BACKGROUND:

- Born in India. Came to Canada in 1966 and grew up in Fredericton, New Brunswick, Canada
- Graduated in the top 10 in 1987 from Dalhousie Medical School, Halifax. Nova Scotia
- Completed Internal Medicine and Cardiology residency training at the University of Toronto
- Completed Cardiology Clinical Research Fellowship at St. Michael's Hospital, Univ of Toronto, 1994
- Staff Cardiologist, Rouge Valley Health System, Centenary site, Toronto, ON, 1994-2002
- Relocated to Atlanta, GA, June 2002, Cardiologist, Northside Cardiology 2002-10, Atlanta Heart Specialists -2010- 2020, now with NSC Cardiology /NSC Research



KEY CURRENT POSITIONS:

- Staff cardiologist, Northside Forsyth, Emory- Johns Creek, Emory- St Joseph's, Piedmont- Atlanta
- Director, Clinical Research Program, NSC Research/NSC Cardiology
- Clinical Assistant Professor Medical College of Georgia at Augusta University, Augusta, GA
- Clinical Assistant Professor- College of Health Professions, Mercer University, Atlanta, GA
- Senior Clinician Scientist / Director Canadian Collaborative Research Network (CCRN)

KEY PAST POSITIONS:

- Clinical Assistant Professor Emory University, Div of Cardiology, Atlanta, Georgia
- Chair, Section of Cardiology, Northside Hospital (Atlanta and Forsyth campus)
- Vice Chair- St Josephs Research Institute, Board Member SJTRI
- American College of Cardiology Atlanta representative on ACC-GA Chapter Council
- Secretary and National Executive Council Member, Canadian Cardiovascular Society (CCS)
- Lecturer, Division of Cardiology, Department of Medicine, University of Toronto
- Chair and founding member, Greater Toronto Area Community Cardiologists (GTACC)
- President of the Medical Staff Society, RVHS- Centenary Health Centre
- Board of Governors, Medical Staff Society Rep, RVHS-Centenary Health Centre
- Board of Directors, Physician Representative, RVHS-Centenary Health Centre Foundation
- Medical Director, Pacemaker/ICD Program and Cath Lab, RVHS-Centenary Health Centre

KEY PROFESSIONAL MEMBERSHIPS:

- Fellow of the American College of Cardiology (FACC), American Heart Association (FAHA)
- Fellow Royal College of Physicians Surgeons (FRCPC), Canadian Cardiovascular Society (FCCS)
- Board Certified in Cardiology and Internal Medicine both in Canada and the United States.

RESEARCH EXPERIENCE:

- Published over 30 articles and 70 abstracts on a wide range of topics in cardiology
- Principal site investigator on over 150 key national and international clinical trials.
- Actively designs and conducts independent investigator initiated clinical research
- Former Member St Joseph's Hospital IRB, SJRI, SJTRI and Northside Cardiac Research group

AWARDS AND SCHOLARSHIPS:

- Recipient of numerous awards and scholarships throughout high school, undergraduate and postgraduate training for academic merit and leadership skills
- -Recipient of many awards of recognition for hospital and community service in Toronto
- -Recipient of multiple research awards and grants for ongoing projects; focus on South Asian and other ethnic heart disease, health outcomes research and heart failure.

MISCELLANEOUS INFORMATION:

- Enjoys teaching medical students and post-graduate trainees
- Invited to deliver lectures on various topics within the field of cardiovascular medicine.
- -Outside interests include live theatre, movies, music, travel, team sports, skiing and golf



Curriculum Vitae-Narendra Singh

PERSONAL DATA

Date of BirthJune 10, 1963Place of BirthSaraiya, IndiaChildren3 sons, 2 daughtersCitizenshipAmericanLanguagesEnglish, some Hindi

HOME ADDRESS

3325 Piedmont Road #2105 Atlanta, GA 30305 narendra.singh@yahoo.com



OFFICE ADDRESS

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HOSPITAL AFFILIATIONS

Northside Hospital -Forsyth, Duluth and Cherokee campus, Emory Hospitals -St Josephs and Johns Creek and Piedmont Hospital- Atlanta

BRIEF CHRONOLOGY

2020 - Present - Cardiologist, Research Director, NSC Cardiology/NSC Research, Atlanta, Georgia

2020- Present - Clinical Assistant Professor, College of Health Professions, Mercer Univ, Atlanta, GA

2012- Present - Clinical Assistant Professor, Medical College of Georgia at Augusta University

2010 - 2020 - Cardiologist, Research Director, Atlanta Heart Specialists LLC, Atlanta, Georgia

2002-2011- Clinical Assistant Professor, Emory University, Div of Cardiology, Atlanta, GA

2002-2010- Cardiologist/Partner/Research Director, Northside Cardiology, PC, Atlanta, Georgia

1994 - 2002 - Staff Cardiologist, Dept. of Medicine, RVHS - Centenary site, Toronto, Ontario

1994 -2002 - Lecturer, Department of Medicine, University of Toronto, Toronto, Ontario

1993-1994 - Completed Cardiology Research Fellowship at St. Michael's Hospital, Toronto.

