

Partnership | Integrity

Enthusiasm

Achievement

Curiosity | Service

2010 - 2011

OPSEI

ANNUAL ACHIEVEMENTS REPORT

The Office of Pediatric
Surgical Evaluation
and Innovation



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OPSEI TEAM

2010-2011



DR. JOHN MASTERSON
Interim-Head
Department of Pediatric
Surgery

Responsible for site specific effective delivery of clinical services; strategic and policy advice; site medical administration; quality monitoring and improvement; and support for teaching and research.



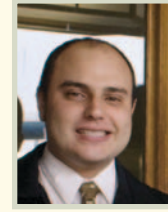
MR. NATHAN O'HARA
Program Coordinator

Responsible for academic and research activities and coordination of global health initiatives.



MR. DAMIAN DUFFY
Executive Director

Responsible for all OPSEI business operations and overall program management.



MR. AMIN MARDAN
Site Lead
Canadian Pediatric
Surgical Wait Times
Project

Responsible for maintaining surgical database used for various research studies and projects.



MR. STONEY CHEN
Project Manager

Responsible for conducting various operations research studies and projects to improve hospital efficiencies and patient quality of care.



MR. JORDAN CHENG
Science Co-op Student

Responsible for assisting operations research analyst and providing project support



MRS. BINDY SAHOTA
Academic
Administrative Assistant

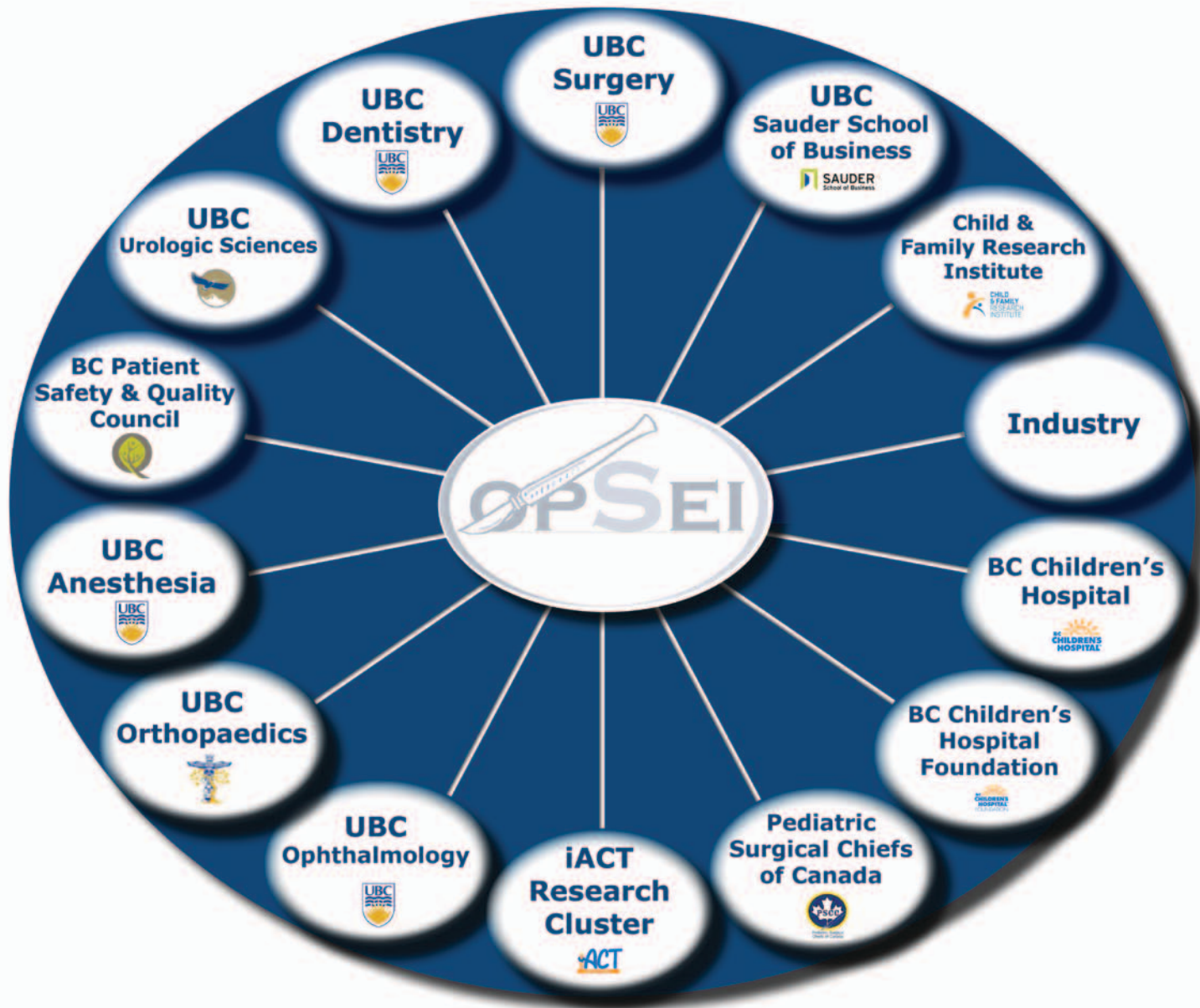
Responsible for all academic support to the pediatric surgeons and coordinates undergraduate and postgraduate training and research activities.



MS. CEDRIC MIAO
Science Coop Student

Responsible for assisting operations research analyst and providing project support.

PARTNERS IN PEDIATRIC SURGICAL INNOVATION



CLINICAL RESEARCH AND EDUCATION

April 1, 2011 marked the sixth year for the Office of Pediatric Surgical Evaluation and Innovation!

OPSEI continues to support an environment which supports student and faculty partnerships in clinical research and education. In

2010, the Department of Pediatric Surgery became BC Children's Hospital's largest summer student program hosting 24 summer students. Students and their faculty mentors were involved in clinical research projects ranging from predicting occlusion therapy outcomes to a quality assurance study on pain management. Following the intensive summer research program, many students presented their projects at the Western Medical Student Research Forum.



CARMEL DINNER

Summer Students and Faculty Supervisors

Students	Supervisor	Project title
Ida Molavi	Blair/Masterson/Duffy	Lights, Camera, Surgery
Jennifer Yam	Blair/Masterson/Duffy	Lights, Camera, Surgery
Freda Wong	Blair/Masterson/Duffy	Lights, Camera, Surgery
Steven Rathgeber	Blair/Masterson/Duffy	Lights, Camera, Surgery

Kristin DeGirolamo	Blair/Masterson/Duffy	Lights, Camera, Surgery
Kaytee Vostretsova	Blair/Masterson/Duffy	Lights, Camera, Surgery
Amandeep Ghuman	Blair/Masterson/Duffy	Lights, Camera, Surgery
Kelvin Kwan	Blair/Masterson/Duffy	Lights, Camera, Surgery
Tin Jasinovic	Blair/Masterson/Duffy	Lights, Camera, Surgery
Andrew Karpov	Blair/Masterson/Duffy	Lights, Camera, Surgery
Ian Wilson	Jennie Mickelson	Audience response system use in the University of British Columbia Medical School undergraduate program
Christopher J.D. Wallis	John Masterson	Wrap-Up and Editing of Online Teaching Resources Project in Urology
Mette Doesburg	Doug Courtemanche	Vascular Anomalies Clinic: Characterizing the population in this specialized provincial clinic
Tamryn Law	Doug Courtemanche	Characterizing Lipofibromatous Hamartomas with Macrodactyly
Colin McInnes	Jugal Arneja	Reconstructive or cosmetic plastic surgery: Factors influencing the type of practice established
Serena Shum	Gillian Lauder	A quality assurance audit of pain management after discharge from day surgery
Andrew Wong	Doug Cochrane	Study of radiological correlates of outcome following Endoscopic Third Ventriculostomy (ETV)
Mary Metrie	Paul Steinbok	Long-term outcome of brain tumours diagnosed in the 1st year of life
Anthony Holmes	Andrew Campbell	<i>Kingella kingae</i> endocarditis: A rare case of mitral valve perforation
Jake Hayward	Debbie Giaschi	The effects of speed, age and amblyopia on the processing of motion-defined form
Ali Qazalbash	Debbie Giaschi	Predicting occlusion therapy outcomes for children with amblyopia
Tim Bowen Roberts	Ash Singhal	Natural History of Syringomyelia
Anish Mitra	Ash Singhal	Ring Apophysis Fracture in Pediatric Disc Herniation

LIGHTS, CAMERA, SURGERY PROGRAM

List of videos produced by program in 2010

1 Steven Rathgeber & Jennifer Yam

DIVISION/DEPARTMENT Pediatric General Surgery
SUPERVISOR Dr. Sonia Butterworth
VIDEO TITLE: "Open Gastrostomy" | "Ladd Procedure"

DIVISION/DEPARTMENT Pediatric Urology
SUPERVISOR Dr. Kourosh Afshar and Ms. Heidi Scott
 "Mitrofanoff Urinary Diversion" | "Mitrofanoff Surgery Follow-up"

DIVISION/DEPARTMENT Pediatric General Surgery
SUPERVISOR Dr. Monica Langer
 "Surgical Scrub" | "Hand Hygiene Protocol"

DIVISION/DEPARTMENT Pediatric General Surgery
SUPERVISOR Dr. Sonia Butterworth
VIDEO TITLE: "Laparoscopic G-Tube Placement"

2 Andrew Karpov & Kaytee Vostretsova

DIVISION/DEPARTMENT Pediatric Plastic Surgery
SUPERVISOR Dr. Cindy Verchere
VIDEO TITLE: "Suturing"

DIVISION/DEPARTMENT BCCH Physiotherapy
SUPERVISOR Ms. Stacey Miller and Ms. Karen Davies
 "Lower Extremity ROM Measurements"

DIVISION/DEPARTMENT Pediatric Cardiac Surgery
SUPERVISOR Dr. Andrew Campbell
VIDEO TITLE: "Bidirectional Glenn Procedure"

3 Tin Jasinovic & Anu Ghuman

DIVISION/DEPARTMENT Pediatric Cardiac Surgery
SUPERVISOR Dr. Andrew Campbell
VIDEO TITLE: "Chest Tube Insertion"

DIVISION/DEPARTMENT Pediatric Orthopedic Surgery
SUPERVISOR Dr. Kishore Mulpuri
VIDEO TITLE: "Short Arm Cast"

DIVISION/DEPARTMENT Pediatric Anesthesia
SUPERVISOR Dr. Simon Whyte
 "Mechanics of Laryngoscopy: "Tips & Tricks""

DIVISION/DEPARTMENT Pediatric General Surgery
SUPERVISOR Dr. Sonia Butterworth
 "Pyloromyotomy"

4 Kristin DeGirolamo & Ida Molavi

DIVISION/DEPARTMENT Pediatric Plastic Surgery
SUPERVISOR Dr. Doug Courtemanche
VIDEO TITLE: "Hand-Splinting"

DIVISION/DEPARTMENT Pediatric General Surgery
SUPERVISOR Dr. Sonia Butterworth
VIDEO TITLE: "G-Tube Placement"

DIVISION/DEPARTMENT Pediatric Anesthesia
SUPERVISOR Dr. Carolyne Montgomery
 "Arterial Line Insertion"

DIVISION/DEPARTMENT Pediatric General Surgery
SUPERVISOR Dr. Sonia Butterworth
 "Congenital Diaphragmatic Hernia Repair"

DIVISION/DEPARTMENT Palliative Care

SUPERVISOR Dr. Romaine Gallagher

"Use of topical opioids for painful wounds or fungating tumors"

DIVISION/DEPARTMENT BCPQC

SUPERVISOR Dr. Geoffrey Blair

"Safe Surgery Checklist"

5 Freda Wong & Kelvin Kwan

DIVISION/DEPARTMENT Pediatric Cardiac Surgery

SUPERVISOR Dr. Andrew Campbell

VIDEO TITLE: "Arterial Switch Procedure"

DIVISION/DEPARTMENT Pediatric Plastic Surgery

SUPERVISOR Dr. Jugpal Arneja

VIDEO TITLE: "Unilateral Cleft Lip Repair"

DIVISION/DEPARTMENT Pediatric Anesthesia

SUPERVISOR Dr. Carolyne Montgomery

"Bag Mask Ventilation and Oral Airway"

"Laryngeal Mask Airway Insertion"

"Insertion of Oral Airway"





BACKGROUND

The Department of Pediatric Surgery at BCCH, led by a surgeon champion and operational leaders, began exploring the use of the new Pediatric module of NSQIP in the fall of 2009. Since that time, the case for the implementation of the Pediatric NSQIP has been championed by physicians and the surgical team, the Child Health Executive Team at BCCH, and the PHSA Executive Team.

BCCH is well positioned to take on this program, given strong physician leadership and buy-in for Pediatric NSQIP, and the commitment to quality of care and patient safety by all members of the

multidisciplinary surgical team. The momentum for Pediatric NSQIP and enthusiasm for surgical quality improvement is strongly supported by the pediatric surgeons. The surgical team at BCCH has also worked hard to enhance communication, and promote a solutions-focused culture which supports the very best surgical care for BC's children and their families.

A SUPPORTIVE PATIENT QUALITY AND SAFETY ENVIRONMENT FOR PEDIATRIC NSQIP TO FLOURISH

A longstanding Quality of Care Committee who reviews clinical concerns and issues within the program, and benchmarks with other pediatric

centers in their network. Pediatric NSQIP will allow a more systematic comparison to benchmark quality standards with a longstanding Quality of Care Committee who reviews clinical concerns and issues within the program.

The Surgical Data Quality Committee is an interdisciplinary committee that collects, analyzes and communicates data regarding surgical care at BC Children's Hospital. Key Initiatives to improve performance, monitor, and report on progress are also developed. There are clear synergies between the Pediatric NSQIP team and the work of this committee.

Surgical quality is deemed the responsibility of all members of the surgical team. For instance, safety events are tracked through the Patient Safety Learning System, and are followed up immediately by the surgical leadership team. This has increased the capacity for surgical quality and prevention of unplanned clinical events.

The OR Quality and Safety Leader for the Surgical Suites plays an integral role in quality improvement, change management, and guideline development and implementation.

EARLY PEDIATRIC NSQIP ACHIEVEMENTS

- Identification of a Surgeon Champion – Dr. John Masterson
- Roles, responsibilities, internal/external reporting mechanisms organized

- Completed contracts with the American College of Surgeons' NSQIP Office
- Recruitment of two Surgical Clinical Reviewers: Ms. Melanie Ganshorn and Ms. Tamara Chan
- Recruitment of a Data Clerk: Ms. Cynthia Rieta-Rusnak
- IMIT issues resolved and Privacy Impact Assessment sign-off complete
- Pediatric NSQIP Budget granted and Annual ACS Membership initiated
- Pediatric NSQIP office identified, space developed, data/hardware/software hook ups organized, furnished. We are open and ready for business!
- Surgical Clinical Reviewers attended SCR training in Chicago, Illinois in May, 2011
- **"Go Live Data Submission"** May 30, 2011 and ongoing data submission deadlines established. Data extractions began on May 30th with the Surgical Clinical Reviewers working their way through a ramp-up schedule. Weekly ramp up commenced with 10 cases and 5 additional cases are included each cycle until we reach a 35 case per 8 day cycle submission rate.
- Identification of data streamlining from various sources (charts, family follow-up, databases, clinics)
- Internal Bi-Monthly Review of data collection quality pathways and data clean up

- Ongoing clinical staff engagement: Journal Club, Surgical Suite Grand Rounds
- BCCH is leading the way nationally and was accepted for a Pediatric NSQIP Workshop at CAPHC, October, 2011 to build participation in Pediatric NSQIP among Canadian Pediatric Health Centers
- BCCH Pediatric NSQIP Clinical Engagement Meetings held with Medical Records, OR team, SDCU, surgical offices, and regular attendance at divisional and quality rounds

LOOKING FORWARD

- Ensuring pediatric surgical procedures are appropriately mapped and linked between ORSOS with CPT coding.
- PIA and ACS harmonization regarding validation of DOBs < 24 months
- Identifying methods to bring Pediatric NSQIP data reporting back to the clinical teams through quality improvement projects
- Design and develop quality action plans
- Annual ACS Pediatric NSQIP Conference in Boston, July 23-26, 2011
- Participating and strengthening our relationship with the BC Patient Safety and Quality Council's Provincial Collaborative for NSQIP sites within the Province of British Columbia
- Collaborating with the BC Patient Safety and Quality Council's Surgical Quality Action Network (SQAN) in which NSQIP will provide SQAN with key measurement data.

THE PEDIATRIC NSQIP TEAM

DR. JUGPAL ARNEJA

Associate Head, Surgery, Clinical Affairs

DR. GEOFFREY BLAIR

Pediatric Surgeon

MS. TAMARA CHAN

Surgical Clinical Reviewer

MR. STONEY CHEN

Project Manager, OPSEI

DR. DOUG COCHRANE

Chair, BC Patient Safety and Quality Council

MS. VICKY CROMPTON

Interim Director, Patient Care Services

MS. OGNJENKA DJURDJEV

Corporate Director, Decision Support Services

MS. MELANIE GANSHORN

Surgical Clinical Reviewer

MR. DAMIAN DUFFY

Executive Director, OPSEI

MR. AMIN MARDAN

ORSOS Manager

DR. JOHN MASTERSON

Interim Chief of Surgery, BCCH

CONT'D

DR. JIM MURPHY

Member, Child Health Surgical Quality of Care Committee

MS. JANICE PENNER

Program Manager, Surgical Services

MR. LARRY GOLD

President, BC Children's Hospital

MS. BARB FITZSIMMONS

Vice-President, Patient Care Services

MS. SHERRY HAMILTON

Chief Nursing and Liaison Officer, PHSA

DR. WARREN HILL

Patient Safety and Quality Leader

MR. MICHAEL MARCHBANK

Chief Operating Officer, PHSA

DR. ERIK SKARSGARD

Associate Head, Surgery, Academic Affairs

MS. SUZANNE STEENBOROUGH

Program Manager, Neurosciences and Surgery

DR. SIMON WHYTE

Associate Head, Department of Pediatric Anesthesia

MS. CINDY RIETA-RUSNAK

Pediatric NSQIP Clerk



Canadian Pediatric Surgical Wait Time Project

The Canadian Pediatric Surgical Wait Time Project is an unprecedented collaborative venture of sixteen Pediatric Academic Health Science Centres. Its main goal was to measure the burden of surgical wait times for Canada's children and youth. One of the first tasks of this project was to conduct a survey in order to understand the current clinical pathways at BCCH and across the country that provide recourse for patients with excessive wait times. Canada-wide, excessive wait times for patients prior to surgery appear to be the most pressing problem for waitlist management. However, prior to this project there was no quantitative evidence to support that hypothesis.

The milestones for this project to date are as follows:

- Data is submitted to the national office on a monthly basis. The national office uses our data to anonymously benchmark our performance across the country in similar surgical services.
- This project has allowed us to allocate resources to correctly identify root causes for waitlist data contamination issues and to help with data maintenance strategies which are monitored on a monthly basis.
- Several provinces have adopted or are considering the adoption of standardized wait-time access targets called the Paediatric Canadian Access Targets for Surgery (P-CATS) developed by the Canadian Paediatric Surgical Wait Times (CPSWT) Project. In December 2010, the BC Ministry of Health implemented the use of these access targets to measure wait times for all pediatric surgery across the province. The Patient Access Registry of Nova Scotia (PAR-NS) incorporates P-CATS-coded pediatric information from the IWK Health Centre capturing approximately 70% of Nova Scotia's pediatric surgical cases. This allows for consistent reporting of adult and pediatric surgical cases. The Patient Access Registry

Tool (PART) of Manitoba also uses and collects P-CATS data from the Winnipeg Children's Hospital. Finally, in a recent initiative in Alberta, the P-CATS model is being considered to develop the pediatric and adult wait time strategy.

- April 1, 2010, the CPSWT Program transitioned into an ongoing program. The CPSWT Project has been funded by Health Canada from 2007 to March 2011 with additional participating site contribution in 2010-2011. The project is currently self-funded through participating site contributions.
- CMAJ article entitled "Waiting for children's surgery in Canada: the Canadian Paediatric Surgical Wait Times project", published at www.cmaj.ca on May 2, 2011.
- CPSWT Report featured in Wait Time Alliance Report Card in 2010 and 2011.
- "Paediatric Surgical Capacity and Demand: Analysis Reveals a Modest Gap in Capacity and Additional Efficiency Opportunities", to be published in Healthcare Quarterly: System Performance Issue, this Fall 2011.



Children's Circle of Care and the Hospital Matching Program

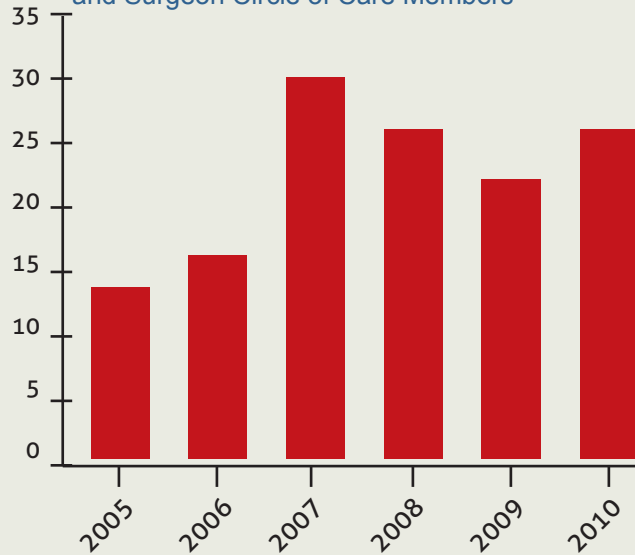
Each year, we work collaboratively with the BC Children's Hospital Foundation to raise funds through the Hospital Family Matching Gift Program in order to support and advance our patient care, research, and education mission.

I am extremely pleased to share with you that we have had a total of 27 donors contribute to the Children's Circle of Care Program within the Departments of Pediatric Anesthesia, Pediatric Dentistry and Pediatric Surgery for 2010. Moreover, it is especially a pleasure to report that

we are warmly welcoming 2 new physician donors to the Children's Circle of Care Program. Their generous donations, along with the matching gifts, have raised a total of \$278,635.

I would also like to take this opportunity to thank Ms. Janice Williams and the whole BC Children's Hospital Foundation team who facilitate the Children's Circle of Care Program. Clearly, their important work has and will continue to make a difference in the care we provide to children and families at our hospital.

Number of Participating Anesthetists, Dentists and Surgeon Circle of Care Members



OPSEI

PASSION

PARTNERSHIP

SHARING THE CARE GLOBALLY

PEDIATRIC SURGICAL CAMP – UGANDA 2011

BC Children's Hospital shares a long-standing partnership with the University of Makerere, Uganda. As part of this ongoing collaboration a team of pediatric surgeons, anesthesiologists, nurses and support staff travelled to Uganda to participate in the Pediatric Surgery Camp in April 2011. The camp was welcomed by Dr. Doreen Birabwemale of Mulago Hospital, who is currently



"The Pediatric Surgical Camp was successful in improving the lives of over 200 Ugandan children and their families through the provision of high-quality surgical treatments."

one of only two pediatric general surgeons serving Uganda's population of 30 million

people. Working side-by-side, the Ugandan and Canadians teams provided invaluable surgical treatments to Ugandan children with a variety of surgical conditions during the camp. The successes of the camp also included contributions to training, education and local research relating to essential surgical care in low-resource settings.

In Uganda, children and their families face tremendous barriers in seeking treatment for even simple surgical conditions. These primarily include accessibility, local availability and costs of care. Camp services were all provided at no charge to families and were based out of hospitals in the capital city of Kampala and the rural

Southwestern town of Ishaka. In low-resource settings such as Uganda even simple, treatable conditions such as pediatric inguinal hernia can lead to debilitating and even life-threatening complications due to the lack of basic surgical services. More complex conditions such as anorectal malformations lead to lifelong disability, suffering and stigmatization to children who are unable to access care. The children treated during the camp suffered from a broad spectrum of conditions including abdominal wall hernias, anorectal malformations, Hirschsprung's disease and sacrococcygeal teratomas.

The Pediatric Surgical Camp was successful in improving the lives of over 200 Ugandan children and their families through the provision of high-quality surgical treatments. Education and research were central components of the Pediatric Surgical Camp which included residents of Anesthesia and Surgery from both Makerere University and the University of British Columbia. Ugandan surgical residents were mentored by Dr. Geoffrey Blair and the Ugandan anesthesia residents were mentored by Dr. Eleanor Reimer. Dr. Monica Langer (Fellow, Pediatric General Surgery, BCCH) employed video replay technology for teaching Ugandan surgical residents in technical procedures to maximize learning opportunities during the busy surgical camp. BCCH surgical nurses Cheryl Baldwin and Kat Lidstone worked closely with local nursing staff and led workshops on pediatric resuscitation and peri-operative care.

The team also conducted a number of research initiatives that investigated barriers to accessing care and costs of providing essential surgical care in Uganda. The findings from the research provide important policy-relevant evidence that demonstrates the feasibility and cost-effectiveness of basic surgical care in low-resource settings.

The overwhelming success of the camp depended on the truly collaborative nature of the Ugandan-Canadian partnership. This symbiotic partnership provides tremendous opportunities for education, research and the delivery of clinical care. Most importantly the Pediatric Surgical Camp was able to provide life-changing treatments to children and families in need of surgical care.



BCCH Team Members:

- Cheryl Baldwin, Nurse
- Kat Lidstone, Nurse
- Catherine Blair, Family Resource Volunteer
- Damian Duffy, Mission Coordinator
- Gareth Eeson, General Surgery Resident
- Dagmar Moulton, Anesthesia Resident
- Monica Langer, Pediatric General Surgery Fellow
- Eleanor Reimer, Pediatric Anesthesiologist
- Geoffrey Blair, Pediatric General Surgeon

The camp was generously supported by the following organizations:

- UBC Branch for International for International Surgery Resident Research Grants - G. Eeson, M. Langer
- Canadian Association of Pediatric Surgeons
- Donation from Dr. Tuan Pham + Family
- Donation from Mrs. Stella Perdios
- Donation from Mrs. Betty McGill
- Circle of Care Dr. and Mrs. Geoffrey and Catherine Blair
- Circle of Care Dr. Eleanor Reimer
- Ryerson United Church (medications and patient supplies)
- Donation from Mrs. Helen Prowse
- In-kind contributions from Industry partners: Kimberley-Clarke



Life-changing treatments to children and families in need of surgical care.



CONFERENCE ON SURGERY AND ANESTHESIA IN UGANDA



On April 2, 2011 OPSEI co-presented the second annual conference on Surgery and Anesthesia in Uganda. The conference brought together over 100 people from twelve different institutions including nine colleagues from Uganda. The meeting was developed with the goal of

bringing together the many academic institutions collaborating in Uganda to improve clinical training and service delivery.

Discussion during and following the conference have led to the development of a proceedings

document which outlines seven mutual priorities of the group to be achieved over the ensuing twelve months. Each priority has a specific set of deliverable linked to a timeline and with a self-assigned person responsible for ensuring a positive outcome.

UGANDA HEARING HEALTH CARE PROGRAM



The program ultimately strives to create a sustainable system for the people of Uganda

The Uganda Hearing Health Care Program began when Dr. Irwin Stewart first visited Uganda in 2000. A year later, he recruited otolaryngologist Dr. Brian Westerberg (BC Children's Hospital, St. Paul's Hospital) to the first team trip to Uganda aiming to determine the prevalence and causes of hearing loss. In subsequent trips Dr. Westerberg treated patients who were deaf or had difficulty hearing by both medical and surgical means. However, the project has always included more than just ear surgery, it has also developed water and sanitation projects in Arua under the guidance of Mr. Michael Crean.

The goal has always been to train the trainers through the education of local Otolaryngology Surgeons (Ear, Nose and Throat Surgeons) and to supply them with donated equipment needed

for ear surgery, thus allowing ultimately for independent practice in Uganda. The program ultimately strives to create a sustainable system for the people of Uganda. Recently, the project has expanded considerably to include a broader range of health and educational services with the addition of experienced personnel in Nursing, Biomedical Engineering and Anesthesiology.

In 2009, OPSEI Executive Director Damian Duffy and BCCH Division of Pediatric Otolaryngology Head, Dr. Fred Kozak joined the group for their October trip. The group saw 92 patients in 10 clinic days in four centers. Dr. Kozak spent additional time working at the Wototo Orphanage screening children with ear problems. There were surgeries done in conjunction with local Otolaryngologists being instructed/assisted in provision of care

for otolaryngologic disorders. The main health concerns addressed were chronic ear infections complicated by perforated ear drums and ear drainage issues. For the pediatric patients this was particularly problematic as it negatively impacted both school learning activities and social development with other children. The team even witnessed occasions in which children no longer attended school. Students were either sent home by the teacher or chose not to attend class hoping to avoid teasing from their peers because of ear discharge.

