

SURGERY

ANNUAL REPORT 2004



MISSION STATEMENT

The mission of the Department of Surgery at the University of British Columbia is to foster an organizational structure, environment, and attitude which provide excellence in patient care, teaching, education, and research. In support of this mission, the members of the Department will maintain exemplary patient care programs through the affiliated teaching hospitals; will be responsible for undergraduate and postgraduate education of the surgical disciplines; and, are committed to the provision and continued growth of basic and clinical research.

We dedicate ourselves to the fundamental rights of our individual patients to dignity and privacy. We believe that the activities of the Department must embody the highest moral and ethical human values. The Department is a 'family' that fosters security and unity, while allowing for individual growth and promoting cooperation with other disciplines within the University, hospitals and community.

We aspire to be scholarly surgeons within a cohesive University Department committed to self-education, teaching others, and expanding knowledge through research in order to progressively improve the quality of patient care.

We propose to enhance our teaching and research by developing new mechanisms for rewarding academic excellence. We will maintain our exceptional variety and depth of clinical material and experience. We will enhance the numerous foci of clinical and research excellence within our hospitals and divisions.

Our primary responsibility is to provide exemplary health care. We serve the University of British Columbia Faculty of Medicine by our commitment to the surgical teaching of undergraduate and postgraduate students, research activities, and continuing medical education within the Department of Surgery. We serve the University Hospitals through our daily activities in patient care, teaching and research. We serve the professional societies with which we are affiliated. We are responsible to our families, our peers, and the community in which we live.

**Annual Report of the
Department Of Surgery
The University Of British Columbia**

2004



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REPORT FROM THE DEPARTMENT HEAD



Dr. Garth Warnock

I would like to welcome you to review the UBC Department of Surgery's 2004 Annual Report. This report summarizes who we are, where we are, and what we do.

Who We Are

The UBC Department of Surgery is comprised of 366 clinical and full-time academic faculty. Embedded within the UBC Department of Surgery are faculty who are surgeon-teachers, educators, surgeon-scientists and members who are career-track scientific staff. The Department is comprised of 10 divisions, including surgical divisions of cardiovascular surgery, general surgery, neurosurgery, otolaryngology, pediatric general surgery, plastic surgery, thoracic surgery, vascular surgery, as well as divisions of emergency medicine and radiation oncology. There are 106 residents in our training programs and 600 medical undergraduates in the UBC Medical School. Recruitment of new talent remains robust in all of our divisions. Our senior emeritus faculty continues to excel by contributing their time to teach and provide sage advice.

Where We Were

The members of the Department of Surgery work on very distributed sites. These include sites at major teaching hospitals within the Vancouver Coastal Health Region and sites throughout the Province where trainees can rotate to do community rotations. The research activities are represented through research facilities at the University of British Columbia as well as through our major research institutes at Providence Health Care, Vancouver Coastal Health Research Institute, and the BC Children's Research Institute. Our distinguished faculty continue to represent the advancement of surgery through participation in many national and international societies and executive committees.

What We Do

Research

Research covers a broad array of interests. There are strong scientific research programs in all divisions. Notably, the outstanding success of the Prostate Research Group with centre designation through the University of British Columbia has led to the Group's recognition as an international centre. During the past few years, the Department has been able to expand its research programs because of the establishment of new research endowed chairs, as well as successful applications to the Michael Smith Foundation for Health Research in British Columbia and the Canada Research Chair Program. Total research funding annually to the UBC Department of Surgery is growing with a greater proportion of this activity via competitive research grants.

Education

The Province of British Columbia has embarked on a bold new program of expansion. By the year 2010, the number of medical undergraduates in the University of British Columbia Medical School Program will have doubled. Partnerships have been established with the University of Northern British Columbia in Prince George and the University of Victoria in Victoria. Students, both undergraduate and postgraduate, will be distributed to these sites. In this past year for the University of Northern British Columbia, we have recruited our first academic surgeon who will oversee research and education programs at this site. The strength of the British Columbia training program has been strong community presence for postgraduate trainees and strong support from community surgeons in the many centres throughout the Province. On the pathway to becoming Canada's largest medical school, many challenges lie ahead. It has not been easy for many of our faculty to address all of these challenges on a recurring basis. Nevertheless, during the past three years, our undergraduate students have positioned very well, ranking amongst the top three of Canadian schools in their surgical LMCC results. One of the key aspects for delivering innovative new teaching programs is to have a focus on innovation and educational research. The Department is fortunate to have use of a "smart classroom" in the Centre of Excellence for Surgical Education and Innovation. The Centre was officially opened in April 2003. The "smart classroom" can link to sites throughout the Province and is regularly used for provincial-wide rounds in surgical education.

One of the advantages of working with an expanded medical school is the ability to recruit new faculty. On a distributed basis throughout the Province and in the Lower Mainland, the Department has embarked upon the recruitment of seven new faculty to address the needs of the expanded medical program.

Our Clinical Programs

A single medical school with tertiary and quaternary programs attracts many complex patients to the major teaching hospitals within Vancouver. Outstanding programs have been developed -- many of which are outlined in this report. A very busy surgical environment exists and the challenge is often to fit increasing demand for resources into a very small box. Fortunately during the past four years, an effective Regional Surgical Executive Council has been in place to address considerations for siting, evidence-based practice, and resource allocation. This Council meets on a monthly basis and engages surgeons with effective working groups. Standards of care continue to remain high and complex problems with access to care (wait lists) and resource allocation are being met by ongoing discussion through the Council.

There are many exciting directions in the future for surgery and I hope you will get a glimpse into some of the future directions for the department in this report.

Summary

The University of British Columbia Department of Surgery provides exemplary health care, is committed to the teaching of surgical trainees, and strives to create new knowledge through research. It is therefore timely that these key elements of our mission be represented in a symbol, by which they are exemplified. To create such a symbol required a linkage with our heritage in the healing arts and a deep respect for the great abundance of heritage and the culture of the people who have inhabited the British Columbia coast for centuries. In August 2004, Mr. Clarence Mills, a First Nation's Haida artist, was commissioned to develop a design for the UBC Department of Surgery to serve as a proud symbol of tradition, healing and scholarship. He designed this symbol in the form of a Haida Killer Whale within which a shaman holding his rattle is imbedded. The traditions of the Killer Whale and the Shaman are outlined as follows:

Vignette On Shaman/Killer Whale

Provided by: Gabriel Patrich, Director, Spirits of the North

Shaman

A Shaman mask will often have a crown of Bear claws or Mountain Goat horns as part of the ceremonial regalia.

More often than not, Shamans were men; and severe illness, hallucinations, visions or frequent dreams were considered the signs of such a calling. The role of the Shaman was a powerful and respectful one, and was therefore sought after. A Shaman would pass on their powers to a younger family member who was prepared and destined for this role. A lengthy apprenticeship followed where a novice was to acquire their master's skills and learn how to control the spirit helpers. The success of the Shaman was dependant on the powers of the spirit helpers who would punish the Shaman if they did not perform the rites correctly. These spirit helpers could be birds, insects, reptiles, constellations or other elemental forces.

Generally, a Shaman served as a seer, performed and healed. If a patient remained ill or died, the Shaman was required to reimburse the family as well as deal with shame and ridicule from the community.

A Shaman mask will often have a crown of Bear claws or Mountain Goat horns as part of the ceremonial regalia.

Killer Whale

The legend of the Killer Whale is a tale of Natcitlaneh who was abandoned on an island by his brothers-in-law who were jealous of his prowess as a hunter. He was rescued by the Sea Lions and taken to their village in a cave where he healed their Chief. In gratitude, the Sea Lions gave him supernatural powers which enabled him to carve eight wooden Killer Whales. These Whales came to life when they were placed in the sea and avenged him by killing his brothers-in-law.

As a mark of respect, Natcitlaneh built a house and named it "Killer Whale House". According to the legend, the ancestors visited the house located at the bottom of the ocean to obtain rights to use the Killer Whale as a crest.

Held in great awe for its power and size, it was believed a Killer Whale could capture a canoe and take it underwater to transform the occupants into Whales. Thus, a Whale near the shore was a human transformed and trying to communicate with his family.

The Whale is a popular symbol for romance as they mate for life. The Whale, like the Wolf, stays with its family and travels in large pods.

The Killer Whale and Shaman

Design by Clarence Mills



The Killer Whale and Shaman by Clarence Mills will take its place as the centerpiece of a new Department of Surgery tie and scarf designed by Andrew Seal. These are due to be released in 2005. Andrew's design for the tie brings together the University of British Columbia crest and the Killer Whale and Shaman symbol, which are placed between red and white stripes on a blue background.

The red and white stripes and blue background represent the colours on a barbers pole and symbolize the history of surgery and its association with the ancient Guild of Barber Surgeons.

It is anticipated that this new design will be worn proudly at functions during which our community of surgeons meets to recognize the many contributions and accomplishments of our members. In particular, every graduate from our residency program and Master of Surgery research studies will be presented with a tie or scarf on the occasion of his or her graduation. The tie will also be presented to scholars and visitors who share their knowledge at our Departmental Grand Rounds.



Garth. L. Warnock

C. N. Woodward Professor and Chair of Surgery

FACULTY

Cardiovascular Surgery

SV Lichtenstein, Head	WRE Jamieson	H Ling
JG Abel	MT Janusz	AK Qayumi
AW Cheung	SS Karim	SS Sett
G Fradet	TB Latham	P Skarsgard
VM Gudas	JG LeBlanc	AD Thompson
RI Hayden		

Emergency Medicine

RA Pursell, Head	JG Haegert	BJ Miller
RB Abu-Laban	DW Harrison	IV Mitchell
J Bijlsma	M Hein	AB Morrison
JR Brubacher	W Henderson	MS Moser
MGR Carter	K Ho	RF Noseworthy
JM Christenson	AE Holmes	BW Oldring
BJ Chung	PBT Huang	LB Oppel
JR Coleman	GD Innes	TA Pickett
A Davison	DM Kassen	AP Scholtz
MS Dettman	WJ Lang	HE Schubert
KR Edmonds	TF-S Lee	JC Stitt
GD Erhardt	CWM Leung	RM Street
L Filiatrault	K MacKay	SJ Stromberg
BA Fleming	JM Macnab	I Thordarson
M Flesher	JI McEwen	L Vertesi
AB Gareau	CM McIntyre	K Wanger
S Glazer	RD McKnight	VM Wood
J Grafstein	RR Mercier	K Zahn

General Surgery

SW Chung, Head	J Hunter	PT Phang
K Alscher	TG Hwang	B Rudston-Brown
JP Appleby	R Janzen	B Sawyer
C Baliski	J Johnson	R Schwarz
NP Blair	A Kamitakahara	B Schopf
S Bloom	T Kieffer	CH Scudamore
D Brosseau	G Kingston	AM Seal

General Surgery (cont'd)

DRG Brown	U Kuusk	R Simons
A Buczkowski	R Lett	WT Simpson
SP Bugis	M Levings	B Sullivan
N Causton	R Lewis	M Sutter
G Chang	GI McGregor	RH Taylor
RE Cheifetz	G McLauchlan	A Towle
IGM Cleator	RM Meloche	LJ Turner
NL Davis	A Mui	JA Vestrup
CK Dingee	AG Nagy	GL Warnock
AJ Dowell	N Nguyen	B Wankling
E Frew	C Ong	MC Wiggins
R Granger	OMN Panton	S Wisman
C Helgason		

Neurosurgery

GJ Redekop, Head	DE Griesdale	R Sahjpaal
R Akagami	C Haw	P Steinbok
MC Boyd	C Honey	B Toyota
DD Cochrane	WWG Jia	WB Woodhurst
C Dong	A Lee	T Zwimpfer
DA Fairholm		

Otolaryngology

NS Longridge, Head	A Javer	F Noel
DW Anderson	L Jewett	I Pathak
C Bakala	D Kibblewhite	B Povah
JA Bartlett	F Kozak	KH Riding
A Blokmanis	TA Kramer	I Samad
T Bojanowski	J Ludemann	DWF Schwarz
GE Bryce	S Mah	JMH Smith
W Cleland	AP Maloney	H Stevens
A Denton	SSD Man	H Strecker
RI Dickson	M Miller	N Thong
JR Dmytryshyn	DR Mintz	B Westerberg
KR Dubeta	MD Morrison	L Wong
JS Durham	D Morwood	JD Woodham
MM Harriman	P Moxham	RAL Younger
RA Irvine		

Pediatric General Surgery

E Skarsgard, Head

G Blair

E Webber

J Murphy

Plastic Surgery

N Carr, Head

B Gelfant

RP Thompson

JC Boyle

J Gray

S Valnicek

E Brown

DA Kester

N van Laeken

KL Bush

P Lennox

C Verchere

P Clugston

PA MacKay

R Warren

DJ Courtemanche

B Peterson

N Wells

A Demianczuk

A Pusic

D Williamson

DG Fitzpatrick

QR Son-Hing

S Williamson

MB Foley

C Taylor

Radiation Oncology and Developmental Radiotherapeutics

T Keane, Head

D Kim

IA Olivotto

AL Agranovich

C Kim-Sing

H Pai

S Balkwill

EC Kostashuk

C Parsons

E Berthelet

W Kwan

T Pickles

P Blood

SN Larsson

M Po

G Duncan

P Leco

M Reed

R Fairey

C Leong

F Sheehan

KJ Goddard

WYV Leung

P Truong

CA Grafton

JTW Lim

S Tyldesley

JH Hay

P Lim

NJS Voss

R Halperin

M Liu

ES Wai

D Hoegler

CM Ludgate

L Weir

H Joe

R Ma

D Wilson

HEHA Kader

MR Mckenzie

J Wilson

A Karvat

I Mohamed

FLW Wong

M Keyes

WJ Morris

J Wu

Thoracic Surgery

RJ Finley, Head

KG Evans

J Yee

ML Brumwell

B Nelems

Urology

SL Goldenberg, Head
K Afshar
MD Carter
V Chow
M Cox
J Davison
HL Fenster
M Gleave
W Gourlay
PW Gout
E Guns
CB Jamieson

TJ Kinahan
P Kozlowski
CG Krahn
E Leone
A MacNeily
JST Masterson
MG McLoughlin
AJ Moore
C Nelson
MK Nigro
G Palmer
R Paterson

Z Perler
K Poon
KT Prestage
P Rennie
MD Sadar
P Skepasts
L Stothers
W Taylor
J Teichman
Y Wang
JE Wright

Vascular Surgery

DC Taylor, Head
JC Chen
DL Doyle
PD Fry

GTM Houston
YN Hsiang
T Kalla
R Lokanathan

S MacDonald
JDS Reid
AJ Salvian
R Sidhu

RESEARCH ASSOCIATES

Z Ao

J Clifton

L Rammage

APPOINTMENTS & PROMOTIONS

New Clinical Faculty Appointments

William Henderson	Cl. Instructor	Emergency Medicine
Andrzej Buczkowski	Cl. Instructor	General Surgery
Richard Lewis	Cl. Instructor	General Surgery
Nam Nguyen	Cl. Instructor	General Surgery
Andrew Denton	Cl. Assistant Professor	Otolaryngology
Jason Gray	Cl. Instructor	Plastic Surgery
Christopher Taylor	Cl. Instructor	Plastic Surgery
Ross Halperin	Cl. Assistant Professor	Radiation Oncology
Anand Karvat	Cl. Instructor	Radiation Oncology
Pamela Leco	Cl. Instructor	Radiation Oncology
Ercle Leone	Cl. Instructor	Urology
Geoffrey Palmer	Cl. Instructor	Urology
Kenneth Poon	Cl. Instructor	Urology

Clinical Faculty Promotions

Norman Blair	Cl. Associate Professor	General Surgery
Gary Kingston	Cl. Assistant Professor	General Surgery
Neely Panton	Cl. Associate Professor	General Surgery
William Simpson	Cl. Associate Professor	General Surgery
Laurence Turner	Cl. Associate Professor	General Surgery
Brian Westerberg	Cl. Associate Professor	Otolaryngology
Richie Younger	Cl. Professor	Otolaryngology
Erin Brown	Cl. Assistant Professor	Plastic Surgery
Eric Berthelet	Cl. Associate Professor	Radiation Oncology
Pauline Truong	Cl. Associate Professor	Radiation Oncology
Elaine Wai	Cl. Assistant Professor	Radiation Oncology

New Full Time Faculty Appointments

James Johnson	Assistant Professor	General Surgery
Sam Wiseman	Assistant Professor	General Surgery
Charles Haw	Assistant Professor	Neurosurgery
Kourosch Afshar	Assistant Professor	Urology
Ravindar Sidhu	Assistant Professor	Vascular Surgery

Full Time Faculty Promotions

Eric Webber	Associate Professor	Ped. General Surgery
Ivo Olivotto	Professor	Radiation Oncology
Lynn Stothers	Associate Professor	Urology

Headships

Neil Longridge	Otolaryngology
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DEPARTMENT COMMITTEES

UBC Surgical Advisory Committee

Garth Warnock, Chair	Larry Goldenberg	Karim Qayumi
Geoff Blair	York Hsiang	Gary Redekop
Ross Brown	Tom Keane	Richard Simons
Nick Carr	Sam Lichtenstein	Erik Skarsgard
Rona Cheifetz	Neil Longridge	David Taylor
Stephen Chung	John Masterson	Nancy Van Laeken
Noelle Davis	Mark Meloche	Eric Webber
Richard Finley	Roy Purssell	Barrie Woodhurst