1991-1993 - Completed residency training in Adult Cardiology at the University of Toronto

1988-1991 - Completed residency training in Internal Medicine at the University of Toronto

1987-1988 - Completed rotating internship at St. Michael's Hospital, University of Toronto.

1983-1987 - Graduated from Dalhousie University Medical School, Halifax, Nova Scotia.

1981-1983 - Completed 2 yrs of a Bachelor of Science degree, Dalhousie Univ, Halifax, N.S.

1978-1981 - Graduated from Fredericton High School, Fredericton, New Brunswick.

Summary of Public School and UnderGraduate Training (1975-1987)

1. **Academic Performance**

- **1983-1987-** Dalhousie University, Faculty of Medicine, Graduated with M.D. degree, ranking 10th out of 98 students
- Distinctions were obtained in 14 courses and the following clerkship rotations: Medicine, Pediatrics, Surgery
- Clerkship Electives were done at:
- Toronto General Hospital, Toronto, Ontario, Emergency Medicine Supervisors: Dr. B. Rowat, Dr. L. Greenspan
- Brigham and Women's Hospital, Boston, Massachusetts, Cardiology Supervisors: Dr. B. Lown, Dr. T. Graboys
- Please note; University Transcripts are available upon request.
- **1981-1983-** Dalhousie University, 2yrs of a Bachelor of Science, Biochemistry Major, Overall G.P.A. = 3.7 = A obtained early admission to medical school
- **1978-1981-** Graduated from Fredericton High School with second highest academic standing.
- **1975-1978-** Graduated from Nashwaaksis Junior High School with highest academic standing.

2. Extra-Curricular Involvement

- Selected student rep on the Admissions Committee for the Faculty of Medicine -1986
- Dalhousie Medical Student Society (DMSS), representative on the Professional Assoc.
 of Residents and Interns for the Maritime Provinces (PARI-MP) Council 1987
- Chairperson of the DMSS constitutional committee.-1987
- Course representative for my class in Pharmacology (2nd year); Human Sexuality, Pediatrics, Medicine, Surgery, Family Medicine (3rd year)-1986-87
- Organizing Committee for the DMSS annual charity auction and book sale -1985-86
- Lab Instructor for Biology 1000 course. 1984-85
- Treasurer of the Dalhousie Science Society (DSS)-1984
- DSS Representative for the Dalhousie Association of Biology Students-1983
- Student rep on the Dalhousie undergraduate scholarship committee. 1982-83
- Student representative on the Dalhousie undergraduate curriculum committee. 1982
- President of one of the houses in the Howe Hall Men's Residence Complex and House representative on residence council -1982-83
- Treasurer of the high school Student Council -1981
- Managing Editor of the High School Paper-1980-81
- Chairperson of the high school's first Annual Year End Activities Banquet -1981
- Model Parliament treasurer and participant- 1979-81
- Student Council Class Representative-1979-80
- Member of the stage crew for the high school's annual musical production-1980-81
- Active in many intramural sports activities eq. hockey, soccer, baseball, and football.

