



GENESIS

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

Beyond the Bench!

Volume 1, Issue 2

April 2006

Dear GENESIS Members,

Welcome to the second issue of *Beyond the Bench!* Thank you for your participation to the 2nd Annual Montreal Meeting. GENESIS is well on it's way. Our last Montreal meeting brought new ideas and new members to the team. Your determination is making this network an innovative and professional team offering current data about CVD.

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.

Louise

♥ Inside this issue:

Press coverage	1, 4
New working groups for year 2	1
GENESIS Logo final version	2
GENESIS Grants and Publications	2
New Project Competition	3
GENESIS Scholars	3
Welcome to... New Members	5
Thanks to...	5

♥ Points of interest

* CMAJ showed great enthusiasm for the theme issues. We will be resubmitting by mid-April following the reviewers recommendations.

The new title will be:

A Comprehensive view of sex Specific Issues Related to Cardiovascular disease

* The website will be updated shortly. Please send comments or any information you wish to be posted on the website to:

jpoole@epimgh.mcgill.ca
www.genesisteam.ca

♥ Heart Disease: Gender Differences May Influence Cardiovascular Health

■ *Data show cardiovascular mortality rates to be 38% among women and 25% among men*

By Louise Gagnon, Correspondent,
The Chronicle of Cardiovascular and
internal medicine, August 2005

(See page 4 for complete article)

♥ New working groups for Year 2

Following the Montreal meeting, new working groups emerged;
Please let us know if you wish to be apart of a group:

♥ **Conceptualizing Gender**
Dr. Colleen Norris

♥ **Risk Factors**
Dr. Kaberi Dasgupta

♥ **Coronary Anatomy**
Dr. Karin Humphries

♥ **Efficacy, Effectiveness of interventions**

1) **Drug Response**
Dr. Nadia Khan

2) **Metaanalyses**
Dr. Karin Humphries

For information:
Jasmine Poole
 Division of Clinical Epidemiology,
 Montreal General Hospital
 Research Institute,
 1650 Cedar avenue,
 suite L10-128

Tel: (514) 934-1934 x 44714
 Fax: (514) 934-8293
 JPoole@epimgh.mcgill.ca
 www.genesisteam.ca

Grants 2004-2005

PI	Title of Project	Funded by
Karin Humphries	“Angina with «Normal» Coronary Arteries: Sex Differences in Presentation and Outcomes”	CIHR
Nadia Khan	“Gender and Ethnic Differences in Hypertension and Diabetes Mellitus”	CIHR
Kaberi Dasgupta	“Walking Behaviour and Glycemic Control in Type 2 Diabetes: Seasonal and Sex Differences”	CIHR

Public presentations/publications 2004-2005

	National	International
♥ CCS Montreal October 2005		
✓ Workshops	2	
✓ Abstracts/Posters	5	
♥ Other GENESIS presentations		
✓ Abstracts/Posters	5	9
✓ Oral presentations	6	2
♥ Publications	2	3
♥ Submitted papers	-	3
♥ Interviews (radio/television)	3	-
♥ Press releases	3	1
♥ Newspaper article	1	-

GENESIS LOGO Created by Stéphanie Lévesque



GENESIS

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

Genre, sexe et maladies cardiaques:
genèse et manifestations



Centre universitaire de santé McGill
McGill University Health Centre

♥ Funded by...



CIHR IRSC

and...





♥ GENESIS Projects: Possibility of Financing 2006—2007

THERE WILL BE TWO GENESIS COMPETITIONS:

1)PROJET 8000: (A maximum of 2 projects with a maximum of financing of 8,000\$ per project) Pilot projects leading to grant proposals. The idea is to acquire data that will lead to an application for a grant proposal of a larger project in September 2006. Preference will be given to gender and/or gene analysis related projects. The projects will start July 1st 2006.

2)GENESIS THEME PROJECTS: (A maximum of 3 projects with a maximum of financing of 20,000\$ per project) Projects to promote investigation related to the GENESIS themes. The idea is to develop large scale multicentre collaborative projects and grant proposals as well as explore new avenues for GENESIS. The projects will start on July 1st 2006 for a maximum of one year.

The themes are:

- A)Sex and Gender Determinants of development, acquisition and modification of CVD Risk factors across the lifespan
- B)Sex and Gender Differences in manifestation of Coronary disease (diagnosis, manifestations, outcomes)
- C)Sex and Gender Differences in Efficacy, Effectiveness of interventions

- ♥ You must submit a 3 page summary (maximum) and a one page budget justification
- ♥ The deadline is May 15th 2006. For more information contact Jasmine Poole: jpoole@epimgh.mcgill.ca

♥ GENESIS SCHOLARS

2004-2005	Project Title	Supervisor	Institution
Dr. Kaberi Dasgupta	Young Investigator	Dr. K. Humphries	<i>McGill University</i>
Dr. Igor Karp	Post-Doc	Dr. L. Pilote	<i>McGill University</i>
Dr. Ken Stark	Young Investigator	Dr. G. Paradis	<i>University of Waterloo</i>
2005-2006			
Mr. Karel Faldik	PhD 2 nd year	Dr. J. Tremblay	<i>Université de Montréal</i>
Dr. Sherry Grace	Young Investigator	Dr. L. Pilote	<i>York University</i>
Dr. Nadia Khan	Young Investigator	Dr. K. Humphries	<i>University of British Columbia</i>

♥ Heart Disease: Gender Differences May Influence Cardiovascular Health (cont'd)

The GENESIS Project, A new Canadian initiative designed to instil a better understanding of the origin, therapeutic management, and outcome of heart disease in Canada, is set to focus on the influences of gender on the cardiovascular health of Canadians patients.

