ACTIVITY REPORT

1999 – 2000
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Acknowledgements
The Cardiovascular Sciences Collaborative Program has forged links with a broad base of departments, institutes, and centres within the university providing our trainees with a rich, diverse experience. As well, by solidifying the Program’s financial base through interest available from endowments, industry sponsorship, and individual departmental support, the Program is in a more secure position which has allowed further growth of the Program. We are now better placed to provide an outstanding value added graduate training experience to those who wish to specialize in cardiovascular sciences. For this past years’ details, please refer to the Director’s report.

The Program office is located on campus in the FitzGerald Building. Day-to-day functions of the Program are handled by the Program Director, Dr. C. Wittnich, and the Program Administrator, Victoria Simpson; with the guidance of the Executive Committee.

Thanks to all of the faculty and students for another successful year leading off the millennium!

Dr. Carin Wittnich

COLLABORATING DEPARTMENTS

Faculty: Medicine
Physical Education and Health

Clinical: Department of Medicine
Department of Surgery
Department of Anaesthesia

Graduate: Department of Clinical Biochemistry
Department of Community Health
Department of Exercise Sciences
Department of Medical Biophysics
Department of Pharmacology
Department of Physiology
Department of Rehabilitation Science
Institute of Medical Science
Laboratory Medicine and Pathobiology

Other: Institute of Biomedical Engineering

EXECUTIVE COMMITTEE
The Executive Committee consists of a representative from each collaborating department as well as two student representatives.

Dr. C. Wittnich (Director)
Dr. M. Plyley (Exercise Science)
Dr. M. Rabinovitch (Lab. Med. Pathobiology)
Dr. D.H. Osmond (Physiology)
Dr. R.D. Weisel (IMS)
Dr. R.I. Ogilvie (Pharmacology)
Dr. M. Ojha (IBME)
Dr. D. Cheng (Anaesthesia)
Dr. S. Thomas (Rehabilitation Science)
Dr. G. Wright (Medical Biophysics)
Kyle Cowan (Sr. Student Representative)
Karim Bandali (Jr. Student Representative)

COURSES OFFERED

BME1448H  Cardiovascular Fluid Mechanics (IBME)
EXS5508H  Cardiovascular Disease and Exercise (Exercise Science)
JEB1365H  Ultrasound: Theory and Applications in Biology and Medicine (IBME)
JTC1331H  Biomaterials Science (IBME)
LMP1015H  Vascular Pathobiology (Lab. Med. Pathobiology)
LMP1407H  From Bench to Bedside: Design, Measurement, and Analysis for Clinical Investigators (Lab. Med. Pathobiology)
LMP1503H  Signal Transduction Pathways in Normal and Diseased Tissue (Lab. Med. Pathobiology)
LMP1504H  Biochemistry, Molecular Biology of Cardiovascular Diseases (Lab. Med. Pathobiology)
MSC3060H*  Advanced Topics in Cardiovascular Sciences – Molecular Biology & Signal Transduction in the Heart (IMS)
MSC3061H*  Advanced Topics in Cardiovascular Sciences – Hormones and the Cardiovascular System (IMS)
MSC3062H*  Advanced Topics in Cardiovascular Sciences – Heart Function (IMS)
MSC3063H*  Advanced Topics in Cardiovascular Sciences – Vascular (IMS)
PCL1006Y  Cardiovascular Pharmacology (Pharmacology)
PSL1029H  Advanced Course in Cardiovascular Regulation (Physiology)
PSL1038H  Volume, Electrolyte and Pressure Regulation in Body Fluid Compartments (Physiology)
PSL1060H  Developmental Cardiovascular Physiology (Physiology)

* Core Courses for PhD Trainees
PROGRAM SPONSORED ACTIVITIES

Annual Cardiovascular Scientific Day -- May 18, 2000

The Annual Scientific Day was hosted this year by the Cardiovascular Sciences Collaborative Program and, for the first time, the newly established Heart & Stroke/Richard Lewar Centre of Excellence. The event was held at the Inn on the Park where 179 faculty and student/trainees participated. The focus of the day was “Genetic Inheritance: How to Win When the Genes are Against You!”