3. Major Awards/Scholarships

- •Selected to the Alpha Omega Alpha ($\mbox{$\mathring{A}\Omega$}$ A) Honour Medical Society recognizing "Academic Achievements as well as Outstanding Personal Qualities, Contributions, and Achievements"-1987
- Awarded \$1000 Proctor and Gamble Award of Excellence at Dalhousie Univ in recognition of "Outstanding Academic Achievement and Extra-Curricular Involvement"-1986
- Awarded \$500 scholarship for 3rd highest academic standing in 2nd year med -1985
- Awarded CV Mosby Book Prize for Scholastic Excellence in 2nd year medicine-1985
- Awarded conference trip-"Research Frontiers in Diabetes Mellitus" in Toronto-1984
- Awarded \$250 scholarship for fifth highest academic standing in 1st yr medicine-1984
- Awarded \$3000 summer research studentship, funding by the Nova Scotia branch of the Canadian Diabetic Association-1984
- Awarded \$1000 entrance scholarship into the Faculty of Medicine-1983
- Awarded \$600 in-course scholarship by the Faculty of Science-1983
- Presented the Howe Hall Outstanding Leadership Award in recognition of accomplishments achieved as president of Studley House-1983
- Presented appreciation plaque by residents of Studley House, Men's Residence-'83
- Awarded \$1300 in-course scholarship by the Faculty of Science -1982
- Awarded \$2000 Dalhousie University's top entrance scholarship 1981
- Awarded \$1000 Regent Mall Scholarship -based on student involvement and high academic standing-1981
- Awarded Birk's Medal for Leadership in Student Activities at F'ton High School-1981
- Presented the Citizenship Award for "Highest Contribution to the extra-curricular program at Fredericton High School"-1981
- Awarded Victoria Lodge Prize for the second highest academic standing at high school graduation (94%)-1981
- Presented three black "F" awards for academic excellence and outstanding extracurricular involvement over 3 years of high school-1981
- Awarded C.W. Hall's Bookstore prize for highest standing in Grade 12 History –1981

Summary of Undergraduate Research Experience

(1982-1987)

Summer 1984

Dalhousie University - Studied the effects of oral hypoglycemics on skeletal muscle insulin sensitivity and responsiveness.

Reference - Dr. M.H.Tan, Chief of Medicine, Halifax Infirmary Hospital (902) 421-7510

Summer 1982,1983

Agriculture Canada - Research into the effects of abiotic and agronomic factors on population dynamics of aphid predators in potato fields.

Reference - Dr. G. Boiteau, Division of Plant Pathology, Fredericton, N.B. (506) 452-3260

1982-1983

Dalhousie University - Research into the Alcohol Expectancy Effect and its influence on motor skills performance.

Reference - Dr. P. Dunham, Department of Psychology, Halifax, N.S. (902) 424 –2211

1. **Postgraduate Training**

- 1993 -'94 (PGY-7) Clinical Research Fellowship, University of Toronto, Ontario Supervisor Dr. Anatoly Langer, St. Michael's Hospital Projects Post MI Outcomes and Resource Utilization Analysis, Heart Rate Variability Post MI, ST Shift in Unstable Angina, Time to Treatment Also did diagnostic cardiac catheterizations 1/2 day /week at SMH/TGH.
- 1991 -'93 (PGY- 5,6) Adult Cardiology at the University of Toronto, Ontario base hospitals St. Michael's Hospital, and The Toronto Hospital, Toronto General and Western divisions electives done -pediatric cardiology, adult congenital heart disease, precardiac transplantation, diagnostic cardiac catheterization
- 1988 -'91- (PGY-2,3,4) Core Internal Medicine at the University of Toronto, Ontario base hospitals St. Michael's Hospital, and The Toronto Hospital, Toronto General and Western divisions
- 1987 '88 (PGY-1) Rotating Internship at St. Michaels Hospital / Hospital for Sick Children, University of Toronto, Ontario. Rotations as follows: 8 weeks; pediatrics, medicine, ob/gyn, psychiatry, emergency medicine. 4 weeks; medical/surgical ICU, orthopedics, radiology

2. Post-Grad Awards/Scholarships

- Awarded Heart and Stroke Foundation of Canada Research Fellowship Award (\$42,585) for 1994-'95 (declined as I accepted a staff position)
- Awarded second prize in Annual Higgins' Resident Research Day competition 1994
- Awarded Univ of Toronto Pettit Research Fellowship, Dept of Medicine (\$41,295)-1993
- Awarded 1st prize in the U.B. Cardiology Resident Research Day competition 1993
- Awarded second prize in Annual Higgins' Resident Research Day competition 1992
- Awarded third prize in Annual Higgins' Resident Research Day competition 1990

3. Other Post-Grad Activities

- Cardiology Resident rep, Div of Cardiology Postgraduate Training Committee 1991-93
- Resident coordinator for the Royal College Oral Exams at the Toronto Hospital -1991
- R3 rep on the Residency Training Committee for the Toronto Hospital 1990- '91
- Representative on Dept. of Medicine On-Site Evaluation committee; 1988- 1991
- Representative on the Interns Education and Liaison Committee for 1987-88.

