



GENESIS
Gender and Sex Determinants
of Cardiovascular Disease :
From Bench to Beyond

Beyond the Bench!

Volume 1, Issue 1

July 2005

Dear GENESIS members,

It is my pleasure to introduce to you « Volume 1, Issue 1 » of our latest creation: *Beyond the Bench!* I invite all of you to make this newsletter yours... Do not hesitate if you wish to announce publications, newly found data etc. Comments and ideas are welcomed, please contact Jasmine Poole (JPoole@epimgh.mcgill.ca) if you wish to add something in the upcoming issue.

I would like to take this opportunity to thank all the Genesis members for the tremendous work and time everyone has put into the project. Although the project mostly began its activities in January 2005, we are close to the end of the first fiscal year. Enormous work has been produced since January, and we have but each other to thank. Welcome to all the readers, your interest is of great value to the GENESIS team.

Louise Pilote, PI, GENESIS ICE TEAM

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♥ Heart disease a danger for women, too

Dr. Pilote was interviewed about heart disease in women on Wednesday, May 11th for the Montreal Gazette. The article was published Thursday, May 12th, 2005.

CHARLIE FIDELMAN

The Gazette
Thursday, May 12, 2005

Heart disease a danger for women, too
Study will investigate biological, social, genetic and environmental factors

A McGill University researcher is heading the largest scientific study of sex, gender and heart disease.
Long thought of as primarily affecting ...
(continued page 5)

♥ Points of interest

- * LOI: We submitted a letter of intent to CIHR for the April 1st, 2005 competition (Genomic Medicine and Human Development Operating Grants) for a teen cohort. Unfortunately it was not accepted.
- * GENESIS meeting will be held at CCC meeting in Montreal in October 2005.
- * Creation of GENESIS Website. We will keep you posted.
- * Dr. Marie Hudson's paper has been accepted in the Journal of the American College of Cardiology

The committees are well on their way...

Many teleconference meetings were held during the months of March and April 2005.

Committee members

♥Clinical Trials

Drs. Mark Eisenberg (chair), William Ghali, Karin Humphries, Marie Lambert, Michal Abrahamowicz and Susan Kirkland

♥Cohort

Drs. Susan Kirkland (chair), Jennifer O'Loughlin, William Ghali, Pavel Hamet and Michal Abrahamowicz

♥Gene and Environment

Drs. Jennifer O'Loughlin (chair), Pavel Hamet, Marie Lambert, Johanne Tremblay and Susan Kirkland

♥Knowledge Translation

Drs. Johanne Tremblay (chair), Jafna L. Cox, Jennifer McGrath, Jennifer O'Loughlin, Colleen Maxwell, Colleen Norris, Karin Humphries and Jack Tu

♥Steering

Drs. Louise Pilote (chair), Mark Eisenberg, William Ghali, Jack Tu and Johanne Tremblay

♥Student Advisory

Drs. Karin Humphries (chair), Colleen Norris, Susan Kirkland and Margaret Labuda



GENESIS
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**Press
release**



**Centre universitaire de santé McGill
McGill University Health Centre**

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**From
Bench
to
Beyond**

♥ **Funded by...**



CIHR IRSC

and...



Sex, gender and heart disease—MUHC researcher leads Canada-wide team

MONTREAL, 11 May 2005—A new research project involving more than thirty investigators from across Canada has just been launched. The project, known as GENESIS, is Canada's largest multidisciplinary initiative to study the causes of cardiovascular disease—the leading cause of death in Canada.

GENESIS will investigate key unknowns in the way cardiovascular disease is manifested between men and women. Specifically, the project will address both the biological and genetic factors (sex) and social and behavioural factors (gender) involved in cardiovascular disease.

"More Canadians die from cardiovascular disease than from another other cause, yet we know little about the differences in signs and symptoms, treatment and rehabilitation of this disease between men and women," says Dr. Louise Pilote—an epidemiologist at the McGill University Health Centre (MUHC) in Montreal, and GENESIS lead investigator. "This collaboration involves researchers with complementary expertise, ranging from molecular genetics and biostatistics to sociology and cardiology."

This year, GENESIS will initiate five pilot projects, covering the entire disease process from development to treatment. The pilot projects will help focus long-term research projects to be conducted over the following five years.

Cardiovascular Disease—also known as heart disease—is a degenerative ailment of the cardiovascular system, resulting in blood vessel blockage and ultimately in heart attack. Once considered a predominantly male affliction, the disease is now understood to end the lives of an approximately equal number of each sex—approximately 80,000 Canadian's each year.