Following the Heart & Stroke/Richard Lewar Centre of Excellence Members-Only Strategic Planning Meeting, the scientific day began with the Central Symposium on “The Future of Cardiovascular Research”. This featured Mr. Rick Gallop, President and CEO, Heart & Stroke Foundation of Ontario, who spoke on “The Heart & Stroke Foundation of Ontario and Future of Cardiovascular Research”. Dr. David Foot, Faculty of Arts and Science, discussed “Changing Demographics and Cardiovascular Disease: The Boomer Era”, and Dr. Steve Scherer, Centre for Applied Genomics, Hospital for Sick Children, reviewed the “Impact of Human Genome Project on Biomedical Research”.

Morning breakout sessions focused on two areas - “Update on Women & Heart Disease & Stroke” and “New Tools for Cardiovascular Research and Investigation”. In the latter session, Dr. Reed Pyeritz, MCP Hahnemann School of Medicine, Pittsburgh, PA, was featured as the Heart & Stroke/Richard Lewar Centre of Excellence Guest Speaker. He spoke on “Genetic Approach to the Young Person with Coronary Disease”. Presentations by key faculty were followed by lively discussions which carried over into lunch.

The “Hyde Park” Novel Concept Session, the first time this concept has been tried, was a huge success. Senior faculty took on the challenge and dared to share their “wildest ideas” with the group.

Afternoon breakout sessions focussed on two areas - “Molecular Insights from Animal Models of Human Disease” and “Future of Genetics in Diagnosis and Therapy”. These were followed by the Isadore E. Smith Annual Lecture. This years lecture was given by Dr. Jacques Genest Jr., McGill University, Montreal, Quebec, who spoke on “The ABC’s of HDL Cholesterol”.

There were 24 abstracts submitted for the poster session. A panel of judges selected six poster finalists. These finalsts were asked to give a short oral presentation during a poster walkabout. An additional hour of poster viewing was available during the breaks and over lunch. These posters highlighted our cardiovascular trainees in their particular area of interest.

Poster prizes were awarded to:
1st Prize – Syed Zaidi (Supervisor: Dr. Rabinovitch) “Suppression of elastase activity protects from medial/intimal thickening following carotid arterial injury in elafin overexpressing transgenic mice”
2nd Prize – Kyle Cowan (Supervisor: Dr. Rabinovitch) “Complete reversal of fatal pulmonary hypertension in rats by a serine elastase inhibitor”
3rd Prize – Imran Mungrue (Supervisors: Drs. Stewart & Husain) “Conditional over-expression of human inducible nitric oxide synthase (iNOS) in the myocardium of transgenic mice”

Congratulations to the finalists, winners, and all the students for their superb efforts.

The awards ceremony, the finale of the day, also recognized outstanding students in the Cardiovascular Sciences Collaborative Program. This year’s Bigelow Book Prize went to Dr. Michael Borger, PhD (Supervisor: Dr. R. Weisel). Recent graduands were also awarded their specialization certificates: MSc: Ian Coplan, Rohan Shahani, Dimitra Trambakoulos, Mohammed Warsi, Stacy O’Blenes, and PhD: Kyle Cowan. We wish them all the best in their future endeavours.

Lively discussions continued during the reception that followed.

Continuing medical education credits were issued for this meeting: 6.5 hours of category 1 credit toward the AMA Physicians Recognition Award and 6.5 hours as an Accredited Group Learning Activity under Section 1 of the Framework of CPD options for the Maintenance of Certification Program of the Royal College of Physicians and Surgeons of Canada.

My thanks are extended to industry for their continued financial support and generosity which is so essential to the success of this meeting. Major sponsorship included AstraZeneca, Aventis Pharma Inc. and Merck Frosst Canada & Co. Because of their support and that of the HSRLCE, we were able, once again, to provide an open registration and complimentary luncheon.

Plans are underway for the 2001 Scientific Day and announcements will be forthcoming. For additional information, please go to the Collaborative Program web site or e-mail us at cv.program@utoronto.ca.

