

Department of Medical Imaging Annual Report 2001-2002

CHAIR'S REPORT	3
DEPARTMENT OF MEDICAL IMAGING - UNIVERSITY OF TORONTO.....	6
Radiologists-in-Chief.....	6
Program Directors.....	6
Division Heads	6
Department Administrative Staff.....	6
COMMITTEES.....	7
Executive Committee	7
Promotions Committee	7
Undergraduate Teaching Committee	7
Specialty Training Committee	7
UNIVERSITY OF TORONTO FULLY AFFILIATED HOSPITALS AND INSTITUTES.....	8
DEPARTMENT OF MEDICAL IMAGING FACULTY	9
THE DEPARTMENT OF MEDICAL IMAGING AND THE UNIVERSITY OF TORONTO	
TEACHING HOSPITALS	12
RESEARCH GRANTS	15
PUBLICATIONS: PEER-REVIEWED PAPERS AND ABSTRACTS.....	20
PUBLICATIONS: NON-PEER-REVIEWED, BOOKS, CHAPTERS.....	34
INVITED PRESENTATIONS AND VISITING PROFESSORSHIPS.....	36
SCIENTIFIC PRESENTATIONS : PEER-REVIEWED PAPERS,.....	52
POSTERS AND EXHIBITS.....	52
RESEARCH PROGRAM.....	70
Welcome to Dr. Timothy Roberts.....	70
The Research Program.....	70
The Medical Imaging Research and Development Awards (Protected Research Time)	71
RSNA Resident/Fellow Research Award	71
Research Day	72
Positron Emission Tomography Centre, Centre for Addiction and Mental Health	72
Imaging/Bioengineering Research, SWCHSC	72
Faculty List.....	72
Grants	73
Publications	75
Original Scientific Presentations	79
Invited Papers and Professorships	80
Awards and Honors	81
Teaching -- Hours of Lectures	81
Department of Medical Imaging Annual Research Day 2002	82
RESIDENT TRAINING PROGRAM	83
General Description	83
PGY1	83
PGY2	83
PGY3	84
PGY 4	84
PGY5	84
Armed Forces Institute of Pathology	84
Physics Instruction.....	84
Conferences	85
Seminars and Half-Day Program.....	85
Research	85

Rounds	86
View Box Teaching	86
Journal Club	86
Visiting Professor Program	86
Organ Imaging Review Course	86
Program Evaluation	86
Program Supervision	86
Resident Evaluations	87
Resident Awards	87
Summary	88
RESIDENTS	89
PGY1 Level	89
PGY2 (R1) Level	89
PGY3 (R2) Level	90
PGY4 (R3) Level	90
PGY5 (R4) Level	91
NUCLEAR MEDICINE TRAINING PROGRAM	92
General Description	92
General Objectives	92
Dual Radiology and Nuclear Medicine Residency	92
RADIOLOGY SCIENTIST TRAINING PROGRAM	93
Objectives	93
Organization	93
Eligibility and Application Procedure	93
Remuneration	93
Selection of Research Project and Supervisor	93
Graduate Degrees	94
Clinical Responsibilities	94
OBJECTIVES OF TRAINING & SPECIALTY TRAINING REQUIREMENTS IN DIAGNOSTIC RADIOLOGY	95
Definition	95
General Objectives	95
Specific Objectives	95
Training in Canada	98
SPECIALTY TRAINING REQUIREMENTS IN DIAGNOSTIC RADIOLOGY	99
RESIDENT RESEARCH PROGRAM	101
Seminar Series	101
Support	101
Presentation Day	102
Resident Research Awards	102
FELLOWSHIP PROGRAM	103
UNDERGRADUATE PROGRAM	106
Year I Medicine	106
Year II Medicine	106
Year III Clerkship	108
Year IV	108
Other Teaching Activities and Involvement	109
CONTINUING EDUCATION PROGRAM	111
Organ Imaging Review	111
Paediatric Update: 2001	113
Women's Imaging: Advances in Gynaecological Imaging and Transvaginal Ultrasound	114
INVITED LECTURERS AND VISITING PROFESSORS	115

CHAIR'S REPORT

The Annual Report details the contributions made by our faculty, residents and fellows to the Department, and to the greater academic and clinical community. It also describes the major physical and organizational changes at the University and its affiliated teaching hospitals. This report demonstrates the remarkable breadth of our activities and the accomplishments of our people. Our people continue to be its most important asset. Accordingly, as in previous years, I would like to highlight the accomplishments of our faculty members, especially those that have distinguished themselves in teaching and research.

Our departmental teaching awards this year were: Dr. TaeBong Chung was presented with the Edward L. Lansdown Award for Outstanding Teaching in the Residency Training Program. Dr. TaeBong Chung, Dr. John Clark, Dr. Lisa Ehrlich, Dr. Richard Farb, Dr. Nasir Jaffer, Dr. Damien Maharaj, Dr. Lyne Noël de Tilly, Dr. Joel Rubenstein, Dr. David Salonen, and Dr. William Weiser were recognized for outstanding teaching in the residency program; Dr. Paul Babyn, Dr. Susan Blaser, Dr. Masoom Haider, Dr. Anthony Hanbidge, Dr. Chia Sing Ho, Dr. Martin O'Malley, Dr. Josée Sarrazin, and Dr. Stephanie Wilson were recognized for outstanding teaching in the fellowship program; and Dr. Mostafa Atri, Dr. Edna Becker, Dr. Dae-Gyun Chung, Dr. Alan Daneman, Dr. Korosh Khalili, Dr. Matthew Lax, and Dr. Shi-Joon Yoo achieved distinction for outstanding teaching in both the residency and fellowship programs.

Our department continued to increase the level of support of its faculty for protected research time. This year, the faculty members with departmentally sponsored research time were: Dr. Murray Asch (Safety and effect of percutaneous temporary portal vein occlusion on the size of a thermal lesion in porcine livers), Dr. Mostafa Atri (Accuracy of unenhanced helical CT and added value of enhanced helical CT in the assessment of acute abdomen), Dr. John Clark (Non-lethal murine vascular imaging), Dr. Richard Farb (Follow-up evaluation of GDC treated aneurysms: Comparison of ATECO MRA, 3D time of flight and IADSA), Dr. Alan Fox (3D cone beam CT for acute cervical spine and facial trauma), Dr. Masoom Haider (MRI and CT dynamic enhancement in carcinoma of the uterine cervix: Correlation with direct interstitial fluid pressure measurement and tumor oxygen levels), Dr. Roberta Jong (American College of Radiology Imaging Network, ACRIN 6652, Digital vs screen-film mammography), Dr. Korosh Khalili (Preoperative Staging of Cholangiocarcinoma: A Prospective Comparative Study of Sonography and MRI), Dr. Naeem Merchant (Effects of ACE inhibitor and beta blocking therapy in patients with systemic right ventricles), Dr. Derek Muradali (Contrast enhanced sonography of the breast nodules and lymph nodes: Vascular morphology and pathologic correlation), Dr. Martin O'Malley (Hepatocellular carcinoma: Features on triphasic CT using a multidetector helical CT scanner), and Dr. Dawn Pearce (The role of weight-bearing CT scan of the foot in pes planus). In addition to the faculty named above, another four radiologists had 50% of their time protected for their research interests: Dr. Shi-Jin Yoo at the Hospital for Sick Children, and Drs. Stephanie Wilson, Masoom Haider and David Mikulis at the University Health Network.

The highlight of our academic year was our Annual Research Day, which held in the Sadowski Auditorium at Mount Sinai Hospital on April 15, 2002. Thirty excellent research papers were given by residents, fellows and faculty. The progressive improvement in the content and style of

the research papers over the past several years at Research Day has been very gratifying to all of us with an interest in the academic development of our Department.

The academic promotions this year were (effective July 1, 2002): to Associate Professor – Dr. Katherine Fong and Lawrence White and to Assistant Professor - Dr. Korosh Khalili and Dheeraj Rajan.

We welcomed several new faculty to our department: Dr. Petrina Causer - Sunnybrook and Women's College Health Sciences Centre, Dr. Raymond Chan - St. Michael's Hospital, Dr. Jane Crossin - University Health Network, Dr. Dorothy Lazinski - University Health Network, Dr. Thomas Marotta - University Health Network, Dr. Stephen Miller - Hospital for Sick Children, Dr. Oscar Navarro - Hospital for Sick Children, Dr. Sophie Pantazi - University Health Network, Dr. Narinder Paul - University Health Network, Dr. Kamaldine Oudjhane - Hospital for Sick Children and Dr. Karen Thomas - Hospital for Sick Children, Dr. Donald Turner - Sunnybrook and Women's College Health Sciences Centre.

Dr Tim Roberts joined us in February 2002, after a ten-year career at University of California, San Francisco. We were most fortunate to recruit Tim. He is an internationally acknowledged expert in magnetic resonance imaging and magnetoencephalography. We were doubly fortunate in that he was awarded a Canada Research Chair in Medical Imaging Research on his appointment. I appointed Dr. Roberts as Deputy Chair of the Department and Director of our Research Program. Since joining us he has been very busy. He has established a graduate student research program through the Institute of Medical Science (IMS), and an Image Analysis Centre at University Health Network with funds awarded by CFI and ORDCF. He has hired several post-doctoral students already, and is actively recruiting other scientists to his group.

There are several people that require special mention for their extra-ordinary efforts on behalf of our Department. Dr. Edna Becker completed her term as Director of our Residency Program this past year. She did an absolutely remarkable job! Her excellence was widely recognized by our trainees, the faculty in Medical Imaging, the University, and the entire Canadian radiology community. She has been succeeded by Drs. Walter Montanera and Suzanne Laughlin, who will share the position of Program Director. Dr. Harry Shulman will step down as Radiologist-in-Chief at Sunnybrook and Women's College Health Sciences Centre this coming winter, after 17 years in the job. He will be succeeded by Dr. Alan Moody from Nottingham, United Kingdom. The hospital grew tremendously during Harry's tenure, both in terms of size and complexity. He saw it through some very complicated organizational changes with mergers and re-structuring. Hopefully his transition to faculty radiologist will reward him with piece of mind, job satisfaction and less paperwork. Dr. Robyn Pugash was our inaugural webmaster, as well as being the Director of the Fellowship Program. She invested a lot of her free time into establishing and maintaining our electronic presence, but this year with the tremendous manpower pressure facing Interventional Radiology, she handed off the web responsibilities to Mr. Paul Ferrari. She continues as our Fellowship Director. Our undergraduate program was substantially re-organized by Dr. Tim Dowdell, with the help of Co-Director, Dr. Nasir Jaffer. Tim and Nasir converted a major portion of our teaching on radiologic-anatomic correlation into electronic media. This greatly improved the delivery of this part of our curriculum. I congratulate and thank them for their efforts.

Members of the Department have frequently been the winners of major teaching awards, but no one more so than Dr. Gregory Olscamp. Last year he won the W.T. Aikins Award for excellence in Undergraduate teaching, considered to be the most prestigious award in the Faculty of Medicine. Sadly, we experienced an immense loss with his death in August 2001. Greg was an outstanding physician, teacher and person. We will all miss him.

Walter Kucharczyk, M.D., F.R.C.P. (C)
Professor and Chair

DEPARTMENT OF MEDICAL IMAGING - UNIVERSITY OF TORONTO

(as of June 30, 2002)

Chair.....Kucharczyk, W.
Associate ChairRoberts, T.

Radiologists-in-Chief

Hospital for Sick Children Babyn, P.
Mount Sinai Hospital-University Health Network (Princess Margaret Hospital/
Toronto General Hospital/Toronto Western Hospital)Bret, P.
St. Michael's Hospital Common, A.
Sunnybrook & Women's College Health Sciences Centre Shulman, H.S.

Program Directors

Continuing Education Hamilton, P.
Fellowship..... Pugash, R.
Neuroradiology Willinsky, R.
Nuclear Medicine.....Hershkop, M.
PGY1..... Clark, J.
Radiology ResidencyMontanera, W.
Radiology Residency (Co-Director) Laughlin, S.
Research..... Roberts, T.
Undergraduate..... Dowdell, T.
Undergraduate (Co-Director).....Jaffer, N.

Division Heads

Abdominal ImagingAtri, M.
Breast Imaging Muradali, D.
Cardiothoracic
 Cardiac Imaging..... Merchant , N.
 Thoracic Imaging..... Paul, N.
Musculoskeletal ImagingWhite, L.
NeuroradiologyTerBrugge, K.G.
Pediatric Imaging.....Manson, D.
Vascular and Interventional Radiology Asch, M.

Department Administrative Staff

Business Officer..... Sciortino, G.
Secretary Shea, A.

COMMITTEES

Executive Committee

Kucharczyk, W. (Committee Chair)
Babyn, P.
Bret, P.
Clark, J.
Common, A.
David, E. (Chief Resident – July 1, 2001)
Dowdell, T.
Hamilton, P.
Hershop, M.
Jaffer, N.
Laughlin, S.
Montanera, W.
Pugash, R.
Roberts, T.
Salem, S.
Shulman, H.

Promotions Committee

Wilson, S. (Committee Chair)
Babyn, P.
Jaffer, N.
Rubenstein, J.
TerBrugge, K.
Weiser, W.
Yaffe, M.

Undergraduate Teaching Committee

Dowdell, T. (Committee Chair)
Chan, R.
Jaffer, N.
Kachura, J.
Lax, M.
Montanera, W.
Paul, N.
Pearce, D.
Weiser, W.

Specialty Training Committee

Montanera W. (Committee Chair)
Clark, J.
Hendler, A.
Laughlin, S.
MacDonald, C.
Mikulis, D.
Muradali, D.
Pearce, D.
Christakis, M.
David, E. (Chief Resident)
Jaskolka, J.
Kirpalani, A.
Stanietzky, N.
Wilkinson, L.
Yu, Robert

UNIVERSITY OF TORONTO FULLY AFFILIATED HOSPITALS AND INSTITUTES

Hospital for Sick Children555 University Avenue
Toronto, Ontario
M5G 1X8

Mount Sinai Hospital.....600 University Avenue
Toronto, Ontario
M5G 1X5

St. Michael's Hospital30 Bond Street
Toronto, Ontario
M5B 1W8

Sunnybrook & Women's College Health Sciences Centre

Sunnybrook Campus2075 Bayview Avenue
Toronto, Ontario
M4N 3M5

Women's College Campus76 Grenville Street
Toronto, Ontario
M5S 1B2

University Health Network

Princess Margaret Hospital610 University Avenue
Toronto, Ontario
M5G 2M9

Toronto General Hospital200 Elizabeth Street
Toronto, Ontario
M5G 2C4

Toronto Western Hospital399 Bathurst Street
Toronto, Ontario
M5T 2S8

Centre for Addiction and Mental Health250 College Street
Toronto, Ontario
M5T 1B8

Positron Emission Tomography Centre250 College Street
Toronto, Ontario
M5T 1B8

DEPARTMENT OF MEDICAL IMAGING FACULTY

Academic Rank, Subspecialty Division and Hospital as of July 1, 2002

<u>NAME</u>	<u>RANK</u>	<u>DIVISION</u>	<u>HOSPITAL</u>
Alton, D.J.	Assistant Professor	Pediatric Imaging	Hospital for Sick Children
Arenson, A.M.	Assistant Professor	Abdominal Imaging	Sunnybrook & Women's College Health Sciences Centre
Armstrong, D.	Assistant Professor	Neuroradiology	Hospital for Sick Children
Asch, M.R.	Assistant Professor	Vascular Imaging	Mount Sinai Hospital
Ash, J.M.	Associate Professor	Pediatric Imaging	Hospital for Sick Children
Atri, M.	Associate Professor	Abdominal Imaging	Sunnybrook & Women's College Health Sciences Centre
Babyn, P.S.	Associate Professor	Pediatric Imaging	Hospital for Sick Children
Becker, E.J.	Associate Professor	Musculoskeletal Imaging	University Health Network
Blaser, S.	Associate Professor	Neuroradiology	Hospital for Sick Children
Blend, R.	Associate Professor	Neuroradiology	University Health Network
Bobechko, P.E.	Assistant Professor	Musculoskeletal Imaging	University Health Network
Bret, P.	Professor	Abdominal Imaging	Mount Sinai Hospital
Bukhanov, K.	Assistant Professor	Breast Imaging	Mount Sinai Hospital
Caldwell, C.B.	Assistant Professor	Research	Sunnybrook & Women's College Health Sciences Centre
Causser, P.	Lecturer	Abdominal Imaging	Sunnybrook & Women's College Health Sciences Centre
Chait, P.G.	Associate Professor	Pediatric Imaging	Hospital for Sick Children
Chan, R.	Lecturer	Vascular Imaging	St. Michael's Hospital
Cheung, G.	Assistant Professor	Neuroradiology	Sunnybrook & Women's College Health Sciences Centre
Cheyne, D.	Associate Professor	Pediatric Imaging	Hospital for Sick Children
Christakis, M.	Assistant Professor	Musculoskeletal Imaging	Sunnybrook & Women's College Health Sciences Centre
Chuang, S.H.	Associate Professor	Neuroradiology	Hospital for Sick Children
Chui, M.C.	Assistant Professor	Neuroradiology	St. Michael's Hospital
Chung, D-G.	Lecturer	Abdominal Imaging	St. Michael's Hospital
Clark, J.A.	Assistant Professor	Vascular Imaging	Sunnybrook & Women's College Health Sciences Centre
Common, A.A.	Assistant Professor	Vascular Imaging	St. Michael's Hospital
Connolly, B.	Assistant Professor	Pediatric Imaging	Hospital for Sick Children
Cooke, G.M.	Assistant Professor	Musculoskeletal Imaging	St. Michael's Hospital
Cooper, P.W.	Assistant Professor	Neuroradiology	Sunnybrook & Women's College Health Sciences Centre
Crossin, J.	Assistant Professor	Cardiothoracic Imaging	University Health Network
Crawley, A.	Assistant Professor	Research	University Health Network
Damyanovich, A.	Assistant Professor	Research	University Health Network
Daneman, A.	Professor	Pediatric Imaging	Hospital for Sick Children
Deitel, W.	Lecturer	Abdominal Imaging	St. Michael's Hospital
Dowdell, T.R.	Assistant Professor	Musculoskeletal Imaging	St. Michael's Hospital
Ehrlich, L.E.	Associate Professor	Nuclear Medicine	Sunnybrook & Women's College Health Sciences Centre
Farb, R.	Assistant Professor	Neuroradiology	University Health Network
Fishell, E.	Associate Professor	Breast Imaging	Sunnybrook & Women's College Health Sciences Centre
Fong, K.	Assistant Professor	Abdominal Imaging	University Health Network
Fox, A.	Professor	Neuroradiology	Sunnybrook & Women's College Health Sciences Centre
Ganguli, N.	Lecturer	Nuclear Medicine	Sunnybrook & Women's College Health Sciences Centre
Gilday, D.L.	Professor	Pediatric Imaging	Hospital for Sick Children
Glanc, P.	Assistant Professor	Abdominal Imaging	Sunnybrook & Women's College Health Sciences Centre
Goldberg, F.	Assistant Professor	Breast Imaging	St. Michael's Hospital
Goldberg, R.E.	Assistant Professor	Abdominal Imaging	University Health Network
Gray, B.	Assistant Professor	Neuroradiology	St. Michael's Hospital
Greyson, N.D.	Associate Professor	Nuclear Medicine	St. Michael's Hospital
Haider, M.	Assistant Professor	Abdominal Imaging	University Health Network
Hamilton, P.A.	Assistant Professor	Abdominal Imaging	Sunnybrook & Women's College Health Sciences Centre
Hanbidge, A.	Assistant Professor	Abdominal Imaging	University Health Network
Hendler, A.L.	Assistant Professor	Nuclear Medicine	University Health Network
Herman, S.J.	Associate Professor	Cardiothoracic Imaging	University Health Network
Hershkop, M.	Assistant Professor	Nuclear Medicine	University Health Network
Ho, C.S.	Professor	Vascular Imaging	University Health Network

Houle, S.	Associate Professor	Nuclear Medicine	Centre for Addiction and Mental Health
Ibach, K.	Lecturer	Abdominal Imaging	University Health Network
Jaffer, N.M.	Associate Professor	Vascular Imaging	Mount Sinai Hospital
Jong, R.A.	Assistant Professor	Breast Imaging	Sunnybrook & Women's College Health Sciences Centre
Kachura, J.	Assistant Professor	Vascular Imaging	University Health Network
Kassel, E.E.	Associate Professor	Neuroradiology	Mount Sinai Hospital
Keller, M.A.	Assistant Professor	Neuroradiology	University Health Network
Khalili, K.	Assistant Professor	Abdominal Imaging	University Health Network
Kucharczyk, W.	Professor and Chair	Neuroradiology	University Health Network
Lata, A.C.	Assistant Professor	Cardiothoracic Imaging	St. Michael's Hospital
Laughlin, S.	Assistant Professor	Neuroradiology	University Health Network
Lax, M.	Assistant Professor	Musculoskeletal	University Health Network
Lazinski, D.	Lecturer	Neuroradiology	Mount Sinai Hospital
MacDonald, C.E.	Assistant Professor	Pediatric Imaging	Hospital for Sick Children
Manson, D.E.	Assistant Professor	Pediatric Imaging	Hospital for Sick Children
Marcuzzi, D.W.	Assistant Professor	Vascular Imaging	St. Michael's Hospital
Margolis, M.	Assistant Professor	Abdominal Imaging	Mount Sinai Hospital
Marotta, T.	Assistant Professor	Neuroradiology	University Health Network
Merchant, N.	Assistant Professor	Cardiothoracic Imaging	University Health Network
Mikulis, D.	Associate Professor	Neuroradiology	University Health Network
Miller, S.	Assistant Professor	Pediatric Imaging	Hospital for Sick Children
Montanera, W.	Associate Professor	Neuroradiology	University Health Network
Muradali, D.	Assistant Professor	Breast Imaging	University Health Network
Murray, S.Y.	Assistant Professor	Nuclear Medicine	Sunnybrook & Women's College Health Sciences Centre
Navarro, O.	Assistant Professor	Pediatric Imaging	Hospital for Sick Children
Noël de Tilly, L.	Assistant Professor	Neuroradiology	St. Michael's Hospital
Nugent, P.	Lecturer	Abdominal Imaging	Sunnybrook & Women's College Health Sciences Centre
O'Malley, M.	Assistant Professor	Abdominal Imaging	University Health Network
Oudjhane, K.	Associate Professor	Pediatric Imaging	Hospital for Sick Children
Pantazi, S.	Lecturer	Breast Imaging	Mount Sinai Hospital
Paul, N.	Assistant Professor	Cardiothoracic Imaging	University Health Network
Pearce, D.	Lecturer	Musculoskeletal	St. Michael's Hospital
Pugash, R.A.	Assistant Professor	Vascular Imaging	Sunnybrook & Women's College Health Sciences Centre
Rajan, D.	Assistant Professor	Vascular Imaging	University Health Network
Ranson, M.	Assistant professor	Pediatric Imaging	Hospital for Sick Children
Rappaport, D.	Associate Professor	Cardiothoracic Imaging	Mount Sinai Hospital
Reilly, R.M.	Associate Professor	Nuclear Medicine	University Health Network
Roberts, H.	Associate Professor	Cardiothoracic Imaging	University Health Network
Roberts, T.	Associate Professor	Research	University of Toronto
Rosen, I.E.	Assistant Professor	Abdominal Imaging	Sunnybrook & Women's College Health Sciences Centre
Rowlands, J.A.	Professor	Research/Medical Biophysics	Sunnybrook & Women's College Health Sciences Centre
Rubenstein, J.D.	Associate Professor	Musculoskeletal Imaging	Sunnybrook & Women's College Health Sciences Centre
Saibil, E.A.	Assistant Professor	Vascular Imaging	Sunnybrook & Women's College Health Sciences Centre
Salem, S.	Associate Professor	Abdominal Imaging	Mount Sinai Hospital
Salonen, D.C.	Assistant Professor	Musculoskeletal Imaging	University Health Network
Samuels, T.H.	Assistant Professor	Breast Imaging	Sunnybrook & Women's College Health Sciences Centre
Sarrazin, J.	Assistant Professor	Cardiothoracic Imaging	Sunnybrook & Women's College Health Sciences Centre
Shorter, A.M.	Lecturer	Abdominal Imaging	Sunnybrook & Women's College Health Sciences Centre
Shulman, H.S.	Professor	Cardiothoracic Imaging	Sunnybrook & Women's College Health Sciences Centre
Shumak, R.	Assistant Professor	Breast Imaging	Sunnybrook & Women's College Health Sciences Centre
Simons, M.	Assistant Professor	Vascular Imaging	University Health Network
Sniderman, K.W.	Associate Professor	Vascular Imaging	University Health Network
Temple, M.	Lecturer	Pediatric Imaging	Hospital for Sick Children
TerBrugge, K.G.	Professor	Neuroradiology	University Health Network
Thomas, K.	Assistant Professor	Pediatric Imaging	Hospital for Sick Children
Thurston, W.	Assistant Professor	Abdominal Imaging	St. Joseph's Health Centre
Ting, G.	Lecturer	Abdominal Imaging	Sunnybrook & Women's College Health Sciences Centre
Toi, A.	Associate Professor	Abdominal Imaging	University Health Network
Tomlinson, G.	Assistant Professor	Research/Biostatistics	University of Toronto Office
Traubici, J.	Lecturer	Pediatric Imaging	Hospital for Sick Children
Turner, D.	Lecturer	Musculoskeletal Imaging	Sunnybrook & Women's College Health Sciences Centre
Wall, J.	Lecturer	Abdominal Imaging	St. Michael's Hospital

Weisbrod, G.L.	Professor	Cardiothoracic Imaging	University Health Network
Weiser, W.J.	Professor	Cardiothoracic Imaging	St. Michael's Hospital
White, L.	Associate Professor	Musculoskeletal Imaging	Mount Sinai Hospital
Willinsky, R.A.	Professor	Neuroradiology	University Health Network
Wilson, C.	Assistant Professor	Breast Imaging	University Health Network
Wilson, S.R.	Professor	Abdominal Imaging	University Health Network
Wood, M.L.	Professor	Research/Medical Biophysics	Sunnybrook & Women's College Health Sciences Centre
Wright, B.E.	Assistant Professor	Breast Imaging	Sunnybrook & Women's College Health Sciences Centre
Xiang, J.	Lecturer	Research	Hospital for Sick Children
Yaffe, M.J.	Professor	Research/Medical Biophysics	Sunnybrook & Women's College Health Sciences Centre
Yoo, S-J.	Professor	Pediatric Imaging	Hospital for Sick Children
Zalev, A.H.	Assistant Professor	Abdominal Imaging	St. Michael's Hospital
Zelovitzky, J.L.	Assistant Professor	Cardiothoracic Imaging	University Health Network

Cross Appointments

Bronskill, M.J.	Professor	Medical Biophysics
Foster, S.	Professor	Medical Biophysics
Freedom R.	Professor	Pediatrics
Henkelman, R.M.	Professor	Medical Biophysics
Johnson, J.A.	Associate Professor	Obstetrics and Gynaecology
McLaughlin, P.R.	Professor	Medicine
Noseworthy, M.	Assistant Professor	Medical Biophysics
Noyek, A.M.	Professor	Otolaryngology
Pharoah, M.J.	Professor	Dentistry
Plewes, D.B.	Professor	Medical Biophysics
Trachtenberg, J.	Professor	Surgery
Vanek, I.	Assistant Professor	Ophthalmology

Radiation Sciences Program (Joint Program with Michener Institute)

Babiak, C.	Instructor
Crowley, S.	Instructor
Goodin, L.	Instructor
Kelly, E.	Instructor
Poulin, D.	Instructor
Rodrigues, G.	Instructor
Sharpe, W.	Instructor
Souter, C.	Instructor
Stone, J.	Instructor
Topple, A.	Instructor
Watson, T.	Instructor
Wilson, D.	Instructor
Wong, B.	Instructor

THE DEPARTMENT OF MEDICAL IMAGING AND THE UNIVERSITY OF TORONTO TEACHING HOSPITALS

The academic programs in the Department of Medical Imaging are integrated with its five major teaching hospitals: the University Health Network (UHN), Mount Sinai Hospital (MSH), St. Michael's Hospital, Sunnybrook & Women's College Health Sciences Centre, and the Hospital for Sick Children. The medical imaging departments at UHN and MSH are consolidated into a single operational unit under the leadership of Dr. Patrice Bret. The other hospitals' Medical Imaging departments are led by Dr. Andrew Common, Dr. Harry Shulman, and Dr. Paul Babyn. Short descriptions of each hospital department are presented below.

University Health Network/Mount Sinai Hospital

This joint Department of Medical Imaging was created in 1997 from the merger of the Departments of Medical Imaging at Mount Sinai Hospital, Toronto Western Hospital, Princess Margaret Hospital, and Toronto General Hospital. The latter three hospitals also merged at the corporate level into the University Health Network (UHN), while Mount Sinai Hospital remained corporately separate.

The Department has a full-time medical imaging faculty of 45 radiologists and nuclear medicine specialists, over 20 post-residency fellows, and approximately 50-60% of the residents registered in the University of Toronto Program. Its practice is carried out in a highly integrated manner at four sites in downtown Toronto. An internally developed PACS system has greatly facilitated the integration across sites and with other departments.

The past year saw tremendous recruitment of new faculty, not only from within Canada, but also internationally, and a substantial increase in activity. Twelve new faculty members joined the Department! Overall clinical activity increased by 6.5% from last year. For the year ended March 31, 2002, 636,386 examinations were performed.

Many of the Department's faculty continued to play major leadership roles in the academic programs of the University of Toronto, including the residency and fellowship programs, and the leadership of many of the subspecialty divisions. The Department is leading the effort to acquire a clinical PET system, and soon a 3T MRI system will add to the complement of its eight current MRI units. A Research Group and Image Analysis Centre were established under the leadership of Dr. Tim Roberts. The Group will have offices at all the sites and at the University of Toronto.

Members of the Department have frequently been the winners of major teaching awards, but no one more so than Dr. Gregory Olscamp. Last year he won the W.T. Aikins Awards for excellence in Undergraduate Teaching, considered to be the most prestigious award in the Faculty of Medicine. Sadly, we experienced an immense loss with his death in August 2001. Dr. Gregory Olscamp was an outstanding physician, teacher and person. A memorial scholarship was set up to honor his memory.

Sunnybrook and Women's College Health Sciences Centre

Sunnybrook and Women's College Health Sciences Centre is a result of the merger of Sunnybrook Health Sciences Centre, Women's College Hospital and the Orthopedic and Arthritic Hospital in June 1998. The Department of Medical Imaging is an integrated department and functions on all three campuses. The Department has 20 full-time faculty members.

The hospital has 2 clinical MRI units (GE 1.5 T TWIN), 2 research MRI units (GE 1.5 T and 3.0T), and 3 CT scanners (2 multislice, 1 single slice). A 4th CT scanner is scheduled to be operational this year. In Nuclear Medicine there are 6 SPECT cameras (Picker/Marconi) as well as a Gamma PET. The hospital has 15 ultrasound units, mainly ATL. The angiography rooms are equipped with Philips equipment (Integris). All modalities are fully integrated with state-of-the-art PACS and RIS (Agfa and IDX), supporting an annual workload of approximately 260,000 exams per year.

