



National Heart, Lung, and Blood Institute
Global Health Initiative

St. John's Medical College & Research Institute

(NIH- Centre of Excellence)

In collaboration with

Population Health Research Institute

McMaster University, Canada



ANNOUNCES

A Two-Week Course in Health Research & A Two-Year Health Research Mentorship Program

Sponsored by

National Institutes of Health (NIH), USA

The Indian Cardiovascular Research and Advocacy Group (ICRAG)

is led by

St. John's Medical College & Research Institute, Bangalore

in collaboration with

Fortis Escorts Hospital, Jaipur, Mahatma Gandhi Institute of Medical Sciences, Sevagram &

Raja Muthiah Medical College, Annamalinagar

*Send the completed application form
along with enclosures by courier to:*

Dr. Denis Xavier MD

Principal Investigator- NIH Centre of Excellence
Professor & Head, Pharmacology, St John's Medical College
Division of Clinical Trials, St John's Research Institute
Koramangala, Bangalore- 560 034
Ph: 080 25526382, 25523416 Fax: 080 25633382

For application or clarifications contact:

Nandini Mathur (9845326801; nandini@sjri.res.in)
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1.0 BACKGROUND

Cardiovascular diseases (CVD) are the leading cause of mortality in urban and rural India. In India, there is little evidence of efforts at primary prevention of CVD. In addition, secondary prevention is less than optimal due to relative high costs of treatment and commitment from patients and health care providers. Presently, there is little data in India on knowledge translation in primary and secondary prevention of CVD in a low-income country setting. Globally, stroke accounts for about 10 percent of all deaths, two-thirds of which occur in low-income countries. In India, stroke is a leading cause of death and acquired adult disability. Yet, there is little nationwide data on the etiologies, treatments and barriers to the optimal care of strokes in India. Furthermore, there is a shortage of qualified health research investigators in India to address issues of local importance in chronic non-communicable disease.

St. John's Medical College and Research Institute (SJMC/SJRI) has for over a decade developed and conducted registries, case-control studies, cohort studies and clinical trials in more than 170 institutions in India in cardiovascular disease. Most studies are in collaboration with the Population Health Research Institute (PHRI), McMaster University, Canada. PHRI is a leading institute for international clinical studies and has conducted collaborative studies with over 1,500 centers in 80 countries.

The Indian Cardiovascular Research & Advocacy Group (ICRAG) is a consortium led by St. John's Medical College & Research Institute, Bangalore and includes Fortis Escorts Hospital, Jaipur, Mahatma Gandhi Institute of Medical Sciences, Sevagram and Rajah Muthiah Medical College, Annamalainagar. This collaboration has worked together for over a decade on several observational studies and clinical trials, predominantly in cardiovascular disease (including strokes) and diabetes.

Recognizing the importance of chronic non-communicable disease in developing countries the national institutes of health (NIH) and UnitedHealth, USA, have set up a chronic disease initiative. This initiative will support a global network of collaborating Centers of Excellence in developing countries along with a partner from a developed country to combat chronic disease. These centers of excellence are developing infrastructure for research and training to enhance their capacity to conduct population based or clinical research in cardiovascular and pulmonary diseases.

St. John's is one of 11 centers in the world to be recognized as a Centers of Excellence. St. John's partners with PHRI, Canada.

The objectives of our program are to:

- Enhance research infrastructure and capacity for collaborative research in a network of healthcare facilities and community sites across India.
- Conduct research studies to evaluate knowledge translation approaches for CVD prevention related to primary and secondary prevention and to better understand the treatments and outcomes of stroke.
- Train or facilitate training of health research investigators and other research support personnel in research methodology and research management.

The following is an outline of the three *research projects* that our consortium will conduct:

- **INSPIRE** (INdian Stroke ProspectIve REgistry): A large multi-center observational study of stroke in India. A hospital-based registry will identify and recruit 10,500 stroke patients at 50 different hospitals (secondary and tertiary care) across India.
- **SPREAD** (Secondary PREvention of coronary Events After Discharge from hospital): A randomized controlled trial in *secondary* prevention of acute coronary syndrome. The objectives are to assess feasibility, estimate rates of adherence to pharmacotherapy, assess adherence to lifestyle modification, and obtain an estimate of the event rates in an Indian setting. It is a randomized open trial comparing post-discharge interventions to standard care in 10 secondary and tertiary care hospitals. The interventions are delivered by over one year by trained non-medical community health workers.
- **PREPARE** (Primary pREvention strategies at the community level to Promote treatment Adherence to pREvent cardiovascular disease): A household-level cluster randomized trial to evaluate primary prevention interventions in CVD in three rural communities (15,000 population). The interventions are delivered by over two years by trained non-medical community health workers.

The *research training program* aims to impact the current shortage of health researchers and research personal in India. We aim to train and mentor a total of 12 researchers (6 in each phase lasting two years) over a 5 year period. We will also conduct several short-term courses in health research methods for over 100 health professionals across India. Some will go on for full-time advanced research training over one year which will be facilitated and funded fully by ICRA (led by St. John's).

This document provides details of the two-year health research training by mentorship program. For ore details on other training programs and research projects, please write to the Principal investigator of the program (contact details in section 4.0).

2.0 OVERVIEW OF TRAINING FOR HEALTH PROFESSIONALS

2.1 Two week research methodology course

The two-week Health Research Methodology course will be conducted at St. John's Bangalore between September 14 and 26, 2009. See section 5 for further details on the schedule and topics.

2.2 Two year research mentorship program

From the applicants selected for the two-week course, a smaller number (up to 6) will participate in the two-year Health Research Training by Mentorship Program.

3.0 APPLICATIONS

3.1 Who can apply?

Health professionals < 40 years and within 5 years of completion of a health related masters degree (Eg:-MD, MS, DM, DNB, MSc MPH) can apply for the course. They must be employed on a regular or permanent basis for more than 1 year in an institution in India. These criteria may be relaxed for exceptional candidates.

