “gracias, gracias, gracias,” was a powerful and moving moment for everyone.

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Since the establishment of the David and Ruth Asper Research Centre at the Pan Am Clinic in October 2008, the research program of the Pan Am Clinic Foundation continues to flourish.

Currently, over 40 research projects are in progress, and since 2008, we have published over 40 peer-reviewed publications. Researchers at the Pan Am Clinic investigate muscle, bone and joint conditions with respect to risk factors, treatment options, and patient quality of life. The majority of studies involve the development, improvement and validation of surgical techniques and outcomes. Research topics range from the effect of tunnel angle on patient outcomes in anterior cruciate ligament reconstruction to the change in running kinematics during a full marathon. Knowledge gained from these studies provides insight into maintaining, restoring or improving patient quality of life.

Surgical Skills Training Centre

The David and Ruth Asper Research Centre is home to a surgical skills training centre that houses state-of-the-art virtual arthroscopic trainers, muscle, bone and joint models and access to fresh frozen cadavers. This allows medical students, residents, and fellows to progress from a virtual reality environment, to a plastic model, to a cadaveric specimen and ultimately the operating room. This step-wise systematic progression of surgical skills ensure that trainees develop fundamental, basic skills before proceeding to more complex tasks and procedures. It also gives them an opportunity to train their surgical skills outside of the operating room where time pressures and reduced workweeks can limit the amount of time allotted to the training and enhancement of surgical skills. Since only a few virtual arthroscopic training centres exist in Canada, the Pan Am Clinic is considered a world-class training facility and has the potential to attract the best surgeons from Manitoba and around the world to train and practice in the city of Winnipeg.

Biomechanics Centre

The Biomechanics Centre at the Pan Am Clinic harbours some of the most advanced human performance and motion analysis equipment that currently exists. From an anti-gravity treadmill, to accelerometry and 3D force platforms, the facility enables researchers to accurately access kinematics and kinetics of human movement. This technology is used to assess patients before and after orthopaedic sports medicine procedures to determine if they are progressing according to evidence-based standards and outcomes.

Human Performance Centre

Recently, the Pan Am Clinic Foundation has established a satellite research facility at the MTS Iceplex. The purpose of this expansion is to evaluate the physiology of elite human performance as it relates to hockey, football and several other sports. Researchers at this facility are also evaluating the incidence, knowledge and pathway of treatment for amateur hockey and football players that have sustained a concussion. The ultimate goal of this research program is to maximize human performance and to minimize injuries so that players of all ages can enjoy their sport of choice and remain healthy and active in the community.
Clinical Services

Academic Arthroplasty

The Concordia Joint Replacement Group (CJRG) has had another great year of clinical and academic success. On the clinical side, the surgeons and staff have continued to work to prepare and carry out 1450 joint replacements annually as requested by the WHRA.

Modeled after our group’s internal consultation distribution, the WRHA launched a common referral intake process to centralize all of the incoming consultation requests for hip and knee arthroplasty. The consult requests are then distributed to the community or academic arthroplasty with the shortest wait for both consultation and surgery. The new process began in June and has already dramatically equalized wait times for surgery across the city and provides much better understanding of the volume of annual consultation requests.

For the first time, the CJRG has welcomed two arthroplasty fellows, Drs Ghazi Alqahtani and James Vernon. Both have been welcome additions to our ORs and clinics.

The Implant Retrieval and Analysis Lab and analytical equipment of the Orthopaedic Innovation Centre (OIC) have been busy with heavy use from both engineers and clinicians alike. We are looking forward to the expansion of the OIC space in the upcoming redevelopment of ground-floor space at Concordia Hospital which should be ready in the summer of 2013. We would like to thank all of those individuals who have been so supportive over the last year and look forward to the forthcoming advancements in the next year.

“another great year of clinical and academic success”
Dr. David Hedden

Dr. Hedden is the current Site Medical Director of Surgery at Concordia Hospital. Dr. Hedden specializes in orthopaedic surgery with a focused area of practice in hip and knee reconstructive surgery. Dr. Hedden completed his Bachelor of Science and Medicine and Surgery at the University of Cape Town, South Africa.

After coming to Canada, Dr. Hedden set up a general practice and anesthesia practice in Virden Manitoba. Dr. Hedden completed his postgraduate training in orthopaedic surgery at the University of Manitoba in 1997. Dr. Hedden joined University Medical Group in the Department of Surgery, Faculty of Medicine at the University of Manitoba in 1998 as an assistant professor in the Section of Orthopaedics. He is a member of the Royal College of Physicians and Surgeons of Canada as well as an examiner for the Royal College for the past four years, the Canadian Medical Association, American Academy of Orthopaedic Surgeons, Canadian Orthopaedic Association, Manitoba Medical Association, the Canadian Medical Protective Association, Manitoba Orthopaedic Society, The College of Physicians and Surgeons of Manitoba, General Medical Council (UK), South African Medical and Dental Council, and an assistant professor for the University of Manitoba.

Dr. Colin Burnell

Dr. Burnell is the current Site Supervisor in Postgraduate Surgery Education for the Department of Surgery at Concordia Hospital. Dr. Burnell specializes in orthopaedic surgery with a focused area of practice in complex primary and revision hip and knee arthroplasty.

Dr. Burnell completed his medical degree along with postgraduate training in orthopaedic surgery at the University of Manitoba. Dr. Burnell joined University Medical Group in the Department of Surgery, Faculty of Medicine at the University of Manitoba in 2003 as an assistant professor in the Section of Orthopaedics. He is a member of the Royal College of Physicians and Surgeons of Canada, Winnipeg Orthopaedic Surgery Executive, Manitoba Medical Association, Canadian Medical Association, College of Physicians and Surgeons of Manitoba, Manitoba Orthopaedic Society and The Canadian Medical Protective Association.

Dr. Thomas Turgeon

Dr. Turgeon specializes in orthopaedic surgery with a focused area of practice in complex primary and revision hip and knee arthroplasty. Dr. Turgeon completed his medical degree at the University of Western Ontario and his residency at the University of Saskatchewan.