The Hospital has 5 major programs. These include Trauma, Cancer, Heart and Circulation, Musculoskeletal, Perinatal and Gynecology. More information about the hospital can be found on our website at: <http://www.sunnybrookandwomens.on.ca/>

St. Michael's Hospital

The Medical Imaging Department at St. Michael's Hospital has undergone considerable expansion and remodelling in the past few years, concomitant with the integration of programs and services from the Wellesley Central Hospital, which is now closed. The annual tally of imaging examinations is over 240,000, excluding a very busy cardiac catheterization service which performs over 4000 radiologist-interpreted procedures per year. Virtually all of the imaging equipment has been replaced in the past few years, with two new helical CT scanners, two new MRI units, and three angiography suites, including a bi-plane neuro-interventional facility. The general radiographic equipment has also been upgraded to PACS readiness. PACS is budgeted in the Hospital's Strategic Information Plan for the years 2002/2003. An aggressive recruiting campaign of sub-specialist radiologists has brought staffing levels to 20. This will allow the department to better meet the needs of the University Residency and Fellowship Programs. St. Michael's is proud of its commitment to teaching and clinical excellence, with a lesser emphasis historically on research. The hospital has recently appointed a renowned critical care researcher as VP of Research, and there is renewed commitment to increasing the research profile of the hospital and of the Imaging Department in particular. Other unique hospital attributes which are reflected in the Medical Imaging Department at St. Michael's are the Inner City Health focus, the world-renowned Minimal Access Therapeutics Program, and the HHT Program. Further, St. Michael's is Toronto's only downtown trauma centre. It has outstanding clinical and research programs in Heart and Vascular and Renal Diseases, both of which are actively supported by the Medical Imaging Department.

The Hospital for Sick Children

The Hospital for Sick Children Department of Diagnostic Imaging provides full imaging service for all children up to the age of 18 years. We currently perform approximately 130,000 examinations per year. The department has 21 full-time staff, with pediatric imaging subspecialists in Neuroradiology, interventional, cardiology, and body cross-sectional imaging. The department has two 1.5T MR scanners, two CT scanners, (including one 8 slice CT), along with a dedicated Image Guided Therapy suite. This suite allows both interventional radiology and minimally invasive surgical procedures to be combined, and consists of four rooms containing integrated CT fluoroscopy, a biplane unit, and two single plane fluoroscopic units with ultrasound units. The department has an active sonography service with eleven ultrasound units. There is an integrated PACS and RIS system providing image and report distribution throughout the department and the hospital. Research and sub-specialty training are active interests of the department with three imaging scientists and eleven fellows in subspecialty training from across the world.

RESEARCH GRANTS

Members of the Department of Medical Imaging (underlined) were investigators on the following grants, identified by the principal investigator, other investigators, project title, sponsor, total amount of grant, and start and end dates of the funding period.

Asch M (Principal Investigator), Gallinger S, Kachura JR (Co-Investigators). Evaluation of safety and effect of percutaneous temporary portal vein occlusion during radiofrequency ablation of liver using a porcine model. Radiotherapeutics Inc. \$40,000.00. January - August 2001.

Asch M (Principal Investigator), Lem S, Gallinger S, Kachura J, Swallow S, Blackstein M (Co-Investigators). Bland hepatic embolization for hepatic neuroendocrine metastasis. Biosphere Medical. \$24,000.00 USD+. January 2002. Ongoing.

Asch M, Bezjak A (Principal Investigators), Partap V, Keshavjee S, Ginzberg R, Yee U, Wilson P (Co-Investigators). A randomized clinical trial comparing radiation therapy to stent insertion and radiation therapy in the treatment of malignant superior vena cava obstruction.

Banwell B (Principle Investigator) with Anderson P) Neuropsychological and MRI Characteristics of Pediatric Multiple Sclerosis. Grantors: Agency: The Multiple Sclerosis Scientific Research Foundation [Pilot project award] \$25,720.00 for fiscal year 12/01/2000 to 11/30/2001

Blaser S, Levin H, (Principle Investigators), Dennis M, The Hospital for Sick Children (with Barnes M, Schachar R) (Co-Principle Investigators). Neurobehavioural Outcome of Head Injury in Children. National Institutes of Health, Baylor College of Medicine (Primary site). Subcontract agreement between Baylor and HSC – annual renewal. September 1998 - July 31, 1999, US \$137,449; September 1998 - July 31, 2000, US \$141,572; September 2000 - July 31, 2001, US \$136,686; March 2000-Feb 2002, US \$226,603

Boyd NF (Principal Investigator), Bukhanov K, Fishell E, Hanna, W, Holloway C, Jong R, Tritchler D, Wright B, Yaffe MJ (Collaborators). Mammography densities and risk of breast cancer. National Institutes of Health, USA and the Ontario Cancer Institute/Princess Margaret Hospital. \$336,022.00. 1999-2002.

Boyd NF (Principal Investigator), Bronskill M, Bukhanov K, Fishell E, Freidenreich C, Minkin S, Wright B, Yaffe MJ (Collaborators). Determinants of breast tissue composition in young women. National Institutes of Health and Ontario Cancer Institute/Princess Margaret Hospital. \$911,954.00. 2002-2005.

Bukhanov K. Z-Tech breast cancer detection system using homologous electrical difference analysis (HEDA). Z-Tech (Canada) Inc. \$22,295.00. 2001-2003.

Burns PN (Principal Investigator), Wilson SR (Co-Investigator). Nonlinear imaging with ultrasound contrast agents: MOP-12482. Medical Research Council of Canada. \$95,748.00. June 1, 2000-May 31, 2004.

Caldwell CB, Mah K. “Multimodality functional and dynamic imaging for target definition: integration into cancer therapy” (project within the Ontario Consortium for Image Guided Therapy and Surgery) Funding Institution: Ontario Research and Development Challenge Fund principle Investigators. \$277,140. 2000-2004

Castellanos F (Principal Investigator), Cheyne D (Consultant), Tannok R, Arnsten A, Gerhardt G, Simard L (Co-Investigator). “Interdisciplinary Network on Cerebellar-Striatal Dysfunction in ADHD” NIH Group Grant, approx. \$100,000 (fMRI/MEG component) 2002-2004.

Cheyne D. “Mapping the Human Sensorimotor Cortex using Spatially Filtered Magnetoencephalography” NSERC - Individual Research Grant, \$40,000 2002-2004

Chow E (Principal Investigator), Mikulis DJ (Co-Principal Investigator). Potential predictor of schizophrenia in a high genetic risk sample: Ontario project. Schizophrenia Society of Ontario. \$40,000.00 per annum. 2002-2004.

Dick P, Schuh S (Principle Investigators), Lalani, A, Allen U, Manson D, Babyn P, Stephens D (co-investigators). Do Children with Bronchiolitis need Chest Radiographs? Physicians Services Incorporated Foundation (PSI), 11/2001 to 5/2004, \$108,000.00

Durie PR (Principle Investigator), Dirks MH, Martha H, Doyle J, Saunders, EF, Barron M, Hagen L, Manson D (co-investigators). Pancreatic Complications of Hematopoietic Stem Cell Transplantation in Children: A Prospective Study of the Incidence, Associated Factors, and Natural History, Pediatric Consultants, 10/2001 to 09/2003, \$4069.00

Farb R. ATECO MR angiography for the follow-up Patients of Intracranial Cerebral Aneurysms Treated with Guglielmi Detachable Coils. The Canadian Head of Academic Radiology Grant in Aid. June 2002-2003.

Feldman B, Blanchette V, Babyn P (Investigators). An open dose escalating factor VIII prophylaxis study assessing the safety efficacy and cost effectiveness in young patients with severe hemophilia. Bayer, Healthcare Division, October 1996 – 2002. \$416,243.00

Friedman J, Mahant S (Project Investigators), Connolly B, Chait, P, Marthur C (Co-Investigator(s)/Collaborators). G tube registry for outcomes and quality of life of neurologically impaired children with radiologically placed G tubes. PSI 2002

Goss PE, Thompson L (Principal Investigators), Bukhanov K, Muradali D (Collaborators). A protocol to study the effects of dietary flaxseed on mammographic density. Canadian Breast Cancer Research Initiative. \$218,165.00. 1998-2003.

Goss PE (Principal Investigator), Josse R, Bukhanov K, Muradali D (Collaborators). A randomized feasibility study of letrozole in postmenopausal women at increased risk for development of breast cancer as evidenced by high breast density. Novartis. \$433,880.00. Summer 1999 (end date unknown).

Haider M (Principal Investigator). Predicting the response of liver metastases to chemotherapy using MRI perfusion and MRI oxymetry. CHAR/Nycomed Development Awards Program. \$6000.00. 2001.

Haider M (Principal Investigator), Toi A, Sweet J, O'Malley M, Trachtenberg J (Co-Investigators). The utility of functional and morphologic MRI in the detection of prostate cancer for patients with elevated PSA and prior negative biopsy. PMH Foundation. \$30,000.00. April 2002.

Haider M (Principal Investigator). The utility of functional and morphologic MRI in the detection of prostate cancer for patients with elevated PSA and prior negative biopsy. CHAR/Amersham Development Awards Program. \$4500.00. 2002.

Haider M (Principal Investigator). The potential use of BOLD MRI as a non-invasive measure of tumor hypoxia in prostate cancer. Canadian Prostate Cancer Research Initiative IDEA Grant, National Cancer Institute of Canada. \$49,692.00. 2002.

Jong RA. Digital Mammography Imaging Screening Trial Pisano ED (Principal Investigator), Hendrick RE (Co-Principal Investigator), (Toronto Site Clinical Investigator) National Cancer Institute \$26,500,000 (US\$) for 2001-2004.

Jong RA. A Population-based Study of Outcomes of Screening Mammography among Ontario Women 40 to 49 years of age Paszat L (Principal Investigator), (Co-investigator) Canadian Breast Cancer Research Initiative \$692805 for 2001-2004.

Kucharczyk W, Stuss D, Henkelman RM, Vaccarino F. (Principal Investigators) "Functional Imaging Research Network". Canadian Foundation for Innovation and Ontario Innovation Trust. Total Grant from CFI/OIT – \$21,400,000. Attributable to W. Kucharczyk - \$6,196,746. 2000-2004.

Kucharczyk W, Stuss D, Henkelman RM, Vaccarino F. (Principal Investigators) "Functional Imaging Research Network – Image Analysis Centre". Canadian Foundation for Innovation and Ontario Innovation Trust. Total Grant from CFI/OIT – \$21,400,000. Attributable to W. Kucharczyk - "Image Analysis Lab" \$300,000. 2000-2004.

Kucharczyk W, Sherar M, Peters T, Ellis R. (Principal Investigators) "Ontario Consortium for Image Guided Therapy and Surgery" – "OCITS" Ontario Research Development & Challenge Fund. Total OCITS Grant from ORDCF - \$16,500,000. Attributable to W. Kucharczyk - \$948,000. Matching Private Sector Contribution to W. Kucharczyk - \$948,000. 2001-2005.

Lesley M (Principle Investigator), Chait P (Co-Investigators/Collaborators). PARKAA ATIIIASP Multi Centre Study. Bayer Inc. (\$127,093.00) 1997 - Ongoing

Mah K, Caldwell CB, and Danjoux C. 2002-2003 "Can ¹⁸FDG-PET images provide the 3D extent of lung tumour motion for individualized radiation targeting?" National Cancer Institute of Canada Operating Grant. Principle Investigators:.. \$63,000/year (2 years total).

Mikulis DJ (Co-Principal Investigator). The behavioral research and imaging network. Ontario Research and Development Challenge Fund. \$475,000.00. 2002-2007.

Milosevic MF (Principal Investigator), Toi A, Bristow R, Panzarella T, Sweet J, Headley D, Hill R (Co-Investigators). A study of transrectal tumor oxygen measurements in patients with clinically localized prostate cancer. US Department of Defence Prostate Cancer Research Program. \$198,375.00. 2001-2004.

Narod S (Principal Investigator), Nam R, Trachtenberg J, Jewett M, Fleshner N, Pollak M, Toi A, Brunet JS (Co-Investigators). The role of serum IGF-1 levels and androgen receptor genotype in prostate cancer diagnosis. NCIC. \$140,000.00 per annum. 1999-2002.

Noseworthy MD, Macgowan CK (co- Principle Investigators). Advanced SUN UNIX computer server and network for imaging physics research. (Accepted, SUN Canada, Jan 31. 2002. \$250,000)

Pang EW (Principle Investigator), Otsubo H, Sharma R, Chuang S (Co-Applicants), Division of Neurology (Primary Investigator's Department). Examination of auditory function in children using magnetoencephalogram. (\$16,316)

Parker C (Principal Investigator), Milosevic M, Warde P, Toi A, Sweet J (Co-Investigators). A clinical study of the effect of recombinant human erythropoietic (rHuEPO) of tumor oxygenation in prostate cancer. Anemia Institute for Research and Education. \$54,700.00 over 2 years 2002.

Reilly RM (Principal Investigator), Sandhu J, Cameron R, Vallis K, Hendler A. Epidermal growth factor receptor overexpression as a target for Auger electron radiotherapy of breast cancer. U.S. Army Breast Cancer Research Program. \$195,551.00 US (1998-2002).

Reilly RM (Principal Investigator), Vallis K. Molecular imaging of the early response to radiotherapy of breast cancer. Breast Cancer Society of Canada. \$18,040.00 (2000-2002).

Reilly RM (Principal Investigator), Vallis K. Molecular imaging of the early response to radiotherapy of breast cancer. Cancer Research Society Inc. \$81,600.00 (2000-2002).

Reilly RM (Principal Investigator), Holloway C, Catzavelos C, Sandhu J, Hendler A. Novel radiopharmaceuticals for radioguided surgery of ductal carcinoma *in situ* of the breast. U.S. Army Breast Cancer Research Program. Diagnostic and Breast Surgical Imaging Award. \$364,410.00 (2000-2003).

Reilly RM (Principal Investigator), Baruchel S (Co-Investigator). Novel targeted Auger electron radiotherapy of neuroblastoma using ¹²³I-MIBG. James Birrell Neuroblastoma Research Fund. \$35,000.00 (2001-2002).

Reilly RM (Principal Investigator), Vallis KA, Oza A, Lockwood G, Hendler A, Cameron R. Preclinical lead-up studies in support of an IND application for ¹¹¹In-hEGF: A new

radiopharmaceutical for treatment of advanced breast cancer. U.S. Army Breast Cancer Research Program. \$199,595 US (2002-2004).

Reilly RM (Principal Investigator), Brandwein, J, Dick J, Minden M. Novel targeted Auger electron radiotherapy of acute myelogenous leukemia. Canadian Institutes of Health Research (CIHR). \$210,000.00 (2002-2005).

Robaey P (Principal Investigator), Cheyne D, Schachar R, Barr CL, Perusse D, Simard L (Co-Investigator). Inattention, impulsiveness and restlessness in childhood: heritability, genetics, neuropsychology and psychophysiology (KIDNET)” CIHR - New Emerging Team Grant, \$1,249,585 2002-2007.

Saint-Cyr J (Principal Investigator), Mikulis DJ (Co-Investigator). Radiological and clinical evaluation of subthalamic nucleus deep brain stimulation. The Parkinson Foundation of Canada. \$28,500.00 per annum 2001-2002.

Saint-Cyr J, Mikulis DJ, McAndrews MP (Principal Investigators). Deep-brain stimulation effect on task-driven fMRI. Natural Sciences and Engineering Research Council of Canada. \$64,000.00. 2001-2004.

Samson L, Sarrazin J, Prosmanne O, Cordeau MP, Bard C, Therasse E. Human Anatomy Imaging. Supported by a grant from the Fondation de L’Hotel-Dieu de Montreal. 1996-07.

Sandhu J, Reilly RM (Co-Investigator), Guha A. Vascular growth factor receptors as a target for Auger electron radiotherapy of malignant astrocytomas. Natural Sciences and Engineering Research Council. \$252,000.00 (2000-2003).

Vallis KA (Principal Investigator), Reilly RM (Co-Investigator), Oza A, Lockwood G, Hendler A, Cameron R, Wells W, Warr D. A phase I study of ¹¹¹In-epidermal growth factor: A novel radiopharmaceutical agent for the treatment of breast cancer. Susan G. Komen Breast Cancer Foundation. \$173,000.00 US.

Wilson SR (Principal Investigator). A trial to assess the variability of definity enhanced pulse inversion ultrasound imaging (DE-PHI) as a method for determining hemodynamic change in human liver tumours. Astra Zeneca Canada Inc. \$97,000.00. January 6, 2002.

Yaffe M (Program Leader), Wilson B, Boyd N, Reilly RM (Principal Investigator) and others. Development of radiopharmaceuticals for breast cancer imaging. Ontario Research and Development Challenge Fund. Centre of Excellence in Breast Cancer Imaging Research. \$100,000.00 (2000-2004).

PUBLICATIONS: PEER-REVIEWED PAPERS AND ABSTRACTS

Ahmed II, Feldman F, Kucharczyk W, Trope GE. Neuroradiologic screening in normal-pressure glaucoma: study results and literature review. *J Glaucoma* 2002 Aug; 11(4):279-86.

Albrecht T, Blomley MJK, Burns PN, Wilson S, Leen E, Cauldon M, Calliada F, Correias JM, LaFortune M. Comparison of conventional sonography, contrast-enhanced pulse inversion sonography and dual phase spiral CT in the detection of hepatic metastases: Results of a multicentre study. *European Radiology* 2001;11(suppl1):212-213.

Al-Maghrabi J, Vorobyova L, Toi A, Chapman W, Zielenska M, Squire JA. Identification of numerical chromosomal changes detected by interphase fluorescence in situ hybridization in high-grade prostate intraepithelial neoplasia as a predictor of carcinoma. *Arch Pathol Lab Med* February 2002;126(2):165-169.

Ang A, Chong NK, Daneman A. Pedoatroc appendicitis in “real-time”: The value of sonography in diagnosis and treatment. *Pediatric Emergency Care* 17:334-340, 2001.

Asch M, Kachura J, Chan G. Endovascular fibrinolysis and metallic stenting for treatment of iliofemoral deep venous thrombosis. Case of the Month: Canadian Interventional Radiology Association Web page (www.canira.org) September 2001.

Benavente O, Eliasziw M, Streifler JY, Fox AJ, Barnett HJM, Meldrum H, for the North American Symptomatic Carotid Endarterectomy Trial (NASCET) Group. Prognosis Following Transient Monocular Blindness Associated with Carotid Artery Stenosis and the Effect of Endarterectomy. *N Engl J Med*. 2001 Oct, 345:1084-90.

Benjaminov O, Atri M. Percutaneous thrombin injection for treatment of an intrarenal pseudoaneurysm. *AJR Am J Roentgenol* Feb. 2002;178:364-6.

Bernstein S, Weinstein M, Connolly B, Temple M. Subcutaneous Emphysema in a paediatric patient after radiologic placement of a percutaneous gastrostomy tube. *AJR Am J Roentgenol*. 2001 Sep; 177(3):693-4

Blaser S, Jay V. Disorders of cortical formation: radiologic-pathologic correlation. *Neurosurg Clin N Am*. 2002 Jan;13(1):41-62

Boutis K, Komar L, Jaramillo D, Babyn P, Alman B, Snyder B, Mandi K, Schuh S. Sensitivity of a clinical examination to predict need for radiography in children with ankle injuries: a prospective study. *Lancet (England)* 358: 22-29, 2001

Butt AM, Ip W, Ellis L, Martin S, Beharry S, Connolly B, Pike J, Kelly E, Stormon M, Tullis E, Pencharz PB, DiMagno EP, Durie PR. The Fate of Ingested Enzymes in Cystic Fibrosis. *Pediatric Pulmonology*: Suppl. 22, 2001 (S11.4 p. 142).

Caldwell CB, Mah K, Ung YC, Danjoux CE, Balogh JM, Ganguli SN, Ehrlich LE “Observer variation in contouring gross tumor volume in patients with poorly defined non-small-cell lung tumors on CT: the impact of 18FDG-hybrid PET fusion” Int J Radiat Oncol Biol Phys 2001 Nov 15;51(4):923-31

Callen DJ, Black SE, Gao F, Caldwell CB, Szalai JP “Beyond the hippocampus: MRI volumetry confirms widespread limbic atrophy in AD” Neurology 2001 Nov 13;57(9):1669-74

Callen DJA, Black SE, Caldwell CB. Limbic system perfusion in Alzheimer’s disease measured by MRI-coregistered HMPAO SPET Eur J Nucl Med (2002) 29:899–906.

Canakis A-M, Cutz E, Manson D, O’Brodivich H. Pulmonary Intestinal Glycogenosis: A new variant of neonatal interstitial lung disease. Am J Respir Crit Care Med 165:1557-1565, 2002.

Chen P, Brandwein J, Wedel N, O’Connor J, Reilly RM. ¹¹¹In-labeled humanized monoclonal antibody HuM195 is selectively radiotoxic to human leukemia cells expressing CD33. J Nucl Med 2001;45:255. (Abstract 1072)

Chen P, Cameron J, Wang J, Vallis K, Sandhu J, Hendler AL, Reilly RM. The anti-tumor effect of the Auger electron-emitting radiopharmaceutical, ¹¹¹In-hEGF against MDA-MB-468 human breast cancer xenografts is tumor-size dependent. J Nucl Med 2001;45:255. (Abstract 1073)

Cheung RT, Eliasziw M, Fox AJ, Barnett HJ. Types and Severity of Hemorrhagic strokes in Patients with Internal Carotid Artery Stenosis - Results from the North American Symptomatic Carotid Endarterectomy Trial. Stroke 2002; 33: 347.

Chow EW, Zipursky RB, Mikulis DJ, Bassett AS. Structural brain abnormalities in patients with 22q11 deletion syndrome and schizophrenia. Biological Psychiatry February 2002;51(3):208-215.

Chris L.F. Woo, Chuang SH, Laurence E. Becker, et al. Radiologic-Pathologic Correlation in Focal Cortical Dysplasia and Hemimegalencephaly in 18 Children. Pediatric Neurology Vol. 25, No. 4, 2001.

Chuang NA, Otsubo H, Ochi A., Jay V, Shroff M, Hiew CY, Aung M, Sobel DF., Rutka JT, O. Carter Snead, III. Chuang SH. Pediatric Localization-related Epilepsy: Pre-operative Magnetic Source Imaging and Neuropathology. ASNR Foundation Symposium, 40th Annual Meeting, Vancouver, May 11-17, 2002.

Chuang S. Integrating MEG. Taiwan Pediatric Epilepsy Congress, Tao Yuan, Taiwan, Nov. 3-7, 2001.

Chuang S. Neuroimaging Studies for Epilepsy Surgery in Children. Taiwan Pediatric Epilepsy Congress, Tao Yuan, Taiwan, Nov. 3-7, 2001.

Colgan TJ, Pron G, Mocarski EJM, Asch MR. The identification and distribution of embolic material and associated necrosis in surgical pathology specimens following uterine fibroid embolization (UFE). Mod Pathol January 2002;15(1):194A.

Common AA, Therapeutic Failure of Uterine Fibroid Embolization Caused by Underlying Leiomyosarcoma. J Vasc Interv Radiol 2001;12: 1449-1452.

Dill-Mackey MJ, Wilson SR, Burns PN, Khalili K. Focal hepatic masses: Enhancement patterns with SH U 508A and pulse-inversion US. Radiology January 2002;222(1):95-102.

Downar J, Crawley AP, Mikulis DJ, Davis KD. A cortical network sensitive to stimulus salience in a neutral behavioral context across multiple sensory modalities. Journal of Neurophysiology January 2002;87(1):615-20.

Downar J, Crawley AP, Mikulis DJ, Davis KD. The effect of task relevance on the cortical response to changes in visual and auditory stimuli: An event-related fMRI study. Neuroimage December 2001; 14(6):1256-67.

Ein SH, Friedberg J, Chait P, Forte V, Najm H. Traumatic Tear of Aorta, Trachea, and Esophagus in a 7-year old survivor. J Pediatr Sur. 2002 Jan;37(1):E1

Elias DA, Lax MJ, Anastakis DJ. Musculoskeletal images. Ganglion cyst of Guyon's canal causing ulnar nerve compression. Can J Surg October 2001;44(5):331-2.

Eugene H. Ng, Vibbuti S. Shah, Armstrong D, Howard M. Clarke. Cavernous Lymphangioma. J. Pediatr 2001;138:146.

Farb RI, McGregor C, Kim JK, Laliberte M, Derbyshire JA, Willinsky RA, Cooper PW, Westman DG, Cheung G, Schwartz ML, Stainsby JA, Wright. Intercranial arteriovenous malformations: real-time auto-triggers elliptic centric-ordered 3D gadolinium-enhanced MR angiography initial assessment. Radiology 2001 Jul; 220 (1):244-251.

Farb RI, Willinsky RA, Kim J, Montanera WJ, terBrugge K, Derbyshire JA, vanDijk JM, Wright GA. Spinal dural arteriovenous fistula localization with a technique of first class Gadolinium enhanced MR angiography: Initial experience. Radiology 2002; 222:843-850.

Fong K, Kung R, Lytwyn A, Trudeau M, Chapman W, Nugent P, Glanc P, Manchul L, Szabunio D, Myhr T. Endometrial Evaluation with Transvaginal US and Hysterosonography in Asymptomatic Postmenopausal Women with Breast Cancer Receiving Tamoxifen. Radiology 2001;220:765-773.

Fong KW, Kung R, Lytwyn A, Trudeau M, Chapman W, Nugent P, Glanc P, Myhr T. Endometrial evaluation with transvaginal ultrasound and hysterosonography in asymptomatic postmenopausal women with breast cancer on tamoxifen. Radiology August 2001;220:765-773.

Forman HP, Traubici J, Covey AM, Kamin DS, Leonidas JC, Sunshine JH. Pediatric radiology at the millennium. Radiology 2001; 220 (1):109-14.

Foster K, Johnson K, Hall A, John P, Chapman S, De Goyet J de Ville UK. The use of TBIDA scintigraphy in evaluating traumatic liver injury in children. Radiological Congress 2002 Abstracts: 31

Fox AJ. Computed Tomography of Hyperacute Infarctions in Relation to Intra-arterial Clot Lysis. Stroke 2002 Jun; 33:1565-1567.

G. Chow, M.D., B. Koirala, M.D., Armstrong D, B.W. McCrindle, M.D., D. Bohn, M.D., D. Edgell.CCP, J.G. Coles, M.D., G. de Veber, M.D. Pediatric Patients undergoing extracorporeal life support for cardiac indications. - Scientific Poster- British Pediatric Neurology Association Meeting, New Castle, England 16-18, Jan. 2002.

Gallix BP, Reinhold C, Dauzat M, Bret PM. Streamlined flow in the portal vein: demonstration with MR angiography. J Magn Reson Imaging May 2002;15(5):603-609.

Gehrke I, John P, Noujaim H, Beath SV, McKiernan P, Otte JB, Kelly DA, de Ville de Goyet J. Meso-portal bypass (MPB) in infants and children: potential cure for extrahepatic portal hypertension (EHPH) British Association for the Study of the Liver Meeting 2001 Abstracts: 25

Gehrke I, John P, Noujaim H, Beath SV, McKiernan P, Otte JB, Kelly DA, de Ville de Goyet J. Meso-portal bypass (MPB) in infants and children: potential cure for extrahepatic portal hypertension (EHPH). The American Association for the Study of Liver Disease, 52nd Annual Meeting 2001 Hepatology (2001) 34 (4) pt2 : 345A

Gehrke I, John P, Noujaim H, Beath SV, McKiernan P, Otte JB, Kelly DA, de Ville de Goyet J. Long term outcome of children following meso-portal bypass (MPB) for extrahepatic portal hypertension (EHPH) due to portal vein thrombosis. British Association of Paediatric Surgeons, Annual International Congress 2002 Abstracts: 5

Gehrke I, John P, Sharif K, Pimpalwar A, Noujaim H, Blundell J, Pearson L, Williams A, Beath SB, McKiernan P, Kelly DA, de Ville de Goyet J. Improved liver flow after direct portal hepatic revascularisation in children with cavernoma. British Association of Paediatric Surgeons, Annual International Congress 2001 Abstracts : poster 14

Gehrke I, John P. MR cholangiogram in children with hepatobiliary and pancreatic disease:when is it useful ? 4th European Congress of Paediatric Surgery 2001 Abstracts : 152-153

Gehrke I. Ayub N, Beath SV, J de Ville de Goyet, Kelly DA, McKiernan P, Raafat F, Ramani P, John P. Safety and feasibility of Transjugular Liver Biopsy In Infants and Children European Society of Paediatric Gastroenterology, Hepatology and Nutrition 2001 Abstracts : 162

Gershon AS, Faughnan ME, Chon KS, Pugash RA, Clark JA, Bohan MJ, Henderson K, Hyland RH, White RI. Transcatheter Embolotherapy of Maternal Pulmonary Arteriovenous Malformations During Pregnancy. Chest 2001; 119:470-7.

Goyal M, Causser PA, Armstrong D. Venous Vascular Malformations in Paediatric Patients: Comparison of Results of Alcohol Sclerotherapy with Proposed MR Classification. Radiology 2002;223:639-644.

Gupte GL, Kumar N, de Ville de Goyet J, John P, McKiernan PJ, Protheroe S, Booth IW, Murphy MS, Kelly DA, Bianchi A, Beath SV. Impact of new strategies in managing intestinal failure (IF) Arch Dis Child (2002) 86, supp 1: A24

Gupte GL, Kumar N, Kelly DA, Booth IW, John P, de Ville de Goyet J, McKiernan PJ, Murphy MS, Protheroe S, Bianchi A, Beath SV. 11 years experience of evaluating children with intestinal failure (IF) referred for possible intestinal transplantation. European Society of Pediatric Gastroenterology, Hepatology and Nutrition Annual Meeting 2002 Journal of Pediatric Gastroenterology and Nutrition (2002) 34: 449

Hahn CD; Shroff MM; Blaser SI; Banwell BL. MRI criteria for multiple sclerosis: Evaluation in a pediatric cohort. Hahn CD; Shroff MM; Blaser SI; Banwell BL. NEUROLOGY 2002, Vol 58, Iss 7, pp A173-A173.

Hanbidge AE. Cancer of the pancreas: The best image for early detection - CT, MRI, PET or US? Can J Gastroenterol 2002;16(2):101-105.

Hickey N, Ryan MF, Hamilton PA, Brenneman P, Boom C, Murphy J. CT of traumatic abdominal wall hernia and associated deceleration injuries. JCAR 53:no. 3, June 2002.

Hirata M., Kato A, Taniguchi M, Ninomiya H, Cheyne D, Robinson S, Marano M, Kumura E, Ishii R, Hirabuki N, Nakamura H, Yoshimine T. Frequency-dependent spatial distribution of human somatosensory evoked neuromagnetic fields. Neuroscience Letters (2002) 318: 73-76.

Hricak H, Ascher S, Dodd GE3rd, Gamsu G, Kucharczyk W, Reiser MF. Imaging interpretation session. Sunday, December 1, 2002. Radiographics 2002 Sept-Oct;22(5):1291-303.

Hughes UM, Thomas KE, Shuckett B, Daneman A, Stephens D. The abdominal radiographic series in children with suspected bowel obstruction - should the second view be abandoned? Pediatric Radiology (2002) 32 556-60

Jacobson JA, Lax MJ. Musculoskeletal sonography of the postoperative orthopedic patient. Semin Musculoskelet Radiol 2002;6(1):67-78.

Jaskolka J, Asch M. What is happening to bedside procedure? Annals RCPSC December 2001; 34(8):515-519. Journal of Neurosurgery January 2002;96(1):76-8.

Jung MJ, Yoo SJ. Prenatal diagnosis of anomalous origin of the right pulmonary artery from the ascending aorta. *Cardiol Young* 2002 Mar;12(2):186-8.

Kim YM, Yoo SJ, Kim TH, Park IS, Kim WH, Kim SH, Lee YT. Tracheal compression by elongated aortic arch in patients with congenitally corrected transposition of the great arteries. *Pediatr Cardiol* 2001 Nov-Dec;22(6):471-7.

Kim YM, Yoo SJ, Kim TH, Park IS, Kim WH, Lee JY, Han MY. Three-dimensional computed tomography in children with compression of the central airways complicating congenital heart disease. *Cardiol Young* 2002 Jan;12(1):44-50.

Kim YM, Yoo SJ, Kim WH, Kim TH, Joh JH, Kim SJ. Bronchial compression by posteriorly displaced ascending aorta in patients with congenital heart disease. *Ann Thorac Surg* 2002 Mar;73(3):881-6.