Additionally, other ENT surgical conditions were seen and treated. These conditions included masses of the neck, nose and sinus. Procedures which were undertaken were done in concert with the local Ugandan surgical team.

UGANDA SUSTAINABLE TRAUMA ORTHOPAEDIC PROGRAM

The Uganda Sustainable Trauma Orthopaedic Program was established in 2008, as collaboration between the University of British Columbia and Makerere University in Kampala, Uganda to reduce the burden of neglected orthopaedic trauma in the country. The program is coordinated by OPSEI administrator, Nathan O'Hara.

USTOP's most recent visit in November 2010 consisted of two orthopaedic surgeons, one anesthesiologist, one orthopaedic resident, one anesthesia resident, three nurses and a sterilization technician who worked with local staff of Mulago Hospital to analyze and strengthen the current system for managing traumatic injuries. Policies are changing to ensure that injured patients receive direct admission to the surgical wards. On this, USTOP's third visit, the team was joined by three members of the Division of Plastic Surgery. Dr. Mark Hill, Dr. Peter Lennox and Dr. Asif Pirani went to Uganda to assess the feasibility of helping Ugandan colleagues establish a residency program in Plastic Surgery. If successful, the program would be the first of its kind in East Africa.



ACADEMIC ACTIVITIES

OPSEI:

Academic Presentations:

1. “Reconstructive or cosmetic plastic surgery: Factors influencing the type of practices established by Canadian Surgeons”. Mr. Colin McInnes, Division of Pediatric Plastic Surgery. AFRM Western Regional Meeting, Carmel, California
2. “Lights, camera, surgery 2010: Expansion and standardization of the production of surgical education learning resources”. Kelvin Kwan. AFRM Western Regional Meeting, Carmel, California
3. “Audience response system use in University of British Columbia Medical School undergraduate education”. Ian Wilson, Division of Pediatric Urology. AFRM Western Regional Meeting, Carmel, California
4. “Intratubular germ cell neoplasia in the pediatric population: A case report”. Kristin DeGirolamo, Division of Pediatric Urology . AFRM Western Regional Meeting, Carmel, California
5. “A case of mixed gonadal dysgenesis with 45,x/46,xringy/46, xy karyotype and its laproscopic management”. Ida Molavi, Division of Pediatric Urology. AFRM Western Regional Meeting, Carmel, California
6. “Spontaneous rupture of hepatic hemangioma in a neonate - Survival with non-operative management”. Amandeep Ghuman, Division of Pediatric General Surgery. AFRM Western Regional Meeting, Carmel, California
7. “An atypical presentation of a pancolonic venous malformation”. Freda Wong, Division of Pediatric General Surgery. AFRM Western Regional Meeting, Carmel, California
8. “Addressing the barriers to the treatment of orthopaedic trauma in Uganda”. Nathan O’Hara. Bethune Round Table on International Surgery, Calgary, Alberta

Honours and Awards:

9. Golden Safety Pin Award. Halifax. Video Competition. Kristin DeGirolamo, Ida Molavi, Ian Wilson, UBC Medical Students
10. 2nd Annual Lights, Camera, Surgery Video Competition. Winning video. “Unilateral Cleft Lip Repair”. Medical Students: Kelvin Kwan, Freda Wong. Faculty Mentor: Dr. Jugpal Arneja, Division of Pediatrics Plastic Surgery

**iACT
RESEARCH DAY
SEPTEMBER 24, 2010**

On Friday, September 24, 2010, the Innovations in Acute Care and Technology (iACT) research cluster at BC Children’s Hospital and the Child and Family Research Institute hosted their first research day.

The event opened with a captivating presentation by the Director of the Manitoba Institute of Child Health, Dr. Terry Klassen. Dr. Klassen’s presentation was followed by presentations from 2010 iACT funding recipients and a lunchtime trainee poster competition.



Committee Participation:

1. D. Duffy, Member, BC Children's Hospital United Way Fundraising Committee
2. D. Duffy, Executive Director, Pediatric Surgical Chiefs of Canada
3. D. Duffy, Chair, BC Children's Hospital Foundation Fellowship Allocation Committee
4. D. Duffy, Member, Pediatric Surgical Executive Committee
5. D. Duffy, Member, Pediatric General Surgery Residency Training Committee
6. D. Duffy, Member, BC Children's Hospital Excellence in Education Awards Committee
7. D. Duffy, Member, Executive Committee, Innovations in Acute Care and Technology Research Cluster, CFRI

Grant Funding Received:

Project Title	PI	Team	Granting Agency	Amount
Supporting On-Line Learning through the development of surgical education videos	Dr. Geoffrey Blair	Mr. Damian Duffy, Dr. John Masterson	UBC Summer Student Internship Award	\$3,200
Wrap-Up and Editing of Online Teaching Resources in Urology	Dr. John Masterson	Dr. Larry Goldenberg, Dr. Kourosh Afshar, Dr. Jennie Mickelson	UBC Teaching and Learning Enhancement Fund	\$9,120
Lights, Camera, Surgery: Production of Surgical Videos within the OR Setting	Dr. Geoffrey Blair	Mr. Damian Duffy, Dr. John Masterson	UBC Summer Student Internship Award	\$25,900
Lights, Camera, Safety	Dr. John Masterson	Mr. Damian Duffy	Partnership with the BC Patient Safety and Quality Council	\$4,020
Capacity Building Award	Dr. Geoffrey Blair	Mr. Damian Duffy, Dr. John Masterson, Ms. Lori Nelson	Child and Family Research Institute	\$40,000
Resident Research Grant	Dr. Paul Mick	Dr. Brian Westerberg, Mr. Damian Duffy	Branch for International Surgery	\$2,500
Global Health Scholarship – Uganda Hearing Health Program	Mr. Damian Duffy	Dr. Brian Westerberg	Auxiliary to BC Children's Hospital	\$2,000
Total Funding				\$86,740



Divisional/Departmental Academic Achievements 2010 - 2011

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Division of Pediatric Cardiovascular and Thoracic Surgery

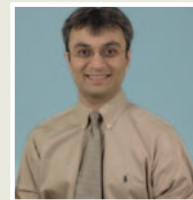


Highlights and Achievements:

In July 2010, Dr. Sanjiv Gandhi joined the staff of the Division of Pediatric Cardiovascular and Thoracic Surgery as Head. Several new clinical initiatives were introduced in 2010, including the concept of fast-tracking postoperative patients, which saw an increase in case numbers and a trend towards reduction in ICU stay and overall length of hospital stay. This year also marked the opening of the Children's Heart Unit, a nursing unit dedicated to the postoperative care of cardiothoracic patients following their discharge from the Intensive Care Unit. With the dedication of the entire Cardiac Sciences staff, the Surgical Division was able to perform over 200 open heart operations and a total of 350 cases in 2010.

In January 2011, Dr. Andrew Campbell also assumed the role of co-director of the Cardiac Surgery Residency program of the University of British Columbia.

Faculty Members:



▶ Dr. Sanjiv K. Gandhi,
Division Head



▶ Dr. Andrew I.M.
Campbell

Other Staff Members:



▶ Ms. Celia Magraw,
Administrative
Assistant

DIVISION OF PEDIATRIC CARDIOVASCULAR AND THORACIC SURGERY

Presentations:

1. **Dr. Sanjiv Gandhi** "Biventricular Assist Devices as a Bridge to Heart Transplantation in Small Children." presented at the University of Alberta Mechanical Circulatory Support Symposium 2010.

Lectures:

1. **Dr. Sanjiv Gandhi** "Surgical Therapy of Pediatric Heart Failure." Pediatric Grand Rounds. BC Children's Hospital, Vancouver, British Columbia. May 1, 2010.
2. **Dr. Andrew Campbell** "Tetralogy of Fallot." Combined Cardiology/Cardiac Surgery Rounds. Vancouver General Hospital, British Columbia. September 16, 2010.

Formal Teaching:

1. **Dr. Sanjiv Gandhi** ECLS Course: Pediatric Mechanical Ventricular Assistance
2. Formal weekly PICU Cardiac Surgery Teaching Rounds
3. **Dr. Andrew Campbell** Congenital Cardiovascular Pathology Lab. UBC Medical School, Vancouver, BC. March 2011
4. Cardiovascular Block, PBL. UBC Medical School, Vancouver, BC. Feb.-March 2011

Publications April 1, 2010 to March 31, 2011:

1. Gazit AZ, **Gandhi SK**, and Canter CE. Mechanical Circulatory Support of the Critically Ill Child Awaiting Heart Transplantation. *Current Cardiology Reviews*. 2010; 6: 46-53.
2. Puri V, Epstein D, Raithel SC, **Gandhi SK**, Sweet SC, Faro A, Huddleston CB. Extracorporeal membrane oxygenation in pediatric lung transplantation. *J Thorac Cardiovasc Surg*. 2010; 140(2): 427-432.
3. Jeewa A, Pitfield AF, Potts J, Soulikias W, DeSouza E, Hollinger AJ, Sandor GGS, LeBlanc JG, **Campbell A**, Sanatani S. Does biventricular pacing improve hemodynamics in children undergoing routine congenital heart surgery? *Pediatric Cardiology*; 2010 31:181-187.
4. Block AJ, McQuillen PS, Chau V, Glass H, Poskitt KJ, Barkovich AJ, Esch M, Soulikias W, Azakie A, **Campbell A**, Miller SP. Clinically silent preoperative brain injuries do not worsen with surgery in neonates with congenital heart disease. *J Thorac Cardiovasc Surg*. 2010 Apr 28.
5. Andrade JG, Leipsic JA, **Campbell A**, Hung T, Klein-Parker H, Kiess MC, Human D. An unusual cause of anterior mediastinal mass. *Journal of the American College of Cardiology*; 2010 56(7).
6. Finkbeiner MR, LeBlanc J, Hosking M, **Campbell A**. Safe retrieval of embolized patent ductus arteriosus coil via left thoracotomy. *Experimental and Clinical Cardiology*; 2010.
7. Carpes L, Leblanc J, **Campbell AI**, Human D, Fandino M, Ludemann J, Moxham P, Kozak F. Vocal Fold Immobility Following Cardiothoracic Surgery in Children. American Society of Pediatric Otolaryngology Annual Meeting, Las Vegas, Nevada, May 1, 2010.
8. Mivelaz Y, Lim KI, Templeton C, **Campbell AI**, Potts JE, Sandor GG. Review of the natural history of tetralogy of Fallot with absent pulmonary valve syndrome: does prenatal diagnosis imply increased risk? World Congress on Ultrasound in Obstetrics and Gynecology 2010.
9. Morales DL, Almond CS, Jaquiss RD, Rosenthal DN, Naftel DC, Massicotte MP, Humpl T, Turrentine MW, Tweddell JS, Cohen GA, Kroschwitz R, Devaney EJ, Canter CE, Fynn-Thompson F, Reinhartz O, Imamura M, Ghanayem NS, Buchholz H, Furness S, Mazor R, **Gandhi SK**, Fraser CD Jr. Bridging children of all sizes to cardiac transplantation: the initial multicenter North American experience with the Berlin Heart EXCOR ventricular assist device. *J Heart Lung Transp*. 2011; 30(1): 1-8.
10. Glass HC, Bowman C, Chau V, Moosa A, Hersch AL, **Campbell A**, Poskitt K, Azakie A, Barkovich AJ, Miller SP, McQuillen PS. Infection and white matter injury in infants with congenital cardiac disease.

Cardiol Young. 2011 Apr 19:1-10.

11. Dimitropoulos A, McQuillen PS, Moosa A, Sethi V, Xu D, Chau V, Brant R, Azakie A, **Campbell AI**, Barkovich AJ, Poskitt K, Miller SP. Relationship of brain injury and delayed brain development in newborns with congenital heart disease. Pediatric Academic Societies Annual

Fellows Supervised:

1. Dr. Takashi Sasaki, Tokyo, Japan

Residents Supervised:

1. Dr. Ala Al-Lawati, UBC, Cardiac Surgery, Nov.2010-Dec.2010

Grant Funding Received:

Project Title	PI	Team	Granting Agency	Amount
International Surgical Patient Capacity Project	Dr. Sanjiv Gandhi	Devon Rasmussen, Damian Duffy, John Masterson		\$3200

Clinical clerks:

Nadzir Juanda	4th year University of Calgary	June 21, 2010	July 2, 2010
Candice Downey	4th year University of Leeds	July 5, 2010	July 30, 2010
Ben Lee	4th Year, Univ. of Newcastle	Aug 2, 2010	Aug 25, 2010
Kathryn Morrison	3rd year UBC medical student	Oct 11, 2010	Oct 23, 2010
Jong Moo Kim	4th year UBC medical student	Oct 25, 2010	Nov 19, 2010
Farrukh Munshey	3rd year UBC medical student	Dec 6, 2010	Dec 18, 2010
Mark Lawson	3rd year UBC medical student	Jan 4, 2011	Jan 16, 2011
Morgan Schellenberg	4th year Queens Medical student	Jan 10, 2011	Jan 21, 2011
Irwin Janjua	3rd year UBC medical student	Feb 28, 2011	Mar 13, 2011
Ada Lam	4th year UBC medical student	Feb. 28, 2011	Mar 11, 2011
Su Yuan	4th year University of Calgary	Mar 14, 2011	Mar 25, 2011
Megan Hill	3rd year UBC medical student	Mar 28, 2011	Apr 10, 2011
Kewan Aboulhosn	4th year UBC medical student	Mar 28, 2011	Apr 8, 2011



Research students [*Student Name, Research Topic*]:

1. Anthony Holmes, Kingella kingae endocarditis, July 2010
2. Freda Wong, Fontan outcomes, April 2011

Committee Participation:

Dr. Andrew Campbell

1. Credentials Committee, BC Children's Hospital, Member
2. Careers in Action, Career Counseling Program, Faculty of Medicine, University of British Columbia, Mentor
3. ECLS Steering Committee, BC Children's Hospital, Member
4. ECLS Working Group Committee, BC Children's Hospital, Member
5. University of British Columbia Cardiac Surgery Residency Program Committee, Co-Director
6. Cardiac Quality Assurance Committee, BC Children's Hospital, Co-Chair
7. Western Canadian Children's Heart Network, Member
8. Western Canadian Children's Heart Network, Chair Research

Dr. Sanjiv Gandhi

1. BC Children's Hospital Surgical Cabinet, Member
2. ECLS Steering Committee, BC Children's Hospital, Member
3. Jehovah's Witnesses Guidelines Committee, BC Children's Hospital, Member
4. Western Canadian Children's Heart Network, Member
5. Western Canadian Children's Heart Network Database Steering Committee, Member

6. Western Canadian Children's Heart Network Operations Committee, Member

Initiatives in Progress:

1. International Surgical Patient Capacity Project
2. Development of Pediatric Mechanical Ventricular Assist Device and Cardiac Transplant Program



Department of Pediatric Dentistry



▶ Dr. Douglas Johnston,
Department Head



Faculty Members:

Dr. Douglas Johnston, Department Head
Dr. Phoebe Tsang
Dr. Jong-Hyun Ban
Dr. Karen Campbell
Dr. Anita Gartner

Other Staff Members:

Dr. Clive Bethel, Associate GP
Dr. Martin Braverman, Active oral and maxillofacial surgeon
Dr. Mark Casafrancisco, Active pediatric dentist
Dr. Anabel Chan, Active pediatric dentist
Dr. Peter Chan, Active pediatric dentist

Dr. Brian Chanpong, Active anesthesiologist
Dr. Wa S. Cheung, Active pediatric dentist
Dr. Sam Chiang, Consulting pediatric dentist
Dr. Ed Chin, Active pediatric dentist
Dr. Jeff Coil, Active endodontist
Dr. Lisa Coveney, Active pediatric dentist
Dr. Hasnain Dewji, Active pediatric dentist
Dr. Leo Fung, Active prosthodontist
Dr. Rosamund Harrison, Active pediatric dentist
Dr. Paul Helpard, Consulting orthodontist
Dr. Bon Bob Hu, Associate GP
Dr. Robin Jackson, Active orthodontist
Dr. Richard Kramer, Active pediatric dentist
Dr. Young Kuah, Active orthodontist and pediatric dentist

Dr. Louisa Leung, Provisional active pediatric dentist
Dr. Angelina Loo, Active orthodontist
Dr. William MacDonald, Active oral and maxillofacial surgeon
Dr. Eugene Marks, Active oral and maxillofacial surgeon
Dr. Resa Nouri, Active pediatric dentist
Dr. Gerry Pochynok, Active pediatric dentist
Dr. Mark Reichman, Active oral and maxillofacial surgeon
Dr. Donal Scheideman, Active pediatric dentist
Dr. Ronald Slemko, Active oral and maxillofacial surgeon
Dr. Dorothy Sonya, Active orthodontist
Dr. Esther Tam, Active endodontics
Dr. Isaac Tam, Active pediatric dentist
Dr. Tim Tam, Active pediatric dentist
Dr. Wendy Tang, Active pediatric dentist

DEPARTMENT OF PEDIATRIC DENTISTRY

Highlights and Achievements:

The dental department at BC Children's was funded by PHSA for a coned beam CT scanner which was installed in the late summer of 2010. This is the first pediatric dental department in Canada to have a coned beam CT scanner and combined with the 3DMD stereo camera will eventually offer the highest technology for the analysis and diagnosis of patients with cleft lip and palate and craniofacial anomalies.

The Graduate Program in Pediatric Dentistry had its inaugural class begin in August, 2010 with three students in each class. The Program is a three year specialty certification that requires the completion and defense of a Master of Science thesis as well as sitting the Fellowship Examinations of the Royal College of Dentists of Canada. The first year's class was selected from over 20 excellent candidates and each student has at least five years of experience in clinical practice prior to their application. They are Drs. Nancy Vertel, Winnie Zhao and Carter Ng. The first year of the Program is focused at UBC Faculty of Dentistry and has a high didactic component. Years two and three will be focused at BC Children's. The students will be treating patients in the clinic and the dental OR as well as taking call with the GPRs.

Presentations:

Dr. Johnston and Ms Kayla Rogosin-Miller presented the new desensitization program for children with autism to OPSEI rounds this past winter. The program focuses on having children with autism come in for repeat visits using a PECS board with images of what to expect with each step of their visit to the department. Subjectively the program appears to be very successful and the plans are to have this lead to an objective trial in the clinic.

Lectures:

1. Dr. Johnston lectured to the fourth year class in the DMD Program at UBC, PACS 430 on professionalism. The lecture focused on special needs patients that are treated in the hospital and by specialists in the community.
2. Every year students in the undergraduate program compete for four positions to rotate as observers in the hospital program and this lecture helps stimulate students to consider a residency in the pediatric GPR at Children's and possibly Graduate training in Pediatric Dentistry.

Formal Teaching:

1. With the initiation of the Graduate Program, all of our staff are involved in teaching. Dent 516, Case Review and Treatment Planning is lead by Drs. Campbell and Johnston. This is a two hour course that runs weekly in the third term of the first year graduate program. Students present a complex case on Power Point which leads to discussion and often alternate treatment plans.
2. Drs. Joy Richman and Ed Yen share a full year course with the first year Graduate Students on Craniofacial Growth and Development, Dent 524. Drs. Richman and Yen each have a full term, half day seminar with the students.
3. Clinical training for the graduate students begins at UBC in their first year, Dent 780. Light sedation is provided to appropriate patients in the form of nitrous oxide/oxygen alone or in combination with midazolam if required. Supervision is provided in three half days per week by Drs. Gartner, Campbell and Johnston.
4. Third term first year is the first exposure the graduate student have to hospital dentistry at BC Children's Hospital. Two of the three students treat patients in the clinic and the OR on Tuesdays and one student works in the clinic on Wednesdays.

Publications April 1, 2010 to March 31, 2011:

1. **Harrison RL**, Veronneau J, Leroux B. "Design and implementation of a dental caries prevention trial in remote Canadian Aboriginal communities" TRIALS 11. 1-9, 2010.
2. Lin D, **Harrison RL**. "Evaluability Assessment of a Dental Prenatal Program" Can J Dent Hygiene 44. 201-06, 2010.

Abstracts:

1. Costa LRRS, **Harrison R**, Aleksejuniene J. Analgesic use by children following dental treatment under general anesthesia, J Dent Res 89 (Spec Iss B) Abstract #1574, 2010.
2. Wallace B, MacEntee M, **Harrison R**. Investigating the sustainability of community dental clinics for the underserved. J Dent Res 90 (Spec Iss B) Abstract #3111, 2011.
3. Veronneau J, **Harrison R**, Leroux B, Caries status of children in a randomized prevention trial. J Dent Res 90 (Spec Iss B) Abstract #352, 2011.
4. **Harrison R**, Veronneau J, Leroux B. Delivering behavioural interventions in a caries-prevention trial in a remote setting. J Dent Res 90 (Spec Iss B) Abstract #1789, 2011.

Residents Supervised:

Dr. Aimee Castro (Pediatrics)
 Dr. Amin Salmasi (Pediatrics)
 GPRs (Adult)
 Dr. Cornel Ciocarlan-Gabor
 Dr. Valentin Dabuleanu
 Dr. Jan Kantoch
 Dr. Austin Lee
 Dr. Norina Leung
 Dr. Indervir Mann
 Dr. Shahryar Rashti
 Dr. Fahad Cadili
 Dr. Mais Sweidan
 Dr. Marie Turcotte
 Dr. Bahram Rash
 Dr. Arden Young



Grant Funding Received:

Project Title	PI	Team	Granting Agency	Amount
Barriers to Access to Care in BC	Drs. Karen Campbell and Nancy Vertel		UBC Faculty of Dentistry	\$15,500

Students Supervised:

Colins Vasquez
 Shima Amel-Gharib
 Nicholas Piemontesi
 Amy Bellamy
 Jana Lamb
 Yili Wang
 Melody Weimer
 Zina Alkafaji
 Fetema Chherawala
 Scott Kim
 Pariya Tabarsi
 Kyla Bajwa
 Harjot Sidhu

Committee Participation:

Dr. Johnston

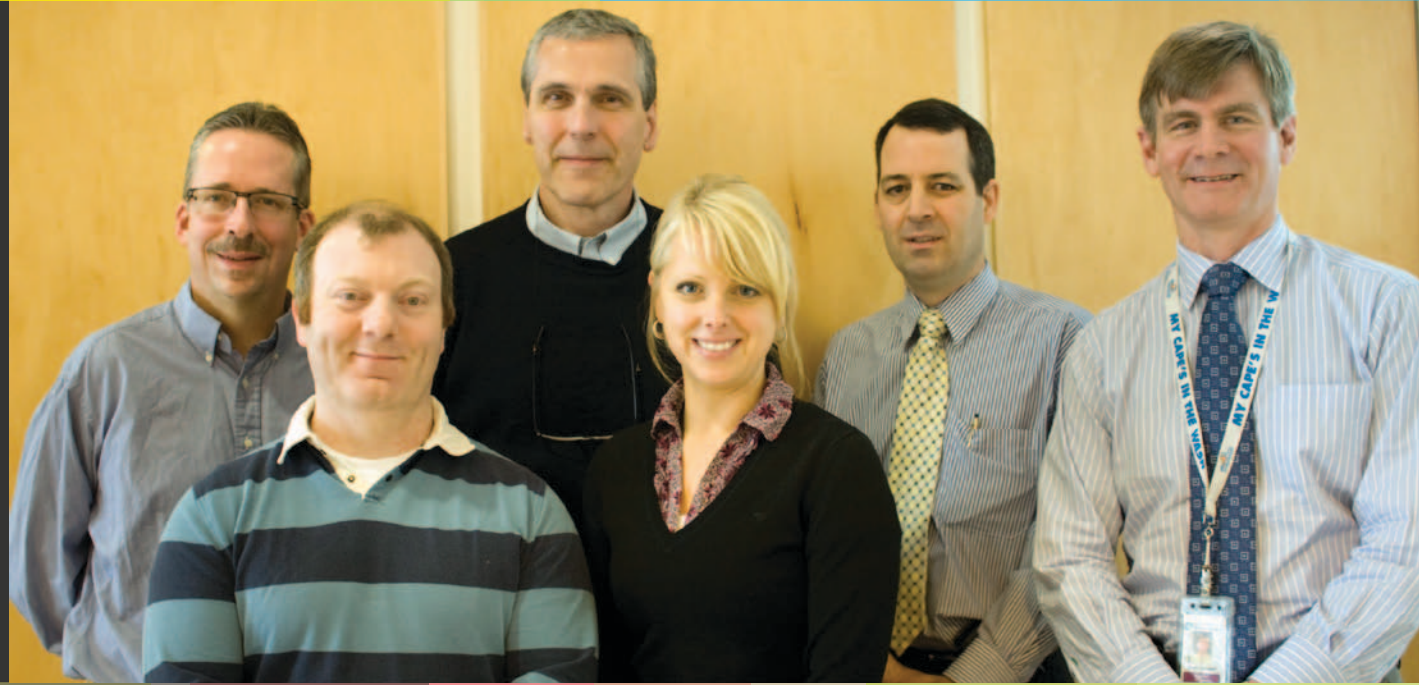
1. SSAC, Surgical Cabinet
2. Medical Department Head, BCCH
3. Peer Review Committee
4. Graduate Studies Committee UBC,
5. Graduate Director's Committee UBC,
6. Pediatric Hospital Dental Chief's of Canada Committee

Initiatives in Progress:

The dental desensitization project continues. The preliminary results of a scientific initiative supported by OPSEI by Drs. Castro and Salmasi were presented to Resident's Day. They won first prize out of 13 research presentations across Vancouver. The study will continue and may become part of a Master of Science project for a Graduate Pediatrics Dental Student.



Division of Pediatric General Surgery



Other Staff Members:

Ms. Lynda Fynn
Ms. Robyn Walker
Ms. Jill Haynes
Ms. Susan Myhre
Ms. Kathy Robertson
Ms. Christine Adamson
Ms. Rozana Lee
Ms. Bindy Sahota
Dr. Arash Safavi

Faculty Members:



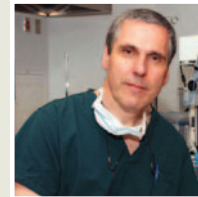
Dr. Erik D. Skarsgard,
Division Head



Dr. James J. Murphy



Dr. Sonia A.
Butterworth



Dr. Geoffrey K. Blair



Dr. Eric M. Webber

DIVISION OF PEDIATRIC GENERAL SURGERY

Highlights and Achievements:

1. Jessica Mills, MD began her 2 year fellowship in Pediatric Surgery in July, 2010
2. The Division matched Jennifer Stanger from University of Calgary as their fellow starting in July, 2012
3. Dr. Blair completed his 2 year term as President of the Canadian Association of Pediatric Surgeons
4. Dr. Blair was appointed Chair of the UBC Surgery Undergraduate Education Committee
5. Dr. Skarsgard completed his travels in Japan (Tokyo, Kobe) as the James IV Traveling Surgeon for Canada

Presentations:

1. Safavi A, Beaudry P, Jamieson D, and Murphy JJ: Traumatic pseudo-aneurysms of the liver and spleen: Is routine screening warranted? 42nd Annual Meeting of the Canadian Association of Pediatric Surgeons, Saskatoon, Saskatchewan, September, 2010.
2. Murphy JJ: The bronchial blocker: Why won't it come out? 42nd Annual Meeting of the Canadian Association of Pediatric Surgeons, Saskatoon, Saskatchewan, September, 2010.
3. Zwicker K and Murphy JJ: Human milk fortifier causing neonatal bowel obstruction – A report of 2 cases. 42nd Annual Meeting of the Canadian Association of Pediatric Surgeons, Saskatoon, Saskatchewan, September, 2010.
4. Langer M, Rozmus J, Dix D, Jamieson D and Murphy JJ: Multiple ganglioneuromas in a 10 year-old girl: Result of spontaneous maturation of a Stage IV-S neuroblastoma. 42nd Annual Meeting of the Canadian Association of Pediatric Surgeons, Saskatoon, Saskatchewan, September, 2010.

5. Sangha BS, Heran MK, Mayo JR, Blair G, Skarsgard ED. Lung nodules in children: video-assisted thoracoscopic surgical resection after computed tomography-guided localization using a microcoil. 42nd Annual Meeting of the Canadian Association of Pediatric Surgeons, Saskatoon, Saskatchewan, September, 2010.
6. Safavi A, Lin Y, Skarsgard ED, Canadian Pediatric Surgery Network. Perinatal management of congenital diaphragmatic hernia: when and how should babies be delivered? Results from the Canadian Pediatric Surgery Network. 40th Annual Meeting of the Pacific Association of Pediatric Surgeons, Kobe, Japan, May 29, 2010.
7. Jansen LA, MacNab YC, Puligandla PS, Skarsgard ED. Pre-closure fluid resuscitation influences outcome in Gastroschisis. 41st Annual Meeting of the American Pediatric Surgical Association, Orlando FL, May, 2010.