4. **Graduate Courses**

- Introduction to Clinical Epidemiology Univ of Toronto (4.0 GPA) Jan 1994
- Accepted in U of T Masters Program in Clinical Epidemiology (declined) Jul 1994

1. <u>Hospital Appointments</u>

Currently; Staff Cardiologist, Northside Hospital Forsyth July 2002-present
 Staff Cardiologist, Northside Hospital Duluth July 2020-present
 Staff Cardiologist, Northside Hospital Cherokee July 2021-present
 Staff Cardiologist, Emory St. Joseph's Hospital, July 2002-present
 Staff Cardiologist, Emory Johns Creek Hospital, January 2007 –present
 Staff Cardiologist, Piedmont Hospital Atlanta July 2020 –present

 Previous; Staff Cardiologist, RVHS-Centenary site, July 1994 to June 2002 Staff Cardiologist, Dekalb Medical, July 2010 –2020 Staff Cardiologist, Grady Memorial, July 2002 –2009

2. Current Medical Licenses

Province of Ontario
 State of Georgia
 CPSO Registration # 58438
 Medical License # 37905
 DEA# BS7629782
 NPI # 1760477202

3. <u>Major Licensing Exam Results</u>

 ABIM Recertification Exam in Cardiovascular Disease Passed April 2015 ABIM Recertification Exam in Cardiovascular Disease Passed May 2004 Passed Sept 1999 NASPE-Special Competency Cardiac Pacing & AICD Certification Board of Nuclear Cardiology Exam Passed Oct 1998, Dec 2007 ABIM Certifying Exam in Cardiovascular Disease Passed Nov 1995 Royal College Exams for Certificate of Competence in Cardiology Passed Nov 1993 • Royal College Oral Exams in Internal Medicine - F.R.C.P.(C) Passed June 1992 American Board of Internal Medicine (ABIM) Certifying Exam Passed Sept 1991 Royal College Written Exams in Internal Medicine Passed Sept 1990 FLEX Components I and II (Michigan) Passed June 1988 Licensing Exam -Medical Council of Canada -LMCC Passed May 1987

4. Key Professional Memberships

- Fellow, American Heart Association (FAHA)
- Fellow, American College of Cardiology (FACC)
- Fellow, Royal College of Physicians of Canada, (FRCP(C))
- Fellow, Canadian Cardiovascular Society (FCCS)
- Member, Medical Association of Georgia (MAG)
- Member, Ontario Medical Association (OMA)
- Member, College of Physicians and Surgeons of Ontario (CPSO)

5. Other Interests

- · Active in the organization of South Asian multicultural events, charity
- Enjoy reading/audiobooks, live theatre, movies, music, travel, dining, skiing, golf

Summary of Committee Memberships/Panels/Working Groups (1994 - present)

Hospital: Current Positions;

none

Hospital: Past Positions - Atlanta, Georgia;

Chief, Section of Cardiology, Northside Hospital (main campus and Forsyth) 2004-2006

Northside Hospital Cardiac Research Subcommittee -2003-2010

Northside Forsyth PCI Subcommittee-2009-2010

Northside Hospital Cardiology Executive Committee - 2005- 2006

St. Joseph's Hospital Women and Heart Disease Board - 2006-2008

Clinical Methods Coordinator for Emory Univ Medical Students – NSH –2002- 2008

St. Joseph's Hospital Research Institute – Vice Chair – 2008 – 2009

St. Josephs Hospital CV Partners LLC- Operations and QA committee 2009

St. Josephs Hospital Heart Failure Advisory Board- 2005-2009

St. Josephs Hospital Translational Research Institute- Board Member- 2009

St. Josephs Hospital Institutional Review Board- member -2008-2009

Hospital: Past Positions in Toronto, Canada;

Medical Director – Scarborough Cardiology Research Organization, 1999 - 2002

Medical Director - Pacemaker /ICD Program, 1995-2002

Medical Director - Cardiac Cath Lab. 1999-2001

Chairperson - Cardiac Care Educational Rounds, 1995-2002

Chairperson- Data Mgmt and Advisory Committee, C.A.R.E. Clinic, 2000-2002

Chairperson, MAC Education Committee, 1997-1999

Chairperson, Cardiac Care Program Quality Assurance, 1995-1998

Chairperson – Cardiac Program Endowment Fund Committee, 1999-2001

Board Member, Physician Rep - Board of Directors, CHC Foundation, 1997-2001

Physician Rep-Major Gifts Committee CHC Foundation, 1997-1999

President, Medical Staff Society (MSS), 1996-1997

Vice-President, Medical Staff Society, 1995-1996

Secretary - Medical Staff Society, 1994-1995

MSS Rep, Board of Governors, 1995-1997

MSS Rep-Strategic Planning committee, 1996-1997, Credentials committee, 1996-1997