3.2 Registration policy

Candidates can apply for both the programs "A two week training course in health methodologies" and " A two year health training by mentorship program" or only for the two-week course. Registration is free and there are no other costs to the candidate. See section xx for more details.

Preference is given to candidates with a commitment to conduct health research in chronic disease in India, especially in cardiovascular disease or diabetes, having academic credentials and showing involvement in clinical work, teaching, research or national public health services.

3.3 Instruction to fill the application form

- Eligible candidates can apply both for the two-week Health Research Methodology Course and the two-year Health Research Methodology by Mentorship Program. All the sections must be filled clearly.
- Questions 7 and 8 are not applicable for those applying only for two-week research methodology course.
- There is no prescribed format for answering question 9A and 9B. Take utmost care to answer these two questions, as these are important for evaluation.

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3.4 General guidelines to fill in and send the application form

1. Use BLACK or BLUE PEN to fill in the application form
2. Fill in all the details in the application. Do not leave any questions unanswered. Where required please write NA for "not applicable"
3. Fill in the form neatly and in legible handwriting. We will be unable to consider the application form if the details are incomprehensible
4. Send the application form, with enclosures and (if applicable) answers to Q 9B in one envelope.
5. Mention the address clearly and entirely (as mentioned) on the envelope to avoid any delays in delivery of the documents.

3.5 Application process

The LAST DATE to receive applications along with enclosures is 25-Aug-09. Application should be forwarded through Dean/Principal/ Head of Institute and Head of Department/Unit. If applying for the two-year mentorship program, details of internal mentor with signature must be available.

3.6 Enclosures

1. Two pass port size photos (with name, signature and date on the reverse)
2. CV of candidate (signed and dated)
3. CV of internal mentor (signed and dated)
4. Additional sheets in response to Q 9 A & B (signed and dated)

Receipt of applications at St. John's will be confirmed by Email.

Send the filled in application form and all enclosed by courier to the address indicated in section 4.0

3.7 Selection process

A screening committee will review all application. Short-listed applicants will be contacted to schedule a telephonic interview for 15 mins. For some more than one telephonic interview may be needed. Candidate's dedication and orientation towards conducting research in chronic disease, especially cardiovascular disease will be assessed during the telephonic interview. Selection is based on research interest, dedication and merit of the candidate. Selected candidates will be informed by email in the first week of September 2009.

A total of 10 candidates will be shortlisted for the mentorship program, the first 6 would initially be considered for the program. The remaining 4 candidates will be waitlisted and

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informed in case of any cancellations. All the research participants will be informed by Email. Each selected candidate will be identified by a unique identification number.

3.8 Cancellation policy

In case of cancellations, selected candidates should inform at least 5 days prior to the start of the course, so that the waitlisted candidates can be informed. Failure to do so will jeopardize the candidate's application for different research methodology courses in future. The Dean and HOD of the respective department will also be informed about the candidate's irresponsible act and applications from the institution will not be looked upon favorably in future.

3.9 Reporting to St. John's

Candidates should report to St. John's with the selection confirmation letter in the afternoon of 13th September and latest before 12.00 noon on 14th September. Further delay will not be entertained. Participants should confirm their expected time of arrival by 10th of September.

3.10 Certificate & Recognition

All candidates will be assessed on an on-going basis as well as at the end of the course. Only candidates achieving a prescribed grade at the end of course will be given a certificate. The grade will be mentioned in the certificate. Further, candidates doing exceptionally well will be given special awards.

4.0 CONTACT INFORMATION

Dr. Denis Xavier MD
Principal Investigator, NIH-Centre of Excellence
Professor and Head, Pharmacology, St. John's Medical College
Division of Clinical Trials, St. John's Research Institute
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For clarifications, contact:

- Nandini Mathur (9845326801, nandini@sjri.res.in)
- Pranjali Rahul (9945477988, pranjali@sjri.res.in)

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5.0 COURSE INFORMATION

The two-week health research methodology course will be conducted from the 14th to 26th September 2009. Sessions as per the schedule will be conducted from 9.30 am to 5.30 pm.

Experienced researchers from India and Canada will conduct the Two-week Health Research Methodology course. See section 5.4 for details on faculty.

5.1 Draft Schedule for two-week Health Research Methodology Course (RMC)

Day/date	9.30-10.30	10.45-11.45	12.00-01.00	2.00-3.30	3.45-5.30	Evening#
Mon-14		Check in and lunch		Inauguration	Orientation	Welcome dinner
Tue-15	L-1	L-2	JC-1	GD-1	SP-1	MM/S
Wed-16	L-3	SL-1	JC-2	GD-2	SP-2	MM/S
Thu-17	L-4	L-5	JC-3	GD-3	SP-3	MM/S
Fri-18	L-6	SL-2	JC-4			
Sat-19	<ul style="list-style-type: none"> • Just after breakfast, RMC candidates leave to an off-site location for Team-building exercises. • Stay overnight at the offsite location. • RMC candidates return by noon 					
Sun-20	<ul style="list-style-type: none"> • Full day - POISE-2 / VISION Meetings* 					
Mon-21	L-7	SL-3	JC-5	GD-4	SP-4	MM/S
Tue-22	L-8	SL-4	L-9	GD-5	SP-5	MM/S
Wed-23	L-10	SL-5	JC-6	GD-6	SP-6	MM/S
Thu-24	L-11	SL-6	JC-7	PROJECT PRESENTATIONS		MM/S
Fri-25	L-12	JC-8	GD-7	PROJECT PRESENTATIONS		Farewell dinner
Sat-26	L-13	Evaluation	Valedictory	Check-out and goodbye		

L: Lecture , JC-Journal Club, GD-Group Discussion,
SL -Statistics Lecture,
SP: Statistics Practical, Literature Review and Data Management
MM/S: Meetings with Mentors and Statisticians

Morning coffee break, 10:30 to 10:45 AM
Afternoon break at 3:30

* not applicable to RMC candidates and their mentors

Evenings are reserved for academic and social interactions with mentors, preparations for next day's sessions, and consultation with statisticians (for candidates in the mentorship program and their mentors only). Details and schedule for these evening activities will be available at a later date.