Invited Lectures:

Dr. Geoffrey Blair

1. UBC Pediatric Grand Rounds- "LIGHTS CAMERA- EDUCATION" February 18th, 2011
2. "Esophageal Atresia- the Canadian Way" Ospedale Pediatrico Bambino Gesù- Rome, Italy. June, 2010

Dr. Sonia Butterworth

1. National Defence, Canadian Forces Trauma Training Centre (West), Pediatric Trauma – August 2010
2. National Defence, Canadian Forces Trauma Training Centre (West), Pediatric Trauma – February 2011
3. The Ultimate Skinny Gene. Advances in pediatrics, BC Children's Hospital, April 2011
4. Sodium Deficit in infants and children post intestinal surgery. Children's Intestinal Rehabilitation Meeting. Vancouver, BC. February 2011

5. Mom, Wife & Surgeon: a personal perspective, Federation of Medical Women, Undergraduate, Vancouver, July 2010.

Dr. Erik Skarsgard

1. CAPSNet: A national network for the study of surgical birth defects. James IV Traveling Surgeon lecture. Kobe Children's Hospital, Kobe Japan. May 28, 2010
2. Fetal Gene Therapy. James IV Traveling Surgeon lecture. Kobe Children's Hospital, Kobe Japan. May 28, 2010
3. CAPSNet: A national network for the study of surgical birth defects. James IV Traveling Surgeon lecture. National Center for Child Health and Development, Tokyo, Japan. May 26, 2010
4. Fetal Gene Therapy. James IV Traveling Surgeon lecture. National Center for Child Health and Development, Tokyo, Japan. May 26, 2010
5. CAPSNet: A national network for the study of surgical birth defects. James IV Traveling Surgeon lecture. Juntendo University, Tokyo, Japan. May 24, 2010
6. Fetal Gene Therapy. James IV Traveling Surgeon lecture. Juntendo University, Tokyo, Japan. May 25, 2010

Formal Teaching:

1. Surgery core Seminars (Research During Surgical Residency)
2. Core seminar series (Pediatric Residents)
3. Pediatric Oncology Fellows Lecture series (Surgical Issues in Pediatric Oncology)
4. Maternal Fetal Medicine Fellows course: Fetal Surgery
5. General Surgery Fellowship exam prep course
6. Nursing Education update: Gastroschisis (twice)
7. Nursing "Eduquick" Program

Publications April 1, 2010 to March 31, 2011:

1. Amari, E, Montgomery CJ, **Skarsgard ED**, Ansermino M. Comparing telephone and web-based pediatric day surgery questionnaires. *Int J Health Care Qual Assur* 23:339-5, 2010.
2. Mills JA, Lin Y, MacNab YC, **Skarsgard ED** and the Canadian Pediatric Surgery Network. J Perinatal predictors of outcome in gastroschisis. *J Perinatol* 2010 Apr 1. [Epub ahead of print]
3. Brindle ME, Ma I, **Skarsgard ED** and the Canadian Pediatric Surgery Network. Impact of Target Blood Gases on Outcome in Congenital Diaphragmatic Hernia. *Eur J Pediatr Surg* 2010 May 27 (Epub ahead of print).
4. Chen JZ, Jamieson DH, **Skarsgard ED**. Does pre-biopsy contrast enema delay the diagnosis of Long segment Hirschsprung's disease? *Eur J Pediatr Surg* 20:375-8, 2010.
5. Yang PT, Hoang L, Jia WW, Skarsgard ED. In Utero Gene Delivery Using Chitosan-DNA Nanoparticles in Mice. *J Surg Res* 2010 Jun 12. [Epub ahead of print]
6. Safavi A, Lin Y, **Skarsgard ED**, Canadian Pediatric Surgery Network. Perinatal management of congenital diaphragmatic hernia: when and how should babies be delivered? Results from the Canadian Pediatric Surgery Network. *J Pediatr Surg* 45:2334-9, 2010.
7. Al-Rawahi GN, Dobson SR, Scheifele DW, Rassekh SR, **Murphy JJ**. Severe genital ulceration in an acute epstein-barr virus infection. *Pediatr Infect Dis J* 2011 Feb;30(2):176-8.
8. Eeson GA, Wales P, **Murphy JJ**. Adhesive small bowel obstruction in children: should we still operate? *J Pediatr Surg* 2010 May;45(5):969-74.
9. Jamieson JL, **Webber EM**, Sivertz KS. Re-entry residency training: opportunities and obstacles. *Can Fam Physician* 2010; 56: e226-232.

Grant Funding Received:

Project Title	PI	Team	Granting Agency	Amount
Surgical Residents as Teachers (SRAT): Implementing an Educators' Curriculum for Surgical Residents	Jarvis-Selinger	Butterworth (co-PI)	UBC - TLEF	\$70,000
Lights, Camera, Surgery	Blair	Duffy, Kwon, Masterson, Wong	UBC-TLEF	\$25,000
The Canadian Pediatric Thyroid Nodule (CaPTN) Study II: The Prospective Evaluation of a Clinical Guideline for Children with Thyroid Nodules	Blair (co-PI)		CI7 Research Network	\$109,000 (under consideration)
Emerging Team in Rare Diseases: Congenital Diaphragmatic Hernia Canadian Health Services Consortium	Skarsgard		CIHR	\$2.2M (under consideration)
Secondary Analyses of Databases: CAPSNet	Skarsgard		CIHR	\$100,000 (under consideration)

Fellows Supervised:

Dr. Arash Safavi, Post-doctoral Fellow

1. Dr Safavi is our current divisional research fellow. He has taken on a wide variety of research and quality assurance projects for the division of Pediatric General Surgery. His projects include a study of a correlation of the case log experience of surgical residents graduating from the 3 western general surgery training programs (UBC, U of C, U of A) with the reported competencies of community general surgeons within their first 5 years in practice. He has also created an appendicitis database which goes back 5 years for both research and quality audit purposes. Finally, he has undertaken a number of clinical projects under the supervision of members of the division. He has 5 publications with 3 more in press.

Residents Supervised:

Dr. Sonia Butterworth

1. Jessica Mills (Pediatric Surgery Fellow): TV tipover injuries. Accepted for presentation and publication at 2011 CAPS meeting

Dr. James Murphy

1. Kelly Zwicker (Pediatrics): Human milk fortifier causing neonatal bowel obstruction – A report of 2 cases
2. Siham Zerhouni (Surgery): Review of Congenital Intra-thoracic Kidney. Manuscript submitted and accepted for presentation at 2011 CAPS Meeting
3. Jacob Rozmus (Oncology): Multiple ganglioneuromas in a 10 year-old

Dr. Erik Skarsgard

1. Jessica Mills (Pediatric Surgery): A population-based study of Chylothorax Following CDH repair. Manuscript submitted and accepted for presentation at 2011 CAPS Meeting
2. Bippa Sangha (Radiology): Lung nodules in children: video-assisted thoroscopic surgical resection after computed tomography-guided localization using a microcoil. Presented at the 2010 CAPS Meeting, Saskatoon, SK

3. Arash Safavi: Antenatal Ultrasound Predictors of Bowel Injury in Gastroschisis. Manuscript submitted and accepted for presentation at 2011 CAPS Meeting
4. Arash Safavi: Multi-institutional follow up of CDH patients reveals severe disability and variations in practice. Manuscript submitted and accepted for presentation at 2011 CAPS Meeting
5. Arash Safavi: Does Operative Experience during Residency Correlate with Reported Competency of Recent General Surgery Graduates? Presented at WB and MH Chung Research Day and submitted for publication

Students Supervised:

Dr. Geoffrey Blair

1. Anu Ghuman: Lights, Camera, Surgery Summer Student
2. Freda Wong: Lights, Camera, Surgery Summer Student
3. Kelvin Kwan: Lights, Camera, Surgery Summer Student
4. Jennifer Yam: Lights, Camera, Surgery Summer Student
5. Steven Rathgeber: Lights, Camera, Surgery Summer Student
6. Kristin DeGirolamo: Lights, Camera, Surgery Summer Student
7. Kaytee Vostretsova: Lights, Camera, Surgery Summer Student
8. Tin Jasinovic: Lights, Camera, Surgery Summer Student
9. Andrew Karpov: Lights, Camera, Surgery Summer Student
10. Ida Molavi: Lights, Camera, Surgery Summer Student
11. Elaine-Jane Buckley: Summer Student

Dr. Sonia Butterworth

1. Anu Ghuman: Summer Student “Spontaneous Rupture of Hepatic Hemangioma in a Neonate – Survival with Non-Operative Management”

2. Freda Wong: Summer medical student - “Congenital diaphragmatic hernia video”
3. Kelvin Kwan: Summer medical student - “Orchidopexy video”
4. David Tso: medical student “Sharps handling practices among junior surgical residents – a video analysis.”

Dr. James Murphy

1. Sophia Chan: Material Issues in Intravenous Catheters and Ethanol Lock Therapy. UBC Department of Engineering 4th year students
2. Gabriel Altit (McGill): Review of Congenital Intra-thoracic Kidney – Manuscript submitted and accepted for presentation at 2011 CAPS Meeting
3. Brent Chang (UBC): Review of Non-operatively Treated Lymphatic Malformations (in progress)

Dr. Erik Skarsgard

1. Jordan Cheng: Safer Healthcare through Innovation, Evaluation and Documentation (SHIELD project)

Committee Participation:

Dr. Sonia Butterworth

1. **BCCH**
BC Children’s Hospital NICU Complex Nutrition Committee
BC Children’s Hospital Children’s Intestinal Rehabilitation Program
Pediatric Oncofertility Committee
2. **UBC**
Pharmacy, Therapeutics and Nutrition Committee
General Surgery Residency Education Committee
Associate Program Director, General Surgery
Pediatric General Surgery Residency Education Committee
3. **National/International**
General Surgery Residency Education Committee

Children's Oncology Group Surgical representative, BCCH Site
Canadian Association of Pediatric Surgeons, program committee

Dr. James Murphy

1. BCCH

Pharmacy, Therapeutics and Nutrition Committee
Transfusion Committee
Resident Education Committee (Pediatric Surgery)
Child Quality and Safety Committee
Surgical Suites Quality and Safety Committee
Transfusion Medicine Subcommittee on Blood Contingency

2. UBC

Department of Surgery Curriculum Group Clinical Faculty Appointment and Promotion Committee

3. National/International

Canadian Association of Pediatric Surgeons-Publications Committee

Dr. Erik Skarsgard

1. BCCH

Associate Chief (Academic), Department of Pediatric Surgery, BCCH
Chair, Innovations in Acute Care and Technology (iACT) cluster-CFRI
Chair, Innovative Technology OR Committee, BCCH
Chair, Surgical Services Advisory Committee
Member, Pediatric Surgery Executive Committee
Member, BCCH Surgical Cabinet
Member, Scientific Steering Committee-Child and Family Research Institute
Member, Medical Advisory Committee, BCCH
Member, Allocations Committee, BCCH Foundation
Physician Chair, Executive Committee BCCHF Miracle Weekend Committee
Surgical Chair, BCCH Mortality Review Committee

2. UBC

Co-chair, Centre for Surgical Research, Dept of Surgery, UBC
Chair, Pediatric General Surgery Education Committee, UBC

Co-chair, Organizing Committee, WB and MH Chung Department of Surgery Research Symposium
Program Director, Pediatric General Surgery Training Program, UBC
Member, Surgical Advisory Committee
Member Faculty Mentoring Program, Faculty of Medicine, UBC
Executive Member, BC Biolibrary Working Group

3. National/International

Vice Chair, Examination Board of the Royal College of Physicians and Surgeons of Canada (Pediatric General Surgery)
Member, Specialty Committee for Pediatric General Surgery, the Royal College of Physicians and Surgeons of Canada
Member, American Pediatric Surgical Association of Program Directors
Member, Finance Committee American Pediatric Surgical Association
Member, New Technology Advisory Committee American Pediatric Surgical Association
Member, the Canadian Congenital Anomalies Surveillance Network Advisory Group (Health Canada)

Dr. Eric Webber

1. BCCH

Mortality Review Committee

2. UBC

Faculty Executive
Faculty of Medicine Residency Education Committee
International Medical Graduate Task Force
Faculty Health Initiative Committee

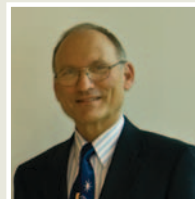
3. National/International

Pacific Association of Pediatric Surgeons: Publications Committee
Royal College of Physicians and Surgeons of Canada
Accreditation Committee
General Surgery Specialty Committee
Surgical Foundations Advisory Committee
Specialty Standards Review Committee
Task Force on Postgraduate Medical Education Terminology

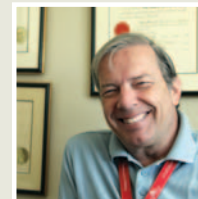
Department of Pediatric Neurosurgery



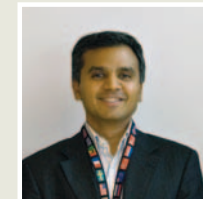
Faculty Members:



▶ Dr. Paul Steinbok,
Division Head



▶ Dr. Doug Cochrane



▶ Dr. Ash Singhal

Other Staff Members:

Ms. Helen McGregor



DEPARTMENT OF PEDIATRIC NEUROSURGERY

Presentations:

1. **Steinbok P.** Craniopharyngioma In Children. Combined Neurosciences Grand Rounds-VGH
2. Lamsdale A, **Cochrane DD.** NOTSS in the BCCH OR. BCCH Department of Anesthesia Rounds October 13, 2010.
3. **Cochrane DD,** Krause C. Disclosure: Moving the Agenda Forward. Getting it Right: A Policy Forum to Advance Quality Improvement in Canada, CMPA, Royal College, Canadian Medical Association, College of Family Physicians, Ottawa, November 2010
4. Daniels J, King A, Hunc K, **Cochrane DD,** Taylor A, Heathcote S, Lim J, Ansermino JM. A web-based tool for family-initiated adverse event reporting: an end-user investigation of usability and reliability. CPSI Canada's Forum on Patient Safety and Quality Improvement 2010, Toronto April 2010
5. Janicki R, **Cochrane DD,** Aronyk K, Pugh J, **Singhal A, Steinbok P.** Iatrogenic Complications Following Shunting the SAS in Infancy: Hindbrain Herniation due to CP Shunting. ASPN Grand Cayman, 2010
6. Janicki R, **Cochrane DD,** Aronyk K, Pugh J, **Singhal A, Steinbok P.** Iatrogenic Complications Following Shunting the SAS in Infancy: Hindbrain Herniation due to CP Shunting. CPNSG Hecla Island 2010
7. **Cochrane DD,** Foroughi M. Role of lamina terminalis position in determining the success of ETV. CPNSG Hecla Island 2010
8. **Cochrane DD.** Arachnoid cysts in infants – case report and management recommendation. CPNSG Hecla Island 2010
9. Apel-Sarid L, Dunham C, Byrne A, **Cochrane DD, Steinbok P.** Avitene-Induced Necrotizing Granulomatous Inflammation Developing Post-Craniotomy: A Pediatric Case Series. American Association of Neuropathologists, Philadelphia Pennsylvania, 2010
10. Foroughi M, Wong A, **Cochrane D, Steinbok P, Singhal A,** Sargent M. The shape & measurements of the Lamina terminalis & Third ventricular floor– A simple and useful MRI finding in successful ETV. Society of British Neurosurgery London Sept 2010
11. Janicki R, **Cochrane DD,** Aronyk K, Pugh J, **Singhal A, Steinbok P.** Iatrogenic Complications Following Shunting the SAS in Infancy: Hindbrain Herniation due to CP Shunting. Society for Research in Hydrocephalus and Spina Bifida, Vancouver 2010
12. Chan I, **Cochrane DD,** Adams E, Irwin B, Thiessen P, Sawatzky B. Evaluating functional and health outcomes in patients with spina bifida 5 and 10 years post-transition into adult care. Society for Research in Hydrocephalus and Spina Bifida, Vancouver 2010
13. **Singhal A,** Liu T, **Cochrane DD, Steinbok P.** Ventriculoperitoneal shunt after previous endoscopic third ventriculostomy: Does ETV improve shunt survival? Society for Research in Hydrocephalus and Spina Bifida, Vancouver 2010
14. **Singhal A,** Krivosheya D, **Steinbok P, Cochrane DD.** Infant Arachnoid Cysts Have a Different Natural History than Arachnoid Cysts in Later Childhood. ISPN Jeju Korea Nov 2010
15. Foroughi M, Wong A, Sargent M, **Singhal A, Steinbok P, Cochrane DD.** Third ventricular shape: a predictor of endoscopic third ventriculostomy success. Pediatric Section AANS

Invited Lectures:

Dr. Paul Steinbok

1. Invited faculty, European Society for Pediatric Neurosurgery course, Berlin, Germany 1) Lumbosacral lipoma 2) Craniosynostosis – management 3) Craniosynostosis – case discussion, May 24-28, 2010.
2. Invited faculty – FLANC/ AANS Pediatric Section course – San Jose,

- Costa Rica: 1) Moya Moya 2) Coronal Synostosis 3) Hemispherectomy 4) Lateral ventricle tumours 5) Spinal lipoma, Jun 7-8, 2010.
3. Visiting Professor – Northwestern University and Children’s Memorial Hospital Academic Day – Chicago. 1. Occult tethered cord syndrome. 2. Epilepsy children in very young children, Sept 17, 2010.
 4. Invited keynote speaker – Symposium on “Surgical treatment for spasticity in children with cerebral palsy”. Herzlia, Israel. 1. Selection of neurosurgical treatment modalities for spasticity in a child with cerebral palsy. 2. Dorsal rhizotomy – techniques and outcomes, Oct 5, 2010.
 5. Invited keynote speaker – 34th Latin American Congress of Neurosurgery – San Salvador, El Salvador. 1. Epilepsy Surgery in children 2. Occult filum terminal syndrome, Oct 25-26, 2010.
 6. Invited lecture – ISPN meeting , Jeju Island, Korea. Conservative management of craniopharyngioma, Nov 4, 2010.
 7. Invited faculty - ISPN course, Hong Kong, China: 1) Cerebellar astrocytoma 2) Sagittal synostosis 3) Shunt complications, Nov 6-7, 2010.
 8. Keynote lecture; Meeting of University of West Indies Medical Alumni – The rewards of pediatric neurosurgery, Nov 15, 2010.
 9. Invited speaker, ISPN annual meeting, Korea. Conservative treatment of craniopharyngioma, Nov 2010.
 10. Visiting Professor – University of Calgary. 1) Rhizotomy 2) Craniopharyngioma 3) Occult tethered cord syndrome, Nov 25-26, 2010.
- Publications April 1 2010 to March 31, 2011:**
1. Pakzad-Vaezi K, **Singhal A**, Sargeant M, **Cochrane D**. Magnetic Resonance Imaging Findings Associated with Papilledema in a Child with a Posterior Fossa Brain Tumor – Case Report. *Pediatr Neurosurg*. 2010;45(6):414-8.
 2. Pakzad-Vaezi K, **Singhal A**. Analysis of Trends in Sports Related Pediatric Injuries. Accepted for Publication – *Pediatrics and Child Health*.
 3. **Cochrane DD**, Lamsdale A. Safe surgery saves lives – surgical safety checklist. *BCMAJ* 2010 52:254-259.
 4. Kulkarni AV, Shams I, **Cochrane DD**, McNeely DP. Quality of life after endoscopic third ventriculostomy and cerebrospinal fluid shunt: an adjusted multivariable analysis in a large cohort. *NeurosurgPediatr*. 2010 Jul;6(1):11-6.
 5. Kulkarni AV, Shams I, **Cochrane DD**, McNeely PD. Does treatment with endoscopic third ventriculostomy result in less concern among parents of children with hydrocephalus. *Childs Nerv Syst*. 2010 Apr 29.
 6. Daniels JP, King AD, **Cochrane DD**, Carr R, Shaw NT, Lim J, Ansermino M. A human factors and survey methodology-based design of a web-based adverse event reporting system for families *Int J Med Inform*. 2010 May;79(5):339-48. Epub 2010 Feb 21.
 7. Kulkarni AV, Drake JM, Kestle JR, Mallucci CL, Sgouros S, Constantini S; Canadian Pediatric Neurosurgery Study Group. Predicting who will benefit from endoscopic third ventriculostomy compared with shunt insertion in childhood hydrocephalus using the ETV Success Score. *J NeurosurgPediatr*. 2010 Oct;6(4):310-5 Contributor of clinical data to CPNSG.
 8. Kulkarni AV, Drake JM, Kestle JR, Mallucci CL, Sgouros S, Constantini S; Canadian Pediatric Neurosurgery Study Group. Endoscopic third ventriculostomy vs cerebrospinal fluid shunt in the treatment of hydrocephalus in children: a propensity score-adjusted analysis. *Neurosurgery*. 2010 Sep;67(3):588-93. Contributor of clinical data to CPNSG.
 9. Apel-Sarid L, **Cochrane DD**, **Steinbok P**, Byrne AT, Dunham C. Microfibrillar collagen hemostat-induced necrotizing granulomatous inflammation developing after craniotomy: a pediatric case series. *J NeurosurgPediatr*. 2010 Oct;6(4):385-92.

10. Malheiros JA, Trivelato FP, Magaldi Oliveira M, Gusmão S, Cochrane DD, **Steinbok P**: Endoscopic choroid plexus cauterization versus ventriculoperitoneal shunt for hydranencephaly and near hydranencephaly: a prospective study. *Neurosurgery* 2010 Mar;66(3):459-64.
11. Visser J, Hukin J, Sargent M, **Steinbok P**, Goddard K, Fryer C. Late mortality in pediatric patients with craniopharyngioma. *J Neuro-oncology* 2010 Oct;100(1):105-11. Epub 2010 Mar 4.
12. Warren DT, Bowen-Roberts T, Ou C, Purdy R, **Steinbok P**. Safety and efficacy of continuous morphine infusions following pediatric cranial surgery in a surgical ward setting. *Childs Nerv Syst.* 2010 Nov; 26(11):1535-41. Epub 2010 Mar 20.
13. **Steinbok P**, Hukin J. Intracystic treatments for craniopharyngioma. *Neurosurg Focus.* 2010 Apr;28(4):E13.
14. Ponger P, Ben-Sira L, Beni-Adani L, **Steinbok P**, Constantini S. International survey on the management of skin stigmata and suspected tethered cord. *Childs Nerv Syst.* 2010 Dec;26(12):1719-25. Epub 2010 Jun 19.
15. Gelinas JN, Battison AW, Smith S, Connolly MB, **Steinbok P**. Electrographic and seizure outcomes in children with lesional epilepsy. *Childs Nerv Syst.* 2010 Sep 21. PMID: 20857122.
16. **Steinbok P**, Milner R, Agrawal D, Farace E, Leung GK, Ng I, Tomita T, Wang E, Wang N, Chu Wong GK, Zhou LF. A Multicenter Multinational Registry for Assessing Ventriculoperitoneal Shunt Infections for Hydrocephalus. *Neurosurgery.* 2010 Nov;67(5):1303-10 Sep 23. [Epub ahead of print] PMID: 20871445.
17. Ou C, Kent S, Miller S, **Steinbok P**. Selective dorsal rhizotomy in children: comparison of outcomes after single-level versus multi-level laminectomy technique. *Can J Neurosci Nurs.* 2010;32(3):17-24.

Honours and Awards:

1. Dr. Doug Cochrane Family Centered Care Award, BC Children's Hospital

Fellows Supervised:

1. Mansoor Foroughi (Fellow): Spontaneous regression of residual pilocytic astrocytoma
2. R. Yong: Retethering of filum terminale
3. Shibu Pillai (Fellow): Mercedes-Benz syndrome
4. Eylem Ocal (Fellow): Chiari II malformation with stridor at birth.

Residents Supervised:

1. Gelinas J (Neurology resident): Lesionectomy with or without ECOG for lesional epilepsy

Student Supervised:

1. Mary Metrie (Medical student): Outcome of brain tumours in 1st year of life
2. Pam Verma, Christopher Wu (Medical students): Informed consent video
3. Kristin DeGiralamo, Ida Molavi (Medical students): Pediatric Handover - Lights, Camera, Surgery
4. I Chan (Medical student): Long term outcome of MMC in Adulthood
5. Anish Mitra (Medical student): Ring Apophyseal Fracture in Pediatric Lumbar Disc Herniation
6. Daria Krivosheya (Medical student): Natural history of pediatric arachnoid cysts
7. Tim Bowen-Clark (Medical student): Natural History of Asymptomatic Syrinx in Children

Grant Funding Received:

Project Title	PI	Team	Granting Agency	Amount
Unclogging the Pediatric Emergency Room: Impact of Rapid Viral Diagnostics		Cochrane (co-PI)	MSRHF Operating Grant, August 2005	\$100,000
Intensive Care Unit Patient Safety Team		Cochrane (co-PI)	MSFHR Team Grant August 2005	\$160,000
Creating a healthy workplace by implementing a patient safety program.		Cochrane (co-PI)	Health Canada	\$200,000
IRIS Pilot grant. Canada Health Infoway	Cochrane (PI)	Steinbok	BC PSTF and the BC Health Authorities	\$2,900,000
Cross Canada study of Thalamic Tumors in children	Steinbok (PI)	Steinbok	Brain Tumor Foundation of Canada	\$25,000
Thalamic brain tumors in Canada in the MRI era	Steinbok (PI)		Research Network and Childhood Cancer Foundation	\$117,985
Fellowship in Pediatric Neurosurgery	Steinbok (PI)		Fellowship allocation Committee at BC Children's Hospital	\$66,700
Long-term follow-up of ambulatory children with spastic diplegia: Efficacy of treatment.		Steinbok (Co-PI)	Shriners International Headquarters	\$49,343 US
Long-term outcomes of children with brain tumours diagnosed in the 1st year of life	Steinbok (PI)		OPSEI	\$5,000
Fellowship in Pediatric Neurosurgery 2011/2012	Steinbok (PI)		Fellowship allocation Committee at BC Children's Hospital	\$61,400
2011 AANS Visiting Surgeon Fellowship Award: To support observership of Dr Suchanda Bhattacharjee from Hyderabad, India	Steinbok (PI)		AANS	\$6,500 US
Targeting the Elimination of Brain Tumor Initiating Cells by Disrupting the PI3K Pathway		A. Singhal (co-PI)	Pediatric Oncology Collaborative Research Funding Program	\$50,000
Incidence and Types of Adverse Events in Children in Large Community Hospitals		Cochrane D (co-PI)	CPSI	\$248,775

Committee Participation:

Dr. Cochrane

1. UBC Resident Education Committee, Division of Neurosurgery, Member
2. Provincial Surgical Services Committee, PHSA, Member
3. British Columbia Patient Safety Taskforce, PHSA, Member
4. Provincial Medical Affairs Committee, PHSA, Member
5. PHSA Executive Committee, Member
6. BC Patient Safety Taskforce, BCCH, Member
7. MAC Executive Committee, BCCH, Member
8. Stereotaxic Rediosurgery Team, BCCH, Member
9. Stereotactic Operations Working Group, BCCA, Member
10. Research and Education Advisory Council, BCCH, Member
11. Site Research and Education Space Planning Committee, BCCH, Member
12. Canadian Society of Telehealth, Founding Member

13. ROARS, Vancouver Richmond Health Board, Member
14. BC Patient Safety and Quality Officer
15. BC Patient Safety and Quality, Member
16. Provincial Medical Affairs Committee, Member
17. BC Patient Safety Taskforce, Member
18. Board of the Canadian Patient Safety Institute, Board Member
19. Management of Myelomeningocele Study, Outcome Review Committee
20. International Infant Hydrocephalus Study, Data Management Committee
21. Hydrocephalus Clinical Research Network, Advisory Committee
22. Institute of Patient Safety, University of Toronto, Advisory Board Member
23. Alpha Omega Alpha Honor Medical Society, Member
24. Canadian Medical Protective Association, Member
25. Alberta College of Physicians and Surgeons, Member
26. Canadian Neurosurgical Society, Member
27. Congress of Neurological Surgeons, Member
28. International Society of Pediatric Neurosurgery, Member
29. 2Congress of Neurological Surgeons, Member
30. American Society of Pediatric Neurosurgery Study Group, Member
31. Spina Bifida Association of Canada, Referee for Grants
32. Canadian Journal of Neurosurgical Sciences, Referee for Articles and Books
33. Pediatric Neurosurgery, Referee for Articles
34. Alberta Children's Hospital Foundation, Referee for Grants
35. Medical Research Council of Canada, Referee for Grants
36. American Journal of Sports Medicine, Referee for Articles
37. Neurosurgery, Referee for Articles

Dr. Singhal:

1. Rare Diseases Foundation of British Columbia – co-chair; scientific review committee; signing officer for research grant allocation. This included the review of over 40 grant applications in 2010
2. Child's Nervous System, Reviewer

Dr. Steinbok:

1. 1. Division of Neurosurgery, BCCH, Head
2. 2. Neurosciences Patient Based Care Unit, BCCH, Medical Director
3. 3. Neurosurgery Resident Education Committee, UBC, Member
4. 4. Brain Tumor Group, BCCA, Member
5. 5. Children's Cancer Study, BCCA, Neurosurgical Representative
6. 6. BCCH Foundation, Finance Committee Member
7. 7. Child Health Executive Council, BCCH, Member
8. 8. BCMA Tariff Committee, Member
9. 9. Canadian Patient Safety Institute Board -Chair
10. International Society for Pediatric Neurosurgery, Executive Committee Member
11. International Society for Pediatric Neurosurgery – President elect – became President November 2010
12. Medical Advisory Board member – Best Doctors of Canada
13. Journal of Pediatric Neurosciences (Indian), Editorship
14. Journal of Neurological Sciences (Turkish), Editorship
15. Childs Nervous System, Reviewer, Editorship
16. Neurosurgery, Reviewer
17. Canadian Journal of Neurological Sciences, Reviewer
18. Pediatrics, Reviewer

Department of Pediatric Ophthalmology



▶ Dr. Christopher Lyons,
Department Head



Faculty On-site:

Dr. Maryam Aroichane
Dr. Jane Gardiner
Dr. Christopher Lyons (Department Head)

Faculty, Off-site:

Dr. Roy Cline
Dr. Alan Demco
Dr. Peter Dolman (oculoplastics, orbit)
Dr. Ross Kennedy
Dr. Patrick Ma (retina)
Dr. Katherine Paton (ocular oncology)
Dr. Megan Rees
Dr. David Rossman (oculoplastics, orbit)
Dr. Aron Tischler

Consulting Faculty:

Dr. David Albiani (retina)
Dr. Duncan Anderson (neuro-ophthalmology)
Dr. Simon Lam (retina)
Dr. David Maberley (retina)
Dr. Andrew Merkur (retina, ERG)
Dr. Jack Rootman (orbit)
Dr. William Ross (retina)

Affiliations:

Visual Impairment Program: Dr. Carey Matsuba
Research Department: Dr. Debbie Giaschi

Orthoptic Staff:

Christy Giligson
Andrea Quan
Vaishali Metha
Hadil Eshtayah

Electrophysiology Staff:

Richard Gonzalez

Administrative Staff:

Courtney Conroy
Jennifer Ali
Dolores Latham
Natalie Wong
Joan Baldos

DEPARTMENT OF PEDIATRIC OPHTHALMOLOGY

Highlights and Achievements:

2010 was a year in which we continued to build upon previous successes. The first of these was in the area of clinical care. We strive to provide the children of this Province with first-class care for their medical and surgical eye problems.