MSS Rep- Medical Advisory Committee (MAC), 1995-1997, Finance Committee, 1995-1996

Secretary, Dept of Medicine Business Meetings, 1994-1995

Member - MAC Research Committee, 1995-1999

Cardiologist Rep. Medical Program Clinical Management Committee, 1997-1999

Dept of Medicine Rep - Cardiac Arrest Committee, 1994-1999

Cardiac Program Rep on MAC Quality Assurance Committee - 1996-1997

Cardiologist Rep. Cardiac Care Community Advisory Committee - 1996-2002

Member-Annual Cardiology Day of Excellence Planning Committee, 1998-2002

Cardiologist Rep, Cardiac Care Teaching Committee, 1994-1997

Medical Program Representative - MAC Quality Assurance Committee, 1994-1995.

Member- Annual Clinic Update Day organization committee, 1994-1996

Physician Representative, Medical Program Utilization Committee, 1995-1996

Member- Cardiac Rehabilitation Development Committee, 1994-1996

Member - Cardiac Program Management Committee, 1996-2002

Member - Cardiac Diagnostics, Clinical Cardiac Care, Pacemaker/ICD Committee, 1994-2002

Summary of Committee Memberships/ Panels/Working Groups (1994 - present)

Regional- Current Positions in Georgia

none

Regional- Past Positions in Georgia

Atlanta Representative – GA chapter ACC Council – 2008-2014

Member - Kaiser Permanente CHF/CAD Working Group 2002-2006

Member – AHA board of directors, Metro Atlanta Division 2005-2008

Chair ACC-Georgia – Annual Scientific Sessions CME Planning Committee 2005-2010

Regional- Past Positions in Ontario, Canada:

Member, GTACC/Uof T Steering Committee 1999-2000

Chair, GTACC Informatics Committee, 1999 -2001

Chair - GTACC (Greater Toronto Area Community Cardiologists Association) 1996-1999

Executive Committee Member - GTACC, 1995- 2001

Medical Advisor - Scarborough Heart Health Network, 1995 - 1998

Co-Chair, GTACC Summer Retreat 1997

Co-Chair, GTACC/Univ of Toronto Summer Retreat 1998

Chair, Medtronic Ontario Physician's Pacemaker Symposium, 1998

Chair, Bayer Cardiology Weekend Retreat, 1999

Planning Committee, St Michael's Annual Cardiology for the Practitioner Day -1998

Planning Committee, GTACC/Univ of Toronto Summer Retreat 1999, 2000, 2001, 2002

Planning Committee, GTACC Fall Retreat 1999,2000,2001,2002

Planning Committee, GTACC Clinical Research Symposium, 2000,2001

Member – Advanced Cardiac Services Task Force 1997-2002

National/International - Current Positions in USA:

Director - SANSAR - South Asian Network Supporting Awareness and Research 2014-Present

National/International - Past Positions in Canada:

Panelist-Ask the Expert - Diabetes and Ethnicity, AHA Scientific Sessions, 2012

Panelist- Risk Stratification in a Multicultural Society, CCS Scientific Sessions, 2010

Panelist - Coronary Heart Disease in South Asians, AHA Scientific Sessions, 2005

Panelist - Coronary Heart Disease in South Asians, CCS Scientific Sessions, 2006

Member – Am College of Cardiology, Assessment Working Group, 2007-2010

National/International – Past Positions in Canada:

Secretary, Canadian Cardiovascular Society (CCS) 2000-2002

Executive Committee, Canadian Cardiovascular Society (CCS) 2000-2002

Executive Committee, Canadian Cardiovascular Academy, 2000 –2002

Council Member, Canadian Cardiovascular Society (CCS) 1999-2002

Chairperson, Membership Committee CCS, 2000-2002

Member, CCS Sponsorship Working Group, 1999

Member, CCS Nominating Committee, 1999, 2000, 2001

Co-Chair, St. Judes Medical 1st Annual Canadian Arrythmia Symposium, 1998

Co-Chair, St. Judes Medical 2nd Annual Canadian Arrythmia Symposium, 1999

Co-Chair, St. Judes Medical 3rd Annual Canadian Arrythmia Symposium, 2000

Co-Chair, St. Judes Medical 4th Annual Canadian Arrythmia Symposium, 2001

Primary panel, CCS Consensus Conference on Cardiac Transplantation, 2001

Co-chair, CCS Satellite Symposium – Metabolic syndrome - 2002

Co-chair, CCS Community Cardiologist Forum - 2001

Summary of University Clinical Teaching Experience (1994- present

Atlanta Teaching;