Annual Student Research Day

On Wednesday, March 1, 2000, the Cardiovascular Sciences Collaborative Program kicked off its 1st Annual Student Research Day in the Medical Sciences Bldg. This was a fun filled day that was attended by CSCP trainees and faculty. Trainees began the day by giving a ten minute talk related to their research, followed by a question/answer period as below.

SESSION I:
Jack Wallen, PhD-PSL  Gender differences in metabolic potential in hypertrophied hearts: Role of sex hormones
Cathy Boscarino, MSc-PSL  Myocardial buffering capacity & hydrogen ion accumulation during global ischemia: Are there gender differences?
Sonia Katyal, MSc-REH  Adaptations to short term aerobic training in women: The role of plasma volume
<table>
<thead>
<tr>
<th>Name</th>
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<tr>
<td>Nesime Askin, MSc-PSL</td>
<td>Metabolic response of skeletal muscle during ischemia</td>
</tr>
<tr>
<td>Vaska Micevski, PhD-IMS</td>
<td>Patient’s adherence to prescribed therapy for coronary artery disease</td>
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<td>Warren Foltz, PhD-MBP</td>
<td>MR oximetry for ischemic heart disease</td>
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<tr>
<td>Sloane Hechter, MSc-IMS</td>
<td>The impact of ACE inhibitors on adults with the mustard procedure</td>
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<tr>
<td>Michelle Batthish, MSc-PSL</td>
<td>Blockade of either chloride channels or mitochondrial ATP-sensitive potassium channels abolishes the protection of angiotensin II in rabbit ventricular myocytes</td>
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**SESSION II:**

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<tr>
<td>Tony Lee, MSc-IMS</td>
<td>The role of nitric oxide in cardiovascular development and remodeling</td>
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<tr>
<td>Nathalie Lapointe, PhD-IMS</td>
<td>Cardioprotective effect of vasopeptidase inhibitor in the infarcted and remodeling rat heart</td>
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<tr>
<td>Zakria Ahmed, PhD-LMP</td>
<td>Protein dependent increase in core aldehydes and</td>
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<td></td>
<td>lysophosphatidylcholine during high density lipoprotein (HDL)</td>
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<td>oxidation by peroxynitrite (ONOO-)</td>
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<tr>
<td>Christie Lee, MSc-IMS</td>
<td>DNA vaccination confers immunity against myocarditis</td>
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<tr>
<td>Karim Bandali, PhD-PSL</td>
<td>Neonatal hemodynamic and metabolic responses to hyperoxia</td>
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<tr>
<td>Shona Torrance, PhD-IMS</td>
<td>Developmental changes in myocardial beta adrenoceptors</td>
</tr>
<tr>
<td>Kyle Cowan, PhD-LMP</td>
<td>Complete reversal of fatal pulmonary hypertension in rats with a serine elastase inhibitor</td>
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<tr>
<td>Michael Borger, PhD-IMS</td>
<td>Decreased cerebral emboli during aortic arch cannulation: A</td>
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<td>randomized clinical trial</td>
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In the afternoon trainees were given valuable advice from Professors Peter Liu and Marlene Rabinovitch who also shared with the students how they began their research/academic careers. This session was followed by a discussion period in which students had an opportunity to discuss the trials and tribulations of living a life devoted to education and research with these highly respected and successful scientists. The day concluded with a wine and cheese reception where students and faculty mixed and mingled, after which most of the students continued their interactions at a student planned social event.

The Student Research Day met with resounding success and the students have made it clear this will become an annual event. It was also unanimously decided by the students that this meeting will be mandatory for all Program trainees. This day would not have been possible without the Herculean efforts of the Student Reps: Karim Bandali and Kyle Cowan and their planning committee: Sloane Hechter and Sonia Katyal. Congratulations on a job well done!