Altogether, the Members of the Department of Ophthalmology also performed 1188 surgical procedures.

We provide 24/7 emergency care for patients from the Emergency Department, Family Physician and Optometrist offices, or if a patient on the ward or in the operating room requires our help. In this period, the three on-site ophthalmologists cared for 9,746 out-patients, an increase of 18% over the previous year. By virtue of these numbers, we are the busiest Department at BC Children's Hospital per doctor. Altogether, the Members of the Department of Ophthalmology also performed 1188 surgical procedures.

As members of the UBC Department of Ophthalmology and Visual Sciences, we give teaching a very high priority. Dr. Jane Gardiner is Director of the UBC Ophthalmology Undergraduate teaching Program, while Dr. Christopher Lyons has been Director of the UBC Ophthalmology Postgraduate teaching program since 1999.

Over the year UBC Ophthalmology Staff members taught undergraduate students PBL and didactic teaching sessions. Third year clinical medical students rotated through our offices for at least one session in their week of undergraduate ophthalmology, learning the vital elements of examination

and care of children's developing eyes and visual system. This year, intensive Resident teaching took place in private offices of UBC Ophthalmology Department members, on-site in the Department, and in the operating Room. In addition, didactic Pediatric Ophthalmology and Strabismus Resident teaching Rounds occurred for an hour each week of the academic year. A set of twelve half-day clinically-based lectures, the Pediatric Ophthalmology and Strabismus Academic Block, was given by Staff Members from Ophthalmology and Orthoptics to provide the Residents with a review of the pertinent elements of the curriculum. As a result of all this, once again this year all our 4 graduating Residents were successful in the Ophthalmology Royal College examination in Ottawa.

We were also successful in the sphere of Research. Our basic science laboratory at Children's Hospital is headed by Dr. Debbie Giaschi. Here, research focuses on important issues such as amblyopia, the common disorder of visual development in which vision fails to develop either because one eye is de-focussed (anisometropia), pointing in the wrong direction (strabismus) or because there is a fundamental problem interfering with entry and focus of the light into the eye (eg. Pediatric Cataract). Dr. Giaschi's other interests include visual perception and dyslexia, and her research department has been notable for its close interaction with the clinicians working at BC Children's. This close communication has been facilitated by its proximity, situated within the physical Department of Ophthalmology. In the course of the year, these researchers continued work under 5 grants with an additional \$75,313 and published abstracts in peer-reviewed scientific journals. Two Masters theses through the UBC Graduate Program in Neuroscience were successfully defended.

Other than the basic science realm of research, clinically-based members participated in numerous important studies, auditing their results for the purpose of monitoring and improving clinical care, reporting new

observations which are important in our world of changing clinical practice or describing new techniques which are helpful for other clinicians and surgeons. All these culminated in a total of 49 Presentations and 32 Publications in peer-reviewed journals.

Orthoptics, headed by Christy Giligson is fully-staffed and has been doing thorough assessments of patients' eye alignment and sensory processing status, as often as possible providing this sophisticated service on the day the patient is also attending the hospital for their visit to the ophthalmologist. Similarly, Richard Gonzalez is able to do essential electrophysiological assessments of patients' retinal and optic nerve function on the day, especially for patients who have travelled a long way for their visit.

In the coming year, we look forward to hosting the 7th Bi-annual Vancouver Pediatric Ophthalmology and Strabismus International Conference. Approximately 120 ophthalmologists, orthoptists, residents and students come from across North America to attend this important contribution to Continuing Medical Education event which is gaining in popularity and which helps to refresh knowledge of practicing Canadian and International clinicians while also providing a useful milieu for case discussion and airing of controversies.

Lastly, all this clinical and academic activity has taken place in the midst of evolving re-development plans. We patiently await our fate in the discussions regarding the imminent destruction of the building in which the Department is currently located. It is clear that the Department will need to move but as yet we have no clear indication of our eventual destination. We look forward to ensuring that our voice is heard amid the turmoil of competing needs at the hospital and to participating in the ongoing planning process so that as a team we can continue to grow and succeed.

Presentations, Lectures & Formal Teaching:

Dr. Maryam Aroichane

1. Canadian Ophthalmological Society Annual Meeting , Quebec City, Canada, June 2010.
 1. Ophthalmic Complications of Pediatric Otitis Media
 2. Ocular and systemic associations of against-the-rule astigmatism in children.
2. Grand Rounds, Royal Columbian Hospital: Outcomes of ROP
3. Resident and Fellow teaching: UBC Ophthalmology Academic teaching block. Pediatric Ophthalmology and
Resident teaching: Pediatric neuro-ophthalmology (3 hour lecture) Jan 2011

Dr. Roy Cline

1. Annual Meeting, BC Optometry Association, Guest Lecturer, 'Can My Baby See?' February 2011.
2. **Resident and Fellow teaching:** UBC Ophthalmology Academic teaching block. Pediatric Ophthalmology and Strabismus. 'Oblique Dysfunction' January 2011

Dr. Peter Dolman

1. Invited Faculty, Israel Oculoplastics and Orbit Symposium. Tel Aviv April 2010, Lacrimal Surgery: world trends and international survey results. Thyroid Orbitopathy: evaluation and management
2. Keynote Speaker, Ophthalmic Society of Montreal/EOUM (University of Montreal Oculoplastics Meeting), Montreal, May 2010
Evaluation and Management of Epiphora,
Management of Orbital Trauma
Blepharoplasty and its Complications
Thyroid Eye Disease and its Management
3. Jules Stein Eye Institute, Los Angeles, USA May 2010
A new QOL questionnaire in Thyroid eye disease

4. Mount St Joseph's Hospital Family Practitioner's Rounds. Vancouver, Canada, August 2010. Epiphora and its management
5. ORBIS Visiting lecturer and faculty at regional hospital. Hue, Vietnam. September 2010
Eyelid and Lacrimal Trauma
Repair of Ptosis
Enucleation and Evisceration Techniques
6. American Academy of Ophthalmology Oculoplastics Subspecialty Day. Radiation therapy Debate. Chicago, USA. October 2010. Point Counterpoint: Radiation Therapy in TED
7. Invited speaker, Swiss International Symposium on Thyroid Eye Disease (TED), Pontresina, Switzerland, December 2010. Surgical Approaches in Thyroid Orbitopathy
8. Invited speaker, Asia ARVO. Chairman of TED Symposium. Singapore, January 2011.
Classification Approaches in Thyroid Orbitopathy and ITEDS, QOL Surveys in Thyroid Orbitopathy
9. Invited lecturer University of Rochester, Rochester, New York, USA, March 2011.
Blepharoplasty and its complications,
Lacrimal Surgery: Current World Trends and Controversies
10. **Resident and Fellow Teaching:** Resident oculoplastics rounds every month. Resident and fellows orbit rounds every 2 months

Dr. Jane Gardiner

1. Canadian Ophthalmological Society Annual Meeting Quebec City, Canada, June 2010
 1. Ophthalmic Complications of Pediatric Otitis Media
 2. Against the rule astigmatism in children seen in a tertiary clinic correlates with significant systemic abnormalities. Kim P (F), Gardiner J, Aroichane M, Lyons CJ

2. **Resident and Fellow teaching:** UBC Ophthalmology Academic teaching block. Pediatric Ophthalmology and Strabismus January 7, 2011.
Retinopathy of Prematurity. Shaken Baby Syndrome

Dr. Debbie Giaschi

1. Canadian Amblyopia Network meeting, McGill University, July 2010. Giaschi lab update.
2. Vision Science Research Seminar, University of Waterloo, November 2010. The neural basis of motion perception deficits in amblyopia and developmental dyslexia.
3. **Medical Student teaching:** Psychology 367 (Sensory Systems): 39 hrs, 186. Psychology 368 (Perceptual Processes): 39 hrs, 90 students (in progress). PBL INT/BB1: 35 hrs, 8 students

Dr. Christopher Lyons

1. Invited guest lecturer, Oman Ophthalmic Society. Muscat, Oman March 2010
Traumatic Superior Oblique Palsy. Diagnosis and management
Vascular orbital Disorders of Childhood
Childhood Retinal Dystrophies
Panel Discussion on 'Problems in Pediatric Ophthalmology'
2. UBC Ophthalmology Grand Rounds. May 2010. Childhood craniopharyngioma,
3. Canadian Ophthalmological Society Annual Meeting, Quebec City, Canada, June 2010
 1. Ophthalmic Complications of Pediatric Otitis Media
 2. Against the rule astigmatism in children seen in a tertiary clinic correlates with significant systemic abnormalities. Kim P (F), Gardiner J, Aroichane M, Lyons CJ
4. Invited Lecturer: 2010 Claud Worth Lectureship, British Isles, Paediatric Ophthalmology and Strabismus Association

5. Liverpool November 2010: Craniopharyngioma in Childhood: the great impersonator
Kingston Eye Unit, London, November 2010: Acquired Esotropias: when to worry
St Thomas' Hospital, London, November 2010: Childhood Craniopharyngioma
6. Sunny Hill Hospital Visually Impaired Program Academic Rounds November 2010: The eye and reflections of brain disease
7. Resident and Fellow teaching:
-Weekly Pediatric Ophthalmology resident teaching Weds 7am
-UBC Ophthalmology Academic teaching block. Pediatric Ophthalmology and Strabismus: Childhood Cataract, Glaucoma and Wrap up session and Exit exam.

Dr. Patrick Ma

1. Canadian Surgical Retina Meeting. Whistler BC February 17-20, 2011. Pediatric Sarcoidosis
2. ASRS Retina Congress. Vancouver September 2010. New therapy for macular degeneration
3. JCAHPO's Vancouver Regional Continuing Education Meeting, Vancouver, August 2010. New therapy for macular degeneration
4. Seminar for Optometrists. Vancouver April 2010. Assessment and treatment of vitreoretinal diseases
5. **Resident/Fellow Teaching:** Residents' Fluorescein Angiography Rounds. Retina Rounds

Dr. Megan Rees

1. American Association for Pediatric Ophthalmology and Strabismus, Orlando Florida USA, April 2010. Vision Therapy Review, Rees M, Handler S
2. **Resident and Fellow teaching:** UBC Ophthalmology Academic

teaching block. Pediatric Ophthalmology and Strabismus. Esotropia and Exotropia

Dr. David Rossman

1. Canadian Ophthalmological Society Oculoplastics Meeting, Quebec City, June 2010. Blepharoplasty – Tips to Avoid Complications
2. UBC Oculoplastics Clinical Day, November 2010. Endonasal Dacryocystorhinostomy
3. **UBC Fellow/Resident Teaching:** Monthly oculoplastics and orbit rounds

Publications April 1 2010 to March 31, 2011:

1. Ophthalmic Complications of Pediatric Otitis Media. Pollock T(F), Kim P (F), Sargent M, **Aroichane M**, Lyons CJ, Gardiner J. JAAPOS accepted.
2. Ultraviolet-B induced keratitis. **Aroichane M**. New England Journal of Medicine (submitted).
3. Comer R (F), Kim P (F), **Cline R**, Lyons CJ Cataract surgery in the first year of life: aphakic glaucoma and visual outcomes. Can J Ophthalmol 2010;45(5):537-8.
4. Prabhakaran VC, Cannon PS, McNab A, Davis G, O'Donnell B, **Dolman PJ**, Ghabrial R, Selva D. Lesions mimicking lacrimal gland pleomorphic adenoma. Br J Ophthalmol. 2010; 94(11):1509-12.
5. Wiwatwongwana D, White VA, **Dolman PJ**. Two cases of periocular cutaneous angiosarcoma. Ophthal Plast Reconstr Surg. 2010 Sep-Oct;26(5):365-6.
6. Morris DS, Selva D, **Dolman PJ**. Endonasal dacryocystorhinostomy in Wegener granulomatosis. Arch Ophthalmol. 2010;128(9):1212-4.
7. Bleyen I, White VA, **Dolman PJ**. Floppy eyelid syndrome and ptosis in a patient with pachydermoperiostosis. Ophthal Plast Reconstr Surg. 2010; 26(4): 293-5.

8. Fayers T, Morris DS, **Dolman PJ**. Vibration-assisted anesthesia in eyelid surgery. *Ophthalmology* 2010; 117(7): 1453-7.
9. **Dolman PJ**. Evisceration, enucleation and alternatives to globe removal. *Can J Ophthalmol* 2010; 45(1): 9-10.
10. Madge SN, Malhotra R, Desousa J, McNab A, O'Donnell B, **Dolman P**, Selva D. Lacrimal Bypass Tube for Lacrimal Pump Failure Attributable to Facial Palsy. *Am J Ophthalmol*. 2010; 149(1): 155-9.
11. Jennifer Vassel, Rosemarie Rupps, Deborah Krakow, Narman Puvanachandra, **Jane A. Gardiner**, Sharon R. Lazee and Cornelius F. Boerkoel. Fetal alcohol syndrome: a phenocopy of spondylocarpotarsal synostosis syndrome? *Clinical Dysmorphology* 2010 Oct vol 19;4:175-80.
12. Ophthalmic Complications of Pediatric Otitis Media. Pollock T(F), Kim P (F), Sargent M, Aroichane M, Lyons CJ, **Gardiner J**. *JAAPOS* accepted.
13. Partanen M, Fitzpatrick K, Edgell D, Bjornson B, **Giaschi D** (2011) The cortical basis for the dichotic pitch deficit in developmental dyslexia. *Cognitive Neuroscience Conference Proceedings*.
14. Narasimhan S, Harrison E, **Giaschi D** (2011) Quantitative measurement of interocular suppression in children with amblyopia. *Journal of Vision* in press.
15. **Giaschi D**, Hayward J, Truong G, Partanen M (2010) The effect of speed, age and amblyopia on the perception of motion-defined form. *Journal of Vision* 10(7):465 doi:10.1167/10.7.465.
16. Solski A, **Giaschi D**, Wilcox L (2010) Perceptual grouping leads to depth discrimination deficits in adults, not children. *Journal of Vision* 10(7):367 doi:10.1167/10.7.367.
17. Partanen M, Edgell D, Bjornson B, **Giaschi D** (2010) Cortical systems utilized for reading and temporal processing in developmental dyslexia. *Cognitive Neuroscience Conference Proceedings*.
18. Wong JCT, **Rossman D**, Bressler B. Dacryoadenitis, an extra-intestinal manifestation of Crohn's Disease. *American Journal of Gastroenterology*. 105 (8): 1904-6, 2010.
19. Neffendorf J, Quinlan M, Mulholland C (F), **Lyons C**: Disc drusen complicated by asymptomatic hemorrhage in childhood. *Can J Ophthalmol*: 2010;45:537-8.
20. WitwatwongwanaA(F), Connolly M, **Lyons CJ**. Red reflex mimicking lens subluxation in a child undergoing orthokeratology. *Eye* 2010;4(1):182.
21. Puvanachandra N (F) Goddard K, **Lyons CJ**. Dramatic visual recovery after prompt radiotherapy and chemotherapy for leukaemic infiltration of the optic nerve in a child. *Eye* 2010;24(5):927-8.
22. Mulholland C (F), Rootman J, **Lyons CJ**. Primary iris neovascularization in NF1. *J Neuro-Ophthalmol* 2010;30(4):340-1.
23. **Lyons CJ**, Rootman J. Strabismus in thyroid-related orbitopathy. *Pediatric Endocrinology Reviews* 2010;7(2):227-29.
24. Kim P (F), **Lyons CJ**. Dating the onset of infantile cataract from family photographs. *Arch Dis Child* 2010;95:689.
25. Smith M, Heran M, Connolly M, Heran H, Friedman J, Jett K, **Lyons CJ**, Steinbok P, Armstrong L. Cerebrovasculopathy in NF1 Associated with Ocular and Scalp Defects *Am J Med Genet*. e-publication 2010 Dec 22.
26. Robitaille J Zheng B, Wallace K, Beis M, Tatidil C, Yang J, Sheldow C, Siebert L, Levin A, Lam W, Artur B, **Lyons C**, Jaakola E, Tsilou E, Williams C, Weaver R, Shields C, Guernsey D. The role of Frizzled 4 mutations in Familial Exudative Retinopathy and Coats Disease. *Brit J Ophthalmol* e-publication Nov 2010.
27. Comer R (F), Kim P (F), Cline R, **Lyons CJ**. Cataract surgery in the first year of life: aphakic glaucoma and visual outcomes. *Can J Ophthalmol* 2010;45(5):537-8.

28. Ophthalmic Complications of Pediatric Otitis Media. Pollock T(F), Kim P (F), Sargent M, Aroichane M, **Lyons CJ**, Gardiner J. JAAPOS accepted.

Submitted and currently under review:

29. MitomycinC- augmented glaucoma drainage implant in childhood- a retrospective review. Pollock T, **Lyons CJ** Br J Ophthalmol.
30. Against the rule astigmatism in in children seen in a tertiary clinic correlates with significant systemic abnormalities. Kim P, Gardiner J, Aroichane M, **Lyons CJ**. Br J Ophthalmol.
31. Response to Treatment of Anterior Uveitis with Juvenile Idiopathic Arthritis and Isolated Chronic Idiopathic Uveitis Charuvani, S Rai S, **Lyons CJ**, Gardiner JA, Guzman J, Petty RE. Ann Rheumatol.

Textbooks:

32. MitomycinC- augmented glaucoma drainage implant in childhood- a retrospective review. Pollock T, **Lyons CJ** Br J Ophthalmol.
33. Against the rule astigmatism in in children seen in a tertiary clinic correlates with significant systemic abnormalities. Kim P, Gardiner J, Aroichane M, **Lyons CJ**. Br J Ophthalmol.
34. Response to Treatment of Anterior Uveitis with Juvenile Idiopathic Arthritis and Isolated Chronic Idiopathic Uveitis Charuvani, S Rai S, **Lyons CJ**, Gardiner JA, Guzman J, Petty RE. Ann Rheumatol.

Students, Residents & Fellows Supervised:

Students

1. 2nd year medical students were supervised every Tuesday morning with Dr Rees. 3rd and 4th year students were supervised every Thursday morning with Dr Gardiner. Dr. Gardiner also led a small group teaching for 8 students in December 2010. Dr. Ma supervises a student every Wednesday. Dr. Rossman supervises a 3rd year student for a half day every week. Dr. Cline supervised one 3rd year student.

Elective Students

1. Drs Cline, Rees, Lyons, Aroichane, Kennedy, Rossman, Tischler and Ma supervised elective students periodically.

Dr. Deborah Giaschi

1. Marita Partanen – obtained MSc, June 2010
2. John Secen – obtained MSc, November 2010
3. Jake Hayward – UBC Faculty of Medicine summer student
4. Ali Qazalbash – Child & Family Research Institute summer student
5. Nicole Chaudhari – work-study student
6. Rawn Stokoe – work-study student

Orthoptic students 2010-2011

1. Coral Crawford
2. Debbie Zylich

Residents

1. Every year, all PGY 3 & PGY 4 UBC residents rotate through Pediatric ophthalmology for an 8 week period. During these rotations, Drs S. Levasseur, S. Schendel, L. Mok, A. Butler, A. Ko, R. Talbot, C. Pollock, A. Seth, D. Bhui, N. Pollock, C. Sheldon, G. Yearsley, were supervised by Drs Aroichane, Cline, Gardiner, Kennedy, Lyons, Ma and Rees.

Fellowship supervision/teaching:**Dr. Maryam Aroichane**

1. Salma Rai, Nepal April 2009-April 2010
2. Peter Kim, Australia July 2009-June 2010
3. Alex Lange Switzerland
4. Funmi Obegola Nigeria
5. Jean Chuo, Canada July 2010-June 2011

Dr. Peter Dolman

1. Ryan Rodriguez, Philippines
2. Greg Moloney: Australia
3. Helena Kordic, Switzerland
4. Anna Roefs, Netherlands

Dr. Patrick Ma

1. Michael Butler
2. Adrian Fung
3. Yunhai Jiang

Dr. Jane Gardiner

1. Salma Rai, Nepal, April 2009-May 2010
2. Peter Kim, Australia, July 2009 -June 2010
3. Lisa Scoppetuolo, United Kingdom, July 2010- Mar 2011
4. Simone Hohermuth, Switzerland, May 2010-Mar 2011

Dr. Deborah Giaschi

1. Sathyasri Narasimhna, postdoctoral fellow

Dr. Christopher Lyons

1. Salma Rai, Nepal, April 2009-May 2010
2. Peter Kim, Australia, July 2009-June 2010
3. Lisa Scoppetuolo, United Kingdom, July 2010-Mar 2011
4. Simone Hohermuth, Switzerland, May 2010-Mar 2011

Dr. David Rossman

1. Adnan Pirbhai – July – Dec 2010
2. Greg Maloney – Jan –June 2011

Grant Funding Received:

Project Title	PI	Team	Granting Agency	Amount
Brain mechanisms underlying human motion perception	D Giaschi		NSERC Discovery grant	\$108,000
The role of coarse stereopsis in typical and atypical visual development	D Giaschi, L Wilcox		CIHR operating grant	\$88,693
Occlusion therapy outcomes for children with amblyopia	D Giaschi, D. Regan		CIHR operating	\$220,269
Neuroplasticity and real-time fMRI	D Giaschi , M. Cynader, K. Christoff		Carraresi Foundation	\$60,000
Fellowship grant		Retina Group	Novartis	\$45,000
Educational Clinical trial software	P. Ma & D. Maberley		Novartis	\$9,900

Committee Participation:**Dr. Maryam Aroichane**

1. President of the Canadian Orthoptic Council
2. Examiner for orthoptists certification in June 2010

Dr. Jane Gardiner

1. Director of Undergraduate Education for the UBC Dept of Ophthalmology and Vision Science
2. UBC Dept Ophthalmology and Vision Science Continuing Education Committee

Dr. Debbie Giaschi

1. Research Day Organizing Committee, UBC Department of Ophthalmology and Visual Sciences
2. Faculty coordinator, NSERC Undergraduate Student Research Award coordinator, UBC Medicine
3. High Field MRI Centre Protocol Review committee, UBC
4. Eye Care Centre Advisory committee, UBC Department of Ophthalmology and Visual Sciences
5. Teaching Evaluation committee, UBC Department of Psychology
6. Neurons to Neighbourhoods cluster advisory, CFRI
7. Thesis supervisory committees: Anna Sinova (Neuroscience, MSc), Raika Pancaroglu (Neuroscience PhD), Lee Lau (Neuroscience MSc, completed), Marla Mickleborough (Neuroscience PhD), Georgia Tropini (Neuroscience MSc, completed), Nadia Pietravalle (Neuroscience MSc, completed)

Dr. Parick Ma

1. UBC Ophthalmology Credentials committee
2. UBC Ophthalmology Clinical Appointment and Promotions Committee

Dr. David Rossman

1. Organizer: Oculoplastics Clinical Day Nov 2010, UBC Department of Ophthalmology and Visual Sciences

Dr. Christopher Lyons**UBC Department of Ophthalmology & Visual Science**

1. Director, Ophthalmology Residency Training January 1999 – April 2011
2. Member Residency Selection sub-committee
3. Member, UBC Ophthalmology Staff Committee
4. Member, UBC Advisory Committee
5. Member, UBC Ophthalmology Manpower Committee
6. Member of the Written Exam Committee and Oral Exam Committee, RCPSC (Ophthalmology)

British Columbia Children's Hospital

7. Head, Department of Ophthalmology 1995 – present
8. Member, Surgical Specialties Cabinet Committee
9. Member, Surgical Specialties Advisory Committee

Vancouver General Hospital

10. Member, Ophthalmology Staff Committee
11. Member, Medical Staff Committee

Reviewer (journal articles)

12. British Journal of Ophthalmology
13. Canadian Journal of Ophthalmology Eye
14. Journal of the Association for Pediatric Ophthalmology & Strabismus
15. Member, Royal College of Physicians and Surgeons of Canada Ophthalmology Nucleus Committee

Dr. Ross Kennedy

1. Member, BC Government Vision Screening Steering Committee 2007 - now
2. Member, American Association for Pediatric Ophthalmology and Strabismus Vision Screening Committee 2008 to present

Dr. Megan Rees

1. UBC Ophthalmology Residency Training Committee
2. AAPOS Nominating Committee



Department of Pediatric Orthopedic Surgery



▶ Dr. Christopher W. Reilly,
Associate Professor,
Department Head

Faculty Members:

Dr. Christopher W. Reilly, Associate Professor, Department Head

Dr. Richard D. Beauchamp, Clinical Professor

Dr. Kenneth L.B. Brown, Clinical Professor

Dr. Christine M. Alvarez, Associate Professor

Dr. U.K. Kishore Mulpuri, Assistant Professor

Dr. Firoz Miyanji, Clinical Assistant Professor

Dr. Shafique P. Pirani, Clinical Professor

Alec Black, Clinical Instructor

Heather Macdonald, Ph.D., Assistant Professor

Other Staff Members:

Bronwyn Slobogean, Research Manager

Clint Hazen, Research Assistant

Harpreet Chhina, Research Assistant

Brenda Whitworth, Administrative Secretary



DEPARTMENT OF PEDIATRIC ORTHOPEDIC SURGERY

Highlights and Achievements:

1. Dr. Firoz Miyanji, C&W Excellence in Education Award, “360 Degree Orthopaedic Education: Colleagues, Fellows, Residents and Nursing”, June 10, 2010
2. Dr. Shafique Pirani, Certificate of Merit, “The Brazilian Orthopaedic Society – Section Minas Gerais”, August 2010
3. Alec Black, Best Poster Award, 2nd Congress of the International Foot and Ankle Biomechanics Community, 2010
4. Heather Macdonald, Postdoctoral Fellowship, Alberta Heritage Foundation for Medical Research, 2008-2010
5. Heather Macdonald, Postdoctoral Fellowship, Canadian Institutes for Health Research, 2008-2010

Presentations:

1. **Reilly C:** “C1 Lateral Mass Screw Fixation in Children: Indications, outcomes, and technique in 11 consecutive patients”. Pediatric Orthopaedic Society of North America Annual Meeting, Waikoloa Hawaii, May 4-7, 2010
2. **Reilly C:** “Impact of Surgical Waitlist Times on Scoliosis Surgery: The Surgeon’s Perspective”. Pediatric Orthopaedic Society of North America Annual Meeting, Waikoloa Hawaii, May 4-7, 2010
3. **Reilly C:** “Publication of Abstracts Submitted to the Annual Meeting of the Pediatric Orthopaedic Society of North America: Is there a difference between accepted vs. rejected abstracts?” Pediatric Orthopaedic Society of North America Annual Meeting, Waikoloa Hawaii, May 4-7, 2010
4. **Reilly C:** “Osteochondritis Dissecans of the Knee”. Canadian Orthopaedic Association Annual Meeting, Edmonton, Alberta, June 17-20, 2010
5. **Reilly C:** “An Approach to Back Pain in Children”. Canadian Orthopaedic Association Annual Meeting, Edmonton, Alberta, June 17-20, 2010
6. **Reilly C:** “C1 Lateral Mass Screw Fixation in Children: Indications, Outcomes, and Technique in 11 Consecutive Patients”. Canadian Orthopaedic Association Annual Meeting, Edmonton, Alberta, June 17-20, 2010
7. **Reilly C:** “Impact on Surgical Waitlist Times on Scoliosis Surgery: The Surgeon’s Perspective”. Canadian Orthopaedic Association Annual Meeting, Edmonton, Alberta, June 17-20, 2010
8. **Reilly C:** “Publication of abstracts submitted to the annual meeting of the Pediatric Orthopaedic Society of North America: Is there a difference between accepted vs. rejected abstracts?” Canadian Orthopaedic Association Annual Meeting, Edmonton, Alberta, June 17-20, 2010
9. **Reilly C:** “C1 Lateral Mass Screw Fixation in Children: Indications, Outcomes, and Technique in 11 Consecutive Patients”. International Research Society of Spinal Deformities, Montreal, Quebec, July 1-3, 2010
10. **Reilly C:** “Impact of Surgical Waitlist Times on Scoliosis Surgery: The Surgeon’s Perspective”. International Research Society of Spinal Deformities, Montreal, Quebec, July 21-24, 2010
11. **Reilly C:** “Does Statistical Significance of SRS-22 Correlate with Clinical Significance? A multi-center Longitudinal Study Evaluating the Minimal Clinically Important Difference of the SRS-22”. International Meeting on Advanced Society of Spinal Deformities (IMAST), Toronto, Ontario, July 21-24, 2010
12. **Reilly C:** “Larger Curve Magnitude is Associated with Increased Peri-operative Healthcare Resource Utilization: A Multi-center Analysis of 422 Adolescent Idiopathic Scoliosis Curves”. Scoliosis Research Society,

Kyoto, Japan, September 21-24, 2010

13. **Reilly C:** "Larger Curve Magnitude is Associated with Increased Peri-operative Healthcare Resource Utilization: A Multi-Center Analysis of 422 Adolescent Idiopathic Scoliosis Curves". Canadian Spine Society Annual Meeting, Quebec City, Quebec, March 9-12, 2011
14. **Reilly C:** Does Statistical Significance of SRS-22 Correlate with Clinical Significance? A Multi-Center Longitudinal Study Evaluating the Minimal Clinically Important Difference of the SRS-22". Canadian Spine Society Annual Meeting, Quebec City, Quebec, March 9-12, 2011
15. **Beauchamp R:** "Poster Presentation: Impact of Botulinum Toxin on Health Utility". American Academy of Neurology, Toronto, Ontario, April 10-17, 2010
16. **Beauchamp R:** "Poster Presentation: Baseline Characteristics of Patients Receiving Botox". American Academy of Neurology, Toronto, Ontario, April 10-17, 2010
17. **Beauchamp R:** "Poster Presentation: Effect of Partial Body Weight Supported Treadmill Training on Functional Mobility in Children with Cerebral Palsy". Physiotherapy Association of B.C. Annual General Meeting, Vancouver, British Columbia, April 17, 2010
18. **Beauchamp R:** "Interim analysis of a large ongoing (BOTOX) on health utility in patients receiving treatment for approved therapeutic indications in Canada". ISPOR 15th Annual Meeting, Atlanta, Georgia, May 15-19, 2010
19. **Beauchamp R:** "Hydrocephalus Spina Bifida". Spina Bifida Annual Conference, July 13, 2010
20. **Beauchamp R:** "Poster Presentation: Can We Classify Mid-Foot Break using the Multi-Joint Foot Model?". iFAB, Seattle, Washington, September 15-18, 2010
21. **Beauchamp R:** "Classification of Mid-foot Break Using a Multi-segment Foot Model", 2nd Congress of the International Foot and Ankle Biomechanics Community, Seattle, Washington, September 16-18, 2010
22. **Brown K:** "Ototoxicity as a Predictor of Outcome in Patients with Osteosarcoma Treated with Cisplatin". American Society of Pediatric Hematology/Oncology meeting, Montreal, Quebec, April 7-10, 2010
23. **Brown K:** "Prognostic Factors of Localized Extremity Rhabdomyosarcomas: The results of a pooled analysis from US and European co-operative groups". American Society of Clinical Oncology Meeting, Chicago, Illinois, June 4-8, 2010
24. **Brown K:** "Second Look Operation with Subsequent Modification of Radiotherapy Dose for Intermediate Risk Rhabdomyosarcoma". American Society of Clinical Oncology Meeting, Chicago, Illinois, June 4-8, 2010
25. **Brown K:** "Subperiosteal lipomas Show Similar Cytogenetic Abnormalities to Soft Tissue Lipomas Rather than Well Differentiated Liposarcomas". Connective Tissue Oncologic Society, Paris, France, November 2010
26. **Alvarez C:** "To Measure Health Related Quality of Life in Patients with Hereditary Multiple Exostoses". Pediatric Orthopaedic Society of North America (POSNA), Waikoloa, Hawaii, May 4-7, 2010
27. **Alvarez C:** "Can we classify a mid-foot break using a multi-segment foot model?" Congress of the International Foot and Ankle Biomechanics Community at the University of Washington, Seattle, Washington, September 16-18, 2010
28. **Mulpuri K:** "C1 Lateral Mass Screw Fixation in Children: Indications, outcomes, and technique in 11 consecutive patients". Pediatric Orthopaedic Society of North America Annual Meeting, Waikoloa Hawaii, May 4-7, 2010
29. **Mulpuri K:** "Publication of Abstracts Submitted to the Annual Meeting of the Pediatric Orthopaedic Society of North America: Is there a difference between accepted vs. rejected abstracts?" Pediatric Orthopaedic Society of North America Annual Meeting, Waikoloa Hawaii, May 4-7, 2010

30. **Mulpuri K:** “Levels of Evidence of Studies presented at POSNA Annual Meetings”. Pediatric Orthopaedic Society of North America Annual Meeting, Waikoloa Hawaii, May 4-7, 2010
31. **Mulpuri K:** “The Levels of Evidence in Paediatric Orthopaedic Journals: Where are we now?”. Pediatric Orthopaedic Society of North America Annual Meeting, Waikoloa Hawaii, May 4-7, 2010
32. **Mulpuri K:** “Impact of Surgical Waitlist Times on Scoliosis Surgery: The Surgeon’s Perspective”. Pediatric Orthopaedic Society of North America Annual Meeting, Waikoloa Hawaii, May 4-7, 2010
33. **Mulpuri K:** “RCT’s in Pediatric Orthopaedic Trauma”. Pediatric Orthopaedic Society of North America, Waikoloa, Hawaii, May 4-7, 2010
34. **Mulpuri K:** “Levels of evidence of studies presented at POSNA annual meetings”. Canadian Orthopaedic Association Annual Meeting, Edmonton, Alberta, June 17-20, 2010
35. **Mulpuri K:** “Publication of abstracts submitted to the annual meeting of the Pediatric Orthopaedic Society of North America: Is there a difference between accepted vs. rejected abstracts?” Canadian Orthopaedic Association Annual Meeting, Edmonton, Alberta, June 17-20, 2010
36. **Mulpuri K:** “The levels of evidence in paediatric orthopaedic journals: Where are we now?” Canadian Orthopaedic Association Annual Meeting, Edmonton, Alberta, June 17-20, 2010
37. **Mulpuri K:** “C1 lateral mass screw fixation in children: Indications, outcomes, and technique in 11 consecutive patients”. International Research Society of Spinal Deformities Annual Meeting, Montreal, Quebec, July 1-3, 2010
38. **Mulpuri K:** “Impact of surgical waitlist times on scoliosis surgery: A surgeon’s perspective”. International Research Society of Spinal Deformities Annual Meeting, Montreal, Quebec, July 1-3, 2010
39. **Mulpuri K:** “The levels of evidence in paediatric orthopaedic journals: Where are we now?” 12th Combined Meeting of the Orthopaedic Associations, Glasgow, United Kingdom, September 12-17, 2010
40. **Mulpuri K:** “The natural history of Perthes’ Disease”, Orthopaedic Rehabilitation Association at the American Academy of Orthopaedic surgeons Annual Meeting, San Diego, California, February 19, 2011
41. **Miyanji F:** “C1 Lateral Mass Screw Fixation in Children: Indications, outcomes, and technique in 11 consecutive patients”. Pediatric Orthopaedic Society of North America Annual Meeting, Waikoloa Hawaii, May 4-7, 2010
42. **Miyanji F:** “Publication of Abstracts Submitted to the Annual Meeting of the Pediatric Orthopaedic Society of North America: Is there a difference between accepted vs. rejected abstracts?” Pediatric Orthopaedic Society of North America Annual Meeting, Waikoloa Hawaii, May 4-7, 2010 (Poster)
43. **Miyanji F:** “Impact of Surgical Waitlist Times on Scoliosis Surgery: Surgeon’s Perspective”. Pediatric Orthopaedic Society of North America Annual Meeting, Waikoloa Hawaii, May 4-7, 2010 (E-poster)
44. **Miyanji F:** “Impact of Surgical Waitlist Times on Scoliosis Surgery: Surgeon’s Perspective”. Canadian Orthopaedic Association Annual Meeting, Edmonton, Alberta, June 17-20, 2010
45. **Miyanji F:** “C1 Lateral Mass Screw Fixation in Children: Indications, Outcomes, and Technique in 11 Consecutive Patients”. Canadian Orthopaedic Association Annual Meeting, Edmonton, Alberta, June 17-20, 2010
46. **Miyanji F:** “Publication of Abstracts Submitted to the Annual Meeting of the Pediatric Orthopaedic Society of North America: Is there a difference between accepted vs. rejected abstracts”. Canadian Orthopaedic Association Annual Meeting, Edmonton, Alberta, June 17-20, 2010 (Poster)

47. **Miyanji F:** "C1 Lateral Mass Screw Fixation in Children: Indications, Outcomes, and Technique in 11 Consecutive Patients". International Research Society of Spinal Deformities, Montreal, Quebec, July 1-3, 2010 (Poster)
48. **Miyanji F:** "Impact of Surgical Waitlist on Scoliosis Surgery: The Surgeon's Perspective". International Meeting on Advanced Spine Techniques (IMAST), Toronto, Ontario, July 21-24, 2010
49. **Miyanji F:** "Does Statistical Significance of SRS-22 Correlate with Clinical Significance? A multi-center Longitudinal Study Evaluating the Minimal Clinically Important Difference of the SRS-22". International Meeting on Advanced Spine Techniques (IMAST) Toronto, Ontario, July 21-24, 2010
50. **Miyanji F:** "Larger Curve Magnitude is Associated with Increased Peri-operative Healthcare Resource Utilization: A Multi-center Analysis of 422 Adolescent Idiopathic Scoliosis Curves". Scoliosis Research Society Annual Meeting, Kyoto, Japan, September 21-24, 2010
51. **Miyanji F:** "Larger Curve Magnitude is Associated with Increased Peri-operative Healthcare Resource Utilization: A Multi-center Analysis of 422 Adolescent Idiopathic Scoliosis Curves". Canadian Spine Society Meeting, Quebec City, Quebec, March 9-12, 2011
52. **Miyanji F:** "Does Statistical Significance of SRS-22 Correlate with Clinical Significance? A multi-center Longitudinal Study Evaluating the Minimal Clinically Important Difference of the SRS-22". Canadian Spine Society Meeting, Quebec City, Quebec, March 9-12, 2011
53. **Pirani SP:** "The Modelisation of the Clubfoot", Orthopaedica Belgica 2010, Oostende, Belgium, May 19-21, 2010
54. **Pirani SP:** "Round Table Discussion: Gold Standard in the Treatment of Clubfoot", Orthopaedica Belgica 2010, Oostende, Belgium, May 19-21, 2010
55. **Pirani SP:** "Clubfoot: The Uganda Clubfoot Care Project", Orthopaedica Belgica 2010, Oostende, Belgium, May 19-21, 2010
56. **Pirani SP:** "The Basis of Ponseti Technique", IV International Conference – Treatment of Congenital Foot Deformities in Children and Adolescents, St. Petersburg, Russia, May 29-30, 2010
57. **Pirani SP:** "Complicated Forms of Clubfoot (Arthrogryptic, Combined, Clubfoot in Elder Age Children)", IV International Conference – Treatment of Congenital Foot Deformities in Children and Adolescents, St. Petersburg, Russia, May 29-30, 2010
58. **Pirani SP:** "Treatment of Congenital Vertical Talus Position", IV International Conference – Treatment of Congenital Foot Deformities in Children and Adolescents, St. Petersburg, Russia, May 29-30, 2010
59. **Pirani SP:** "Measuring the Deformity: Pirani Score and MR Studies", Orthopaedic Society of Minas Gerais 2010, Belo Horizonte, Brazil, August 11-12, 2010
60. **Pirani SP:** "The Ponseti Method in Africa", Orthopaedic Society of Minas Gerais 2010, Belo Horizonte, Brazil, August 11-12, 2010
61. **Pirani SP:** "Ponseti Clubfoot Treatment in Uganda – Can it work? Will it Work? Is it Worth It?", Orthopaedic Society of Minas Gerais 2010, Belo Horizonte, Brazil, August 11-12, 2010
62. **Pirani SP:** "MRI Evaluation of Changes in Tarsal Anlagen and Soft Tissues during Ponseti Casting", 9th Ponseti Clubfoot Symposium, in Combination with the 13th Basel Pediatric Orthopaedic Symposium, Pediatric Orthopaedic Department University Hospital, Basel, Germany, September 2, 2010
63. **Pirani SP:** "Pitfalls using the Ponseti Method", 9th Ponseti Clubfoot Symposium, in Combination with the 13th Basel Pediatric Orthopaedic Symposium, Pediatric Orthopaedic Department University Hospital, Basel, Germany, September 2, 2010
64. **Pirani SP:** "The Uganda Sustainable Clubfoot Care Project", 9th

- Ponseti Clubfoot Symposium, in Combination with the 13th Basel Pediatric Orthopaedic Symposium, Pediatric Orthopaedic Department University Hospital, Basel, Germany, September 2, 2010
65. **Pirani SP:** "Clinical and MRI Evaluation of the Clubfoot Deformity", 21st Annual Meeting of the Japanese Pediatric Orthopaedic Association, Tokushima City, Japan, November 26-27, 2010
 66. **Pirani SP:** "How Did I Take the Ponseti Method to Uganda with a Public Health Prospective?", 21st Annual Meeting of the Japanese Pediatric Orthopaedic Association, Tokushima City, Japan, November 26-27, 2010
 67. **Pirani SP:** Pirani SP: "Ponseti Method Hands-On Workshop", 21st Annual Meeting of the Japanese Pediatric Orthopaedic Association, Tokushima City, Japan, November 26-27, 2010
 68. **Pirani SP:** "Paediatric Trauma and Limb Reconstruction (Moderator)", 7th Middle East Orthopaedic Conference, Dubai, UAE, January 24-26, 2011
 69. **Pirani SP:** "How the Ponseti Method works – a 3D MRI Assessment of Clubfoot undergoing Ponseti Casting", 7th Middle East Orthopaedic Conference, Dubai, UAE, January 24-26, 2011
 70. **Pirani SP:** "The Ponseti Method – A revolution in clubfoot correction", 7th Middle East Orthopaedic Conference, Dubai UAE, January 24-26, 2011
 71. **Black A:** "Classification of Mid-foot Break Using a Multi-segment Foot Model (Poster)", 2nd Congress of the International Foot and Ankle Biomechanics Community, Seattle, Washington, September 16-18, 2010
 72. **Black A:** "How Do We Walk? An Interactive Learning Module for Children with Neuromuscular Disorders", Physiotherapy Practice Forum, Vancouver, British Columbia, February 28-March 1, 2011
 73. **Macdonald H:** "Predicted Age-Related Changes in Bone Microarchitecture of the Distal Radius Differ Between Women and Men, but Age-Related Changes in Bone Strength are Similar", 37th European Symposium on Calcified Tissues, Glasgow, Scotland, June 2010
 74. **Macdonald H:** "Age-Related Changes in Bone Microarchitecture and Strength of the Distal Radius May Explain Sex Differences in Forearm Fracture Risk", American Society of Bone and Mineral Research Annual Meeting, Toronto, Ontario, October 2010
 75. **Macdonald H:** "Increased Cortical Porosity During Puberty May Increase Distal Radius Fracture Risk in Girls and Boys: A HR-pQCT Study", American Society of Bone and Mineral Research Annual Meeting, Toronto, Ontario, October 2010
 76. **Macdonald H:** "Bone Microarchitecture at the Distal Radius to Predict Fracture Using in vivo HR-pQCT", 11th Alberta Biomedical Engineering Conference, Banff, Alberta, October 2010

Invited Lectures:

Dr. Christopher Reilly

1. "Effective Paediatrics", Orthopaedic Update, Department of Orthopaedics, Vancouver, British Columbia, May 12-14, 2010
2. "Alcohol in Paediatric Orthopaedics", Orthopaedic Grand Rounds, Department of Orthopaedics, VGH, Vancouver, British Columbia, October 20, 2010
3. "Physiology and Disorders of the Growing Skeleton", Canadian Orthopaedic Association Basic Science Course, Montreal, Quebec, October 26, 2010
4. "Developmental Dysplasia of the Hip", Resident Lecture, Department of Orthopaedics, VGH, Vancouver, British Columbia, October 28, 2010
5. "Moderator: Case-based Discussions". 2010 Perspective on Paediatric Spine Deformity Meeting, Halifax, Nova Scotia, November 4-6, 2010
6. "Management of Pediatric Spine Trauma (Instructional Course)",

American Academy of Orthopaedic Surgeons Annual Meeting, San Diego, California, February 15-19, 2011

7. "Abstract: A Novel Skeletal Dysplasia Featuring Congenital Scoliosis, Impaired Ossification of the Vertebral Pedicles, and Short Stature". Clinical Genetics Annual Meeting Vancouver, British Columbia, March 16-20, 2011

Dr. Richard Beauchamp

1. "Peds Ortho in India", Orthopaedic Grand Rounds, Department of Orthopaedics, Vancouver, British Columbia, June 23, 2010

Dr. Christine Alvarez

1. "Medical Genetics for the Orthopaedic Surgeon", Resident Lecture, Department of Orthopaedics, VGH, Vancouver, British Columbia, April 22, 2010
2. "Paediatric Fractures", Orthopaedic Update, Department of Orthopaedics, Vancouver, British Columbia, May 12-14, 2010

Dr. Kishore Mulpuri

1. "Cerebral Palsy & Hip Osteotomy (adult and child)", Resident Lecture, Department of Orthopaedics, VGH, Vancouver, British Columbia, November 4, 2010
2. "Royal College Lecture - Perthes' Disease: 100 Years Later", 38th Annual Paediatric Orthopaedic Seminar & Townsend Lecture, Alberta Children's Hospital, Calgary, Alberta, October 22, 2010
3. "Management of the Hip in Cerebral Palsy", 38th Annual Paediatric Orthopaedic Seminar & Townsend Lecture, Alberta Children's Hospital, Calgary, Alberta, October 22, 2010
4. "Management of Paediatric Elbow Injuries". 38th Annual Paediatric Orthopaedic Seminar & Townsend Lecture, Alberta Children's Hospital, Calgary, Alberta, October 22, 2010

5. "How to manage intra-articular fractures and osteochondral injuries of the knee", Saint Justine Orthopaedic Review Course, Montreal, Quebec, March 24-26, 2011

6. "DDH before walking age: The place of imaging and treatment options", Saint Justine Orthopaedic Review Course, Montreal, Quebec, March 24-26, 2011

7. "Facts and controversies about Legg-Calve-Perthes' Disease", Saint Justine Orthopaedic Review Course, Montreal, Quebec, March 24-26, 2011

Dr. Firoz Miyanji

1. Abstract: A Novel Skeletal Dysplasia Featuring Congenital Scoliosis, Impaired Ossification of the Vertebral Pedicles, and Short Stature". Clinical Genetics Annual Meeting, Vancouver, British Columbia, March 16-20, 2011

Dr. Shafique Pirani

1. Co-author: Bethune Round Table of International Surgery, "Performance of Clubfoot clinics in Uganda", co-authored by Dr. Shafique Pirani, Dr. Edward Naddumba, and Dr. Gonzaga Waiswa, University of Calgary, Calgary, Alberta, May 15, 2010
2. "Manipulation and Casting" SIGN International Orthopaedic Conference and Ponseti Method Workshop, Richland, Washington, September 7, 2010
3. "Common Errors" SIGN International Orthopaedic Conference and Ponseti Method Workshop, Richland, Washington, September 7, 2010
4. "Ponseti Method Casting Workshop Table Instructor" SIGN International Orthopaedic Conference and Ponseti Method Workshop, Richland, Washington, September 7, 2010
5. "Ponseti Clubfoot Method and Minimally Invasive Approach to Vertical Talus: Technical Skills Course", American Academy of Orthopaedic Surgeons 2011 Annual Meeting, San Diego, California, February 18, 2011

6. “Improving Global Health – Diaspora and the Trans-Local Potential for Change”, SFU Morris J. Wosk Centre for Dialogue, Vancouver, British Columbia, March 16, 2011

Dr. Heather Macdonald

1. “Establishing Normative Data for Bone Microarchitecture and Strength Measured with High-Resolution pQCT”, University of Calgary Human Performance Laboratory Seminar, Calgary Alberta, April 2010

Formal Teaching:

Dr. Christopher Reilly

1. “ACL Reconstruction”, 3R Nurses In-Service, BCCH, Vancouver, British Columbia, April 2010 – 1 hour
2. “Scoliosis and Depression”, BCCH, 2010 Slaoti Fellow Education Day (POSNA), Vancouver, British Columbia, April 22, 2010 – 20 minutes
3. “Bone and Soft Tissue Tumors”, BCCH Resident Teaching Rounds, Vancouver, British Columbia, June 10, 2010 – 1 hour
4. “The Pediatric Orthopaedic Examination”, BCCH Resident Teaching Rounds, Vancouver, British Columbia, August 12, 2010 – 1 hour
5. “The Upper Limb”, BCCH Resident Teaching Rounds, Vancouver, British Columbia, September 23, 2010 – 1 hour
6. “Leg-Length Discrepancy”, BCCH Resident Teaching Rounds, Vancouver, British Columbia, February 4, 2011 – 1 hour

Dr. Richard Beauchamp

1. “Advances in Gait Lab”, BCCH OPSEI Rounds, Vancouver, British Columbia, April 6, 2010 – 1 hour
2. “Leg-Length Discrepancy”, BCCH Resident Teaching Rounds, Vancouver, British Columbia, April 20, 2010 – 1 hour
3. “Botox Indications”, BCCH In-Service @ The Centre for Child Development, Surrey, British Columbia, June 17, 2010 – 1 hour

4. “Idiopathic Scoliosis”, BCCH Resident Teaching Rounds, Vancouver, British Columbia, June 29, 2010 – 1 hour

5. “Leg-Length Discrepancy”, BCCH Resident Teaching Rounds, Vancouver, British Columbia, July 13, 2010 – 1 hour

6. UBC Clinical Skills Tutorial, INDE 420 Musculoskeletal, Vancouver, British Columbia, October 15 & 20, 2010 – 8 hours

7. “The Lower Extremity”, BCCH Resident Teaching Rounds, Vancouver, British Columbia, November 9, 2010 – 1 hour

8. “The Skeletal Dysplasias”, BCCH Resident Teaching Rounds, Vancouver, British Columbia, January 11, 2011 – 1 hour

9. “The Upper Limb”, BCCH Resident Teaching Rounds, Vancouver, British Columbia, February 22, 2011 – 1 hour

Dr. Kenneth Brown

1. “Use of PET/CT in Sarcomas”, BCCH, 2010 Slaoti Fellow Education Day (POSNA), Vancouver, British Columbia, April 22, 2010 – 20 minutes

2. “The Child with a Limb Deficiency”, BCCH Resident Teaching Rounds, Vancouver, British Columbia, June 3, 2010 – 1 hour

3. “The Lower Extremity”, BCCH Resident Teaching Rounds, Vancouver, British Columbia, July 22, 2010 – 1 hour

4. “The Skeletal Dysplasias”, BCCH Resident Teaching Rounds, Vancouver, British Columbia, September 16, 2010 – 1 hour

5. UBC Clinical Skills Tutorial, INDE 420 Musculoskeletal, Vancouver, British Columbia, October 27, 2010 – 4 hours

6. “Slipped Capital Femoral Epiphysis”, BCCH Resident Teaching Rounds, Vancouver, British Columbia, November 25, 2010 – 1 hour

Dr. Christine Alvarez

1. “Botox use in Club Feet”, BCCH, 2010 Slaoti Fellow Education Day (POSNA), Vancouver, British Columbia, April 22, 2010 – 20 minutes
2. “Management of Fractures”, BCCH Resident Teaching Rounds, Vancouver, British Columbia, May 18, 2010 – 1 hour
3. “Management of Fractures”, BCCH Resident Teaching Rounds, Vancouver, British Columbia, August 24, 2010 – 1 hour
4. UBC Clinical Skills Tutorial, INDE 420 Musculoskeletal, Vancouver, British Columbia, October 22 and 29, 2010 – 8 hours
5. “The Pediatric Orthopaedic Examination”, BCCH Resident Teaching Rounds, Vancouver, British Columbia, November 16, 2010 – 1 hour
6. “What’s New in Pediatric Fractures”, Provincial Trauma Rounds, BCCH, Vancouver, British Columbia, November 17, 2010 – 1 hour
7. “The Child with a Limb Deficiency”, BCCH Resident Teaching Rounds, Vancouver, British Columbia, March 15, 2011 – 1 hour

Dr. Kishore Mulpuri

1. “Research Overview and Wrap-up”, BCCH, 2010 Slaoti Fellow Education Day (POSNA), Vancouver, British Columbia, April 22, 2010 – 20 minutes
2. “The Role of the Orthopaedic Surgeon in Diagnosing Child Abuse”, BCCH Resident Teaching Rounds, Vancouver, British Columbia, April 29, 2010 – 1 hour
3. “Surgical Clinical Investigator: Fact or Fiction”, Methodology Research Rounds, BCCH, Vancouver, British Columbia, May 12, 2009 – 1 hour
4. “The Skeletal Dysplasias”, BCCH Resident Teaching Rounds, Vancouver, British Columbia, June 24, 2010 – 1 hour
5. “The Pediatric Orthopaedic Clinical and Research Fellowship Program”, OPSEI Rounds, BCCH, Vancouver, British Columbia, July 6, 2010

6. “Congenital Scoliosis”, BCCH Resident Teaching Rounds, Vancouver, British Columbia, August 5, 2010 – 1 hour
7. “Limb-Length Discrepancy”, BCCH Resident Teaching Rounds, Vancouver, British Columbia, October 7, 2010 – 1 hour
8. UBC Clinical Skills Tutorial, INDE 420 Musculoskeletal, Vancouver British Columbia, November 3 & 5, 2010 – 8 hours
9. “The Role of the Orthopaedic Surgeon in Diagnosing Child Abuse”, BCCH Resident Teaching Rounds, Vancouver, British Columbia, December 2, 2010
10. “The Role of the Orthopaedic Surgeon in Diagnosing Child Abuse”, BCCH Resident Teaching Rounds, Vancouver, British Columbia, December 16, 2010 – 1 hour
11. “The Lower Extremity”, BCCH Resident Teaching Rounds, Vancouver, British Columbia, February 10, 2011

Dr. Firoz Miyanji

1. “The Pediatric Orthopaedic Examination”, BCCH Resident Teaching Rounds, Vancouver, British Columbia, April 1, 2010 – 1 hour
2. “The Upper Limb”, BCCH Resident Teaching Rounds, Vancouver, British Columbia, May 27, 2010 – 1 hour
3. “The Role of the Orthopaedic Surgeon in Diagnosing Child Abuse”, BCCH Resident Teaching Rounds, Vancouver, British Columbia, July 29, 2010 – 1 hour
4. “Slipped Capital Femoral Epiphysis”, BCCH Resident Teaching Rounds, Vancouver, British Columbia, August 19, 2010
5. “The Child with a Limb Deficiency”, BCCH Resident Teaching Rounds, Vancouver, British Columbia, October 14, 2010 – 1 hour
6. “Management of Fractures”, BCCH Resident Teaching Rounds, Vancouver, British Columbia, December 2, 2010 – 1 hour

7. “Idiopathic Scoliosis”, BCCH Resident Teaching Rounds, Vancouver, British Columbia, February 17, 2011– 1 hour
8. “Congenital Scoliosis”, BCCH Resident Teaching Rounds, Vancouver, British Columbia, April 1, 2011 – 1 hour

Dr. Shafique Pirani

1. “The Foot”, BCCH Resident Teaching Rounds, Vancouver, British Columbia, June 15, 2010 – 1 hour