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5.2 Topics for Research Methodology Course

1. Why do health research? Current health research scenario in India and challenges for young health professionals.
2. Asking relevant health research questions
3. Study design and methods in cross sectional studies
4. Study design and methods in case control studies
5. Study design and methods in cohort studies
6. Randomized controlled trials – 1 (basic principles)
7. Randomized controlled trials –2 (advanced principles and methods)
8. Qualitative studies
9. Systematic reviews
10. Meta-analysis
11. Health economics
12. Health policy and advocacy
13. Ethics in health research
14. Skills in grant application and research publications

5.3 Team building exercise

All the participants will be taken to an off-site location on September 19th (Sat). Participants, their mentors and faculty and staff of St. John's and ICRAAG will get an opportunity to interact and get to know each other better. This is a compulsory requirement of the course and participants are instructed not to plan other activities for the day. After an overnight stay, all return on Sunday.

5.4 Faculty for research methodology workshop:

This list of faculty is being completed.

Dr Denis Xavier MD is Professor and Head, Department of Pharmacology at St. John's Medical College and Coordinator of the Division of Clinical Trials at St. John's Research Institute. He was the HOPE-Canada Research Scholar and trained in Clinical Epidemiology and Biostatistics, at McMaster University, Canada.

He is the Principal Investigator of the Indian Cardiovascular Research and Advocacy Group and the NIH (USA) Centre of Excellence to counter chronic diseases in India. This is a comprehensive preventive program that is ongoing in collaboration with three other institutions in India and McMaster University, Canada. The 5-year program includes research training, infrastructure development and research projects in primary and secondary prevention of CVD.

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He is also the Principal Investigator for the Fogarty International Clinical Research Fellows program at St. John's and Co-Investigator for the Wellcome Trust Grant for an International Polypill trial.

He has helped set up a large collaboration of cardiovascular researchers in over 175 centers from about 60 cities in India. He is the National Coordinator and / or member of the International Steering Committee conducting several large *epidemiological studies* (INTERHEART, INTERSTROKE, WHO-PREMISE, VISION), *registries* (CREATE-ACS, INSPIRE, RELY-AF), large multi-centre *clinical trials* in *primary prevention* (POLYCAP, HOPE-3, MARS and PREPARE, in primary prevention of CVD) and *secondary prevention* (CREATE, OASIS 5, & 6, FUTURA, CURRENT, RELY, ARISTOTLE, AVERROES, POISE PRoFESS, VITATOPS, VISION, ASPIRE and SPREAD involving anticoagulants, beta-blockers, antiplatelet agents and lifestyle modification).

He led the largest study of acute coronary syndromes practice patterns and outcomes from any developing country - the CREATE registry involving over 20,000 patients from India (lead author Lancet, April 2008). He is the joint PI of INTERSTROKE – a large global case-control study in stroke and the Project Director of the POLYCAP trial – a randomized clinical trial involving a Polypill in the primary prevention of cardiovascular disease.

He has over 30 Scientific Publications.

List of selected publications:

1. **Denis Xavier**, Prem Pais, PJ Devereaux, Changchun Xie, D Prabhakaran, K Srinath Reddy, Rajeev Gupta, Prashant Joshi, Prafulla Kerkar, S Thanikachalam, KK Haridas, TM Jaison, Sudhir Naik, AK Maity, Salim Yusuf on behalf of the CREATE registry investigators. Treatment and outcomes of acute coronary syndromes in India (CREATE): a prospective analysis of registry data. **Lancet**. 2008 Apr 26;371(9622):1435-42.
2. **Xavier D**, Pais P, Sigamani A, Pogue J, Afzal R, Yusuf S. The need to test the theories behind the Polypill: rationale behind the Indian Polycap Study. **Nat Clin Pract Cardiovasc Med**. 2008 Dec 23.
3. **Denis Xavier**, PJ Devereaux, Abhinav Goyal, Prem Pais, Salim Yusuf. Polypharmacotherapy for Primary Prevention of Cardiovascular Disease. **Indian Heart J** 2008; Suppl B:29–33.
4. S Yusuf, P Pais, R Afzal, **D Xavier**, K Teo, J Eikelboom, A Sigamani, V Mohan, R Gupta, N Thomas. Effects of a polypill (Polycap) on risk factors in middle aged individuals without cardiovascular disease. The Indian Polycap Study (TIPS): a phase II, double-blind, randomized trial. **Lancet**. March 30, 2009.
5. Stuart J. Connolly, Michael D. Ezekowitz, Salim Yusuf, Janice Pogue, **Denis Xavier**, Lars Wallentin et al. Dabigatran Compared to Warfarin in Patients with Atrial Fibrillation. **New Eng J Med**, Aug 2009.
6. Devereaux PJ, Yang H, Yusuf S, Guyatt G, Leslie K, Villar JC, **Xavier D**, Chrolavicius S, Greenspan L, Pogue J, Pais P, Liu L, Xu S, Málaga G, Avezum A, Chan M, Montori VM,