Finance Committee

Gary Redkop, Chair	Wayne Davis	<i>[Sep-Dec 2004]</i>
Garth Warnock	Madeline Bicknell	<i>[Jan-Aug 2004]</i>
Barrie Woodhurst		

Resident Education Committee

Eric Webber, Chair	York Hsiang	Nancy Van Laeken
Geoff Blair	Paul Moxham	Garth Warnock
Jerry Chen	Shahzad Karim	Barrie Woodhurst
Patricia Clugston	Andrew MacNeily	Thomas Zwimpfer
Ken Evans		

Curriculum Group Committee

Barrie Woodhurst, Chair	Virginia Gudas	Karim Qayumi
Don Anderson	Peter Lennox	Anthony Salvian
Graeme Duncan	Ercole Leone	Andrew Seal
David Fairholm	Jill McEwen	Garth Warnock
Richard Finley	James Murphy	Thomas Zwimpfer
William Gourlay		

Continuing Medical Education Committee

Rona Cheifetz, Chair	Richard Finley	Charles Scudamore
James Boyle	Guy Fradet	Gary Redekop
Geoff Blair	Thomas Keane	David Taylor
Scott Durham	Roy Purssell	Garth Warnock
Howard Fenster		

CLINICAL FELLOWS AND POSTGRAD TRAINEES

Cardiovascular Surgery

Majdi A Abdel-Hadi	Momenul Huq	Siamak Mohammadi
Tomonbu Fukuda	Susan Moffatt Bruce	Jian Ye

General Surgery

Wael Al-Kattan	Jeffery Gaboury
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Neurosurgery

Deepak Agrawal	Christopher Ang	Tomasz Mandat
Rodrigo Pimentel	Ashutosh Singhal	Roy Torcuator

Otolaryngology

Kwai O Chan	Mireille Gervais
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Plastics

Colin Morrison	Robert Shenker
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Radiation Oncology and Developmental Radiotherapeutics

Andrew T Bates	Genevieve Coulumbe	Charles Candish
Patricia Gail Niblock	Andrew Tom	

Urology

Antonio Hurtad-Coll	Ian-Pim-Lui Madelena Alan So
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RESIDENTS

Cardiovascular Surgery

Mohammed Alnasir	Richard Cook**	Chris Goddard
Jamil Bashir**	Lynn Fedoruk	Khalid Swenia
Osama Benhameid*		

Emergency Medicine

Steven Brooks	Jason Exner	Afshin Khazei**
Andrew Campbell*	Chad Kim Sing	W. Bretton Passi*
Kevin Clark	James Kung	David Sweet
Ryan Deedo*	Nicholai Kuzak	Erik Vu

General Surgery

Scott Ainslie	Katherine Hsu	Jean Oosthuizen**
Keith Baxter	Hamish Hwang	Jin-Si Pao*
Tracy Bishop	Dalbir Jangra	Hannah Piper
Mary Brindle**	Laura July**	Madeline Plourde*
John Boutros*	Al-Reza Kazemi	Nicole Robbins*
Joe Chan	Jennifer Kenyon	Sharadh Sampath
Edward Chang	Peter Kim	Nathan Schneiderei
Scott Cowie	David Konkin	Andrew Schumacher
Shaun Deen*	Monica Langer	Janakie Singham*
Mark Dickeson*	Sher-Ping Leung	Jenni Smith
Jeff Doyle	Adrienne Melck	Todd Swanson*
Christian Finley	Adam Meneghetti**	Elena Vikis
Jason Francoeur	Jessica Mills*	Kevin Wiseman
Naisan Garraway		

Neurosurgery

Shahid Gul	Neilson McLean	Stephen Yip
Salvator DiMaio*	Michael Nikolakis	Raymund Yong
Navaraj Heran**		

Otolaryngology

Benjamin Achetem	Patricia Lee**	Rebecca Morley
Jason Archibald	Noah Massa**	Sanjay Morzaria
Ryan Cain	Shabir Mia*	Yotis Tsaparas
Matthew Dickson	Tyler Mori	Kevin Wong*
Sergei Filatov	Jon-Ivar Michelson*	

Paediatric General Surgery

Ahmed Abdalwahad*	Sonia Butterworth	Florence Lewis**
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Plastic Surgery

Sean Bristol	Colleen McCarthy**	Rebecca Morley*
Cameron Bowman**	Sheina Macadam*	Jennifer Prince
Nicole Halgren	Kristian Malpass	Daniel Peters
Catrion Lawlor**	Steve Meredith*	

Radiation Oncology and Developmental Radiotherapeutics

Caroline Chung	Nori MacGowan*	Devin Shellenburg
Hans Chung**	Wilson Marhin	Kim Voduc
Paris Ann Gfeller	Stacy Miller*	Douglas Wu
Valeri Goutsouliak**	David Palma*	Elaine Karol Wong**

Thoracic Surgery

Ayman Al-Sulaimani*	James Bond**	Sharon Ong*
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Urology

Michael Eng	Andrew Marks*	Derek Ottem
Geoffrey Gotto*	Jennifer Mickelson	Alexandra Perks
Chris Hoag	John Morrell	Dan Rapoport
Herman Kwan	Kevin Morrison	Vu Truong
Tony Luongo**	Omar Nazif	Blayne Welk*
Jeffrey McCracken	Christopher Nguan**	

Vascular Surgery

Mohammed Al-Assisi*	Dhafer Kamal	Matthew Smith**
Joel Gagnon*		

* Residents entering program in 2004

** Residents graduating from program in 2004

STAFF

Maryam Abbassian Milani
Ingrid Ahlsten
Vanessa AmatyLeon
Brenda Barker
Maureen Berard
Madeleine Bicknell
Cindy Bryson
Janet Buchanan
Luke Bu
Wendy Cannon
Rachel Cadelina
Florence Chan
Shurli Chan
Margie Christopherson
Long-Jun Dai
Angela Dawe
Wayne Davis
Gail Elliot
Lynn Fearn

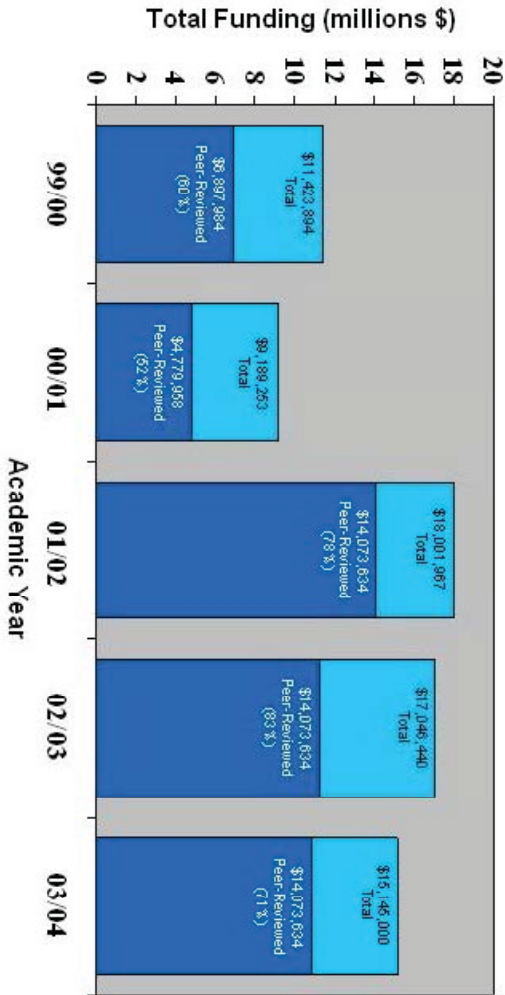
Ann Finneran
Eva Germann
Susan Goguen
Winsome Greaves
Saadat Hashamiyan
Zehua He
Maj-Britt Hedberg
Pam Itterman
Valentyna Koval
Jason Ladicos
Maria Lopes Chau
Irfan Moledina
Leslie MacFadden
Janet Mackie
Joan MacNab
Barbara Mueller
Fern Rushton
Gail Newell

Jim Peacock
Betty Pearson
Sharon Sanderson
Marlene Scouten
Ferooz Sekandarpoor
Ruth Shafron
Kevin Shillitto
Andrew Shum
Tricia Raeburn
Elizabeth Stanford
Jennie Taylor
Philippa Taylor
Sandra Thomsen
Gayle Uthoff
Catherina Van Beek
Alison Whelan
Marlene Woschee
Ji Zhang

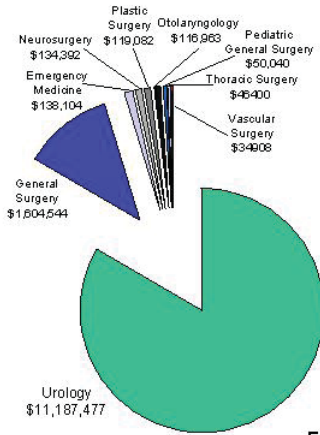


Back [right to left]: E Germann, I Ahlsten, J Clifton, M Milani, A Dawe, R Shafron, G Warnock, M Bicknell, L MacFadden, B Mueller, M Christopherson, MB Hedberg, G Uthoff. Front [right to left]: T Raeburn, G Newell, S Sanderson, R Cadelina, M Berard, M Lopes Chau, P Itterman

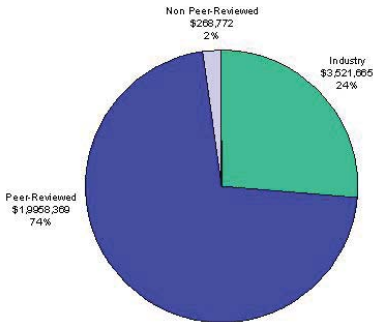
UBC ADMINISTERED RESEARCH FUNDING OVER PAST FIVE ACADEMIC YEARS



UBC ADMINISTERED RESEARCH FUNDING IN CALENDAR YEAR 2004



Funds by Division
Total: 13,748,806



Funding by Source
Total: \$14,665,766



Dr. Sam Lichtenstein, Head

The UBC Division of Cardiovascular Surgery provides clinical services at St. Paul's hospital, the Vancouver General Hospital and the British Columbia Children's Hospital. It also provides clinical services at the Royal Columbian Hospital and consultant services at the BC Women's Hospital and at the BC Cancer Agency. The Division is recognized nationally for its clinical and academic excellence and its clinical expertise in the management of aortic diseases, in the field of transplantation and ventricular assist devices. It has also achieved international recognition in the fields of valvular heart diseases, longitudinal prosthetic valve database, complex pacing modalities and lead extraction and in the field of myocardial protection.

In late 2003, the UBC Division of Cardiovascular Surgery established a cross-site cardiac surgical group (VGH and St. Paul's Hospital) to provide integrated clinical coverage and teaching at both institutions. In 2004, the group established a joint wait list for in-hospital patients waiting for urgent cardiac surgery allowing quick and efficient triage while maximizing the use of available clinical resources. This effort has contributed to the significant decrease of the cardiac surgical wait list in BC.

The division has also expanded on its initiative of building a strong academic division. After our recruitment of Dr. Skarsgard (MD, PhD), we were able to recruit two other surgeon scientists. In 2005, Dr. Jian Ye (MD) who has a strong interest in stem cell research, cerebral and spinal cord preservation will join the adult Division of Cardiovascular Surgery. Dr. Andrew Ian Campbell (MD, completing PhD at the University of Toronto) who has research interests in pulmonary hypertension and vascular reactivity was recruited from Philadelphia. Dr. Campbell brings a strong neonatal cardiac surgical expertise to B.C. and will join the paediatric Division of Cardiovascular Surgery.

There are presently 14 faculty members and two full-time scientists. The Division is hoping to recruit one to two more candidates over the next 2 years with expertise in new technologies such as robotic surgery and endovascular surgery. We are also in the process of developing the area of minimally invasive cardiac surgery under the leadership of Dr. Peter Skarsgard.

Administration

Dr. Sam Lichtenstein is the UBC Division of Cardiovascular Surgery Head and the Division Head at St. Paul's Hospital. Dr. Guy Fradet is the UBC Division Associate Head. Dr. Shahzad Karim is the UBC Cardiovascular Surgery

Residency Training Program Director. Dr. Mike Janusz is the Division Head at Vancouver General Hospital. Dr. Jacques Leblanc is the Division Head at BC's Children's Hospital. Dr. Eric Jamieson is the Director of Cardiac Clinical Research, and Dr. Karim Qayumi is the Director of Basic Science Research. Ms. Maryam Abbassian Milani is the UBC Division Secretary.

Clinical Services

The Division of Cardiovascular Surgery provides cardiovascular surgical services under the auspices of the Vancouver Coastal Health Authority, Fraser Health Authority and Provincial Health Services Authority. It provides tertiary and quaternary subspecialty programs that are province-wide. Subspecialty programs include paediatric cardiovascular and thoracic surgery, adult congenital heart surgery, arrhythmia surgery, cardiac transplantation and mechanical assist devices, lead extraction, surgery of the aorta and valvular reconstruction. In addition, the Division of Cardiovascular Surgery at Vancouver General Hospital (VGH) provides support to the Divisions of General Surgery (trauma and oncology) and Neurosurgery and the Spinal Program for complex surgical procedures requiring the uses of cardiopulmonary bypass. There is also an active ECMO program at BC's Children's Hospital, VGH and St. Paul's Hospital. Over the next year, we will be establishing a clinic for aortic diseases and hope to establish a similar clinic for the surgical treatment of atrial fibrillation in cooperation with the UBC Division of Cardiology. The Division already participates actively in the end stage heart failure program.

Teaching

The Cardiovascular Surgery Residency Program is fully accredited by the Royal College of Physicians and Surgeons of Canada. Clinical training includes rotation at all institutions, as well as, exposure to diagnostic, medical and interventional cardiology with inpatient and ambulatory experience. The different sites offer weekly combined cardiology-surgery clinical rounds. The Division hosts Visiting Professor events and Division-wide Journal Clubs. There is a weekly academic day for the residents and fellows. Postgraduate fellowship training is offered in Adult and Paediatric Cardiac Surgery. The Division has currently three Post Doctoral Fellows and five residents. Two of our most recent graduates (Drs. R. Cook and J. Bashir) successfully completed the examination of the Royal College of Physicians and Surgeons of Canada for Fellowship in Cardiovascular Surgery and both are currently away doing fellowship. The members of the Division also participate in the Phase IV Undergraduate Teaching Program. This program is coordinated by Dr. Larry Burr (Emeritus Clinical Professor).

Research

The Division of Cardiovascular Surgery is committed to an environment that fosters both basic scientific inquiry and clinical research. The Division continues to be very active in the conduct of institutional or multicenter outcome trials with over 10 trials currently active and members of the Division acting as principal investigators or co-investigators. While continuing to develop our clinical research efforts, we are also in the process of building a strong basic research group. Three surgeon scientists (PhD's) have now been recruited with definitive research commitments. The Division continues to be academically productive with 25 peer-reviewed publications in 2003-04, six manuscripts in press and 14 submitted for publication in 2004. Members of the Division also continue to support the BC Cardiac Registry which generates annual site and surgeon specific outcome analyses important in the development and validation of best practices related to our area of clinical care.

People

Dr. James Abel has become a member of the Cardiac Surgery Specialty Committee of the Royal College of Physicians and Surgeons of Canada. Dr. Guy Fradet continues to be a member of the organizing committee for the Annual Peak Performance Meeting for Canadian Cardiac Surgeons. This meeting is being held in Lake Louise February 2005. Dr. Eric Jamieson is the Chair of the Organizing Committee for Meeting of the Society for Heart Valve Disease to be held in Vancouver July 17 to 20th 2005. Members of the Division have been recruited to the membership of the steering committee. Dr. Jacques Leblanc is a member of the Cardiac Surgery Examination Committee of the Royal College of Physicians and Surgeons of Canada. Dr. Leblanc also spent 2 weeks in Shanghai, China along with a surgical team from the BC's Children's Hospital helping and training colleagues of the Fudan University Children Hospital in the surgical care of complex congenital cardiac diseases in infants and children. Dr. Karim Qayumi is the Director of the Centre of Excellence for Surgical Education and Innovation at the University of British Columbia.

EMERGENCY MEDICINE



Dr. Roy Pursell, Head

The UBC Division of Emergency Medicine is recognized as one of the leading academic units in Canada.

The physicians in the Division are enthusiastic teachers both at the undergraduate and postgraduate levels. Many faculty hold peer review grant funding.

Administration

Dr. Roy Pursell is the Head of the UBC Division of Emergency Medicine and Head of the Emergency Department at Vancouver Hospital. Grant Innes is the Chief of Emergency Medicine for Providence Healthcare. Ms. Dee Dee Wall is the Divisional Secretary and Ms. Janet Chung is the Postgraduate/Undergraduate Program Secretary.

Dr. Grant Innes and Ms. Leanne Heppell are the Co-Chairs of the Vancouver Coastal Emergency Services Planning Project. The purpose of this project is to design a region-wide strategy for the provision of emergency services.

Drs. Roy Pursell, Sandy Whitehouse and Julian Marsden are the Co-Chairs of the Academic Working Group. This is one of the committees set up by the steering committee. The purpose of this working group is to facilitate and collaborate in the postgraduate and undergraduate training of Emergency Medicine and to collaborate in Emergency Department related research.

Dr. Bruce Fleming continues as the Associate Dean, UBC Undergraduate Affairs, and Dr. Kendall Ho, as the Associate Dean, Continuing Medical Education, UBC Faculty of Medicine.