GENESIS has received \$1.5 million from the Heart and Stroke Foundation of Canada (HSFC) and the Canadian Institutes of Health Research (CIHR), who launched an Interdisciplinary Capacity Enhancement (ICE) initiative to encourage intra- and inter-institutional collaborations; the magnitude of the project's funding is



Press release

Cont'd

a clear indication of the priority that these organizations place on cardiovascular disease. For more information visit www.cihr-irsc.gc.ca/e/pr_030505.html.

The Research Institute of the McGill University Health Centre (RI MUHC) is a world-renowned biomedical and health-care hospital research centre. Located in Montreal, Quebec, the institute is the research arm of the MUHC, a university health center affiliated with the Faculty of Medicine at McGill University. The institute supports over 500 researchers, nearly 1000 graduate and post-doctoral students and operates more than 300 laboratories devoted to a broad spectrum of fundamental and clinical research. The Research Institute operates at the forefront of knowledge, innovation and technology and is inextricably linked to the clinical programs of the MUHC, ensuring that patients benefit directly from the latest research-based knowledge. For further details visit: www.muhc.ca/research.

The McGill University Health Centre (MUHC) is a comprehensive academic health institution with an international reputation for excellence in clinical programs, research and teaching. The MUHC is a merger of five teaching hospitals affiliated with the Faculty of Medicine at McGill University—the Montreal Children's, Montreal General, Royal Victoria, and Montreal Neurological Hospitals, as well as the Montreal Chest Institute. Building on the tradition of medical leadership of the founding hospitals, the goal of the MUHC is to provide patient care based on the most advanced knowledge in the health care field, and to contribute to the development of new knowledge. For more information please contact:

Ian Popple

Communications Coordinator (research)
MUHC Public Relations and Communications
Tel : (514) 843-1560 email: ian.popple@muhc.mcgill.ca

♥ New Pilot Projects Funding by GENESIS



Following the "Pilot Project for \$ 8000.00" contest, we received 2 projects which were both accepted.
Congratulations to the awardees!

Project 1: EXPLORING SEX AND GENDER DETERMINANTS OF VENOUS THROMBOSIS IN QUEBEC MEN AND WOMEN: PRELIMINARY EVALUATION OF THE VALIDITY OF THE RAMQ DATABASE FOR THE DIAGNOSIS OF VENOUS THROMBOEMBOLISM

PI: Dr. Vicky Tagalakis (McGill University)

Co-Applicants: Drs. Susan Kahn (McGill University), Andrew Hirsch (McGill University) and Hani Tamim (University of Montreal)

Project 2: STRESS, SOCIOECONOMIC STATUS, AND CARDIOVASCULAR RISK IN BOYS AND GIRLS: A FEASIBILITY STUDY OF THE CORTISOL AWAKENING RESPONSE

PI: Dr. Jennifer J McGrath (Concordia University)

Co-Applicants: Drs. Jennifer O'Loughlin (McGill University), Marie Lambert (University of Montreal) and Tracie Barnett (University of Montreal)

♥ CCC Workshop (Mtl, Oct. 2005)

We submitted a proposition for a workshop* at the Canadian cardiovascular congress for next October...we are still waiting for the response and we will keep you posted.

“SEX AND GENDER DETERMINANTS OF CARDIOVASCULAR DISEASE: AN OVERVIEW”

GENESIS (Gender and Sex Determinants of CVD determinants)
ICE Team

Target Audience

Physicians, nurses and health care workers

Learning Needs

There exists little CVD research on women and little knowledge comparing gender differences in CVD.

Learning Objectives

This workshop summarizes current knowledge about gender and sex determinants of the etiology, presentation, processes of care (diagnosis/treatment), and outcomes of cardiovascular disease (CVD). By attending this workshop participants will increase the capacity to:

1. Recognize differences in burden of the CVD between men and women
2. Identify risk factors of CVD in young girls and boys and men and women
3. Recognize the differences in the genetics of CVD in men and women
4. Become aware of CVD differences between men and women in cardiac care delivery and outcomes of CVD

Workshop Outline

15 minute presentations by GENESIS ICE Team co-investigators of the 4 learning objectives of gender and sex determinants of CVD which will be preceded by a 5 minute introduction about the GENESIS ICE team. Throughout these presentations, the participants will be asked to respond to interactive questions (using wireless audience response keypads). At the end of the 4 presentations a questions period/debate will follow (25 minutes). Distributed materials: handout and reference list.