Kornreich L, Blaser S, Schwarz M, Shuper A, Vishne TH, Cohen IJ, Faingold R, Michovitz S, Koplewitz B, Horev G. Optic pathway glioma: correlation of imaging findings with the presence of neurofibromatosis. *AJNR Am J Neuroradiol*. 2001 Nov-Dec;22(10):1963-9.

Lanthier S, Domi T, Armstrong D, de Veber G. Post-Varicella Arteriopathy of Childhood: Natural History of Vascular Stenosis. The 54th Annual Meeting of the American Academy of Neurology. Poster Presentation. (Aspects of work described in this abstract previously presented at 10th European Stroke Conference). *Cerebrovascular Diseases* 2001;11(suppl 4):99.

LeBlanc CM, Inman RD, Dent P, Smith C, Babyn P, Laxer RM: Retroperitoneal fibrosis: An extraarticular manifestation of ankylosing spondylitis. *Arthritis Rheum* Apr; 47(2): 210-4 2002.

Lee SK, terBrugge K. Clinical presentation, imaging and treatment of cerebral venous thrombosis (CVT). *Interventional Neuroradiology* 2002;8:5-14.

Lee SK, Vilela P, Willinsky R, terBrugge K. Spontaneous regression of cerebral arteriovenous malformations: Angiographic and clinical findings with a review of the literature. *Neuroradiology* January 2002;44(1):11-16.

Lee SK, Willinsky R, terBrugge K. Dural sinus thrombosis complicated with heparin induced thrombocytopenia and thrombosis (HITT). *Interventional Neuroradiology* 2002;8:77-80.

Lee WS, John P, McKiernan P, deVille De Goyet J, Kelly DA. Inferior vena cava occlusion and protein-losing enteropathy after liver transplantation in children. *J Pediatr Gastroenterol Nutr* (2002) 34,4: 413-416

Lee WS, McKiernan PJ, de Ville de Goyet JV, Tanner MS, John P. Successful treatment of refractory ascites in a child with transjugular intrahepatic portosystemic shunt. *Acta Paediatrica* (2002) 90,11:1352-1355

Li TQ, Noseworthy MD (2002) Mapping the development of white matter tracts with diffusion tensor imaging. *Develop. Sci.* 5:293-300.

Lieberman M, Kay S, Emil S, Flageole H, Nguyen LT, Tewfik TL, Oudjhane K, Laberge JM- Ten years experience with Third and Fourth branchial remnants. *Journal of Pediatric Surgery* 2002;37: 685-690

Lum C, Willinsky R, Mikulis D, Montanera W, terBrugge K. The developing stroke: Management decisions. *Can Assoc Radiol J* April 2002;53(2):95-102. Review.

Macgowan CK, Henkelman RM, Wood ML. Pulse-Wave Velocity Measured in One Heartbeat Using MR Tagging. *Magn. Reson. Med.* 48(1), 115-121 (2002)

Mah K, Caldwell CB, Ung YC, Danjoux CE, Balogh JM, Ganguli SN, Ehrlich LE. "The impact of 18-FDG PET on target and critical organs in CT-based treatment planning of patients with poorly defined Non Small Cell Lung Carcinoma: A prospective study" *International Journal of Radiation Oncology, Biology, Physics* 2002(Feb 1); 52: 339-350.

Male C, Chait PG, et al. Comparison of Venography and Ultrasound for the Diagnosis of Deep Vein Thrombosis in the Upper Body in Children: Results of the PARKAA Study. *Journal of Thrombosis and Hemostasis.* 2002 Apr;87(4):593-8

Marotta TR, Lingawi S, Katz SE, Woodhurst WB, Rootman J: Intraorbital Rupture of a Cavernous Internal Carotid Artery Aneurysm: Therapeutic Options. *Ophthalmic Plastic and Reconstructive Surgery* 2001; Vol. 17;1: 67-72.

Martino R, Terrault N, Ezerzer F, Mikulis DJ, Diamant NE. Dysphagia in a patient with lateral medullary syndrome: Insight into the central control swallowing. *Gastroenterology* August 2001; 121(2):420-6.

Massicotte E, Montanera W, Fleming JFR, Tucker W, Willinsky RA, terBrugge K, Fehlings M. Idiopathic spinal cord herniation: Report of eight cases and review of the literature. *Spine* May 2002;27(9):E233-41. Review.

Mayville J, Fuchs A, Ding M, Cheyne D, Deecke L, Kelso JAS. Event-related changes in neuromagnetic activity associated with syncope and synchronization timing tasks. *Human Brain Mapping* (2001) 14: 65-80.

McAdam LC, Blaser S, Banwell BL. Pediatric tumefactive demyelination: case series and review of the literature. *Pediatr Neurol.* 2002 Jan;26(1):18-25.

McClure M, Khalili K, Sarrazin J, Hanbidge A. Epiploic appendagitis: Imaging features and differentiation from segmental omental infarction. *Clinical Radiology* October 2001;56(10):819-827.

McClure MJ, Atri M, Haider MA, Murphy J. Perineural cysts presenting as complex adnexal cystic masses on transvaginal sonography. *AJR Am J Roentgenol* Dec.2001;177:1313-8.

McClure MJ, Khalili K, Sarrazin J, Hanbidge A. Radiological features of epiploic appendagitis and segmental omental infarction. *Clinical Radiology*, 2001;56:819-827.

McClure MJ, Sarrazin J, Kapusta L, Murphy J, Arenson AM, Geertz W. Intravascular femoral vein lipoma: an unusual cause of lower limb venous obstruction. *AJR*, 2001; 463-464; 176(2) : 463-464.

McCready DR, Ghazarian DM, Hershkop MS, Walker JA, Ambus U, Quirt IC. Sentinel lymph-node biopsy after previous wide local excision for melanoma. *Canadian Journal of Surgery* December 2001;44(6):432-4.

Meijboom LJ, Nollen GJ, Merchant N, Webb GD, et al. Frequency of coronary ostial aneurysms after aortic root surgery in patients with the Marfan Syndrome. *Am J Cardiol* May 2002;89(9):1135-1138.

Menon K, Barkun A, Romagnuolo J, Friedman G, Mehta S, Reinhold C, Bret P. Patient satisfaction after MRCP and ERCP. *Am J Gastroenterol* September 2001;96(9):2646-2650.

Mikulis DJ, Jurkiewicz MT, McIlroy WE, Staines R, Rickards L, Kalsi-Ryan S, Crawley AP, Verrier M, Fehlings MG. The relationship between residual motor function and the degree of adaptive change in the primary motor cortex in patients with cervical spine cord trauma. *Neurology* March 2002;58(5):794-801.

Miller DL, Blaser S, Laxer RM. Clinical images: epidural lipomatosis in a 14-year-old boy with systemic lupus erythematosus. *Arthritis Rheum*. 2002 May;46(5):1291

Miller NA, Chapman JW, Fish EB, Link MA, Fishell E, Wright B, Lickley HLA, McCready DR, Hanna WM In Situ Duct Carcinoma of the Breast. Clinical and histopathologic factors and association with recurrent carcinoma. . *The Breast Journal*, volume 7, number 5, 2001, 292-302.

Miller SF, Proud VK, Werner AL, Field FM, Wilcox WF, Lachman RS, Rimoin DL. Pacman dysplasia: a lethal skeletal dysplasia with variable radiographic features. *Pediatric Radiology*, January 2002

Miller SF. Brachytelephalangy with spraing of the fifth distal phalanx: a disgnostic feature of Keutel syndrome. *Pediatric Radiology*, February 2002.

Millward SF, Oliva VL, Bell SD, Valenti DA, Rasuli P, Asch M, Hadziomerovic A, Kachura JR. Günther Tulip retrievable vena cava filter: Results from the Registry of the Canadian Interventional Radiology Association. *J Vasc Interv Radiol* September 2001;12:1053-1058.

Mitchell A, John PR, Mayer DA, Mirza DF, Buckels JA, De Ville De Goyet J. Improved technique of portal vein reconstruction in pediatric liver transplant patients with portal vein hypoplasia. *Transplantation* (2002) 73,8:1244 -1247

More B, Chandran H, Pimpalwar A, John P. Traumatic intra-renal pseudoaneurysm in children. European Society of Pediatric Urology, 13th Annual Meeting 2002 Abstracts: 56PD

Nanthakumar K, Graham AT, Robinson TI, Grande P, Pugash RA, Clark JA, Hutchinson SJ, Mandzia JL, Hyland RH, Faughnan ME. Contrast Echocardiography for Detection of Pulmonary Arteriovenous Malformations. American Heart Journal 2001; 141:243-6.

Natsheh SE, Roberts EA, Ngan B, Chait PG, NG VL. Liver Failure with Marked Hyperferritinemia: “ironing out” the diagnosis. Can J Gastroenterol 2001 Aug;15(8) 537-40.

Nield LE, Qi X, Yoo SJ, Valsangiacomo ER, Hornberger LK, Wright GA. MRI-based blood oxygen saturation measurements in infants and children with congenital heart disease. Pediatr Radiol 2002 Jul;32(7):518-22.

O'Malley ME (Principal Author), Weir MW, Hahn PF, Misdraji J, Wood BJ, Mueller PR. US-guided fine-needle aspiration biopsy of thyroid nodules: Adequacy of cytologic material and procedure time with and without immediate cytologic analysis. Radiology February 2002;222:383-387.

Ochi A, Otsubo H, Honda Y, Hara Y, Sharma R, Rutka JT, Chuang SH, Ken-ichi Kamijo K, Kiyuna T, Yamazaki T, Snead OC III.. EEG dipoles of spikes with/ without myoclonic jerks caused by epilepsy partialis continua. J Child Neurol. 2002 Feb;17(2):127-31.

Ochi A, Otsubo H, Sharma R, Hunjan A, Rutka J, Chuang SH, et al Comparison of EEG Dipoles of Interictal Spikes from Prolonged Scalp Video-EEG and MEG Dipoles from Short-Term Recording in Children with Extratemporal Lobe Epilepsy.. J Child Neurol. 2001 Sep;16(9):661-7.

Ochi, A, Otsubo, H, Chitoku, S, Hunjan, A, Sharma, R, Rutka, JT, Chuang, SH, Yamakazi, T, Snead, OC. Dipole Localization for Identification of Neuronal Generators in Independent Neighboring Interictal EEG Spike Foci. Epilepsia, 2001; 42(4): 483-490.

Oh DC, Min JY, Lee MH, Kim YM, Park SY, Won HS, Kim IK, Lee YH, Yoo SJ, Ryu HM. Prenatal diagnosis of tetralogy of Fallot associated with chromosome 22q11 deletion. J Korean Med Sci 2002 Feb;17(1):125-8.

Otsubo H, Ochi A, Elliott I, Chuang SH, et al. MEG Predicts Epileptic Zone in Lesional Extrahippocampal Epilepsy: 12 Pediatric Surgery Cases. Epilepsia 42(12):1523-1530, 2001.

Pandya J, Valverde K, Heon E, Blaser S, Gallie BL, Chan HS. Predilection of retinoblastoma metastases for the mandible. Med Pediatr Oncol 2002 Apr;38(4):271-3

Pedra CA, Yoo SJ, Soderberg B, Freedom RM. Aneurysm of the membranous septum in critical pulmonary stenosis: spontaneous rupture after balloon dilatation. Pediatr Cardiol 2001 Jul-Aug;22(4):359-62.

Peirone AR, Hornberger LK, Yoo SJ, Van Arsdell GS, Freedom RM. Solitary arterial trunk with absence of the ascending aorta: embryologic considerations. J Thorac Cardiovasc Surg 2002 May;123(5):993-5.

Porter PJ, Tymianski M, Muller PJ, terBrugge KG. What to do when the doctor sees double: Identical twins with nearly identical aneurysms. Interventional Neuroradiology 2001;7:153-160.

Poskitt K, Haw C, Marotta TR, et al. MR Quantification of Flow in Children with Vascular Malformations. Interventional Neuroradiology 7:201-212, 2001.

Poskitt K, Marotta TR, et al. MR Quantification of Flow in Children with Vein of Galen Malformations. Interventional Neuroradiology 7:213-222, 2001.

Rajan DK, Haskal ZJ, Clark TW. Serum bilirubin and early mortality after transjugular intrahepatic portosystemic shunts: Results of a multivariate analysis. J Vasc Interv Radiol February 2002;13:155-161.

Redekop G, Marotta TR, Weill A. Treatment of Traumatic Aneurysms and Arteriovenous Fistulae of the Skull Base Using Endovascular Stents. J Neurosurg 95:412-419, 2001.

Reilly RM, Maiti PK, Kiarash R, Prashar A, Fast D, Dan MD, Narang SA, Foote S, Kaplan HA. Rapid tumour imaging using a scFv of the human monoclonal antibody NovoMAb-G2® labelled with indium-111. Nucl Med Commun 2001;22: 587-595.

Rendon RA, Gertner MR, Sherar MD, Asch MR, Kachura JR, Sweet J, Jewett MA. Development of a radiofrequency based thermal therapy technique in an in vivo porcine model for the treatment of small renal masses. J Urol July 2001;166(1):292-298.

Rendon RA, Kachura JR, Sweet JR, Gertner MR, Sherar MD, Robinette M, Tsihlias J, Trachtenberg J, Sampson H, Jewett MA. The uncertainty of radiofrequency treatment of renal cell carcinoma: Findings at immediate and delayed nephrectomy. J Urol April 2002;167(4):1587-1592.

Restrepo R, Ranson M, Amaral J, Vhait P, Connolly BL, Temple MD, John P. Extracranial arterial aneurysms in infants and children : a practical classification based on etiology and location. P The Society for Pediatric Radiology Annual Meeting 2002 Abstracts: 139

Robinson P, White LM, Salonen D, Daniels TR, Ogilvie-Harris D. Ankle impingement: MR arthrographic assessment of the anterolateral recess. Radiology October 2001;221:186-190.

Robinson P, White LM, Salonen D, Ogilvie-Harris D. Anteromedial impingement of the ankle: Using MR arthrography to assess the anteromedial recess. American Journal of Roentgenology (AJR) March 2002;178:601-604.

Robinson P, White LM, Sundaram M, Kandel R, Wunder J, McDonald DJ, Janney C, Bell RS. Periosteal chondroid tumours: Radiologic evaluation with pathological correlation. American Journal of Roentgenology (AJR) November 2001;177(5):1183-1188.

Ryan MF, Atri M. Fat collection related to the intrahepatic portion of the inferior vena cava. AJR Am J Roentgenol July 2001;177:251-2.

Ryan MF, Hamilton P, Benjaminov O. Abdominal computed tomographic findings in adults with hypovolaemic shock complex (abstract). RSNA 2001

Ryan MF, Hamilton PA, Chu P, Sarrazin J, Benjaminov O, Lam K. Abdominal computed tomography findings of hypovolemic shock complex in adults. Submitted for publication. Radiology, April 2002.

Ryan MF, Hamilton PA. Paradoxical attenuation values in acute aortic dissection. AJR 2001, Sept; 177(3) 719-720.

Ryan MF, Hamilton PA. Performance of CT in the detection of active arterial extravasation following blunt abdominal trauma. (abstract) RSNA 2001.

Ryan MF, Hamilton PA. Performance of CT in the detection of active arterial extravasation following blunt abdominal trauma. (abstract) European Radiology; 11: no.6, March 2001, C33.

Ryan MR, Hamilton P, Benjaminov O. Abdominal computed tomographic findings in adults with hypovolaemic shock complex.(abstract) European Radiology 11: no.6, March 2001.

Sahani DV, O'Malley ME (Co-Author), Bhat S, Hahn PF, Saini S. Contrast-enhanced MRI of the liver with mangafodipir trisodium: Imaging technique and results. Journal of Computer Assisted Tomography March-April 2002;26(2):216-222.

Shah P, Glanc P, Ng E. Asymptomatic morgagni hernia in a neonate. J Pediatrics Online, April 2002 Vol 140, N0.4 pg

Sharif K, Beath SV, Protheroe S, de Ville de Goyet J, John P. Transhepatic Hickman line placement: improving line stability by surgically assisting radiological placement. J Pediatr Gastroenterol Nutr (2002) 34,5: 561-563

Sherar MD, Gertner MR, Yue CKK, O'Malley ME (Contributing Author), Toi A, Gladman AS, Davidson SRH, Trachtenberg J. Interstitial microwave thermal therapy for prostate cancer: Method of treatment and results of a phase I/II trial. Journal of Urology November 2001;166:1707-1714.

Sheth T, Woo A, Schwartz L, Merchant N. Left ventricular mass regression assessed by MR imaging in hypertrophic obstructive cardiomyopathy post-septal ablation. SCMR January 2002. (Abstract)

Sheth TN, Winslow JL, Mikulis DJ. Rotational changes in the morphology of the vertebral artery at a common site of artery dissection. Can Assoc Radiol J August 2001;52(4):236-241.

Simons ME. Peripheral vascular malformations: Diagnosis and percutaneous management. Can Assoc Radiol J August 2001;52(4):242-251. Review.

Siu W, Weill A, Gariepy JL, Moret J and Marotta TR. Arteriovenous Malformation of the Mandible: Percutaneous and Endovascular Treatment. J Vasc Interv Radiol 2001; 12:1095-1098.

Stefani M, Porter PJ, terBrugge K, Montanera W, Willinsky RA, Wallace C. Angioarchitectural factors present in brain arteriovenous malformations associated with hemorrhagic presentation. Stroke April 2002;33(4):920-4.

Stefani M, Porter PJ, terBrugge K, Montanera W, Willinsky RA, Wallace C. Large and deep brain arteriovenous malformations are associated with risk of future hemorrhage. Stroke May 2002; 33(5):1220-4.

Stewart LK, Wilson SR. Transvaginal and transperineal sonography of perianal inflammatory disease. AJR September 2001;177(3):627-632.

Stone M, Salonen D, Lax M, Payne U, Inman R. Clinical and imaging correlates of response to treatment with infliximab in patients with ankylosing spondylitis. J Rheumatol July 2001; 28(7):1605-14.

Streifler JY, Eliasziw M, Benavente OR, Alamowitch S, Fox AJ, Hachinski VC, Barnett HJM, for the North American Symptomatic Carotid Endarterectomy. Trial Group. Prognostic Importance of Leukoaraiosis in Patients with Symptomatic Internal Carotid Artery Stenosis. Stroke. 2002 Jun; 33:1651-5

Taylor AG, Tymianski M, terBrugge K. A dissecting aneurysm of the posterior inferior cerebellar artery. A case report. Interventional Neuroradiology 2001;7:253-257.

Traubici J, Daneman A, Wales P, Gibbs D, Fecteau A, Kim P. Mesenteric lymphatic malformation associated with small-gowel volvulus – two cases and a review of the literature. Pediatr Radiol 32:362-365, 2002.

Traubici J, Daneman A, Wales P, Gibbs D, Fecteau A, Kim P. Mesenteric lymphatic malformation associated with small-bowel volvulus – two cases and a review of the literature. Pediatr Radiol 2002;32 (5):362-5. Review.

Traubici J. The double bubble sign. Radiology 2001;220 (2):463-4.

van Der Knaap MS, Naidu S, Breiter SN, Blaser S, Stroink H, Springer S, Begeer JC, van Coster R, Barth PG, Thomas NH, Valk J, Powers JM. Alexander disease: Diagnosis with MR imaging. AJNR Am J Neuroradiol 2001 Mar;22(3):541-52

VanDijk M, terBrugge K, Willinsky RA, Wallace C. Multiplicity of dural arteriovenous fistulas. Journal of Neurosurgery January 2002;96(1):76-8

VanDijk M, terBrugge K, Willinsky RA, Wallace C. The clinical course of cranial dural AV-fistulas with long-term persistent cortical venous reflux. Stroke May 2002; 33(5):1233-6.

Vijay RKP, John P. Acute limb ischaemia in children: a retrospective study and pictorial review. UK Radiological Congress 2002 Abstracts: 89

Vilela P, terBrugge, Willinsky RA. Association of distinct intracranial pial and dural arteriovenous shunts. Neuroradiology September 2001;43:770-777.

Wales P, Drab S, Connolly B, Kim P. Horseshoe lung in association with other foregut anomalies: What is the significance? Journal of Pediatric Surgery, 2002 Aug; 37(8):1205-7

Wales P, Langer J, Connolly B, Chait PG, Muraca S. Fundoplication and gastrostomy versus Image Guided gastrojejunal tube for Enteral Feeding in Neurologically Impaired Children with Gastroesophageal Reflux. Journal of Pediatric Surgery, 2001 37(3):407-12

Wang J, Chen P, Su ZF, Vallis K, Sandhu J, Hendler A, Cameron R, Reilly RM. Amplified delivery of indium-111 to EGFR-positive breast cancer cells. Nucl Med Biol 2001;28:895-902.

Weill A, Marotta TR, Redekop G. Importance of the Over-the-Wire Occlusion Balloon Catheter Designed for Intracranial Use: Illustrative Cases. Interventional Neuroradiology 7:115-120, 2001.

Weinstein M, Babyn P, Zlotkin S. An orange a day keeps the doctor away: scurvy in the year 2000. Pediatrics (United States), 108(3) pE55 Sep 2001.

White LM, Buckwalter KA. Technical considerations: CT and MR imaging in the postoperative orthopedic patient. Semin Musculoskelet Radiol 2002;6(1):5-18.

White LM, Schweitzer ME, Weishaupt D, Kramer J, Davis A, Marks PH. Diagnosis of recurrent meniscal tears: Prospective evaluation of conventional MR imaging, indirect MR arthrography, and direct MR arthrography. Radiology February 2002;222(2):421-430.

White LM. Advanced imaging of the postoperative orthopedic patient. Semin Musculoskelet Radiol 2002;6(1):3-4.

Williams HJ, Wake MJC, John P. Intraosseous haemangioma of the mandible. Pediatr Radiol (2002) 32: 605-608

Wittram C, Batt J, Rappaport DC, Hutcheon MA. Inspiratory and expiratory helical CT of normal adults: Comparison of thin section scans and minimum intensity projection images. J Thorac Imaging January 2002;17(1):47-52.

Wittram C, Weisbrod GL. Mycobacterium avium complex lung disease in immunocompetent patients: Radiography-CT correlation. The British Journal of Radiology April 2002;75:340-344.

Wu J, Haycocks T, Alasti H, Ottewell G, Middlemiss N, Abdoell M, Warde P, Toi A, Catton C. Positioning errors and prostate motion during conformal prostate radiotherapy using on-line isocenter set-up verification and implanted prostate markers. Radiotherapy and Oncology November 2001; 61:127-133.

Yoo SJ, Min JY, Lee YH. Normal pericardial fluid in the fetus: color and spectral Doppler analysis. Ultrasound Obstet Gynecol 2001 Sep;18(3):248-52.

PUBLICATIONS: NON-PEER-REVIEWED, BOOKS, CHAPTERS

Blaser SI, Jay V, Becker L, Ford-Jones L. Neonatal brain infections. Chapter 10 in disorders in the newborn infant. Ed. Rutherford M, G. Harcourt Publishers LTD. London 2001; pp: 201-223.

Blaser SI, Armstrong D. Congenital malformations of the face. Chapter 9 in Pediatric ENT Radiology. Eds. SJ King, AE Boothroyd. Springer-Verlag Berlin 2002;pp:99-118.

Blaser S, Armstrong D. Congenital Malformations of the Face. In: Pediatric ENT Radiology, (eds) S.J. King, A.E.. Boothroyd; Springer-Verlag Berlin Heidelberg New York 2002.

Clark JA, Pugash RA. Radiologic Gastrostomy. Endoscopy 2002; 34:506. [letter]

Clark JA. A Vague Impression. AJR 2001; 177:468. [letter]

Clark JA, Faughnan ME, Hyland RH, Pugash RA. *Re:* Surgical Management of Pulmonary AVMs. World J Surg 2001; 25:254-255. [letter]

Clark JA, Pugash RA. Radiologic Gastrostomy. Surg Endosc 2001; 15:221. [letter]

Clark JA, Pugash RA. *Re:* Continent Gastrostomy. J Surg Onc 2001; 76:237. [letter]

Clark JA, Faughnan ME, Hyland RH, Pugash RA. Duplex Ultrasound Screening for Vascular Malformations of the Liver. HHT Foundation International 2001. [abstract]

Connolly B. “The Paediatric Liver, Biliary Tree and Spleen” for Grainger and Allison’s Diagnostic Radiology, Harcourt Publishers. Fourth Edition, Volume 2. London, Ontario 2001.

Donnelly L, O’Hara S, Westra S, Blaser S. Pocket Radiologist: Pediatrics – Top 100 diagnoses. Amirsys, Salt Lake City, 2002

Fox, AJ Technical aspects of neuroangiography: are risks and safeguards understood in the same way? AJNR Am J Neuroradiol. 2001 Nov Dec; 22(10): 1809-10. (commentary).

Fox, AJ Computed Tomography of Hyperacute Infarctions in Relation to Intra-arterial Clot Lysis. Stroke 2002 Jun; 33:1565–1567. (commentary)

Gilday DL. The Contribution of Nuclear Medicine to Pulmonary Imaging. Pediatric Chest Imaging. Pgs. 27-32. Editors Javier Lucaya and Janet L. Strife. Springer 2001.

Gilday DL. Medicine of the Thyroid and Parathyroid Glands. Pediatric ENT Radiology. Pgs. 327-334. Editors Susan J. King and Anne E. Boothroyd. Springer 2001.

Jaffer NM, Ho CS. Investigation of esophageal diseases: Imaging. Radiology, computed tomography and magnetic resonance imaging. In: Pearson FG, Heibert CA et al (eds.). Esophageal Surgery. New York: Churchill Livingstone, 2002. Pages 77-114.

Lasjaunias P, Berenstein A, terBrugge K. Surgical neuroangiography, clinical vascular anatomy and variations, 2nd edition. Germany: Springer-Verlag, 2001. Vol. 1.

Mandzia JL, Faughnan ME, Schneiderman J, Clark JA, Hyland RH. MRI and Clinical Screening in a Population of HHT Patients. HHT Foundation International 2001. [abstract]

Osborn A, Blaser S, Salzman K. Pocket Radiologist: Brain – Top 100 diagnoses. Amirsys, Salt Lake City 2002

Temple M, Chait PG, Connolly B. Interventional Radiology: Radiology Considerations. Pediatric Anaesthesia: Principles and Practices, Chapter 73, 1st Edition, Bisonette B and Dalens B. McGraw-Hill Medical Publishing Division, Toronto, 2002.

Temple M, Chait PG, Connolly B. Interventional Radiology: Radiology Considerations. Pediatric Anaesthesia: Principles and Practices, Chapter 73, 1st Edition, Bisonette B and Dalens B. McGraw-Hill Medical Publishing Division, Toronto, 2002.

Thomas K, Craig F, Owens C. Paediatric Imaging - clinical cases. Greenwich Medical Media Ltd, (2002)

Wilson SR. The future of ultrasound in gastrointestinal imaging. In: Gourtsoyiannis, Yamada, Itai, Meyers, Nolan Ros and Stevenson, (eds.). Abdominal and Gastrointestinal Imaging Multimedia Virtual Testbook, 2001.

Wilson SR. Evaluation of the small intestine by ultrasonography. In: Gourtsoyiannis NC (ed.). Radiological Imaging of the Small Intestine. Springer-Verlag, 2002. Chapter 3.2.

INVITED PRESENTATIONS AND VISITING PROFESSORSHIPS

Amaral J, Chait PG, Connolly BL, Temple MJ, Restrepo, R, Marcon P et al. Esophageal balloon dilatation under fluoroscopic guidance in children – experience of 172 dilatations. SCVIR, Baltimore, Maryland, April 2002.

Armstrong D. Retinal findings in children with intracranial hemorrhage. Presented at the International Society of the Prevention of Child Abuse and Neglect (ISPCAN), Denver, Colorado, July 8, 2002.

Armstrong D. Correlation between retinal abnormalities and intracranial abnormalities in the Shaken Baby Syndrome. Presented at the International Society for the Prevention of Child Abuse and Neglect (ISPCAN), Denver, Colorado, July 8, 2002.

Asch M. Critical appraisal of the literature, recovery IVC filter: initial human experience. National Sales Meeting. CR Bard. Atlanta, Georgia. July 25, 2001.

Asch M. Local tumor ablation. Canadian Association of Radiologists Annual Meeting. Vancouver, British Columbia. September 22, 2001.

Asch M. Radiologists working with industry. Bard Canada Meeting. Vancouver, British Columbia. September 22, 2001.

Asch M. Temporary IVC filters; Local tumor ablation. New Interventions. London, Ontario. October 27, 2001.

Asch M. RFA Workshop. SCIVR Annual Meeting. Baltimore, Maryland. April 2002.

Atri, M. CT and Ultrasound of GI tract. University of Toronto GI Fellows' rounds. January 2002.

Atri, M. Transvaginal Intervention. University of Toronto OB/GYN meeting. Toronto, Ont. Feb. 2002

Atri, M. Transvaginal Intervention. Ectopic pregnancy: the role of endovaginal ultrasound in diagnosis and management. University of Toronto OB/GYN meeting. Toronto, Ont. Feb. 2002

Atri, M. Sonography of acute lower quadrant pain. Ontario Society of Diagnostic Medical Sonographic annual meeting. Toronto, Ont. April 2002

Bret P. Pancreas ultrasound. US de Normandie. France. September 12-13, 2001.

Bret P. PACS and electronic image management in Medical Imaging Departments. Ontario Association of Radiology Managers Conference 2001 Annual Meeting "2001 Embracing Change". Nottawasaga Inn, Aliston, Ontario. September 20, 2001.

Bret P. Challenges of delivering Diagnostic Imaging. Diagnostic Imaging: Navigating Through the Grey Zone. Overview of the Current State of Imaging in Ontario and the Challenges of Management of Diagnostic Imaging. Ontario Hospital Association. Toronto, Ontario. October 2, 2001.

Bret P. Equipment shortages. Diagnostic Imaging: Navigating Through the Grey Zone. Overview of the Current State of Imaging in Ontario and the Challenges of Management of Diagnostic Imaging. Ontario Hospital Association. Toronto, Ontario. October 2, 2001.

Bret P. Human resource issues. Diagnostic Imaging: Navigating Through the Grey Zone. Overview of the Current State of Imaging in Ontario and the Challenges of Management of Diagnostic Imaging. Ontario Hospital Association. Toronto, Ontario. October 2, 2001.

Bret P. Accessibility to services; waiting lists. Diagnostic Imaging: Navigating Through the Grey Zone. Overview of the Current State of Imaging in Ontario and the Challenges of Management of Diagnostic Imaging. Ontario Hospital Association. Toronto, Ontario. October 2, 2001.

Bret P. How to get from here to there? Grand Rounds, Vancouver Hospital PACS Steering Committee, MAAC, PACS Advisory Committee. Vancouver Hospital & Health Sciences Centre. Vancouver, British Columbia. October 10-11, 2001.

Bret P. Jury Informag. Journées Françaises de Radiologie 2001. Paris, France. October 20-24, 2001.

Bret P. Informal Case Presentation. The future of Radiology. Twentieth Annual Practical Radiology at Whistler. University of British Columbia, Whistler, British Columbia. February 3-8, 2002.

Bret P. Chair Scientific Session: Pancreas/Abdomen. European Congress of Radiology 2002. Vienna, Austria. March 1-5, 2002.

Bret P. Controversies in Gastroenterology. MRCP is more cost-effective than ERCP in the initial work-up of patients with suspected biliary obstruction. (Pro) Biliary Debate Session. Sheraton Centre. Toronto, Ontario. April 8-10, 2002.

Bret P. PACS. Pacific North West Radiological Society Annual Meeting. Victoria, British Columbia. April 20-21, 2002.

Bret P. US versus CT versus MRI of the pancreas. Pacific North West Radiological Society Annual Meeting. Victoria, British Columbia. April 20-21, 2002.