Clinical

Four Lower Mainland sites, Vancouver General Hospital, St. Paul's Hospital, BC's Children's Hospital and the Royal Columbian Hospital, are now the core centres for UBC emergency medicine teaching and research. Prince George Regional Hospital and the linked Victoria emergency departments are key expansion sites that are already involved in academic emergency medicine planning and that will be important components of a future academic Division of Emergency Medicine. The Division will be forming and developing academic collaborations with other key BC sites, including Kelowna General Hospital, Surrey Memorial Hospital, and Royal Inland Hospital.

Undergraduate Education

Emergency Medicine performs a large teaching function for the Faculty of Medicine and is an invaluable component of the undergraduate medical curriculum. The Division provides an unparalleled opportunity for students to perform clinical assessments, formulate differential diagnoses, order and interpret diagnostic tests, do procedures, and devise management plans for a wide range of undiagnosed acutely ill patients, all with real-time 1:1 faculty supervision.

In 2004, we completed a very successful pilot for an undergraduate teaching rotation in Emergency Medicine at the University of Northern BC.

Postgraduate Education

Almost 20 years ago, UBC emergency physicians developed FRCPC and CCFP (EM) residency programs. Although among the smallest in Canada, they are a source of pride for our faculty. Both have received continuous accreditation and enjoy 100% resident pass rates on certification examinations. Last year over 70 graduating students applied for our two Royal College positions while 33 applied for the four CCFP (EM) positions.

As well as training medical students and future emergency physicians, members of the Division of Emergency Medicine train a large number of “off-service” residents from Surgery Divisions of Urology, General Surgery, Plastic Surgery, Otolaryngology, Neurosurgery and from the Departments of Orthopedics, Medicine (Internal Medicine, Neurology), Family Medicine, Pediatrics, Anesthesia, Psychiatry, Pathology, Laboratory Medicine, Microbiology, and Medical Genetics, who do emergency medicine training as part of their residency training. The Division plays an integral role in training and evaluating International Medical Graduates and in providing up to one year of advanced emergency skills training for physicians from communities of need (the BC Enhanced Skills Program).

Continuing Health Education

Ongoing professional development is integral to any academic program, and it is a strength and focus for the Division of Emergency Medicine. The Division is fortunate to have many high-level emergency medicine educators who present on behalf of UBC at dozens of national and international venues every year. In addition, the Division offers several excellent continuing medical education and outreach programs, including the Provincial Outreach Education Program in Pediatric Emergency Medicine, the Annual Herb Parkin Emergency Medicine Course, the Annual Whistler Emergency Medicine Conference, and the BC Section’s Spring Emergency Medicine Conference. All are highly rated and generally oversubscribed. The Division is now discussing mechanisms

of expanding Emergency Medicine continuing medical education beyond the Lower Mainland. Our educators collaborate in running monthly regional emergency medicine journal clubs to promote evidence-based medicine, and in the development of online learning modules, telemedicine, and distance education initiatives that are relevant to practicing physicians.

Research

Our research goal is to produce new knowledge that will translate into clinical and system changes that improve important patient outcomes. Our areas of focus include: prehospital care, resuscitation, diagnosis of acute coronary syndromes, clinical prediction rule development, medical education, emergency health services and health information systems.

Since 1999, UBC Division of Emergency Medicine principal investigators have secured over \$6 million in research funding (approximately \$1.2 million per year). Over the same time, they have collaborated with other investigators to bring in an additional 3.3 million in funding. From 1999 to 2004, our faculty have collaborated locally and nationally to publish 149 articles in peer-reviewed journals, 50 non-refereed articles, 241 abstracts, 5 books and 58 book chapters, making the Division one of Faculty of Medicine's more productive academic divisions.

Emergency Medicine Subspecialty Development

Emergency Medicine sub-specialization has evolved rapidly over last decade, and members of the Division are leaders in the areas of pediatric emergency medicine, emergency medical services, toxicology, inner city medicine, hyperbaric medicine and health informatics.

Toxicology

Four Emergency Medicine faculty members have completed subspecialty training in medical toxicology. All have clinical appointments with the BC Drug and Poison Information Center and provide consultations to physicians throughout British Columbia in difficult overdose and poisoning cases and provide the majority of medical toxicology consultations in BC.

Every seven years, the pharmacists, nurses and physicians at the Drug and Poison Information Center publish a Poison Management -- the fifth edition is due in 2004. This 800-page text is a compilation of monographs and treatment guidelines developed at the Drug and Poison Information Center and is distributed to BC hospitals and emergency departments.

Hyperbaric Medicine

Three Emergency Medicine faculty members, including Dr. David Harrison, Director of the VGH Hyperbaric Unit, have completed additional training in Hyperbaric Medicine. In British Columbia, the majority of hyperbaric treatments are given under the supervision of Emergency Medicine/hyperbaric specialists. This group teaches at the undergraduate, postgraduate and post-specialty level. They are active researchers and in a recent study evaluated the incidence of postoperative cerebral air embolism. Information from this study has led to a study of the effectiveness of hyperbaric treatment for this condition.

Health Informatics

Information technology is changing patient care and research. UBC emergency physicians are national leaders in the area. St. Paul's Hospital is the first Emergency Department in Canada and one of only a few in North America to successfully implement fully computerized physician order entry (CPOE) -- a modality that the Institute for Healthcare Improvement has identified as having the greatest promise for increasing patient safety. CPOE has enabled emergency physicians to provide care in non-traditional locations (like hallways and waiting rooms) and to improve patient-focused performance measures (like time-to-physician, time-to-testing and ED length of stay). CPOE prevents errors by providing dosing and administration instructions for uncommon agents, by generating alerts when potentially harmful combinations of medications are prescribed, and by preventing transcription errors.

Recruitment

In 2004, the Division recruited Drs. Christopher de Witt, Corinne Hohl, Afshin Khazei, and Jeffrey Plant. Dr. Christopher de Witt completed his residency in Emergency Medicine at the University of Colorado and his fellowship in Medical Toxicology at the Rocky Mountain Poison Center in Denver. He will be joining the group of medical consultants at the Drug and Poison Center of BC. Dr. Corinne Hohl completed her residency at McGill University. She has expertise in the area of adverse drug reactions and will be completing research in this area. Dr. Afshin Khazei completed his residency in Emergency Medicine at UBC. He is interested in outreach programs to optimize Emergency Medical care in underserved communities. Dr. Jeffrey Plant completed his residency in Emergency at the University of Calgary. He has expertise in the use of simulators for education.

GENERAL SURGERY



Dr. Stephen Chung, Head

The UBC Division of General Surgery includes geographical fulltime and clinical faculty members at the Vancouver Acute [Vancouver General Hospital (VGH) & UBC Hospital], St. Paul's Hospital (SPH), and an increasing number of clinical faculty members in community hospitals situated throughout the lower mainland and the province. Vancouver General Hospital and St. Paul's Hospital are the principal providers of tertiary and quaternary services.

Administration

Dr. Stephen Chung is the UBC Division Head. Dr. Neely Pantou is the VGH Division Head and Dr. Sam Bugis the SPH Division Head. Dr. Eric Webber is the General Surgery Residency Program Director and the Department of Surgery Program Director. Dr. Andrew Seal is the Undergraduate representative. Dr. Charles Scudamore is the Continuing Medical Education representative. Ms. Angela Dawe is the Divisional secretary. Ms. Pam Itterman is the General Surgery Residency Program secretary.

Clinical Services

Vancouver General Hospital, St. Paul's Hospital and the university-affiliated community hospitals provide a broad range of surgical services including emergency/acute, urgent, elective, and subspecialty surgical services. Tertiary and quaternary services include advanced laparoscopic surgery, colorectal surgery, endocrine surgery, hepatopancreaticobiliary surgery, surgical oncology, transplantation, and trauma surgery. Transplantation, including a living-related liver transplant program and an islet cell transplant program, and trauma are designated Provincial programs.

Teaching

The General Surgery Residency Training Program is fully accredited by the Royal College of Physicians & Surgeons of Canada. There are 37 resident trainees in the program. Fellowship programs exist in trauma and hepatopancreaticobiliary surgery & liver transplantation. Residents rotate to Vancouver Acute, St. Paul's Hospital and the community hospitals.

Undergraduate teaching takes place at Vancouver Acute, St. Paul's Hospital,

Royal Columbian Hospital and Richmond Hospital. All UBC clinical clerks rotate through General Surgery.

Dr. Scudamore organizes weekly city-wide rounds which includes monthly teleconferencing to Royal Columbian Hospital, Prince George, Prince Rupert and Cranbrook. Dr. Rona Cheifetz has organized a number of continuing medical education oncology conferences throughout the Province under the auspices of the British Columbia Cancer Agency Surgical Oncology Network. Dr. Terry Phang organized continuing medical education conferences on pelvic floor dysfunction and a laparoscopic colectomy course.

Laparoscopic and trauma training modules have been established in the Centre of Excellence for Surgical Education and Innovation.

Research

Research is focused on sections within the division including transplantation, trauma and oncology. The Division has obtained over \$1.5 million in peer-reviewed research funding from agencies including Canadian Institute of Health Research (CIHR), the Michael Smith Foundation for Health Research (MSFHR), and the National Cancer Institute (NCI). There is also additional industry-related funding. Dr. Megan Levings holds a Canada Research Chair in Transplantation; Dr. Garth Warnock heads the Ike Barber Research Program in Islet Cell Transplantation; Dr. Stephen Chung is program director for the CIHR/MSFHR Health Research Training Program in Transplantation; Drs. Alice Mui and Cheryl Helgason hold CIHR Scholarships, and Dr. Chris Ong holds a Vancouver Coast Health Research Institute Scholarship. Dr. Urve Kuusk received an NCI grant studying breast cancer prevention. Dr. Terry Phang received a St. Paul's Foundation Research Grant for rectal cancer research. Dr. Sam Wiseman received a Department of Surgery Concept award and a Canadian Surgical Research Fund award for research in cancer genomics. Drs. Chung, Mui and Ong are part of a research group awarded a \$9.1 million grant from Genome Canada to study biomarkers of transplant rejection.

People

The Division welcomed Dr. Morad Hameed (Vancouver Acute) and Dr. Sam Wiseman (St. Paul's Hospital) to Vancouver. Dr. Hameed was recruited from the University of Calgary and has fellowship training in trauma/critical care from the University of Miami. Dr. Wiseman has fellowship training in surgical oncology from Roswell Park.

Promotions & Appointments:

Clinical Instructor: Drs. Andrzej Buczkowski (Vancouver Acute), Richard Lewis (Lions Gate Hospital), and Nam Nguyen (Richmond Hospital).

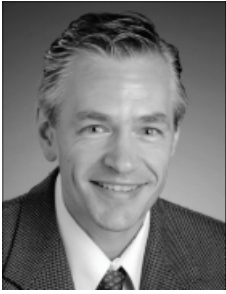
Clinical Assistant Professor: Drs. Gary Kingston (Nanaimo) and Blair Rudston-Brown (Nanaimo).

Clinical Associate Professor: Drs. N. Peter Blair (Royal Columbian Hospital), Neely Panton (Vancouver Acute), Bill Simpson (Prince George), and Laurence Turner (Royal Columbia Hospital).

Awards & Accolades:

Dr. Ross Brown was appointed Medical Director for Critical Care, Emergency and Trauma Services at Vancouver General Hospital. Dr. Stephen Chung received the VGH Medical Staff Scientific Achievement Award. Dr. Megan Levings received the Department of Surgery Hjalmar Johnson Young Investigator Award. Dr. Neely Panton was Program Chair for the BC Surgical Society. Dr. Charles Scudamore was elected a Governor-at-Large, American College of Surgeons. Dr. Andrew Seal gave the keynote address at the UBC Class of 2004 Hooding Ceremony. Dr. Richard Simons was elected President, Trauma Association of Canada. Dr. Garth Warnock was Visiting Professor for the McMaster University Department of Surgery Resident Research Conference. He was also keynote speaker at the Annual UBC/BC Transplant Society Transplantation Research Day. Dr. Eric Webber received the PARBC Resident Advocate award.

The following residents entered the program July 1st, 2004: John Boutros (University of Montreal), Shaun Deen (University of Alberta), Mark Dickeson (Memorial University), Jin-Si Pao (University of Toronto), Madelaine Plourde (University of Ottawa), Nicole Robbins (UBC), Janakie Singham (Queen's University), Todd Swanson (University of Alberta) and Jessica Mills (UBC). The following residents graduated in 2004: Mary Brindle (Pediatric Surgery Fellowship, Hospital for Sick Children); Laura July (Laparoscopy Fellowship, Portland, Oregon), Adam Meneghetti (Laparoscopy Fellowship, University of California San Francisco); John Oosthuizen (Community Surgery, Williams Lake, BC). Dr. Meneghetti received the Division of General Surgery FB Thompson award and the Department of Surgery IB Holubitsky Memorial award. Dr. Brindle received the Department of Surgery Best Resident Teacher award. Dr. Christian Finley received the WB & MH Chung Research Day Best Resident Presentation award. Drs. Kathy Hsu and Hamish Hwang received the Annual Resident Research Day awards for outstanding research presentations. Dr. Nathan Schneidereit received the Canadian Association of General Surgeons-Merck Frosst Resident Teaching award.



Dr. Gary Redekop, Head

The UBC Division of Neurosurgery includes clinical services at the Vancouver General Hospital (VGH) and British Columbia's Children's Hospital (BCCH). The Division has established itself as one of the leading neurosurgical programs in Canada, and is recognized internationally for clinical and academic excellence. There are presently twelve full-time clinical faculty, three part-time clinical faculty, one full-time neurophysiologist,

and one full-time research scientist.

Administration

Dr. Gary Redekop is the Head of the Division of Neurosurgery at UBC and at VGH. Dr. Paul Steinbok is the Head of the Division of Pediatric Neurosurgery at BCCH. Dr. Thomas Zwimpfer is the Director of the Neurosurgery Residency Training Program, and Dr. Barrie Woodhurst is the Director of Undergraduate Education for the UBC Department of Surgery. Sharon Sanderson is the Divisional secretary.

Clinical Services

The Division of Neurosurgery at VGH is the major adult neurosurgical service in the Vancouver Coastal Health Authority, providing tertiary and quaternary subspecialty programs that are province-wide in scope. Members of the Division of Neurosurgery care for approximately 2000 inpatients annually. There are linkages with multidisciplinary programs in Stereotactic Radiosurgery, Spine Surgery, and Interventional Neuroradiology. The neurosurgeons at BCCH are the only subspecialty trained pediatric neurosurgeons in British Columbia, and limit their practice to the care of children, with approximately 250 inpatient admissions annually.

Teaching

The Neurosurgery Residency Training Program is fully accredited by the Royal College of Physicians and Surgeons of Canada. Clinical training includes inpatient and ambulatory experience. The academic program includes weekly Neuroscience Grand Rounds, Professor's Rounds, and Clinicopathological Correlation Rounds. A postgraduate course consists of biweekly seminars on a series of topics supervised by the Neurosurgical Faculty. Post-residency

fellowship training is provided in pediatric neurosurgery, functional and stereotactic neurosurgery, and spine surgery.

Each of the members of the Division are involved in undergraduate medical education. During the Brain and Behaviour module, second year students are taught clinical examination skills as well as fundamental neurology and neurosurgery in 16 hours of small group seminars. During the Surgery block in Phase IV, third-year students rotate through the Division for two weeks. They are assigned a preceptor, and participate in inpatient care as well as ambulatory clinics. A series of Neurosurgery seminars is included in the Academic Half-Day program. In Phase V, Fourth year students can choose to do a four week elective in Neurosurgery.

Research

The Division is committed to create and nurture an environment that fosters basic scientific inquiry as well as clinical research. Areas of focus in the Division include Pediatric Neurosurgery, Functional and Restorative Neurosurgery, Neuro-Oncology, Cerebrovascular Disease, and Stroke. The scope of research includes basic science, translational studies, and clinical trials. Dr. William Jia, PhD provides expertise in viral vectors and gene therapy, and has contributed significantly as a co-investigator with other members of the division as well as by supervising resident research projects. Through institutional and multicentre outcome studies we pursue the development and validation of best practices relating to our areas of clinical activity.

Members of the Division are investigators or co-investigators in research studies that generated approximately \$750,000 in grant funding during the past year. Several have received national and international recognition for their work. Faculty and residents present their research at national and international meetings and have a consistent track record of publication in peer-reviewed journals.

People

The leadership contributions of members of the Division extend beyond the boundaries of our discipline. Dr. Douglas Cochrane is the Surgeon-in-Chief at the BCCH and the Vice-President of Medical Affairs, Risk, Quality and Safety Provincial health Services Authority. Dr. David Fairholm is the Assistant Dean for Faculty Development and Educational Support at The University of British Columbia. Dr. Barrie Woodhurst was awarded the 2004 AD MacKenzie Clinical Teaching Award for Undergraduate and Postgraduate Teaching. Dr. Felix Durity, Professor Emeritus and former Head of the Division of Neurosurgery was awarded the 2004 Dr. Cam Coady Medal of Excellence for education and humanitarianism by the British Columbia Medical Association.



Dr. Neil Longridge, Head

The Division of Otolaryngology has experienced a year of transition. Dr. Neil Longridge was appointed Head of the Division as of September 2, 2004. In the near future the Division is looking to changes at both St. Paul's Hospital (SPH) and Vancouver General Hospital (VGH) of new OPD Clinics and office space. With the closure of St. Mary's Hospital, the residency training from this site has been relocated to Surrey Memorial Hospital.