He also completed his Master’s degree in Public Health Epidemiology at San Diego State University. Dr. Turgeon joined University Medical Group in the Department of Surgery, Faculty of Medicine at the University of Manitoba in 2005 as an assistant professor in the Section of Orthopaedics. He is a member of the Royal College of Physicians and Surgeons of Canada, Manitoba Medical Association, Canadian Medical Association, College of Physicians and Surgeons of Manitoba, Manitoba Orthopaedic Society, The Canadian Medical Protective Association, American Association of Hip and Knee Surgeons and the America Association of Orthopaedic Surgeons. Dr. Turgeon is currently chair for Concordia Foundation, serves on the Concordia Hospital Ethics Board as well as a medical director of Operation Walk Winnipeg.
**Highlights of Current Research Projects/Grants:**

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**Diabetic Foot Program & Foot and Ankle Service**

**Diabetic Foot**

Diabetic Foot is a multidisciplinary subspecialty in medicine that is now gaining increased demand in North America. The Diabetic Foot Service provides patient care to patients with a range of conditions from complex diabetic mellitus conditions to ulcers and Charcot foot complications.

This multidisciplinary focus in the Diabetic Foot Service program combines the disciplines of infectious disease, vascular surgery and plastic surgery to provide the best possible care for patients with diabetes mellitus. In 2011, we performed 928 procedures, including minor and major debridements (infected ulcers, osteomyelitis), toe amputation, ingrown nail surgeries, and other complications of the loss of sensation such as Charcot foot. The Diabetic Foot Service is available to patients in the main OR, the outpatient OR, in clinics, in cast clinics and for those patients that are bedridden with other complications. This allows for the maximum flexibility of care and the rapid saving of limbs to patients with diabetes mellitus.

In 2011, the number of Total Contact Casts (TCC) was 715 cases, versus 634 in 2010. The continuing need for TCC shows the continuing gold standard indicator that this procedure has now become in the treatment of complications related to Diabetic Foot such as ulcers and Charcot foot.

The Diabetic Foot team attended several international conferences in 2011/12, including the “Diabetic Global Conference 2011” in Noordwijkhout, the Netherlands and the “Diabetic Limb Salvage Conference 2011” in Washington, D.C. Dr. Dascal has been invited to present a session at the Diabetic Foot Global Conference in March 2013 in Los Angeles, California, the world’s foremost interdisciplinary diabetic foot, amputation prevention, PAD and wound care conference. He will present *How to Culture a Wound and How I Probe to Bone.*

The team is currently continuing its collaborative research efforts across all the multidisciplinary specialties to continue to investigate the connection between diabetic foot complications and depression, how to target decreased dialysis complications, and how to target diabetic nerve damage in feet at an earlier stage of disease.

"the most devastating effects of nerve damage and severe deformities may be avoided"

The Diabetic Foot Service continues to maintain the goal of educating diabetes patients at an earlier stage of the disease and its complications. If Charcot foot can be detected earlier, some of the most devastating effects of nerve damage and severe deformities of the foot may be avoided.
Dr. Mario Dascal

Dr. Dascal received his undergraduate medical degree at the University of Buenos Aires in 1993 and completed his orthopaedic residency in 1990 there. He completed a fellowship in Arthroscopy subsequently, and continued his education to specialize in Forensic Medicine and Occupational Medicine.

Before beginning to practice as a diabetic foot surgeon here at the University of Manitoba as an assistant professor in 2004, Dr. Dascal practiced as a surgeon in Buenos Aires, Argentina. His practice in Argentina focused on general orthopaedics, arthroscopy and diabetic foot.

Foot and Ankle Service:

This service is supported by three surgeons, Dr. Brad Pilkey, Dr. Heather Barske and Dr. Allan Hammond. This team provides expert treatment for elective and post-traumatic reconstruction of the ankle, hind foot, midfoot and forefoot including ankle fusions and total ankle arthroplasty surgery.

Dr. Heather Barske

Dr. Barske joined the Section of Orthopaedics at Pan Am Clinic in the summer of 2012. Dr. Barske is a graduate of the University of Manitoba Residency Program and completed her foot and ankle fellowship training at the University of Rochester and the University of British Columbia. She carried out research and academic activities in addition to clinical activities at these two institutions.

Dr. Barske returns to the University of Manitoba to provide expertise in foot and ankle surgery working out of Pan Am Clinic, the Victoria Hospital and covering some call at the Concordia Hospital.

(left) The Diabetic Foot team is able to achieve remarkable results and provide a much improved quality of life for patients.

Dr. Allan Hammond

Dr. Allan Hammond specializes in Foot and Ankle surgery as well as serving as a member of the HSC Orthopaedic Trauma team. He completed both his degree in undergraduate medicine and his orthopaedic residency in 2008 at the University of Manitoba. It was here that he became a recipient of the Joe Doupe Memorial Scholarship and the Fredrick R. Tucker Research Award.

After residency, Dr. Hammond enjoyed work experience as a locum physician in British Columbia and in Alberta during the summer of 2008. Then after a tour of Australia, New Zealand and the South Pacific, Dr. Hammond completed a fellowship in foot and ankle surgery at the University of Iowa, with a focus on arthroscopy and ankle arthritis. Following this, he completed a fellowship in orthopaedic trauma at the University of Missouri with a focus on multi-ligament knee injuries.
Orthopaedic Paediatric Program

The Paediatric Orthopaedic Surgery Service is based at the Health Sciences Centre Children’s Hospital.

We provide expert care for a wide range of musculoskeletal disorders affecting children from newborn to 16 years of age. These include congenital, acquired and traumatic musculoskeletal conditions. The service is led by a team of dedicated paediatric orthopaedic surgeons and we continue to grow as a section and are currently providing specialist care to more patients than ever before. By the 2012 year end, surgeries will have increased by 8.4% and clinical visits by 13.3% over 2011.

Along with this, we are pleased and excited to announce a welcome addition to our section, Dr. Virginie Pollet. She joins us from Belgium via her fellowships at Wilhelmina Children’s Hospital in Utrecht, Netherlands, and Robert Debre Children’s Hospital in Paris, France. She brings with her much experience of paediatric orthopaedics especially in the area of treatment of DDH.

As a Section we have a particular interest in limb deformity correction, clubfoot treatment, and developmental dysplasia of the hip (DDH); in Manitoba the incidence of DDH is among the highest in the world. Additionally, the treatment of children with neuromuscular conditions takes place at our rehabilitation hospital.

Our catchment area covers the whole of Manitoba as well as northwestern Ontario and Nunavut, a population of approximately 1.2 million. Being the only paediatric centre to cover this diverse area, we are uniquely placed to study rare and interesting conditions, such as multiple hereditary exostosis and rare metabolic conditions. Our position also allows us to study trends in children’s trauma and raise awareness of, and effect change in, injury prevention.

Our particular geography also influences our significant research activity, led by enthusiastic personnel, and as a section we have published many articles on topics such as Paediatric trauma and child injury prevention.