Dr. Heather Macdonald

1. “New Directions in Pediatric Bone Health Research”, OPSEI Rounds, BCCH, Vancouver, British Columbia, November 2, 2010 – 1 hour

Publications April 1 2010 to March 31, 2011:

1. Slobogean BL, **Reilly CW**, Alvarez CM. “Recurrent viral induced compartment syndrome”. Submitted to Pediatric Emergency Care, June 2010
2. Arneja SS, Furey MJ, Alvarez CM and **Reilly CW**, “Segond Fractures: Not Necessarily Pathognomonic of Anterior Cruciate Ligament Injury in the Pediatric Population”. *Sports Health: A Multidisciplinary Approach* 2010;2:437, DOI: 10.1177/1941738110379215
3. Davidson D, Ghag, **Beauchamp RD**, Tredwell SJ, Mulpuri K, “Inter-observer and intra-observer agreement in the radiographic diagnosis of avascular necrosis of the femoral head following slipped capital femoral epiphysis. *Journal of Children’s Orthopaedics*, 2010;4(4):327-330
4. La TH, Wolden SL, Rodeberg DA, Hawkins DS, **Brown KLB**, Anderson JR, and Donaldson SS, “Regional Nodal Involvement and Patterns of Spread Along In-Transit Pathways in Children with Rhabdomyosarcoma of the Extremity: A Report from the Children’s Oncology Group”, *Int J Radiation Oncology Biol Phys*:1-7, 2010
5. Raney RB, Anderson JR, **Brown KLB**, Huh WW, Maurer HM, Meyer WH, Parham DM, Rodeberg DA, Wolden SL, Donaldson SS, “Treatment Results for Patients with Localized, Completely Resected (Group I) Alveolar Rhabdomyosarcoma on Intergroup Rhabdomyosarcoma Study Group (IRSG) Protocols III and IV, 1984-1997: A Report from the Children’s Oncology Group”, *Pediatr Blood Cancer* 55:612-616, 2010
6. Minn AY, Lyden ER, Anderson JR, Million L, Arndt CA, **Brown KLB**, Hawkins DS and Donaldson SS, “Early Treatment Failure in Intermediate Risk Rhabdomyosarcoma: Results from IRS IV and D9803 – A Report from the Children’s Oncology Group”, *J Clin Oncology* 27:4228-4232, 2010
7. Raney B, Stoner S, Anderson J, Andrassy R, Arndt C, **Brown KLB**, Crist W, Maurer H, Qualman S, Wharam M, Wiener E, Meyer W, Hayes-Jordan A, “Impact of tumor viability at second-look procedures performed before completing treatment on the IRSG protocol IRS-IV, 1991-1997: A report from the Children’s Oncology Group”, *J Pediatr Surg* 45:2160-2168, 2010
8. Sommer A, Blanton SH, Weymouth K, **Alvarez C**, Richards BS, Barnes D, Hecht JT, “Smoking, the xenobiotic pathway, and clubfoot”, *Birth Defects Res A Clin Mol Teratol.* 2011 Jan; 91(1):20-8, Epub 2010 Dec 1
9. Shalinder S Arneja, Matthew J Furey, **Christine M Alvarez** and Christopher W Reilly, “Segond Fractures: Not Necessarily Pathognomonic of Anterior Cruciate Ligament Injury in the Pediatric Population”. *Sports Health: A Multidisciplinary Approach* 2010;2:437
10. Kennedy SA, Slobogean GP, **Mulpuri K**, “Does degree of immobilization influence refracture rate in the forearm buckle fracture? *Journal of Pediatric Orthopaedics Part B*, 2010;19(1):77-81
11. *Murnaghan ML, Slobogean BLT, Byrne A, Tredwell SJ, **Mulpuri K**, “The effect of surgical timing on operative time and quality of reduction in Type III supracondylar humeral fractures in children”, *Journal of Children’s Orthopaedics*, 2010;4:153-158
12. “Vaccaro AR Fisher CG, Whang PG, Patel AA, Prasad SK, Angevine PD, **Mulpuri K**, Thomas KC, “Evidence-based recommendations for spine surgery”, *Spine*, 2010 Feb 26[Epub ahead of print]

13. Fisher CG, Vaccaro AR, Thomas KC, Angevine PD, **Mulpuri K**, Patel AA, Prasad SK, Whang PG, "Evidence-based recommendations for spine surgery", *Spine*, 2010;35(15):E678-686
14. Slobogean BL, Jackman H, Tennant S, Slobogean GP, **Mulpuri K**, "Iatrogenic ulnar nerve injury after the review", *Journal of Pediatric Orthopedics*, 2010;30(5):430-436
15. Davidson D, Ghag A, Beauchamp RD, Tredwell SJ, **Mulpuri K**, "Inter-observer and intra-observer agreement in the radiographic diagnosis of avascular necrosis of the femoral head following slipped capital femoral epiphysis", *Journal of Children's Orthopaedics*, 2010;4(4):327-330
16. *Kelley SP, Cashin MS, Douziech Jr, Varghese RA, **Mulpuri K**, "Levels of evidence at the Pediatric Orthopaedic Society of North America Annual Meetings", *Journal of Pediatric Orthopaedics*, 2010;30:612-616
17. **Mulpuri K**, Slobogean BL, Tredwell SJ, "The epidemiology of non-accidental trauma in children". *Linical Orthopaedics and Related Research*, 2010 Sept 21 (Epub ahead of print)
18. Burrows M, Liu D, Perdios A, Moore S, **Mulpuri K**, McKay H, "Assessing bone microstructure at the distal radius in children and adolescents using HR-pQCT: A methodological pilot study". *Journal of Clinical Densitometry*, 2010;13:451-455
19. Dodwell E, Parisini E, Latorre J, Chandra D, **Mulpuri K**, Snyder B, "NSAID exposure and risk of non-union: A meta-analysis of case control and cohort studies". *Calcified Tissus International*, 2010;87:193-202
20. Flynn JM, Betz RR, O'Brien MF, Newton PO, Harms Study Group, "Radiographic classification of complications of instrumentation of adolescent idiopathic scoliosis", *Clin Orthop Relat Res*. 2010;468-665-9
21. Helgeson MD, Shah SA, Newton PO, Clements DH 3rd, Betz RR, Marks MC, Bastrom T, Harms Study Group, "Evaluation of proximal junctional kyphosis in adolescent idiopathic scoliosis following pedicle screw, hook, or hybrid instrumentation", *Spine* 2010;35:177-81
22. Newton PO, Yaszay B, Upasani VV, Pawelek JB, Bastrom TP, Lenke LG, Lowe T, Crawford A, Betz R, Lonner B, Harms Study Group, "Preservation of thoracic kyphosis is critical to maintain lumbar lordosis in the surgical treatment of adolescent idiopathic scoliosis", *Spine*;35:1365-70
23. Baxter-Jones ADG, McKay HA, Burrows M, Petit MA, Bachrach L, Mirwald RL, **Macdonald HM**, Bailey DA, "International Longitudinal Paediatric Reference Standards for Bone Mineral Content", *Bone* 2010;46:208-16. CA(IF: 4.089; Citations: 2)
24. Nishiyama KK, **Macdonald HM**, Buie HR, Hanley DA, Boyd SK, "Postmenopausal women with osteopenia have higher cortical porosity and thinner cortices at the distal radius and tibia than women with normal aBMD: an in vivo HR-pQCT study", *Journal of Bone and Mineral Research* 2010; 25:882-90, CA (IF: 6.043)
25. Manske SL, **Macdonald HM**, Nishiyama KK, Boyd SK, McKay HA, "Clinical tools to evaluate bone microarchitecture associated with 18-months of teriparatide therapy in postmenopausal women with osteoporosis", *Osteoporosis International*, doi: 10.1007/s00198-010-1226-1. FA (IF: 4.997)
26. **Macdonald HM**, Nishiyama KK, Kang J, Hanley DA, Boyd SK, "Age-related patterns of trabecular and cortical bone loss differ between sexes and skeletal sites: A population-based HR-pQCT study", *Journal of Bone and Mineral Research*, DOI: 10.1002/jbmr.171. FA (IF: 6.043)
27. Nishiyama KK, **Macdonald HM**, Hanley DA, Boyd SK, "Predicted age-related declines in distal radius bone strength are similar in women and men despite differences in age-related changes in bone microarchitecture", *Bone* 2010; 47(Suppl 1):S33
28. **Macdonald HM**, H, Nishiyama KK, Kang J, Hanley DA, Boyd SK, "Age-related changes in bone microarchitecture and strength of the distal radius may explain sex differences in forearm fracture risk", *Journal of Bone and Mineral Research* 2010, In Press
29. Nishiyama KK, **Macdonald HM**, Burrows M, McKay HA, Boyd SK,

“Increased cortical porosity during puberty may increase distal radius fracture risk in girls and boys: A HR-pQCT study”, Journal of Bone and Mineral Research 2010, In Press

Grant Funding Received:				
Project Title	PI	Team	Granting Agency	Amount
Pediatric Orthopaedic Research Support	CW Reilly		BCCH Foundation Circle of Care	\$20,000
An investigation into risk-taking behaviour, bone microstructure and fracture between the sexes: What underpins fracture in boys compared to girls during growth?	H McKay	SK Boyd, M Burrows., LC Li HM Macdonald, K Khan, K Mulpuri, P-J Naylor, RE Rhodes	Canadian Institutes of Health Research (2009-2013)	\$595,133
The role of physician assistants in pediatric acute care	K Mulpuri Q Doan	B Slobogean	iACT Synergy Grant (COMP) (2010)	\$10,000
Internet-administered adolescent scoliosis questionnaires compared with traditional pencil and paper versions: a randomized crossover design	CW Reilly	K Mulpuri F Miyanji	iACT Synergy Grant (COMP)(2010)	\$5,000
A clinical prediction model for growth arrest in pediatric physeal fractures: A pilot study	K Mulpuri	CW Reilly F Miyanji	BCCH Foundation Telethon Grant (COMP)(2010)	\$28,056
Pediatric Orthopaedic Research Support	K Mulpuri		BCCH Foundation Circle of Care (NC) (2010)	\$20,000
A clinical prediction model for growth arrest in paediatric physeal fractures	K Mulpuri	S Miller	POSNA Clinical Trial Planning Grant (educ) (COMP) (2011)	\$15,000
Health related quality of life in children with cerebral palsy undergoing surgery for dislocated hips	K Mulpuri	S Miller	UBC Department of Orthopaedics Research Excellence Fund (OREF) (COMP) (2011)	\$22,389
A clinical prediction model for growth arrest in paediatric physeal fractures	K Mulpuri	CW Reilly F Miyanji	UBC Department of Orthopaedics Research Excellence Fund (OREF) (COMP) (2011)	\$34,000

Functional outcomes following orthopaedic surgery based on gait laboratory results versus observational gait analysis in ambulatory children in cerebral palsy: A multicenter randomized control trial	U Narayanan	C Alvarez, DL Fehlings, S Klejman, JH Wedge, AR Willan, KF Zabjek, K Mulpuri (Collaborator)	Canadian Institutes of Health and Research (CIHR) (COMP) (2009-2013)	\$314,633
Quality of Life in Multiple Hereditary Exostoses	C Alvarez		MHE Coalition (NON-COMP) (2010)	\$930.00
Establishing the correlation HRQOL-Genotype-Phenotype in individuals with hereditary Multiple Exostoses	C Alvarez		UBC Department of Orthopaedics Research Excellence Fund (OREF) (COMP) (2011)	\$15,000
Uganda Sustainable Clubfoot Project	SP Pirani	N Penny, R Mathias, J Kond-Lule, J Amone, E Naddumba, F Francheschi	CIDA (COMP) (2004-2010)	\$300,000 total = \$1.8 million over 6 years
Skeletal development in clubfoot treatment	SP Pirani	S Siegler, R Brand, I Ponseti, J Udupa, W Morrison	N.I.H. (COMP) (2006-2010)	\$200,000 (USD)
How Do We Walk? Interactive Learning Module for Children with Neuromuscular Disorders	A Black		UBC Teaching and Learning Enhancement Fund (2011)	\$41,000.00
Bone health and physical activity in adolescents	H Macdonald, H McKay (Co-PI)	J Wharf Higgins, PJ Naylor	Canadian Institutes of Health Research (CIHR) (COMP) (2010)	\$100,000
Bone quality across the lifespan	S Boyd	DA Hanley, HM Macdonald	Canadian Institutes of Health Research (CIHR) (COMP) (2010)	\$126,000
Sex differences in forearm fracture risk during adolescence	H McKay	M Burrows, RE Rhodes, K Miran-Khan, K Mulpuri, L Li, PJ Naylor, HM Macdonald, SK Boyd	Canadian Institutes of Health Research (CIHR) (COMP) (2010)	\$150,000

Fellows Supervised

1. Renjit Varghese (India), Fellow, 2-year Academic Program, MSc, Health & Epidemiology, CP Database Project)
2. Dr. Neil Saran (Canada), 1-year Clinical Fellow
3. Dr. Megan Cashin (Canada), 1-year Clinical Fellow
4. Dr. Arjun Dhawale (India), 1-year Clinical Fellow
5. Dr. Jonathan Lescheid (Canada), 1-year Clinical Fellow
6. Dr. Ali Chaudhary (Saudi Arabia), 1-year Clinical Fellow (self)
7. Dr. Kalpesh Shah (Saudi Arabia), 3-month Clinical Fellow (self)
8. Dr. Ashok Acharya, 1-year Clinical Fellow, 6-month Clinical Fellow

Other:

1. Fayez Al Harthi, Pediatric Emergency Medicine Fellow
2. Jing Ye (China), Pediatric Emergency Medicine International Fellow
3. Jihua Zhou (China), Pediatric Emergency Medicine International Fellow
4. Gangxi Lin (China), Pediatric Emergency Medicine International Fellow
5. Hua Song (China), Pediatric Emergency Medicine International Fellow
6. Maher Naharal, Pediatric Emergency Medicine Fellow
7. Jasmine Allaire, Pediatric Emergency Medicine Fellow
8. Abdulla Al Qanatani, Pediatric Emergency Medicine Fellow

Residents Supervised (April 2010 – March 31, 2011):

1. Calvin Wang, PGY-4, UBC Orthopaedic Residency Program
2. Brent Weatherhead, PGY-3, UBC Orthopaedic Residency Program
3. Emily Dodwell, PGY-5, UBC Orthopaedic Residency Program

4. Cassandra Dielwart, PGY-1, UBC Pediatric Residency Program
5. Denise Mackey, PGY-4, UBC Orthopaedic Residency Program
6. Michael Weber, PGY-5, UBC Orthopaedic Residency Program
7. Peter Grunau, PGY-2, UBC Orthopaedic Residency Program
8. Lise Leveille, PGY-1, UBC Orthopaedic Residency Program
9. Gerard Slobogean, PGY-5, UBC Orthopaedic Residency Program
10. James Douglas, PGY-4, UBC Orthopaedic Residency Program
11. Marie-Eve Pelletier, PGY-1, UBC Orthopaedic Residency Program
12. Hooman Sadr, PGY-1, UBC Orthopaedic Residency Program
13. Luke Pugh, PGY-4, UBC Orthopaedic Residency Program
14. Anthony Costa, PGY-5, UBC Orthopaedic Residency Program
15. Denise Mackey, PGY-5, UBC Orthopaedic Residency Program
16. Catherine O'Brien, PGY-4, UBC Orthopaedic Residency Program
17. Robert Petretta, PGY-1, UBC Orthopaedic Residency Program
18. Scott Hughes, PGY-4, UBC Orthopaedic Residency Program
19. Christopher Kong, PGY-1, UBC Orthopaedic Residency Program
20. Parth Lodhia, PGY-4, UBC Orthopaedic Residency Program
21. Jason Strelzow, PGY-1, UBC Orthopaedic Residency Program
22. Kelsey Inrig, PGY-4, UBC Pediatric Residency Program
23. Cristina Bigg, PGY-4, UBC Pediatric Residency Program
24. Helen Wong, PGY-4, UBC Pediatric Residency Program
25. Kristen Ebbert, PGY-4, UBC Pediatric Residency Program

- 26. Jonathan Sam, PGY-4, UBC Pediatric Residency Program
- 27. Julia Panczuk, PGY-4, UBC Pediatric Residency Program
- 28. Jon Hawkeswood, UBC Pediatric Rehab Residency Program
- 29. Gillian Simonett, UBC Pediatric Rehab Residency Program
- 30. Neil Brown, PGY-1, UBC Podiatry Residency Program

Students

- 1. 2nd Year Medical Students – 2
- 2. 3rd Year Medical Students – 19
- 3. 4th Year Medical Students – 17 less 1 (cancellation in March) = 16
- 4. BCIT Prosthetic & Orthotic Students (September 21 – November 30, 2010) – 13
- 5. BCIT Prosthetic & Orthotic Students (January – April 5, 2011) – 12
- 6. Research Medical Students – 8

Committee Participation:

Dr. Christopher Reilly

- 1. Child and Family Research Institute, Member
- 2. Centre for Hip Health, Member
- 3. Royal College Subspecialty Committee, Member
- 4. Orthopaedic Re-design Committee, BCCH, Member
- 5. Department of Paediatric Orthopaedic Surgery, BCCH, Dept. Head
- 6. Surgical Cabinet Meeting, Member
- 7. Surgical Services Advisory Committee (SSAC), Member
- 8. The Department of Pediatric Surgery Surgical Cabinet, Member

- 9. Orthopaedic Faculty Advisory Committee, University of British Columbia Member
- 10. Orthopaedic Academic Council, University of British Columbia, Member
- 11. Spina Bifida Clinic, BCCH, Consultant
- 12. Muscular Diseases Clinic, BCCH, Consultant
- 13. Pediatric Orthopaedic Society of North America Association of Surgical Educators, Member
- 14. Canadian Orthopaedic Association, Member
- 15. Scoliosis Research Society, Member
- 16. British Columbia Medical Association, Member
- 17. Canadian Medical Association, Member
- 18. British Columbia Orthopaedic Association, Member
- 19. Journal of Pediatric Orthopaedics, Pediatric Society of North America, Reviewer

Dr. Richard Beauchamp

- 1. Shriner's Gait Lab, Sunny Hill Health Centre, Medical Director (BCCH)
- 2. Osteoporosis Group, BCCH, Member
- 3. Quality of Care Surgical/Neurology, BCCH, Member
- 4. Promotions Committee, UBC Orthopaedics, Member
- 5. BCIT Program Advisory Committee, and Prosthetic & Orthotics Program, Member
- 6. Regional Hospital, Outreach Kootenay Lake, Consultant
- 7. British Columbia Medical Association, Member

8. British Columbia College of Physicians and Surgeons of Canada, Member
 9. Association of Children's Prosthesis & Orthotic Clinics (ACPOC), Member
 10. Canadian Medical Association, Member
 11. Canadian Orthopaedic Association, Member
 12. Pediatric Orthopaedic Society of North America, Member
 13. Advisory Panel, Running Room of Canada, Member
 14. CP Association of Canada, Sports Classifier, Member
 15. Gait and Clinical Motion Analysis Society, Member
 16. American Academy of Cerebral Palsy and Development Medicine, Member
 17. VANOC, Member
 18. Spasticity Advisory Committee, Allergan Canada, Member
 19. Clinical Journal of Sports Medicine, Reviewer
 20. Running Room, Canada, Instructor
- Dr. Kenneth Brown**
1. Established only Canadian Center for Fitbone Surgery 2010, Member
 2. American Academy of Orthopaedic Surgeons, Member
 3. British Columbia Medical Association, Member
 4. Association of Bone and Joint Surgeons, Member
 5. Canadian Medical Association, Member
 6. Canadian Sarcoma Group, Member
 7. Children's Oncology Group – Bone Tumor Steering Committee, Soft Tissue Sarcoma Steering Committee, Member
 8. Limb Lengthening and Reconstructive Society ASAMI North America, Member
 9. Musculoskeletal Tumor Society, Member
 10. Orthopaedic Research Society, Member
 11. Pediatric Orthopaedic Society of North America, Member
 12. Canadian Joint Replacement Registry, Provincial Representative
 13. American Academy of Orthopaedic Surgeons Outcomes Committee, Member
 14. POSNA Outcomes Sub-Committee/AAOS Pediatrics Instrument Work Group, Pediatric Orthopaedic Committee Member
 15. Society of North America, Member
 16. Epidemiology and Outcomes Committee, Canadian Orthopaedic Association, Member
 17. Site Specific Advisory Group, Canadian Committee on Cancer Staging, Member
 18. Journal of Bone and Joint Surgery, Reviewer
 19. Clinical Orthopaedics and Related Research. Reviewer
 20. Pediatric Blood and Cancer Journal, Reviewer
 21. Canadian Journal of Surgery, Reviewer
 22. Grant Review Committee Fond de la Recherche en Sante du Quebec
 23. BC Cancer Agency, Consultant
- Dr. Christine Alvarez**
1. Trauma Division Committee, Division of Paediatric Orthopaedics, UBC
 2. Appointment, Reappointment, Promotion, Tenure (ARPT) Committee, UBC Department of Orthopaedics, Member

3. Multiple Hereditary Exostoses (MHE) Scientific Advisory Board, Member
4. Pharmaceutical Services Division (PDS), UBC, Reviewer
5. Anatomy Working Group, Canadian Botulinum Toxin Conference (CBTC), Member
6. Steering Committee, Canadian Botulinum Toxin Conference (CBTC), Member
7. Examination Panel, Royal College of Physicians and Surgeons of Canada, Orthopaedic Surgery Examination Board 2008-2012, Member
8. Canadian Medical Association, Member
9. Canadian Orthopaedic Association, Member
10. Pediatric Orthopaedic Society of North America, Member
11. BC College of Physicians and Surgeons, Member
12. Society of Specialists, Member
13. BC Orthopaedic Association, Member
14. BC Medical Association, Member
15. Journal of Clinical Kinetics, Reviewer
16. Journal of Pediatric Orthopaedics, Reviewer
17. Canadian Journal of Surgery, Reviewer
18. Clinical Orthopaedics and Related Research, Reviewer
19. Archives of medical Research, Reviewer
20. Prenatal Diagnosis, Reviewer

Dr. Kishore Mulpuri

1. Centre for Hip Health, Member

2. Evidence Based Medicine Committee, Pediatric Orthopaedic Society of North America, Chair
3. President's Subspecialty Advisory Council, Canadian Orthopaedic Association, Member
4. Paediatric Orthopaedics Sub-Specialty, Canadian Orthopaedic Association, Program Committee and Chair
5. Canadian Paediatric Orthopaedic Research Group, Organizer
6. Innovative Acute Care and Technologies Cluster (iACT) Steering Committee, Child and Family Research Institute, BCCH Representative
7. Research Committee on Child Restraint Seat Safety, Member
8. Karnataka Medical Council, Member
9. Karnataka Orthopaedic Association, Member
10. Indian Orthopaedic Association, Member
11. Paediatric Orthopaedic Society of India, Member
12. Asia Pacific Orthopaedic Association, Member
13. British Columbia Medical Association, Member
14. Canadian Medical Association, Member
15. Pediatric Orthopaedic Society of North America, Member
16. Western Society for Pediatric Research, Member
17. Journal of Pediatrics, Reviewer
18. Journal of Spine, Reviewer
19. Journal of Clinical Epidemiology, Reviewer
20. Western Society for Pediatric Research, Regional Meeting, Reviewer
21. Canadian Institutes of Health Research, Reviewer

- 22. Journal of Pediatrics, Reviewer
- 23. Journal of Children's Orthopaedics, Reviewer
- 24. Journal of Orthopaedic Surgery, Reviewer
- 25. Journal of Pediatric Orthopaedics, Part B, Reviewer

Dr. Firoz Miyanji

- 1. Harms Study Group, Core Member
- 2. British Columbia Medical Association, Member
- 3. Canadian Orthopaedic Association, Member
- 4. Pediatric Orthopaedic Society of North America, Canadian Member
- 5. Canadian Spine Society, Member
- 6. Canadian Paediatric Spinal Deformity Study Group, Member
- 7. American Academy of Orthopaedic Surgeons Resident/Fellow, Member

Dr. Shafique Pirani

- 1. College of Physicians & Surgeons of BC, Member
- 2. British Columbia Medical Association, Member
- 3. Canadian Orthopaedic Association, Member
- 4. American Board of Orthopaedic Surgery, Member
- 5. American Academy of Orthopaedic Surgeons, Member
- 6. Royal College of Physicians & Surgeons of Canada, Member
- 7. ASAMI – North America (The Limb Lengthening and Reconstructive Society), Member
- 8. The American Orthopaedic Foot and Ankle Society, Member

- 9. Ponseti International Association for the Treatment of Clubfoot, Medical Director
- 10. Pediatric Orthopaedic Society of North America, Children's Orthopaedics in Underdeveloped Regions (COUR) Committee
- 11. Global HELP International, Board Member

- 12. The Rotary Club of Burnaby, Member

Mr. Alec Black

- 1. Hospital Emergency Incident Command System, Logistics Chief

Dr. Heather Macdonald

- 1. American Society for Bone and Mineral Research, Member
- 2. Bone and Mineral Society, Member
- 3. Postdoctoral Association of the University of Calgary, Member

Projects and Initiatives in Progress:

Dr. Christopher Reilly

Work In Progress: Completed Projects with Manuscripts in Progress

- 1. Reilly CW, Mulpuri K, Choit RL. Trans-Physal Anterior Cruciate Ligament Reconstruction in Skeletally Immature Patients

Dr. Christopher Reilly

Work In Progress – Projects in Progress

- 1. Reilly CW, Ansermino M, Mulpuri K, Purdy FR, Tredwell SJ. The Effect of Femoral Nerve Block on Opioid Requirements Following Anterior Cruciate Ligament Reconstruction in the Paediatric Population: A Double Blind, Prospective, Randomized Controlled Trial – Data collection almost completed.
- 2. Mulpuri K, Ansermino M, Montgomery C, Purdy R, Lehman W, Reilly CW, Tredwell SJ. The Effect of Femoral Nerve Block on Morphine Requirements following Intramedullary Nailing of Femoral Fractures in Paediatric Patients.

3. Cervical Spine Injuries & Helmets – helmet testing underway.
4. BrAIST: A Randomized Control Trial on Bracing Vs Watchful Waiting in Patients with Adolescent Idiopathic Scoliosis – data collection ongoing.
5. Seating Pressure following Spine and Hip Surgery in Patients with Neuromuscular Disease – protocol Development ongoing.
6. PCA Vs Morphine Utilization following Posterior Instrumentation for Idiopathic Scoliosis – manuscript preparation.
7. Mental Health Disturbance in Adolescents following Acute Knee Injury (J Douglas) – protocol development.
8. Risk Factors for Psychiatric Disorders Associated with Adolescent Idiopathic Scoliosis – ethics approval received; data collection to begin.
9. Scoliosis and Wait Times – PHSI grant submission preparation underway.
10. The Impact of Scoliosis and Wait Times on Treatment and Outcomes – data collection.
11. Harms Study Group – Scheuermann's Kyphosis – data collection ongoing.
12. Harms Study Group – AIS Database – data collection ongoing.
13. Harms Study Group – AIS 2-year post-operative motion – data collection ongoing.
14. Harms Study Group – Cerebral Palsy and Scoliosis – ethics approval received; contract negotiations underway with UBC and Harms Study Group.
15. Adolescent idiopathic Scoliosis: Anterior and Posterior Instrumentation Vs Posterior Instrumentation Alone – protocol development.
16. The Relationship between Body Mass Index and Pedicle Morphology in Adolescent Idiopathic Scoliosis: A Computerized Tomography Study –

protocol development.

17. Management of displaced supracondylar fractures of the humerus using lateral versus cross K wires: A Prospective randomized clinical trial

Dr. Kenneth Brown
Ewing Sarcoma

1. Wrote the surgical guidelines for the new Metastatic Study AEWS09P2.
2. Wrote the surgical guidelines for the new non-Metastatic Ewing Sarcoma study which will be launched in 2010. Enrolment of 770 patients is expected over the next 5 years. In September we began a collaboration with radiation oncologists other surgeons, pathologists and imagers and oncologists to create specific aims for the study and change the parameters of local control which include a new definition of surgical margins and decreased radiation therapy for tumors with >90% necrosis, this will be the first COG sarcoma study which will assess patient Quality of Life outcome. For the first time we will have real-time access to imaging studies and surgeons and radiation oncologists are partnering in assessment of results of therapy in different sites.

Establish Vancouver as a Centre of Excellence for Fitbone Surgery in Canada,

3. Perform the first Fitbone surgery in Canada with 2 visiting surgeons from Dallas and Adelaide.
4. Begin to develop a business plan with Dr. Piotr Blachut and Dr. Pierre Guy at Vancouver General Hospital to perform 10 Fitbone surgeries per year, impact on hospital budgets is current impasse.