Administration

Dr. Neil Longridge is the new UBC Division Head. Dr. Scott Durham continues as VGH Division Head. Dr. Rob Irvine resigned his position as Program Director to focus more on being the Division Head at St. Paul's Hospital. Dr. Paul Moxham from Children's Hospital has assumed the role as Program Director. Dr. Andrew Denton stepped down as Director of Continuing Medical Education and Dr. Andy Blokmanis has taken up this position. Ms. Margie Christisopherson is the Divisional secretary.

Clinical Services

The Division is still experiencing a lack of operating room time. This impacts severely on the teaching program to allow residents sufficient surgical exposure during their five years of training. The Cochlear Implant Program has experienced an infusion of funds and now is doing 28 adult and 23 pediatric cochlear implants.

Teaching

In an effort to have adequate teaching resources for the medical school expansion, faculty from Victoria and the interior of British Columbia will be appointed. Dr. Patricia Lee and Dr. Dave Kramer have joined the faculty to support teaching in the interior of British Columbia. The number of fellows in the Division has steadily increased with fellows coming from China, Colombia, Eastern Canada to do fellowships in otology, sinonasal disease, and laryngology. The number of fellows accepted is closely monitored through the Residency Training Program – this is to ensure that the experience for residents is not eroded. The Temporal Bone Laboratory was finally ready to go after updating of equipment and final construction adjustments.

The UBC Otolaryngology/BC Otolaryngology Society Clinic Day was held on April 17, 2004. The guest speaker was Dr. John Greinwald from Ohio and the local speakers were Dr. Danuta Skowronski, Dr. Brian Westerberg, and Dr. Fred Kozak. Dr. Ritchie Younger continues to be actively involved with the Seattle group and yearly with this group puts on the Soft Tissue Course which our PGY-4 residents attend. Dr. Younger also organized a Soft Tissue Course in Vancouver in July 2004. Drs. Brian Westerberg and Amin Javer jointly organized the Current Techniques in Endoscopy Sinus Surgery and Current Techniques in Temporal Bone and Middle Ear Surgery Course held from July 19-22, 2004. This course was well attended with all available residents in attendance. Visiting speakers included: Dr. Manohar Bance from Nova Scotia, Dr. Richard Canter from the UK, Dr. William Luxford from California, Dr. Frederick Kuhn from Georgia, Dr. Martin Citardi from Cleveland, Dr. Winston Vaughan from California, and Dr. Kenneth Scott from North Dakota.

Research

Dr. Dietrich Schwarz, Director of Research for the Division of Otolaryngology, was due to retire this year but has delayed his retirement date until June 30, 2005 to allow for recruitment of a suitable researcher. Dr. Brian Westerberg has been holding regular research meetings with the otolaryngology residents. This is a more hands-on-guided approach and will increase the quality of research within the division.

People

Dr. Neil Longridge, the new Head of the Division of Otolaryngology, originally comes from England. He came to Canada in the late 1970's to do a residency in otolaryngology and remained at the Vancouver General Hospital. Since 1977 Dr. Longridge has been the Medical Director of the Neurotology Unit. After his retirement, Dr. Patrick J. Doyle has remained in the background. He is now writing the history of otolaryngology in Vancouver and the Lower Mainland. Dr. Chee Thong agreed to again resume the position as Director of the Temporal Bone Laboratory and with this position will guide the residents through hands-on experience in temporal bone drilling. Dr. Lillian Wong has returned from her otology fellowship in Nova Scotia to work in Richmond. She joins the on-call group at VGH and has taken on supervising the resident OPD Clinic at VGH.



Dr. Eric Skarsgard, Head

During 2004 the Division has seen major programmatic achievements, including the development of a nationally-unique perioperative service computer simulation tool, and a faculty CIHR operating grant award.

Administration

Dr. Geoff Blair is now in his third year as BC's Children's Hospital (BCCH) Surgeon-In-chief. His vision of improved operational efficiency in perioperative service delivery is beginning to be realized. In a joint venture with Economics faculty from UBC's Sauder School of Business, Dr Blair and Dr Jacques LeBlanc, BCCH cardiac surgeon, have developed a computer simulation tool which uses predictive modelling to assess the implications of changes in scheduling and resourcing on patient flow, bed utilization, and surgical wait lists. This tool is the first of its kind in Canada. The pilot data that it has generated has resulted in a joint-faculty (Medicine and Economics) submission to the CIHR for funds to develop an enhanced simulation tool. This enhanced simulation tool would have broader applicability in modelling the impact of resourcing various areas of health care delivery systems on that system's deliverables as well as on outcomes related specifically to quality of care.

Clinical Services

Excellence in clinical care remains the principle mandate of the Division. In addition to surgical treatment of head and neck, thoracic, digestive, and oncologic disease across the entire pediatric age spectrum, the Division remains active in the treatment of birth defects, traumatic injuries, and vascular access, including extracorporeal membrane oxygenation (ECMO). Expansion continues within our Pediatric Minimally Invasive Surgery (MIS) program. This program performs approximately 150 laparoscopic and thoracoscopic procedures annually, including appendectomy, splenectomy, fundoplication, enteral access, pull-through procedures for Hirschsprung's disease, adrenalectomy, Heller myotomy, thymectomy, lung and mediastinal tumor biopsy and resection, and MIS repair of pectus excavatum. The Division looks forward to upcoming OR renovations which will give us a dedicated "endosuite" for our MIS procedures.

In an effort to operationalize the recommendations of a province-wide review of pediatric surgical services, a joint pediatric ambulatory surgical program between BCCH and Richmond General Hospital will be initiated. In the spring of 2005, BCCH surgeons will begin performing outpatient surgery at Richmond General Hospital. This community partnership will benefit approximately 1000 children and their families annually. This initiative will have children safely treated by pediatric surgeons outside of BCCH and will allow re-allocation of BCCH resources to serve the growing population of tertiary and quaternary care patients.

Teaching

At the undergraduate level, the Division provides almost 100 hours of educational commitment per academic year to the first and second year Problem Based Learning (PBL) tutor blocks, as well as core lectures in the INDE 420 Clinical Skills course. Dr Jim Murphy supervises undergraduate teaching in pediatric general surgery. In 2004 the Division's undergraduate teaching program received the highest student rating of all of the academic Divisions in the Department of Surgery, resulting in H. Rocke Robertson undergraduate teaching awards being given to all four Division members. At the postgraduate level, Dr Eric Webber's expanded leadership role includes his Directorships of both the General Surgery Residency, and the Departmental Postgraduate Education programs.

Dr Blair continues in his role as Director of the two year, Royal College and American Board of Surgery accredited pediatric surgery fellowship program. The 2004 graduating fellow, Dr Fawn Lewis has begun a private practice in Pensacola, Florida. 2005 will see the end of Dr Sonia Butterworth's long UBC matriculation (undergraduate student, medical student, general surgery resident, pediatric surgical fellow). In the summer of 2005, the Butterworth family will be moving to Portland where Sonia will take up private practice in Pediatric Surgery.

Research

Faculty sponsored basic science and clinical research continues in the division of Pediatric General Surgery. Dr Skarsgard's \$136,000 grant from the Cystic Fibrosis Foundation has produced some exciting results in an experimental model of Fetal Gene Therapy. Through a vital research collaboration with William Jia, PhD (Division of Neurosurgery) in the Brain Research Centre at UBC, the project supports a Masters of Science (Surgery) student, Louis Huang. Louis Huang is scheduled to defend his thesis in the spring 2005. This work was awarded a "Best Poster" prize at this past summer's British Association of Pediatric Surgeons' Annual Meeting in Oxford, UK, as well as a Concept Innovations Award from the Department of Surgery.

In June Dr Skarsgard's effort to develop a Canadian Perinatal Surgical Network (CAPSNET) to study outcomes in babies born with congenital diaphragmatic hernia (CDH) and abdominal wall defects was recognized with a \$680,000, 4 year operating grant from the CIHR. This network, which will be the first of its kind in North America, will see standardized pre and postnatal data collection on a national cohort of patients, and should identify best perinatal practice strategies for these medically and surgically complex infants.

Dr Blair was awarded grants by the Royal College of Physicians and Surgeons of Canada to study evolution of technical aptitude in surgery residents during their pediatric surgery rotation, and to develop software and protocols for the "Portfolio-Based Learning" Project.

All told, faculty in the Division of Pediatric General Surgery hold or have grants under funding consideration in excess of \$1.5 M.

The Division is proud of its contributions to the health of children and families in British Columbia. Despite the challenges of ongoing fiscal restraint in health care, we are committed to a vision of: "for care, for quality, for life". In 2005 we are certain that there will be continued improvement in the health and welfare of the future of our province.



Dr. Nick Carr, Head

The Division of Plastic Surgery is an integral clinical service at four University hospital sites including UBC, VGH, St. Paul's Hospital and BC's Children's Hospital. Encompassed within the Division are a wide range of clinical activities comprising a variety of subspecialty areas which include plastic surgery trauma, burn care, paediatric plastic surgery, breast reconstructive surgery, craniofacial surgery, and hand and upper extremity surgery. The Division of Plastic Surgery has an active teaching program with activities at the Undergraduate, Postgraduate and Fellowship levels. Research activity within the Division remains a primarily clinical endeavour. It is anticipated that a Burn and Wound Healing Lab and basic research program will open in 2005.

Administration

Dr. Nicholas Carr is the UBC Division Head. Dr. Patricia Clugston supported by Dr. Peter Lennox managed the Residency Training Program. Dr. Clugston also managed the Fellowship Director position. The Undergraduate Program Director's position is held by Dr. Peter Lennox. Maureen Berard is the Divisional secretary.

Hospital Headships are Dr. Kevin Bush at St. Paul's Hospital and Dr. Douglas J. Courtemanche at BC's Children's. The VGH site Director is Dr. Erin Brown. Dr. Peter Lennox holds the position of Director of Surgical Services at the UBC site. Dr. Jim Boyle continues as the Burn Unit Medical Director. Dr. Erin Brown has taken over the position of the Director of the Research Committee within the Division of Plastic Surgery.

Clinical Services

The Division of Plastic Surgery continues to be a very busy clinical service providing emergency plastic surgery care as well as a wide variety of reconstructive plastic surgery services. The Division's goal of achieving a secure funded arrangement to support clinical activity appears to be closer. It is anticipated that this will increase the ability to coordinate activities within the UBC Division such that subspecialties in Plastic Surgery will be promoted. This will bring anticipated benefits to programs such as Breast Reconstructive Surgery and Craniofacial Surgery.

Teaching

The Undergraduate Program in Plastic Surgery remains a very popular and well-subscribed service for all medical students. The Postgraduate Residency Training Program has expanded significantly. Dr. Steve Meredith, a graduate of UBC Medical School became the RI in July 2004. The normal quota of 7 Plastic Surgery residents has risen to 9 with the acquisition of Dr. Sheina Macadam who transferred as an R.III from University of Alberta beginning in July and Dr. Rebecca Morley who transferred as R.III from the Otolaryngology Program at UBC, also beginning in July 2004. The Residency Program graduated three residents in 2004. Dr. Colleen McCarthy is pursuing a two year Clinical Research Fellowship at Memorial Sloan Kettering Cancer Centre with a focus on Microvascular and Breast Reconstruction, as well as a Masters in Biostatistics for Clinical Research at Columbia University. Dr. Catriona Lawlor is pursuing a six-month Breast Reconstruction Surgery Fellowship to be followed by a six month Craniofacial Fellowship at St. Mike's Hospital in Toronto. Dr. Cameron Bowman is undertaking a combination of Fellowship experiences including a six-month Fellowship in Sexual Reassignment Surgery and Breast Reconstructive Surgery in Gent, Belgium followed by additional reconstructive surgery experience in Grand Rapids, Michigan.

The Fellowship Training Program remains active. Dr. Colin Morrison from Dublin, Ireland spent 10 months as the Breast Reconstructive and Clinical Microsurgery Fellow. Dr. Morrison has found his time beneficial to the degree that he intends to return for an additional period of time in Vancouver in 2005. Dr. Robert Shenker from the University of Toronto joined us as the Breast Reconstructive Surgery Fellow from July 1st to December 31st, 2004.

Two excellent Visiting Professorships were held in 2004. The 22nd Annual UBC Division of Plastic Surgery Residents' Day was held on April 30th with Visiting Professor, Dr. Malcom Lesavoy, Clinical Professor, Division of Plastic and Reconstructive Surgery, UCLA School of Medicine. Dr. Lesavoy gave 3 excellent talks on nasal reconstructive, chest wall reconstruction and scalp wall reconstruction. The fall Visiting Professorship was held by Dr. Gary Burget from Chicago who, on November 4th, spoke on Basic Concepts for Nasal Aesthetic Reconstruction and Microvascular Free Flaps for Aesthetic Facial Reconstruction.

Research

The Research Division for Plastic Surgery continues to evolve and grow. The role of Research Director has been assumed by Dr. Erin Brown who is amply qualified for this position by virtue of his Ph.D in Neurosciences together with Postgraduate training in Plastic Surgery in the area of Hand and Microsurgical Reconstructive Surgery. Wendy Cannon, our Research Assistant, continues to be active particularly in supporting undergraduate students. Many of these students have been successful in presenting papers, posters and abstracts at a variety of meetings.

Dr. Cam Bowman, graduating senior resident won the Residents' Corner Best Poster Award at the Canadian Society of Plastic Surgeons meeting held in June in Hamilton, Ontario for his educational video - Breast Reconstruction Using the TRAM Flap.

The most exciting development in the Research Section is the pending recruitment of a world-class scientist in the area of Burn and Wound Healing research. The necessary lab space to accommodate this scientist is ready to go and has been generously funded by the B.C. Professional Fire Fighters' Burn Fund.

The Division of Plastic Surgery is entering an exciting phase of its evolution. It is anticipated that within the next year there will be reorganization possible between the various campuses that will foster development of subspecialty Plastic Surgery programs. Together with this we expect the arrival of basic science program centered in a new Wound Healing Lab.

RADIATION ONCOLOGY AND DEVELOPMENTAL RADIOTHERAPEUTICS



Dr. Tom Keane, Head

The Division is the academic home for all radiation oncologists in the Province of British Columbia who work at the BC Cancer Agency (BCCA) in the Provincial Radiation Therapy Program. The members of the Division are distributed across four cancer centres in British Columbia; Vancouver, Surrey, Victoria and Kelowna. Radiation Oncology is one of the largest divisions within the Department of Surgery. In 2004 the title of the division was changed from Radiation Oncology to Radiation Oncology and Developmental Radiotherapeutics. This change was made to recognize the significant activity by faculty in research and development of the field of applied radiotherapeutics, and also to provide a suitable academic home for some 20 PhD medical physicists who work closely with radiation oncologists at BCCA and contribute significantly to research and teaching within the Division.

Administration

The Division is housed entirely within the BCCA administrative structure. Dr. Keane, as the Division Head, is also the Provincial Program Leader in Radiation Therapy and Professional Practice Leader for the BCCA. He and Dr. Frances Wong in Surrey, Dr. Randall Fairey in Kelowna and Dr. Ivo Olivotto in Victoria meet on a regular basis and oversee the activities of the Division in each of the cancer centre. Ms. Susan Broadbear is the Divisional secretary.

Clinical Services

Members of the Division provide all radiation treatment services in the Province. In addition to radiation treatment services, radiation oncologists provide consultative services in 10 consultative clinics in peripheral hospitals in the province.

BC has the largest prostate brachytherapy program in Canada, which serves as an excellent vehicle for clinical and translational research. Clinical service continues to expand at the rate of about 3% annually and members of the division anticipate a fifth cancer centre to be opened in Abbotsford in 2008.

Teaching

Administration: The Divisions teaching efforts are lead by Dr. Mira Keyes, Residency Training Director and Dr. Graeme Duncan, Undergraduate Education Program Director. There is an active clinical fellowship program led by Dr. Peter Lim.

Undergraduate Education: The Division has consistently shouldered a large responsibility for undergraduate teaching. Despite the fact that the faculty is spread across four centres in the province, all staff participates in undergraduate teaching to some extent, by traveling to Vancouver. Teaching evaluations have consistently demonstrated high levels of satisfaction from undergraduates with regard to their teaching experience. The recent expansion of the UBC medical school has been warmly welcomed by faculty. Staff at the Vancouver Island Cancer Centre are now very actively involved on the Victoria campus.

Postgraduate Education: The Division is primarily involved in radiation oncology training and has an excellent success rate in the Royal College exams. There is a process in place for evaluating faculty postgraduate teaching and an appropriate feedback mechanism to individual staff through the Division Head.

Clinical Fellowship Program: The Division receives fellowship application each year primarily from outside Canada, and most notably from the United Kingdom and Australia. Three or four fellowship positions are funded annually. The fellowship experience is well regarded and is an integral part of the Division's research program

Research

The members of the Division in all four cancer centres are full time clinicians and as a result their research is primarily clinical, translational or epidemiological. Division members are principle investigators in many national and international clinical trials. In addition to clinical studies, there is strong collaboration with the basic scientists at the BC Cancer Research Centre, with continuing excellent work in the areas of tumor hypoxia with the Department of Medical Biophysics, and also with the Department of Cancer Endocrinology, particularly in the area of prostate cancer.

Strategic Initiatives

The Division of Radiation Oncology also plans to interact more strongly with the cancer control strategy group at the BC Cancer Agency. This group which encompasses both clinical epidemiology and screening and prevention programs, provides significant opportunity for health outcomes research, linked to the Division's clinical programs.