Bukhanov K. Breast ultrasound. Breast Pathology Day. The Michener Institute for Applied Health Sciences, Toronto, Ontario. October 20, 2001.

Bukhanov K. Digital mammography. Women's health: Diagnosis and management through ultrasound. The Michener Institute for Applied Health Sciences, Toronto, Ontario. November 17, 2001.

Causer P. The Role of MRI in breast imaging. Presented at the Women and Breast cancer conference, Oct 2001, Women's Health Program, UHN.

Causer P. Interventional Breast Ultrasound. Presented Feb 24, 2002 at the Colony Hotel for the Women's Imaging: Advances in Gynaecological Imaging and Transvaginal Ultrasound conference.

Chait PG. Recent Advances in Vascular Access. 12th IPNA International Congress 2001. Seattle, Sept. 2001.

Chait PG, Shlomovitz E. Percutaneous cecostomy: updated in technique and patient care. RSNA, Chicago, Illinois, November 2001

Chait PG, Gamulka BD, Connolly BL, Temple MJ. Organization of a Pediatric Vascular Access Program: Streamlining care. SCVIR, Baltimore, Maryland, April 2002.

Chait PG, Connolly B, Amaral J, Shlomovitz E, Muraca S, Temple M. Chest port placement in paediatric patients. ARRS, Atlanta, GA. May 2002.

Chait PG, Connolly B, Amaral J, Restrepo R, Shlomovitz E, Muraca S, Temple M. Chest port placement in paediatric patients. ESPR, Bergen, Norway, June 2002.

Chait PG, Connolly B, Amaral J, Restrepo R, Shlomovitz E, Temple M. Pediatric hemodialysis catheter placement in interventional radiology. ARRS, Atlanta, GA. May 2002.

Chait PG, Shlomovitz E, Connolly B, Temple M, Amaral J, Restrepo R, Ein S. Ventriculoperitoneal-shunt complications in children following percutaneous cecostomy. ARRS, Atlanta, GA. May 2002.

Chait PG, Shlomovitz E, Connolly B, Temple M, Amaral J, Restrepo R, Ein S. Percutaneous cecostomy: long term outcomes and patient satisfaction. ARRS, Atlanta, GA. May 2002.

Chait PG, Shlomovitz E, Richards H, Connolly B, Temple M, Amaral J, Restrepo R, Ein S. Percutaneous cecostomy, long term outcomes and patient satisfaction. ESPR, Bergen, Norway, June 2002.

Chait PG, Gamulka B, Mahant S, Connolly B, Amaral J, Restrepo R, Temple M. Organization of a paediatric vascular access program (vap). ESPR, Bergen, Norway, June 2002.

Chait PG, Restrepo R, Amaral J, Connolly B, Temple M, Shlomovitz E. Removal of imbedded retrievable IVC filters – a case report. ESPR, Bergen, Norway, June 2002.

Chait PG, Shlomovitz E, Richards H, Connolly B, Temple M, Amaral J, Restrepo R, Ein S. Ventriculoperitoneal-shunt complications in children following percutaneous cecostomy. ESPR, Bergen, Norway, June 2002.

Chait PG, Kim P, Papadouris DC, Muraca S, Connolly B, Amaral J, Restrepo R, Temple M. Case report: laparoscopically assisted cecostomy tube. ESPR, Bergen, Norway, June 2002.

Cheung G. "Percutaneous Vertebroplasty", Course on Management of Bone Metastases, Toronto Sunnybrook Regional Cancer Centre, February 22, 2002

Cheung G. "Head and Neck Lesions", Session with Residents, Montreal General Hospital, Montreal, October 22, 2001.

Cheung G. "MRI of Seizures", Montreal Neurological Hospital, Montreal, October 23, 2001.

Cheung G. 7th Annual Conference: The Science & Art of Pain and Symptom Management Faculty of Medicine, University of Toronto. November 17 & 18, 2000.

Cheung G. Vertebroplasty, Management of Bone Metastasis. Pain Preceptorship Program, TSRCC, October 23-25, 2000, Vertebroplasty - A New Treatment for Pathologic Fractures.

Cheung G. 'Current Management of Epistaxis', Cheung G, Desrosiers M, Stevens H, Canadian Society of Otolaryngology - Head and Neck Surgery, 54th Annual Meeting. Toronto, June 2000.

Cheung G. Continuing Education, University of Toronto, 7th Annual Conference. The Science & Art of Pain and Symptom Management, November 17& 18, 2000.

Cheyne D. Neuromagnetic imaging of human motor function. 11th World Congress of Psychophysiology. Montreal, Quebec. July, 2002.

Chuang SH, Otsubo H, Xiang J, Sharma R, Holowka S, Pang E, Ochi A, Elliot I, Rutka JT, Snead OC III. Magnetoencephalography for evaluation of pediatric intractable epilepsy. Philadelphia, AES, December 4, 2001.

Chuang NA, Otsubo H, Ochi A, Jay V, Shroff MM, Hiew CY, Aung M, Sobel DF, Rutka JT, Snead OC, III, Chuang SH. Pediatric Localization-related Epilepsy: Pre-operative Magnetic Source Imaging and Neuropathology. American Society of Neuroradiology 40th Annual Meeting, Vancouver, B.C., May 2002.

Clark JA. GI/GU What's New, Michener Institute, Toronto; Film Interpretation Session (course faculty) April 13, 2002.

Connolly B, Daunt S, Schneider R, Temple M, Amaral J, Chait P. Ultrasound guided tendon sheath injections in children. Society of Cardiovascular & Interventional Radiology, Baltimore MD, April 2002.

Connolly BL, Chait PG, Temple MJ, Restrepo R, Amaral J, Shlomovitz E et al. Sonographic guidance for lung nodule biopsy: inherent contrast of air. SCVIR, Baltimore, Maryland, April 2002.

Connolly BL, Temple MJ, Chait PG, Restrepo R, Amaral J. Insertion and management of the G and GJ tube. SCVIR, Baltimore, Maryland, April 2002.

Connolly BL, Walsh S, Temple MJ, Restrepo R, Amaral J, Chait PG. Influence of arm movement on central tip location of peripherally inserted central catheters (PICCs). SCVIR, Baltimore, Maryland, April 2002.

Crossin J. Interstitial lung disease. RANZCR Spring Meeting. Brisbane, Australia. August 2001.

Crossin J. Solitary pulmonary nodule and lung cancer screening. RANZCR Spring Meeting. Brisbane, Australia. August 2001.

Crossin J. CT and pulmonary thromboembolism. Radiology Resident Program. University of Queensland, Brisbane, Australia. August 2001.

Crossin J. Rounds on interstitial lung disease. Radiology Resident Program. University of Queensland, Brisbane, Australia. August 2001.

Crossin J. Sonography of liver transplants. Radiology Resident Program. University of Queensland, Brisbane, Australia. August 2001.

Crossin J. Cardiac MRI. The Michener Institute of Applied Health Sciences, Toronto, Ontario. February 2002.

Daneman A, Faingold R, Manson D, Babyn P, Tomlinson G, Mohanta A, Hellmann J, Kim J. Grey Scale and Color Doppler Sonography of the Normal Neonatal Bowel. 39th Congress of the European Society of Pediatric Radiology. Bergen, Norway, June 17-21, 2002.

Daneman A, Faingold R, Manson D, Tomlinson G, Mohanta A, Hellmann J, Kim JH. Bowel viability assessment by color Doppler sonography in necrotizing enterocolitis. 39th Congress of the European Society of Pediatric Radiology Bergen, Norway, June 17-21, 2002.

Daneman A, Doria AS, Smith C, Mohanta A, Clarke J, Mann A. New patterns of splenic parenchymal echogenicity in children: Clinical pathological correlation. 39th Congress of the European Society of Pediatric Radiology Bergen, Norway, June 17-21, 2002.

Dowdell T. Vancouver CCFP Forum, Radiology Review. Vancouver. October 26, 2001.

Dowdell T. Radiology Review. Ontario College of Family Physicians. November, 2001.

Faingold R, Daneman A, Manson D, Babyn P, Tomlinson G, Mohanta A, et al. Bowel Viability Assessment by Colour Doppler Sonography in Necrotizing Enterocolitis. 45th Annual Meeting, The Society for Pediatric Radiology, Philadelphia, Pennsylvania, April 27-May 1, 2002.

Faingold R, Daneman A, Manson D, Babyn P, Tomlinson G, Mohanta A, et al. Grey Scale and Colour Doppler Sonography of the Normal Neonatal Bowel. JOHN KIRKPATRICK YOUNG INVESTIGATOR AWARD PAPER. 45th Annual Meeting, The Society for Pediatric Radiology, Philadelphia, Pennsylvania, April 27-May 1, 2002.

Fong KW. Organizer and Moderator. The 18 week sonogram and controversial findings. Obstetric Ultrasound Symposium. Canadian Association of Radiologists 64th Annual meeting. Vancouver, British Columbia. September 21-23, 2001.

Fox AJ. "Imaging of Acute Stroke: Rapid Response in a Changing Field" Cape Breton Regional Medical Society, Sydney, Nova Scotia, Nov, 2001.

Fox AJ. "Imaging of Acute Stroke: Rapid Response in a Changing Field" Clinical Neuroscience Rounds, Dalhousie University, Halifax, Nov. 2001.

Fox AJ. a) "Diagnostic Evaluation of Cerebrovascular Disease" in "Extracranial and Intracranial Vascular Reconstruction – Surgical and Endovascular Options" b) "Management of Posterior Circulation Aneurysms", Luncheon Seminar Panelist. Meeting of AANS/CNS Section on Cerebrovascular Surgery and ASITN, Dallas Feb 2002

Gilday DL, Yahil A, Puetter R, Babyn PS, McFadden R. Revolutionary Nuclear Medicine Diagnostic Images Through Pixon Post-Processing: Enhanced Contrast, Resolution, and Order of Magnitude Increase in Signal-to-Noise Ratio. The Radiological Society of North America 87th Scientific Assembly and Annual Meeting, Chicago, Illinois, November 25-30, 2001.

Glanc P, J. Johnson, G. Ryan, S. Salem, Co Directors. Course: Women's Imaging: Advances in Gynaecological Imaging and Transvaginal Ultrasound: February 22-24, 2002. Cosponsored University of Toronto, Departments of Medical Imaging and Obstetrics & Gynaecology

Gray B. Bone Mineral Densitometry and Osteoporosis Certificate Program "World Health Organization Definitions", Michener Institute, Toronto, October 2001.

Hanbidge AE. Pancreatic masses: CT. Annual Meeting of the Canadian Association of Radiologists. Vancouver, British Columbia. September 2001.

Hanbidge AE. The best image for early detection - CT, MRI, PET, US? The Don Wilson Symposium: Cancer of the Pancreas. 14th International Course on Therapeutic Endoscopy. Toronto, Ontario. October 2001.

Hanbidge AE. Adnexal masses in the adult. Women's Imaging: Advances in Gynecological Imaging and Transvaginal Ultrasound Course. University of Toronto, Toronto, Ontario. February 2002.

Hayeems E. Transcatheter arterial chemoembolization. Canadian Interventional Radiology Association Annual Meeting. Niagara-on-the-Lake, Ontario. June 8, 2002.

Jong, R. MRI & Digital Imaging of the Breast. Breast Pathology Day, The Michener Institute, Toronto, Ontario October 20, 2001

Kachura JR. Visceral artery aneurysms and pseudoaneurysms. Canadian Association of Radiologists 64th Annual Scientific Meeting. Vancouver, British Columbia. September 22, 2001.

Kachura JR. Lindsay TF, Rubin BB. Case discussion: endovascular repair of thoracic aortic aneurysm. Transfemoral Endovascular Aneurysm Management Symposium. Hull, Quebec. October 18, 2001.

Kachura JR. Imaging of peripheral vascular disease. Vascular Imaging Toronto 2002. Metropolitan Hotel, Toronto, Ontario. February 16, 2002.

Kachura JR. Visiting Professor. Gastrointestinal bleeding. Memorial University, St. John's, Newfoundland. February 28, 2002.

Kachura JR. Vascular and interventional radiology in liver tumour management. Newfoundland Association of Radiologists Annual Scientific Meeting. Corner Brook, Newfoundland. March 2, 2002.

Kachura JR. Uterine fibroid embolization: An overview. Obstetrics-Gynecology Grand Rounds. Toronto East General Hospital, Toronto, Ontario. March 20, 2002.

Kachura JR. Ultrasound guided ablation (hands-on) workshop. Society of Cardiovascular and Interventional Radiology 27th Annual Scientific Meeting. Baltimore, Maryland. April 10, 2002.

Kachura JR. Renal PTA/stents. Canadian Interventional Radiology Association 1st Annual Meeting. Niagara-on-the-Lake, Ontario. June 7, 2002.

Kachura JR. Fibroid embolization. Canadian Interventional Radiology Association 1st Annual Meeting. Niagara-on-the-Lake, Ontario. June 7, 2002.

Kassel EE. Advanced imaging of the orbit. Annual Dr. Jack Crawford Memorial Lectureship. Department of Otolaryngology, University of Toronto, Toronto, Ontario. September 27, 2001.

Keller A. Imaging of head and neck emergencies. Newfoundland Association of Radiologists Spring Meeting. Corner Brook, Newfoundland. March 2, 2002.

Keller A. Imaging of head and neck malignancies: CT vs MR. Newfoundland Association of Radiologists Spring Meeting. Corner Brook, Newfoundland. March 2, 2002.

Kim P, Chait PG. A novel treatment of congenital duodenal web: Image guided treatment of congenital and acquired stenosis in children. Canadian Association of Pediatric Surgeons 33rd Annual meeting, Winnipeg, Manitoba, September 2001

Kucharczyk W. Interventional MRI. University of Ancona. August 2001.

Kucharczyk W. Imaging of Prion Diseases. University of Ancona. August 2001.

Kucharczyk W. "Spin Gymnastics" - Basic Physics of MRI. ISMRM Annual Meeting Meeting - Honolulu. May 2002

Kucharczyk W. MRI Physics: An animated version. Rush CT MR Course. October 18-19, 2001.

Kucharczyk W. Imaging CNS infections and prion diseases.. Rush CT MR Course. October 18-19, 2001.

Macgowan CK, Wright GA, Sussman MS. Adaptive Averaging of Real-Time Velocity Spectra Using Variable-Density Trajectories. International Society of Magnetic Resonance in Medicine, (2002).

Mah K, Caldwell CB. PETS in the Clinic: The potential role in radiation oncology. Presented at Grand Rounds, Kingston Regional Cancer Centre, Kingston, Ontario March 21, 2002.

Male C, Chait PG, Andrews M, Hanna K, Mitchell L and the PARKAA Investigators. Central venous line location and insertion technique associated with the incidence of thrombotic events in children. XVIII Congress. The International Society on Thrombosis and Haemostasis. Paris, France. July 2001.

Manson D, Hechter S, Huyer D. Sternal Fractures in Children and Their Relationship to Abusive Injury. 45th Annual Meeting, The Society for Pediatric Radiology, Philadelphia, Pennsylvania, April 27-May 1, 2002.

Merchant N. CVMR in cardiac disease. Cardiology Grand Rounds. Rouge Valley Medical Center. Toronto, Ontario. December 2001.

Merchant N. Visiting Professor. Current applications of CVMR; Congenital heart disease: Where is MRI useful?; MR angiography: Techniques and applications. University of Alberta, Edmonton, Alberta. February 21-22, 2002.

Merchant N. The role of CVMR in cardiovascular surgery. Cardiovascular Surgery Grand Rounds. Toronto General Hospital, Toronto, Ontario. March 2002.

Merchant N. Cardiac sarcoid. Medical CPC Rounds. Toronto Western Hospital, Toronto, Ontario. March 2002.

Merchant N. The evolution of CVMR. Cardiology Grand Rounds. William Osler Health Center, Ontario. May 2002.

Mikulis DJ. Presentation of unknown cases. Eastern Neuroradiological Society. Bolton Landing, New York. September 21-23, 2001.

Mikulis DJ. Visiting Professorship. fMRI and neuroradiology; Difficult spine cases; CVR in Moya Moya Disease. Massachusetts General Hospital, Boston, Massachusetts. January 16-17, 2002.

Mikulis DJ, Jurkiewicz MT, McIlroy WE, Staines R, Rickards L, Kalsi-Ryan S, Crawley AP, Verrier M, Fehlings MG. The relationship between residual motor function and the degree of adaptive change in the primary motor cortex in patients with cervical spine cord trauma. 18th Annual Meeting of the American Association of Neurological Surgeons and Congress of Neurological Surgeons. Orlando, Florida. February 28, 2002.

Muradali D. Sonography of the breast: 2001, an update. Canadian Association of Radiologists Annual Meeting. Vancouver, British Columbia. September 2001.

Muradali D. Pelvic ultrasound imaging artifacts. Women's Imaging: Advances in Gynaecological Imaging and Transvaginal Ultrasound. Toronto, Ontario. February 2002.

Muradali D. Breast ultrasound. Women's Imaging: Advances in Gynaecological Imaging and Transvaginal Ultrasound. Toronto, Ontario. February 2002.

Muradali D. Imaging the augmented breast. 2nd Annual Toronto Breast Surgery Symposium. Mount Sinai Hospital, Toronto, Ontario. April 4, 2002.

Muradali D. Indications and results of pre-operative chemotherapy - an imaging perspective. Controversies in the Etiology, Detection and Treatment of Breast Cancer 2002. Toronto, Ontario. June 14, 2002.

Navarro O, Epelman M. The utility of real-time and m-mode sonography in the assessment of diaphragmatic motion in children. 39th Congress of the European Society of Pediatric Radiology, Bergen, Norway, June 17-21, 2002.

Noseworthy M. Correlating Subcellular Contrast Agent Location from Dynamic Contrast Enhanced Magnetic Resonance Imaging (dMRI) and Analytical Electron Microscopy. Contrast Media Research (CMR) bi-Annual Meeting, Island of Capri, Italy, Oct 20/2001.

Ochi A, Otsubo H, Chitoku S, Sharma R, Hunjan A, Chuang SH, Rutka JT, Kamijo K, Yamazaki T, Snead OC III. Usefulness of EEG dipole analysis in children with localization-related epilepsy. Philadelphia, AES, December 3, 2001

O'Malley ME. US of the bowel with CT correlation. Canadian Association of Radiologists 64th Annual Scientific Meeting. Vancouver, British Columbia. September 2001.

O'Malley ME. CT of the kidneys. Canadian Association of Radiologists 64th Annual Scientific Meeting. Vancouver, British Columbia. September 2001.

O'Malley ME. GU radiology: Overview and review. Radiology Grand Rounds. Brigham and Women's Hospital, Boston, Massachusetts. April 02, 2002.

O'Malley ME. GU radiology: Overview and review. GI/GU Minicourse. Massachusetts General Hospital, Boston, Massachusetts. April 03, 2002.

O'Malley ME. GU - What's new?!. GI/GU – What's New?! Course. The Michener Institute for Applied Health Sciences, Toronto, Ontario. April 13, 2002.

Otsubo H, Chuang SH, and Snead OC III. Magnetoencephalography for epilepsy surgery candidates in children. Japan Pediatric Neurosurgery Society, Shizuoka, Japan, September 8, 2001.

Otsubo H, Ochi A, Elliott I, Chuang SH, Rutka RT, Jay V, Aung M, Sobel DF, Snead OC III. MEG localizes asymmetrical epileptic zone in lesional extrahippocampal epilepsy. Philadelphia, AES, December 4, 2001.

Oudjhane K. Moderator, Scientific Session "Growth plate/Bone Dynamics/Diagnosis" The International Skeletal Society 28th Annual Refresher Course Quebec City, QC, CANADA, September 5-8 2001

Paul N. Interpretation of thoracic radiology. PMH Respiratology Residents. Toronto, Ontario. January 9 and 30, 2002.

Paul N. The radiology of breathing. Sunnybrook Women's College Health Sciences Centre (Medical Scientists). Toronto, Ontario. January 28, 2002.

Paul N. Lung carcinoma: A multidisciplinary approach. Multidisciplinary Oncology Lecture. Princess Margaret Hospital, Toronto, Ontario. February 20, 2002.

Paul N. The staging of lung carcinoma. Thoracic Surgeons. Toronto General Hospital, Toronto, Ontario. March 15, 2002.

Paul N. MRI of takayasu arteritis. Society of Thoracic Radiology. San Francisco, California. March 24-28, 2002.

Paul N. Thoracic radiology. The Michener Institute for Applied Health Sciences, Toronto, Ontario. May 11, 2002.

Paul N, Cygan I, Merchant N. MRA: Timing is everything. UK Radiological Congress Birmingham, England. June 9-11, 2002.

Qi XL, Valsangiacomo ER, Macgowan CK, Nield LN, Yoo SJ, Hornberger LK, Wright GA. In-vivo MRI Measurement of Blood Oxygen Saturation in Children with Congenital Heart Disease. International Society of Magnetic Resonance in Medicine, (2002).

Rajan DK. Dialysis access-catheters, AV grafts and fistulae. Ontario Society of Diagnostic Imaging Nurses. Toronto, Ontario. April 13, 2002.

Rajan DK. Dec clotting of native arteriovenous dialysis fistulae. 9th Annual Interventional Radiology and Vascular Imaging 2001. University of Pennsylvania, Philadelphia, Pennsylvania. May 5-9, 2002.

Rajan DK. Self expanding nitinol stents. Canadian Interventional Radiology Association Annual Meeting. Niagara on the Lake, Ontario. June 6-8, 2002.

Reilly RM. Molecular imaging and targeted radiotherapy of cancer: Past, present and future. Department of Medical Biophysics, Sunnybrook and Women's College Health Sciences Centre, Toronto, Ontario. July 4, 2001.

Reilly RM. Targeted Auger electron radiotherapy of breast cancer and other malignancies. The Toronto Nuclear Medicine Society. Toronto, Ontario. November 15, 2001.

Reilly RM. Auger electron-emitting radiopharmaceuticals as novel therapeutic agents for cancer. Pharmaceutical Sciences Graduate Seminar. University of Toronto, Toronto, Ontario. January 18, 2002.

Reilly RM. Molecular imaging of cancer. The Faculty of Pharmacy, University of Toronto, Toronto, Ontario. April 10, 2002.

Restrepo R, Chait PG, Connolly BC, Temple M. Combined ultrasonographic and fluoroscopic guidance for transjugular liver biopsies (TJLB) in pediatric patients. RSNA, Chicago, Illinois, November 2001

Salem S. Medico-legal issues in obstetric ultrasound. Canadian Association of Radiologists Annual Meeting. Vancouver, British Columbia. September 21-23, 2001.

Salem S. Early first trimester sonography. Women's Imaging: Advances in Gynaecological Imaging and Transvaginal Ultrasound. University of Toronto CME Course. Toronto, Ontario. February 22-24, 2002.

Salem S. The role of ultrasound in the management of thyroid nodular disease. Management of Thyroid Nodular Disease and Cancer. University of Toronto CME Course. Toronto, Ontario. May 31-June 1, 2002.

Salonen DC. Visiting Professor. The assessment of the unstable shoulder. The Royal College of Physicians and Surgeons of Canada. University of Western Ontario, London, Ontario. July 2001.

Salonen DC. Visiting Professor. Inflammatory diseases of the vertebral column. The Royal College of Physicians and Surgeons of Canada. University of Ottawa, Ontario. November 2001.

Salonen DC. Technical considerations and advances in MRI of the ankle. Society of Skeletal Radiology. Jacksonville, Florida. March 2002.

Salonen DC. MR imaging of the hand and wrist; Knee MRI: Meniscal injury, pre and postoperative evaluation; Knee MRI of ligamentous injuries. Orthopedic Radiology 2002. Harvard Medical School, Boston, Massachusetts. March 2002.

Sharma R, Otsubo H, Pang E, Holowka S, Hunjan A, Xang J, Chang S, Snead C III. Clinical MEG: The Hospital for Sick Children Experience. Presented at the Canadian Association of Electroneurophysiology Technologists Annual Meeting- June 18-22, 2002. Vancouver, BC

Shlomovitz E, Connolly BL, Temple MJ, Restrepo R, Amaral J, Chait PG. Percutaneous cecostomy, long term outcomes and patient satisfaction. SCVIR, Baltimore, Maryland, April 2002.

Temple M, Restrepo R, Chait PG, Smith CR, Connolly B. Transhepatic transbiliary bile duct biopsy. SPR, Philadelphia PA, USA. May 2002.

Temple M, Connolly B, Chait PG, Amaral J. "Stuck" PICC lines: Description of a new complication. ESPR, Bergen, Norway. June 2002.

Temple M, Armstrong D, Chait PG, Connolly B, Masicotte P. Intra-arterial administration of rTPA in children: experience in 6 cases. ESPR, Bergen, Norway. June 2002.

Temple M, Fecteau A, Chait PG, Grant D, Kachura J. Use of a hydrostatic thrombectomy catheter to treat acute budd-chiari syndrome soon after liver transplantation in an infant. ARRS, Atlanta, GA. May 2002.

Temple M, Amaral J, Connolly B, Restrepo R, Shlomovitz E. Cava filters in 14 children. ESPR, Bergen, Norway, June 2002.

Temple M, Connolly B, Aziza A, Murray D, Amaral J, Restrepo R, Chait PG. The Image Guided Therapy Centre (IGT) ESPR, Bergen, Norway, June 2002.

Temple M, Connolly B, Chow L, Chait PG, Restrepo R, Shlomovitz E, Amaral J, Friedman J. Fractured peripherally inserted central catheters (PICCs). ESPR, Bergen, Norway, June 2002.

Temple M, Connolly B, Daunt S, Schneider R, Amaral J, Chait PG. Ultrasound guided tendon sheath injections in children. ESPR, Bergen, Norway, June 2002.

TerBrugge K. Intracranial aneurysms: Endovascular or surgical management. 2001 National Neuro Endovascular Symposium. South Africa. August 23-29, 2001.

TerBrugge K. Aneurysm treatment (coiling/clipping); The role of 3D DSA in neuro-endovascular treatment; Endovascular treatment of dural AVF; Endovascular treatment of epistaxis and head and neck AVM/AVF; Management of carotid cavernous fistulas and vertebral fistulas; Cerebral venous ischemia; Imaging and the role of embolization. 3rd Annual South African Interventional Neuroradiology Peer Review Group. South Africa. August 31-September 1, 2001.

TerBrugge K. Intra-arterial thrombolysis; Venous thrombolysis; Natural history of dural AVM; AVM: risks and benefits. WFITN 2001. Seoul, Korea. September 23-26, 2001.

TerBrugge K. Management of brain and dural AVMs and AVFs. University of Tokushima, Tokushima, Japan. September 27-28, 2001.

TerBrugge K. Berry aneurysms and risk of hemorrhage; Natural history of BAVMs; Micro AVM; Fusiform aneurysms; False aneurysms; Multiple aneurysms; Classification of maxillo-facial vascular lesions; Rendu-Osler Weber Disease; AVF (glue). 2000-2001 International Master Degree in Neurovascular Diseases. Chiangmai, Thailand. November 3-8, 2001.

TerBrugge K. Visiting Professor. Cerebral venous vascular disease. Clinical presentation, imaging and management strategies. Boston Medical Centre, Massachusetts. November 15-16, 2001.

TerBrugge K. Visiting Professor of Neurosurgery. Cerebral venous ischemia. Karolinska Hospital, Stockholm, Sweden. February 18-22, 2002.

TerBrugge K. Diagnosis and management of vascular lesions of the head and neck. Grand Rounds, Sunnybrook and Women's College Health Sciences Centre, Toronto, Ontario. March 22, 2002.

TerBrugge K. Venous injuries, thromboses and hemorrhages; DAVs and cortical venous drainage; Spontaneous thrombosis; Abused children; Para spinal and epidural lesions; Spinal cord vascular tumors (hemangioblastomas); SC cavernoma; Hemangioblastomas; Para spinal AVM; DAVs Sacral; SCAVM. 2001-2002 International Master Degree in Neurovascular Diseases. Chiangmai, Thailand. March 31-April 5, 2002.

TerBrugge K. Congenital malformations. American Society of Neuroradiology 40th Annual Meeting. Vancouver, British Columbia. May 13-17, 2002.

Toi A. The changing nature of prostate biopsy – it isn't just sextant any more. Prostate Symposium. Princess Margaret Hospital and University of Toronto, Ontario Science Centre, Toronto, Ontario. September 20, 2001.

Traubici J, Capisonda R, Phan V, Balfe JW, Daneman A. High resolution renal and hepatic sonography (US) in autosomal recessive polycystic kidney disease (ARPKD) in 31 children. 39th Congress of the European Society of Pediatric Radiology Bergen, Norway, June 17-21, 2002.

Valsangiacomo ER, Barrea C, Macgowan CK, Smallhorn JF, Coles JG, Yoo SJ. Phase-Contrast Magnetic Resonance for Assessment of the Normal and Abnormal Pulmonary Venous Blood Flow in Children. European Meeting of Pediatric Cardiology, (2002).

White LM. Visiting Professor. Imaging assessment of complications of total hip arthroplasty. Radiology Grand Rounds Presentation. Thomas Jefferson University Hospital, Philadelphia, Pennsylvania. October 29, 2001.

White LM. Postoperative imaging of the shoulder and knee: MR imaging of the postoperative meniscus. Categorical Course Presentation. 2001 Scientific Assembly and Annual Meeting of the Radiologic Society of North America 2001. Chicago, Illinois. November 28, 2001.

White LM. Technical update for musculoskeletal MRI: MRI of tumors. Focus Session Presentation. 2002 Annual Meeting of the Society of Skeletal Radiology. Ponte Vedra, Florida. March 17, 2002.

White LM. Visiting Lecturer. Advanced imaging assessment of complications of total hip arthroplasty. Department of Radiology Rounds Presentation. Hospital for Special Surgery, New York, New York. May 2002.

White LM. Visiting Professor. MR imaging of the knee post meniscal and articular cartilage reparative surgery. 4th Annual Robert Frieberger Honorary Lecture. Hospital for Special Surgery, New York, New York. May 2002.

White LM. MR imaging of traumatic injuries of the meniscus and articular cartilage of the knee. Categorical Course Presentation. 2002 International Society of Magnetic Resonance in Medicine Annual Meeting and Exhibition. Honolulu, Hawaii. May 2002.

White LM. MR imaging of cartilage repair following osteochondral transplantation. 2002 International Cartilage Repair Society Symposium. Toronto, Ontario. June 2002.

Willinsky RA. Visiting Professor. Department of Neuroradiology, Karolinska Institute, Stockholm, Sweden. August 2001.

Willinsky RA. Imaging and treatment of venous congestive disorders of the CNS. Thirteenth Annual Meeting of the Eastern Neuroradiological Society. Bolton, Landing New York. September 21-23, 2001.

Willinsky RA. Cerebral aneurysms: Research directions. Society of Pakistani Physicians of North America. Toronto, Ontario. April 6, 2002.

Wilson SR. Gestational trophoblastic disease; Microbubble contrast agents: Their role in the characterization and detection of focal masses; The acute abdomen of hollow visceral origin: Sonographic assessment; Biliary sonography; The rectum and anal canal: Transrectal, transvaginal and transperineal scanning. 23rd Annual Diagnostic Imaging Seminar Ultrasound

Computed Tomography Magnetic Resonance. Martha's Vineyard Island, Boston, Massachusetts. July 9-13, 2001.

Wilson SR. Liver mass imaging: The Toronto experience. Scientific Program-Portofino 2001. Portofino-Rapallo, Italy. September 30-October 3, 2001.

Wilson SR. Image interpretation session. Radiologic Society of North America 87th Scientific Assembly and Annual Meeting. Chicago, Illinois. November 25, 2001.

Wilson SR. Sonography in the evaluation of focal liver masses: The contribution of microbubble contrast agents. Radiologic Society of North America 87th Scientific Assembly and Annual Meeting. Chicago, Illinois. November 27, 2001.