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- Jacka M, Choi P. POISE Study Group. Effects of extended-release metoprolol in patients undergoing non-cardiac surgery (POISE trial): a randomised controlled trial. **Lancet**. 2008 May 31;371(9627):1839-47.
7. Rafael Díaz, Abhinav Goyal, Shamir R. Mehta, Rizwan Afzal, **Denis Xavier**, Prem Pais, Andrzej Budaj, Mohammad , Zubaid, Alvaro Avezum, Mikhail Ruda, Salim Yusuf, Glucose-insulin-potassium (GIK) therapy in patients with ST-segment elevation myocardial infarction: Results of the OASIS-6-GIK trial and the combined analyses of the OASIS-6 and the CREATE-ECLA GIK trials. **JAMA**. 2007; 298 (20):2399-2405.
 8. Deborah Cook, Anne Moore-Cox, **Denis Xavier**, François Lauzier, Ian Roberts, Randomized Trials in Vulnerable Populations. **Controlled Clinical Trials** 2007
 9. Karthik G, **Xavier D**, Prabhakar D, Pais P. Perspectives on the management of coronary artery disease in India. **Heart** 2007
 10. Yusuf S, Mehta SR, Xie C, Ahmed RJ, **Xavier D**, Pais P, Zhu J, Liu L; CREATE Trial Group Investigators. Effects of reviparin, a low-molecular-weight heparin, on mortality, reinfarction, and strokes in patients with acute myocardial infarction presenting with ST-segment elevation. **JAMA**. 2005 Jan 26;293(4):427-35.
 11. Mehta SR, Yusuf S, Diaz R, Zhu J, Pais P, **Xavier D**, Paolasso E, Ahmed R, Xie C, Kazmi K, Tai J, Orlandini A, Pogue J, Liu L; CREATE-ECLA Trial Group Investigators. Effect of glucose-insulin-potassium infusion on mortality in patients with acute ST-segment elevation myocardial infarction: the CREATE-ECLA randomized controlled trial. **JAMA**. 2005 Jan 26;293(4):437-46
 12. **Xavier D**, Pais P, Thanikachalam S, Joshi PP, Jaison TM, Gupta R, Yusuf S. Does the socioeconomic status affect treatment and outcomes of patient with ST elevation MI in India. **Ind Heart J** 2003
 13. **Xavier D**, Pais P, Thanikachalam S, Joshi PP, Kerkar P Yusuf S Acute Coronary Syndromes In The Young: Are They Different? **Ind Heart J** 2002 vol 54, No. 5, 477
-

Prem Pais MD is Dean and Professor of Medicine at St. John's Medical College and Head of Clinical Trials Division, St. John's Research Institute, Bangalore .

Relevant Research Experience & Technical accomplishments:

Epidemiology and Clinical Trials: a case control study of risk factors in Ischaemic Heart disease in Indians (Lancet 1996; JACC 1999, Indian Heart Journal 2002; 53:731-5).

● completed a joint project with the CDC, Atlanta and World Bank on preparing guidelines for the management of diabetes in India. ● The Indian Council of Medical Research a national task force case control study on risk factors for IHD among Indians in India. ● WHO project officer at Geneva, to work on developing a programme for secondary prevention of cardiovascular disease, PREMISE I and another on management of hypertension in low and middle income countries.

● **Observation studies:** designed, coordination & management – Create Registry (published – Lancet 2008), ● *Randomized Clinical Trials as Steering committee member* - RELY, OASIS-5 STUDY, OASIS-6 STUDY, POISE STUDY, PRoFESS, HOPE -3 study, Averroes, Aristotle, Recreate, POLYCAP trial ● *Randomized Clinical Trials as National coordinator & Co-investigator* - WHO hypertension PROJECT, WHO-PREMISE STUDY, VITATOPS, POISE,

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VISION, INTERSTROKE, HERO, DREAM and ORIGIN. ●National coordinator - ICMR
TASK FORCE PROJECT on risk factors for Acute myocardial infarction.

Selected list of Publications:

1. **Prem Pais**, Pogue J, Gerstein H, Zachariah E, Savitha D, Jayaprakash S, Nayak P R & Yusuf A. Risk factors for acute myocardial infarction in Indians: a case control study. **Lancet** 1996;348:358 -364
2. Denis Xavier, **Prem Pais**, PJ Devereaux, Changchun Xie, D Prabhakaran, K Srinath Reddy, Rajeev Gupta, Prashant Joshi, Prafulla Kerkar, S Thanikachalam, KK Haridas, TM Jaison, Sudhir Naik, AK Maity, Salim Yusuf on behalf of the CREATE registry investigators. Treatment and outcomes of acute coronary syndromes in India (CREATE): a prospective analysis of registry data. **Lancet**. 2008 Apr 26;371(9622):1435-42.
3. S Yusuf, **P Pais**, R Afzal, D Xavier, K Teo, J Eikelboom, A Sigamani, V Mohan, R Gupta, N Thomas. Effects of a polypill (Polycap) on risk factors in middle aged individuals without cardiovascular disease. The Indian Polycap Study (TIPS): a phase II, double-blind, randomized trial. **Lancet**. March 30, 2009
4. Salim Yusuf, **Prem Pais** et al. Effect of potentially modifiable risk factors associated with myocardial infarction in 52 countries (the INTERHEART study): case-control study. **The Lancet**. 2004;364:973.
5. Joshi P, Islam S, **Pais P**, Reddy S, Prabhakaran D, Kazmi K et al. Risk factors for early myocardial infarction in South Asians compared with individuals in other countries **JAMA** 2007; 297:286-294.
6. Yusuf S, Mehta SR, Xie C, Ahmed RJ, Xavier D, **Pais P**, Zhu J, Liu L; CREATE Trial Group Investigators. Effects of reviparin, a low-molecular-weight heparin, on mortality, reinfarction, and strokes in patients with acute myocardial infarction presenting with ST-segment elevation. **JAMA**. 2005 Jan 26;293(4):427-35.
7. Salim Yusuf, Shamir R. Mehta, Rafael D'az, Ernesto Paolasso, **Prem Pais**, Denis Xavier, Changchun Xie, Rashid J. Ahmed, Khawar Khazmi, Jun Zhu, Lisheng Liu, Challenges in the conduct of large simple trials of important generic questions in resource-poor settings: The CREATE and ECLA trial program evaluating GIK (glucose, insulin and potassium) and low-molecular-weight heparin in acute myocardial infarction. **Am Heart J**.2004;148:1068-78
8. Yusuf S, Mehta SR, Xie C, Ahmed RJ, Xavier D, **Pais P**, Zhu J, Liu L; CREATE Trial Group Investigators. Effects of reviparin, a low-molecular-weight heparin, on mortality, reinfarction, and strokes in patients with acute myocardial infarction presenting with ST-segment elevation. **JAMA**. 2005 Jan 26;293(4):427-35
9. Rafael Díaz, Abhinav Goyal, Shamir R. Mehta, Rizwan Afzal, Denis Xavier, **Prem Pais**, Susan Chrolavicius, Jun Zhu, Khawar Kazmi, Lisheng Liu, Andrzej Budaj, Mohammad , Zubaid, Alvaro Avezum, Mikhail Ruda, Salim Yusuf, Glucose-insulin-potassium (GIK) therapy in patients with ST-segment elevation myocardial infarction: Results of the OASIS-6-GIK trial and the combined analyses of the OASIS-6 and the CREATE-ECLA GIK trials. **JAMA**. 2007; 298 (20):2399-2405.