As a Section we are committed to, and enthusiastic about, teaching. Residents attend weekly-dedicated teaching sessions led by one of the staff surgeons, during which we aim to cover key aspects of paediatric orthopaedics and trauma. This local teaching complements the core postgraduate Orthopaedic teaching, and of course we offer focused exam practice.

The future for the Section of Paediatric Orthopaedics is exciting. We have developed a novel approach for the treatment of shoulder deformities associated with brachial plexus birth palsy; early results of our glenoid osteotomy are encouraging and show marked improvement in the shape and function of the shoulder when compared to other modalities of treatment. In addition, we hope to establish a clubfoot clinic, to which patients may be referred directly, in order to receive all their treatment and advice from one source.

Manchester University. He completed his residency in orthopaedics in Newcastle, and while there obtained a postgraduate degree in Medical Law from the University of Newcastle. Since taking up his current position in July 2008 he has taken on the role of section head for Paediatric Orthopaedics, and sits on the Paediatric Surgical Council and Postgraduate Medical Education Committee.

Dr. Paul Jellicoe

He obtained his undergraduate medical degree at St. Andrews University, Scotland, and his MBChB degree from Manchester University. He completed his residency in orthopaedics in Newcastle, and while there obtained a postgraduate degree in Medical Law from the University of Newcastle. Since taking up his current position in July 2008 he has taken on the role of section head for Paediatric Orthopaedics, and sits on the Paediatric Surgical Council and Postgraduate Medical Education Committee.

Dr. Brian Black

Dr. Black is a Paediatric Orthopaedic surgeon who works at different clinic sites including Children’s Hospital, Pan Am, St. Boniface Hospital and Rehab Centre for Children. Originally from Nova Scotia, he has a BSc degree from Mount Allison University, his medical degree from Dalhousie University in Halifax and completed his orthopaedic training at Queen’s University in Kingston. He is a past faculty member for the Orthopaedic Basic Science Course and Ste. Justine Pediatric Review Course as well as an examiner with the Royal College. He continues to enjoy clinical research and teaching. More recently, he has rekindled his longtime interest in veterinary medicine and has been lecturing at the University of Georgia College of Veterinary Medicine. Dr. Black is a member of the Pediatric Orthopaedic Society of North America.
Dr. Jack McPherson

Dr. McPherson is a Paediatric Orthopaedic surgeon at the Children’s Hospital, Health Sciences Centre, Winnipeg.

He is a graduate of the University of Manitoba Medical School and completed his orthopaedic residency at the University of Manitoba, followed by paediatric orthopaedic subspecialty fellowship training at the Hospital for Sick Children in Toronto. His clinical practice includes general paediatric orthopaedics and trauma with a special interest in children with chronic disabilities. He is the orthopaedic consultant for the Assistive Technology Program and the Juvenile Spina Bifida Clinic at the Rehab Centre for Children and the consulting orthopaedist for St. Amant Centre. He has a longstanding participation in medical education including past service as Department of Surgery clerkship coordinator, Orthopaedic undergrad coordinator, Med II Musculoskeletal course director, Core Surgery Program director and Orthopaedic Residency Program director. He served as service chief for Paediatric Orthopaedics for many years then as director of Paediatric Surgery and is currently the director of Postgraduate Surgical Education and is the acting head for the Department of Surgery and the acting medical director for the WRHA Surgery Program.

Dr. Virginie Pollet

Virginie Pollet, MD, is a Paediatric Orthopaedic surgeon working at the Children’s Hospital and the Rehabilitation Centre for Children.

She has a special interest in paediatric hip pathology, lower extremity disorders, cerebral palsy and paediatric sports injuries. She obtained her medical degree at the Free University of Brussels, Belgium, where she also completed orthopaedic surgery residency. She also has a postgraduate in Sports medicine at the same University. She is a PhD candidate at the University of Utrecht in the Netherlands, conducting several research projects on the diagnosis and treatment of developmental dysplasia of the hip. She is a member of the Paediatric Orthopaedic Society of North America, the European Paediatric Orthopaedic Society and the Dutch Orthopaedic Society.

Dr. Susan Thompson

Dr. Susan Thompson is an attending Paediatric Orthopaedic surgeon at the Children’s Hospital and the Rehabilitation Centre for Children in Winnipeg.

She received her Bachelor of Science degree from the University of Manitoba and then went on to McGill University where she did her undergraduate degree in medicine. She completed her orthopaedic residency at McGill University and received her FRCSC in 1999. After being an attending Paediatric Orthopaedic surgeon at Alfred I duPont in Wilmington, Delaware for three years, she then moved to Winnipeg to be with her husband and family. She is currently a member of the Paediatric Orthopaedic Society of North America, the American Association of Orthopaedic Surgeons, the Canadian Orthopaedic Association, the Ruth Jackson Society, and the Manitoba Orthopaedic Society. Dr. Thompson is board certified in orthopedic surgery in the United States and is a fellow of the Royal College of Surgeons of Canada.

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<td>To determine incidence of ATV related injuries in MB following change in legislation: Has anything changed?</td>
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<tr>
<td>Jellicoe, P.</td>
<td>Do distal tibia physeal fractures need to be anatomically reduced: A systematic review of the literature?</td>
<td>Alexander Gibson Fund</td>
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<td>Thompson, S.</td>
<td>Evaluation patterns of paediatric orthopaedic cases from rural centres</td>
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<td>Tufescu, T., Jellicoe, P., Thompson, S.</td>
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<td>Jellicoe, P.</td>
<td>Ibuprofen vs. codeine, is one better for post-operative pain relief following closed reduction of paediatric forearm fractures?</td>
<td>Alexander Gibson Fund</td>
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<td>Pollet, V.</td>
<td>Incidence of developmental dysplasia of the hip in children for the Province of Manitoba</td>
<td>Alexander Gibson Fund</td>
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Orthopaedic Trauma Program

The Adult Orthopaedic service at Health Sciences Centre provides expert care for patients with severe musculoskeletal injuries and related complications.

The service is a regional resource for physicians challenged by complex orthopaedic trauma cases. Complex foot and ankle is also done at HSC. The service also provides coverage for non-trauma cases such as musculoskeletal infections, tumours, and amputations.

Patients with acute and chronic conditions are managed by our service. In 2011, trauma volume accounted for 1,357 surgeries and 5,646 clinical visits. Acute conditions include severe fractures of the upper and lower extremities. Other injuries may include open fractures, complex periarticular injuries, and pelvic and acetabular fractures. Chronic conditions may include nonunions, malunions, infections, and osteomyelitis.