Wilson SR. Definity enhanced ultrasound of focal liver masses: A comparison with contrast enhanced CT/MR scans. The Seventh European Symposium on Ultrasound Contrast Imaging. Rotterdam, The Netherlands. January 24-25, 2002.

Wilson SR. Is GI ultrasound still practical? Twentieth Annual Practical Radiology. Whistler, British Columbia. February 3-8, 2002.

Wilson SR. RLQ pain: Not always acute appendicitis. Women's Imaging: Advances in Gynaecological Imaging and Transvaginal Ultrasound. University of Toronto, Toronto, Ontario. February 22, 2002.

Wilson SR. Peritoneal disease: The significance in gynecological imaging. Women's Imaging: Advances in Gynaecological Imaging and Transvaginal Ultrasound. University of Toronto, Toronto, Ontario. February 23, 2002.

Wilson SR. Ultrasound contrast agents: Their use in liver mass characterization and detection; The acute abdomen of hollow visceral origin; Inflammatory bowel disease. OB\GYN and Abdominal Sonography Update. San Francisco, California. March 2, 2002.

Wilson SR. Characterization of liver masses with contrast agents. 2002 AIUM Annual Convention Preliminary Program. Nashville, Tennessee. March 10-13, 2002.

Wilson SR. Liver lumps and bumps. Updated in General Surgery 2002. 42nd Annual Course for Practising Surgeons. Toronto, Ontario. April 12, 2002.

Wilson SR. Microbubble contrast agents for sonography: Liver mass characterization; Contrast agents for ultrasound: Improved liver mass characterization and detection. Abdominal Radiology Course 2002. The Society of Gastrointestinal Radiologists and The European Society of Gastrointestinal and Abdominal Radiology. Orlando, Florida. April 14-19, 2002.

Wilson SR. Doppler applications in gynaecology. "A Day's Doppler", Theory and Practical Applications of Doppler Ultrasound in Obstetrics. The Department of Obstetrics &

Gynaecology, Maternal-Fetal Medicine Division, University of Toronto and Mount Sinai Hospital, Toronto, Ontario, June 1, 2002.

Wright, B. Investigating breast abnormalities including digital mammography, MRI, core biopsies. Controversies in the etiology, detection and treatment of breast cancer: 2002. University of Toronto. June 13-14.

SCIENTIFIC PRESENTATIONS : PEER-REVIEWED PAPERS, POSTERS AND EXHIBITS

Agid R, Sarma D, Holowka S, Blaser SI. Schizencephaly evaluated by 3D MRI: Demonstrating the “Diving Gyri” pattern. Scientific poster. ASNR 40th Annual Meeting, Vancouver May 13-17, 2002

Alfuhaid T, Khalili K, Kirpalani A, O'Malley ME, Haider M. Scientific Exhibit. Clinical applications of tesla scan in abdominal imaging. Annual Meeting of the American Roentgen Ray Society. Atlanta, Georgia. April-May 2002.

Anton N, Chait P, Chan A, Marzinotto V, Massicotte P. Vena caval filters in children: Preliminary safety and efficacy data. XVIII Congress. The International Society on Thrombosis and Haemostasis. Paris, France. July 2001.

Armstrong D. Review of Spinal Trauma. Medical Radiation Technology Week. November 5-9, 2001.

Armstrong D. Pediatric Cervical Spine Injury – Imaging and Management. Pediatric Neurosurgery training Program. Lecture Course. University of Toronto, 2002.03.01.

Armstrong D. 1) Patterns of Brain Injury and Imaging; 2) Outcomes of Very Low Birth Weight Babies – how early can we predict? Patterns of Brian Injury and Imaging. Research Seminar Workshop, Mount Sinai Hospital, April 12, 2002.

Artho G, Merchant N, Crossin J, Paul N. MR imaging of hypertrophic cardiomyopathy. Canadian Association of Radiology Meeting. Vancouver, British Columbia. September 2001. (Abstract)

Asch M. Recovery IVC filter: Initial human experience. Canadian Association of Radiology Annual Meeting. Vancouver, British Columbia. September 22, 2001.

Asch M. Temporary IVC filters. Great Lakes Endovascular Symposium. Dearborn, Michigan. October 20, 2001.

Asch M. Recovery IVC filter: Initial human experience. Radiologic Society of North America. Meeting. Chicago, Illinois. November 30, 2001.

Asch M. Recovery IVC filter: Initial human experience. International Symposium on Endovascular Therapy. Miami, Florida. January 24, 2002.

Asch M, Kachura JR, Gallinger S. Safety and effect of percutaneous temporary portal vein occlusion on the size of thermal lesions in porcine livers. Society of Cardiovascular and Interventional Radiology 27th Annual Scientific Meeting. Baltimore, Maryland. April 10, 2002.

Atri M, Benjaminov O, Hamilton P, Rappaport D. Features of the normal appendix on helical CT examination without oral, bowel or intravenous contrast (EXHIBIT). Canadian Association of Radiology annual meeting. Vancouver, BC September 2001.

Atri, M. Sonography of acute pelvic pain in women. Canadian Association of Radiology Annual Meeting. Vancouver, BC. September 2001

Atri, M. Sonography of the anexa. Practical approach Canadian Association of Radiology Annual Meeting. Vancouver, BC. September 2001

Babyn P, Faingold R, Daneman A, Manson D, Tomlinson G, Mohanta A, Hellmann J, Kim JH. Grey scale and colour doppler sonography of the normal neonatal bowel. 45th Annual Meeting of the Society for Pediatric Radiology Philadelphia, Pennsylvania, April 27-May 3, 2002

Benjaminov O, Atri M, Hamilton P, Rappaport D. Normal appendix thickness and visualization rate on unenhanced CT: single detector vs multidetector (ABSTRACT). Canadian Association of Radiology annual meeting. Vancouver, BC September 2001.

Benjaminov O, Atri M, Lobo K, O'Malley M. Cystic Renal Masses: CT Features Predicting Malignancy and the Inter-observer Agreement of different features (ABSTRACT). Canadian Association of Radiology annual meeting. Vancouver, BC September 2001.

Benjaminov O, Atri M. Transvaginal sonography of the fallopian tube (EXHIBIT). Radiological Society of North America, Chicago, Illinois, Nov. 2001.

Benjaminov O, Atri M, O'Malley ME, Lobo K. Scientific Exhibit. Cystic renal masses: CT features predicting malignancy and the interobserver agreement of different features. Annual Scientific Meeting of the Canadian Association of Radiologists. Vancouver, British Columbia, September 2001.

Blaser S. Craniofacial malformations. ENT Surgical grand rounds. University of Toronto, September 27th, 2002

Blaser S. Craniofacial malformations. Eastern Society of Neuroradiology Conference and Annual meeting. Malbaie, Quebec, August 23-25, 2002

Blaser S. Approach to the child with an undiagnosed white matter disorder. American Society of Neuroradiology, Vancouver, May 13-17, 2002

Blaser S. Neonatal infections. The 7th biennial meeting European Society MRN; Hammersmith Hospital, London UK, March 14th – 16th, 2002

Blaser S. Neuroimaging of the Developing Brain. University of Toronto, Neurosurgery Resident Seminars, January 11, 2002

Blaser S. Pediatric neuroradiology CAQ review. Eastern Society of Neuroradiology, New York, September 21-23, 2001

Brannigan M, Khalili K, Burns PN, Wilson SR. Definity enhanced ultrasound of focal liver masses: A comparison with contrast enhanced CT/MR scans. SGR and ESGAR Meeting. Orlando, Florida. April 15-19, 2002. First Prize.

Burns PN, Wilson SR. New multipulse nonlinear imaging methods for real-time evaluation of liver mass vascularity and perfusion with microbubble. Radiologic Society of North America 87th Scientific Assembly and Annual Meeting. Chicago, Illinois. November 25-30, 2001.

Causier P, Liao L, Warner E, et al. Screening detected breast lesions in a high risk population for hereditary breast cancer: comparison of mammography, ultrasound and MRI features of benign and malignant lesions. Presented at ARRS, April 2002.

Causier P, Liao L, Warner E, Plewes DB, Shumak RS, Yaffe MJ, Ramsay E, Taylor GA, Samuels TS, Jong RA. Screening detected breast lesions in a high risk population for hereditary breast cancer: comparison of mammography, ultrasound and MRI features of benign and malignant lesions. American Roentgen Ray Society, Atlanta, Georgia April 29, 2002

Chait P, Dinyari M, Massicotte. The sensitivity and specificity of linograms and ultrasound compared to venography for the diagnosis of central venous line related thrombosis in symptomatic children: The LUV study. XVIII Congress. The International Society on Thrombosis and Haemostasis. Paris, France. July 2001.

Chait PG, Schlomovitz E, Connolly B, Temple M. Risk of ventriculoperitoneal shunt problems in children with percutaneous cecostomy. RSNA, Chicago, Illinois, November 2001.

Chait P, Gamulka B, Connolly B, Temple M. Organization of a pediatric vascular access program: streamlining care. Society of Cardiovascular and Interventional Radiology, Baltimore, MD. USA. April 2002.

Chait PG, Connolly B, Temple M, Amaral J, Restrepo R, Shlomovitz E. Innovative access to the biliary system in a patient with a liver transplant. ESPR, Bergen, Norway. June 2002.

Chait PG, Connolly B, Amaral J, Restrepo R, Shlomovitz E, Temple M. Paediatric Hemodialysis catheter placement in interventional radiology. ESPR, Bergen, Norway. June 2002.

Chait P. 1) Minicourse: Practical Answers for Complex Imaging Questions – Hand-on/How to: Musculoskeletal Interventional Sonographic Procedures (Hands-on workshop); 2) Venous Access (Hands-on Workshop); 3) Techniques of Invasive Sonography (Hand-on Workshop); 4) Residing Officer - Pediatric (Interventional Radiology). RSNA Refresher Course Presentations, Chicago, Illinois. November 2001.

Chait P. Future Directions in Interventional Pediatric Radiology, AVIR, Baltimore, Maryland, April 2002.

Chait P. New Image Guided Procedures: What is the Impact on Paediatric Patient Care? Paediatric Update 2002. Toronto, Ontario, April 2002.

Chait P. Between a Clot and a Hard Place. Paediatric Update 2002. Toronto, Ontario, April 2002.

Chait P. Paediatric Interventional Lessons Learned. 27th Annual SCVIR Meeting, Baltimore, Maryland, April 2002.

Chan R. "Hereditary Hemorrhagic Telangiectasia". Ontario Society of Diagnostic Imaging Nurses. Spring Educational Conference. Toronto. April 20, 2002.

Chawla TP, Khalili K, Haider M, Merchant N. Poster. Fat containing lesions in the abdomen and pelvis: A pictorial essay. Radiologic Society of North America Meeting. Chicago, Illinois. November 2001.

Chawla TP, Khalili K, Haider M, Wilson SR. Poster. Neoplasms of the biliary tree and gallbladder: A multimodality approach. Radiologic Society of North America Meeting. Chicago, Illinois. November 2001. Awarded Certificate of Merit.

Chawla TP, Muradali D, Cattral M, Wilson SR. Pancreatic transplant: Is sonography an optimal modality for assessing complications? Radiologic Society of North America Meeting. Chicago, Illinois. November 2001.

Chawla TP, Muradali D, Cattral M, Wilson SR. Poster. Sonography of pancreatic transplants: Normal and abnormal. Radiologic Society of North America Meeting. Chicago, Illinois. November 2001. Award: Magna Cum Laude.

Cheyne D, Gaetz W, Ducorps A, Schwartz D, Varela F. Neuromagnetic imaging of changes in somatosensory rhythms during observation of tactile stimulation. 13th International Conference on Biomagnetism. Jena, Germany. August (2002) 10 – 14, 2002.

Chitayat D, Sherman C, Viero S, Myles-Reid S, Toi A. Poster. Absent eyelids, micrognathia, digital and skeletal abnormalities and ambiguous genitalia: A new autosomal recessive syndrome. The American Society of Human Genetics 51st Annual Meeting. San Diego, California. October 12-16, 2001.

Chuang SH, Otsubo H, Xiang J, Sharma R, Holowka S, Pang E, Ochi A, Elliot I, Rutka JT, Snead OC III. Magnetoencephalography for Evaluation of Pediatric Intractable Epilepsy - Poster Presentation. Annual American Epilepsy Society. November 30 - December 5, 2001, Philadelphia, PA.

Chuang NA, Otsubo A, Ochi H, Jay V, Shroff MM, Sobel DF, Rutka JT, Snead OC, Chuang SH. Pediatric Localisation-related Epilepsy: Pre-operative Magnetic Source Imaging and Neuropathology: presented as scientific paper at the American Society of Neuroradiology at Vancouver, May 2002

Chuang SH. Hoechst Arion Roussel Keynote Lecture II. "Neuro-Imaging of Epilepsy". Chinese Neurology Forum, 2nd Symposium of World Association of Chinese Epileptologists (WACE), 12th Annual Scientific Meeting of The Hong Kong Neurological Society. Hong Kong, Dec. 4-5.

Chuang SH. 1) Malformation of the Pediatric Spine. 2) Neuroimaging in Pediatric Epilepsy. Department of Diagnostic Radiology, Tuen Mun Hospital, Oct. 27th - Nov. 2nd.

Chuang SH. 1) Integrating MEG. 2) Neuroimaging Studies for Epilepsy Surgery in Children. Taiwan Pediatric Epilepsy Congress, 2001, Tao Yuan, Taiwan. Nov. 3rd - Nov. 7th, 2001.

Clark JA, Faughnan ME, Hyland RH, Pugash RA. Duplex Ultrasound Screening for Vascular Malformations of the Liver. Scientific Meeting of HHT Foundation International, Tenerife, Spain, April 20-26, 2001.

Clark JA, Pugash RA. Angiographic Demonstration of the Parabiliary Venous System. Scientific Meeting of HHT Foundation International, Tenerife, Spain, April 20-26, 2001.

Colgan TJ, Pron G, Mocarski EJM, Asch MR. The identification and distribution of embolic material and associated necrosis in surgical pathology specimens following uterine fibroid embolization (UFE). Presented at the United States and Canadian Academy of Pathology. Chicago, Illinois. February 23-March 1, 2002.

Common A. Ontario UFE Trial Results: Sixth McGill International Symposium on Reproductive Endocrinology, Infertility and UFE. Montreal, PQ, October 19, 2001.

Connolly B, Chait P, Temple M, Restrepo R, Amaral J, Shlomovitz E. Sonographic guidance for lung nodule biopsy: Inherent contrast of air. Society of Cardiovascular and Interventional Radiology, Baltimore, MD. USA. April 2002.

Connolly B, Temple M, Chait P, Restrepo R, Amaral J. Insertion and management of G and GJ tubes. Society of Cardiovascular and Interventional Radiology, Baltimore, MD. USA. April 2002.

Connolly B, Walsh S, Temple M, Restrepo R, Amaral J, Chait P. Influence of arm movement on central tip location of peripherally inserted central catheters, Society of Cardiovascular and Interventional Radiology, Baltimore, MD. USA. April 2002.

Connolly B, Aziza A, Murray D. "Image Guided Therapy Centre" – O.H.A. Meeting; Touching Technology. Toronto, 2001.

Connor P, Crossin JD, Hutcheon M, Weisbrod G. Poster. Pictorial review of the complications of single and double lung transplantations. Society of Thoracic Radiologists. San Francisco, California. March 2002.

Connolly B. Plain film interpretation for pediatrics; 2001; CT interpretation for pediatrics I and CT interpretation for pediatrics II, 2002. Pediatric Resident Lecture Series, The Hospital for Sick Children (PERLS)

Crossin JD, Paul N, Merchant N. MRI evaluation of surgical repair for congenital heart disease. Canadian Association of Radiologists Meeting. Vancouver, British Columbia. September 2001. (Abstract)

Crossin JD, Paul N, Kim J, Merchant N. Contrast enhanced 3D MR angiography. Canadian Association of Radiology Meeting. Vancouver, British Columbia. September 2001. (Abstract)

Crossin JD, Paul N, Kim J, Merchant N. Pitfalls in contrast-enhanced 3D MR angiography. Radiological Society of North America Meeting. Chicago, Illinois. November 2001. (Abstract)

Crossin JD, Merchant N, Paul N. MRI of the pulmonary vasculature. Radiological Society of North America Meeting. Chicago, Illinois. November 2001. (Abstract) Awarded Certificate of Merit.

Crossin JD, Merchant N, Paul N. Poster. MRI of the pulmonary vasculature. Radiologic Society of North America Meeting. Chicago, Illinois. November 2001. Awarded Certificate of Merit.

Crossin JD, Paul N, Kim J, Merchant N. Poster. Pitfalls in contrast-enhanced 3D MR angiography. Radiologic Society of North America Meeting. Chicago, Illinois. November 2001.

Daneman A, Chait P, Connolly BL, Temple M. Post-operative complications after renal transplant in children. Restrepo R, Amaral J. 39th Congress of the European Society of Pediatric Radiology, Bergen, Norway, June 17-21, 2002.

Daneman A. 1) Intussusception: Issues and controversies related to diagnosis and reduction. 2) An approach to imaging the acute abdomen in pediatrics. 3) Cross-sectional imaging of the gastrointestinal tract in pediatrics. 4) Imaging of the adrenal in infants and children. XXVI national congreso colombiano de radiologia Cartagena, Colombia, August 16-19, 2001. Visiting Professor Invited Luis Fernando Uribe Lecturer

Daneman A. Guest Lecturer, Faculty of Radiology, College of Physicians and Surgeons, Ireland Dublin, Ireland, October 5-6, 2001

Daneman A. Pediatric Radiology Course - Evolution of the management of intussusception in children (4x - 75 minute lectures), Guest Faculty 34th annual international diagnostic course in Davos. Davos, Switzerland, April 5 and 6, 2002

Daneman A. Abdominal Imaging Course - An approach to imaging the acute abdomen in children (10x - 75 minutes lectures), Guest Faculty 34th annual international diagnostic course in Davos. Davos, Switzerland, April 5 and 6, 2002

Daneman A. 1) Disappearing masses in the abdomen of fetuses, neonates and infants; 2) Evolution of the management of intussusception in children. Brazilian society of radiology, Rio de Janeiro, Brazil, April 25, 2002

Daneman A. 1) Congenital bowel obstruction: Etiology, imaging, management and pathology; 2) Cross-sectional imaging of the gastrointestinal tract in children; 3) Disappearing masses of the abdomen in fetuses, neonates and infants; 4) An approach to imaging the acute abdomen in children; 5) The evolution of intussusception management in children with emphasis on issues and controversies, pathologic lead points and perforation; 6) Recent advances of chest imaging in fetuses and neonates. Jornada paulista de radiologia 32nd annual meeting, ao Paulo, Brazil, April 27-30, 2002

Daneman A. Annual Lecture University of Toronto R4 Radiology Residents, May 6, 2002. Lecture: Imaging of acute abdominal conditions in children (2 hours).

Daneman A. Imaging of cystic masses of the abdomen and pelvis in children. 39th Congress of the European society for pediatric radiology and 25th post-graduate course. Bergen, Norway, June 17-21, 2002

Doria AS, Babyn PS, Noseworthy MD, Crawley A, Pritzker K, Salter RB. (2002) Understanding the functional angiogenic process in an antigen-induced arthritis model: correlative BOLD MR imaging through the stages of synovitis. *ISMRM-2002* 10:1850.

Doria AS, Babyn PS, Noseworthy MD, Crawley A, Pritzker K, Salter RB. (2002) Understanding the functional angiogenic process in an antigen-induced arthritis model: BOLD MR imaging (fMRI) correlation with of the stages of synovitis along the time course of the disease. *SPR-2002 pg 55, no.15*

Dowdell T. Chest Radiograph Interpretation. Peoples Hospital, Dali China – March 2002.

Dowdell T. Chest Examination & Radiography. Dali Health School. Dali China . March 2002.

Dowdell T. Suture Techniques. Dali Health School. Dali China. March 2002.

Dowdell T. Radiology Revue. Visiting Professor McGill Department of Family Medicine. April 3, 2002.

Easson A, Asch M, Crosby J. The use of a permanent intraabdominal Tenckhoff catheter for the symptomatic drainage of malignant ascites. Society of Surgical Oncology Annual Meeting. Naples, Italy. September 20, 2001.

Elias DA, Rubenstein JD, Merchant N, Christakis M, White LM. Scientific Exhibit. MRI of popliteal artery stenosis caused by popliteal entrapment and cystic adventitial disease. 2001 Scientific Assembly and Annual Meeting of the Radiologic Society of North America. Chicago, Illinois. November 2001. Award of Merit.

Elias DA, Rubenstein JD, Merchant N, Christatkis M, White LM. MRI of popliteal artery stenosis caused by popliteal entrapment and cystic adventitial disease. RSNA Dec. 2001 (poster).

Elias DA, White LM, Fithian DC. MRI findings of acute lateral patellar dislocation: Injury patterns of the medial patellar soft-tissue restraints and osteochondral injuries of the inferomedial patella. 2001 Scientific Assembly and Annual Meeting of the Radiologic Society of North America. Chicago, Illinois. November 2001.

Elias DA, White LM, Simpson DJ, Kandel RA, Wunder JS, Bell RS. MRI assessment of osseous invasion by soft tissue sarcoma. 2001 Scientific Assembly and Annual Meeting of the Radiologic Society of North America. Chicago, Illinois. November 2001.

Eriksson MJ, Crossin JD, Woo A, Merchant N, Sloggett C, Jamorski M, Focsaneanu D, Wigle ED, Rakowski H. Contrast echocardiography is comparable to magnetic resonance imaging for left ventricular thickness in patients with apical hypertrophic cardiomyopathy. American Society of Echography. Florida. January 2002.

Faingold R, Daneman A, Manson D, Tomlinson G, Mohanta A, Hellmann J. Bowel Viability Assessment by Colour Doppler Sonography in Necrotizing Enterocolitis. 45th Annual Meeting, The Society for Pediatric Radiology, Philadelphia, Pennsylvania, April 27-May 1, 2002.

Faingold R, Daneman A, Manson D, Babyn P, Tomlinson G, Mohanta A, Hellmann J, Kim JH. Grey scale and colour Doppler sonography of the normal neonatal bowel. 45th Annual Meeting of the Society for Pediatric Radiology Philadelphia, Pennsylvania, April 27-May 3, 2002.

Farb R, Kim J, Willinsky RA, Montanera W, terBrugge K, Derbyshire J, Wright G. Spinal dural arteriovenous fistula localization using a technique of real-time auto-triggered elliptical centric ordered 3D Gd-MRA: An initial assessment. WFITN 2001. Seoul, Korea. September 23-26, 2001.

Farb R, Kim J, Willinsky RA, Montanera W, terBrugge K, Derbyshire J, Wright G. Spinal dural arteriovenous fistula localization using a technique of real-time auto-triggered elliptical centric ordered 3D Gd-MR angiography. American Society of Neuroradiology 40th Annual Meeting. Vancouver, British Columbia. May 13-17, 2002.

Faughnan ME, Lee WL, Graham AF, Pugash RA, Clark JA, Hutchison SJ, Grande P, Hyland RH. Contrast Echocardiography Remains Positive after Treatment of Pulmonary Arteriovenous Malformations. Scientific Meeting of HHT Foundation International, Tenerife, Spain, April 20-26, 2001.

Fong K, Lytwyn A, Kung R, Causer P, Atri M Transvaginal sonography and sonohysterography In postmenopausal women on Tamoxifen: Correlation with hysteroscopy and pathology (EXHIBIT). Radiological Society of North America, Chicago, Illinois, Nov. 2001.

Fong K, Causer P, Atri M, et al. Transvaginal ultrasonography and hysterosonography in postmenopausal women with breast cancer receiving tamoxifen: correlation with hysteroscopy and pathology. RSNA 2001.

Fox AJ, Rothwell PM, Eliasziw, Warlow CP, Barnett HJM. Prognosis of Patients with Carotid Near Occlusion, 27th International Stroke Conference, San Antonio Feb 2002, Stroke 2002; 33: 347; + ASNR 2002 program, Vancouver May, 2002.

Fitzgerald TL, Asch MR, Kachura JR, Ho CS, Greig P, Gallinger S. Incidence and management of complications associated with radiofrequency ablation of hepatic tumors. Society of Cardiovascular and Interventional Radiology 27th Annual Scientific Meeting. Baltimore, Maryland. April 10, 2002.

Fitzgerald TL, Asch MR, Kachura JR, Ho CS, Sherman M, Wong F, Greig P, Gallinger S. Multi-disciplinary application of radiofrequency ablation to hepatic tumors. Canadian Society of Surgical Oncology. Montreal, Quebec. April 20, 2002.

Fong KW, Causer P, Lytwyn A, Atri M, Kung R. Education Exhibit. Transvaginal sonography and hysterosonography in postmenopausal women on tamoxifen: correlation with hysteroscopy and pathology. Radiologic Society of North America 87th Scientific Assembly and Annual Meeting. Chicago, Illinois. November 25-30, 2001.

Fong K, Lytwyn A, Kung R, Causer P, Atri M Transvaginal sonography and sonohysterography In postmenopausal women on Tomoxifen: Correlation with hysteroscopy and pathology (EXHIBIT). Radiological Society of North America, Chicago, Illinois, Nov. 2001.

Fong K, Causer P, Atri M, et al. Transvaginal ultrasonography and hysterosonography in postmenopausal women with breast cancer receiving tamoxifen: correlation with hysteroscopy and pathology. RSNA 2001.

Fox AJ, Rothwell PM, Eliasziw, Warlow CP, Barnett HJM. Prognosis of Patients with Carotid Near Occlusion, 27th International Stroke Conference, San Antonio Feb 2002, Stroke 2002; 33: 347; + ASNR 2002 program, Vancouver May, 2002.

Gaetz W, Bosnyak D, Roberts LE, Pang LW, Cheyne D. (2001). The search for high frequency (~600 Hz) somatosensory responses to mechanical stimulation in humans. Presented at the Society for Neuroscience Annual Meeting, Nov 10-15th, San Diego California.

Gaetz W. and D. Cheyne (2001). Neuromagnetic imaging of somatosensory cortex using dipole analysis and synthetic aperture magnetometry (SAM). Presented at the British Psychophysiology Society, 29th Annual Meeting, Sept. 17th-19th, 2001.

Ghanekar A, Grant D, Lajoie G, Phillips MJ, Zhong R, Levy G, Wilson S, Muradali D. Poster. Ultrasound diagnosis of delayed xenograft rejection in pig-to-primate kidney xenotransplantation. 2001 A Transplant Odyssey. Istanbul, Turkey. August 20-23, 2001.

Gaetz W. Seminar Series on Human Electrophysiology. April 18th, 2002. Department of Psychology, McMaster University. Localized responses to somatosensory stimulation: Some new solutions to an old problem.

Gaetz W, Cheyne D. Neuromagnetic imaging of somatosensory cortex using dipole analysis and synthetic aperture magnetometry (SAM). 13th International Conference on Biomagnetism. Jena, Germany. August (2002) 10 – 14, 2002.

Gaetz W, Cheyne D. Neuromagnetic imaging of somatosensory cortex using a minimum-variance beamformer. 11th World Congress of Psychophysiology. Montreal, Quebec. July 2002.

Gaetz WC, Cheyne D. Neuromagnetic imaging of somatosensory cortex using a minimum-variance beamformer and dipole analysis. Annual meeting of the British Psychophysiological Conference, Birmingham, England. (2001)

Gaetz WC, Bosnyak DJ, Roberts LE, Pang LW, Cheyne D. The search for high frequency (~600 Hz) somatosensory responses to mechanical stimulation in humans. Annual meeting of Neuroscience, New Orleans, USA. (2001)

Gilday D. 1) Read with the Experts; 2) Controversial Issues in MSK. The 49th Society of Nuclear Medicine Annual Meeting, Los Angeles, California, June 15-19, 2002

Glanc, P. Adnexal Masses: Maternal, Fetal and Neonatal Women's Imaging: Advances in Gynaecological Imaging and Transvaginal Ultrasound February 22-24, 2002, University of Toronto.

Goh V, Khalili K, Wilson SR. Focal nodular hyperplasia: Contrast enhanced ultrasound features. Radiologic Society of North America Meeting. Chicago, Illinois. November 2001.

Hahn C, Shroff MM, Blaser SI, Bainwell B - MR criteria for multiple sclerosis in children: presented at the "Annual Pediatric Research Day" - Hospital for Sick Children, December 2001 and presented as a scientific paper at the Montreal Neurology Conference, April 2002

Haider MA, Noseworthy M, Henderson E, Yeung I, Milosevic M, Fyles A, Lee T-Y. Comparison of kinetic parameters derived from dynamic contrast-enhanced CT & MRI of cervix cancer. International Society of Magnetic Resonance in Medicine 10th Annual Meeting (ISMRM-2002 10:2093). Honolulu, Hawaii. May 18-24, 2002.

Henderson E, Milosevic M, Gertner M, Haider M, Sherar M, Trachtenberg J, Yeung I. Functional CT imaging of prostate cancer. COMP Annual Meeting. Kelowna, British Columbia. July 12-14, 2001.

Hershtkop MS, McCready DR, Ghazarian DM. Sentinel lymph node in melanoma: The Princess Margaret experience. Radiological Society North America Meeting. Chicago, Illinois. November 2001.

Hershkop MS, Hendler A, Mcginley M. Evaluation of combined Tc-99m bone and Tc-99m HMPAO WBC scans to exclude sternal osteomyelitis. 2002 Society of Nuclear Medicine Annual Meeting. Los Angeles, California. June 2002.

Hiew CY, Armstrong DC, Robin P. American Society of Neuroradiology 40th Annual Meeting, Vancouver B.C. “Sinus Pericranii: Our Experience at The Hospital for Sick Children”. Scientific Poster. Humphreys. May 15, 2002.

Hirji A, Crossin J, Merchant N. Magnetic resonance imaging of right ventricular pathologies: A pictorial review. American Roentgen Ray Society. April 2002. (Abstract)

Hirji A, Crossin JD, Paul N, Merchant N. Poster. MR of the right ventricle: Normal and abnormal. American Roentgen Ray Annual Meeting. Atlanta, Georgia. May 2002. Awarded Exhibit of Merit.

Huang Y, Merchant N, Wright GW. Dynamic monitoring contrast distribution in lower extremities as the timing and localizer for targeted 3D MRA. International Society of Magnetic Resonance in Medicine. May 2002. (Abstract)

Illner A, Carroll SB, Osborne A, Townsend J, Blaser S, Chong B. Giant and “tumefactive” cavernous malformations of the brain. Presented at the 39th Annual meeting of the American Society of Neuroradiology Boston April 21-27, 2001

Jabs DK, Samuels TS, Wright B, Jong RA. Is there a role for vacuum-assisted biopsies? American Roentgen Ray Society, Atlanta, Georgia May 2, 2002

Jhaveri K, O'Malley ME, Haider M, Jewett MA. Scientific Exhibit. Rendon RA. MRI of the bladder. The Annual Meeting of the American Roentgen Ray Society. Atlanta, Georgia. April 30-May 4, 2002.

Jong RA, Tu ES, Shumak RS, Glazier J, Justynski LJ, Yaffe MJ Computer-aided Detection of Breast Cancer on Current & Prior Mammograms International Workshop on Digital mmography Bremen, Germany June 22-25, 2002

Jong R. Digital Mammography. Canadian Association of Radiologists Vancouver, British Columbia September 23, 2001

Kachura JR, Rendon RA, Gertner MR, Sweet JM, Sherar MD, Jewett MA. Radiofrequency ablation (RFA) of renal cell carcinoma with post-RFA CT and pathologic correlation. Society of Cardiovascular and Interventional Radiology 27th Annual Scientific Meeting. Baltimore, Maryland. April 10, 2002.

Kamishima T, Schweitzer ME, White LM, Bartilozzi AB, Awaya H. Scientific Poster. MR imaging and percutaneous therapy of osteitis pubis as a stress injury of sports. 2001 Scientific Assembly and Annual Meeting of the Radiologic Society of North America. Chicago, Illinois. November 2001.