“The project will focus on what differences exist between men and women where cardiovascular illness is concerned,” explained Dr. Louise Pilote, an internist, an epidemiologist, and an associate professor at the McGill University Health Centre in Montreal.

“We want to look at whether these differences are mainly environmental or purely biological.”

The multidisciplinary initiative will bring together 30 investigators whose mandate over the next two to three years is to study how cardiovascular disease develops, how it manifests itself, how it is treated, and whether the response varies from men to women, explained Dr. Pilote. The Canadian Institutes of Health Research and the Heart and Stroke Foundation of Canada are funding the \$1.5 million initiative.

“It is a pan-Canadian project with investigators from across Canada,” said Dr. Pilote.

“The general idea is to study gender and sex determinants of cardiovascular disease. It will go on for five years, but may go on beyond that. The goal is to recognize that we do not have much information in this area. If you look at cardiovascular trials, women are underrepresented. You cannot make conclusions about women and cardiovascular disease because there are not enough female patients in these trials”.

One of the goals of the project is to dispel conventional thinking that cardiovascular disease affects men and women similarly, she explains.

“The medical thinking was that women did not get hearts attacks because they were not stressed and men were” said Dr. Pilote.

“It could be that women respond differently to stress.”

There is an acknowledgement now that heart attacks occur later in life among women. There is an estimated 10 to 15 year difference between men and women in terms of their risk of heart disease. Moreover, there have been suggestions in the literature that women with heart disease are going undiagnosed because the condition may present differently in women, said Dr. Pilote.

Indeed, one of the first of five pilot research projects that GENESIS will undertake is examining myocardial infarction presentation in women.

“The classical symptoms that we were taught in medical school of signs of a heart attack may not be the symptoms that women have,” said Dr. Pilote.

“They could be experiencing fatigue, nausea, and upper body pain and not shoulder pain.”

Women experiencing what are not considered classical symptoms may explain the difference in the mortality rates between men and women: 38% among women and 25% among men.

“It could be that their first heart attack is being missed,” said Dr. Pilote. “They may only be seen when it is their second or third heart attack.”

A study that was published in *The New England Journal of Medicine* in April 2005 found that women who were assigned to take ASA on a regular basis had a reduced risk of developing their first stroke. However, there was no reduction in the risk of their first myocardial infarction overall. In men, there was a risk of having a heart attack overall, but it remained unclear if there was a reduction in the risk of stroke.

The Chronicle of Cardiovascular & Internal Medicine, August 2005



2nd Annual GENESIS Montreal Meeting February 27th and 28th, 2006 Guest Speaker: Dr. Kay-Tee Khaw



It was a pleasure to be invited to the annual meeting of GENESIS investigators. The GENESIS ICE Team's goal is to improve prevention, treatment and management of cardiovascular disease in women and men. They have chosen a broad range of different strategies to accomplish this. These include raising awareness by highlighting these issues, identifying gaps in knowledge, identifying key research questions and how they might be operationalised, supporting pilot projects, and encouraging training of young investigators.

The GENESIS team has been remarkably effective in using the limited resources available as leverage to bring together an accomplished group of investigators from diverse disciplines and with a wide range of expertise to work together to address the aims of GENESIS. These include ensuring that gender issues are considered and incorporated in ongoing projects such as cohort studies, developing appropriate methodologies and identifying new research and training needs where pilot support can make a substantial impact.

I congratulate GENESIS on substantial achievements in a short time and look forward to future successes.

By Dr. Kay-Tee Khaw

*Member of the GENESIS Scientific Advisory Board,
Professor of Clinical Gerontology in Cambridge, England Principal investigator in EPIC-Norfolk, University of Cambridge, England*



GENESIS ICE TEAM
Co-investigator
 Senior investigator
 Junior Investigator
Student

Principal Investigator
 Louise Pilote
 Susan Kahn; Sheldon Magder;
 Kaberi Dasgupta (Scholar);
 Stella Daskalopoulou; Moira Kapral;
 Eric Loucks; Richard Sheppard; Vicky
 Tagalakis; Cara Tannenbaum;
 Maria Florian; Marie Hudson;
 Igor Karp (Scholar); Golyar Keyhan


Jennifer O'Loughlin
 Marie Lambert
 Jennifer McGrath
 Gilles Paradis
 Tracie Barnett
 Ken Stark (Scholar)

Pavel Hamet
Johanne Tremblay
 Anne-Marie Antchouey
 Karel Faldik (Scholar)