**Lecture Series**

For this academic year the lecture series was focused in the two main areas of “Molecular Biology and Signal Transduction” and “Hormones and the Cardiovascular System”. A number of interesting speakers contributed their time and knowledge. Both these areas were covered from the perspective of whole body and organ to the molecular level including genetics, with a particular emphasis on bridging basic science and clinical approaches to these areas.
3rd Annual “Cardiovascular Disease Update”

The 3rd Annual Cardiovascular Disease Update was successfully held on March 4, 2000 at the Weston Prince Hotel, Toronto. This annual CME event was made possible by the generous sponsorship of Bristol-Myers Squibb. The purpose of this half-day event is to provide clinical insight into the diagnosis and treatment of current cardiovascular disease from a bench-to-bedside perspective. This year the focus was on issues relating to women and heart disease, hypertension, and drug therapies. Each session was accompanied by audience discussion that continued informally during the buffet luncheon. The meeting was accredited for 4 Mainpro-MI credits and 4 hours of the Accredited Group Learning Activity under Section 1 of the Framework of CPD options for the Maintenance of Certification Programs of the Royal College of Physicians & Surgeons of Canada. The meeting was attended by Family Physicians, Internists and Specialists from across Toronto. For the first time the university mandated that we were required to levy a fee which we kept to a minimum. This money, along with an educational grant from industry, was used to help defray the costs of the meeting.

The speakers and topics were:

Dr. Eric Cohen, Assistant Professor of Medicine, University of Toronto
Cardiologist and Director of the Cardiac Catheterization Lab Sunnybrook & Women’s College Health Sciences Centre
“Antiplatelet & Antithrombotic Treatment: The Full Range of Protection”

Dr. Paul Oh, Lecturer, Clinical Pharmacology, University of Toronto
Clinic Director, Cardiovascular Assessment & Risk Evaluation, Sunnybrook Health Science Centre

Dr. Peter Liu, Professor of Medicine, University of Toronto
Associate Director, Division of Cardiovascular, University Health Network,
Director, Heart & Stroke/Richard Lewar Centre of Excellence
“How to Diagnose & Manage CHF & LVH”

Dr. Jean-Lucien Rouleau, Professor of Medicine, University of Toronto
Head, Division of Cardiology, University Health Network & Mount Sinai Hospital
“ACE Inhibitors, AT1 Receptor Blockers & Beyond – More Differences than Similarities!”

Human Biology Student Union Career Fair

The Cardiovascular Sciences Collaborative Program was contacted by the Human Biology Undergraduate Student Association to participate in their Career Fair on November 30, 1999. Various
graduate programs had displays and the Collaborative Program manned a booth and provided information to interested future graduate students.

Summer Activities

The Collaborative Program ran another very successful summer program. Applicants included undergraduate and medical school students from the University of Toronto as well as other universities. The Program provided a number of summer scholarships to help students who were unable to procure funding. Over the course of the summer, seminars were presented by graduate students currently enrolled in the Program and covered a range of topics with both clinical and basic science relevance. As well, the summer students were given the opportunity to present their summer work. An “end-of-summer” luncheon was held for both faculty and students.

This highly successful program is enjoyed by all who participate.

AWARDS

Medtronic Travel Award

Two competitions were held (spring and fall) for the Medtronic Travel Award. This award, established in 1995, helps to defray costs of travel for Program students presenting their research work at recognized scientific meetings. Students supported by this award this academic year were:

Fall 1999:

Kyle Cowan: Elastase Inhibition Induces a Smooth Muscle Cell Apoptotic Response Mediating Reversal of Progressive Pulmonary Vascular Disease in Rats. **72nd Scientific Sessions of the American Heart Association**, November 1999 (Supervisor: Dr. Marlene Rabinovitch, LMP)

Shona Torrance: Developmental Changes in Myocardial β-Adrenoceptors. Annual Meeting of the Canadian Cardiovascular Society, October 1999 (Supervisor: Dr. C. Wittnich, IMS)

Jack Wallen: Gender Differences in the Heart’s Metabolic Potential. Annual Meeting of the Royal College of Physicians & Surgeons of Canada, September 1999 (Supervisor: Dr. C. Wittnich, Physiology)

Cathy Boscarino: Hydrogen Ion Buffering Capacity in Normal Adult Hearts: Are There Gender Differences? Annual Meeting of the Canadian Cardiovascular Society, October 1999 (Supervisor: Dr. C. Wittnich, Physiology)