- Mercer and Augusta University PA Students cardiology electives
- PCOM osteopathic students- Suwanee Campus- cardiology electives
- 2nd yr Emory Medical students Clinical Methods Course
- Emory Cardiology Fellows Grady Memorial Hospital Cardiology Clinic
- Emory PA students doing community cardiology electives
- 3rd and 4th yr medical students doing community cardiology electives

University of Toronto Teaching;

- Clinical Clerk Seminars "Congestive Heart Failure", St. Michael's Hospital, 1995-1996
- Ambulatory Clinic Experience for cardiology fellows, 1994-2002
- Community Cardiology Elective for cardiology fellows, 1994-2002
- Community Cardiology Elective for 3rd and 4th yr medical students, 1994-2002
- "Health in the Community" Elective preceptor –1999-2000

Summary of Special Training /Certification

(1994 - present

- 1995-1996 Completed CMA- Physician Management Institute (PMI) program (courses I-IV)
- 1994-1997- Advanced Pacemaker Function Courses with Medtronic and St.Judes Medical
- 1995- HP Stress Echo techniques, interpretation and utilization course
- 1996- ICD Training courses with CPI, Medtronic and Telectronics
- 1997- Indiana University, Interpretive Stress Echo Course
- 1998- Am Soc Nuclear Cardiology, 3rd Annual Tutorial in Nuclear Cardiology
- 2001- certification with Datascope on IABP insertion
- 2002- certification with St Judes Medical on Angioseal closure device
- 2003- certification with Duett vascular closure device
- 2003- certification with St Judes Medical, Pacemaker Implantation Course
- 2006- HRS -ICD/CRT Device Implantation and follow up course
- 2007- Am Soc Nuclear Cardiology, 7th Annual Tutorial In Nuclear Cardiology
- 2008- CTA Course, Denver, Level II certification
- 2020- NAVIX Peripheral Vascular Ultrasound Interpretations Course

Summary of Group Practice Involvement

(2002 - present)

- Physician Manager of Diagnostic Lab, Northside Cardiology PC 2002-2005
- Director of Cardiac Research, Northside Cardiology PC- 2003-2010
- Physician Manager of Website, Northside Cardiology PC, 2004-2008
- Director of Cardiac Research, Atlanta Heart Specialists LLC- 2010-2020
- Director of Cardiac Research, NSC Cardiology/NSC Research 2020 present

Summary of Medical Industry Involvement

(1994 - present)

1998-99	Cardiology Preceptorship Experience – Searle Canada
1999	Contributor, Canadian Journal of CME
1998	Regional Lipid Advisory Board, Merck Canada
1999	Cardiology Consultant, Drug Intelligence Inc, Toronto
2000	National Standard Order Advisory Panel, Sanofi Canada
2001-03	National CAD Advisory Board, Pfizer Canada
2001	National Cardiac Advisory Board, Biovail Canada

Ongoing – active within pharma/device industry and professional medical organizations as a speaker, consultant, facilitator and CME organizer.

Regular Webcast and Podcast Speaker with MD Online and CCRN

Current Speakers Bureau;

Regional - Bayer, Amgen, Esperion, Alexion

National - Astra Zeneca, Janssen, Boehringer Ingelheim, Eli Lilly, Novo Nordisk

Have served on over 50 national and regional Speaker's Bureau and advisory boards

Summary of Internal Hospital Publications

(1994 - present)

Contributing Author

1994	Cardiac Care Program Strategic Plan
1995	Cardiac Care Program Strategic Plan Update
1995	3M Quality Healthcare Award - Your Heart is in Good Hands
1995	A Proposal to Establish A Cardiac Rehabilitation Program
1996	Cardiac Care Program Strategic Plan Update
1996	Regional Cardiac Care Center Proposal
1997	Cardiac Care Program-Strategic Plan
1997	Cardiac Care Hospital Accreditation Document
1998	Regional Advanced Cardiac Services Proposal
1998	Cardiac Care Program Strategic Plan
1999	High Risk Cardiac Intervention Service Proposal
1999	Response to CCNO on PM/ICD Services at CHC