Evaluation Method

Questionnaire form to be completed at the end of the workshop

*(Special thanks to CCORT for the model of this workshop)

Theme issues: CMAJ supplement

The writers will be hard at work all summer. The goal is to be able to submit the paper by the end of August (Friday, August 26th, 2005) and be published in late 2005.

1. The first draft was received on Tuesday, May 24th, 2005 (Thank you!)
2. The second version is due on Monday, July 4th, 2005
3. The final version will be due by Friday, August 26th, 2005

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♥ Heart disease a danger for women, too (cont'd from page 1)

men, cardiovascular disease - including heart disease, hypertension and stroke - is also the No. 1 killer of women, epidemiologist Louise Pilote said. It kills an estimated 80,000 Canadians each year - half of them women, said Pilote, lead investigator of the \$1.5-million, five-year study.

"But we know little about the differences in signs and symptoms, treatment and rehabilitation of this disease between men and women," Pilote said.

That's because 70 per cent of research, treatment and results have been studied in men, she said.

That makes about as much sense as giving a child medication meant for an adult, experts say.

"The biology is different. We know very little, but we assume a lot," Pilote said.

Called Genesis, the multidisciplinary, pan-Canadian study involves 30 investigators coast to coast.

They will look at "key unknowns" in the way heart disease affects men and women.

For example, why do fewer women than men survive their first year after a heart attack?

Women generally develop the disease later in life, but their risk of dying is higher.

Diabetic women with heart disease also have a higher mortality rate than diabetic men, Pilote said: "Why is that?"

"But we know little about the differences in signs and symptoms, treatment and rehabilitation of this disease between men and women," Pilote said

Researchers will look at various factors, from biological and genetic to social and environmental. Five pilot projects will cover the disease process from development to treatment.

"Heart disease and stroke account for more deaths than all forms of cancer combined," Pilote said. "There's a lot of misconception due to lack of data or evidence."

Several studies in the 1990s pointed to treatment gaps, cardiologist Beth Abramson said.

"There was an awareness that we need to include women in clinical trials," said Abramson, a Heart and Stroke Foundation of Canada spokesperson.

"In the United States, it's mandated into the law that they include women and minorities as subjects. We do not have that legislation in Canada."

That's why the foundation is committed to funding such research, she said.

"Women may not get the same care as men," Abramson said.

"Women don't believe it can happen to them. Women think it's a man's disease," she added.

"So when they're having their chest pain or indigestion, they say, 'Not me, it can't be my heart,' and they go off and take care of their kids or parents."

The study is funded by Canadian Institutes of Health Research and the Heart Foundation.

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♥ Other interviews

♥ **Radio with Paul Arcand, (Montreal, 98.3 fm) May 4th, 2005**

♥ **Montreal Gazette, May 12th, 2005**

♥ **Global T.V. « This Morning Live », May 30th, 2005**

♥ GENESIS SCHOLARS, 2005

2 Post-Doctoral fellows and 1 Young investigator have been selected by the Student Advisory Committee for a scholarship through GENESIS

Congratulations! and many thanks to the evaluators...

	Project Title	Institution	Supervisor
Dr. Michele Bowers, Post-Doc, PhD	Quality of Life in Men and Women Following Normal Coronary Angiography	University of British Columbia	Karin Humphries
Dr. Igor Karp, Post-Doc, PhD	Sex differences in the effects of cardiac medications in CHF and post-AMI patients	McGill University	Louise Pilote
Dr. Ken Stark, Young investigator	Cardiovascular Disease Risk and n-3 Fatty Acid Status in Men and Women	University of Waterloo	Gilles Paradis

Please note that Dr. Kaberi Dasgupta was selected by the Evaluation Committee. Unfortunately, she had to refuse the award considering she had already accepted another award from the FRSQ (Fonds de la recherche en santé du Québec). There will be a new Scholar's competition in September.

Welcome to... New members of GENESIS since February 2005

- Sherry Grace
- Teresa Ho
- Susan Kahn
- Igor Karp
- Erick Loucks
- Ken Stark
- Vicky Tagalakis
- Cara Tannenbaum

Thanks to... Members of the External Advisory Board

- Elizabeth Barrett-Connor
- Deborah Grady
- Kay-Tee Khaw

Thanks to... Our collaborators

- Larry Deck (website developer)
- Stéphanie Lévesque (logo designer)
- Danielle Libersan (medical writer)



Creation: Jasmine Poole
Editing: Sylvie Savard