We strive to deliver optimal care for patients

The service is comprised of the following surgeons: Dr. Laurie Barron, Dr. Chris Graham, Dr. Allan Hammond, Dr. Brad Pilkey, and Dr. Ted Tufescu. Ramon Angeles and Nasser Ghassemi are our clinical assistants. Nigar Sultana is our full-time research coordinator. Current fellows include Dr. James Longstaffe and Dr. Sultan Aldosari.

Aside from clinical work, the group has many academic activities; Dr. Pilkey is the director of Orthopaedic Trauma at HSC and Dr. Tufescu is the Orthopaedic Trauma Research and fellowship director. The group teaches at many levels, especially with our presence at the Bannatyne Campus. Teaching is done at undergraduate and postgraduate levels. Physician assistants, civilian and military, also rotate through the Adult Orthopaedic service.

Dr. Graham and Dr. Tufescu have organized the Ortho Trauma Symposiums, which began in 2009. These have been received well by participating OR personnel and orthopaedic surgeons.

We continue to strive to deliver the optimal care for patients with complex orthopaedic trauma and other conditions

“Dr. Brad Pilkey
/ Section Head
Dr. Brad Pilkey works at the Health Sciences Centre in Winnipeg. He specializes primarily in adult trauma and foot and ankle surgery. His undergraduate degree in medicine and postgraduate training is from the University of Saskatchewan in Saskatoon."

Dr. Pilkey completed a two-year fellowship training at the University of Toronto. His subspecialty training includes trauma, foot and ankle surgery, and lower extremity reconstruction. He is a fellow of the Royal College of Physicians and Surgeons and currently serves as the director of Orthopaedic Trauma at Health Sciences Centre. Dr. Pilkey also has representative positions on the Winnipeg Orthopaedic Surgical Executive, the Department of Surgery Surgical Standards Committee, and the Postgraduate Education Committee. He has won the orthopaedic postgraduate teaching award on two occasions. He is a member of the Canadian Orthopaedic Association and the American Academy of Orthopaedic Surgeons.

Dr. Laurie Barron

Dr. Barron practices at the Health Sciences Centre, Pan Am Clinic, and Concordia Hospital where he specializes in orthopaedic trauma and lower extremity joint replacement surgery. He has both Bachelor of Science and Doctor of Medicine degrees from the University of Saskatchewan.

His orthopaedic residency was also completed in Saskatoon. Following three years of community orthopaedic practice in Regina, he pursued two years of trauma and arthroplasty fellowship training in Halifax prior to his arriving in Winnipeg. In 2009 he was given the “Educator of the Year” award for the section of Orthopaedics, and he received an “Honourable Mention” in 2008 and 2010.
Dr. Chris Graham

Dr. Graham has an orthopaedic surgical practice at the Health Sciences Centre, is a member of the Health Sciences Orthopaedic Trauma team and specializes in fracture fixation. After completing undergraduate studies at the University of Saskatchewan with a Bachelor of Science, he returned to the University of Saskatchewan and was accepted to the College of Medicine in September 1995, graduating in 1999.

Dr. Graham completed his orthopaedic surgery residency at the University of Saskatchewan in 2004. Dr. Graham joined UMG in the Department of Orthopaedic Surgery as a trauma surgeon in 2004, and has taught trauma surgery through the University of Manitoba Medical School since. Dr. Graham’s current research is focused on fracture implant studies and he is an organizer of the Ortho Fracture Symposium and OR Personnel Course. He is a member of the Royal College of Physicians and Surgeons of Canada, the Canadian Orthopaedic Association, the Canadian Medical Association and sits on the Postgraduate Education Committee of the University of Manitoba Residency Training program, a position that he has held since 2005.

Dr. Ted Tufescu

Dr. Tufescu has an undergraduate Pharmacology degree from the University of Toronto, and a medical degree from Queen’s University.

He completed his orthopaedic training at the University of Saskatchewan and obtained subspecialty fellowship training in orthopaedic trauma at Sunnybrook Health Sciences Centre in Toronto, where he also began his practice. Dr. Tufescu currently practices at the Health Sciences Centre in Winnipeg, where he focuses on complex orthopaedic trauma and post-traumatic problems. Dr. Tufescu is assistant professor at the University of Manitoba and heads research for the Orthopaedic Trauma group. Dr. Tufescu is the fellowship director for the Orthopaedic Trauma program. Dr. Tufescu has been invited faculty at numerous fracture care courses for nursing staff, residents and surgeons, and he chairs a fracture care course in Winnipeg.

Highlights of Current Research Projects/Grants:

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<td>Hammond, A.</td>
<td>Arthroscopic Ankle arthrodesis: measuring postop pain to assess potential for outpatient surgery</td>
<td>Alexander Gibson Fund</td>
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<td>Tufescu, T., Srinathan, S.</td>
<td>Factors associated to hip fracture stability in the 31-A2 group</td>
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<td>Tufescu, T., Srinathan, S.</td>
<td>Randomized control trial comparing cost of simplified postop radiographic protocol for fractures with stable internal fixation</td>
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<td>Tufescu, T., Ashmead, N.</td>
<td>Surgical wait time improvement with the implementation of a trauma census</td>
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<tr>
<td>Tufescu, T.</td>
<td>A description of the perceived “non-fracture” needs of fracture patients treated at HSC</td>
<td>Alexander Gibson Fund</td>
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Sports Medicine and Upper Extremity

Currently five orthopaedic surgeons provide Sports Medicine and Upper Extremity surgery services at the Pan Am Clinic and the Concordia Hospital for the Department of Surgery. The team performed 1,639 surgeries at Pan Am alone in 2011 and facilitated 14,760 clinic visits. It is projected that clinical visits will increase by 9.7% in 2012 over 2011 to 16,352.

Partnership and collaboration with the Pan Am Clinic Foundation continue to build on our commitment to research and education. Surgeons and researchers have a unique opportunity at the Pan Am Clinic in that patients can be followed from their first visit through their follow-up visits documenting outcomes of their diagnostic tests, surgical procedures, even rehabilitation. This approach gives the researchers the opportunity to conduct comprehensive studies to evaluate and monitor patient quality of life with the aim of providing the best possible care according to objective and subjective performance measures. Initiatives such as the Pan Am Clinic Surgical Skills Training Centre and the Pan Am Clinic Research Centre enhance the Centre’s universal recognition as a leader in innovation in bone and joint care and research.