Staff at the Vancouver Cancer Centre have unique opportunities to collaborate in both translational and fundamental research with the scientific staff of the BCCA working at the BC Cancer Research Centre, adjacent to the Vancouver clinic. There is an internationally recognized genome science centre onsite which offers some unique opportunities in molecular oncology research as it applies to radiation therapy. The major opportunities in this regard relate to the application of clinical radiobiology at the molecular level.

New Faculty and Promotions

Dr. Anand Karvat joined the Fraser Valley Cancer Centre staff as a Clinical Instructor. Dr. Pamela Leco (Clinical Instructor) and Dr. Ross Halperin (Clinical Assistant Professor) are now on staff at the Kelowna Cancer Centre. Eric Berthelet was promoted to Clinical Associate Professor; Pauline Truong, to Clinical Associate Professor; and Elaine Wai, Clinical Assistant Professor. Ivo Olivotto was promoted to Professor.

THORACIC SURGERY



Dr. Richard Finley, Head

The Division of Thoracic Surgery includes Clinical Services at the Vancouver General Hospital (VGH) and the British Columbia Cancer Agency. The Division has the leading thoracic surgery program in Western Canada and is recognized nationally and internationally for its clinical excellence, postgraduate education program and innovative research. There are presently two fulltime, clinical faculty and two research assistants

Administration

Dr. Richard Finley is a Professor and the UBC Division Head. Dr. Kenneth Evans is a Clinical Professor and the VGH Division Head. Dr. Evans is also the Director of the Thoracic Surgery Residency training program. Dr. John Yee is an Assistant Professor and the Head of the UBC and BC Lung Transplant Program. The work of the Division is greatly facilitated by Gail Newell, UBC Division, and Joanne Clifton, UBC Department of Surgery Research Office, and by Gail Elliott, Pat Wickson and Elizabeth Findlay in the clinical offices.

Clinical Services

The clinical activity of the Division of Thoracic Surgery is located in the Chest Surgery Centre at the Vancouver General Hospital. The clinical program provides secondary and tertiary care for the Vancouver Coastal Health Authority and quaternary subspecialty programs are provided on a Province wide basis. The members of the Division of Thoracic Surgery care for over 2,000 patients annually. The Division provides a wide range of thoracic surgery services including the care of patients with lung and esophageal cancer, minimally invasive foregut and pulmonary surgery, thoracic trauma and patients with respiratory failure including lung transplantation. The Chest Surgery Centre is led with the help of Lynn Paddon and Betty Ross. The Thoracic Surgery program is fully integrated with respiratory medicine program at the Vancouver General Hospital. This amalgamation has provided outstanding quality of patient care with very low morbidity and mortality for our patients.

Dr. Ken Evans is the President of the BC Thoracic Surgical Association. This Association, along with the help of Brian Schmidt (Provincial Health Services Authority) and Dr. Mike Hummer (Thoracic Surgeon from Kelowna); planned, organized and implemented the Provincial Thoracic Surgery Program

at the Vancouver General Hospital, Kelowna General Hospital, Royal Jubilee Hospital, and the Surrey Memorial Hospital. The development of critical masses of thoracic surgeons, anesthesia, pathology, radiology, respiratory and allied health workers will continue to improve the quality of care and cost effectiveness of thoracic surgery care in British Columbia.

Teaching

The Thoracic Surgery Residency Training Program is fully accredited by the Royal College of Physicians and Surgeons of Canada. Clinical training includes inpatient and ambulatory experience. The academic programs include: thoracic surgery rounds, professors rounds, quality assurance and improvement rounds, and interdisciplinary respiratory rounds. The thoracic surgery postgraduate course consists of weekly seminars and journal clubs. The program graduates one thoracic surgeon every two years. There have been no failures by our residents taking the Royal College of Physicians and Surgeons of Canada Fellowship exams.

Dr. James Bond graduated as Chief Resident in June 2004. During his residency Dr. Bond received his Masters of Education from the University of British Columbia. Dr. Bond is a very competent clinical surgeon and educator. He has taken a position as Head of the Thoracic Surgery program at the Surrey Memorial Hospital and the Fraser Valley Cancer Centre.

Residents entering the Thoracic Surgery Fellowship Program were Dr. Sharon Ong from the University of Ottawa and Dr. Ayman Al-Sulaimani from Dalhousie. Dr. Al-Sulaimani is presently taking course work towards a Master's degree in Health Sciences, and Dr. Ong plans to take a Master's of Adult Education.

Each of the members of the Division of Thoracic Surgery are involved in Undergraduate Medical Education. This involvement includes the respiratory module in second year, the third year clerkship, fourth year elective and the clinical professors rounds each week.

Recently the Division of Thoracic Surgery has committed to developing new knowledge that improves the care of their patients. Present research initiatives include the development of a molecular marker for the diagnosis, staging and treatment of early lung cancer (John Yee). The development of image guided pulmonary surgery in collaboration of the Departments of Radiology and Pathology (Richard Finley), the use of quality of life and economic tools to evaluate new emerging technology in minimally invasive thoracic surgery. Peer reviewed funding has generated over \$200,000 in research funds this year. The Division of Thoracic Surgery was awarded both the "Best Resident Research" prize and the "Best Faculty prize at the Annual Department of Surgery Research Day in 2004.

People

Dr. John Yee was recruited from the Division of Thoracic Surgery, University of Michigan to the University of British Columbia. Since his arrival, Dr. Yee has provided strong leadership in the Lung Transplantation program as well as in the area of early detection and treatment of lung cancer. Dr. Yee is a graduate of the McGill University Medical School where he completed his training in General Surgery. He undertook graduate fellowship training in Cardiothoracic Surgery at the University of Michigan and spent a one year fellowship in thoracic surgery at the University of British Columbia after which he returned to McGill University. He was recruited back to Michigan. In Michigan, he established himself as an outstanding esophageal and pulmonary surgeon and directed the lung transplant program. Dr. Ken Evans is the President of the BC Thoracic Surgery Association. Dr. Richard Finley continues as a Regent of the American College of Surgeons. He is both the Vice-President of the American Surgical Association 2004 and the recently elected President of the Canadian Association of Thoracic Surgeons.



Dr. Larry Goldenberg, Head

In the year 2004, the Division of Urology continued to broaden its base and extend its scope of excellence in patient care, research and teaching. The Division has 16 full-time faculty including one distinguished university scholar, two tenured professors and 13 grant-tenured faculty. The Division is pleased that its number of clinical track faculty members has increased this past year as members of the community have joined in the expanded medical school system.

In 2004 the Division of Urology remains fiscally and academically sound and moved forward into exciting new opportunities. The granting of \$40 million by Canada Foundation for Innovation (CFI) and the Research Hospital Fund (RHF) will see the growth of basic and translational science within a new research building to be constructed adjacent to the Jack Bell Research Centre. The Bladder Care Centre became a reality in 2004 with the completion of renovations at UBC Hospital. Under the direction of Dr. Lynn Stothers, the unit is now fully staffed and equipped and ready to move forward in providing state of the art bladder care to the people of our Province. Significant research funding and exciting basic discoveries are sure to turn the Bladder Care Centre into a true Centre of Excellence within the Department.

As we move into 2005, the Division of Urology is positioned to continue adding academic value to the Department of Surgery, UBC.

Administration

Under the leadership of Dr. Larry Goldenberg, the Division of Urology continues to develop along programmatic lines and raise funds towards the establishment of endowed chairs and purchase of very much needed equipment. Members of the division are involved with many university and hospital committees. At the national level, Dr. Martin Gleave remains Chair of the Canadian Urological Oncology Group as well as the GU Section of the National Cancer Institute of Canada. Dr. Larry Goldenberg is now Past-President of the Canadian Urological Association and Active President of the Western Section, American Urological Association. Dr. Andrew MacNeily is an active member of the Royal College Examination Board in Urology. He is also a Nominating Committee member of the Canadian Urological Association, and Secretary Treasurer of the Pediatric Urologists of Canada. Dr. MacNeily, in 2003-2004, was President of the Canadian Academy of Urological Surgeons. In 2004, Dr. Mark Nigro was President of the Northwest Urological Society. Dr. Victor Chow served on the

Canadian Urological Association, Organizing Committee, Whistler, BC, 2004 and the Moderator of the Infertility/E.D Poster Session. Dr. Chow was also on the Northwest Urological Society, Executive Committee, Vancouver, BC, 2004. Dr. Bill Gourlay continues as an active member of the Royal College Examination Board in Urology. Dr. Stothers continues to serve as a member of Methodology Committee, 1st Annual Consensus on Incontinence, World Health Organisation and on the US National Institutes of Health Urologic Diseases in America Project. Dr. Joel Teichman continues to serve on the Young Urologists Committee of the American Urological Association.

Clinical Services

The members of the Division see many thousands of patients each year in the affiliated teaching hospitals. Our faculty provides care for adults and children and are steadily shifting towards directed subspecialties or programmatic care. The Division continues to move forward in development of dedicated Centres of Excellence in bladder care, stone treatment, laparoscopy, renal transplantation, andrology and oncology. Planning is now underway to develop a robotic surgical program within the Division, with particular emphasis on robotic laparoscopic prostatectomy and living renal donor nephrectomy.

Teaching

The members of the Division continue to be active teachers in both basic science and the undergraduate medical education program. Our scientists are actively teaching in pathology, medical genetics, transplant biology, chemistry, endocrine/metabolism, animal models and surgery. Dr. John Masterson has assumed a significant role in the problem based learning teaching program, and Dr. Ercole Leone is doing an excellent job as Director of Undergraduate Training. At the postgraduate level, Dr. MacNeily continues to be considered one of the leaders in education. This was acknowledged this year by the Association for Surgical Education which named him Outstanding Teacher 2004. His T-Res program is being adopted by many Canadian medical specialty programs.

The two graduates in 2004 were Dr. Chris Nguan and Dr. Tony Luongo. Chris is doing a transplant fellowship at the University of Western Ontario and Tony is a uro-oncology fellowship at the MD Anderson Cancer Centre in Houston. New residents to the program this academic year include Andrew Marks, Geoff Gotto and Blayne Welk.

Continuing Health Education is an unending process, and the Division is committed to the ongoing education of clinical practitioners at both the primary care and specialty levels. With this in mind, the Urology Update 2004 was highly successful. In addition, the Division hosted 15 visiting professors who

provided our faculty, resident staff and community colleagues with a diverse flavour of conceptual urology from across North America.

Research Activities

Over the past year the Division has continued to witness exciting discoveries, promising new research and national and international recognition for its basic and clinical research work. Our 13 research scientists and surgeon-scientists have expertise ranging from molecular biology to psycho-social research, pharmacokinetics, cell-signaling, erectile dysfunction, laser energy, infrared diagnostics and physics. The Division is developing specialized areas of interest in biophotonics and robotic surgery.

One of the most exciting events of 2004 was the announcement that the Canada Foundation for Innovation awarded the Prostate Centre a grant of \$7.6 million for development of PC-TRIADD: The Prostate Centre's Translational Research Initiative for Accelerated Discovery and Development. This project involves an outstanding team of scientists and clinicians, lead by Drs. Martin Gleave and Colleen Nelson, who will use the most sophisticated state of the art tools in a series of projects that are geared towards understanding the molecular and genetics mechanisms responsible for prostate disease and, ultimately, use that information to develop therapies for improved treatments. The grant will provide 40% of the funding necessary for this program, which totals \$19.8 million with a balance coming from the BC Knowledge Development Fund, industrial partners and private donors. Also in 2004, the Michael Smith Foundation awarded us a total of \$1,000,000 dollars for salary support as an adjunct to the CFI grant. Drs. Gleave and Nelson followed up this great achievement with another grant success of \$19.2 million through the Research Hospital Fund. This funding will build an addition on to the Jack Bell Research Centre and allow further expansion of our programs. The Division is raising additional funds to incorporate members of all of its research teams into this medical research facility.

In the Bladder Care Centre, Dr. Lynn Stothers has also had exciting success with her research. She has received over \$1.5 million in research funds to study cranberries in the prevention and treatment of bladder disorders. She has developed non-invasive new technologies to study the bladder which are now held in patent through the UILO office.

Dr. Joel Teichman continues to move forward in a determined manner to develop a multidisciplinary and transdisciplinary biophotonics unit at Providence Health Care. Our faculty direct research and testing in areas of male reproduction, bladder cancer, kidney cancer, benign prostate enlargement, neuro-urology, stone disease, urodynamics and renal transplantation.

In 2005, we hope to establish a robotics program which will enable associations with industry for future research and development. We also hope to leverage this program into significant recruitment successes.

Academic Highlights

Dr. Andrew MacNeily received the esteemed Association for Surgical Education (ASE) Outstanding Teacher Award 2004.

Dr. Martin Gleave won the prestigious Don Coffey Physician-Scientist Award from the Prostate Cancer Foundation, 2004. He also won the Ernst and Young Entrepreneur of the Year, 2004, Finalist, Life Sciences award.

The Northwest Urological meeting was held in Vancouver this year. There was a good showing from our faculty and residents. Dr. Victor Chow claimed the first prize in the research category for his presentation. Dr. Mike Eng won third prize in the resident presentation category. We were proud of all their hard work and excellent presentations.

In the Vancouver Coastal Health Authority realm, Dr. Gleave received the People's Choice Award for the Medical Poster Boy Award for Media Exposure 2004, VCHA Medical/Dental Staff, Vancouver, BC and Dr. Goldenberg received the People's Choice Award for the Come-Back Kid 2004, VCHA Medical/Dental Staff, Vancouver, BC.

Dr. Joyce Davison won a research scientist award from the Canadian Cancer Society for her ongoing excellent work in the study of patient education. Dr. Emma Guns received the Hjalmar Johnson New Investigator award from the UBC Department of Surgery as well as an "In it for Life" scholarship from the Vancouver Hospital Foundation and the James Goebel Grand Prize for best poster at the American Urological Association annual meeting. Dr. Lynn Stothers was nominated for a Women of Distinction Award by the YWCA and also won the first prize for basic science research at the Northwest Urological Society meeting. At the Canadian Urological Association Dr. Palma Rocchi, a postdoctoral fellow at the Prostate Centre, won the basic science essay award for 2004. Dr. Herman Kwan, working with Dr. Victor Chow, won the resident research award at the Canadian Fertility Andrology Society meeting. Dr. Kevin Morrison won first prize clinical research at the Canadian Urological Association. Dr. Dan Rapoport received first prize for Resident Research at the Western Section American Urological Association, Aug 2004.

In 2004 the Division of Urology welcomed back Dr. Kourosh Afshar after a two year fellowship in Pediatric Urology at the University of Toronto. Currently he is the only urologist performing advanced pediatric laparoscopic procedures in British Columbia. He has special interest in genital reconstruction and pediatric renal transplant. Dr. Afshar has a Diploma in Clinical Epidemiology from the University of Toronto. He is the Director of Research in the Division of Urology

at the BC Children’s Hospital. His main research interest is in surgical clinical trials. Dr. Afshar won a Canadian Urological Association scholarship, which is a peer-reviewed competition for young scholars beginning their careers in Canadian medical schools.

Visiting Professors

The Division has hosted many visiting professors over the past academic year.

Visiting Professor	Date	Affiliation
Dr. Kourosh Afshar	Jan 6-9, 2004	University of Toronto, Toronto, Ontario
Dr. Richard Baverstock	Feb 17-18, 2004	University of Toronto, Toronto, Ontario
Dr. Keith F. Rourke	Mar 2-3, 2004	University of Alberta, Edmonton, Alberta
Dr. Claus Roehrborn	Mar 9-12, 2004	University of Texas, Southwestern Medical School, Dallas, TX
Dr. Peter Scardino	Mar 16-17, 2004	Memorial Sloan-Kettering Cancer Centre, New York, NY
Dr. Victor Nitti	Apr 27-28, 2004	New York University, New York, NY
Dr. Ralph V. Clayman	Jun 15-16, 2004	University of California-Irvine, Irvine, California
Dr. Dicken Ko	Jun 25, 2004	Boston Medical School, Boston, MA
Dr. Glenn M. Preminger	Aug 17-18, 2004	Duke University, North Carolina
Dr. Eric A. Klein	Aug 31 – Sep 1, 2004	Cleveland, Ohio
Dr. Ben Chew	Sep 7-8, 2004	University of Toronto, Toronto, Ontario
Dr. Anil Kapoor	Sep 21-22, 2004	McMaster University, Hamilton, Ontario
Dr. Ari Beldegrun	Oct 12-13, 2004	University of California in LA, Los Angeles, California

Visiting Professor	Date	Affiliation
Dr. Patrick Luke	Oct 19-20, 2004	University of Western Ontario, London, ON
Dr. Mark P. Cain	Dec 7-8, 2004	Indiana University, Indianapolis, IN

People

New Appointments: Dr. Ercole Leone was appointed in January 2004 and is serving as Director of Undergraduate Education in the Division of Urology. The Division of Urology also welcomed Dr. Ken Poon and Dr. Geoff Palmer as Clinical Instructors. Dr. Poon is practicing in Richmond and Dr. Palmer is practicing in Prince George. These enthusiastic urologists will be participating in resident education and the medical school expansion within the Division of Urology.

Promotions: Dr. Lynn Stothers and Dr. Colleen Nelson were promoted to Associate Professor in 2004.

VASCULAR SURGERY



Dr. David Taylor, Head

The Division consists of clinical vascular surgery services at St. Paul's Hospital (SPH) and Vancouver General Hospital (VGH). It has well established and excellent postgraduate and undergraduate education programs and over the next year will be addressing the need for an increased undergraduate teaching program with the expansion of the UBC Medical School. The Division has remained productive in clinical research and its members have presented widely at both national and international meetings.