Learn Technique and Application of Intraoperative Imaging

5. Joined the Intraoperative Imaging Society and attended second annual meeting in Istanbul to see how others had utilized intraoperative imaging for patient care.
6. Attended Brainlab instruction session at AAOS.
7. Learned techniques of navigation in new OR suite with Brainlab and Siemens personnel

8. Excised 6 tumors, grafted a para-acetabular ABC, performed distal femoral lengthening, reconstructed tibia plateau in patient with meningococcemia, utilized navigation to perform cuts in large pelvic osteosarcoma.

Dr. Christine Alvarez

Clubfoot

1. Alvarez C, DeVera M, Chhina HK, Williams L, Durlacher K, Kaga S. Two-year clinical and pedobarographic outcome of children with idiopathic clubfoot treated with manipulation, casting and adjuvant Botulinum A toxin. Proposed venue: Journal of Bone and Joint Surgery (80% completed, data collected and preparing the manuscript).
2. Case Report: Peroneal Nerve Palsy in Clubfoot Population (data collected and preparing manuscript).
3. A Double-Blind, Randomized Control Trial Comparing Botulinum A toxin and Placebo in the Treatment of idiopathic Clubfoot in progress since 2006 with 30 participants enrolled to date at BCCH site (ongoing data collection).
4. Genetic Studies of Clubfoot (CTEV) is a collaborative project with the University of Houston Texas to explore the genetic causes of clubfoot which is in progress since 2005 (ongoing data collection).

Hereditary Multiple Exostoses

5. Quality of Life in Hereditary Multiple Exostoses and Disease specific questionnaire (data collection complete, analysis and manuscript preparation underway).
6. Genotype-Phenotype – Quality of Life correlation in Hereditary Multiple Exostoses (ongoing data collection).
7. The First Clinical Instance of Hereditary Multiple Exostoses in Families (manuscript preparation underway).

Gait

8. Pedobarographic profile of clubfoot patients (data collection complete, analysis and manuscript preparation underway).

9. Gait analysis of clubfoot patients (ongoing data collection).

10. Mid-foot Break: A clinical description and a new perspective (ongoing data collection, analysis and manuscript preparation underway).

11. Crouch Gait in children with Cerebral Palsy (ongoing data collection).

Botox

12. Advance events related to use of BTX in children under the age of 2 years.

Dr. Kishore Mulpuri

Manuscripts under Review

1. Varghese RA, Dhawale AA, Mulpuri K. "Citation classics in pediatric orthopaedics". Submitted to Journal of Bone and Joint Surgery-American, November 18, 2010

Manuscripts under Reviews

2. Mulpuri K, Reilly CW, Tredwell SJ. "Management of Displaced Supracondylar Fractures of the Humerus Using Lateral versus Cross K wires: A Prospective Randomized Clinical Trial, Recruitment in progress
3. Reilly CW, Ansermino M. Mulpuri K, Purdy FR, Tredwell SJ. "The Effect of Femoral Nerve Block on Opioid Requirements following Anterior Cruciate Ligament Reconstruction in the Paediatric Population: A Double-Blind, Prospective, Randomized Controlled Trial, Recruitment in progress
4. Mulpuri K, Ansermino M. Montgomery C, Purdy R, Lehman W, Reilly CW, Tredwell SJ. "The Effect of Femoral Nerve Block on Morphine Requirements following Intramedullary Nailing of Femoral Fractures In Paediatric Patients. Recruitment in progress
5. Varghese R, Slobogean BL, Mulpuri K. "Inter and intra-observer reliability of classification systems in Perthes' Disease", Data collection in progress
6. Mulpuri K, Dodwell E, Slobogean BLT, Wilson D, "dGEMRIC and Perthes' Disease". Protocol development

7. Mulpuri K, Jain R, Dyke L, Varghese R, Miyanji F, Reilly CW. "Taping vs splinting vs above elbow casting for Type I supracondylar fractures of the humerus in children: A randomized controlled trial"

Recruitment in progress

8. Mulpuri K, Cashin MS. "Outcome analysis of comminuted vs non-comminuted paediatric femur fractures treated with elastic intramedullary nail fixation. Protocol development"

Dr. Firoz Miyanji

1. Miyanji F, Mahar A, Oka R, Newton PO. "Cervical Spine Instrumentation: An alternative to lateral mass screws"
2. Miyanji F, Newton PO, Perry A, Vanvalin S, Pawlek J. "Analysis of the Lenke 1A Curve classification: Defining 2 Sub-types based on L4 tilt"
3. Miyanji F, Govender P, Lewis SJ. "Anterior Column Reconstruction in the Treatment of Metastatic Lesions of the Upper Cervical Spine"
4. Miyanji F, Lewis SJ. "Complications following the use of Biogluce Surgical Adhesive as an Adjunct to Dural Repair in Spinal Surgery"
5. Mulpuri K, Jain R, Dyke L, Varghese R, Miyanji F, Reilly CW. "Taping vs splinting vs above elbow casting for Type I supracondylar fractures of the humerus in children: A randomized controlled trial"

Dr. Shafique Pirani

1. A Reliable and valid method of evaluating amount of deformity in the congenital clubfoot (90% complete)

Mr. Alec Black

Projects

1. Maturation of Gait in children following rotationplasty, 2001-Present
2. Implementation of multi-segmented foot model using Visual 3D
3. Quantification of mid-foot break in children with Cerebral Palsy

Industry

4. Motion Capture for Animation, Taught for Vancouver Film School, 2005 - Present
5. Developer of Kin Tools partnering with Motion Analysis Corporation (Santa Rosa, California) – August 2009 – Present

Students supervised

6. Stephanian D, Laws J, McMartin K, Jones L and Hiebert R. "Barefoot vs. Shod Running, Mech 435 Term Project, March 2011"
7. Madkhali A and Dickinson M. "A biomechanical analysis of the field hockey drag flick, Mech 535 Term Project, March 2011"
8. Lai R and Tam K. "Biomechanics of Ballet: Joint loading during grand jete landing and gait analysis in Hyperextended knees, Mech 535 Term"



Division of Pediatric Otolaryngology



▶ Dr. Frederick K. Kozak,
Division Head



Highlights and Achievements:

Dr. Kozak received a 2010 Partners in Care and B.C. Children's Hospital Family Centred Care Award. His third award in three years which is nominated by patients.

Dr. Moxham was awarded the "2010 Outstanding Reviewer Award" from the Canadian Journal of Otolaryngology Head and Neck Surgery.

Dr. Chadha has started the B.C. Pediatric Voice Clinic which will assist in the diagnosis and treatment of children with complex voice disorders in the province.

Dr. Ludemann was the supervisor and senior author for the Choking Prevention: Short-Comings of Traditional Public Education Campaigns, Prompting the Development of Web-Based Interactive Teaching Tools for Pre-Teens, Teenagers and Adults which received recognition at BCCH iACT Research Day in June 2010.

Faculty Members:

Dr. Frederick K. Kozak, Division Head
Dr. Jeffrey P. Ludemann
Dr. J. Paul Moxham
Dr. Neil K. Chadha

Staff Members:

Ms. Patsy Regan, Pediatric Otolaryngology Clinical Nurse
Ms. Michelle Freeman, MOA to Dr. Kozak
Ms. Nancy Davies, MOA to Drs. Ludemann & Moxham
Ms. Michele Poulsen, MOA to Drs. Ludemann & Moxham
Ms. Elisabeth Robertson, MOA to Dr. Chadha

DIVISION OF PEDIATRIC OTOLARYNGOLOGY

Presentations:

Dr. N. Chadha

1. "Risk Factors for Sudden Sensorineural Hearing Loss." Canadian Society of Otolaryngology-Head and Neck Surgery Annual Meeting, Victoria, BC, May, 2011
2. "Randomized Controlled Trial to Assess Mental Preparation Before Resident Mastoidectomy." Canadian Society of Otolaryngology-Head and Neck Surgery. Annual Meeting ,Victoria, BC, May, 2011
3. "A Live Animal Training Model for Laryngotracheal Reconstruction." American Society for Pediatric Otolaryngology Annual Meeting, Chicago, USA, May, 2011
4. "Kurz Titanium Ossiculoplasty in Pediatric Ossicular Reconstruction." The Triological Society Annual Meeting at COSM, Chicago, USA, April, 2011
5. "Classifications of Tympanic Membrane Retraction Do Not Correlate With Hearing Loss." The Triological Society Annual Meeting at COSM, Chicago, USA, April, 2011
6. "Bone Anchored Hearing Systems." BC Early Hearing Program Annual Meeting, Vancouver, BC April 2011
7. "Pediatric endoscopic skull base surgery." Division of Pediatric Neurosurgery Rounds, BC Children's Hospital. January 2011
8. "Foreign Body Aspiration." Pediatric Emergency Medicine Academic Half-day Teaching. BC Children's Hospital, December 2010
9. "Pediatric ENT Diseases." Pediatric Academic Half-day Teaching. BC Children's Hospital, April 2011

Dr. F.K. Kozak

1. "Vocal Fold Immobility Following Cardiothoracic Surgery in Children." American Society of Pediatric Otolaryngology Mtg. Chicago. May 1, 2010.

2. "Vocal Fold Immobility Following Pediatric Cardiothoracic Surgery Special." OPSEI Academic Rounds. BC Children's Hospital. May 13, 2010.
3. "Vocal Fold Immobility Following Cardiothoracic Surgery in Children." Resident Research Meeting. Whistler. April 16, 2010.
4. "Post-Cochlear Implant Audiological Findings in Two Patients with aplasia/Hypoplastic VIII Nerves and Inner Ear Anomalies (IEA)." SENTAC. Cincinnati, Ohio, December 2-5, 2010.
5. "Characterization of V37I Pathogenicity in the Homozygous and Heterozygous States: Emergence of New Population Effects." Canadian Society of Otolaryngology-Head and Neck Surgery. Niagara Falls. May 25, 2010.
6. "Successful Hearing Outcomes in Ossicular Chain Reconstruction: An Analysis of Prognostic and Risk Factors." Canadian Society of Otolaryngology-Head and Neck Surgery. Niagara Falls. May 25, 2010.
7. "Pediatric Cholesteatoma Panel: Intact Canal Wall versus Canal Wall Down Surgical Techniques." The European Society of Pediatric Otorhinolaryngology 10th International Congress. Pamplona, Spain. June 5-8, 2010.
8. "Hearing Loss progression of GJB2/V37I homozygous patients." The European Society of Pediatric Otorhinolaryngology 10th International Congress. Pamplona, Spain. June 5-8, 2010.
9. "Does visualization of the recurrent laryngeal nerve during pediatric cardiothoracic procedures prevent vocal fold immobility?" The European Society of Pediatric Otorhinolaryngology 10th International Congress. Pamplona, Spain. June 5-8, 2010.
10. "Ototoxicity as a predictor of outcome in patients with osteosarcoma treated with cisplatin." 42nd Congress of the International Society of Pediatric Oncology. Boston. October 21, 2010.

11. "Post-Cochlear Implant Audiological Findings in Two Patients with Hypoplastic/Deficient VIII Nerves and Inner Ear Anomalies (IEA)." SENTAC Annual Meeting. Cincinnati. December 2010.
12. "Management of Otitis Media." St. Paul's Hospital CME Conference. Vancouver. November 26, 2010.
13. "Holes in the Head: An ear, nose and throat slide show." St. Paul's Hospital CME Conference. Vancouver. November 26, 2010.
14. "Sensory Neural Hearing Loss in the Newborn-What not to miss." St. Paul's Hospital CME Conference. Vancouver. November 26, 2010.
15. "Hot tips for ENT-Pediatric Otolaryngology." St. Paul's Hospital CME Conference Small Group sessions. Vancouver. November 23, 2010.
16. "Hearing loss progression in GJB2 mutations: V37I as a model of a non-truncating mutation with systematic review of progression." Annual Clinical Genetics Meeting. Vancouver, Canada March 18, 2011.
17. "Screening for Congenital Cytomegalovirus (CCMV) infection in the era of universal newborn hearing screening in a Canadian province." 2010 Congenital CMV Conference. September 23-25, 2010. Paris, France
18. Pediatric Otolaryngology in Twenty Minutes." 20th Annual BCTS/BCSAI Case Challenge & CME. Sutton Place Hotel, Vancouver. January 2010.
19. "Medical Management of SNHL. Pediatric Sensorineural Hearing Loss in BC: The Development of a Provincial Standard of Care." Child Health B.C. Conference, Vancouver, October 22, 2010.
20. ASPO 2010 Scientific Program Moderator – Otolaryngology Session. Las Vegas. May 1, 2010.
21. Pediatric Otolaryngology Session Chair. Canadian Society of Otolaryngology-Head and Neck Surgery. Niagara Falls. May 25, 2010.
22. "Challenges in Pediatric Otolaryngology." Canadian Society of Otolaryngology-

Head and Neck Surgery Annual Meeting. Niagara Falls, May 23, 2010

23. "Esophageal Wishbone Extraction: Not for the Chicken-hearted!" Canadian Society of Otolaryngology-Head and Neck Surgery Annual Meeting. Niagara Falls, May, 2010

Dr. Ludemann

1. "Vocal Fold Immobility Following Cardiothoracic Surgery in Children." American Society of Pediatric Otolaryngology Annual Meeting, Las Vegas, Nevada, May, 2010
2. "Lessons Learned at Altitude in Nepal and Bhutan." BC Children's Hospital OPSEI Academic Rounds, September, 2010 and BC Children's Hospital Audiology -Otolaryngology Rounds, September, 2010.
3. "Middle Ear Facial Neuroma." BC Children's Hospital Audiology/Otolaryngology Rounds, February, 2011
4. "Facial Neuroma Mimicking A Congenital Keratoma." UBC, Division of Otolaryngology Grand Rounds February 2011
5. "Vocal Fold Immobility Following Cardiothoracic Surgery in Children." UBC Division of Otolaryngology Resident Research Meeting. Whistler. April 16, 2010
6. "The case of the large nasal septal "hematoma" in a 4 month old baby." UBC Otolaryngology Grands: Interesting Cases Jan 2011

Dr. Moxham

1. "Vocal Fold Immobility Following Cardiothoracic Surgery in Children." American Society of Pediatric Otolaryngology Meeting. Chicago. May 1, 2010
2. "Vocal Fold Immobility Following Pediatric Cardiothoracic Surgery." Special OPSEI Academic Rounds. BC Children's Hospital. May 13, 2010
3. "Vocal Fold Immobility Following Cardiothoracic Surgery in Children." UBC Division of Otolaryngology Resident Research Meeting. Whistler April 16, 2010.

4. "Characterization of Vestibular Abnormalities in Children." UBC Division of Otolaryngology Resident Research Meeting. Whistler. April 16, 2010
5. Vestibular Anomalies in Children. UBC Division of Otolaryngology Grand Rounds Otolaryngology Grand Rounds, May 2010

Formal Teaching:

Dr. Chadha

1. INDE 410 Otolaryngology Clinical Skills Teaching, UBC, March 2011

Dr. Kozak

1. Third Year Clerkship Seminars. Otolaryngology: Disorders of the Ear. September 14, 2010
2. UBC Year 3 Surgery Clerkship Oral Examinations. February 24, 2011

Dr. Ludemann

1. UBC Oral Surgical Exams for Third Year (Phase IV) Clerks, April 2010
2. UBC Medical INDE 410, Clinical Skills in Otolaryngology, April 20, 2010

Dr. Moxham

1. UBC Year 3 Surgery Clerkship Oral Examinations August 2010
2. UBC Year 3 Surgery Seminars February 2011
3. INDE 410 Otolaryngology Clinical Skills Teaching April 2010

Publications April 1 2010 to March 31, 2011:

1. Beers AN, Shahnaz N, Westerberg BD, **Kozak FK**. "Wideband reflectance in normal Caucasian and Chinese school-aged children and in children with otitis media with effusion." *Ear Hear*. 2010 Apr;31(2):221-33.

2. Chang KT, **Chadha NK**, Leung R, Shago M, Phillips MJ, Thorner PS. Lymphadenoma: Case Report of a Rare Salivary Gland Tumor in Childhood." *Pediatr Dev Pathol*. 2010;13(4):331-7.
3. MacNeil SD, **Moxham JP**. "Review of floor of mouth dysontogenic cysts." *Ann Otol Rhinol Laryngol*. 2010 Mar;119(3):165-73.
4. Cheung VW, **Moxham JP**. "Cat Scratch Disease Presenting as Acute Mastoiditis Laryngoscope." 2010;120 Suppl 4:S222.
5. **Chadha NK**, Allegro J, Barton-Forbes M, Harlock H, Hawkes M, Campisi P. The Quality of Life and Health Utility Burden of Recurrent Respiratory Papillomatosis in Children. *Otolaryngol Head Neck Surg* 2010;143(5):685-90
6. Campisi P, Hawkes M, Simpson K, **Chadha NK**, Monteiro E, Ppsin B, Forte V, **Kozak FK**, Kozak JK, El Hakim H, Drummond D, Brookes JT, Leitao D, Husein M, Korman B, MacCormick J, Daniel SJ, Lapointe A, Johnson LB, Lee B. "The Canadian Juvenile Onset Recurrent Respiratory Papillomatosis Working Group. The epidemiology of juvenile onset recurrent respiratory papillomatosis derived from a population level national database." *Laryngoscope*. 2010 Jun;120(6):1233-45.
7. Repanos C, Carswell AJ, **Chadha NK**. "Manipulation of Nasal Fractures Under Local Anaesthetic: A Convenient Method for the Emergency Department and ENT Clinic." *Emerg Med J* 2010 27(6):473-4.
8. Shamon S, Sharma AR, **Ludemann JP**. "Glottic Foreign Body in a Child with Preexisting Vocal Cord Paralysis and Reflux Laryngitis: A Challenging Diagnostic Paradigm." *International Journal of Pediatric Otorhinolaryngology* (on-line), June 2010.
9. MacNeil SD, **Moxham JP**, **Kozak FK**. "Paediatric aerodigestive foreign bodies: remember the nasopharynx." *J Laryngol Otol*. 2010 Oct;124(10):1132-5. Epub 2010 Apr 29.

10. Seaberg RM, **Chadha NK**, Hubbard BJ, Gordon KA, Allemang BA, Harrison BJ, Papsin BC. Chorda Tympani Nerve Function in Children: Relationship to Otitis Media and Body Mass Index. *Int J Pediatr Otorhinolaryngol.* 2010;74(12):1393-6.
11. Fandiño M, Connolly M, Usher L, Palm S, **Kozak FK**. “Landau-Kleffner syndrome: a rare auditory processing disorder series of cases and review of the literature.” *Int J Pediatr Otorhinolaryngol.* 2011 Jan;75(1):33-8.
12. **Chadha NK**. “Intralesional Cidofovir for Recurrent Respiratory Papillomatosis: Systematic Review of Efficacy and Safety.” *J Laryngol Voice.* 2011;1(1):22-26.
13. **Chadha NK**, Gordin A, Luginbuehl I, Patterson G, Campisi P, Taylor G, Forte V. “Automated Cuff Pressure Modulation: A Novel Device to Reduce Endotracheal Tube Injury.” *Arch Otolaryngol Head Neck Surg.* 2011;137(1):30-4.
14. Gordin A, **Chadha NK**, Campisi P, Luginbuehl I, Taylor G, Forte V. “An Animal Model For Endotracheal Tube-related Laryngeal Injury Using Hypoxic Ventilation”. *Otolaryngol Head Neck Surg.* 2011 Feb;144(2):247-51.
15. Prisman E, **Chadha NK**, Gordon A, Estrada M, Campisi P, Forte V. “A Novel Endoscopically Placed Stent to Relieve Glottic Obstruction from Bilateral Vocal Fold Paralysis.” *Int J Pediatr Otorhinolaryngol.* 2011;75(2):182-5.
16. Allan LL, Stax AM, Zheng DJ, Chung BK, **Kozak FK**, Tan R, van den Elzen P. “CD1d and CD1c expression in human B cells is regulated by activation and retinoic acid receptor signaling.” *J Immunol.* 2011 May 1;186(9):5261-72. Epub 2011 Mar 30.
17. **Kozak FK**, Fandiño M, Carpes LF, Peiris K, Malherbe S, Purdy R. “Cranial conjoined twins: surgical and anesthetic challenges for a routine procedure: adenoidectomy and examination of ears.” *Int J Pediatr Otorhinolaryngol.* 2011 Mar;75(3):444-7. Epub 2011 Feb 1.

Residents Supervised:

UBC Division of Otolaryngology

1. Dr. Elaheh Akbari R3
2. Dr. Veronique Cheung R2
3. Dr. Anali Dadgostar R3
4. Dr. Estelle Chang R4
5. Dr. Trevor Hartl R2
6. Dr. Anil Sharma R4
7. Dr. Andrew Thamboo R3
8. 50 Medical Students and 20 Residents from either family practice, pediatrics or dentistry undertook electives in the Division of Pediatric Otolaryngology under the supervision of Drs. Kozak, Ludemann and Moxham and Chadha.

Pediatric Otolaryngology Fellows Supervised by Dr. Kozak:

1. Dr. Marcela Fandino, 2010
2. Dr. Jane Lea, 2010-2011
3. Dr. Anne Conlin, 2010-2011

Grant Funding Received:

Project Title	PI	Team	Granting Agency	Amount
Evaluation of Ciliary beat frequency and beat pattern in children with chronic nasal and respiratory symptoms: a new non-invasive method to improve diagnosis 2009-2011	M Childvers	D Wensley, F David, ES Chan, S Turvey, M Seear, FK Kozak	2010 Telethon Awards Competition	\$30,000
Discovery of novel candidate genes involved in facial clefting: A pilot project 2010-2012	L Brown	FK Kozak, P Eydoux	2011 Telethon Awards Competition	\$29,775
Discovery of novel candidate genes involved in facial clefting: A pilot project	L Brown	FK Kozak, P Eydoux	Cleft Lip and Craniofacial Team Funding	\$15,000
Cystic fibrosis and sinus disease. December 2010	NK Chadha (PI)		Rare Diseases Foundation	\$3,500

Committee Participation:

Dr. Chadha

1. Member, Clinical Informatics Advisory Committee, BCCH
2. Member, UBC Otolaryngology Research Committee, Division of Otolaryngology
3. Member, International Task-Force for Recurrent Respiratory Papillomatosis
4. Poster Judge Committee, SENTAC 2010, Cincinnati, Ohio, December 2010
5. Poster Judge Committee, iACT Research Day, CFRI September 2010
6. Scientific Committee Judge, COSHNS 2011

Dr. Kozak

1. Children's and Women's Health Centre Redevelopment Project Steering Committee
2. Department of Pediatric Surgery Surgical Cabinet, BCCH
3. Chair, Division of Pediatric Otolaryngology Fellowship Committee

4. Surgical Services Advisory Committee, BCCH
5. Medical Staff Association Nominating Committee, BCCH
6. Medical Staff Association Site Redevelopment Working Party, BCCH
7. Selection Committee for UBC Division of Otolaryngology Chair
8. Executive Committee, UBC Otolaryngology
9. Council, Canadian Society of Otolaryngology Head and Neck Surgery
10. Scientific Chair, Canadian Society of Otolaryngology Head and Neck Surgery Annual Meeting
11. Board Member, SENTAC (Society of Ear Nose and Throat Advances in Children)
12. Board Member, Inter American Association of Pediatric Otolaryngology, Canadian Representative
13. Co-Chair, Medical Advisory Group, B.C. Early Hearing Program
14. Conference Planning Committee, Pediatric Sensorineural Hearing Loss in BC: The Development of a Provincial Standard of Care, Child Health B.C.

15. International Task-Force for Recurrent Respiratory Papillomatosis

Dr. Ludemann

1. Member, Innovative Therapy Committee, BCCH

Dr. Moxham

1. Executive Committee, UBC Otolaryngology
2. Selection Committee, UBC Division of Otolaryngology Chair
3. Laser Safety Committee, BCCH
4. Postgraduate Otolaryngology Education (RPC) Committee, UBC
5. Full Faculty Residency Education Committee

Initiatives in Progress:

Dr. Chadha

1. OPSEI Lights Camera Surgery supervision
2. Summer student supervision awarded SSRP UBC funding
3. RCT nasendoscopy nasal preparation
4. Systematic review dilatation for laryngotracheal stenosis
5. Systematic review laryngomalacia and reflux
6. Systematic review pediatric bilateral bone conduction hearing systems
7. Study of epidemiology of cystic fibrosis and sinus disease
8. Duplicate publications in Otolaryngology study
9. Voice analysis in Recurrent Respiratory Papillomatosis

Dr. Kozak

1. OPSEI Lights Camera Surgery supervision
2. Systematic Review of Autism and Audiology

3. Systematic Review of Anoxia and SNHL

4. Incidence/Prevalence of Choanal Atresia in B.C.

5. Rhinologic Manifestations of Women's Health

6. Vaccination of cochlear Implant Patients: a Quality Assurance Review

7. Pediatric Tracheostomy at BCCH: a Quality Assurance Review

8. Choanal Atresia Incidence and Prevalence and Outcome Review

Dr. Moxham

1. OPSEI Lights Camera Surgery supervision
2. TGF-Beta Osteoinduction study
3. Choanal Atresia Incidence and Prevalence and Outcome Review

Dr. Ludemann

1. *Cutting for Stone* Book Clubs on Incoming UBC Medical Students: a pilot study
2. Evaluation of the Educational Effectiveness of Computerized Interactive Learning Modules on the Management of a Bronchial and Esophageal Foreign Bodies
3. Animated video and interactive website on choking prevention and treatment for children, parents, teachers, daycare instructors and babysitters
4. Management of Ultra-Small Tracheobronchial Foreign Bodies in Neonates: in progress; to be submitted to Int J Ped Otorhinolaryngol
5. New Light on the Life of Chevalier Jackson: Premier Pediatric Otolaryngologist and "the 'Babe Ruth' of Throat Doctors"
6. First Branchial Anomalies: the Spectrum.
7. Otogenic Facial Abscesses: a Comparison of 2 Cases.

8. Methotrexate Embryopathy with Severe Cardiac and Tracheobronchial Anomalies: A Case report

Journals Reviewed:

Dr. Chadha

1. Laryngoscope
2. Clinical Otolaryngology
3. Medical Science Monitor
4. Archives in Otolaryngology - Head and Neck Surgery
5. International Journal of Pediatric Otolaryngology

Dr. Kozak

1. Archives of Otolaryngology.
2. International Journal of Otorhinolaryngology.
3. Rural and Remote Health.
4. Otolaryngology Head and Neck Surgery (United States)
5. BMC Ear, Nose and Throat Disorders
6. Journal of Otolaryngology Head and Neck Surgery (Canadian)

Dr. Moxham

1. Laryngoscope
2. Journal of Otolaryngology-Head & Neck Surgery
3. International Journal of Pediatric Otolaryngology

Other Noteworthy Endeavors 2010-2011:

Dr. Chadha

1. Formalized the B.C. Pediatric Bone Anchored Hearing Aid Program
2. Has been awarded CFRI Membership as an Associate Clinician Scientist

3. Has been named an Examiner for the National In-training Examination in Otolaryngology in Canada
4. Presented at the B.C. Children's Hospital Foundation Event, "World of Smiles" in Surrey, in January 2011
5. Was a presenter at the Child and Family Research Institute, "Behind The Stethoscope" Program in October 2010

Dr. Kozak

1. UBC Medical Undergraduate Student Mentor
2. UBC Faculty of Medicine Shadow Physician
3. Outreach to Prince George and Sechlet, B.C.

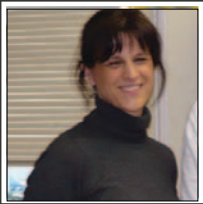
Dr. Ludemann

1. Outreach to Fort Nelson, B.C.

Dr. Moxham

1. Oral Exam Preparation for UBC Otolaryngology UBC Residents

Division of Pediatric Plastic Surgery



▶ Dr. Cynthia Verchere,
Division Head



Faculty Members:

Dr. Cynthia Verchere, Division Head
Dr. Jugpal Arneja
Dr. Sean Bristol
Dr. Kevin Bush
Dr. Douglas J Courtemanche
Dr. Mark Hill

Staff Members:

Ms. Norine Mayede, Division Administrative Assistant & Medical Office Assistant to Dr. Verchere
Mr. Ross Petersen, MSc, Research Coordinator
Ms. Rupinder Parhar, Medical Office Assistant to Dr. Courtemanche
Ms. Sonya Datt, Medical Office Assistant to Dr. Arneja
Ms. Lee Heng, Office Assistant



DIVISION OF PEDIATRIC PLASTIC SURGERY

Highlights and Achievements:

The Division of Plastic Surgery has had a busy and productive year again. We especially enjoyed having our clinical fellow, Rebecca Morley with us for a year, as she will become our colleague in Victoria in July as the first fellowship trained pediatric plastic surgeon on the Island. It will be a pleasure to see her start up a comprehensive pediatric program there, and we hope to continue to collaborate with her. Ross Petersen, our research coordinator was bitten by the academic bug and has decided to go back to school to do his PhD, so we are in transition and will welcome our next research coordinator in the summer. We have come to appreciate how valuable it is to have research coordinator help and we will miss Ross!