Principal Author

1995	Dept of Medicine Annual QA Report
1996	Dept of Medicine Annual QA Report
1996	Effect of Early Ambulation on Hematoma Formation and Vascular Complications Study
1996	Cardiac Care Program Annual QA Report
1996	Implantable Cardioverter Defibrillator Follow-up Proposal
1997	Differential Effects of ACEI on QOL and exercise in Cardiac Rehabilitation Study
1998	Your Heart Is In Good Hands - Cardiac Care Program Brochure
1998	Cardiac Care Program Annual QA Report
1998	Dept of Medicine – CME Maintenance of Competency Policy

Summary of Clinical Research Trials Participation (1994- present

Principal Site Investigator- USA

IRIS- rosuvastatin vs atorvastatin in South Asians, one of the top enrolling US sites

ACCOMPLISH- outcomes trial using combination antihypertensives

EVEREST- tolvaptan in acutely decompensated CHF

OPTIMIZE-HF registry- in hospital CHF registry

LIFE- Guidant pacemaker trial

AWARE- Guidant pacemaker trial

Affects Registry- outpt atrial fibrillation registry

ULTRA- Guidant pacemaker trial

RELY- dabigitran vs warfarin in atrial fibrillation

TIMI 42 IMPROVE IT- ezetemibe on top of simvastatin in acute coronary syndrome

RED-HF- darbopoeitin in CHF pts

LTAP- Pfizer lipid management registry

CLEAR- Biotronik CLS technology pacemaker trial

TIMI 46 ATLAS- rivaroxaban dosing study in acute coronary syndromes

CURRENT OASIS 7- high dose clopoidogrel and ASA in ACS, 4th highest enroller in the USA

RIVAL - radial vs femoral PCI in ACS pts

OMACOR-AFIB- high dose omega 3's in atrial fib- top enrolling site in the study

RATE REGISTRY- St Judes pacemaker trial, 15th highest enrolling site

ASCEND HF- neseritide in acutely decompensated CHF

TRILOGY-ACS- prasugrel vs clopidogrel in medically managed ACS

TIMI 50 TRA-2P- vorapaxar in stable atherosclerotic disease, top enrolling site in the USA

NATURE- Sorin pacemaker trial, tied for highest enrolling USA site

Dal outcomes trial-dalcetrapib in ACS

TIMI 48 ENGAGE-AF- edoxaban in atrial fib, 4th highest enrolling site in the USA

ALTITUDE- aliskiren outcomes trial in diabetic hypertensives

TIMI 52 SOLID – LpPLA2 inhibitor darapladib in ACS pts

BRADYCARE- St Judes pacemaker trial

EMERALD- Sorin pacemaker trial

TIMI 54 PEGASUS- ticagrelor in chronic CAD - silver medal enrolling site

PALLAS- dronedarone in permanent atrial fibrillation

ASPECT- apadenosan vs adenosine in nuclear imaging

SAVOR TIMI 53- saxagliptin in diabetes and CAD -high enrolling site despite late participation

ASPECT II- apadenosan vs adenosine in nuclear imaging

REVEAL TIMI 55/HPS3 – ancetrapib/atorvastatin in CAD and high risk diabetics

DALOUTCOMES II- dalcetrapib in stable CAD and diabetics - top enrolling site worldwide

REDUCE-IT- EPA ethyl esters in CAD and high risk diabetics – high enrolling site

CANTOS – canakinumab IL-1 monoclonal antibody in post MI pts with high CRP

Takeda angina – febuxostat in chronic angina patients

ODYSSEY Longterm- PCSK9 inhibitor in stable CAD - high enrolling site in USA

ODYSSEY Outcomes- PCSK9 inhibitor in ACS pts - high enrolling site in USA

EUCLID – ticagrelor vs clopidogrel in PVD high enrolling site in USA

ACCELERATE - evacetrapib in ACS high enrolling site in USA

SIELLO - Biotronik lead evaluation clinical study high enrolling site in USA

GRAND – TAK 875 in diabetic pts

DECLARE TIMI 58 - Dapagliflozin in diabetic pts

CIRT – Methotrexate in CAD pts

GLORIA phase 1-3 - BI atrial fibrillation registry high enrolling site in USA

CAMELLIA TIMI 61- lorcacerin-Belviq in high risk obese and overweight pts high enrolling site