Administration

Dr. David Taylor is the UBC and VGH Division Head. He has been the Head for the past 12 years but will be stepping down and going on sabbatical starting March 2005. Dr. Lynn Doyle will be the Acting Head until a new permanent Head is appointed. Dr. Jock Reid is the SPH Division Head. Dr. Jerry Chen is the Director of the Vascular Surgery Postgraduate Training Program, and Dr. Anthony Salvian is the Director of Vascular Surgery Undergraduate Education. Dr. York Hsiang is the Director of Surgical Research and the Research Director for the Division.

Clinical Services

The Division of Vascular Surgery provides comprehensive clinical services at St. Paul's Hospital (SPH) and Vancouver General Hospital (SPH) in Vancouver. This includes treatment of aortic aneurysms, atherosclerotic occlusive disease of the limbs and visceral arteries, treatment of carotid diseases, treatment of venous diseases and management of vascular access for hemodialysis and chemotherapy. The Division's clinical activities include acting as the main referral centres for vascular surgery in British Columbia. The Division also plays a role in regional and provincial planning of vascular surgery services.

The Division continues to develop the endoluminal stent graft program for treatment of abdominal aortic aneurysms which is becoming increasingly accepted as a useful method of treating some abdominal aortic aneurysms that involves a minimally invasive endovascular approach. The Division at VGH has recently had their carotid artery endarterectomy results reviewed by the National Institutes of Health (NIH) for participation in the CREST trial. The Division was found to have a perioperative complication and death rate of approximately 2%. The Division has developed evidence based benchmarks for waiting times to operative care for its major operative procedures and

regularly tracks its ability to meet those benchmark standards. In the past year, over 1,000 major operative procedures were done by the Vascular Surgery Services at VGH and SPH.

Teaching

The Division of Vascular Surgery continues to be active in teaching both undergraduate and postgraduate students. Many surgical services rotate their residents through the Division of Vascular Surgery during their core years for both vascular surgery knowledge and surgical experience.

The Division provides undergraduate education in vascular surgery and vascular disease. The Division provides tutors for problem based learning in first and second year on an ad hoc bases; provides clinical skills teaching, seminars and practical sessions for second year; and teaches scheduled seminars and takes part in the oral examinations for third year. Clerkship rotations in vascular surgery are provided to third and fourth year students. The Division continues to develop web-based teaching for third year under the direction of Dr. Tony Salvian, Vascular Surgery Undergraduate Director, with Dr. David Taylor. The Division is formally reviewed for its teaching activities on a regular basis and receives good reviews.

The University of British Columbia, Division of Vascular Surgery has an accredited postgraduate training program. The residency program trains one or two residents per year in a two-year training program. In general, the residency education involves 15 months of clinical vascular surgery, three months of endovascular training and six months of directed research. The residents are actively involved in clinical research during their research rotation and during their clinical vascular surgery training and have both published and presented extensively. Fellows in the program in 2004 were Drs Matt Smith, Dhafer Kamal, Joel Gagnon, and Mohammed Al-Assisi. Dr. Matt Smith has been successful in his Royal College examinations for certification and will be taking up an academic practice in Calgary Alberta.

The Division is actively working on increasing the level of expertise in endovascular procedure among its division members. Dr. York Hsiang and Dr. Jerry Chen will be spending three month Fellowships in endovascular training and bringing this expertise back to the Division.

Research

The Division of Vascular Surgery remains productive in clinical research and presents widely at both national and international meetings. Dr.. Hsiang remains productive in both clinical and basic science research.

Recruitment

Over the next few years, the undergraduate medical school class will increase from 120 to 256 students. This will place a strain on the clinical teachers within all divisions, including vascular surgery. To this end, the Division will be recruiting clinical teachers for the Northern BC Medical Program in Prince George and the Vancouver Island Program in Victoria BC. In addition, the Division will be recruiting clinical vascular surgeons as clinical instructors in surrounding communities to provide a larger manpower base for clinical teaching.

People

Members of the Division not only make important contributions within the University and Vancouver Hospital but also in the greater surgical community. Dr. David Taylor has been the Chair of the Royal College of Physicians and Surgeons exam board in Vascular Surgery. Dr. Jerry Chen is the Chairman of the Education Committee for the Canadian Society for Vascular Surgery. Dr. Lynn Doyle has been the President of the BC Medical Association and the Division appreciates her efforts on behalf of all the physicians in the Province of British Columbia. Dr. York Hsiang is President of the Pacific Northwest Vascular Society. Dr. Tony Salvian is the Head of the Section of Vascular Surgery for the British Columbia Medical Association and is President of the Canadian Society for Vascular Surgery. Dr. Jock Reid is the Chair of the Vascular Surgery subgroup for the Vancouver Coastal Region.

UNDERGRADUATE EDUCATION PROGRAM

Dr. Barry Woodhurst, Director

The Undergraduate Program Y3 and Y4 is directed by W.B. Woodhurst, Clinical Professor, Division of Neurosurgery. Maj-Britt Hedberg continues as the Undergraduate Program Administrator, and Tricia Smersch Raeburn as the Secretary for the Undergraduate Program.

The Undergraduate Curriculum Committee meets every 1-2 months to discuss overall issues i.e. curriculum development and faculty and student issues. Representatives from each division and program year and students from each year contribute to this process.

The Undergraduate Program in the Department of Surgery continues to expand in scope both in curriculum content and geographically. The expansion of the General Surgery clerkship to the Richmond General Hospital remains successful and an excellent model for preceptored undergraduate education. The Royal Columbian Hospital accepts two students at a time for General Surgery with continued excellent reviews. There continues to be a lot of competition for the teaching sites in the VGH and St. Paul's hospitals, particularly when external students come for visiting externships. The other surgical specialty rotations continue to be very active with only a few sites and services underutilized. Professor's rounds, a noon-hour, small group clinical teaching program, have been continued for General Surgery, Neurosurgery, Vascular and Thoracic Surgery.

The Department of Surgery Undergraduate Programs uses learning modules posted on the MEDICOL site. These are under 'course handouts' and serve as background information for the year's seminar series. Thus, we aim to standardize the learning opportunities of the students no matter where they are and to provide them with a background to approach the seminar series as an interactive learning method.

The Basic Surgical Techniques (BST) course remains an important introduction to the Department of Surgery third year clinical clerkship activities. It is organized by Dr. Qayumi and is now entirely dry lab experience in CESEI. BST teaching by Emeritus Faculty continues to be extremely well received by the students. The curriculum 2005 will offer BST I Basic Suturing and Knot Tying near the end of Y2. This is designed to better equip students for Rural Family Practice P3.

The curriculum development for the reconfiguration of fourth year proceeds. This is a major opportunity for the Department of Surgery to develop new elective and selective offerings. Many of them could be multi-disciplinary and appeal to a wide range of students, not only those interested in a career in Surgery.

The student and program evaluation tools have improved over the last two years. The National Board of Medical Examiners shelf exam is the standard exam after Year 3 Clerkship and is proving a good objective tool. The oral examination process has been further refined in conjunction with Dr. David Fairholm in the UBC Faculty Development office.

The new WebEval, a web-based product developed locally by Dr. Ric Arseneau at St. Paul's, is used for all evaluation of rotations and faculty. This has given the first overview evaluation of these rotations with reasonable indices comparing different sites and services. It highlights the very high degree of acceptance of the students of the clerkship experiences and their high regard for the clinical teachers and the surgery seminar series. WebEval is also used for evaluation of students and Faculty for Year 4 electives and selectives.

The quantity of teaching in the Undergraduate Program is quite prodigious. In Years 1 and 2, Surgery Faculty contributed to PBL as Tutors, in lectures, in Clinical Skills teaching, and in Doctor-Patient & Society. In Year 3, the seminar series plus Basic Surgical Techniques requires major input. Bedside clinics and ward and office-based teaching consume large numbers of hours; Year 4, bedside and office teaching, a lesser number of hours. Overall, approximately 70%+ of Undergraduate teaching is provided by clinical faculty.

The expansion plans for the Island Medical Program (Victoria), and the Northern Medical Program (Prince George) are proceeding well. The Prince George faculty, though small, is robust and enthusiastic. Successful completion of a pilot rotation for three Y3 surgery students in early 2004 reassures all that good clinical education experiences are available. The seminar videoconference process received mixed reviews, and improvements in technology are underway. Prince George continues to host a steady stream of Year 4 elective/selective students during P5 "the selective-elective block" in Y4. These senior student rotations in Prince George continue to be very well received by the students.

The Island Medical Program in Victoria will be hosting a pilot clerkship in General Surgery, Plastics and Otolaryngology in March and April 2005. It is anticipated that further development of the Island Medical Program facilities and definitive development of faculty and facilities can proceed well in 2005.

Awards

In 2004 the Rock Robertson Award for Undergraduate Teaching was presented to the Pediatric General Surgery Faculty at BC's Children's Hospital, Drs Goeff Blair, James Murphy, Eric Skarsgard and Eric Webber

POSTGRADUATE EDUCATION PROGRAM

Dr. Eric Webber, Director

Postgraduate Education is an area of emphasis and strength in the Department of Surgery. The Department has eleven specialty and subspecialty programs recognized by the Royal College of Physicians and Surgeons of Canada. Currently there are 105 residents enrolled in these training programs

Administration

Dr. Eric Webber is the Director of Postgraduate Education in the Department of Surgery; he is assisted in this activity by Ms. Shurli Chan, Undergraduate Program Assistant. .

Residency Programs and Program Directors

The following Divisions have residency programs.

Program	Program Director
Cardiovascular Surgery	Dr. Shahzad Karim
Emergency Medicine	Dr. Brian Chung
General Surgery	Dr. Eric Webber
Neurosurgery	Dr. Thomas Zwimpfer
Otolaryngology	Dr. Paul Moxham
Pediatric General Surgery*	Dr. Geoffrey Blair
Plastic Surgery	Dr. Patricia Clugston
Radiation Oncology	Dr. Mira Keyes
Thoracic Surgery*	Dr. Kenneth Evans
Urology	Dr. Andrew MacNeily
Vascular Surgery*	Dr. Jerry Chen

* Subspecialty program requiring certification in a primary specialty.

All of the above programs currently enjoy the status of Full Approval from the Accreditation Section of the Royal College of Physicians and Surgeons of Canada. The next Royal College accreditation survey will occur in 2007.

Graduating Residents

The following residents completed their training in 2004.

Program	Graduating Resident
Cardiovascular Surgery	Jamil Bashir
	Richard Cook
Emergency Medicine	Afshin Khazei
General Surgery	Mary Brindle
	Laura July
	Adam Meneghetti
	Jean Oosthuizen
Neurosurgery	Navraj Heran
Otolaryngology	Patricia Lee
	Noah Massa
Pediatric General Surgery	Florence (Fawn) Lewis
Plastic Surgery	Cameron Bowman
	Catriona Lawlor
	Colleen McCarthy
Radiation Oncology	Hans Chung
	Valeri Goutsouliak
	Elaine Karol Wong
Thoracic Surgery	James Bond
Urology	Tony Luongo
	Christopher Nguan
Vascular Surgery	Matthew Smith

All of the residents completing their primary specialties were successful on the Certifying Examination of the Royal College of Physicians and Surgeons of Canada. The residents completing subspecialty programs will take their exams in the fall of 2004.

Postgraduate Awards

The Department of Surgery awards the I.B. Holubitsky Memorial Award to the resident who demonstrates the highest qualities of surgical excellence. In 2004 this was awarded to Dr. Adam Meneghetti from General Surgery. The William Knox Award, also given to an outstanding resident, was awarded to Dr. Tony Luongo from Urology.

There are also awards for outstanding postgraduate teaching. In 2004 the A.D. Forward Postgraduate Teaching Award was awarded to Dr. Kenneth Evans from Thoracic Surgery and the resident prize was awarded to Dr. Mary Brindle from General Surgery.

Entering Residents

The surgical residency programs at the University of British Columbia continue to be highly sought after by talented candidates from across Canada. Again all of the specialty positions filled in the first round of the CaRMS (Canadian Residency Match Service) match. The following residents commenced their training in the Department of Surgery on July 1, 2004.

Division	Resident	Medical School
Cardiovascular Surgery	Osama Benhameid	Al-Arab Univ., Libya
	Christopher Goddard	Univ. of BC
Emergency Medicine	Andrew Campbell	University of Ottawa
	Ryan Deedo	University of Alberta
	W. Bretton Passi	Queen's University
General Surgery	John Boutros	University of Montreal
	Shaun Deen	University of Alberta
	Mark Dickeson	Memorial University
	Jessica Mills	Univ. of BC
	Jin-Si Pao	University of Toronto
	Madelaine Plourde	University of Ottawa
	Nicole Robbins	Univ. of BC
	Janakie Singham	Queen's University
	Todd Swanson	University of Alberta
	Neurosurgery	Salvatore DiMaio
Otolaryngology	Jon-Ivar Mickelson	University of Calgary
	Kevin Wong	University of Alberta
	Shabir Mia	Natal Univ, S. Africa
Pediatric Gen. Surgery	Ahmed Abdalwahad	Univ. of Manitoba
Plastic Surgery	Steve Meredith	Univ. of BC
	Sheina Macadam	University of Alberta
	Rebecca Morley	Univ. of BC
Radiation Oncology	Nori MacGowan	Univ. of BC
	Stacy Miller	Univ. of BC
Radiation Oncology	David Palma	Univ of West. Ontario
Thoracic Surgery	Sharon Ong	University of Ottawa
	Ayman Al-Sulaimani	Dalhousie University
Urology	Geoffrey Gotto	Univ. of BC
	Andrew Marks	University of Alberta
	Blayne Welk	Univ of West Ontario
Vascular Surgery	Joel Gagnon	Laval University
	Mohammed Al-Assisi	University of Manitoba

Residency Training Sites

The Department of Surgery has partnered with surgeons in all Health Authorities throughout British Columbia to deliver postgraduate education. With the ongoing expansion of the medical school, the Department of Surgery is clearly a leader in developing linkages with clinician educators in a broad range of practice settings. The following hospitals are involved with residency education in the Department of Surgery.

Vancouver Coastal Health Authority

- GF Strong Rehabilitation Centre
- Lion's Gate Hospital
- Mount Saint Joseph Hospital
- St. Paul's Hospital
- The Richmond Hospital
- UBC Hospital
- Vancouver General Hospital

Fraser Health Authority

- Chilliwack General Hospital
- Royal Columbian Hospital
- Surrey Memorial Hospital

Island Health Authority

- Nanaimo Regional General Hospital
- Royal Jubilee Hospital
- Victoria General Hospital

Interior Health Authority

- Cranbrook Regional Hospital
- Kelowna General Hospital
- Vernon Jubilee Hospital

Northern Health Authority

- Prince George Regional Hospital

Provincial Health Authority

- British Columbia Cancer Agency
- Children's and Women's Health Centre of British Columbia

CONTINUING MEDICAL EDUCATION

Dr. Rona Cheifetz, Director

CME has a strong mandate within the Department of Surgery. Each division offers regularly scheduled rounds with both local and invited speakers and Departmental Grand Rounds occur monthly. In addition, in 2004 several special events were sponsored by the Department of Surgery. Divisional and Departmental Rounds are listed on the Departmental website www.surgery.ubc.ca. Activities with invited speakers and other special events in 2004 are included in the following tables:

UBC Department Of Surgery

Date	Visiting Speaker	Topic
Feb 25	Dr. Padraig Warde, Professor, Department of Radiation Oncology, University of Toronto	<i>New Radiation Therapy Technology in the Treatment of Prostate Cancer – Toys for the Boys or Do they Improve Results?</i>
Mar 31	Dr. Vincent Hayward, Associate Professor, Department of Electrical and Computer Engineering, McGill University, Montreal	<i>New Directions for High Fidelity Surgical Simulation with Haptics</i>
Apr 28	Professor Chung-Mao Lo, Professor of Surgery, University of Hong Kong	<i>Improving the Outcome of Hepatic Resection for Hepatocellular Carcinoma</i>
May 26	Dr. John Hunter, Professor and Chair, Department of Surgery, Oregon Health and Science University	<i>The Role of Fundoplication for Gastroesophageal Reflux Disease</i>

Division Of General Surgery

Date	Visiting Speaker	Topic
Mar 10	Dr. Nathaniel Soper, Professor and Vice-Chair Clinical Affairs, Director, Minimally Invasive Surgery, Northwestern University Feinberg School of Medicine, Chicago, Illinois	<i>SAGES and Surgical Education: Assuring that History Does NOT Repeat Itself</i>

Division Of General Surgery (cont'd)

Date	Visiting Speaker	Topic
May 12	Dr. Gerald Fried, Professor of Surgery, McGill University	<i>Skills, Training and Evaluation in Laparoscopic Surgery</i>
Oct 6	Dr. Michael R. Lucey, Hepatologist, Professor of Medicine, University of Wisconsin Medical School	<i>Long Term Outcome after Liver Transplantation</i>