Mark Eisenberg

Michal Abrahamowicz

Jafna Cox
 Susan Kirkland
 Charmaine Cooke



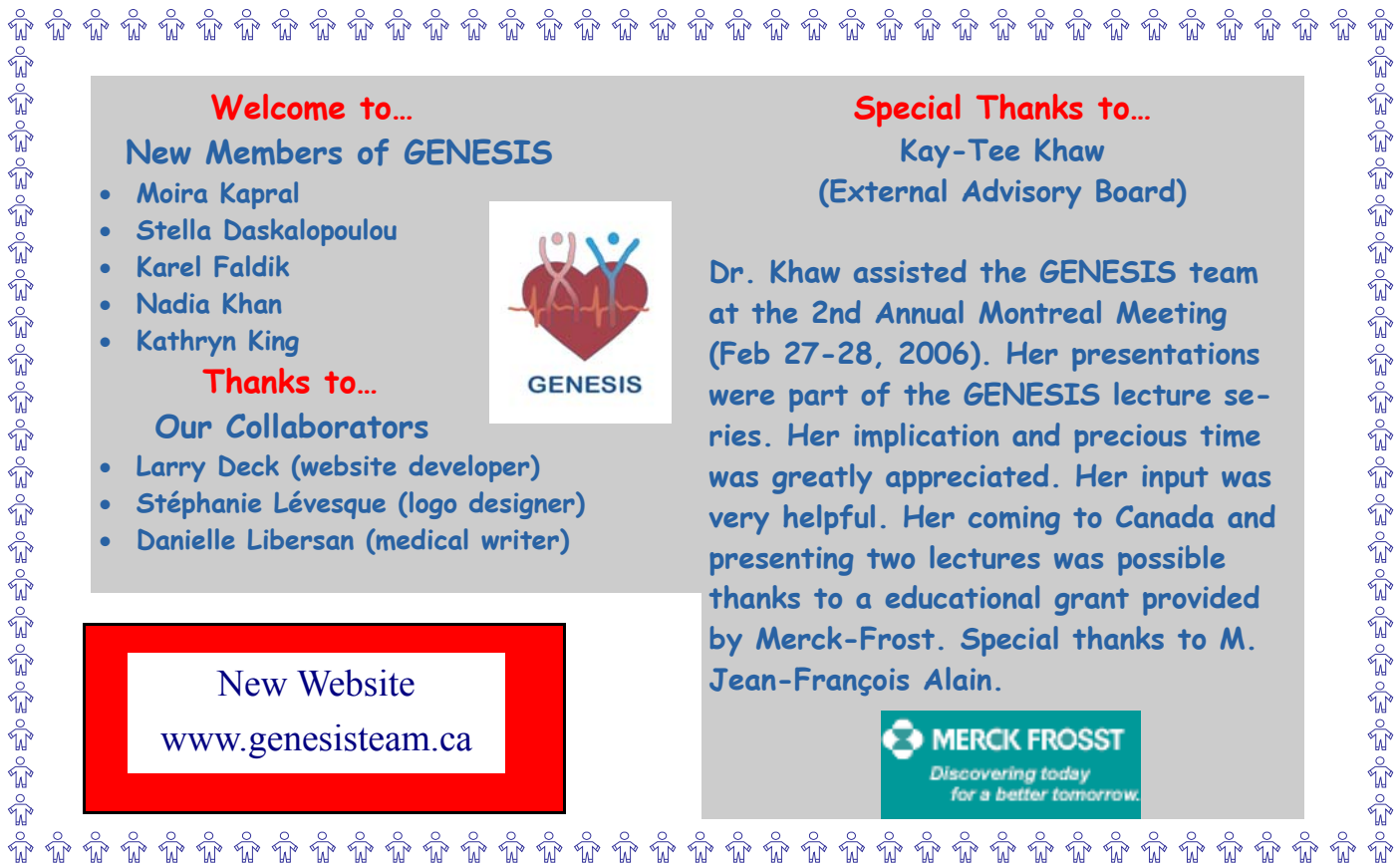
Colleen Norris

Karin Humphries
 Lorraine Greaves
 Nadia Khan (Scholar)

William Ghali
 Colleen Maxwell
 Michele Graham; Heidi Schmaltz
 Kathryn King
 Doreen Rabi

Jack Tu
 Sherry Grace (Scholar)
 Veena Guru

Creation: Jasmine Poole
 Editing: Sylvie Savard



Welcome to...

New Members of GENESIS

- Moira Kapral
- Stella Daskalopoulou
- Karel Faldik
- Nadia Khan
- Kathryn King

Thanks to...



Our Collaborators

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

Special Thanks to...

Kay-Tee Khaw
 (External Advisory Board)

Dr. Khaw assisted the GENESIS team at the 2nd Annual Montreal Meeting (Feb 27-28, 2006). Her presentations were part of the GENESIS lecture series. Her implication and precious time was greatly appreciated. Her input was very helpful. Her coming to Canada and presenting two lectures was possible thanks to a educational grant provided by Merck-Frost. Special thanks to M. Jean-François Alain.

New Website
www.genesisteam.ca