Spring 2000:

**Bigelow Book Prize**

The Bigelow Book Prize consists of 2 books written by Dr. W.G. Bigelow entitled “Cold Hearts” and “Mysterious Heparin”. This prize was established in 1995 by the Cardiovascular Sciences Collaborative Program to recognize and honor a pioneer clinician and scientist in the field of cardiovascular sciences. Awardees should exemplify the personal traits of Dr. Bigelow -- curiosity, drive, and scientific integrity. The award is given in every year that a qualified student is identified. Qualifications include sustained academic scientific excellence, innovative experimental approaches, original discoveries and good scientific productivity. Some weight is given to work that has recognizable clinical relevance, especially that which promises to improve patient care.

1995 – Dr. John S. Ikonomidis  
1996 – Ms. Shona M. Torrance  
1997 – Dr. Vivek Rao  
1998 – Dr. Bryce Cowan  
1999 – Dr. Gideon Cohen  
2000 – Dr. Michael Borger

**Ontario Student Opportunity Trust Funds (OSOTF) Award**

The OSOTF award refers to a class of awards that have resulted from the Ontario government’s “matching” program. Under the program every dollar of donation received for student assistance has been matched by the government as well as the university on a dollar-for-dollar basis. The Cardiovascular Sciences Collaborative Program participates in this program. There are two major conditions for all OSOTF awards; recipients must be Ontario residents and demonstrate financial need. However, the Program has additional eligibility criteria that must be adhered to, including excellence in science and academic performance. One competition is held per academic year.

The applications are handled centrally through the Faculty of Medicine’s, Research Office. Applications pertaining to the CSCP are sent to us and are then adjudicated by a subcommittee; chaired by Dr. D. Cheng. Committee recommendations are then forwarded to the OSOTF Awards Committee (Faculty of Medicine) where the final decision is made. Of this years’ eligible submissions, all were deemed meritorious and the awards were allocated equitably to the winners as follows:

**Spring 2000 Competition**  
Karim Bandali, PhD, Dept. of Physiology  
Jack Wallen, PhD, Dept. of Physiology
Cathy Boscarino, MSc, Dept. of Physiology

*Life Sciences Committee Summer Undergraduate Research Fellowships*

These fellowships are awarded to support research at the University of Toronto to assist undergraduate students seeking training for graduate level research. Funds were awarded to the Cardiovascular Sciences Collaborative Program for 8 undergraduate trainees. All candidates put forward by the Program were awarded funding.

**ADVERTISING MATERIAL**

*World Wide Web*

The Cardiovascular Sciences Collaborative Program continues to maintain its own website under the Faculty of Medicine. This website is updated regularly and is continually undergoing expansion. Please check out our site at [www.library.utoronto.ca/www/cardiosci/index.html](http://www.library.utoronto.ca/www/cardiosci/index.html) to learn more about cardiovascular sciences. The site is updated at faculty renewal and whenever relevant changes occur. Links continue to be built with other relevant cardiovascular sites.

Collaborating departments are encouraged to provide hypertext links to the Collaborative Program on their web site.

Other material that continues to give the Program exposure includes the brochure, the Scientific Day pamphlets and posters, various industry sponsored seminars, and the Lecture Series notices posted on campus. Collaborating departments also display and distribute the Program brochure.

**PROGRAM FACULTY**

Faculty are divided into 3 categories (Full, Associate, and Affiliate) depending on their SGS status.

ASSOCIATE: M. Bendeck, D. Brooks, D. Courtman, P. Dorian, L.S. Goodman, M. Husain, J. Irvine, T. Lindsay, M. Locke, J. Parker, N.A. Shaikh, R. Tsushima, R. Wald


We would like to wish Dr. J. Edelson all the best in his new position in Philadelphia.

Our thoughts and prayers go out to the family of Dr. Robert Burns who past away in November 1999 at the age of 48 after a lengthy illness.