Division of Neurosurgery

Date	Visiting Speaker	Topic
Mar 3	Dr. G. Rees Cosgrove, Associate Professor, Microsurgical Center, Massachusetts General Hospital	<i>Surgery for Intractable Illness</i>
Mar 10	Dr. Garnette Sutherland, Professor of Neurosurgery, University of Calgary and Foothills Medical Centre, Calgary	<i>Intraoperative MRI and Robotics</i>
Mar 10	Dr. Matt Wheatley, MD, PhD, FRCSC, Stereotactic Neurosurgeon, University of Alberta Hospital, Edmonton, AB & Dr. Christopher Honey, Division of Neurosurgery, UBC	<i>Motor Cortex Stimulation</i>
Mar 31	Dr. Jerry Oakes, Department of Pediatric Neurosurgery, Children's Hospital of Alabama, Birmingham	Neurosciences Grand Rounds: <i>Experience with the Pediatric Chiari I Malformation: Pediatric Neurosciences Rounds: Lumps, bumps and holes: a primer on occult spinal dysraphism</i>
Sep 22	Dr. Anthony M. Kaufmann, Associate Professor, University of Manitoba, Winnipeg	<i>Current applications of radiosurgery: our first year of gamma knife experience</i>

Division of Otolaryngology

Date	Visiting Speaker	Topic
Oct 6	Dr. Joseph Dohar, Pediatric Otolaryngologist, Pittsburgh Children's Hospital	<i>Airway Healing</i>

Division of Paediatric General Surgery

Date	Visiting Speaker	Topic
Feb 17	Dr. Marcos Vemon, Costa Rica.	<i>Pediatric Surgery in Costa Rica</i>
Jun 15	Dr. Michael Giacomantonio, Head, Division of General Surgery, IWK Health Centre for Children, Clinical Professor of Surgery, Dalhousie University	<i>Long Term Management of Fecal Incontinence in Children</i>

Division of Plastic Surgery

Date	Visiting Speaker	Topic
Nov 4-5	Dr. Gary Burget, Assistant Clinical Professor, Section of Plastic and Reconstructive Surgery	<i>1) Basic Aesthetic Concepts for Nasal Reconstruction 2) The use of Microvascular Free Flaps for Aesthetic Facial Reconstruction</i>

Division of Urology

Date	Visiting Speaker	Topic
Mar 3	Dr. Keith F. Rourke, Assistant Professor, Division of Urology, University of Alberta, Edmonton	<i>Urethral Stricture Disease: Contemporary Treatment</i>
Mar 10	Dr. Claus Roehrborn, Chair, Department of Urology, University of Texas Southwestern Medical Centre, and Chief, Section of Urology, Dallas VA Medical Centre	<i>A Paradigm Shift in the medical Therapy for BPH</i>
Mar 17	Dr. Peter T. Scardino, Professor, Department of Urology, Weill Medical College of Cornell University and College of Medicine, State University of New York, Head, Prostate Cancer Program, Memorial Sloan-Kettering Cancer Center, New York	<i>Whither Surgery: Will Radical Prostatectomy still be in our Treatment Armamentarium in Ten Years?</i>

Division of Urology (cont'd)

Date	Visiting Speaker	Topic
Apr 28	Dr. Victor W. Nitti, Vice-Chair, Department of Urology, New York University School of Medicine	<i>Surgery for Stress Incontinence: State of the Art 2004</i>
Jun 16	Dr. Ralph V. Clayman, Professor and Chair, Department of Urology, University of California Irvine College of Medicine	<i>Laparoscopic Urology: What's Going On?</i>
Aug 18	Dr. Glenn M. Preminger, Professor of Urologic Surgery, Duke University Medical Center, Durham, North Carolina	<i>Advances in Surgical Stone Management</i>
Sept 1	Dr. Eric A. Klein, Head, Section of Urologic Oncology and Professor of Surgery, Glickman Urologic Institute, Cleveland Clinic Foundation	<i>Chemoprevention and Genetics of Prostate Cancer</i>
Sept 22	Dr. Anil Kapoor, Assistant Professor of Urology, McMaster University, Hamilton	<i>Advanced Laparoscopic Procedures in Urologic Practice</i>
Oct 13	Dr. Arie Belldegrun, Professor and Chief of Division of Urologic Oncology, UCLA School of Medicine	<i>New Approaches to Therapy and Prognostication of Kidney Cancer</i>
Oct 20	Dr. Patrick Luke, Assistant Professor of Surgery, University of Western Ontario, and Surgical Director of Renal/Pancreas Transplantation, London Health Sciences Centre, Ontario	<i>Robotics and Telesurgery – Where we Are and Where we will Go</i>
Dec 8	Dr. Mark P. Cain, Associate Professor of Pediatric Urology, Indiana University Medical Centre, Indianapolis, Indiana	<i>Lower Urinary Tract and Bowel Reconstruction in Children: The Indiana Experience with 500 Mitrofanoff and Mace Procedures</i>

Special Events

Mar 5	BC Neurosciences Day, Peter Moyes Lectureship Dr. G. Rees Cosgrove, Associate Professor of Surgery (Neurosurgery), Harvard Medical School, Attending Neurosurgeon, Massachusetts General Hospital	<i>Imaging & Epilepsy: A Neurosurgeon's Perspective</i>
Apr 29	27 th Annual Residents' Research Day, Divisions of General, Thoracic, Vascular and Pediatric General Surgery	
Apr 30	22 nd Annual Plastic Surgery Residents' Day Visiting Professor: Dr. Malcolm A. Lesavoy, Division of Plastic Surgery, UCLA School of Medicine	1) <i>Chest Wall Reconstruction</i> 2) <i>Scalp Reconstruction</i>
Oct 1-2	Laparoscopic Colectomy Course.	
Oct 29	UBC Department of Surgery Research Day and 10 th Annual WB and MH Chung Lectureship Visiting Professor: Professor John Wong, Chair of Surgery, University of Hong Kong Medical Centre, Queen Mary Hospital, Hong Kong	<i>Complications of Esophagectomy: Confess and Remember</i>

CENTRE OF EXCELLENCE FOR SURGICAL EDUCATION & INNOVATION (CESEI)

Dr. Karim Qayumi, Director

The year 2004 saw a number of exciting and successful activities in the Centre of Excellence for Surgical Education and Innovation. CESEI Lecture Theatre and videoconferencing facilities continue to be extensively used for a diverse range of activities such as e-learning, distant surgery, and distance interviews.

The Centre continues to expand its opportunities for involvement with a diverse range of stakeholders. This has been undertaken through the formation and expansion of several committees including the CESEI Nursing Committee, the Human Patient Simulator Users' Group Committee, the Core MIS Group Committee, the Education Committee and the Research Committee. These Committees provide valuable guidance for the ongoing and developing activities of CESEI.

Furthermore, a good number of meetings with architects, the VGH facility planning team and designers took place in preparation for the upcoming CESEI expansion (CESEI). The completion of Phase II expansion architectural design was achieved in late 2004.

An exciting opportunity for a telecommunications program with Science World was initiated in 2004. Further discussions are to be continued in 2005. This is an exciting program aiming for our public school system (Grades 11-12).

A number of partnerships were also established. Among these was the incorporation of the Paediatrics team from Children's Hospital into the CESEI team, as well as collaboration with Children's Hospital in the purchase of the PediaSim, which is a paediatric patient model that generates realistic and automatic responses to clinical interventions and drug administration. As part of the international branch of CESEI,

Dr. Qayumi has worked to form a partnership with the University of British Columbia in a project in Afghanistan. The purpose of this work is the reconstruction of the Afghanistan health care system, including the training of Afghan physicians, nurses and technical staff. This project is in collaboration with Partnership Afghanistan Canada (PAC).

In 2004, the CESEI team was delighted to receive extensive grant support from various sources in the Industry. The grants received by CESEI include:

AWARE Youth to Work Employment Program	\$ 14,000
British Columbia's Children's Hospital Purchase of METI Pedia-Sim	\$325,000
Ethicon (Johnson & Johnson) Educational Grant to Department of Surgery	\$100,000
Ethicon (Johnson & Johnson) Educational Grant to Department of Surgery	\$ 50,000
Karl Storz Endoscopy	\$ 10,000
Linvatec Canada	\$ 50,000
Medical Education Technologies Inc.	\$15,000 USD
UBC Department of Anaesthesia	\$ 10,000
VGH & UBC Hospital Foundation	
in it for life Challenge Grant	\$390,000
Zimmer Inc.	\$100,000

Administration

In 2004, Dr. Qayumi was given the mandate to write a proposal for the Centre to provide an infrastructure for Patient Safety programs and specific competency programs using new technology in the province of British Columbia.

The Centre is pleased to announce the hiring of a full time educator, Dr. Valentyna Koval, who will be in charge of the simulation program of CESEI. Dr. Koval is a foreign graduate from Ukraine who had been volunteering in the Centre since September 2003. In 2004, she spent her time attending specific courses at METI (Medical Education Technologies Inc.) to develop simulator-training curricula for the Canadian Forces Trauma Training Centre, UBC Department of Anesthesia and VGH Trauma Services.

Clinical Services

In 2004, CESEI began the process of organizing the ethical and legal aspects of the clinical services for teleconsultation and telehealth. This is a prerequisite before pilot projects can be considered. CESEI is also in the process of negotiating to become a supporting infrastructure for disaster relief/patient safety in an emergency situation for the province of British Columbia. CESEI established a collaboration to launch a Patient Consultation and Trauma Management Telehealth project led by Ms. Chris Clement from Vancouver Coastal Health and Dr. Richard Simons from Trauma Services at VGH. Finally, CESEI established a collaboration to launch a Clinical Telehealth project in wound management with VGH nurses.

Teaching

In 2004, approximately 17,000 undergraduate, postgraduate, continuing medical education, nursing and industry participants attended lectures, rounds, courses and workshops at the CESEI premises which include the Lecture Theatre, Surgical Skills Lab and the Human Patient Simulator (HPS) Room.

Some of the major events that took place in CESEI in 2004 include:

Undergraduate Courses:

Basic Surgical Techniques I (122 students) Jan 5, Mar 1, Apr 26, Jun 21, Sep 8, Nov 1.

GI CyberPatient Clinical Skills (127 students) Nov 17, Nov 19, Nov 24, Nov 26.

Surgery Seminars for Third Year Students (Videoconference lectures) (122 students) Mar 9, Mar 11, Mar 23, Mar 30, Apr 6, Apr 8, Apr 13, Apr 20.

Postgraduate Courses and Workshops:

SCOPE (Surgical Complications of Pelvic Endoscopic) Workshop - approximately 25 participants. May 14-15.

FCCS (Fundamental Critical Care Support) Course (ICU) – approximately 25 participants Jul 23-24, Oct 3-4.

ACES (Acute Critical Event Simulation) Course (ICU) – approximately 30 participants Jun 30-Jul 4.

Zimmer Workshop – MIS Anteriolateral Hip Technique – approximately 30 participants Jan 21, Feb 24, Dec 4.

SEPSIS Workshop (ICU) – approximately 30 participants Sep 27.

Airway Management Workshop (Anaesthesia) – approximately 40 participants Sep 24.

Airway Management Workshop (Emergency Nurses) – approximately 10 participants Dec 8.

Trauma Nurse Core Course (Trauma Nurses) – approximately 35 participants Aug 30-31.

ESSC (Essential Surgical Skills Course - Family Practice) – approximately 20 students Oct 25-28.

Other courses at the postgraduate level include training of Canadian Forces physician assistants and Trauma and Emergency residents on a weekly basis, Urology sessions for Urology residents on a monthly basis, and Obstetrics and Gynaecology sessions for Obstetrics and Gynaecology residents on a bi-monthly basis. Faculty members from the UBC Anaesthesia Department have worked very hard to develop a simulator-training program (Anaesthesia Crisis Management Course) aiming for Anaesthesia residents. Anaesthesia residents will be taking this course in January 2005.

Research

In 2004, the CESEI Research Committee met four times and increased its membership from 5 to 12 members. Additional research projects also originated from other CESEI Committees including the Education Committee, the HPS Users' Group Committee, the Core MIS Group Committee and the Nursing Committee.

The Centre's research is multidisciplinary, and in addition to CESEI, includes the Departments of Surgery and Medicine, Division of Educational Support and Development (Faculty of Medicine), Department of Mechanical Engineering (Faculty of Applied Science at UBC), Faculty of Computer Science (McGill University), School of Engineering Science (SFU) and the Centre for Minimal Access Surgery (CMAS) at McMaster University. The industry partners committed to collaborate in these projects are MacDonald Dettwiler & Associates (MDA) and Intuitive Surgical and Medical Education Technologies Inc. (METI).

In the 2004, the research work done included:

1. Comparison of computer assisted instruction (CAI) vs. traditional textbook method in training for abdominal examination.
2. Evaluating the effectiveness of computer-assisted learning module in the context of UBC Medical School Curriculum (paper presented at the ACMC Annual meeting in Halifax, April 2004)
3. Model for evaluating the instructional effectiveness with different cohorts (paper presented at the 11th International Ottawa Conference on Medical Education, Barcelona, July 2004)
4. The effect of structured training outside of the operating room on laparoscopic knowledge and skill acquisition (study in the progress on the effectiveness of a curriculum for laparoscopic surgery training of residents)
5. Effectiveness study of a multimedia Basic Surgical Techniques training modules for clerks (proposed study using the model for evaluation with different cohorts)
6. Objective multi-modal surgical performance analysis (paper presented at the SAGES Annual meeting, Denver, March 2004)
7. Cost-performance trade-offs in the design of force-feedback surgical simulators (experimental platform presented at the IEEE International Conference on Robotics and Automation, New Orleans, 2004)
8. Collaborative project with Centre for Minimal Access Surgery, McMaster University: participation in the Canadian Surgical Support Network, Canadian Health Infoway
9. Collaborative project with University of Calgary "Advancing Robotics and Surgical Simulations"

10. Collaborative project with Interventional Cardiology Programme, UBC on development of a Remote Controlled Cardiac Catheterization Laboratory
11. Collaborative project with McGill University on the Design for Multimodal Symbolic Displays
12. Dual-task approach to assessment in surgical education (project to start in the Spring of 2005)

People

Staff: The day-to-day business and administration of the Centre is supervised by Dr. K. Qayumi, Director of the Centre of Excellence for Surgical Education and Innovation. The Centre also has four full-time staff located at the Centre including Ms. Marlene Woschee (Manager), Ms. Vanessa AmatyLeon (Administrative Support), Mr. Ferooz Sekandarpour (IT Manager) and Dr. Valentyna Koval (Clinical Instructor and Simulator Trainer).

Students: In addition, the Technology Development Lab team included students in the UBC Department of Mechanical Engineering masters program (MAsc / Mr. Iman Brouwer, Ms. Catherine Kinnaird, Ms. Joanne Lim) and doctorate program (PhD / Ms. Sayra Cristancho) and the UBC Department of Surgery Master of Surgery program (MS / Humberto Lara-Guerra).

Awards

In 2004 Dr. Lara-Guerra received the following awards: (1) Albert B and Mary Steiner Summer Research Award. UBC and Ms Linda Caisley Vancouver Foundation, June 2004. (2) CIHR/MSFHR Strategic Training Program in Transplantation Research award for attending the Summer Intensive Ethics Program at the University of Chicago, July 2004. (3) American Heart Association. New Investigator Award, July 2004. (4) Dr. George Saxton Memorial Fellow, British Columbia Lung Association. July 1, 2004-June 30, 2005. (5) Faculty of Graduate Studies International Graduate Tuition Scholarship. The University of British Columbia 2004-2005. (6) Ontario Cancer Research Network Fellowship. Starting December 2004.

TRAUMA PROGRAM

Dr. Ross Brown, Medical Director of Trauma Services

Dr. Richard Simons, Regional Trauma Director

Overview

Vancouver General Hospital (VGH) is the designated Tertiary Regional Trauma Centre for Vancouver Coastal Health Authority and the Adult Provincial Trauma Centre serving the whole of BC. VGH has the distinction of being the only trauma centre in BC accredited by the Trauma Association of Canada. The program has been restructured into a regional program in line with the provincial trauma system for five regional trauma systems covering BC.

Administration

The program is structured as a sub-group of the Critical Care/Emergency/Trauma Group. The Medical Director and Acting Medical Manager of Trauma Services is Dr Ross Brown. Trauma Program Manager is Tracey Taulu RN, BSN. Dr Richard Simons has been appointed as the Regional Trauma Director for VCH and Providence Health. Practice guidelines, multidisciplinary protocols, and standards of care are developed through the VGH Trauma Advisory Committee and closely monitored by the program. The program also provides leadership for provincial trauma program development through Dr Simons' input into the BC Trauma Advisory Committee (reporting directly to PHSA).

Clinical Services

The trauma program provides a full spectrum of clinical trauma services, including housing the provincial burn program, and caring for complex orthopedic and multi-trauma patients. Dedicated trauma units allow patients to be cohorted and cared for by specialty nurses and allied health care team members. The Trauma Service provides for integrated care of the polytrauma patient ensuring optimal outcomes for these high-risk patients. Approximately 2200 trauma patients are admitted annually with approximately 500 severely injured patients (ISS \geq 16).

Teaching

Undergraduate trauma training is provided through elective Trauma Service rotations and the American College of Surgeons – Committee on Trauma (ACS-COT) sponsored “Trauma Evaluation and Management” or TEAM[®], Course provided 6 times a year.

Postgraduate training is provided with Trauma Service rotations for 12 programs including Core surgery, general surgery, emergency medicine and rural family practice. Trauma Services, Orthopedic Trauma and Spine all provide unique fellowship training opportunities. Outreach training in trauma is provided through ACS-COT sponsored ATLS® courses (10 per annum), Trauma Nurse Core Courses (TNCC), ISS-IATSIC Definitive Surgical Trauma Care Course and weekly rounds which are available widely through telehealth technology. In partnership with the Centre of Excellence in Surgical Education and Innovation, Trauma Services has taken a lead role in simulation training and program development. Weekly simulation training for house staff is conducted. In addition, under Trauma Services sponsorship, the program supports the only Canadian Forces (CF) Trauma Training Centre in Canada providing initial training as well as pre-deployment trauma readiness programs for Medical Officers, Nursing Officers, Operating Room Nurses and Technicians, and Physician Assistants. Many of the CF medical team members serving abroad have done training at VGH.