Despite this challenge, we were active in research this year, with several ongoing studies in the data collection phase Too Hot for Tots Burn Prevention, Brachial Plexus Balance Study, VAD Placement Study, Academic Surgical Leadership Audit, and publications in national and international journals of plastic surgery. Five abstracts from BCCH were presented at the Canadian Society Meeting in Halifax in 2010, and three abstracts from BCCH were accepted for podium presentation at the International Confederation for Plastic, Reconstructive, and Aesthetic Surgery Association congress in May 2011, a huge honour for our small group.

Presentations:

1. McInnes CW, **Courtemanche DJ**, **Verchere CG**, **Bush K**, **Arneja JS**. Reconstructive or Cosmetic Plastic Surgery: Factors Influencing the Type of Practice Established by Canadian Plastic Surgeons. International Confederation for Plastic, Reconstructive and Aesthetic Surgery, May 2011, Vancouver, British Columbia, Canada.
2. Hynes SL, Narasimhan K, **Arneja J**. Complicated Hemangiomas of the Lip: Outcomes of Early vs. Late Surgical Excision. International

Confederation for Plastic, Reconstructive and Aesthetic Surgery, May 2011, Vancouver, British Columbia, Canada.

3. Gregory TN, Liu T, Machuk A, **Arneja JS**. What is the Ultimate Fate of Presented Abstracts? The Conversion Rates of Presentations to Publications over a 5-year Period from Three North American Plastic Surgery Meetings. International Confederation for Plastic, Reconstructive and Aesthetic Surgery, May 2011, Vancouver, British Columbia, Canada.
4. **Courtemanche DJ**. Primary reconstruction of the cleft nostril sill. IPRAS, Vancouver BC, 23 May 2011.
5. **Courtemanche DJ**, Doesberg M. The logistics of managing a vascular anomalies clinic. IPRAS, Vancouver BC, 25 May 2011.

Invited Lectures:

1. **Courtemanche DJ**. Management of lymphoedema in children. Lymphoedema Symposium, Vancouver, BC 30 Oct 2010.

Publications April 1 2010 to March 31, 2011:

1. McInnes CW, **Courtemanche DJ**, **Verchere CG**, **Bush K**, **Arneja JS**. Reconstructive or Cosmetic Plastic Surgery: Factors Influencing the Type of Practice Established by Canadian Plastic Surgeons. Can J Plast Surg 2011; 19 (suppl A, Summer 2011): 38A.
2. Hynes SL, Narasimhan K, **Arneja J**. Complicated Hemangiomas of the Lip: Outcomes of Early vs. Late Surgical Excision. Can J Plast Surg 2011; 19 (suppl A, Summer 2011): 32A.
3. Gregory TN, Liu T, Machuk A, **Arneja JS**. What is the Ultimate Fate of Presented Abstracts? The Conversion Rates of Presentations to Publications over a 5-year Period from Three North American Plastic Surgery Meetings. Can J Plast Surg 2011; 19 (suppl A, Summer 2011): 22A.

4. McInnes CW, Benson A, **Verchere C**, Ludemann J, **Arneja JS**. Management of Congenital Midline Cervical Cleft. J. Craniofac Surg. (in press, 2011).
5. **Arneja JS**, Gosain AK. Different treatment approaches to management of Hemangiomas of the Nasal Tip: Reply. Plast Recon Surg 127:2508, 2011.
6. **Arneja JS**. Management of complicated facial hemangiomas with Beta-Blocker (Propranolol) therapy: Reply. Plast Recon Surg 127:1742, 2011.
7. McInnes CW, Reynolds RA, **Arneja JS**. Management of pelvic heterotopic ossification post-myocutaneous flap reconstruction of sacral pressure ulcer. Can J Plast Surg 19:60, 2011.
8. **Arneja JS**, Chim H, Drolet B, Gosain AK. The “Cyrano Nose”: Refinements in Surgical Technique and Treatment Approach to Hemangiomas of the Nasal Tip. Plast Recon Surg. 126:1291, 2010.
9. **Arneja JS**, Pappas PN, Shwayder TA, Cullen ML, Becker CJ, Hamzavi FH, Roarty JD, Madgy DN, and Baker JD. Management of complicated facial hemangiomas with Beta-Blocker (Propranolol) therapy. Plast Recon Surg. 126: 889, 2010.
10. **Arneja JS** and Mulliken JB. Resection of Amblyogenic Periorcular Hemangiomas: Indications and Outcomes. Plast Recon Surg. 125: 274, 2010.

Fellows Supervised:

1. Eveline Corten Vancouver, BC. Oct 30, 2010

Committee Participation:

Dr. Courtemanche

1. BCCH: Surgical Data Management Committee
2. PHSA: Biohazard Exposure Control Committee

Grant Funding Received:

Project Title	PI	Team	Granting Agency	Amount
Predictors of readmission and death in pediatric in-patients	Courtemanche (PI)		UBC Summer Research Student Funding	\$3,000
Vascular Anomalies Clinic	Courtemanche (PI)		BCCH Plastic Surgery Summer Student Funding	\$3,900
Lipohamartomatous macrodactyly	Courtemanche (PI)		CFRI Summer Research Student Funding	\$2,500
Management of Infantile Hemangiomas with Beta-blocker therapy	Courtemanche (co-PI)		Rare Disease Foundation Microgrant	\$1,750
Scalpel Safety	Courtemanche (co-PI)		iACT Synergy Grant	\$10,000

Division of Pediatric Urology



Faculty Members:



▶ Dr. Andrew E
MacNeily, Division
Head



▶ Dr. John ST
Masterson, Acting
Head, Dept of
Pediatric Surgery



▶ Dr. Kourosh Afshar



▶ Dr. Jennifer
Mickelson

Other Staff Members:

Ms. Heidi Barber, Pediatric Urology Nurse Clinician
Dr. Souzan Baharlou, Pediatric Urology Research Associate
Dr. Noosheen Mohajerani, Pediatric Urology Research Associate
Ms. Danielle Baghii, Administrative Assistant
Ms. Maria Lopes Chau, Administrative Assistant
Ms. Maria Chaperon, Administrative Assistant
Ms. Patricia Lizama, Administrative Assistant

DIVISION OF PEDIATRIC UROLOGY

Highlights and Achievements:

As the only pediatric urology service in British Columbia, the Division of Pediatric Urology at BC Children's performed more than 800 surgical procedures and cared for over 5,000 children in our ambulatory clinic this year. Last year realized many successes for our small team which are detailed in this report.

Some notable highlights include the following: Dr. Masterson continued in the position of interim head, Dept of Pediatric Surgery, a time intensive position of great responsibility. Dr. Afshar completed his first year term as President of Pediatric Urologists of Canada (PUC) our national subspecialty organization. Locally, Dr. Afshar's contributions were recognized with a 2010 Department of Urological Sciences Merit award for academic productivity, as well as the departmental 2010 Undergraduate Teacher of the year award. Dr. Jennifer Mickelson returned to the Division in January 2011 after a 6 month maternity leave. Dr. Mickelson completed all of the required course work for a Master's Degree in Health Professions Education which will be a great asset to our Division, as well as Children's Hospital in general. The defense of her thesis on surgical mentoring is anticipated this fall. Dr. Mickelson has also served on no fewer than 8 UBC undergraduate curriculum committees, most notably as the Dept of Urological Sciences Undergraduate Educational Director. Dr. MacNeily continues on as Head of the Division of Pediatric Urology. In the past year he was appointed as Vice Chair Education and Clinical Affairs for the Dept of Urological Sciences, as well as Vice President of the NorthWest Urologic Society.

Academic productivity was excellent with a total of 14 abstract presentations, 14 invited lectures, 14 peer-reviewed publications, and 5 new or ongoing grants. Academic excellence by Drs. MacNeily and Afshar was recognized locally when their research on quality of life in lower urinary tract

reconstruction was a 2010 Featured Research Paper for the BCCH Child and Family Research Institute.

The Division of Pediatric Urology continues to play a major educational role within both the UBC Department of Urological Sciences and the Department of Pediatric Surgery at the undergraduate and postgraduate levels. A total of 12 residents from our UBC training program rotated at BCCH participating in ambulatory clinics, surgery, urodynamic assessments, ward and emergency consultations as well as a variety of scheduled academic sessions. In 2010-11 we hosted 38 elective medical students from UBC and across Canada. Dr. Victor Figueroa, a Urologist from Colombia completed his clinical fellowship and graduated in June 2010. He was followed by Dr. Shahram Moosavi, a urologist from Iran who spent 3 months with our Division as an observing fellow.

Presentations:

1. Langer M, Sidhu R, Butterworth S, **MacNeily AE**, Blair GK. "Video Replay: A Coaching and Assessment Tool for Residents' Performance in Pediatric Surgery." Pacific Association of Pediatric Surgeons. Kobe, Japan. May 2010.
2. Mamut A, **Afshar K**, Mickelson J, **MacNeily AE**. "Surgical Case volume in Canadian Urology Residency: A comparison of Trends in Open and Minimally Invasive Surgical Experience." Canadian Urological Association. Charlottetown, PEI. June 2010.
3. Hennessey K, **Afshar K**, Williams A, **MacNeily AE**. "Duplicate Publications: A survey of Redundancy In the Urological Literature." Canadian Urological Association. Charlottetown, PEI. June 2010.
4. Faddegon S, **MacNeily AE**, **Afshar K**. "Predictors of Surgical Complications in Pediatric Renal Transplantation." Western Section of American Urological Association. Kona, Hawaii. Oct 2010.

5. Kavangah A, MacAuley I, **MacNeily AE**. “Non-functional upper pole of a duplex collecting system masquerading as an antenatal adrenal cyst.” Western Section of American Urological Association. Kona, Hawaii. Oct 2010.
6. Robinson ME, **MacNeily AE**, Goldenberg ASL, Black P. “Status of Robotic assisted surgery among canadian urology residents.” NorthWest Urological Society. Vancouver, BC. Dec 2010.
7. Metcalfe BC, **MacNeily AE**, **Afshar K**. “A reliability assessment of the international vesicoureteric reflux grading system.” NorthWest Urological Society. Vancouver, BC. Dec 2010.
8. **Afshar K**, Shadgan B, Stothers L, McNab A. “Near infrared Spectroscopy in diagnosis of dysfunctional elimination syndrome in children.” Canadian Urological Association Annual Meeting, Charlottetown, PEI. 2010.
9. Hennessey K, **Afshar K**, **MacNeily A**. “Duplication in Urologic Publications.” Canadian Urological Association Annual Meeting, Charlottetown, PEI 2010.
10. **Masterson JST**, Wallis CJ. “An Online Video Resource to Enhance Surgical Medical Education.” Poster Presentation. Canadian Surgery Forum, Quebec, ON, Sept 2010.
11. Wilson I, **Masterson JST**, Paterson L, Kourosh A, Duffy D. “Audience Response System Use in University of British Columbia Medical School Undergraduate Education.” Western Regional Meeting, Carmel, California, Jan 2011.
12. Degirolamo K, **Masterson JST**, Duffy D. “Intratubular Germ Cell Neoplasia in the Pediatric Population: A Case Report.” Western Regional Meeting, Carmel, California, Jan 2011.

Lectures:

Dr. Kourosh Afshar

1. “Testicular Tumors in Childhood and Adolescents.” Lecturer. UBC

Urology Grand Round, September 2010.

2. “Scholarship Lecture: Advances in Surgical Management of Disorders of Sexual differentiation.” Department of Surgery, BCCH. February 2010.
3. “Catheters and drains in Urology.” Presentation to Surgical Nurses , BC Children’s Hospital May 2010.

Dr. Andrew MacNeily

1. “Lower Urinary tract reconstruction in pediatric neurogenic bladder.” Sociedad Colombiana de Urologia. Cartagena, Colombia August 2010. Invited Faculty Lecturer.
2. “Postgraduate Urological Education – Time for Change.” Sociedad Colombiana de Urologia. Cartagena, Colombia August 2010. Invited Faculty Lecturer.
3. “Establishing a multidisciplinary clinic for spina bifida.” Sociedad Colombiana de Urologia. Cartagena, Colombia August 2010. Invited Faculty Lecturer.
4. “Transition into adulthood for the Pediatric Neurogenic bladder.” Sociedad Colombiana de Urologia. Cartagena, Colombia August 2010. Invited Faculty Lecturer.
5. “Tethered Cord syndrome for the Urologist.” Sociedad Colombiana de Urologia. Cartagena, Colombia August 2010. Invited Faculty Lecturer.
6. “Early Management of the Pediatric Neurogenic Bladder”. Sociedad Colombiana de Urologia. Cartagena, Colombia August 2010. Invited Faculty Lecturer.
7. “The challenge of transitioning the care of neurogenic bladder from childhood to adulthood.” Western Urologic Forum. Lanai, Hawaii. March 2011.

Dr. Jennie Mickelson

1. "Update in Hypospadias." Gender Committee. BC Children's Hospital, Vancouver BC. 2010.
2. "Robotics in Pediatric Urology." Grand Rounds. Department of Urologic Sciences, Vancouver BC. 2010.

Formal Teaching:**Dr. Kourosh Afshar**

1. First year INDE 410, Male genitor urinary exam. May 2010 (2hrs)
2. FERGU lecture Development of Urinary tract: Clinical correlations. May 2010 (1hr)
3. UBC Department of Surgery, Principles of Surgery. Jun 2010 (4hrs)
4. UBC Departments of Surgery, Urology and Orthopedics. Nov 2010 (1hr)
5. Academic Half day: Department of Urologic Sciences: Senior Residents Mock Exam: May 2010
6. Senior Resident Mock Exam: Mar 2010
7. Senior Resident Mock Exam: May 2010
8. FERGU lecture Development of Urinary tract: Clinical correlations. May 2011 (1hr)

Dr. Andrew MacNeily

1. Urology Chief Resident Oral Preparatory Examinations. Apr 2010 (2hrs)
2. Urology Chief Resident Oral Preparatory Examinations. May 2010 (3hrs)
3. Urology Chief Resident Oral Preparatory Examinations. May 2010 (4hrs)
4. INDE 410 Clinical Skills: Male GU System examination. May 2010 (1hrs)
5. Phase IV MD Urology Lecture "Voiding Dysfunction & BPH". Oct 2010 (1.5hrs)

6. Urology Resident Mock OSCE. Nov 2010 (5hrs)
7. Urology Resident Academic Half Day seminar: CPD and the Royal College. Nov 2010 (2hrs)
8. Urology Resident Academic Half Day Seminar: Pediatric Oncology. Jan 2011 (4hrs)
9. Urology Chief Resident Oral Preparatory Examinations. Mar 2011 (3hrs)

Dr. Jennie Mickelson

1. Urology Resident – Oral Exam. Post-graduate. Nov 21, 2009 (hrs)
2. Urology Resident Teaching. Urology Academic Half day – library workshop. Post-graduate. Nov 26, 2010 (2hrs)
3. Urology Resident - Oral Examinationm. Post-graduate. Nov 20, 2010. (2hrs)
4. Urology Resident Teaching. Urology Academic Half Day. Post-graduate. Jan 15, 2010. (4hrs)
5. Urology Resident Teaching. Urology Academic Half Day. Post-graduate. Feb 12, 2010. (4hrs)
6. Pediatric Resident Teaching. Pediatric Urology Review. Post-graduate. April 14, 2010. (2hrs)
7. Clinical Skills. Male genitourinary examination. Undergraduate. May 11, 2010. (2hrs)
8. Clinical Skills. Male genitourinary examination. Undergraduate. May 13, 2010. (2hrs)
9. Urology Resident Teaching. Urology Academic Half day – library workshop. Post-graduate. Jan 7, 2011. (3hrs)
10. FERGU Lecture . FERGU case wrap up lecture. Undergraduate. May 6, 2011. (2hrs)

11. FERGU Lecture . FERGU case wrap up lecture. Undergraduate. May 14, 2011. (2hrs)

Publications *April 1 2010 to March 31, 2011:*

1. Aronson KJ, Wilson JWL, Hamel M, Diarsvitri W, Fan W, Woolcott C, Heaton JPW, Nickel JC, **MacNeily AE**, Morales A. "Plasma Organochlorine Levels and Prostate Cancer Risk." J Expo Science and Environmental Epidemiology. 2010 Jul;20(5):434-5.
2. Gotto G, **Afshar K**, Eftakari A, **MacNeily AE**. "Peer Reviewed Publications by CUA members: then and now." CUA Journal. Dec 2010;4(6)385-390.
3. **MacNeily AE**. "The training of Canadian Urology Residents: Whither open surgery?" CUA Journal 2010;4(1) 47-8.
4. Kavanagh A, McAuley I, Longpre M, **MacNeily AE**. "Atrophic Upper Pole of a duplex collecting system masquerading as supra-renal mass: a case study and literature review." CUA Journal 2010 Aug 4(4) E94-6.
5. **MacNeily AE**. "The teaching of critical appraisal skills in urology residency: What is the Evidence?" CUA Journal ;2010;4(2):121-2.
6. Heran MK, Bergen DC, **MacNeily AE**. "The use of Cryoplasty in a benign ureteric stricture." Pediatr Radiol. 2010 Nov;40(11):1806-9.
7. McQuiston L, **MacNeily AE**, Liu D, **Mickelson JJ**, Yerkes E, Chaviano A, Roth D, Stoltz RS, Herz DB, Maizels M. "Computer Enhanced Visual Learning (CEVL) Method to train urology residents in pediatric orchiopexy provided a consistent learning experience in a multi-institutional trial." Journal of Urology 2010 October;184 (4) suppl: 1748-1753.
8. **MacNeily AE**, **Afshar K**. "Circumcision and Non-HIV STI's." CUA Journal Feb 2011;5(1):58-9.
9. Marks A, Maizels M, **Mickelson J**, Yerkes E, Anthony Herndon CD, Lane J, Ben-Ami T, Maizels E, Stoltz RS, Dixon S, Liu D, Chaviano T, Hagerty J, Kaplan W. "Effectiveness of the computer enhanced visual learning method in teaching the society for fetal urology hydronephrosis grading system for urology trainees." J Pediatr Urol. 2011 Apr;7(2):113-7.
10. McQuiston L, **MacNeily A**, Liu D, **Mickelson J**, Yerkes E, Chaviano A, Roth D, Stoltz RS, Herz DB, Maizels M. "Computer Enhanced Visualized Learning (CEVL) method to train residents in pediatric orchiopexy provided a consistent learning experience in multi-institutional trial". Journal of Urology,184 (Suppl 4): 1748-53, Oct 2010.
11. Le B, **Mickelson J**, Gossett D, Kim D, Sharma V, Maizels M. "Residency Training in Neonatal Circumcision: a pilot project and needs assessment." Journal of Urology,184 (4 Suppl): 1754-7, Oct 2010.
12. Macnab A, Shadgan B, **Afshar K**, Stothers L, "Near-Infrared Spectroscopy of the Bladder: New Parameters for Evaluating Voiding Dysfunction," International Journal of Spectroscopy, vol. 2011, Article ID 814179, 8 pages, 2011. doi:10.1155/2011/814179.

Honours and Awards:

1. **MacNeily AE**, **Afshar K**. 2010 Annual Featured Research Paper – BC Children's Hospital Child and Family Research Institute (CFRI). 2010
2. **Mickelson JJ**, **MacNeily AE**. "Five Star Award" for top poster – "Trends in Urology Resident Exposure to Open Surgery for Index Procedure: A Tale of Two Countries". 2011
3. **Afshar K**. Undergraduate Teacher of the year. 2010
4. **Masterson JST**. Excellence in Education Award of Distinction, BC Children's Hospital. 2010
5. **Masterson JST**. V.B. and M. H. Chung Research Day Award - Best Video Presentation. 2010

Grant Funding Received:

Project Title	PI	Team	Granting Agency	Amount
Does cranberry product prevent urinary tract infections in children? A randomized controlled trial. 2004-2011	L Stothers A MacNeily	R Grady	Lions Gate HealthCare Research Foundation Grant	\$55,000
Treatment of Persistent Urinary Incontinence in Children. 2005-2011	P Steinbok A MacNeily	H Garton, MP Leonard, M Vassilyadi, R Milner M Sargent, J Drake, E Sherman	BC Medical Services Foundation	\$49,983
A prospective trial on the use of biofeedback in the management of Pediatric Dysfunctional Voiding . 2011	K Afshar A MacNeily		UBC Urology Research Education and Development Fund	\$10,000
Virtual Problem Based learning-A needs assessment exploring on-line PBL group learning. 2011-2012	JJ Mickelson	AE MacNeily, K Afshar, W Gourlay, J Masterson	UBC Teaching and Learning enhancement learning fund	\$10,920
Psychological Impact of Surgical Cancellations on Families. 2010	K.Afshar		Child and Family Research Institute	\$8,000
Continued Development of Online Teaching Resources in Urology. 2009-2010	J Masterson		UBC Teaching and Learning Enhancement Fund	27,950
Lights, Camera, Surgery: Production of Surgical Education Videos within the OR Setting	J Masterson		UBC Teaching and Learning Enhancement Fund	\$14,850
Supporting Online Learning through the Development of Surgical Education Videos within OR Setting. 2009-2010	J Masterson		UBC Faculty of Medicine- Summer Student Internship Award	\$3,200
Wrap-up and Editing of Online Teaching Resources in Urology. 2009-2010	J Masterson		UBC Teaching and Learning Enhancement	\$9,120
Lights, Camera, Surgery: Production of Surgical Videos within the OR Setting. 2009-2010	J Masterson		UBC Faculty of Medicine- Summer Student Internship Award	\$25,900
Lights, Camera, Safety. 2009-2010	J Masterson		Partnership with the BC Patient Safety and Quality Council	\$4,020

Fellows Supervised:

1. Dr. Victor Figueroa
2. Dr. Shahram Moosavi

Residents Supervised:

1. Dr. Steve Faddegon
2. Dr. Paul Gustafson
3. Dr. Reza Hamidizadeh
4. Dr. Kiara Hennessey
5. Dr. Nathan Hoag
6. Dr. Alex Kavanagh
7. Dr. Michelle Longpre
8. Dr. Brian Mayson
9. Dr. Meagan Melnyk
10. Dr. Mike Metcalfe
11. Dr. Chuck Metcalfe
12. Dr. Mike Robinson

Students Supervised:

1. Ashman, B (UBC-3)
2. Atwal, P (UBC-4)
3. Biggs, C (UBC-3)

4. Brooks, E (UBC-3)
5. Chin, C (UBC-3)
6. Cordes, R (UBC-3)
7. Czerwinski, M (UWO)
8. Dojcinovic (UBC-3)
9. Draht, L (UBC-3)
10. Flannigan, R (Calgary)
11. Han, R (UBC-4)
12. Hoffer, D (Ottawa)
13. Kim, S (McMaster)
14. Larsen, D (UBC-3)
15. Lau, P (UWO)
16. Lee, S (UBC-4)
17. Leung, K (Queens)
18. Mader, P (UBC-3)
19. Martinka, P (UBC-4)
20. McGarry, P (Queens)
21. Murray, D (UBC-4)
22. Nelson, H (UBC-3)
23. Paras, E (UBC-3)
24. Robinson, M (UBC-3)

25. Samilski, J (UBC-3)
26. Sasges, D (Toronto)
27. Scanlan, F (UBC-4)
28. Stockley, K (UBC-4)
29. Thong, N (UBC-3)
30. Toosi, B (UBC-3)
31. Tran, H (UBC-4)
32. Vaughan, M (UBC-3)
33. Warshawski, T (Calgary)
34. Watts, A (UBC-3)
35. Wu, C (UBC-3 DPL)
36. Yan, H (Toronto)
37. Yip, D (UBC-3)
38. Yokogawa, T (UBC-3)

Committee Participation:

Dr. Kourosh Afshar

1. 2006-present. Member, Research Committee, Department of Urological Sciences, UBC
2. 2006-present. Director, Residency Research Program: Department of Urological Sciences, UBC
3. 2009-present. Member, UBC Department of Urologic Sciences Post-graduate training Committee
4. 2009- present. Member, UBC/C&W Clinical Research Ethics Board
5. 2008-2010. Secretary Treasurer Pediatric Urologists of Canada
6. 2010- present. President. Pediatric Urologists of Canada
7. 2009-present. Member, CFRI, Innovation Acute Care and Technology cluster
8. Canadian Task Force for Prevention of HIV Transmission through Circumcision in HIV Endemic Area : CANCIRC. My role was to provide expert advise as the member of funding nucleus of this task force in relation to surgical education of health care providers in Africa.

Dr. Andrew MacNeily

1. 2000-2010. Member, Dept of Surgery Residency Affairs Committee
2. 2000-2011. Member, UBC Dept of Urological Sciences Post-graduate Training Committee
3. 2008-2011. Member, Dept Urological Sciences Promotion and Tenure committee
4. 2009-2012. Member, Dept of Urological Sciences Executive Council
5. 2005-2011. Divisional Representative, BCCCH Surgical Services Advisory Committee
6. May 2010. Chair-Internal Review committee, UBC Pediatric Cardiology

training program

7. 2011-2014. Vice-Chair, Education and Clinical Affairs Dept of Urologic Sciences
8. 2010-2012. Vice-President, NorthWest Urologic Society
9. 2011-2014. Executive at Large: BC Representative, Canadian Urological Association
10. 2011-2014. Committee Member, Canadian Urological Association Guidelines
11. 2007-2011. Section Editor (Pediatric Urology), Canadian Urological Association Journal
12. 2011–2016. Section Editor (Training and Education), Canadian Urological Association Journal
13. 2011-2013. Editorial Board Member, The Journal of Pediatric Urology

Dr. John Masterson

Service to the University Faculty of Medicine

1. 2007-present. Department of Urologic Sciences Representative Champion, Mentoring Program Working Group

Department of Surgery

1. 2002-present. Member, Surgical Advisory Committee, Department of Surgery
2. 2002-present. Chair, STI (Strategic Teaching Initiatives) Committee, Department of Surgery

Department of Urologic Sciences

1. 2000-present. Member, Resident Training Committee
2. 2006-present. Clinical Faculty Appointment and Promotion Committee
3. 2009-present. Alternate Member, UBC Undergraduate Curriculum Committee

Service to the B.C.'s Children's Hospital

1. 1985-present. Member, Gender Assessment Committee
2. 2009-present. Physician Member, "Circle of Care" \$ 10,000 Foundation donor
3. 2009-2010. Member, Pediatric Surgical Executive Committee
4. 2010-present. Chair, Pediatric Surgical Executive Committee
5. 2009-2010. Member, Surgical Data Management Committee
6. 2010-present. Chair, Surgical Data Management Committee
7. 2009-2010. Member, Surgical Cabinet Committee
8. 2009-present. Chair, Surgical Cabinet Committee
9. 2009-present. Member, Surgical Services Advisory Committee
10. 2010-present. Interim Chair, Department of Pediatric Surgery
11. 2010-present. Member, BCCH Design & Transition Strategy Team
12. 2010-present. Member, Child Health BC Steering Committee
13. 2010-present. Member, Child Health Executive Committee
14. 2010-present. Member, Child Health Leadership Team
15. 2010-present. Member, Child Health Management Team
16. 2010-present. Chair, Child Health Safety and Quality of Care Committee
17. 2010-present. Member, Informed Consent Task Force
18. 2010-present. Member, Multi-Organ Children's Transplant Program
19. 2010-present. Member, Provincial Surgical Advisory Council
20. 2010-present. Member, Sedation Suite Steering Committee
21. 2010-present. Member, Surgical Data Management Committee
22. 2010-present. Member, Surgical Services core Leadership

23. 2011-present. Member, Surgical Suite Planning Group
24. 2011-present. Member, BCCH Pediatric NSQIP Work Group
25. 2011-present. Member, Mortality Review Committee
26. 2011-present. Member, Inter Area Planning Team

Dr. Jennifer Mickelson

1. 2011 – present. Department of Urologic Sciences representative, UBC BMB Library Advisory Committee
2. 2010 – present. Co-chair, Flexibility Working Group – Dean's Task Force on Curriculum Renewal
3. 2010 – present. Week Chair – FERGU urology weeks (3 & 4), Year 1 FERGU Block
4. 2009 - present. Department of Urologic Sciences representative, UBC Year 4 Undergraduate Committee
5. 2009 – present. Department of Urologic Sciences representative, UBC Year 3 undergraduate Committee
6. 2010 – present. Department of Urologic Sciences representative, UBC Undergraduate Surgical Education Committee
7. 2010 – present. Director of Undergraduate Education, UBC Department of Urologic Sciences
8. 2009 - present. Member, UBC Department of Urologic Sciences Education Committee
9. 2010- present. Undergraduate Education Representative, UBC Department of Urologic Sciences Advisory Committee
10. 2011- present. Editorial Board Member, Medical Post

**BC CHILDREN'S HOSPITAL
UNIVERSITY OF BRITISH COLUMBIA**

**Faculty of Medicine
Department of Pediatric Surgery**

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