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10. Devereaux PJ, Yang H, Yusuf S, Guyatt G, Leslie K, Villar JC, Xavier D, Chrolavicius S, Greenspan L, Pogue J, **Pais P**, Liu L, Xu S, Málaga G, Avezum A, Chan M, Montori VM, Jacka M, Choi P. POISE Study Group. Effects of extended-release metoprolol succinate in patients undergoing non-cardiac surgery (POISE trial): a randomised controlled trial. **Lancet**. 2008 May 31;371(9627):1839-47.
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 12. Xavier D, **Pais P**, Sigamani A, Pogue J, Afzal R, Yusuf S. The need to test the theories behind the Polypill: rationale behind the Indian Polycap Study. **Nat Clin Pract Cardiovasc Med**. 2008 Dec 23.
 13. Denis Xavier, PJ Devereaux, Abhinav Goyal, **Prem Pais**, Salim Yusuf. Polypharmacotherapy for Primary Prevention of Cardiovascular Disease. **Indian Heart J** 2008; Suppl B:29-33
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Salim Yusuf MBBS, DPhil, FRCP(UK), FRCPC, FACC, FRSC is a Professor of Medicine at McMaster University, Director of the Population Health Research Institute, and is Vice-President of Research and Chief Scientific Officer at Hamilton Health Sciences. He did his MBBS from St. John's Medical College, Bangalore, DPhil in Epidemiology and MRCP in medicine from the University of Oxford. He holds a Heart and Stroke Foundation of Ontario Research Chair, was a Senior Scientist of the Canadian Institutes of Health Research, and recent awards include the Lifetime Research Achievement award of the Canadian Cardiovascular Society, the 2001 Prix Galien Canada Research Award, the Lucian Award for Cardiovascular Research 2002, the Paul Wood Silver Medal of the British Cardiac Society 2003, he was a finalist for the CIHR Michael Smith Prize in Health Research 2005, and was inducted into the Royal Society of Canada in 2005. In 2008 he received both the Gold Medal from the European Society of Cardiology, and the Clinical Research Prize from the American Heart Association.

He has led over 20 major trials and several of them have changed medical practice. He has published over 600 articles, and his research collaboration involves 79 countries in all the inhabited continents of the world. He was seminal to establishing the HOPE-CIHR scholarships for individuals from South Asia to receive advanced training in Canada. He is the only Canadian amongst the top 20 highest cited scientists in clinical medicine in the world.

Key Publications

1. S Yusuf, P Pais, R Afzal, D Xavier, K Teo, J Eikelboom, A Sigamani, V Mohan, R Gupta, N Thomas. Effects of a polypill (Polycap) on risk factors in middle aged individuals without cardiovascular disease. The Indian Polycap Study (TIPS): a phase II,

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- double-blind, randomized trial. *Lancet*. March 30, 2009
2. Denis Xavier, PJ Devereaux, Abhinav Goyal, Prem Pais, **Salim Yusuf**. Polypharmacotherapy for Primary Prevention of Cardiovascular Disease. *Indian Heart J* 2008; Suppl B:29–33
 3. McQueen MJ, Hawken S, Wang X, Ounpuu S, Sniderman A, Probstfield J, Steyn K, Sanderson JE, Hasani M, Volkova E, Kazmi K, and **Yusuf S** for the INTERHEART study investigators. Lipids, lipoproteins, and apolipoproteins as risk markers of myocardial infarction in 52 countries (the INTERHEART study): a case-control study. *Lancet* 2008; 372: 224-33.
 4. **Yusuf S**, Teo KK, Pogue J, Dyal L, Copland I, Schumacher H, Dagenais G, Sleight P, Anderson C. Telmisartan, ramipril, or both in patients at high risk for vascular events. *N Engl J Med* 2008; Apr 10;358(15):1547-59.
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Selected Publications

1. Patil SS, Joshi R, Gupta G, Reddy MVR, Pai M, Kalantri SP. Risk factors for acute myocardial infarction in a rural population in central India: a hospital-based case-control study. *Natl Med J India* 2004; 17:189-94.
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Dr. Philip James (P.J) Devereaux MD, PhD, FRCP(C) is Associate Professor, Department of Medicine, Division of Cardiology and Department of Clinical Epidemiology and Biostatistics, McMaster University, Hamilton. His PhD is in Health Research Methodology from McMaster University, Hamilton, Ontario. He was a resident at the Division of Cardiology, Department of Medicine, Dalhousie University, Halifax, Nova Scotia and at the Division of Internal Medicine, Department of Medicine, University of Calgary, Calgary, Alberta. He did his MBBS from McMaster University, Hamilton, Ontario & his Bachelor of Science from Dalhousie University, Halifax, Nova Scotia.