PROGRAM STUDENTS

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<tr>
<th>Student</th>
<th>Supervisor</th>
<th>Degree</th>
<th>Department</th>
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<tr>
<td>Zakaria Ahmed</td>
<td>P. Connelly</td>
<td>PhD</td>
<td>Pathobiology</td>
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<td>Akis Amfiliochadias</td>
<td>D. Osmond</td>
<td>MSc</td>
<td>Physiology</td>
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<tr>
<td>Nesime Askin</td>
<td>C. Wittnich</td>
<td>MSc</td>
<td>Physiology</td>
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<tr>
<td>Saeid Babaei</td>
<td>D. Stewart</td>
<td>PhD</td>
<td>Pathobiology</td>
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<td>Karim Bandali</td>
<td>C. Wittnich</td>
<td>PhD</td>
<td>Physiology</td>
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<td>Michelle Batthish</td>
<td>G. Wilson</td>
<td>MSc</td>
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<tr>
<td>Michael Borger</td>
<td>R. Weisel</td>
<td>PhD</td>
<td>IMS</td>
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<td>Cathy Boscarino</td>
<td>C. Wittnich</td>
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<td>Andrew Campbell</td>
<td>D. Stewart</td>
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<td>Gideon Cohen</td>
<td>R.D. Weisel</td>
<td>PhD</td>
<td>IMS</td>
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<td>Warren Foltz</td>
<td>G. Wright</td>
<td>PhD</td>
<td>Medical Biophysics</td>
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<td>Tommaso Gori</td>
<td>J. Parker</td>
<td>MSc</td>
<td>IMS</td>
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<td>Sloane Hechter</td>
<td>P. Liu</td>
<td>MSc</td>
<td>IMS</td>
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<td>Sonia Katyal</td>
<td>S. Thomas</td>
<td>MSc</td>
<td>Rehab Med</td>
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<tr>
<td>Nataly Kogan</td>
<td>D. Osmond</td>
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<td>Nathalie Lapointe</td>
<td>J. Rouleau</td>
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<td>Christie Lee</td>
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<td>Tony Lee</td>
<td>D. Stewart</td>
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<td>Negin Liaghati-Nasser S. Fremes</td>
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<td>MSc</td>
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<tr>
<td>Sarah McCutcheon</td>
<td>S. Thomas</td>
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<tr>
<td>Jack Wallen</td>
<td>C. Wittnich</td>
<td>PhD</td>
<td>Physiology</td>
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CONVOCATED STUDENTS/FOLLOW-UP

Ian Copland, MSc, Dept. of Physiology (Supervisor, Dr. L. Adamson) has continued with his graduate studies at the PhD level at the University of Toronto.
Kyle Cowan, PhD, Laboratory Medicine & Pathobiology (Supervisor: Dr. M. Rabinovitch) has been accepted into medical school at the University of Toronto.

Dimitra Trambakoulos, MSc, Dept. of Physiology (Supervisor: Dr. D. Osmond) has been accepted into medical school at the University of Ottawa.

Stacy O’Blenes, MSc, Laboratory Medicine & Pathobiology (Supervisor: Dr. M. Rabinovitch) has returned to residency in Cardiac Surgery at the University of Toronto.

Mohammed Warsi, MSc, Institute of Medical Science (Supervisor: Dr. P. Liu) has been accepted into medical school at the University of Toronto.

Rohan Shahani, MSc, Institute of Medical Science (Supervisor: Dr. T. Lindsay) has been accepted into medical school at the University of Toronto.

STUDENT ACHIEVEMENTS


Saeid Babaei, Doctoral Fellowship, Medical Research Council of Canada Postgraduate Award: Edward Christie Prize, University of Toronto MRC/BioContact 99 Competition, 2nd Prize, Quebec Young Investigator Award, Canadian Cardiovascular Society, Quebec Best Presentation, 4th Annual Symposium on Advances in Laboratory Medicine, The Hospital for Sick Children, University of Toronto

Karim Bandali, National Science and Engineering Research Council (NSERC-PGSB) Scholarship Ontario Student Opportunity Trust Fund (OSOTF) Award, Cardiovascular Sciences Collaborative Program, University of Toronto Ontario Graduate Scholarship in Science and Technology (OGSST) - declined