Kirpalani A, Khalili K, Alfuhaid T, Wilson SR. Tumor involvement of the inferior vena cava: An imaging review. American Roentgen Ray Society. Atlanta, Georgia. April 2002.

Lan F, Khalili K, Muradali D, Wanless I, Oreopoulos D, Hanbidge A. Subcapsular steatosis and steatonecrosis of the liver in response to intraperitoneal insulin: Imaging features and prevalence. Annual Meeting of the Radiological Society of North America. Chicago, Illinois. November 2001.

Lee K, O'Malley ME, Kachura JR, Haider M, Hanbidge A. Scientific Exhibit. Hepatocellular carcinoma: Imaging and image-guided intervention. The Annual Meeting of the American Roentgen Ray Society. Atlanta, Georgia. April 28-May 3, 2002.

Lee SK, Willinsky RA, Montanera W, Porter PJ, Kim B, terBrugge K. Midterm clinical and angiographic follow up of aneurysms completely treated using GDC. 5th Joint Annual Meeting of AANS/CNS Section of Cerebrovascular Surgery and ASITN. Dallas, Texas. February 3-6, 2002.

Loucks-Gray T, White LM, Ross H, Davis AM, Gross AE. Temporal radiographic changes following bulk osteochondral allograft of the knee: Normal incorporation and evidence of complications. 2001 Scientific Assembly and Annual Meeting of the Radiologic Society of North America. Chicago, Illinois. November 2001.

Mandzia JL, Faughnan ME, Schneiderman J, Clark JA, Hyland RH. MRI and Clinical Screening in a Population of HHT Patients. Scientific Meeting of HHT Foundation International, Tenerife, Spain, April 20-26, 2001.

Manson D. Emergency Radiographs That You Love to Hate. Paediatric Update 2002, The Hospital for Sick Children, University of Toronto, Toronto, Ontario, April 25, 2002.

Mikulis DJ, Jurkiewicz MJ, McIlroy WE, Staines R, Rickards L, Kalsi-Ryan S, Crawley AP, Verrier M, Fehlings MG. The relationship between residual motor function and the degree of adaptive change in the primary motor cortex in patients with cervical spine cord trauma. 18th Annual Meeting of the American Association of Neurological Surgeons and Congress of Neurological Surgeons. Orlando, Florida. February 28, 2002.

Miller SF. The numerous clinical entities associated with punctate epiphyses: from A to Z. Society for Pediatric Radiology. Philadelphia, Pennsylvania; April 27 - May 1, 2002

Miller SF, Proud VK, Werner AL, Field FM, Lachman RS, Rimoin DL. Pacman dysplasia: a lethal skeletal dysplasia with variable radiographic features. European Society for Paediatric Radiology. Bergen, Norway, June 19-22, 2002

Muradali D, Kulkarni S, Bukhanov K, Burns P, Wilson S. Optison enhanced sonography of the breast: Optimal technique for vascular evaluation of benign and malignant breast nodules. AIUM Annual Convention. Nashville, Tennessee. March 10-13, 2002.

Muradali D, Kulkarni S, Bukhanov K, Burns P, Wilson S. Contrast-enhanced sonography of the breast: Can vessel morphology and vascular volume predict malignancy? AIUM 2002. Nashville, Tennessee. March 13, 2002.

Muradali D, Wilson SR, Bukhanov K, Burns P. Optison enhanced sonography of the breast: Optimal technique for vascular evaluation of benign and malignant breast nodules. 102nd Annual Meeting of the American Roentgen Ray Society. Atlanta, Georgia. April 28-May 3, 2002.

Muradali D, Wilson SR, Bukhanov K, Burns PN. Contrast enhanced sonography of the breast: Can vessel morphology and vascular volume predict malignancy? 102nd Annual Meeting of the American Roentgen Ray Society. Atlanta, Georgia. April 28-May 3, 2002.

Noseworthy MD, Ackerley C, Qi X, Wright GA. (2002) Quantification of intravascular and extravascular gadolinium using energy dispersive X-ray spectroscopy (EDS): correlation with dynamic MRI findings in a VX2 tumour. ISMRM-2002 10:2105.

Noseworthy MD. Title: Advanced Neuromaging Using MRI. IWK Children's Hospital, Department of Diagnostic Imaging, Halifax, Nova Scotia, Canada. May 31/2002

O'Riordan E, Haider M, O'Malley ME, Khalili K, Ibach K, Bahadorani B. Manually respiratory-triggered single-shot fast spin-echo imaging: A better way to detect and characterize liver lesions? Radiologic Society of North America. Chicago, Illinois. November 2001.

Oudjhane K. "Biphosphonate therapy in childhood Osteoporosis: Radiographic and Densitometric considerations" The International Skeletal Society 28th Annual Refresher Course Quebec City, QC, CANADA September 5- 8 2001

Patel NK, Rajan DK, Simons ME, Rudnick N, Stavropoulos W, Clark TW. Cephalic arch stenosis in native hemodialysis fistulae: Prevalence and outcome following percutaneous therapy. Society of Cardiovascular and Interventional Radiology Annual Meeting. Baltimore, Maryland. April 6-11, 2002.

Paul N, Crossin JD, Merchant N. MR Imaging of cardiac masses. Canadian Association of Radiologists Meeting. Vancouver, British Columbia. September 2001. (Abstract)

Paul N, Crossin JD, Merchant N. Poster. MRI of Surgical corrections for congenital heart disease. UK Radiological Congress. Birmingham, England. June 9-11, 2002.

Petroniene R, Baker JP, Gardiner GW, Burnstein MJ, Zalev AH, et al. Given Imaging Diagnostic System helps to diagnose mid ileal Crohn's disease, presenting as obscure gastrointestinal bleeding: Case Report. Given Conference on Capsule Endoscopy. March 2002.

Pressman A, White LM, Gross A. MR imaging evaluation of fresh osteochondral allografts. 2002 International Cartilage Repair Society Symposium. Toronto, Ontario. June 2002.

Pron G, Mocarski E, Vilos GA, Common A, Sniderman K, Bell S, Bennett J, Garvin G, Kozak R, Vanderburgh L, Asch M, Simons M, Kachura JR. Resumption of menses and control of menorrhagia after uterine embolization. American Association of Gynecologic Laparoscopists 30th Annual Meeting. San Francisco, California. November 18, 2001.

Provost Y, Crossin JD, Merchant N, Paul N. Poster. MR Imaging of cardiac masses. Society of Thoracic Radiologists. San Francisco, California. March 2002.

Rajan DK, Partap V, Simons ME. Patency of stents placed at the venous anastomosis of dialysis grafts for salvage of angioplasty-induced rupture. Society of Cardiovascular and Interventional Radiology Annual Meeting. Baltimore, Maryland. April 6-11, 2002.

Ranson M. Instructional Course: Musculoskeletal MRI Pediatric Arthropathies American Roentgen Ray Society May 1, 2002 Atlanta, Georgia

Rappaport DC, Crossin JD, Asch MR, Economopoulos PA, Morgan M. Prevalence of unsuspected pulmonary thromboembolism in a high risk in-patient population diagnosed by multi-detector row CT. American Roentgen Ray Annual Meeting. Atlanta, Georgia. May 2002.

Reilly RM, Vallis K, Chen P, Oza A, Hendler A, Cameron R, Hershkop MS, Keene P. A phase I study of Tc-99m-h-R3 monoclonal antibody for imaging EGFR positive malignancies. 2002 Society of Nuclear Medicine Annual Meeting. Los Angeles, California. June 2002.

Restrepo R, Daneman A, Chait P, Connolly BL, Temple M. Post-operative complications after renal transplant in children. 45th Annual Meeting of the Society for Pediatric Radiology Philadelphia, Pennsylvania, April 27-May 3, 2002.

Restrepo R, Ranson M, Chait PG, Connolly BL, Temple MJ, Amaral J, John P. Extracranial Aneurysms in Children: Practical Classification and Correlative Imaging. The Society for Pediatric Radiology Philadelphia, PA Apr. 28-May 3, 2002

Restrepo R, Amaral J, Daneman A, Chait PG, Connolly B, Temple M. Post operative complications after renal transplant in children. ESPR, Bergen, Norway. June 2002.

Restrepo R, Ranson M, Amaral J, Chait PG, Connolly B, Temple M, John P. Extracranial arterial aneurysms in infants and children: a practical classification based on etiology and location. ESPR, Bergen, Norway. June 2002.

Roberts L.E., Bosnyak D. and Gaetz W. (2001). Modification of human tonotopic and somatotopic representations by training at frequency discrimination. Presented in a symposium titled "Dynamics of Functional Architecture in Human Cerebral Cortex: From Neuroplasticity to Neurorehabilitation" (T. Elbert, Chair), Society for Psychophysiological Research, Montreal, Quebec, October 13 2001.

Robinson P, White LM, Agur AM, Kandel R, Bell RS. The obturator externus bursa: Features of pathological involvement on MR Imaging. 2001 Scientific Assembly and Annual Meeting of the Radiologic Society of North America. Chicago, Illinois. November 2001.

Robinson P, White LM, Salonen DC, O'Connor PJ. Scientific Exhibit. Soft tissue and osseous impingement syndromes of the ankle: Role of imaging in diagnosis and management. Scientific Assembly and Annual Meeting of the Radiologic Society of North America. Chicago, Illinois. November 2001. Award of Merit.

Ryan M, Atri M, Bonifacio A, Hanbidge A, Clark J, Murphy J. Dropped gallstones post laparoscopic cholecystectomy mimicking peritoneal seeding: CT and ultrasound features. Annual Meeting of the Radiological Society of North America. Chicago, Illinois. November 2001.

Ryan MF, Hamilton PA, Chu P, Sarrazin J, Benjaminov O, Lam K. Computed tomography findings of the hypovolemic shock complex in adults. RSNA, Chicago, December 2001.

Ryan MF, Hamilton P, Benjaminov O. Abdominal computed tomographic findings in adults with the hypovolaemic shock complex. ESGAR meeting Dublin 2001.

Sarma D, Agid R, Blaser S. Septum pellucidum and forniceal columns in schizencephaly. Presentation at ASNR 40th Annual Meeting, Vancouver, May 13-17, 2002

Shlomovitz E, Connolly B, Temple M, Restrepo R, Amaral J, Chait PG. Percutaneous cecostomy, long term outcomes and patient satisfaction. SCVIR, Baltimore, MD, April 2002.

Shroff MM. Imaging of CNS infection, University of Michigan, Ann Arbor, September 2001

Shroff MM. Imaging of Epilepsy in children: Hinduja Hospital & Medical Research Center, Mumbai, 24th July 2002

Shroff MM. Interesting pediatric neuroradiology cases – Resident teaachin: Bombay Hospital and Institute of Medical Sciences, Mumbai, 18th July 2002

Shroff MM. Newer Advances in Neuroimaging: Holy Family Hospital, Mumbai, 25th July 2002

Shroff M, Chuang N, Hiew C, Blaser S, Papsin B. Diagnosing cochlear nerve hypoplasia on CT and MR imaging. Presentation at ASNR 40th Annual Meeting, Vancouver, May 13-17, 2002

Shroff M, Blaser S, Wood B, Hedden D, Hiew C, Chuang N. Vertebral osteoid osteoma/osteoblastoma: An unusual combination of tissue edema and atrophy. Presentation at ASNR

Shroff MM, Blaser BI, Wood B, Hedden D, Hiew C, Chuang NA. Vertebral osteoblastomas and osteoid osteomas: an unusual combination of tissue edema and atrophy: presented as scientific paper (oral presentation) at American Society of Neuroradiology 40th Annual Meeting, Vancouver, May 13-17, 2002.

Shroff M, Blaser S. Duplicated pituitary gland and basilar artery duplication. Presented at the 39th Annual meeting of the American Society of Neuroradiology, Boston April 21-27, 2001

Sinus Pericranii: our experience at the Hospital for Sick children; C. Hiew, D. Armstrong, R.P.Humphreys, M. M. Shroff, N. A. Chuang,; presented as a scientific exhibit at the American Society of Neuroradiology at Vancouver, May 2002

Sussman MS, Stainsby JS, Robert N, Merchant N, Wright, GW. Variable-density adaptive imaging for high-resolution coronary artery MRI. International Society of Magnetic Resonance in Medicine. May 2002. (Abstract)

Temple M, Restrepo R, Chait PG, Connolly B. Ultrasound guided interventions in the musculoskeletal system. ARRS, Atlanta, GA. May 2002.

Temple M, Chait PG, Connolly B, Fecteau A, Grant R. Use of a hydrostatic thrombectomy catheter to treat acute Budd-Chiari Syndrome soon after liver transplantation in an infant. ESPR, Bergen, Norway. June 2002.

Temple M, Connolly B, Chait PG, Amaral J, Restrepo R, Shlomovitz E, Smith C. Sonographic guidance for lung nodule biopsy; inherent contrast of air. ESPR, Bergen, Norway. June 2002.

Temple M, Connolly B, Chait PG, Restrepo R, Mahant S, Amaral J. Image Guided Therapy (IGT); the role of a pediatrician. ESPR, Bergen, Norway. June 2002.

Temple M. Ultrasound guided interventions in the musculoskeletal system. Arrs, Atlanta, Georgia, April/May, 2002.

Temple M, Chait PG, Connolly B, Fecteau A, Grant R. Use of a hydrostatic thrombectomy catheter to treat acute budd-chiari syndrome soon after liver transplantation in an infant. ESPR, Bergen, Norway, June 2002.

Temple M esophageal balloon dilatation under fluoroscopic guidance in children. ESPR, Bergen, Norway, June 2002.

Thomas KE, Georgalas C, Owens CM, Burnett C, Roberts G, Lack G. The utility of MRI in the assessment of symptomatic adenoidal hypertrophy and rhinosinusitis in children - pre and post medical therapy. ESPR, Bergen, Norway, June 2002 Guebert Poster Scientific Award.

Toi A, Bedford MH, Lo B, Chitayat D. A tale of two tails: Prenatal diagnosis of two pseudotails. American Society of Human Genetics. San Diego, California. October 2001.

Tu ES, Jong RA, Shumak RS, Glazier J, Justynski LJ, Yaffe MJ Performance Review of mamammographic CAD system. Canadian Association of Radiologists, Vancouver, BC September23,2001.

Valsangiacomo E, Barrea C, Macgowan C, Smallhorn J, Coles J, Yoo SJ. Phase-contrast magnetic resonance for assessment of the normal and abnormal pulmonary venous blood flow in children. Presented at the Scientific Meeting of the European Society of Pediatric Cardiology in Porto, May 2002. Award poster for cardiac Imaging AEPC scientific Meeting 2002.

Valsangiacomo ER, Hornberger LK, Barrea C, JF, Yoo SJ. Partial and total Anomalous pulmonary venous connection in the fetus: Two-dimensional and Doppler echocardiographic findings. Presented at the Scientific Meeting of the European Society of Pediatric Cardiology in Porto, May 2002.

VanDijk M, terBrugge K, Willinsky RA, Wallace C. Reappraisal of the natural history of aggressive cranial dural AVFs. 5th Joint Annual Meeting of the AANS/CNS Section of Cerebrovascular Surgery and ASITN. Dallas, Texas. February 3-6, 2002.

VanDijk M, terBrugge K, Willinsky RA, Wallace C. Multimodality management of spinal dural AVFs with long-term follow up. 5th Joint Annual Meeting of the AANS/CNS Section of Cerebrovascular Surgery and ASITN. Dallas, Texas. February 3-6, 2002.

Wang J, Chen P, Mrkobrada M, Hu M, Vallis K, Reilly RM. Antisense imaging of epidermal growth factor (EGF)-induced p21^{WAF-1/CIP-1} mRNA in human breast cancer xenografts. The Society of Nuclear Medicine 48th Annual Meeting. Los Angeles, California. 2002.

Warner E, Plewes D, Hill K., Causer P, Shumak R. Ramsay E, Cutrara M, Jong RA, Narod S., Yaffe M., Meschino W., Messner S., DeBoer G., Walcarius R., Glazier J., Zubovits J., Piron C., Markin G., Samuels T. Three Year Results of Annual Breast MRI and Ultrasound (US) in Addition to Mammography (M) and Clinical Breast Examination (CBE) for Surveillance of Women at High Risk for Hereditary Breast Cancer. American Society of Clinical Oncology (poster) Orlando, Florida May 2002.

Weiser WW. Visiting Professor – Technion University Haifa, Israel. April 18-May 3, 2002.

White LM, Couch GG, Backstein D, Shasha N, Salonen DC, Gross AE. Digital vs conventional templating techniques in preoperative planning for total hip arthroplasty. 2001 Scientific Assembly and Annual Meeting of the Radiologic Society of North America. Chicago, Illinois. November 2001.

Willinsky RA, Vilela P, terBrugge K. Dural arteriovenous fistulae associated with tumoral dural sinus thrombosis. Thirteenth Annual Meeting of the Eastern Neuroradiological Society. Bolton Landing, New York. September 21-23, 2001.

Willinsky RA, Vilela P, terBrugge K. Association of distinct intracranial pial and dural arteriovenous shunts. Thirteenth Annual Meeting of the Eastern Neuroradiological Society. Bolton Landing, New York. September 21-23, 2001.

Willinsky RA, Farb R, Kim J, Montanera W, terBrugge K, Derbyshire A, VanDijk M, Wright G. Spinal dural arteriovenous fistula: Localization using real-time auto-triggered elliptical centric ordered 3D Gd MRA (ATECO). ABC/WIN 2002, Val D'Isère, France. January 18, 2002.

Willinsky RA, Taylor SM, terBrugge K, Montanera W, Farb R. Neurologic complications of cerebral angiography: A prospective analysis of 2900 procedures. American Society of Neuroradiology 40th Annual Meeting. Vancouver, British Columbia. May 13-17, 2002.

Wilson SR, Burns PN, Khalili K. Hemangiomas: A challenge for microbubble contrast agents. Radiologic Society of North America 87th Scientific Assembly and Annual Meeting. Chicago, Illinois. November 25-30, 2001.

Wu L. Multimodality Imaging of G.U. System with MR Focus. U.C.S.F. Grand Rounds (SFGH). March 2002.

Yeung I, Henderson E, Milosevic M, Gertner M, Haider M, Sherar M, Trachtenberg J. Functional CT imaging of prostate cancer. ASTRO Annual Meeting. San Francisco, California. November, 2001.

Yoo SJ. Cardiovascular MR in children. Symposium on “Modern Methods of Visualization in Cardiovascular Surgery”. Bacoulev Scientific Center for Cardiovascular Surgery in Moscow, Russia. October 24, 2001.

Yoo SJ Neonatal cardiac imaging. 2002 Postgraduate Course, The Annual Assembly of the Society for Pediatric Radiology. May 2-3, 2002.

Zalev AH. Ontario Science Centre Exhibit – Science of the Circus: Radiology of Sword-swallowing. June 2001 to April 2002.

RESEARCH PROGRAM

(Director: Dr. Tim Roberts)

Welcome to Dr. Timothy Roberts

The Department is pleased to welcome Tim Roberts, PhD, who was recruited Jan 2002 from the University of California, San Francisco. Tim has assumed the mantle of Director of Research and Deputy Chair of the Department.

Dr. Roberts attained his PhD. in MRI physics from the Cambridge University, England in the Herschel Smith Laboratory for Medicinal Chemistry in 1991. As a postdoctoral fellow in the Neuroradiology section at the University of California San Francisco, in the laboratory of John Kucharczyk and Mike Moseley, he focused on the quantitative use of high speed perfusion- and diffusion sensitive MRI in animal models of cerebral ischemia, metabolic encephalopathies and neonatal development. Dr. Roberts later went on to research the role contrast media in imaging physiologic functions, as well as cellular and vascular response of perfusion-sensitive and BOLD MRI. In 1994 he was appointed Assistant Professor of Radiology at UCSF and co-founded the Biomagnetic imaging Laboratory (BIL) studying electrophysiologic aspects of brain function. Dr. Roberts became director of the BIL and went on to develop one of the largest Clinical Brain mapping sites in the USA. In 1999 he co-founded the Combined MR-Xray angiography suite where he was director until his arrival here at the University of Toronto.

The Research Program

Many of the faculty, residents, and fellows in the Department of Medical Imaging devote considerable effort to research. Research is an important mission of the Department of Medical Imaging. The nature of this research depends primarily on the interest and expertise of individuals and on resources at particular hospitals. In addition, the department promotes certain research topics, including the development and evaluation of imaging methods, such as magnetic resonance (MR) imaging, percutaneous and transvascular treatment methods, use of contrast agents, and most recently, minimally-invasive diagnosis and therapy.

Approximately eight years ago, an aggressive program to enhance research within the Department was initiated. The Research Program was created in 1992 with two main objectives:

- to encourage more faculty to participate in research related to radiological observations and procedures;
- to allow at least a few of the faculty to perform intensive medical imaging research

The two objectives are being pursued through several initiatives, involving contributions to the salary of a small number of faculty, shared access to certain resources, and an annual forum for highlighting research accomplishments. A synopsis of the key initiatives is presented below. Also included below are the research grants and publications of the faculty who are not listed with one of the affiliated hospitals.

The Medical Imaging Research and Development Awards (Protected Research Time)

The Medical Imaging Research and Development Awards have been our most successful initiative. These awards allow a select group of radiologists to devote at least one day each week to a particular research project. The Awardees in 2001-2002 were:

Award Holder	Hospital	Project Title
Murray Asch	UHN/MSH	Safety and Effect of Percutaneous Temporary Portal Vein Occlusion on the size of a thermal lesion in Porcine livers
Mostafa Atri	SWCHSC	Accuracy of unenhanced (No IV, rectal, or oral contrast) helical CT and added value of enhanced helical CT in the assessment of acute abdomen
John Clark	SWCHSC	Non-lethal murine vascular imaging
Richard Farb	UHN/MSH	Follow-up evaluation of GDC treated aneurysms: Comparison of ATECO MRA, 3D time of flight and IADSA
Alan Fox	SWCHSC	3D Cone beam CT for acute cervical spine and facial trauma
Masoom Haider	UHN/MSH	MRI and CT dynamic enhancement in carcinoma of the uterine cervix: Correlation with direct interstitial fluid pressure measurement and tumor oxygen levels
Roberta Jong	SWCHSC	American College of Radiology Imaging Network, ACRIN 6652, Digital vs screen-film mammography
Korosh Khalili	UHN/MSH	Preoperative staging of cholangiocarcinoma: A prospective comparative study of sonography and MRI
Naeem Merchant	UHN/MSH	Effects of ACE inhibitor and beta blocking therapy in patients with systemic right ventricles
Derek Muradali	UHN/MSH	Contrast enhanced sonography of breast nodules and lymph nodes: Vascular morphology and pathologic correlation
Martin O'Malley	UHN/MSH	Hepatocellular carcinoma: Features on triphasic CT using a multidetector helical CT scanner
Dawn Pearce	SMH	The role of weight-bearing CT scan of the foot in pes planus

In addition to the The Medical Imaging Research and Development Awards, the department provides substantial salary support to allow three additional radiologists to devote 50% of their time to research. Last year these were: Dr. David Mikulis, Dr. Shi-Joon Yoo, and Dr. Stephanie Wilson.

RSNA Resident/Fellow Research Award

The RSNA Research and Education Fund offers an award annually to recognize and encourage outstanding residents and fellows in radiology research. The award is for one resident or fellow in each training program in North America who is deemed to have participated meaningfully in research during the previous year. Dr. James Scott was selected for this Award in 2001-2002.

Research Day

Our Annual Research Day was held on April 15, 2002. It consisted of a record number of presentations from senior residents, the faculty with The Medical Imaging Research and Development Awards, and many other members of the department. The presentations are listed by title at the end of this section.

Positron Emission Tomography Centre, Centre for Addiction and Mental Health

The University of Toronto Positron Emission Tomography (PET) Centre is under the direction of Dr. Sylvain Houle. Investigations concentrate on schizophrenia, mood and anxiety disorders, cognitive neuroscience, aging and dementia, movement disorders, and PET methodology.

Imaging/Bioengineering Research, SWCHSC

Imaging research is a major focus of the Imaging/Bioengineering Research group at Sunnybrook and Women's College Health Sciences Centre (SWCHSC). Scientists in this group have University of Toronto appointments in the Department of Medical Biophysics, or the Department of Medical Imaging, or both. The faculty in this group make use of exceptional resources for research at SWCHSC and conduct research involving x-ray, nuclear medicine, magnetic resonance, and ultrasound technology. This group is internationally recognized for its excellent graduate student program.

Faculty List

(Academic Rank as of July 1, 2002)

John A. Rowlands	Professor	Senior Scientist, SWCHSC
Michael L. Wood	Professor	MR physicist
Martin J. Yaffe	Professor	Senior Scientist, SWCHSC
Sylvain Houle	Associate Professor	Director, PET Centre Centre for Addiction and Mental Health
Tim Roberts	Associate Professor	Director, Research Program, UHN
Curtis B. Caldwell	Assistant Professor	Physicist, SWCHSC
Adrian Crawley	Assistant Professor	MR physicist, TWH
Christopher MacGowan	Assistant Professor	MR physicist, HSC
Michael Noseworthy	Assistant Professor	MR physicist, HSC
George Tomlinson	Assistant Professor	Biostatistics

Grants

Members of the Department of Medical Imaging (underlined) were investigators on the following grants, identified by the principal investigator, other investigators, project title, sponsor, total amount of grant, and start and end dates of the funding period.

Boyd NF, Yaffe MJ, et al, Mammographic Densities in Chinese and Caucasian Women: A Pilot Study, National Institutes of Health, \$49,972 USD (2001-2002)\$24,790 USD (2002-2003)

Boyd NF, Yaffe MJ et al, Effects of Diet on Growth Hormone-IGF-1 Axis, National Institutes of Health, \$356,758 USD (2001-2002)\$223,372 USD (2002-2003)

Boyd NF, Anand S, Chiarelli A, Freidenreich C, Harper P, Hislop TG, Minkin S, Yaffe MJ, Lifestyle and breast tissue composition in Chinese and Caucasian women, National Cancer Institute of Canada - CBCRI, \$715,670 year 1; \$783,671 year 2; \$562,820 year 3

Castellanos F, Arnsten A, Gerhardt G, Cheyne D: NIH Group grant, “Interdisciplinary Network on Cerebellar-Striatal Dysfunction in ADHD” , Amount: \$100,000; 2002 – 2004.

Cheyne D: NSERC – Individual Research Grant, “Mapping the Human Sensorimotor Cortex using Spatially Filtered Magnetoencephalography” Amount: \$40,000; 2002 - 2004

Chiarelli A, Yaffe MJ et al, Effect of Mammographic Density and Estrogen Replacement Therapy on Detection of Breast Cancer, National Cancer Institute of Canada -CBCRI, \$C189,567, 2001-2003

Fajardo LL, & , Pisano ED, Yaffe MJ, et al, Clinical Evaluation of Digital Mammography, US Army Medical Research & Materiel Command, \$26,916 USD (2000)\$27,291 USD (2001)\$1,600 USD (2002),

Friedenreich CM & Courneya KS; McTiernan A, Ballard-Barbash R, Irwin ML, Yaffe M, Boyd NF, Terry T, Brant RF, Jones CJ, Cameron B, ALPHA Trial: Alberta Physical Activity and Breast Cancer Prevention Trial, Canadian Breast Cancer Research Initiative, \$1,104,147, 2002-2005

Henkelman RM, Bronskill MJ, Burns PN, Foster FS, Plewes DB, Rowlands JA, Wright GA, Yaffe MJ, Medical Imaging for Cancer, NCI Canada (Terry Fox Program Project), \$C 1,425,844 pa, 07/01/01 - 06/30/06

Macgowan CK and Noseworthy MD. Computing Infrastructure for Pediatric Imaging Research, Sun Microsystems Canada equipment competition. Approximate value: \$250,000. Date Awarded: 03 / 2002

Oram, J (supervisor: Roberts TPL). CIHR Postdoctoral Fellowship (2 yr). Award: 6/2002

Pisano ED, Yaffe MJ, et al, Trial of Digital Mammography versus Screen-Film Mammography, US National Institutes of Health/ACRIN CA80098, \$208,900 USD, 06/01/01 - 05/30/04

Robaey P, Schachar R, Cheyne D, Perusse D: CIHR – New Emerging Team Grant, “Inattention, impulsiveness, and restlessness in childhood: heritability, genetics, neuropsychology and psychophysiology (KIDNET)” ; Amount: \$1,249,585; 2002 – 2007;

Rowlands JA, N Robert, S Fort , Image Guided Optimisation of X-ray Cardiac Angiography, Canadian Institutes of Health Research (Operating Grant), \$C 75,121, 01/10/2002 – 30/09/2005

Rowlands JA, + 9 Co-applicants, Imaging Research Centre for Cardiac Interventions, Ontario Innovation Trust, \$C 6,109,294 total, 06/2002 - 06/2005

Rowlands JA, + 9 Co-applicants, Imaging Research Centre for Cardiac Interventions, Canadian Foundation for Innovation (Innovation Fund), \$C 6,109,294 total, 02/2002 - 02/2005

Roberts TPL, National Alliance For Autism Research (NAAR), P.I., "Neural correlates of phonological processing in individuals with autism" 7/01-6/03, \$ 96,273

Roberts, TPL. Canada Research Chair in Imaging Research. \$500,000. 1/2002-12/2006

Publications

(a) Peer-Reviewed:

Billingsley RL, McAndrews MP, Crawley AP, Mikulis DJ. Functional MRI of phonological and semantic processing in temporal lobe epilepsy. *Brain*. 2001 Jun;124(Pt 6):1218-27.

Boyd NF, Martin LJ, Stone J, Greenberg C, Minkin S and Yaffe MJ. Mammographic densities as a marker of human breast cancer risk and their use in chemoprevention. *Current Oncologic Reports* 3; 314-321, 2001.

Caldwell CB, Mah K, Ung YC, Danjoux CE, Balogh JM, Ganguli SN, Ehrlich LE. Observer variation in contouring gross tumor volume in patients with poorly defined non-small-cell lung tumors on CT: the impact of 18FDG-hybrid PET fusion. *Int J Radiat Oncol Biol Phys*. 2001 Nov 15;51(4):923-31.

Callen DJ, Black SE, Gao F, Caldwell CB, Szalai JP. Beyond the hippocampus: MRI volumetry confirms widespread limbic atrophy in AD. *Neurology*. 2001 Nov 13;57(9):1669-74.

Callen DJ, Black SE, Caldwell CB. Limbic system perfusion in Alzheimer's disease measured by MRI-coregisteredHMPAO SPET. *Eur J Nucl Med Mol Imaging*. 2002 Jul;29(7):899-906.

Downar J, Crawley AP, Mikulis DJ, Davis KD. A cortical network sensitive to stimulus salience in a neutral behavioral context across multiple sensory modalities. *J Neurophysiol*. 2002 Jan;87(1):615-20.

Downar J, Crawley AP, Mikulis DJ, Davis KD. The effect of task relevance on the cortical response to changes in visual and auditory stimuli: an event-related fMRI study. *Neuroimage*. 2001 Dec;14(6):1256-67.

Etchells E, Meade M, Tomlinson G, Cook D. Semiquantitative dipyridamole myocardial stress perfusion imaging for cardiac risk assessment before noncardiac vascular surgery: a meta-analysis. *J Vasc Surg*. 2002 Sep;36(3):534-40

Etminan M, Levine MA, Tomlinson G, Rochon PA. Efficacy of angiotensin II receptor antagonists in preventing headache: a systematic overview and meta-analysis. *Am J Med*. 2002 Jun 1;112(8):642-6. Review.

Fahrig R, Buttes K, Rowlands JA, Saunders R, et al., "A truly hybrid interventional MR-x-ray system: feasibility demonstration." *Journal of Magnetic Resonance Imaging*, 13, 294-300 (2001).