His areas of research interest are Perioperative vascular events in patients undergoing non cardiac surgery; surgical randomized controlled trials; Health policy – health care delivery; randomized controlled trial methodology; systematic review and meta-analysis methodology randomized controlled trial of metoprolol in patients undergoing non-cardiac surgery, the PeriOperative ISchemic Evaluation study (POISE study) (Co-Principal Investigator; Perioperative Epidural Trial (POET) Pilot Trial; Knowledge Innovation and Diffusion in Myocardial Infarction (KIDMI) – Knowledge Strategies for Health Research (Co-investigator) and TROPonin in ICU Screening (TROPICS) Study.

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List of key publications

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8. The POISE Study Group (**Devereaux PJ** writing committee chair) Effects of extended-release metoprolol succinate in patients undergoing non-cardiac surgery (POISE trial): a randomised controlled trial. *Lancet* 2008; 371: 1839-1847.
9. Xavier D, **Devereaux PJ**, Goyal A, Pais P, Yusuf S. Polypharmacotherapy for primary prevention of cardiovascular disease. *Indian Heart J*. 2008; Suppl B: B29-B33
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Research interests include Health services research, knowledge translation, primary care performance, chronic disease management, quality improvement, clinical epidemiology, global health, aboriginal health.

List of key publications

1. **Bhattacharyya O**, Reeves S, Zwarenstein M. What is implementation research? Rationale, concepts and practices. *Research on Social Work Practice* online first publication May 27, 2009.
2. Clement M, Conway R, **Bhattacharyya O**. "Is tight glycemic control in type 2 diabetes really worthwhile?: YES" *Canadian Family Physician* 2009; 55:580-582. PMID: 19509194
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Dr SP Kalantri MD, MPH received his training in internal medicine at Government Medical College, Nagpur. He obtained MD in 1981 and joined Mahatma Gandhi Institute of Medical Sciences (MGIMS), a medical school in Sevagram (Maharashtra state) immediately. At MGIMS, he heads a full internal medicine unit, teaches medical students and residents, and conducts clinical research. He has supervised theses of 14 residents in internal medicine and has also mentored eight medical students in ICMR short term studentships. He has taught epidemiology and basic biostatistics in seven workshops and has published extensively in peer-reviewed medical journals.

He edited *MFC bulletin* (1989-92) and was associate editor of *Indian Journal of Medical Ethics* (2001-2004). He successfully campaigned against sponsorship of medical conferences by drug industry in his institute and has participated in several workshops on ethical issues in medical practice. In 2004, he won Fogarty AIDS International research scholarship (USA), took a year-long sabbatical and completed his MPH in epidemiology at the School of Public Health, University of California, Berkeley.

As a clinician – researcher, Dr Kalantri's main interest is in evidence-based medicine. He has been a leading exponent of evidence based approaches to clinical practice and has co-hosted several workshops on biostatistics, EBM and research methodology. He has supervised the work of diverse group of graduate students, who have focused primarily on the accuracy and precision of history and physical signs. His general interests include medical ethics, public health, and information technology and healthcare.

Dr Kalantri has, and continues to foster academic and research culture in the institute. His research involves collaboration with researchers from University of California, Berkeley and McGill University, Canada. He has also served as a site principle investigator for several multi-centric international randomized controlled trials which focused on coronary artery disease and stroke. He is also a part of a group from India that has recently won United Health Group-NHLBI funding to study the epidemiology of chronic diseases at primary and secondary level.

Selected publications

1. Birkner MD, Kalantri SP, Solao V, Badam P, Joshi R, Goel A, Pai M, Hubbard A. Predicting 30-day mortality in acute stroke in a rural hospital in Central India: A prognostic score using data-adaptive regression. *Therapeutics and Clinical Risk Management*.2007;3(3)
2. Pant Pai N, Joshi R, Dogra S, Taksande B, Kalantri SP, Pai M, Narang P, Tulskey JP, Reingold AL. Evaluation of Diagnostic Accuracy, Feasibility and Client Preference for Rapid Oral Fluid-Based Diagnosis of HIV Infection in Rural India. *PLoS ONE*. 2007 Apr 11; 2:e367. [PMID: 17426815]
3. Pai M, Joshi R, Bandyopadhyay M, Narang P, Dogra S, Taksande B, Kalantri S. Sensitivity of a whole-blood interferon-gamma assay among patients with pulmonary tuberculosis and variations in T-cell responses during anti-tuberculosis treatment.

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Dr Rajeev Gupta MD, PhD is Senior Consultant and Head Department of Medicine; Head of Medical Services; and Director Research & Academics, Fortis Escorts Hospital, Jaipur, India. Educational background: MBBS (1976), SP Medical College, Bikaner, India. MD (Medicine) (1979), Postgraduate Institute of Medical Education and Research, Chandigarh. Research training. Attended multiple courses as participant and faculty in cardiovascular epidemiology conducted by ICMR, WHO, International Epidemiology Society, etc. PhD (Community Medicine-Cardiovascular epidemiology) (2004), SMS Medical College, Jaipur, University of Rajasthan, Jaipur.

Research interests / background: Pioneer in coronary heart disease and hypertension epidemiology in India. Established the first cardiovascular epidemiology research laboratory in the non-governmental sector in India.

Major research interest is cardiovascular epidemiology and coronary risk factors.

He has over 500 publications that includes more than 220 major original articles.

Articles have been published in prestigious journals such as Lancet, BMJ, Circulation, Journal of Human Hypertension, International Journal of Cardiology, American Heart Journal, Indian Journal of Medical Research, Current Science, BMC Medical Genetics.

Key publications:

1. **Gupta R**, Joshi PP, Mohan V, Reddy KS, Yusuf S. Epidemiology and causation of coronary heart disease and stroke in India. *Heart* 2008; 94:16-26.
2. Prasad PP, Prasannakumar KM, Ammini AC, Gupta A, **Gupta R**, Thelma BK. Association of dopaminergic pathway gene polymorphisms with chronic renal insufficiency in Asian Indians with type 2 diabetes. *BMC Genetics* 2008; 9:e26(1-8).
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Dr. Chittaranjan Andrade, MD, is a psychiatrist with over 25 years of experience in his field. He is a Professor in the Department of Psychopharmacology at the National Institute of Mental Health and Neurosciences, Bangalore.