Michelle Batthish, 1st Place, Poster Presentations, 4th Annual Symposium on Advances in Laboratory Medicine, The Hospital for Sick Children Ontario Graduate Scholarship: Ministry of Training, Colleges and Universities Research Training Competition Studentship: The Hospital for Sick Children 1st Place, Oral Presentations, Samuel Lunenfeld Summer Student Symposium, The Hospital for Sick Children Santalo Scholarship for Graduate Studies: Department of Physiology, University of Toronto

Michael Borger, Edward Christie Stevens Fellowship, University of Toronto Soobiah Javenthey Award, University of Toronto
CSCI Award for Excellence in Research Research, Medical Research Council of Canada
Canadian Cardiovascular Society Student Award for Clinical Research
Wilfred G. Bigelow Book Prize, Cardiovascular Sciences Collaborative Program, University of Toronto

Catherine Boscarino
Heart & Stroke/Richard Lewar Centre of Excellence Fellowship, University of Toronto
Ontario Student Opportunity Funds (OSOTF) Award, Cardiovascular Sciences Collaborative Program, University of Toronto

Warren Foltz
Heart & Stroke Foundation of Canada Research Traineeship, University of Toronto

Tommaso Gori
Arrangement Grant between the Universities of Siena and Toronto

Sloane Hechter
University of Toronto Open Entry Scholarship, Institute of Medical Science, University of Toronto
Golden Key National Honor Society, Faculty of Education, McGill University

Sonia Katyal
Scholarship Recipient, Canadian Association of Cardiac Rehabilitation
University of Toronto Open Scholarship, Department of Rehabilitation Science, University of Toronto

Nataly Kogan
Member of the Dean’s Honour List

Tony Lee
Institute of Medical Science Roncari Book Prize, University of Toronto
Institute of Medical Science Merit Scholarship, University of Toronto
CHS-Pfizer-MRC/PMAC Health Program Studentship Award, IMS, University of Toronto

Shona Torrance
Medtronic Travel Award, Cardiovascular Sciences Collaborative Program

Jack Wallen
Ontario Student Opportunity Trust Funds (OSOTF) Award, University of Toronto
Medtronic Travel Award, Cardiovascular Sciences Collaborative Program
Medical Research Council/K.M. Hunter Doctoral Research Award
Research Trainee Award, Canadian Society for Clinical Investigation, Royal College of Physicians and Surgeons of Canada

**DIRECTOR’S COMMENTS:**

In its’ eighth year, the Cardiovascular Sciences Collaborative Program (CSCP) continues to grow and evolve. The CSCP also continues to develop new liaisons with other departments and faculties who express an interest in cardiovascular sciences. We welcome the Department of Medical Biophysics as our newest participating department.

We also welcome the opportunity to interact with the new Heart & Stroke/Richard Lewar Centre of Excellence (HSRLCE) which was established at the University of Toronto in 1998. The purpose of this Centre is primarily to bring cutting edge cardiovascular research together at the University and to become an international leader. It focuses on the prevention and cure of atherosclerosis, heart failure
and congenital heart disease using cutting edge tools such as molecular genetics to evolve diagnostic, prognostic and therapeutic innovations. Immediate benefits to our trainees has been access to new monies in the form of a Fellowship program and OGSST scholarships. As well, the HSRLCE Distinguished Visiting Professor Seminar Series has provided Program trainees a wonderful forum to meet and hear international scientists/clinicians. Thus, combining the CSCP’s role in education and the HSRLCE’s role in research, our efforts together could provide an outstanding second to none cardiovascular initiative on campus. This relationship continues to be explored and we anticipate exciting times in the years ahead.

The following graph represents enrolment figures. It can be seen that during the current academic year we had 17 Masters and 12 PhD trainees active in the program. Once again, we had a significant number of our trainees who completed and convocated which was counterbalanced by new recruits. The ability to recruit the numbers that we convocated and actually increase our enrolment is a reflection of a number of initiatives (eg. 1st Annual Student Research Day, increased student representation (1 junior/1 senior) on the Executive Committee) that focus on increasing student capture in the CSCP. This has resulted in more student activity promotion and a higher Program profile with the trainees.