In 2011, Pan Am engaged in a planning process to establish priorities that align with the WRHA strategic directions; enhance patient experience, foster public engagement, improve quality and integration, support a positive work environment, advance research and education and build sustainability. Nine strategic priorities were developed along with the following role statement:

Pan Am Clinic optimizes health outcomes by leading in the delivery of ambulatory musculoskeletal (MSK) patient care, supported by innovative research and education. Pan Am promotes healthy living in the community by working to keep people mobile and active.

One of the nine major strategic priorities was the creation of an integrated, comprehensive electronic health information system. This means moving from patient paper charts to electronic medical records. On December 5, 2011 Pan Am Clinic went ‘live’ with an Electronic Medical Record (EMR) system for patient registration, scheduling and billing. The system allows the Clinic to manage patient records and clinical functions in a seamless, efficient and consolidated manner. This was a massive undertaking and required many hours of development, training and dedication by the staff and for the most part, the transition went fairly well. The Accuro system has now been migrated to the Citrix environment to improve the speed of the system. Special thanks to Judy Mills-Jesson, Shelley Sibbick, Jim Scott and members of the EMR Project Oversight Board for their hard work in completing this challenging project.

Arthroscopy Courses

2011 – Shoulder Arthroscopy Skills Course

The annual skills course promotes skills development, evidence-based medicine and interaction between local residents, surgeons, staff members and highly skilled professionals from around North America. On April 8 and 9, 2011 the Pan Am Clinic Foundation partnered with Linvatec to host the Shoulder Arthroscopy Skills Course. Guest faculty included Dr. John Randle (Newmarket, ON), Dr. Jon Xerogeanes (Atlanta, GA) and Dr. Ian Lo (Calgary, AB)

2012 – Knee Arthroscopy Skills Course

In 2012, the course was held on April 13 and 14 and once again, the Pan Am Clinic Foundation partnered with Linvatec to host the Knee Arthroscopy Skills Course. Guest faculty included Dr. Daniel Whelan (Toronto ON), Dr. Bruce Levy (Rochester, MN), and Dr. Laurie Hiemstra (Banff, AB).
Concussion study

The Pan Am Clinic Foundation was awarded a grant by the Winnipeg Jets True North Foundation to conduct research related to concussions. Despite the increased attention that concussions in sport have received in recent years, little information exists on how amateur players, suspected of having a concussion, make their way through the medical system. The purpose of the project is to determine, via video analysis at the MTS Iceplex, the kinematics and kinetics of concussion-inducing collisions in male and female hockey. By determining the force, velocity, acceleration and circumstances that increase the risk of brain injury in youth hockey, advances can be made towards the prevention, diagnosis and treatment of concussions sustained in youth hockey players. The results of the project have the potential to positively impact the short- and long-term health and wellness of children in Winnipeg and Manitoba.

Dr. Peter MacDonald was invited to present Top of Mind Subject – Concussion in Sports at the October 23, 2012 WRHA AGM. He was joined by Dr. Jeff Leiter.

Dr. Peter MacDonald / Section Head

Dr. Peter MacDonald is the medical director, Department of Surgery at the Pan Am Clinic in Winnipeg. He is also the head, Section of Orthopaedic Surgery for the University of Manitoba and the regional lead, Section of Orthopaedic Surgery for the Winnipeg Regional Health Authority. In addition, Dr. MacDonald is the Gibson Chair of Orthopaedic Surgery and chief research and innovation officer of the Pan Am Clinic.

Dr. MacDonald also serves as medical director of the Winnipeg Jets Hockey Club and orthopaedic surgeon to the Winnipeg Blue Bombers. He is associate editor of the Journal of Shoulder and Elbow Surgery and on the editorial board of the Clinical Journal of Sport Medicine.
Dr. Jeff Leiter

Dr. Leiter is the Albrechtsen Research chair and executive director of the Pan Am Clinic Foundation. He is also an assistant professor in the Faculty of Medicine, Department of Surgery, Department of Human Anatomy and Cell Science and Department of Family Medicine at the University of Manitoba.

He has a Bachelor of Physical Education and Recreation Studies, a Master of Science in Biomechanics and a Doctor of Philosophy in Human Anatomy and Cell Science (Musculoskeletal Research), all from the University of Manitoba. In his role as orthopaedic resident research director, Dr. Leiter fosters and supervises research initiatives and educates residents on various topics from ethics submissions to self-audit and appraisal of practice.

Dr. Jason Old

Dr. Jason Old has been in practice since 2009 at the Pan Am Clinic and Concordia Hospital as a member of the Sports and Upper Extremity group.

He completed his undergraduate medical degree and orthopaedic surgery residency at the University of Manitoba Medical School. He completed fellowship training in shoulder and elbow surgery at North Shore Hospital in Auckland, New Zealand and at the Melbourne Shoulder and Elbow Centre in Australia. He also completed a shoulder surgery fellowship in Nice, France under Professor Pascal Boileau.

"commitment to research and education"

Dr. Greg Stranges

Dr. Stranges works primarily out of Pan Am Clinic and specializes in sports medicine, arthroscopy and knee and shoulder surgery. After an undergraduate degree in Science, he completed his MD degree and orthopaedic surgical residency at the University of Manitoba in June of 2007. Dr. Stranges was then accepted for a one-year fellowship at the University of Toronto in association with Sunnybrook Hospital and their Knee and Shoulder Surgery program then completed a second year-long fellowship at the Steadman Hawkins Clinic of the Carolinas for a fellowship in Sports Medicine and Arthroscopic Surgery. Dr. Stranges returned to the University of Manitoba to begin an academic orthopaedic surgery practice in August 2009. He currently teaches at the undergraduate, graduate and residency levels of the University of Manitoba Surgery Program. He is currently a member of the Canadian Orthopaedic Association, the American Academy of Orthopaedic Surgery, the American Orthopaedic Society of Sports Medicine, the Arthroscopy Association of North America and a fellow of the Royal College of Physicians and Surgeons.