His academic record comprises 25 prizes in pre-collegiate education, 4 prizes in pre-professional collegiate education (including the 4th rank in the State of Karnataka), 9 prizes and gold medals in medical college (including the best outgoing student award in the university), and the gold medal for standing first in the university in the postgraduate examinations.

He has received 3 international awards, 10 national awards (including all the major awards of the Indian Psychiatric Society and the Indian Association of Private Psychiatrists) and 6 state and other awards in recognition of his research. He has published 11 books, nearly 40 chapters in various texts, and approximately 400 scientific papers in peer-reviewed journals.

His main research interests lie in the field of electroconvulsive therapy. He received the ECT Investigator of the Year Award at San Francisco in 2003 and will guest edit a special issue of the Journal of ECT on the practice of ECT in developing countries. He is a member of the World Federation of Societies of Biological Psychiatry Task Force on Brain Stimulation, a member of the editorial board of *The Journal of ECT*, and a member of the editorial board of *Brain Stimulation*.

He is also the Field Editor for Clinical Therapeutics for the journal *Bipolar Disorders*. He is also on the editorial board of several other overseas and national journals, including the *Indian Journal of Psychiatry*. He is a referee/reviewer for 24 international journals, 5 national journals, and 2 international scientific publishing houses.

Dr. Andrade is involved with research and training on allopathic medications. He is also involved in the research and development of herbal psychotropic medicinal substances, and was in the Expert Group and Standing Expert Committee on Herbal Medicines for the Treatment of Addictive Disorders, International Centre for Drug Policy, St. George's University, London, during 2006. His studies are based on animal models and also on clinical trials. He has completed a large number of studies in both herbal and allopathic fields.

Dr Andrade is an experienced research methodologist with considerable expertise in statistical analysis. He is presently on the International Society for Bipolar Disorders Clinical Trials Committee for the Development of Guidelines for the Design and Conduct of Clinical Trials in Bipolar Disorder.

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Dr. Andrade is a committed educator, and publishes a thrice-weekly electronic newsletter, the Synergy Times, which, since 2001, has been reaching psychiatrists across the world. He has also published various print newsletters down the years, including Psychiatry Update, Psychiatry Review, and others; these have/had an extensive national circulation among psychiatrists and physicians, and a small international circulation, as well.

Dr. Andrade is an active freelance journalist with a regular crossword column. He has published over 600 articles in various newspapers and magazines. He has played 4 musical instruments for several orchestras and musical groups in Bangalore. He composes music, has written the anthems of 2 schools and one college, and has featured often in radio and television broadcasts. He has been a mountaineer and has scaled 6 peaks in the Himalayas. He continues to be an active rock-climber and a state-level middle-distance athlete.

List of key publications

1. **Andrade C.** Chaos in science, medicine and psychiatry. *Drug Wise* 1996; 20: 18-19.
2. Kumaraiah V, Jayaram M, **Andrade C.** Current status of assessments and investigations in mental health and neurosciences. *NIMHANS J* 1997; 15: 269-272.
3. Andrade AC, **Andrade C.** Improving self-esteem: A cognitive behavioural approach. *Indian J Psychol Med* 1997; 20(1): 26-39
4. **Andrade C.** Misinterpreter of maladies! *Indian J Psychiatry* 2000; 42: 446-447
5. **Andrade C.** Evidence-based psychiatry: a distant dream? *Indian J Psychiatry* 2000; 42: 442
6. **Andrade C.** Intolerance to noise in psychiatric disorders. *Indian J Psychiatry* 2000; 42: 218.
7. **Andrade C.** Evidence-based mental health practice in psychiatry. *Eastern J Psychiatry* 2001; 5: 7-9.
8. **Andrade C,** Madhavan AP. Testing logical memory using a complex passage: development and standardization of a new test. *Indian J Psychiatry* 2001; 43: 252-256.
9. **Andrade C.** Sweet preference and alcoholism risk. *Am J Psychiatry* 2002; 159: 498.
10. Thomas JK, Kumar PNS, Verma AN, Sinha VK, **Andrade C.** Psychosocial dysfunction and family burden in schizophrenia and obsessive-compulsive disorder. *Indian J Psychiatry* 2004; 46: 238-243.
11. **Andrade C.** Multiple expansion disorder. *Bipolar Disord* 2004; 6: 168-169.
12. **Andrade C.** Sexual dysfunction in India. *Indian J Psychiatry* 2005; 47: 181.
13. **Andrade C.** The case for humour: moving one step further. *Indian J Psychiatry* 2006; 48: 269-270.
14. **Andrade C.** Depression, chronic medical disease, and perceived health. *Arch Indian Psychiatry* 2007; 9: 8-9.
15. **Andrade C.** 5HTT gene-environment interactions in human behavior. *Arch Indian Psychiatry* 2009 (in press).

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Dr Ramesh.A is Associate Professor at the Dept. of Otolaryngology Head and Neck Surgery at St John's Medical College Hospital, Bangalore. He has done his Master of surgery from All India Institute of Medical Sciences New Delhi and M.B.B.S from Jawaharlal Institute Of Postgraduate Medical Education and Research Pondicherry. He has undergone Research Methodology training as a delegate on Statistical Techniques in Clinical Research; Multilevel Modeling and Generalized Estimating Equations Research Methodology and Biostatistics. He has been a faculty on a number of Research Methodology and Biostatistics Workshops for post graduates, undergraduates & para medical students.