CSCP Student Enrolment:

This past year was the first that we benefited from a fully committed administrative individual which allowed us to pursue a number of activities that previously were not possible. In the upcoming year the initiatives already launched will be furthered and their impact on student enrolment is expected to increase.

This years’ annual student interviews illustrated an unprecedented level of satisfaction with the program. The increase in events targeted specifically for students has resulted in more effective student participation and this has further elevated satisfaction with the Program. The post-graduate follow-up illustrates that the graduates of this past year have once again gone on to pursue either academic or
research careers (see Convocated section). As part of the ongoing tradition, bound copies of each graduating student’s thesis is kept in the Program office. We now have 16 MSc and 9 PhD theses available for anyone interested in perusing.

The CSCP award programs have again helped support a number of our trainees. The Medtronic Travel Award monies made it possible for a number of students to attend scientific meetings and present their work. As well, the OSOTF bursary monies provided much needed financial relief to a number of deserving students in the Collaborative Program. These funds are available on an annual basis to help those with demonstrated academic and research excellence that are in financial need. It is interesting to note that perhaps as a sign of the outstanding quality of students in the Program, despite well advertised bursaries and funds available for travel, these funds are not in as high demand as one would expect. This has as a side benefit that students who apply have a very good chance of success. Corporate sponsors such as Bristol-Myers Squibb, Merck Frosst Canada & Co., and more recently Solvay Pharma are to be recognised, once again, for their outstanding annual support of education in the cardiovascular sciences at the University of Toronto.

The Bigelow Book Prize is awarded in recognition of an outstanding graduate student in the Program and is the most prestigious student award given. A plaque has been designed to commemorate this annual event and we will be having an unveiling reception in the near future.

Due to the popularity of the original courses MSC 3060/3061, they have now been redesigned into 4 half credit courses which were approved by the School of Graduate Studies. Thus, there are now 4 courses on “Advanced Topics in Cardiovascular Sciences” for our trainees to select. These are MSC3060 – cellular and molecular mechanisms, MSC3061 – hormones in the cardiovascular system; MSC3062 – heart function; and MSC3063 – vascular. Ongoing and frequent review of these courses continues to ensure that leading edge technologies and research foci are represented. This is considered critical if they are to serve as our flagship courses for our trainees. Enrolment continues to be strong in these courses and their popularity is reflected in the strong reviews by the students.

The 3rd Annual Cardiovascular Update was again jointly run with the generous support of Bristol-Myers Squibb in the form of an educational grant. This half-day event provided a clinical update and insights to interested trainees, specialists and general practitioners in the cardiovascular field. As this CME event is offered to general practitioners, the university required us to charge a registration fee. This was kept to a minimum in order to encourage attendance and the educational grant allowed this to be so. Details of this meeting are in the appropriate section of this report.

This past year we welcomed a new corporate sponsor, Solvay Pharma. The Program was pleased to be a part of a series of workshops focused on systolic hypertension that was offered to both G.P.’s, specialists and trainees. The “Cardi-Active: Systolic Hypertension Workshop” was held at the Glenn Abbey Golf Course on May 6th and at Niagara-on-the-Lake on June 13th. These were very well attended and those present all felt the time well spent. It is hoped that together with Solvay a Canada-wide CME event may be created to promote the dissemination of current information on the
management of systolic hypertension. A panel of experts in the field from across the country has been formed and discussions are ongoing.

For the 2000-2001 academic year, we plan to continue our current activities and pursue the following priorities:

1. Create a Student Guidebook with course listings to help selection.
2. Obtain a much more user friendly sub-domain name for the web site.
3. Development of a student section in the Program web site.
4. Actively recruit students to the program.
5. Further develop CME programs in cardiovascular sciences.
6. Firm up a 5-year plan for the program.
7. Recruit clinical residents doing 1-2 years of research into a formal graduate program where appropriate.
8. Continue developing endowments to provide permanent infrastructure support.

PUBLICATIONS – STUDENTS


PUBLICATIONS – FACULTY


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