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<td>A Randomized Study of Non-Operative Management versus Expedited Surgery among WCB Patients with Small Rotator Cuff Tears: Effect Upon Time to Claim Closure in Two Prone Centres</td>
<td>Workers Compensation Board</td>
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<td>MacDonald, P.B.</td>
<td>Develop Self-Audit Forms for Knee Arthroscopy to Measure Motor Skills</td>
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<td>MacDonald, P.B.</td>
<td>Exploring the Biologics of Rotator Cuff Injury and Advancing Repair</td>
<td>Department of Surgery: The Canadian Orthopaedic Foundation/Canadian Orthopaedic Research Legacy: Alexander Gibson Fund</td>
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<tr>
<td>MacDonald, P.B.</td>
<td>Arthroscopic Bankart Repair with and without Arthroscopic Infraspinatus Rempilissage in Anterior Shoulder Instability with a Hill-Sachs Defect: A Randomized Controlled Trial</td>
<td>Alexander Gibson Fund</td>
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Dr. Michael Goytan

Dr. Michael Goytan joined the Department of Surgery, Section of Orthopaedics, in 1998 as an Assistant Professor. Dr. Goytan graduated from the University of Manitoba medical school in 1989 after completing an undergraduate degree in Science and graduate degree training in Biomechanics. In 1996, Dr. Goytan left Winnipeg to pursue further training in spine surgery completing spine fellowships in Montreal (Program Director Dr. Max Aebi) and Vancouver (Program Director Dr. Marcel Dvorak), where he gained further experience in the development of instrumentation for the cervical, thoracic and lumbar spine, and the treatment of spinal cord injury and spine tumour surgery. He belongs to the Canadian Spine Society, North American Spine Society and Scoliosis Research Society; he is the former chair of the morbidity and mortality committee of the SRS. Currently, Dr. Goytan is the head of the Winnipeg Spine Program and site director for the Section of Orthopaedics at Health Sciences Centre. He was promoted in 2012 to the rank of associate professor in the Department of Surgery in the sections of Orthopaedics and Neurosurgery/Winnipeg Spine Program at the University of Manitoba. He is also program director of the Winnipeg Spine Fellowship Program, which is devoted to postgraduate training of orthopaedic, and neurosurgery fellows in spine surgery.

Dr. Michael Johnson

Dr. Michael Johnson, BA, BSc (Med), MD, FRCSC joined the Department of Surgery, Section of Orthopaedics and Neurosurgery as an assistant professor in 2001. Dr. Johnson graduated from the University of Manitoba Medical School [M.D., BSc (Med)] in 1994 after completing an undergraduate degree in Arts (English). He was certified by the Royal College of Physicians and Surgeons of Canada in Orthopaedic Surgery in 1999. Subsequently, he spent two years completing combined orthopaedic and neurosurgical adult and paediatric spine surgery fellowships in New York City (New York University Medical Center/Hospital for Joint Diseases) and Vancouver (Vancouver Combined Spine Program, Vancouver General Hospital). He is the director of Spine Research at the University of Manitoba, Winnipeg Spine Research Laboratory (WSRL). Completed projects have been presented at national and international spine meetings (Canadian Spine Society; North American Spine Society) and have been published in Spine and the Journal of Neurosurgery. Manuscripts have been published in Journal of American Academy of Orthopaedic Surgeons and Orthopaedic Knowledge Update Spine. Dr. Johnson’s research has received grant funding from the Alexander Gibson Foundation, Health Sciences Centre Foundation and the Manitoba Medical Services Foundation.
The Orthopaedic Surgery Residency Training Program at the U of M has steadily grown over the years to now include 23 faculty, 16 residents and up to 8 fellows. The program also participates in the education of undergraduate medical students, and physician assistants.

Training occurs at the Health Sciences Centre Adult and Children’s Hospital, the Pan Am Clinic, the Concordia Hospital and the Concordia Hip and Knee Institute.

A reflection on the past two years reveals several exciting changes for the program. Both of this past year’s graduating residents successfully passed their Royal College examinations and are now undertaking subspecialty fellowship training, namely Dr. Mohamed Elkurbo, Dr. Earl Kowalczyk, Dr. Jesse Shantz, Dr. James Vernon, Dr. James Longstaffe and Dr. Abdulhamid Elyousfi. We wish all of our graduating residents the best of luck in the future.

Past Residents

Congratulations and all the best to Dr. Al-Walid Hamam (Orthopaedic Trauma Fellowship, Sunnybrook Hospital, Toronto), and Dr. Taranjit Tung (Orthopaedic Trauma Fellowship, Sunnybrook Hospital, Toronto). We also congratulate the 2011 graduating residents as they also passed their Royal College exams and moved into subspecialty fellowship training, namely Dr. Mohamed Elkurbo, Dr. Earl Kowalczyk, Dr. Jesse Shantz, Dr. James Vernon, Dr. James Longstaffe and Dr. Abdulhamid Elyousfi. We wish all of our graduating residents the best of luck in the future.

New Residents

The Section is pleased to welcome six new residents to our training program via the 2011 and 2012 CaRMS match; Dr. Nathan Ashmead (UBC), Dr. Austin Enright (St. Georges University) and Dr. James McCammon (U of M) all matched to our program in the 2011 match; Dr. Kyle Martin (U of M), Dr. Robert Longstaffe (U of M) and Dr. David Perrin (Sherbrooke) all matched in the 2012 match. We welcome all of the new residents and look forward to their unique contributions throughout their five years of residency with us.

Academic

The educational training in our program continues to be augmented with further surgeon recruitment and improvements to our formal academic teaching sessions. Wednesday resident academic/research day has been expanded to include defined
teaching blocks in trauma, spine, paediatric orthopaedics, sports, arthroplasty and anatomy. This will include the introduction of a focused six-week surgical anatomy course covering the breadth of the field. Hand and wrist rotations have been added to the sports medicine block and a defined foot and ankle rotation is planned with the recruitment of Dr. Hammond and Dr. Barske. Formal quality assurance rounds and complication rounds are being added to the grand rounds schedule.

Resident Research

Resident research continues to flourish under the exceptional direction of Dr. Jeff Leiter. The quality of our resident’s research was appreciated with another outstanding Resident Research Day on October 3, 2012. Visiting guest speaker, Dr. Robert Marx from Weill Medical College of Cornell University, arbitrated the resident competition and presented very stimulating presentations on Decision Making in Orthopaedic Surgery and Surgical Management of Medial and Lateral Side Knee Ligament Injuries.

Awards

The 2010/2011 recipients of the Orthopaedic Junior Resident Award (HPH Galloway Scholarship) and Senior Resident Award (Elmer James Award) were Dr. Danny Gillis (Junior) and Dr. Al-Wald Hamam (Senior); and the 2011/12 recipients were Dr. Meaghan Rollins (Junior) and Dr. Jonathan Marsh (Senior). These prizes are selected by attending staff and are awarded for well-rounded resident performance, clinically, academically and administratively. This year’s awards were presented at the Welcome BBQ along with the Educator of the Year Award, which was presented to Dr. Brad Pilkey. Educator of the Year for 2011 was a tie and presented to Drs. Colin Burnell and Paul Jellicoe.