Ford NL and Yaffe MJ. A comparison of image quality measurements among mammography facilities in Ontario. *CARJ* 52; 369-372, 2001.

Hirata M., Kato A., Taniguchi M., Ninomiya H., Cheyne D., et al. Frequency-dependent spatial distribution of human somatosensory evoked neuromagnetic fields. *Neuroscience Letters* 318: 73-76. (2002)

Gaetz W. and Cheyne D. (2002) Neuromagnetic imaging of human somatosensory cortex using a minimum-variance beamformer. *NeuroReport*, submitted.

Karim KS, Nathan A and Rowlands JA, "Active pixel sensor architectures in a-Si:H for medical imaging", *J. Vacuum Science and Technology* A20 1095-1099 (2002)

Karim KS, Nathan A and Rowlands JA, "Amorphous silicon active pixel sensor architectures for large area medical imaging", *J. Non-Crystalline Solids* 299-302 1250-1255 (2002)

Kasap SO, Rowlands JA, Fogal B, Zahangir Kabir M, et al., "Progress in the science and technology of direct conversion a-Se x-ray sensors", *J. Non-Crystalline Solids* 299-302, 988-992 (2002)

Kasap SO and Rowlands JA, "Direct conversion flat panel x-ray image detectors", *IEE Proceedings in Systems, Circuits and Devices* 149 85-96 (2002)

Kasap SO and Rowlands JA, "Direct conversion flat panel x-ray image sensors for digital radiography" *Proceedings of the IEEE* 90 591-604 (2002)

Krahn MD, Bremner KE, Asaria J, Alibhai SM, et al., "The ten-year rule revisited: accuracy of clinicians' estimates of life expectancy in patients with localized prostate cancer". *Urology*. 2002 Aug;60(2):258-63.

Macgowan CK, Wood ML. Fast Measurements of the Motion and Velocity Spectrum of Blood Using MR Tagging. *Magn. Reson. Med.* 45(3), 461-469 (2001)

Macgowan CK, Henkelman RM, Wood ML. Pulse-Wave Velocity Measured in One Heartbeat Using MR Tagging. *Magn. Reson. Med.* 48(1), 115-121 (2002)

Mah K, Caldwell CB, Ung YC, Danjoux CE, et al., The impact of (18)FDG-PET on target and critical organs in CT-based treatment planning of patients with poorly defined non-small-cell lung carcinoma: a prospective study. *Int J Radiat Oncol Biol Phys*. 2002 Feb 1;52(2):339-50.

Mainprize JG, Ford NL, Yin S, Tumer T, Yaffe MJ. A slot-scanned photodiode-array/CCD hybrid detector for digital mammography. *Medical Physics* 29(2), 214-225, 2002.

Mayville J., Fuchs A., Ding M., Cheyne D., et al., (2001) Event-related changes in neuromagnetic activity associated with syncope and synchronization timing tasks. Human Brain Mapping 14: 65-80.

McCormick BB, Tomlinson G, Brill-Edwards P, Detsky AS. Effect of restricting contact between pharmaceutical company representatives and internal medicine residents on posttraining attitudes and behavior. JAMA. 2001 Oct 24-31;286(16):1994-9.

Mikulis DJ, Jurkiewicz MT, McIlroy WE, Staines WR, Rickards L, Kalsi-Ryan S, Crawley AP, et al. Adaptation in the motor cortex following cervical spinal cord injury. Neurology. 2002 Mar 12;58(5):794-801.

Naglie G, Radomski SB, Brymer C, Mathiasen K, O'Rourke K, Tomlinson G. A randomized, double-blind, placebo controlled crossover trial of nimodipine in older persons with detrusor instability and urge incontinence. J Urol. 2002 Feb;167(2 Pt 1):586-90.

Naglie G, Tansey C, Kirkland JL, Ogilvie-Harris DJ, Detsky AS, Etchells E, Tomlinson G, O'Rourke K, Goldlist B. Interdisciplinary inpatient care for elderly people with hip fracture: a randomized controlled trial. CMAJ. 2002 Jul 9;167(1):25-32.

Noseworthy MD, Ackerley C, Qi X, Wright GA., Correlating subcellular contrast agent location from dynamic contrast-enhanced magnetic resonance imaging (dMRI) and analytical electron microscopy. Acad Radiol. 2002 Aug;9 Suppl 2:S514-8.

Pang G, Beachey DJ, O'Brien PF and Rowlands JA, "Imaging of 1.0-mm-diameter radio-opaque markers with megavoltage x-rays: An improved online imaging system" International Journal of Radiation Oncology Biology and Physics, 52, 532-537 (2002)

Pang G, Lee DL and Rowlands JA, "Investigation of a direct conversion flat panel imager for portal imaging", *Medical Physics*, 28, 2121-2128 (2001).

Pawluczyk O and Yaffe MJ. Field non-uniformity correction for quantitative analysis of digitized mammograms. *Medical Physics*, 28; 438-444, 2001.

Prayer D, Barkovich AJ, Kirschner DA, Prayer LM, Roberts TPL, Kucharczyk J, Moseley ME. Visualization of non-structural changes in early white matter development by diffusion-weighted MR imaging: evidence supporting premyelination anisotropy. AJNR Am J Neuroradiol. 22:1572-1576 (2001)

Robert N, Komljenovic PT and Rowlands JA, "A filtering method for signal equalization in region-of-interest fluoroscopy", *Medical Physics* 29, 736-747 (2002)

Roberts HC, Roberts TPL, Dillon, WP. CT perfusion: "off and running" or "up and coming" ?, AJNR Am J Neuroradiol 22:1018-1019 (2001)

Roberts HC, Roberts TPL, Smith WS, Lee TJ, Fischbein NJ, Dillon WP. Multisection dynamic CT perfusion for acute cerebral ischemia: the "toggling-table" technique. AJNR Am J Neuroradiol 22(6):1077-80 (2001)

Roberts HC, Roberts TPL, Lee TY, Dillon WP, Dynamic, contrast-enhanced CT in human brain tumors: quantitative assessment of blood volume, blood flow, and microvascular permeability, AJNR Am J Neuroradiol, in press (2002)

Roberts HC, Roberts TP, Ley S, Dillon WP, Brasch RC. Quantitative estimation of microvascular permeability in human brain tumors: correlation of dynamic Gd-DTPA-enhanced MR imaging with histopathologic grading. Acad Radiol. 2002;9 Suppl 1:S151-5.

Roberts TP, Tran Q, Ferrari P, Berger MS. Increased somatosensory neuromagnetic fields ipsilateral to lesions in neurosurgical patients. Neuroreport. 2002 Apr 16;13(5):699-702.

Roberts TP, Helbich TH, Ley S, Turetschek K, Wendland MF, Shames DM, Brasch RC. Utility (or not) of Gd-DTPA-based dynamic MRI for breast cancer diagnosis and grading. Acad Radiol. 2002;9 Suppl 1:S261-5.

Samani A, Bishop J, Yaffe MJ, Plewes DB. Biomechanical 3D finite element modeling of the breast using MRI data. IEEE Trans Med Imaging. 20;271-279, 2001.

Schiffbauer H, Ferrari P, Rowley HA, Berger MS, Roberts TP. Functional activity within brain tumors: a magnetic source imaging study. Neurosurgery. 2001 Dec;49(6):1313-20

Taniguchi M., Kato A., Hirata M., Cheyne D., Robinson S., et al., Cerebral motor control in patients with gliomas around the central sulcus studied with spatially filtered magnetoencephalography. Journal of Neurology, Neurosurgery and Psychiatry submitted (2002)

Tinmouth J, Tomlinson G, Heathcote EJ, Lilly L., Benefit of transplantation in primary biliary cirrhosis between 1985-1997. Transplantation. 2002 Jan 27;73(2):224-7.

Turetschek K, Roberts TPL, Floyd E, Preda A, Novikov V, Shames DM, Carter WO, Brasch RC, Tumor microvascular characterization using ultrasmall superparamagnetic iron oxide (USPIO) particles in an experimental breast cancer model. J Magn Reson Imag 13(6):882-8. (2001)

van Dijke CF, Mann JS, Rosenau W, Wendland MF, Roberts TP, Roberts HC, Demsar F, Brasch RC. Comparison of MR contrast-enhancing properties of albumin-(biotin)10-(gadopentetate)25, a macromolecular MR blood pool contrast agent, and its microscopic distribution. Acad Radiol. 2002;9 Suppl 1:S257-60.

Warner E, Plewes DB, Shumak RS, Catzavelos C, Di Prospero L, Yaffe MJ, et al., Comparison of breast magnetic resonance imaging, mammography and ultrasound for surveillance of women at high risk for hereditary breast cancer. J Clin Oncol. 19; 3524-3531, 2001.

Zhao W, Ji WG and Rowlands JA, "Effects of characteristic x-rays on the noise power spectra and detective quantum efficiency of photoconductive x-ray detectors" *Medical Physics* 28, 2039-2049 (2001)

(b) Books or Book Chapters

Boyd NF, Lockwood GA, Martin LJ, Byng JW, Yaffe MJ and Tritchler DL. Mammographic density as a marker of susceptibility to breast cancer: a hypothesis. In Biomarkers in Cancer Chemoprevention AB Miller, H Bartsch, P Boffetta, L Dragsted, H Vainio (eds) IARC Scientific Publications #154, 163-170, 2001.

Rowlands JA and Yorkston J. "Physics and technology of fluoroscopic image receptors," In AAPM 2002 Summer School, Medical Physics Publishing, Ed. by: S Butler, RC Chan and TB Shope Jr. 617-662 (2002)

Roberts TPL, Rowley HA. "Magnetoencephalography and Magnetic Source Imaging", Ed: Latchaw, Kucharczyk, Moseley, in press (2002)

Roberts TPL, McGonigle DJ. "Functional MRI and Related Techniques", in "Principles and Practice of Behavioral Neurology and Neuropsychology", Ed: Rizzo, Eslinger. in press (2002)

Roberts TPL, Van Bruggen N. "Principles of MRI Contrast" in "Biomedical Imaging in Neuroscience Research", Eds: VanBruggen N, Roberts TPL. CRC Press (2002)

Rowley HA, Roberts TPL. "Magnetoencephalography in Epilepsy", Ed: Latchaw, Kucharczyk, Moseley, in press (2002)

van Bruggen N, Roberts TPL. "Emerging Technologies" in "Techniques of Biomedical Imaging in Neuroscience Research", Eds: VanBruggen N, Roberts TPL. CRC Press (2002)

van Bruggen N and Roberts TPL, "Biomedical Imaging in Experimental Neuroscience", CRC Press, (2002)

Original Scientific Presentations

(a) Peer-Reviewed

Skarpathiotakis M, Yaffe MJ Digital Iodine Subtraction Mammography 87th Scientific Assembly and Annual Meeting, Chicago, IL, Nov 27, 2001.

Welsh CR, Young B, Gopalakrishnan V, Mahon I, Gopalakrishnan B, Gatsonis, C, Pisano ED, Yaffe MJ, American College of Radiology Imaging Network (ACRIN) Digital Mammographic Imaging Screening Trial (DMIST) informatics infrastructure. CARS 2002 Computer Assisted Radiology and Surgery. 16th International Congress and Exhibition, Paris, France June 26-29, 2002.

(b) Non-Reviewed

Yaffe M., Antonuk L., Dobbins J., Maidment A., et al., "Computed and Digital Radiography: A Moderated Debate", 43rd Annual Meeting of the American Association of Physicists in Medicine, Salt Lake City, July 25, 2001.

Yaffe MJ , Current and Future Detectors for Digital Medical Imaging. European Congress of Medical Physics and Clinical Engineering. IPEM Ann. Scientific Meeting. Belfast, UK. Sept. 14, 2001.

Yaffe MJ ,Quantifying breast cancer risk from mammograms. CARS : Computer Assisted Radiology and Surgery. 16th International Congress and Exhibition, Paris, France June 26-29, 2002.

Cheyne, D., Gaetz W., ducorps A. Schwartz D. and Varela F. Neuromagnetic imaging of changes in somatosensory rhythms during observation of tactile stimulation. 13th International Conference on Biomagnetism. Jena, Germany. August 10 – 14. 2002.

Gaetz W. and Cheyne, D. Neuromagnetic imaging of somatosensory cortex using dipole analysis and synthetic aperture magnetometry (SAM). 13th International Conference on Biomagnetism. Jena, Germany. August 10 – 14. 2002.

Gaetz W. and Cheyne, D. Neuromagnetic imaging of somatosensory cortex using a minimum-variance beamformer. 11th World Congress of Psychophysiology. Montreal, Quebec. July, 2002.

Gaetz WC, and Cheyne, D. Neuromagnetic imaging of somatosensory cortex using a minimum-variance beamformer and dipole analysis. Annual meeting of the British Psychophysiological Conference, Birmingham, England.

Gaetz WC, Bosnyak DJ., Roberts LE., Pang LW. and Cheyne D. The search for high frequency (~600 Hz) somatosensory responses to mechanical stimulation in humans. Annual meeting of Neuroscience, New Orleans, USA. (2001)

Invited Papers and Professorships

Cheyne D. Neuromagnetic imaging of human motor function. 11th World Congress of Psychophysiology. Montreal, Quebec. July, 2002.

Roberts T. Jan 02: "Permeability Mapping" and "Neuro-Interventional XMR", Philips Neuro Users Meeting, Groenendaal, Holland

Roberts T. Mar 02: (UCSF CME course). "Advanced neuroimaging techniques" (2 lectures), Vail, CO

Roberts T. Mar 02: (UCSF CME course). “Mapping eloquent cortex”, March Radiology Course, San Francisco, CA

Roberts T. Mar 02: (UCSF CME course). “Advances in MRI Methods”, 2nd CT/MR Perfusion Symposium, San Francisco, CA

Roberts T. April 2002. Visiting Professor. AKH Vienna, Austria.

Roberts T. May 02: “High Field MR: Promises and Opportunities”, Opening ceremony University Hospital Bonn, Germany

Awards and Honors

Valsangiacomo ER, Barrea C, Macgowan CK, Smallhorn JF, Coles JG, Yoo SJ. Best Poster in category Imaging 37th Association for European Paediatric Cardiology Annual Scientific meeting, May 18, 2002. Phase-Contrast Magnetic Resonance Imaging Measurement of Pulmonary Venous Flow in Normal and Surgically Repaired Pulmonary Veins.

Teaching -- Hours of Lectures

Faculty Member	Students	Residents, Fellows, Faculty	Technologists
C.B. Caldwell	10	1	2
S. Houle	10	20	10
J.A. Rowlands	2	4	0
M.L. Wood	0	4	0
M.J. Yaffe	10	38	3

Department of Medical Imaging Annual Research Day 2002

Date: Monday, April 15, 2002

Location: Sadowski Auditorium, 18th floor of the Mount Sinai Hospital

Starting Time: 1:00 pm with welcome from Dr. Walter Kucharczyk

Body Imaging Moderators: Mostafa Atri and Masoom Haider

1:05	Ricardo Faingold	Bowel Viability Assessment by Color Doppler Sonography in Necrotizing Enterocolitis
1:15	Fred Lan	Subcapsular Steatosis and Steatonecrosis of the Liver in Response to Intraperitoneal Insulin: Imaging Features and Prevalence
1:25	Mostafa Atri	Accuracy of Unenhanced CT and the Added Value of Rectally Enhanced CT for the Assessment of Acute Right Lower Quadrant Pain and the Impact of Different Levels of Reviewers' Expertise
1:35	Masoom Haider	Comparison of Kinetic Parameters Derived from Dynamic Contrast-Enhanced CT and MRI of Cervix Cancer
1:45	Roberta Jong	ACRIN 6652 Digital Mammography Imaging Screening Trial
1:55	Jillian Pugh	Sentinel Lymph Node Biopsy in Breast Carcinoma: Comparison of Two Injection Techniques
2:05	Robert Yu	HRCT of Pulmonary Capillary Hemangiomatosis and Pulmonary Hypertensive Arteriopathy
2:15	Tarang Sheth	Delayed Myocardial Enhancement in Hypertrophic Obstructive Cardiomyopathy Post-Septal Ethanol Ablation
2:25	Kelvin Lee	Hepatocellular Carcinoma: Features on Triphasic CT using a Multidetector Helical CT Scanner
2:35	Danny Rappaport	Screening of a High Risk Inpatient Population for Unsuspected Pulmonary Embolism using Multi-Detector Row CT
2:45	Andréa S. Doria	Impact of High-Resolution US Transducers on the Visualization of a New Pattern of Splenic Parenchyma in Children: Clinical-Pathological Correlation of the Reticulonodular Pattern
2:55	Dawn Pearce	Weight-Bearing CT of the Feet

3:05 **Break (15 minutes)**

Intervention Moderator: Murray Asch

3:20	Murray Asch	Safety and Effect of Percutaneous Temporary Portal Vein Occlusion on the Size of Thermal Lesions in Porcine Livers
3:30	John Kachura	Incidence and Management of Complications Associated with Radiofrequency Ablation of Hepatic Tumors
3:40	Sheila Chou	Preoperative Portal Vein Embolization – Experience with Embospheres
3:50	Jonathan Jones	Cholangiographic Appearances of “Masquerading” Klatskin Tumours
4:00	Nikunj Patel	Cephalic Arch Stenosis in Native Hemodialysis Fistulae: Prevalence and Outcome Following Percutaneous Therapy
4:10	Marty Simons	The Woggle Technique: A New Method of Suture Closure of Hemodialysis: Arteriovenous Grafts and Fistulae, After Percutaneous Interventions
4:20	Marc Ossip	Fine Needle Aspiration of Thyroid Nodules that had Previously Insufficient Cytology

4:30 **Break (15 minutes)**

Neuroimaging Moderator: Tim Roberts

4:45	Tim Roberts	XMR - A Multimodality Approach to Interventional Radiology
4:55	Tom Marotta	An Endovascular Clip for Cerebral Aneurysm Treatment
5:05	Vincent Shin	Can Plain Radiographic Technique be used as a Predictor of Intracranial Aneurysm Recurrence Treated with Guglielmi Detachable Coils?
5:15	Richard Farb	Gadolinium-enhanced MR Venography of the Intracranial Venous System using an Auto-Triggered Elliptical Centric Ordered (ATECO) Sequence: Initial Experience
5:25	David Mikulis	Mapping Improved Cerebrovascular Reactivity (CVR) following Revascularization in Moyamoya Disease using Dynamic Modulation of End Tidal CO2 and BOLD MRI
5:35	Nat Chuang	Pediatric Localization-Related Epilepsy: Pre-Operative Magnetic Source Imaging and Neuropathology
5:45	Manu Shroff	Spinal Osteoid Osteoma and Osteoblastomas: The Significance of Paraosseous Soft Tissue Changes

5:55 Walter Kucharczyk **Closing remarks**

RESIDENT TRAINING PROGRAM

General Description

There were 46 residents in our program in the 2001-2002 year. The five-year program consists of one year of preliminary clinical training (PGY1), followed by four years of training in medical imaging.

The university-wide integration and rotational system ensures that each resident will have access to all the strengths of our large and expert faculty and the huge volume of clinical pathology. Residents have the opportunity to train at several large modern hospitals, doing so in groups of 5 – 10 trainees of all levels, thus maintaining a close working environment with peers and faculty. All hospitals are equipped with state-of-the-art equipment. Residents work daily with the best of general radiographic, ultrasound, CT and MRI technology. Several hospitals have digital image archiving and communication systems.

PGY1

PGY1 Clinical training is divided into two blocks, one eight-nine month block at core teaching hospitals and a two-three month block at a community hospital. During 2001 - 2002, the core teaching hospitals have been the Mount Sinai Hospital and the St. Michael's Hospital. Community training is principally done at the North York General Hospital. The content of the PGY1 program included Medicine (General Medicine and Respiriology); Surgery (General Surgery, Orthopaedics, Urology, Neurosurgery, Obstetrics and Gynaecology); one month of Paediatrics; one month of Anatomy at the U of T Anatomy Department; and two months of elective choices. In the final month of PGY1, all residents come together for a Radiology Orientation Program, which introduces the trainees to physics, imaging equipment, clinical lectures, program issues and the core hospitals. The PGY1 rotation opportunities are reviewed annually, attempting to make the best of training choices in the clinical services.

PGY2

This is the first year of training in medical imaging. During 2001 - 2002, a PGY2 trainee spent the entire year at one or two of the three core teaching Departments (Mount Sinai – University Health Network, Sunnybrook and Women's College Health Sciences Centre and St. Michael's Hospital). There is a graduated increase in responsibility over the course of the year. In order to prepare residents to take night call (which starts in September), the year begins with a 10 week introductory program covering thoracic, GI, GU, CNS, MSK, CT and nuclear imaging. The remainder of the year consists of one or two month rotations in each of the above organ systems, as well as a one-month rotation in ultrasound.

PGY3

In 2001 - 2002, residents in this training year divided their rotations into three to six month blocks at hospitals different from that of their PGY2 training year. This allows the trainee an opportunity to see a different spectrum of pathology and to work with a different group of faculty. Rotations during the PGY3 year have included Breast Imaging, Neuroradiology, Ultrasound, Vascular-Interventional, and Nuclear Medicine as well as additional training in CT, MSK, GI and Chest. MRI training is included within all organ system rotations and is a strong component of all core hospitals.

PGY 4

During this year, each resident spent a four-month block in Paediatric Radiology at the world famous Hospital for Sick Children. The other eight months is at one or two of the core hospitals. This year includes a two-month block of dedicated Angio-Interventional training. The resident also has four to six months of General Radiology rotations. The Armed Forces Institute of Pathology (AFIP) six-week rotation for Radiology-Pathology is scheduled during the General radiology time.

PGY5

The resident is usually allowed to use this year for electives, but this is conditional upon the resident having achieved an acceptable standard of competence in medical imaging. It may be spent concentrating on areas of relative weakness, or on subspecialty areas. Most residents include electives in obstetric ultrasound, cardiac imaging and Body MRI in this final year.

Armed Forces Institute of Pathology

All residents are encouraged to attend the Armed Forces Institute of Pathology in Washington, D.C., where they receive a six-week, intensive, didactic course in pathology correlated to imaging. This generally occurs during the PGY4 year. Some financial support is available. To date, we have been successful in reserving a sufficient number of positions at AFIP to permit all of our residents to attend at some point in their training.

Physics Instruction

All residents must be knowledgeable about the physics of medical imaging. To that end, intensive physics instruction is provided. One week courses are provided for the PGY1 and PGY3 years and there is also a five-day review course in the PGY3 or PGY4 year of training. These courses are organized by Martin Yaffe, Ph.D. (Department of Medical Imaging) and taught by the faculty of our department, the faculty of the Department of Medical Biophysics, and guest speakers.

Conferences

Residents are encouraged to attend imaging conferences, both to be involved in presenting papers or posters and also for the benefit of knowledge and interaction with the imaging community at large. During the PGY3 year, each resident is given the opportunity to attend a major imaging conference with the provision of financial support. The resident is not required to present at the conference to receive this support but does prepare a report following the meeting to highlight what they gained in their attendance. In addition, residents presenting papers or posters at recognized meetings generally receive financial support through affiliations with hospital imaging departments.

Seminars and Half-Day Program

Wednesday afternoons from September to June have been the focus for the academic program. There is a formal two to three hour weekly clinical seminar for PGY1, PGY2 and PGY3 residents. Most seminars are organized around organ systems and imaging modalities.

As well, there are special sessions for all resident years on non-clinical topics such as ethical and legal issues, practice management and career planning. Speakers from outside the Department add interest to the content of these featured sessions.

A 10 hour review series is provided for PGY5 residents each spring in preparation for the ABR and Royal College examinations.

Research

Residents in Medical Imaging are required to have a good foundation of research methodology and critical appraisal in order to either critically evaluate scientific medical literature or pursue independent research activities. Principles and issues of health technology assessment, quality improvement and clinical audits are also core components of the clinical research curriculum. Dr. George Tomlinson, statistician, has recently joined the Department, and with the resident Research Committee under Dr. David Mikulis, is responsible for the design and delivery of the course curriculum, workshops, tutorials and lectures on these topics. Instruction in this curriculum is given throughout the Residency Program. In total, residents in Medical Imaging receive over 30 hours of course instruction.

Each resident is required to become involved in a research project beginning no later than the PGY3 year. All residents receive protected time to work on their project. The research is conducted in conjunction with one or more staff persons with a view to presenting the project during the PGY4 or PGY5 years at our Annual Research Day. The residents are encouraged to publish their results and to present them at national or international meetings.

Rounds

Teaching rounds, or small group conferences, are held at each of the core hospitals once or twice a day. University Division rounds are held for the entire department six to eight times annually at a central location.

View Box Teaching

Every resident in the PGY2 through to the PGY5 years receives daily teaching from faculty at the view box and in the procedure rooms. Teaching is based on the day's cases, but may be supplemented with related cases from faculty teaching files. The amount of teaching varies from rotation to rotation but on average there are one to two hours of this type of one-to-one teaching daily. This program is widely recognized for the quality of teaching provided to residents. In addition, residents learn to teach others and are expected to teach students and observers in the Department.

Journal Club

This is organized by the residents and is held approximately five times annually.

Visiting Professor Program

This program of six lectures between October and April is organized by the CME Director of our department and is provided for all imaging specialists including community radiologists. Residents attend the lecture and reception. Visiting Professors from outside Toronto usually present resident teaching sessions at two or three of the teaching hospitals during their visits to Toronto.

Organ Imaging Review Course

This is a week-long, internationally recognized review course. It is given in September or October of each year. It is primarily intended as a CME course for practicing radiologists but also contains a wealth of valuable teaching material for residents. All residents are given some time off clinical services to attend, and can do so at no cost.

Program Evaluation

In addition to that carried out by the Radiologists-in-Chief and the teaching co-ordinators at each hospital, the residents complete an assessment of each rotation, and an annual assessment of the faculty's teaching.

Program Supervision

This is the direct responsibility of the Program Director who is, in turn, responsible to the Departmental Chair and the Departmental Executive Committee. The Program Director is assisted by the Resident Training Committee, which is composed of a representative from each

of the teaching hospitals, a PGY1 coordinator responsible for all PGY1 issues, as well as from Nuclear Medicine and the Research Committee. In addition, the University of Toronto Chief Resident in Medical Imaging and a resident representative from each year of training are full members of the committee.

There are Division Heads appointed for Cardiothoracic, Musculoskeletal, Abdominal, Pediatric, Vascular-Interventional, Breast Imaging and Neuroradiology. These Division Heads and the Program Director for Nuclear Medicine are responsible for rotation goals and objectives, suggested reading lists and recommendations regarding the resident lectures and seminars. Division Heads advise the Program Director and Resident Training Committee.

Resident Evaluations

- Evaluation consists of the following:
- An in-training evaluation completed following each rotation.
- A summary in-training evaluation at the end of each year of training.
- Results of the American College of Radiology multiple choice in-training examination, taken in the spring of each year.
- Results of a yearly oral examination based on the Royal College format (PGY2-5).
- Results of a written examination in physics following the PGY1 course.
- A practice OSCE examination in the spring of each year (PGY3-5).

Resident Awards

Outstanding residents are recognized by awards for clinical excellence, teaching and research.

1) Gordon Potts Award

This award of a commemorative plaque is made to the outstanding final-year resident, based on a combination of the following academic and personal strengths: Interpersonal skills, willingness to explore new methods and ideas, dedication to patient service and academic activities, intellectual capacity and publications in residency.

2001 – 2002 co-recipients: Dr. Elizabeth David, PGY5; Dr. Teresa Loucks-Gray, PGY5

2) Resident Teacher-Mentor Award

This award will be made to a final year graduating resident, based on a combination of the following strengths and contributions: dedication to teaching, resident advocate and mentor, contribution to Resident Program and commitment to personal continuing educational growth.

2001 - 2002 winner: Dr. Nir Stanietzky, PGY5

3) Research Awards

Each year residents as well as fellows are nominated to receive the RSNA Research Award for Research excellence within the University of Toronto Department of Medical Imaging.

2001 – 2002 winner: Dr. James Scott

Summary

The University of Toronto training program in Medical Imaging is designed to provide the best possible training in all aspects of imaging. The program is an intensive one, with considerable emphasis on teaching, in addition to exposure to a huge volume of clinical pathology. The university-wide integration and rotational system ensures that each resident will have access to all of the strengths of our departments.

RESIDENTS

PGY1 Level

Gagan Ahuja, MD
University of Toronto, 2001
Harpreet Baweja, MD
McMaster University, 1994
Richard Bitar, MD
University of Toronto, 2001
Louis-Martin Boucher, MD/PhD
University of Toronto, 2001
Debra Chang, MD
University of Toronto, 2000
Meaghan Hyland, MD
University of Ottawa, 2001
Jeffery Jaskolka, MD
University of Western Ontario, 2001
Ryan Margau, MD
University of Toronto, 2001
Elaine Martinovic, MD
University of Calgary, 2001
Matthew McInnes, MD
University of Toronto, 2001
Rola Shaheen, MD
University of Jordan, 1996

PGY2 (R1) Level

Susan Armstrong, MD
University of Toronto, 2000
Debra Chang, MD
University of Toronto, 2000
Marc Freeman, MD
University of Toronto, 2000
Aaron Glickman, MD
University of Western Ontario, 2000
Anish Kirpalani, MD
McMaster University, 2000
Sarah Koles, MD
University of Calgary, 2000
Vikash Prasad, MD
Dalhousie University, 2000
Michael Stefanos, MD
University of Toronto, 2000

PGY3 (R2) Level

Peter Ballyk, MD
University of Toronto, 1999
Carrie Betel, MD
University of Toronto, 1999
Anita Chae, MD
University of Western Ontario, 1999
Zdenko Filakovic, MD
Ontario International Medical Program, 1999
Angela Ho, MD
University of Toronto, 1999
Zeinab Layton, MD
University of Western Ontario, 1999
Selina Lem, MD
Queen's University, 1999
Bonnie O'Hayon, MD
University of Toronto, 1999
Markian Shulakewych, MD
University of Manitoba, 1994
Steven Singer, MD
University of Ottawa, 1998
Sameh Tadros, MB, BCh
Ontario International Medical Program, 1999
Lana Wilkinson, MD
McMaster University, 1999

PGY4 (R3) Level

Frederick Lan, MD
University of Toronto, 1998
Erika Mann, MD
Queen's University, 1998
Marc Ossip, MD
University of Toronto, 1998
Jillian Pugh, MD
Dalhousie University, 1998
Tarang Sheth, MD
University of Toronto, 1998
Vincent Shin, MD
University of Ottawa, 1998
Robert Yu, MD
University of Toronto, 1998

PGY5 (R4) Level

Hilarie Broom, MD

University of Ottawa, 1997

Elizabeth David, MD

University of Toronto, 1997

David Jacobs, MD

Queen's University, 1996

Jae Koul Kim, MD

University of Toronto, 1997

Teresa Loucks, MD

University of Ottawa, 1997

Nikunj Patel, MD

Queen's University, 1997

Anoosh Sharif, MD

University of Western Ontario, 1997

Nir Stanietzky, MD

University of Ottawa, 1997

NUCLEAR MEDICINE TRAINING PROGRAM

General Description

Nuclear medicine is a branch of medical practice primarily concerned with the use of unsealed radioactive sources in the study, diagnosis, and treatment of disease. Our program currently provides dual-certification in radiology and nuclear medicine. This is a six year (including PGY1) program with two years of subspecialty training in nuclear medicine (provided that the subspecialty training is taken following the completion of at least 18 months in Diagnostic Radiology, effective June 1, 1998).

The Nuclear Medicine Program provides formal instruction and training for both radiology and nuclear medicine residents. Formal lectures cover various aspects of nuclear medicine including cardiac and oncologic nuclear medicine, functional neuroimaging, radiopharmacy, nuclear physics, and general nuclear medicine. Residents have specific goals, objectives and reading lists during their rotation at one of the teaching hospitals. There are weekly or biweekly teaching rounds for both radiology and nuclear medicine residents at these hospitals. Also, there are city-wide nuclear medicine rounds held every Friday morning at the Hospital for Sick Children. The residents acquire skills by participating in daily clinical work. Didactic instruction is supplemented by teaching files at each hospital. In addition, there are monthly teaching rounds during the academic year at Mount Sinai Hospital. These rounds are given by internationally renowned guest speakers, who also present evening lectures on current topics in nuclear medicine at the Toronto Nuclear Medicine Society Meeting.