Research

The program supports a wide variety of clinical, epidemiological, education, and basic science trauma related research across the specialties. Dr Morad Hameed is taking the lead role for our research program. Participation in a Factor VII and Resuscitation Outcome Consortium projects exemplify our national and international commitment to research. Faculty continue to develop their primary interests in systems development, injury epidemiology and education.

Resident Research

Residents and fellows have continued to advance both clinical and basic science trauma research programs. Drs Naisan Garaway, Rardi van Heest and David Konkin have explored the challenging scenario of resuscitating the lethal triad of hypovolemia, hypothermia, and coagulopathy. Utilising readily available technology they have demonstrated the utility of rapid core rewarming techniques, which has translated into a dramatic survival improvement in the clinical arena. They have also explored the impact of alternative resuscitation strategies on the development of the abdominal compartment syndrome. Drs Konkin, Peter Kim and Dalbhir Jangra have addressed the concerning rising trend in recreation-associated injury, especially around biking both on and off the highway. In the spirit of 'evidence-to-action' Dr Kim has brought together a group that has developed educational media releases to help address this public health issue. Resident research projects are regularly submitted to the Trauma Association of

Canada (TAC) and ACS-COT resident paper competitions. Of note, three of our general surgery residents (Drs Peter Kim, David Konkin, Naisan Garraway) won or placed in research competitions this past year

People

Dr Ross Brown has recently retired and transferred to the Canadian Forces Reserve. He has now taken up his position as the Medical Director for Critical Care, Emergency and Trauma Services for VCH-Vancouver Acute. LCol Jay Doucet will be moving from the US Navy Trauma Training Centre in LA to take over as the Medical Director of the CFTTC(W). Dr Morad Hameed is now well settled in Vancouver, having moved from Calgary to join us last fall. Dr David Evans will be joining us this fall as our new Medical Manager. Dr Richard Simons received the award “Bringing Clinical Renown to Vancouver Acute”. Dr Simons continues his term as President of the Trauma Association of Canada after leading TAC through its most successful spring conference to date. Over 300 trauma and emergency physicians, nurses and allied health members from Canada, Australia and New Zealand enjoyed the venue and content of the combined TAC and Australasian Trauma Society meeting held this April in Whistler. Dr Jeffrey Gaboury and Maj. Christine Simard are now completing their clinical trauma fellowships and look forward to returning to practice this summer. A special thanks is extended to Drs John Reid, Gregor McGregor and Andrji Buczkowski for supporting the Trauma Service until the recruitment of new trauma surgeons has been completed.

SURGICAL ONCOLOGY PROGRAM

Dr. Noelle Davis, Head

Surgical oncology plays a critical role in the continuum of cancer care. It is a role that extends beyond the excellent clinical care provided by surgeons within the Department of Surgery at UBC and extends into the community. Surgeons not only provide excellence in actual surgical procedures, but also provide expert opinion to patients and colleague about the management of a patient with cancer. Over the past few years the surgical oncology program has undergone significant developments to improve effectiveness, particularly in terms of integration with radiation and systemic therapies and efforts to provide equitable, accessible surgical oncology care throughout the province.

The Provincial Surgical Oncology Program at the BCCA promotes the delivery of quality surgical oncology services as part of the integrated provincial system for cancer care delivery. It is one of three major programs in cancer control accompanying radiation and systemic therapies. The program's goals are to: provide expert and equitable access to surgical consultation; to provide surgical oncology consultation within multidisciplinary care teams that are tumour site specific; to develop site-based standards of practice; to reduce variation in surgical practice; to develop and maintain a surgical oncology registry; and to develop a provincial network of surgeons linked with Extranet/Web site communication.

Background and Administration

In 2000, the Provincial Program initiated the development of a strategic plan for surgical oncology services in BC. Research indicated that an effective 'Network' directed by a Council would help integrate surgical oncology into the formal cancer control system ensuring the best quality service delivery, equitable and timely access, and the most positive patient outcomes

Recommended Network features included: distributed service delivery, evidence-based care, defined roles and responsibilities, formal linkages, and academic foundation. Based on these recommendations, the Provincial Program submitted a request for funding to the Ministry of Health's Health Action Plan. In January 2001, the Ministry of Health allocated annualized core funding to BCCA for the establishment and maintenance of the BC Provincial Surgical Oncology Council & Network. The Network includes all providers of surgical oncology services in BC from surgeons in remote areas to sub-specialists. It is the means through which the Council promotes and advances quality cancer care. The Council membership totals 12 including surgeons from each of the five BCCA regions and from at least four separate tumour sites, and the Ministry of Health. It is lead by two co-chairs – Dr. Noelle Davis,

Provincial Program Leader, and Dr. Con Rusnak, Chief of Surgery for the Capital Health Region – who report to the President of the BCCA.

The Council & Network includes four operating themes with standing committees for each:

- **Communications** – to enhance surgical decision making provincially
- **Clinical Practice** – to develop peer reviewed surgical oncology practice guidelines linked to the BCCA site specific treatment policy and based on best practice principles of outcome measurement, multidisciplinary assessment, critical mass, technology, and infrastructure
- **Continuing Medical Education** – to develop a high quality continuing education program that meets standards of the Canadian College of Physicians and Surgeons; and
- **Research & Outcomes Evaluation** – to define and undertake regionally based research projects that will provide surgeons, academics, healthcare planners/administrators and the Ministry of Health with outcome data and other vital information.

Clinical Services

Cancer operations are undertaken throughout the province, using standards and guidelines promoted within an expanding cancer control system operated by the BC Cancer Agency (BCCA). The latter includes the Provincial Surgical Oncology Program based at the BCCA in Vancouver and led by Dr. Noelle Davis.

Linkages between surgeons and hospitals in the province, and the formal BCCA cancer care system are just beginning to develop and will ultimately address the existing variation in service delivery, equitability and timeliness of access. The objective of the BCCA Provincial Surgical Oncology Program is to build upon BC's expertise in cancer treatment to improve patient outcomes. In order to better develop linkages between practicing surgeons and the BCCA, a Surgical Oncology Council and network has been established, described below. Activities of this organization can be viewed at www.bccancer.bc.ca/son.

People

At present there are about 36 subspecialty trained (with 1 or more years of Fellowship training) surgical oncologists included among the 1,045 practicing surgeons in British Columbia. Most of these subspecialist surgeons (including Head and Neck, Gynecologic Oncology, General Surgical Oncology, Urologic Oncology, Thoracic Oncology, Neurosurgical Oncology and Reconstructive Oncology) practice within UBC affiliated Hospitals, however all of these subspecialties are represented at Vancouver General Hospital. This is primarily

because of tertiary program siting, and as a result, the majority of complex cancer procedures in the province are undertaken at VGH. This includes major head and neck, esophageal, thoracic, hepato-biliary, intestinal, sarcoma surgery and major urologic procedures. VGH remains a major provincial focus for research and teaching within the cancer surgery disciplines.

Teaching

Students Supervised at BCCA in 2004

Student Name	Program Type	Principal Supervisor
Piper, H	Resident / General Surgery	Baliski, C
Melck, A	Resident / General Surgery	Wiseman, S
Chen, J	Master of Science Student	Wiseman, S
Rajput, A	Resident / Pathology	Wiseman, S
Niblock, P	Resident / Radiation Oncology	Wiseman, S

Continuing Medical Education

“Provincial Rounds” program were held in Prince George (Update on Melanoma), Vancouver (Head and Neck Cancer and in Victoria (Head and Neck Cancer). A Breast Cancer Conference was held in April 2004 in Victoria.

Research

Surgical Atlas Phase I Completed. The Research & Outcomes Evaluation Committee of the BC Surgical Oncology Council & Network completed its first major project - a broad overview of surgical oncology volumes in British Columbia based on hospital discharge records supplied by the Ministry of Health. Phase 1 of the BC Atlas of Surgical Oncology 1999/2000, provides breakdowns of procedure volumes by patient age, patient gender, new health authority areas, BCCA regions and hospital size categories and is available on-line at www.bccancer.bc.ca/son.

Proposal Underway to Include Surgical Oncology on Provincial Wait Lists.

The Research & Outcomes Evaluation Committee is preparing a proposal to the Ministry of Health promoting surgical oncology, procedures to be “flagged” on surgical wait lists.

Process Established to Receive and Evaluate Network Research Proposals.

A formal process and on-line application templates are available to receive and evaluate research proposals from Surgical Oncology Network members. They are available at www.bccancer.bc.ca/son.

Publications in which there was direct involvement of the Surgical Oncology Program:

Aljada IS, Ramnath N, Donohue K, Harvey S, Brooks JJ, Wiseman SM, Khoury T, Loewen G, Slocum HK, Anderson TM, Bepler G, Tan D. Upregulation of the tissue inhibitor of metalloproteinase-1 protein is associated with progression of human non-small-cell lung cancer. *Journal of Clinical Oncology* 22: 3218-3229.

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Baliski CR, Schachar NJ, McKinnon JG, Stuart GC, Temple WJ. Hemipelvectomy: a changing perspective for a rare procedure. *Canadian Journal of Surgery* 47(2):99-103.

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Deeb G, Wang J, Ramnath N, Slocum H, Wiseman S, Beck A, Tan D. Altered e-cadherin and epidermal growth factor receptor expressions are associated with patient survival in non-small cell lung cancer: a study utilizing high-density tissue microarray and immunohistochemistry. *Modern Pathology* 17(4):430-439.

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Wiseman S, Rigual N, Hicks W, Popat S, Lore J, Douglas W, Tan D, Loree T. Parathyroid carcinoma: a multicenter review of clinicopathologic characteristics and treatment outcomes. *ENT Journal* 83(7):491-494.

Wiseman S, Stoler D, Anderson G. The role of genomic instability in the pathogenesis of squamous cell carcinoma of the head and neck. *Surgical Oncology Clinics Of North America* 13(1):1-11.

Presentations

Davis A, Schreiber D, Wunder J, O'Sullivan B, Turcotte R, Masri B, Bell R: The impact of sleep disturbances and fatigue on functional outcome in extremity soft tissue sarcoma patients. *Connective Tissue Oncology Society 10th Annual Meeting*. Montreal, PQ, Nov.

Davis N, Cheifetz R. Effect of referral patterns of general surgeons on rectal cancer outcomes in B.C. *CSSO Meeting*, Toronto Apr.

Endocrine Surgical Group: Detecting and defining hypothyroidism after hemithyroidectomy. *North Pacific Surgical Association Meeting*, Tacoma, WN, Nov.

Endocrine Surgical Group: Selective unilateral parathyroid exploration: an effective treatment of primary hyperparathyroidism. *North Pacific Surgical Association Meeting*, Tacoma, WN, Nov.

Endocrine Surgical Group: Tissue microarray analysis of Type 1 growth factor receptor family expression and prognostic significance in human breast cancer. *British Columbia Surgical Society Annual Spring Meeting*, Kelowna, BC, May.

Phang PT. BC rectal cancer project update 2004. *Canadian Forum*, Ottawa, Sep.

Phang PT. Teaching rectal cancer management to general surgeons. *Canadian Forum*, Ottawa, Sep.

Phang PT. Segmental or subtotal colectomy for cancer in young age patients. *Canadian Forum*, Ottawa, Sep.

Schreiber D, Bell R, Wunder J, O'Sullivan B, Turcotte R, Masri B, Davis A: Evaluating function and overall well-being in extremity soft tissue sarcoma. *Connective Tissue Oncology Society 10th Annual Meeting*. Montreal, PQ, Nov.

Poster Presentations

Cheifetz R: The BC Surgical Oncology Network: Educating the Province's surgeons. International CME Congress. Toronto, ON, May

Endocrine Surgical Group: Tissue eosinophilia: a valuable morphologic marker in assessing stromal invasion, locoregional recurrence & distant metastasis in head & neck squamous cell carcinoma. Poster presentation at the 93rd Annual USCAP meeting, Vancouver, BC Mar.

Endocrine Surgical Group: Co-expression of the Type 1 growth factor receptor family members HER1, HER2 and HER3 has a synergistic negative prognostic effect on breast cancer survival. UBC Department of Surgery Chung Research Day Conference, Vancouver, BC, Oct; BCCA Annual Cancer Conference 2004, Vancouver, BC, Nov. San Antonio Breast Cancer Conference, San Antonio, TX, Dec.

Endocrine Surgical Group: High rates of intrachromosomal and chromosomal instability in papillary thyroid carcinoma correlates with aggressive biological behavior. Cancer Education Consortium Molecular And Translational Workshop, Virginia Beach, VA, Jun.

Endocrine Surgical Group: Immunohistochemical expression of CA19-9 in papillary thyroid carcinoma: a potential marker for biologically aggressive disease. American Association for Cancer Research 95th Annual Meeting, Orlando, FL, Mar 2004.

Endocrine Surgical Group: Institution's experience in the management of second malignancy of the lung associated with head and neck cancer. Society of Surgical Oncology 57th Annual Cancer Symposium, New York, NY, Mar.

Endocrine Surgical Group: Sentinel lymph node biopsy: a useful tool for staging squamous cell carcinoma of the oral cavity. 6th International Conference On Head and Neck Cancer, Washington DC, Aug.

SURGICAL TRANSPLANTATION PROGRAM

Dr. Mark Meloche

The Surgical Transplant Program at UBC is a comprehensive, multi-organ transplant program with clinical and research activities that located at three sites: Vancouver General Hospital, St. Paul's Hospital, and BC Women's and Children's Health Centre. The UBC Department of Surgery works in a cooperative fashion with each of these principal hospitals and with the British Columbia Transplant Society, an agency in the Provincial Health Services Authority, to provide all aspects of surgical clinical care to patients who require transplantation.

Clinical Transplant Activity

Kidney transplantation is performed at all three of the above-mentioned principal teaching hospitals. With the nationwide decline in cadaveric organ donation, living donor kidney transplantation now plays a significant role in each of these three programs. The UBC Department of Surgery, through its Division of Urology, has contributed significantly to the expansion of the Living Donor Kidney Transplant Program with the development of laparoscopic nephrectomy for organ transplantation.

The Heart Transplant Program is centred at St. Paul's Hospital. It is part of the larger "Healthy Heart Program" in the Provincial Cardiac Centre of Excellence.

Vancouver General Hospital is the site where liver, lung, pancreas and pancreatic islet transplantations are performed.

The Lung Transplant Program has been at Vancouver General Hospital since the Program's inception. Dr. John Yee has been appointed the new Surgical Program Head. This program will be expanding the number of transplants performed annually.

The Liver Transplant Program has maintained its annual rate of cadaveric liver transplants. The expanding pool of patients in need of a liver transplant, and an increasing shortfall of cadaveric donors, have led to the development and implementation of a new Living Donor Liver Transplant Program, under the direction of Dr. Charles Scudamore.

The Pancreas Transplant Program at Vancouver General Hospital has expanded during the past three years to include pancreas transplant after a prior living donor kidney transplant, in addition to simultaneous kidney and pancreas transplantation from a cadaver donor. This has allowed Type I diabetic patients who are in end stage renal failure (on dialysis) to benefit from having a living

donor kidney transplant much earlier than having to wait for a combined cadaveric kidney and pancreas transplant.

Funding support from private donations, research-granting agencies, the Vancouver Coastal Health Authority and the British Columbia Transplant Society has allowed development of the Ike Barber Human Pancreatic Islet Transplantation Laboratory. Since March 2003, over 40 transplant procedures have been performed in 18 diabetic recipients. Dr. Warnock is the Co-Director of the Laboratory and Dr. Ziliang Ao is the Laboratory Director and Research Associate.

In 2004, transplantations performed: kidney/cadaveric donor 53; kidney/living donor 78, pancreas/with kidney 2, pancreas/after kidney 7; pancreatic islets 7, heart 14, liver/cadaveric donor 35, liver/living donor 1; lung 10.

Transplantation Research and Education

Transplantation research is conducted by members of the Department from pure bench science in the laboratory to development and implementation of a wide range of new transplant processes and procedures. Both basic and clinical research are being performed at all three transplantation hospitals.

Dr. Stephen Chung, Professor and Head of UBC's Division of General Surgery, serves as Scientific Director of the British Columbia Transplant Society. He also is Program Director of the CIHR/MSFRH Transplantation Training Program, an undergraduate program at UBC which introduces students to clinical and basic research in the field of transplantation.

Dr. Karim Qayumi, Professor in the Division of Cardiovascular and Thoracic Surgery at UBC, is Program Director of Experimental Biology for the British Columbia Transplant Research Institute. He also serves as Director of the UBC-Vancouver Coastal Health Centre of Excellence for Surgical Education and Innovation.

Dr. Garth Warnock, C.N. Woodward Professor, Head of UBC and VGH Departments of Surgery and Co-Director of the Ike Barber Human Islet Transplant Laboratory at British Columbia Islet Transplant Program.

Dr. Alice Mui, Assistant Professor in the Department of Surgery, a research scientist for the BCTRI and the Vancouver Coastal Health Research Institute.

Dr. Megan Levings, Assistant Professor in UBC's Department of Surgery, a BCTRI research scientist at the Immunity and Infection Research Centre and a Canada Research Chair in Transplantation.

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