Program Director

Dr. Jack McPherson stepped down as program director in March of 2012 after three years of service in this position to act as the interim head for the Department of Surgery. Dr. Tod Clark has taken on the role going forward. We thank Dr. McPherson for his considerable contribution to the program and look forward to the new and exciting contributions that Dr. Clark will bring to this position.

Overall, the Orthopaedic Residency Training Program has grown and excelled in the past two years. Thanks to all of the residents and attending staff for their continued dedication and contribution to this important educational process and a special thanks to our section head, Dr. Peter MacDonald and our program coordinator Ms. Michelle Elands.

Undergraduate Education Report

Dr. Jamie Dubberley / Director of Undergraduate Education

This has been a busy couple of years for undergraduate medical education in the Section of Orthopaedic Surgery. We have seen many fresh young Clinical Clerks as they rotate on their clerkship rotations and have hosted 25 elective rotations from various medical schools both in Canada and abroad in 2011 and 2012.

The Section continues to teach within the clinical clerkship program with an Introduction to Clerkship Seminar, Comprehensive Patient Assessment, Clinical Skills, and the Clerkship Seminar Series. Undergraduate elective requests have improved immensely over the past year with many positive changes in the Undergraduate Medical Education office. The Section will once again be participating in the Med II Block V Musculoskeletal Course, which will take place from December to March. These consist of seminars, tutorials and clinical skills sessions. The Section would like to send a special thank you to all of the senior residents and fellows for their assistance in teaching this course.

We participate in the training of the new Physician Assistant Trainees (PAEP).

All PAEP trainees complete two rotations through Orthopaedic Surgery; one Sports Medicine rotation and one Adult Orthopaedics rotation. Trainees from the Military Physician Assistant Program continue to complete a two-week rotation in Adult Orthopaedic Surgery.

The Section also continues to partake in the Early Exposure Program and the Mentorship Program to allow those students in their early stages of training the opportunity to spend time learning about the practice of orthopaedic surgery.

Thank you to all faculty, residents, and fellows who participated in the teaching of undergraduate education sessions with the Section of Orthopaedic Surgery. Your ongoing cooperation and assistance is very much appreciated.
The Section of Orthopaedic Surgery hosted the third annual Resident Academic Day at Pan Am Clinic on September 21, 2011. Dr. Robert Bourne, a professor of surgery at the University of Western Ontario, was the visiting faculty and judged the presentations with Drs. MacDonald and Leiter. A total of fourteen residents and two fellows presented their research. The results were as follows:

1st Place
Dr. Jon Marsh – The Physical Activity Patterns of Surgical Residents

2nd Place
Dr. Randy Mascarenhas – Arthroscopic Rotator Cuff Repair with and without Arthroscopic Acromioplasty in the Treatment of Full-Thickness Rotator Cuff Tears: A Randomized Controlled Trial

Honourable Mention
Dr. Chris Kim – A Prospective Clinical Study Comparing Anteromedial Portal Technique Versus Transtibial Technique for Femoral Tunnel Positioning in Hamstring Anterior Cruciate Ligament Reconstruction

Resident Academic Day – 2012
October 3, 2012 was the fourth annual Orthopaedic Surgery Resident Research Day. Dr. Robert Marx, an attending surgeon at the Hospital for Special Surgery and the Weill Medical College of Cornell University in New York was the visiting professor and guest judge. Fifteen residents presented their research and the results were as follows:

1st Place
Dr. Joe Amirault – Reliability of the Cortical Step Sign in Higher Energy Femur Fracture Patterns

2nd Place
Dr. David Ames – The Patella as an Indicator of Femur Rotation During I.M. Nailing

Honourable Mention
Dr. Robert Longstaffe – Surgeon-Therapist Communication: Do All Members See Eye-to-Eye

(Tie)
Dr. James McCammon – Spinal Cord Injury in Manitoba: A Provincial Epidemiological Study

Publications/Presentations
Orthopaedic residents made eight presentations at national or international meetings and published one case report. In addition, four residents and one fellow were selected to present at the University of Manitoba, Department of Surgery research forum.

Research Grants
Residents were involved in four successful grant applications. The granting agencies included AO North America, Alexander Gibson Fund (University of Manitoba), and Department of Surgery (University of Manitoba).
2011–2012

**Dr. Mohammad Elkurbo**
Dr. Elkurbo completed his arthroplasty fellowship at the Concordia Hip and Knee Institute in June 2012. He is a graduate of the Faculty of Medicine at Al Fateh University of Medical Sciences in Tripoli, Libya.

**Dr. James Longstaffe**
Trauma / Nov 1, 2011 – May 30, 2012
Dr. James received his MD at the University of Manitoba in 2006 and completed his Orthopaedic residency from the University of Manitoba in June 2011.

**Dr. David Rhodes**
Dr. Rhodes completed his orthopaedic residency training in June 2011 at the University of Utah Hospitals and Clinics in Salt Lake City. He received his medical degree at the University of Nebraska Medical Centre in Omaha in 2006.

2012–2013

**Dr. James Chiu**
Dr. Chiu received his medical training in Sydney, Australia and is an orthopaedic surgeon in Dandenong Hospital and Austin Hospital in Australia.

**Dr. David Simon**
Dr. Simon received his Doctorate in Medicine in 2005 from the University of Ottawa. Along with his FRCSC, he is also a candidate for a Master of Health Administration from the Telfer School of Management at the University of Ottawa.

**Dr. Scott Hughes**
Dr. Hughes completed his orthopaedic surgery residency at the University of British Columbia. He received his Doctorate in Medicine from the University of Toronto in 2007.

**Dr. Stephen Kennedy**
Dr. Kennedy was certified FRCSC in June 2011. He received his MD in 2006 and completed the orthopaedic surgery residency in 2011 both from the University of British Columbia.

Dr. Kennedy also completed a Hand and Microvascular Surgery Fellowship at the University of Washington before coming to Manitoba.

**Dr. James Longstaffe**
Trauma / Jul 1, 2012 – Dec 31, 2012
Dr. Longstaffe continued his trauma fellowship after passing the Royal College Fellowship Exam in June 2012.

**Dr. Sultan Aldosari**
Trauma / Jul 1, 2012 – Dec 31, 2012
Dr. Aldosari received his degree of Medicine and Surgery from King Saud University in Riyadh, Saudi Arabia. He began his orthopaedic surgery residency in King Khalid University Hospital and completed it at the University of Alberta in 2010.