The Nuclear Medicine Program is actively involved in clinical and basic science research including functional neuroimaging with SPECT and PET, cardiac, oncologic, and pediatric nuclear medicine, and radiochemistry. Residents are encouraged to participate in these research activities.

General Objectives

The goal of the nuclear medicine resident is to be able to function independently as a medical specialist with the ability to advise on, supervise, perform, and interpret all diagnostic procedures, and to achieve a level of competence in the performance of radiotherapy with unsealed radioactive sources so as to act as a consultant to referring physicians. The resident must acquire excellent communication and technical skills, and the knowledge and professionalism appropriate to a lifetime career in nuclear medicine.

Dual Radiology and Nuclear Medicine Residency

Applicants will be considered from candidates who are already in the Diagnostic Radiology Training Program at the University of Toronto, usually, one slot per year is reserved for the dual certification program.

RADIOLOGY SCIENTIST TRAINING PROGRAM

Objectives

The purpose of the Radiological Scientist Training Program (RSTP) is to provide a small group of radiology residents with the opportunity to develop skills important to the pursuit of independent research. These skills encompass research methodology, publications, grant writing, and presentations. The research training is intended to complement the excellent clinical training for which the Department of Medical Imaging is already recognized.

Organization

The RSTP is a six-year program with two years of research and four years of clinical training. The Royal College of Physicians and Surgeons of Canada will accept one year of research towards fulfilling the requirements of the five year program in diagnostic radiology. The RSTP is able to accommodate as many as two residents per year. The first two years of the RSTP are identical to the regular radiology training program. The difference is in the PGY3 and PGY4 years which, in the RSTP, are entirely devoted to research. Research opportunities are available in many departments relevant to radiology. Under certain circumstances, residents in the RSTP may pursue a M.Sc. or Ph.D. degree. The final two years, PGY5 and PGY6, are designated for clinical training to fulfil the requirements of the Royal College of Physicians and Surgeons of Canada.

Eligibility and Application Procedure

Applications will be considered from candidates already accepted into the regular radiology training program and will occur during the PGY2 training year. A maximum of two places per year will be reserved for residents in the RSTP. Applicants need not have prior experience in research or a special background, but are expected to be self-motivated.

Remuneration

Residents in the RSTP will be remunerated commensurate with residents in the regular radiology training program, up to a maximum of the PGY5 level.

Selection of Research Project and Supervisor

Residents in the RSTP should select a project and a supervisor as soon as possible, and before the PGY3 year. The Director of Research and the Chair of the department can offer assistance with this selection. A supervisor may be selected from various University of Toronto departments, including Medical Imaging, Medical Biophysics, Anatomy, Physiology, Biochemistry, Computer Science, Clinical Epidemiology, or Electrical Engineering, specifically the Institute of Biomedical Engineering. The supervisor must have operating funds to support the research, but is not expected to provide remuneration for the resident. Candidates will be strongly encouraged also to apply for a fellowship from an agency such as the Medical Research

Council, but acceptance into the RSTP will not be conditional upon success in obtaining such a fellowship.

Graduate Degrees

Residents in the RSTP are encouraged to pursue a graduate degree. The procedure depends somewhat on the department in which the research is to be conducted, but requires a separate application to that department and the School of Graduate Studies or Institute of Medical Sciences. Residents are responsible for fulfilling all requirements of the department in which they are registered as graduate students.

Clinical Responsibilities

During the two years of research training, residents in the RSTP will have minimal clinical responsibilities, probably limited to one on-call evening/night per week. In addition, residents in the RSTP are encouraged to maintain contact with clinical activities through attendance at select departmental rounds and teaching sessions. Such attendance will not be compulsory for RSTP residents in the two research years, as it is for residents in the regular training program.

OBJECTIVES OF TRAINING & SPECIALTY TRAINING REQUIREMENTS IN DIAGNOSTIC RADIOLOGY

Definition

Diagnostic Radiology is a branch of medical practice concerned with the use of imaging techniques in the study, diagnosis and treatment of disease.

General Objectives

On completion of the educational program, the graduate physician will be competent to function as a consultant in Diagnostic Radiology. This requires the physician to have the ability to supervise, advise on and perform imaging procedures to such a level of competence, and across a broad range of medical practice, as to function as a consultant to referring family physicians and specialists.

Communication skills, knowledge, and technical skills are the three pillars on which a radiological career is built, and all are dependent on the acquisition of an attitude to the practice of medicine which recognizes both the need to establish a habit of continuous learning and a recognition of the importance of promoting a team approach to the provision of imaging services.

Residents must demonstrate the knowledge, skills and attitudes relating to gender, culture and ethnicity pertinent to Diagnostic Radiology. In addition, all residents must demonstrate an ability to incorporate gender, cultural and ethnic perspectives in research methodology, data presentation and analysis.

Specific Objectives

At the completion of training, residents will have achieved the following competencies so as to function effectively as:

i) Medical Expert/Clinical Decision-Maker

General Requirements

- Demonstrate diagnostic and therapeutic skills for ethical and effective patient care.
- Access and apply relevant information to clinical practice so as to have competence in clinical radiological skills.
- Demonstrate effective consultation services with respect to patient care, education and legal options.

Specific Requirements

- Understand the nature of formation of all types of radiological images, including physical and technical aspects, patient positioning, contrast media.
- Knowledge of the theoretical, practical and legal aspects of radiation protection, including other imaging techniques and their possible harmful effects.

- Knowledge of human anatomy at all ages, both conventional and multi-planar, with emphasis on radiological applications.
- Knowledge of all aspects of clinical radiology, including understanding of disease, appropriate application of imaging to patients, importance of informed consent, complications such as contrast media reactions, and factors affecting interpretation and differential diagnosis.
- Understand the fundamentals of quality assurance in radiology.
- Understand the fundamentals of epidemiology, biostatistics and decision analysis.
- Show competence in manual and procedural skills and in diagnostic and interpretive skills.
- Demonstrate the ability to manage the patient independently during a procedure, in close association with a specialist or other physician who has referred the patient. The radiologist should know when the patient's best interests are served by discontinuing a procedure, or referring the patient to another physician.
- Understand the acceptable and expected results of investigations/and or interventional therapy as well as unacceptable and unexpected results. This must include knowledge of and ability to manage radiological complications effectively.
- Understand the appropriate follow-up care of patients who have received investigations and/or interventional therapy.
- Show understanding of a sound and systematic style of reporting.
- Competence in effective consultation, conduct of clinico-radiological conferences, and the ability to present scholarly material and lead case discussions.

ii) Communicator

- Establish appropriate therapeutic relationships with patients/families.
- Listen effectively.
- Obtain the appropriate information during consultation with referring physicians in order to be able to make recommendations regarding the most appropriate testing and/or management of patients.
- Discuss appropriate information with patients/families and the health care team, and be able to obtain informed consent for tests and procedures when this is needed.

Specific Requirements

- Have the ability to produce a radiological report which will describe the imaging findings, most likely differential diagnosis, and when indicated, recommend further testing and/or management.
- Understand the importance of communication with referring physicians, including an understanding of when the results of an investigation or procedure should be urgently communicated.
- Communicate effectively with patients and their families and have a compassionate interest in them.

- Recognize the physical and psychological needs of the patient and their families undergoing radiological investigations and/or treatment, including the needs of culture, race and gender.

iii) Collaborator

General Requirements

- Consult effectively with other physicians and health care professionals.
- Contribute effectively to other interdisciplinary team activities.

Specific Requirements

- Have the ability to function as a member of a multi-disciplinary health care team in the optimal practice of radiology.

iv) Manager

- Utilize resources effectively to balance patient care, learning needs, and other activities.
- Allocate finite health care resources wisely.
- Work effectively and efficiently in a health care organization.
- Utilize information technology to optimize patient care, life-long learning and other activities.

Specific Requirements

- Be competent in conducting or supervising quality assurance including an understanding of safety issues and economic considerations.
- Be competent in computer science as it pertains to the practice of radiology.

v) Health Advocate

General Requirements

- Identify the important determinants of health affecting patients.
- Contribute effectively to improve the health of patients and communities.
- Recognize and respond to those issues where advocacy is appropriate.

Specific Requirements

- Understand and communicate the benefits and risks of radiological investigation and treatment including population screening.
- Recognize when radiological investigation or treatment would be detrimental to the health of a patient.
- Educate and advise on the use and misuse of radiological imaging.

vi) Scholar

General Requirements

- Develop, implement and monitor a personal continuing education strategy.
- Critically appraise sources of medical information.
- Facilitate learning of patients, house staff/students and other health professionals.
- Contribute to development of new knowledge.

Specific Requirements

- Competence in evaluation of the medical literature.
- The ability to be an effective teacher of radiology to medical students, residents, technologists and clinical colleagues.
- The ability to conduct a radiology research project, which may include quality assurance.
- Appreciation of the important role that basic and clinical research plays in the critical analysis of current scientific developments related to radiology.

vii) Professional

General Requirements

- Deliver highest quality care with integrity, honesty and compassion.
- Exhibit appropriate personal and interpersonal professional behaviours.
- Practice medicine ethically consistent with the obligations of a physician respecting the needs of culture, race and gender.

Specific Requirements

- Be able to accurately assess one's own performance, strengths and weaknesses.
- Understand the ethical and medical-legal requirements of radiologists.

Training in Canada

The foregoing represents the general and specific objectives that all candidates for the Royal College examinations in Diagnostic Radiology are expected to meet. For those training in Canadian programs, these objectives will be accomplished in a staged manner. Residents in Canadian programs may obtain the document describing this approach from their program directors.

SPECIALTY TRAINING REQUIREMENTS IN DIAGNOSTIC RADIOLOGY

These specialty training requirements apply to those who began training on or after 1 June 1997.

The five years of approved training require, at first, a closely supervised practice, with the opportunity for increasing responsibility in the final years, so that the resident near the end of training can function as a general radiology consultant, requesting help from staff radiologists when necessary. The residency may be followed by one or more years of fellowship training in a subspecialty discipline, as the residence training is not intended to provide a subspecialty level of expertise.

This period must include:

- 1) One year of basic clinical training:
The purpose of this year is to give the resident a degree of independent responsibility for clinical decisions; an opportunity for further development of the skills required in making effective relationships with patients; the consolidation of competence in primary clinical and technical skills across a broad range of medical practice; and an understanding of the nature of the relationship between a referring physician and a clinical radiological consultant.
- 2a) Three years of approved resident training in “general diagnostic imaging”, this must include:
Respiratory, cardiovascular, gastro-intestinal and biliary, genitourinary, musculoskeletal, mammography, neurological and pediatric radiology, as well as the following modalities: fluoroscopy, ultrasound, CT and MR imaging.
Because of the varying training programs in the recognized university training centres, these 36 months may be allocated as block periods of at least three months or their equivalents.
- 2b) One year of approved residency that may consist of one to twelve month periods in any of the following, as long as these are appropriately integrated by the Residency Training Committee:
 - further training in diagnostic radiology
 - diagnostic ultrasound
 - CT
 - MR
 - nuclear medicine
 - cardiac and/or vascular radiology
 - interventional radiology
 - neuroradiology
 - pediatric radiology
 - pathology or other clinical specialty relevant to the practice of radiology (for up to three months)

- a full-time research project, relevant to diagnostic imaging, and acceptable to the program director and the Credentials Committee.

NOTE: In view of the amount and variety of radiology to be covered and the skills required at the time of the final examination, it will seldom be appropriate to spend the entire 12 months of the fifth year in any one of these areas.

RESIDENT RESEARCH PROGRAM

While training in clinical radiology remains the main focus of the residency, research is considered to be of paramount importance as well. It is essential that residents gain experience in as many aspects of research as possible, including searching the literature, data analysis and manuscript preparation. A resident cannot know if he/she would enjoy an academic career without firsthand experience. The feeling of satisfaction that accompanies completion of a project, and contribution of information to the medical/scientific literature, can only be appreciated if personally experienced.

The Research Program consists of three aspects; a seminar series, resident support, and a formal presentation day.

Seminar Series

Residents in Medical Imaging are required to have a good foundation of research methodology and critical appraisal in order to either critically evaluate scientific medical literature or pursue independent research activities. Principles and issues of health technology assessment, quality improvement and clinical audits are also core components of the clinical research curriculum. Workshops, tutorials, and lectures on these topics are organized by the department's epidemiologist who is responsible for the design and delivery of the course curriculum. Attendance at these sessions is compulsory and instruction of this curriculum is given throughout the Residency Program.

Support

Department faculty are asked to submit research topics from which residents may choose a project, which he or she finds interesting. The residents are given the opportunity to create their own topic or to choose one from this faculty-generated list. Residents are freed from clinical responsibilities for their work. Each resident presents a short, informal outline of the intended project to the Resident Research Committee in November of their PGY3 year so that project feasibility can be assessed before too much time has been devoted to it. Helpful suggestions are offered by Committee Members. Data collection for the project begins in January of the PGY3 year and extends to December of the same year. During June, the residents present an interim report, again informal, to the Committee, to confirm that data collection has begun and is progressing satisfactorily. In November/December the residents present a third informal discussion for assessment of project status and to determine if an abstract can be generated for submission to a national/international meeting. It is at this time that the Committee determines if the project is satisfactory. Incomplete studies may be considered satisfactory depending on the circumstances described by the resident. Finally, the study is presented formally in the following Spring at the Annual Research Day.

Presentation Day

Our 14th annual Department of Medical Imaging Research Day held at the Sadowski Auditorium, at the Mount Sinai Hospital on April 15, 2002 was the venue for excellent resident research presentations. Support for the event was provided by Nycomed Amersham (Canada) Inc. The presentations included:

1.	Fred Lan	Subcapsular Steatosis and Steatonecrosis of the Liver in Response to Intraperitoneal Insulin: Imaging Features and Prevalence
2.	Jillian Pugh	Sentinel Lymph Node Biopsy for Breast Cancer: Comparison of Two Different Injection Techniques
3.	Robert Yu	HRCT of Pulmonary Capillary Hemangiomatosis and Pulmonary Hypertensive Arteriopathy
4.	Tarang Sheth	Delayed Myocardial Enhancement in Hypertrophic Obstructive Cardiomyopathy Post-Septal Ethanol Ablation
5.	Nikunj Patel	Cephalic Arch Stenosis in Native Hemodialysis Fistulae: Prevalence and Outcome Following Percutaneous Therapy
6.	Marc Ossip	Thyroid biopsies
7.	Vincent Shin	Can Plain Film Radiography Predict Recurrence in GDC Coiled Cerebral Aneurysms?

While presentation at this meeting is an end unto itself, many of the projects have since been presented at national and international meetings and have been published in peer-reviewed journals. Since the research program was instituted, 56 of the resident's projects have appeared in peer-reviewed journals. Of those not published, many have been presented either orally or as a poster at national/international meetings.

Resident Research Awards

The faculty have observed that the research performed and presented by the residents was of high quality. Some of the residents have received awards recognizing outstanding research, therefore independently confirming the faculty's impressions. The following is a list of such rewards obtained by the residents in the 2001-2002 academic year:

RSNA Resident/Fellow Research Award June 2002: James Scott

FELLOWSHIP PROGRAM

With access to several thousand inpatient beds, the affiliated hospitals of the University of Toronto form one of the largest teaching facilities in the world, thereby serving as an ideal setting for advanced subspecialty training in Medical Imaging. The program has national and international stature both clinically and in research, and attracts fellows from around the world.

In 2001-2002 the seven divisions of the University of Toronto Department of Medical Imaging offered a comprehensive array of fellowships:

- Abdominal Imaging
- Breast Imaging
- Cardiac Imaging
- Cross-sectional Imaging
- Magnetic Resonance Imaging
- Musculoskeletal Imaging
- Neuroradiology (Diagnostic)
- Neuroradiology (Interventional)
- Pediatric Imaging
- Thoracic Imaging
- Vascular/Interventional Radiology
- Women's Imaging
- Combined Clinical/Research

The flexibility of the program permits tailoring of the fellowship experience to accommodate most needs. Research is encouraged as an integral component of the fellowship program and to this end protected research time is available to all Medical Imaging fellows.

2001–2002 Department of Medical Imaging Fellows

Abdominal Imaging Fellows

- Giovanni Artho
- Turki Alfuhaid
- Margôt Brannigan
- Kartik Jhaveri
- Stefan Kriegler
- Enoch Lai
- Kelvin Lee
- Caitlin McGregor
- Ur Metser
- Andrea Miller
- Eric Sala

Breast Imaging Fellow

- Kavita Dhamanaskar

Cardiac Imaging Fellow

- Yves Provost

Cross-sectional Imaging Fellows

- James Haroun
- Soe Lwin Kyone
- James Meindok

Magnetic Resonance Imaging Fellow

- Gilbert Chow

Musculoskeletal Imaging Fellows

- Robert Bleakney
- Raymond Kuan
- Andoni Toms

Neuroradiology (diagnostic) Fellows

- Ronit Agid
- Jeffery Illman
- Dipanka Sarma
- James Scott

Neuroradiology (interventional) Fellows

- Charles Haw
- Seon-Kyu Lee

Thoracic Imaging Fellows

- Eliahu Konen
- Conor Murray

Vascular/Interventional Radiology Fellows

- Sheila Chou
- Christopher Guest
- Jonathan Jones

Women's Imaging Fellows

- Doris Jabs
- Lydia Liao
- Maximilian Ryan

Combined Clinical/Research Fellow

- Nathaniel Chuang

Pediatric Imaging Fellows

- Pedro Albuquerque
- Joao Amaral
- Andrea Doria
- Ricardo Faingold
- Chee-Yan Hiew
- Christian Kellenberger

- Monica Epelman
- Osnat Konen
- Lisa Raviv-Zilka
- Ricardo Restrepo
- Manohar Shroff

UNDERGRADUATE PROGRAM

Year I Medicine

The first year medical program consists of three main contiguous block courses of study. These include Structure and Function, Metabolism and Nutrition and Brain and Behavior. Medical imaging participates in the Structure and Function and Brain and Behavior courses. This course teaches anatomy, histology, and cardio-respiratory physiology.

Structure and Function

This course teaches anatomy, histology, and cardio-respiratory physiology.

Anatomy - Radiology Seminar

The anatomy radiology seminar series was extensively revised and standardized this past year. Ten lecturers gave a total of 24 hours of interactive seminars to the first year medical class using this new curriculum. These six seminars taught radiographic anatomy of the thorax, abdomen, pelvis-urinary tract, upper extremity, lower extremity and of the head and neck. Faculty lecturers participating in this seminar series included the following radiologists; Dr. Ray Chan, Dr. Wayne Dietel, Dr. Tim Dowdell, Dr. Nasir Jaffer, Dr John Kachura, Dr Walter Kucharczyk, Dr. Walter Montenera, Dr. Narindar Paul, Dr. Dawn Pearce and Dr. Bill Weiser.

Full Class Lecture - Imaging of the Lungs

Dr D. Rappaport delivered this one-hour lecture to the first year medical class.

Full Class Lecture - Imaging of the Bones and Muscles

Dr. J. Rubinstein delivered this one-hour lecture to the first year medical class.

Brain and Behavior

From time to time, the Department of Medical Imaging has provided tutors for the Brain and Behavior course. Neuroradiology teaching tools have been developed by members of the department of Medical Imaging and are used in this course on an ongoing basis.

Year II Medicine

Year II teaching centers around the two main programs in the Year II curriculum: The Pathobiology of Disease (the first half of the year), and The Foundations of Medical Practice (the second half of the year).

The Pathobiology of Disease Course

This fourteen-week course teaches pathology, immunology, genetics and other similar subjects. The Department of Medical Imaging has worked on an ongoing basis to develop and provide the medical imaging teaching resources required for delivery of this PBL. (Problem based learning), oriented curriculum.

Pathobiology of Disease - Imaging Case material

In past years, a series of images with annotations was exhibited on a viewer in the Medical Science Building. The content of this series roughly paralleled and/or emphasizes the imaging aspects of the material taught in the Pathobiology of Disease course. Efforts are currently under way, in cooperation with course organizers, to revise and update these cases using current imaging technology. In the near future, this case material will be presented to students in a web-based format.

Full Class Lectures: Chest Imaging

Dr. J. Crossin, at the beginning of the Pathobiology of Disease Course gave a full class lecture in chest imaging. This lecture included a review of the radiographic anatomy and pathophysiology of the lungs in lung disease. Numerous radiographs of common lung diseases were presented.

Foundation of Medical Practice Course

This 21-week course teaches core clinical subjects such as medicine and surgery.

PBL Tutors

Faculty members in the department of medical imaging participated as tutors by leading core multidisciplinary seminars in the Foundations of Medical Practice curriculum.

Drs. Jane Wall, Wayne Deitel and Danny Marcuzzi provided 102 hours of teaching time as tutors, plus an additional 55 hours of preparation for this course.

Year II Seminars

Radiology departments from each of the Medical Academies of the University of Toronto provided three interactive seminars to the Foundations of Medical Practice course. Topics for these two-hour seminars included

- Imaging in Obstetrics and Gynecology-supervised by Dr J. Wall
- Chest Radiology – supervised by Dr. TaeBong Chung
- Trauma Radiology. -Supervised by Dr. Tim Dowdell

A total of 24 hours of seminar teaching was provided along with a similar amount of preparation time to deliver this seminar series.

Clerkship

The two-year clerkship consists of 78 weeks of clinical rotations. The department of medical imaging provides an array of teaching activity during the clerkship program.

Year III Clerkship

Elective Students

A significant number of third year medical students at the University of Toronto took electives in radiology at the various teaching hospitals during the 2001-2002 Academic year.

Hospital Based Seminars

Various Year III seminars have been held in the teaching hospitals as part of the Medicine - Surgery block rotations. These include a series of chest seminars, interventional, gastrointestinal, as well as neuroradiology seminars.

Year IV

Medical Imaging Electives

Electives in Medical Imaging are among the most popular medical under-graduate electives at the University of Toronto. In addition to teaching basic radiology skills these electives also serve to promote awareness about medical Imaging within the undergraduate medical community. Elective students are also given an opportunity to consider specialty training in radiology during these teaching blocks.

The popularity of the elective program continues to increase. This is evidenced by a very significantly increase in the number of fourth year electives taken in radiology in this past year as compared to the prior academic year.

University of Toronto Electives

Seventy-six University of Toronto students took radiology electives in their clerkship year at the various teaching hospitals during the 2001-2002 academic year.

Visiting Elective Students

Sixty-six non-University of Toronto students, many of these overseas foreign students in their senior undergraduate year, took part in visiting electives during the 2001–2002 academic year.

The Bruce Tovee LMCC Review Lectures

The Undergraduate Committee in Radiology has participated in this review course for many years. Three hours of radiology review lectures were given to final year medical students. The majority of these were University of Toronto students. The review course has also been very well received and attended by final year students from McMaster and other local medical schools. The lectures were given in the evening at the main medical lecture theatre of the University. Three, one hour lectures were given. These are listed below.

- i) Musculoskeletal radiology – Dr. David Salonen
- ii) Chest radiology – Dr. TaeBong Chung
- iii) Gastrointestinal radiology – Dr. Nasir Jaffer

The final year students have had access to a series of notes, the MCCQE Study Guide. The medical imaging portion of this lecture series and syllabus were updated and revised by Drs Jaffer, Chung and Salonen.

Other Teaching Activities and Involvement

Physiotherapy Student Seminars

A series of seminars are given to the physical therapy students at the University of Toronto by radiologists at the various Academies each year.

Career Sampling Electives in Radiology

On a somewhat informal basis, undergraduate students, many in Year I, have spent various periods of time, from several days to weeks, in all of the teaching hospital radiology departments as part of a career sampling experience.

Undergraduate Teaching Computer File for Radiology

A comprehensive interactive computerized teaching program, called **Radiofile** has been developed by the Department of Medical Imaging. This program allows undergraduate students to have a uniform exposure to core medical imaging teaching material. The students can access this program either in the various radiology departments, or in the Academy computer laboratories. The program is available centrally, in the computer laboratory in the Medical Sciences Building.

The Internet and Undergraduate Education in Radiology

The Department of Medical Imaging hosts an internet web site on which various program descriptions are posted. Plans are being made to expand the role of the Internet in the delivery of and evaluation of undergraduate Medical Imaging teaching programs.

The Future Direction of the Medical Imaging Undergraduate Teaching Program

Efforts are currently under way to standardize the major components of the undergraduate medical imaging teaching program through the development and implementation of standardized curriculum and electronic teaching tools. This approach will be ongoing and promises to further optimize the efficiency, scope and value of the undergraduate teaching program in Medical Imaging.

CONTINUING EDUCATION PROGRAM

Organ Imaging Review

September 9-13, 2001

Course Description

This four day course focuses on aspects of primary interest to both radiologists and radiologists-in-training. The course content includes general concepts of diagnostic imaging with emphasis on recent advances. The participant learns new ideas and has the opportunity to enhance their knowledge in selected common clinical situations. The participant is also able to participate in problem-solving with daily case reviews in each of the organ systems.

Course Chairman: Walter Kucharczyk, M.D.

Course Director: Paul Hamilton, M.D.

University of Toronto Faculty

Atri, Mostafa, M.D., Associate Professor
Becker, Edna J., M.D., Associate Professor
Bret, Patrice, M.D., Professor
Christakis, Monique, M.D., Assistant Professor
Chung, Dae-Gyun, M.D., Lecturer
Clark, John, M.D., Assistant Professor
Cooper, Perry, M.D., Assistant Professor
Crossin, Jane, M.B., BCh, Clinical Fellow
Ehrlich, Lisa, M.D., Associate Professor
Fox, Allan, M.D., Professor
Goldberg, Franklin, M.D., Assistant Professor
Haider, Masoom, M.D., Assistant Professor
Hamilton, Paul, M.D., Assistant Professor
Hanbidge, Anthony, M.B., B.Ch., Assistant Professor
Herman, Stephen J., M.D., Associate Professor
Jong, Roberta, M.D., Assistant Professor
Kachura, John, M.D., Assistant Professor
Keller, Anne, M.D., Assistant Professor
Khalili, Korosh, M.D., Lecturer
Kucharczyk, Walter, M.D., Professor and Chairman
Lax, Matthew, M.D., Lecturer
Merchant, Naeem, M.D., Assistant Professor
Montanera, Walter, M.D., Associate Professor
Muradali, Derek, M.D., Assistant Professor
Noël de Tilly, Lyne, M.D., Assistant Professor
O'Malley, Martin, M.D., Assistant Professor

Paul, Narinder, M.D., Clinical Fellow
Rajan, Dheeraj M.D., Lecturer
Rappaport, Daniel, M.D., Associate Professor
Rubenstein, Joel, M.D., Associate Professor
Salonen, David, M.D., Assistant Professor
Samuels, Taube, M.D., Assistant Professor
Shulman, Harry, M.D., Professor
Shumak, Rene, M.D., Assistant Professor
Stewart, Lori, M.D., Lecturer
TerBrugge, Karel, M.D., Professor
Weisbrod, Gordon, M.D., Professor
Weiser, William, M.D., Professor
White, Lawrence, M.D., Assistant Professor
Willinsky, Robert, M.D., Professor
Wilson, Christine, M.D., Assistant Professor
Wilson, Stephanie R., M.D., Professor
Wright, Barbara, M.D., Assistant Professor

Guest Faculty

Anderson, Mark W., M.D.
Associate Professor
Department of Radiology
University of Virginia Health Sciences System
Charlottesville, Virginia

Martinoli, Carlo, M.D.
Professor and Chair Department of Radiology
University Hospital of Genoa
Genoa, Italy

Paediatric Update: 2001
Saturday, September 8, 2001

Course Description

This course is intended for practicing Radiologists. It will provide an update on current indications and use of imaging modalities for commonly encountered conditions in children.

Course Chairman: Walter Kucharczyk, M.D.
Course Director: Paul Babyn, M.D.

University of Toronto Faculty

Armstrong, Derek, M.B., BS, Assistant Professor
Ash, Judith, M.D., Associate Professor
Blaser, Susan, M.D., Assistant Professor
Chait, Peter, M.D., Associate Professor
Chuang, Sylvester, M.D., Associate Professor
Connolly, Bairbre, M.D., Assistant Professor
Daneman, Alan, M.B., B.Ch., Professor
Gilday, David, M.D., Professor
Manson, David, M.D., Assistant Professor
Ranson, Marilyn, M.D., Assistant Professor
Traubici, Jeffrey, M.D., Lecturer
Yoo, Shi-Joon, M.D., Ph.D., Professor

Guest Faculty

Siegel, Marilyn, M.D.
Professor of Radiology and Pediatrics
Edward Mallinckrodt Institute of Radiology
Washington University School of Medicine
St. Louis, Missouri

**Women's Imaging: Advances in Gynaecological Imaging and Transvaginal Ultrasound
February 22-24, 2002**

Co-sponsored by Departments of Medical Imaging and Obstetrics and Gynaecology

Course Description

This 2 1/2 day program on women's imaging will provide participants with the most up-to-date practice standards in gynaecological and early fetal imaging. It will emphasize the integration of ultrasound into current clinical management and will explore some of the latest technological and clinical advances in women's imaging. It will be of interest to radiologists, obstetricians and gynaecologists and ultrasonographers.

Codirectors: Phyllis Glanc M.D., Shia Salem M.D. Department of Medical Imaging
Jo-Ann Johnson M.D., Greg Ryan M.D. Department of Obstetrics and Gynaecology

University of Toronto Faculty

Atri, Mostafa, M.D., Associate Professor
Causer, Petrina, M.D., Lecturer
Common, Andrew, M.D., Assistant Professor
Erich, Lisa, M.D., Associate Professor
Fong, Katherine, M.D., Assistant Professor
Glanc, Phyllis, M.D., Assistant Professor
Haider, Masoom, M.D., Assistant Professor
Hanbidge, Anthony, M.D., Assistant Professor
Muradeli, Derek, M.D., Assistant Professor
Salem, Shia, M.D., Associate Professor
Toi, Ants, M.D., Associate Professor
Wilson, Stephanie, M.D., Professor

Guest Faculty

Lev-Toaff, Snna, M.D.
Professor, Department of Radiology
Thomas Jefferson University
Philadelphia, Pennsylvania

Lyons, Edward, M.D.
Professor, Department of Radiology
University of Manitoba
Winnipeg, Manitoba

Pandya, Pran, M.B.
Consultant in Obstetrics and Fetal Medicine
University College Hospital
London, England

INVITED LECTURERS AND VISITING PROFESSORS

October 1-2, 2001

Dr. Jeffrey Newhouse
Department of Radiology
Columbia Presbyterian Medical Centre

“Radiologic Approach to Patients with Hematuria”

“Imaging in Prostate Cancer: What the Radiologist Needs to Know”

“Radiology of the Adrenal”

November 5-6, 2001

Dr. Mary Jane O’Neill
Department of Radiology
Massachusetts General Hospital

“Pelvic MR in Benign and Malignant Conditions of the Female Pelvis”

“The Role of MR in the Workup of Indeterminant Ultrasound of the Pelvis”

“The Role of Sono-Hystero-graphy in the Evaluation of the Abnormal Endometrium”

January 7-8, 2002

Dr. Gilda Cardenosa
The Breast Center of Greensboro

“Unusual Breast Lesions and their Management”

“What should the Role of the Radiologist be in the Management of Women with Breast Diseases?”

“DCIS and their Management”

February 4-5, 2002

Dr. Pierre Lasjaunias
University of Paris
Centre Hospitalier de Bicêtre, Paris

“Spinal Cord Vascular Diseases”

“The Congenital Nature of Brain Arteriovenous Malformations”