Some of his completed projects are: Long term results of ossicular reconstruction using preserved nasal cartilage in tympanomastoid surgery for cholesteatoma : MS thesis , All India Institute of Medical Sciences , New Delhi; Clinicopathologic aspects of deep neck space infections , All India Institute of Medical Sciences , New Delhi ; Clinical features of tuberculous involvement of head and neck region, All India Institute of Medical Sciences , New Delhi; Changing trends of Bezold's abscess , All India Institute of Medical Sciences , New Delhi. His ongoing research projects are on Designing a scoring system for the diagnosis of deep neck space infection by primary care providers; Developing a paradigm for implementing a national neonatal hearing screening program; Octave waveband analysis of noise levels in the Neonatal intensive care unit and measuring their impact on the otoacoustic levels of neonates and effectiveness of transient evoked otoacoustic emission as a tool for neonatal hearing screening.

List of key recent publications

1. **Ramesh A.** Qualitative research methods , Newsletter of Tata Institute of Social Sciences , 1994 April (6),12-13
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Details on more faculty will be available shortly.

5.5 Teaching methods

Lectures, Journal clubs, Group discussion, student presentation, peer review and protocol writing.

5.6 Attendance

Participants will be required to attend all the sessions and absence is strongly discouraged.

6.0 RESEARCH TRAINING BY MENTORSHIP PROGRAM

6.1 Prerequisites for the Mentorship program

Candidates applying for mentorship program,

1. Should have an internal mentor.
2. Should be available for both research methodology workshops conducted each year.
3. Should be committed towards the program and research project *for 2 years*. If in doubt do not apply.

6.2 Mentorship process

1. Candidates will continue their regular responsibilities at their home institution while undergoing the two-year mentorship process.
2. Candidates applying for the mentorship program should identify a senior faculty/consultant in the same institution. This person is the ***Internal Mentor*** who will support the candidate with scientific and operational aspects.
3. The candidate can select from the available research areas to work on for 2 years.
4. Candidates will be paired an external mentor (from India or abroad) depending upon the research topic chosen by the candidate.
5. Both mentors (internal and external) will work in close association with the candidates for 2 years.
6. Candidate should attend the research methodology course for 2 weeks with their mentors in September (14to 26). A second two-week course will be held approximately at the same time next year.
7. He/ she will have to make some additional time in the evenings or at the weekends/holidays to work with their mentors on their research project.
8. Research funds up to Rs. 5,00,000 (rupees five Lakhs) will be provided to the mentors. This will be disbursed based on the research proposal that the mentors and the candidate make to the granting committee.
9. Following the two week research methodology course, candidates will continue their training for two years. The training will occur hands-on while working on their research project and by participating in the research methodology training while in their home institution through regular emails, teleconference and web seminars with their mentors and other faculty of the course.

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10. Candidates will be closely evaluated. The outcome of the evaluation will determine the advanced training that the candidates can opt for at the completion of the two-year research mentorship program.

6.3 Internal Mentor

Candidates must select an internal mentor from the institution where they are working. This internal mentor will help the candidate with scientific and operational aspects at the institute. The internal mentor is also required to attend a part of the course. We recommend that the internal mentor attends the RMC for at least 3-4 days. If necessary we can cover costs of the internal mentor for up to 5 days.

6.4. External Mentor

The external mentors will play an important role in the selection process of the candidates for the two-year Health Research Mentorship program. They will be the key contributors to the development and implementation of both the two-week Research Methodology Course and two-year Research Mentorship Program. They will work with the candidates to develop ideas for their research project and will continue to help the candidates throughout the two years to fine tune their protocols and complete the research project. If necessary, they will help to identify and obtain funds from other external sources.

6.5 Research areas currently available

1. Epidemiology of cardiovascular diseases and diabetes (CVD/DM)
2. Primary prevention of CVD/DM
3. Secondary prevention of CVD/DM
4. Research ethics
5. Clinical trials in CVD/DM
6. Peri-operative cardiac ischemia
7. Chronic lung disease
8. Barriers to CVD care in India
9. Guidelines for CVD management in primary and secondary care

Applicants can choose from the above areas for the two-year mentorship program.

6.6 Support provided

All costs for travel and accommodation will be covered. The 6 candidates in the Research Training by Mentorship Program will be provided a laptop that will facilitate learning and subsequent protocol development. If a laptop is not necessary, software or other research tools (eg.books) for an equivalent amount may be provided. Those who already have a laptop are encouraged to bring it along for the two-week course.

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There are *no registration or other fees* for the two-week course or for the two-year mentorship program. A research grant of up to Rs.5,00,000 (Rupees five lakhs) is available to the mentors of candidates in the two year mentorship program. The mentors and candidates must make a joint grant application. A selection committee will evaluate the proposals and budgets to make the grant award. This grant must be used to conduct the research over two years.

No other financial support will be provided to the researchers for 2 years and they will continue to be employed at their institution/hospital.

6.7 Advanced training

At the end of two years committed candidates will be eligible for full-time advanced research training. More details on the evaluation and monitoring criteria will be available during the course.

7.0 TRAVEL

We will support costs for two-way travel for all the participants and the mentors. Participants will be encouraged to travel by train (3-tier / 2-tier AC). If the journey to Bangalore by train lasts longer than 24 hours, we will cover costs for economy class flight. Candidates and their mentors must purchase the tickets that will be reimbursed on production of original tickets. In case of cancellation without sufficient notice AND reason, costs will not be reimbursed. Flight tickets must be purchased immediately and within 24 hours of announcement of results by the cheapest available economy class. The costs must be informed in advance and must be approved by St. John's prior to purchase.

8.0 STAY AND FOOD

Accommodation is provided at no cost for all the participants within our campus on a twin-sharing basis. The campus guest house (Annexe III) is relatively new, clean, has spacious rooms and an attached bathroom. Each room contains two single bed and two tables. The shared accommodation is to encourage collaboration and camaraderie.

Single room accommodation is therefore not encouraged. If candidates strongly prefer a single room, then they must bear the full costs of the room and dinner on all days.

Breakfast, lunch and snacks are provided during the course on all the days. For dinner candidates and their mentors may choose from the several restaurants around the campus. A modest amount is available to reimburse costs for dinner. A good opportunity for mentors and the candidates to get to know each other better over dinner!

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