**Dr. Ghozi Alqahtani**
Arthroplasty / Sep 1, 2012 – Jun 30, 2013
Dr. Alqahtani is currently in the Orthopaedic Training Program at Dalhousie University. He received his Bachelor of General Medicine and Surgery at King Khalid University in 2001.

**Dr. James Vernon**
Dr. Vernon was a graduate of the University of Manitoba orthopaedic residency program in 2011. He received his Bachelor of Medicine and Surgery at the University of Sydney, Australia in 2004 and completed a fellowship in arthroplasty at Otago University in Dunedin, New Zealand in 2012.
Residents

2012 Graduates

Dr. Al-Walid Hamam
Dr. Hamam passed the Royal College Fellowship Exam in June 2012 and is currently participating in an Orthopaedic Trauma Fellowship at Sunnybrook Hospital in Toronto, Ontario.

Dr. Taranjit Tung
Dr. Tung is a graduate of the University of Saskatchewan, Faculty of Medicine and passed the Royal College Fellowship Exam in June 2012. He is also currently completing a Fellowship at Sunnybrook Hospital in Toronto, Ontario.

Current Residents

Dr. David Ames
Dr. Ames is a graduate of the University of Manitoba, Faculty of Medicine. He is a fourth-year Orthopaedic Surgery resident.

Dr. Joe Amirault
Dr. Amirault is a graduate of Dalhousie University in Halifax, Nova Scotia in undergraduate medicine. He is a third-year resident.

Dr. Nathan Ashmead
Dr. Ashmead is a graduate of the University of British Columbia, Faculty of Medicine. He is a second-year Orthopaedic Surgery resident.

Dr. Austin Enright
Dr. Enright is a graduate of the University of Saskatchewan and a second-year Orthopaedic Surgery resident.

Dr. Donny Gillis
Dr. Gillis is a graduate of the University of Manitoba, Faculty of Medicine. He is a fourth-year Orthopaedic Surgery resident.

Dr. Bahram Groohi
Dr. Groohi is a graduate of the Iran University of Medical Sciences for undergraduate medicine. He is a fifth-year resident.

Dr. Kyle Martin
Dr. Martin is a graduate of the University of Manitoba, Faculty of Medicine and a first-year resident.

Dr. Jamie Rusen
Dr. Rusen is a graduate of the University of Manitoba, Faculty of Medicine. He is a fifth-year resident.

Dr. Mohammad Zarrabian
Dr. Zarrabian is a graduate from Queen’s University in Kingston, Ontario and a fourth-year resident.

Dr. Christopher Kim
Dr. Kim is a graduate of the University of Manitoba, Faculty of Medicine and a third-year resident.

Dr. Robert Longstaffe
Dr. Longstaffe is a graduate of the University of Manitoba, Faculty of Medicine. He is a first-year Orthopaedic Surgery resident.

Dr. James McCommon
Dr. McCommon is a graduate of the University of Manitoba and is a second-year resident.

Dr. David Perrin
Dr. Perrin is a graduate of Sherbrooke University, Faculty of Medicine and a first-year resident.

Dr. Meaghan Rollins
Dr. Rollins is a graduate of the Royal College of Surgeons in Dublin, Ireland and a third-year Orthopaedic Surgery resident.

Dr. Randy Mascarenhas
Dr. Mascarenhas is a graduate of the University of Manitoba, Faculty of Medicine. He is a fifth-year Orthopaedic Surgery resident.
Profile of Dr. Frank Duerksen

Dr. Duerksen was an esteemed orthopaedic surgeon with the Department of Surgery at the Health Sciences Centre retiring in March 2008 and was the recipient of the Dr. Jack Armstrong Humanitarian Award in 2012. The award recognizes the many years of selfless humanitarian service that Dr. Frank Duerksen has provided in the interest of advancing the treatment of leprosy in impoverished areas of the world.

It is the second time Dr. Duerksen has been honoured by Doctors Manitoba. For his significant academic accomplishments, he received the Scholastic Award in 1997.

Dr. Duerksen was born and raised in a Mennonite missionary community in Paraguay. Having always aspired to become a missionary physician, he received his medical degree and initial postgraduate training in Argentina. His residency training continued at the University of Manitoba, initially in general surgery and subsequently in orthopaedic surgery.

During his residency in Winnipeg, Dr. Duerksen was inspired by Dr. Paul Brand, widely regarded as the “father of leprosy surgery.” Dr. Brand specifically wanted to train a young physician who had been raised in South America to work with leprosy patients there. Dr. Duerksen subsequently completed fellowships in reconstructive surgery with Leprosy ALERT in Ethiopia, and in hand surgery and microsurgery at University of Kentucky.

Thousands of leprosy patients in South America have benefited directly or indirectly from Dr. Duerksen’s dedication to improving their health and quality of life. In addition to working as an orthopaedic surgeon at Health Sciences Centre in Winnipeg, starting in 1981, Dr. Duerksen also made numerous trips to Paraguay to perform reconstructive surgery at a mission hospital where he was medical director. He also spent extended periods of time in Sao Paulo, Brazil, teaching surgical techniques to physicians at a leprosy training site.

Dr. Duerksen is respected globally for advancing the body of knowledge in his area of expertise. The focus of his leprosy research has ranged from clinical drug trials in Paraguay, and new amputation techniques, to a multi-site trial of denatured muscle grafting for nerve lesions. Dr. Duerksen has numerous publications to his credit, including journal articles, books and book chapters. He has travelled widely to attend or give presentations at meetings all over the world. As a member of many medical organizations on both sides of the equator, he has played a prominent role in organizing, chairing or sitting on committees associated with international scientific congresses.

In Manitoba, various academic and hospital appointments over the years preceded Dr. Duerksen’s current positions. Since 1998, he has been associate professor of surgery, Section of Orthopaedics, Department of Surgery in the Faculty of Medicine. He became medical director of Rehab. Engineering at Health Sciences Centre in 2004, and previously was director of the Orthopaedic Hand Program.

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Awards and honours bestowed on Dr. Duerksen over the years reflect the depth and breadth of his humanitarian concerns. In 2005, he was recognized by the Paraguayan Workers Compensation Hospital for assisting in the treatment of more than 450 burn victims from a shopping centre fire. The following year, he received a silver plaque from the Health Secretariat in the Brazilian state of Minas Geraies, honouring his 20 years of teaching there. Closer to home, the Royal College of Physicians and Surgeons of Canada presented to Dr. Duerksen a regional award in 2004 for outstanding contribution to medical education and the international and aboriginal communities. In 2009, he received a recognition award, named in his honour, from the Christian and Dental Society.

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