Summary of Clinical Research Trials Participation (1994- present

ORBIT II- atrial fibrillation Registry high enrolling site in USA

COMMANDER HF- Rivaroxaban in ischemic CHF

TIGRIS- AZ ACS registry post PCI

THEMIS- Ticagrelor in high risk diabetic pts

PARAGON HF- ANRI in preserved EF heart failure

CARMELINA- linagliptin in pts with diabetes, CAD and renal insufficieny

GEMINI - Rivaroxaban in ACS

VOYAGER- Rivaroxiban in PVD pts

AUGUSTUS – apixaban vs warfarin post PCI in afib pts with DAPT or TAPT

CADLAD – advanced analytics to assess for CAD

HARMONY- albiglutide in diabetic pts to reduce CV events

XL PAD- Vorapaxar vs. Placebo in PAD pts

PARADISE MI - Entresto vs. Ramipril in AMI pts

PROMINENT – Pemafibrate vs. Placebo in high TG diabetic pts

CLEAR – Bempedoic acid vs Placebo in statin intolerant pts

EMPEROR- empagliflozin in HFPEF pts

DAPA-HF- dapagiflozin in HFREF pts

ST JUDES BRADY MRI - Post approval MRI PM follow up

GOULD-PCSK9 Registry

LOWER- Juxtapid Registry

CADFEM- advanced analytics to assess for CAD

VESALIUS- alirocumab in CVD pts

NODE 303- Etripamil for SVT prevention

SELECT- Semaglutide in overweight non diabetic pts

ORION 4/HPS4- Inclisarin in CVD pts

SURPASS- dulaglutide vs tirzepatide in type 2 diabetics

AZALEA TIMI 71- rivaroxaban vs abelicimab in high risk atrial fibrillation

CARE HF- CHF registry to monitor hyperkalemia

ZEUS- Ziltvekimab in CHF and CKD

MK1242-035 – Veiciguat in stable HFrEF pts

Co-Investigator- USA

Adenosine Nuclear Stress - role of exercise during adenosine infusion, helped design study

FUSION II- outpt neseritide infusions for CHF

Ranolazine Dosing Trial- inpt high dose ranolazine trial

TOPCAT- aldactone in diastolic heart failure

ROCKET AF – rivaroxaban in atrial fibrillation

CARDIOMEMS- wireless PA sensor for CHF monitoring

Summary of Clinical Research Trials Participation (1994- present)

Principal Site Investigator- Canada

CARS- low dose ASA and warfarin in ACS, one of the top enrolling sites in North America

ESSENCE- enoxaparin in ACS, one of the top enrolling sites in North America

TRILOGY DR+- St Judes PM trial

PROTECT- perindopril in CAD pts

TIMI 11B- enoxaparin in ACS pts, one of the top enrolling sites in North America

MIRACL ACS- atorvastatin in ACS pts, one of the top enrolling sites in North America

OPUS-TIMI-16- sirofiban in ACS, one of the top enrolling sites in North America

RASTAF- Medtronic PM trial

PRINCESS- cerivastatin in ACS

OPUS-Angiographic- sirofiban angiographic sub study

Practice Patterns in Atrial Fib- Canadian atrial fib registry, was part of the steering committee

OVERTURE- omapatrilat vs enalapril in CHF

OCTAVE- omapatrilat in hypertension

Tirofiban Evaluation Study- hospital based comparative trial vs eptifibitide

CHARM- candesartan in CHF

MERCURY II- high dose rosouvastatin in CAD pts

INTERACT- enoxaparin in ACS, top enrolling site worldwide

SPORTIF-V- ximelgatroban vs warfarin in atrial fibrillation

ADONIS- dronedarone in atrial fibrillation

AF CHF- rate vs rhythm control in CHF pts with atrial fib

OAT- open artery hypothesis trial

Co-Investigator- Canada

GUSTO - tpa vs streptokinase, one of the top enrolling sites in North America

CAMIAT- amiodarone post myocardial infarction

HOPE- ramipril in stable CAD, one of the top enrolling sites in North America

CAPRIE- clopidogrel in atherosclerotic disease, one of the top enrolling sites in North America

C-TOPP- dual vs single chamber pacing, one of the top enrolling sites in North America

GUSTO II &IIb- hirudin vs heparin in ACS

GUSTO III- tpa vs retaplase

ACHIEVE- accupril in CHF

DIG- digoxin in CHF, one of the top enrolling sites in North America

RESOLVD- candesartan in CHF

SPICE- candesartan in CHF

CTAF- anti arrhythmic therapy in atrial fibrillation

CONVINCE- verapamil vs atenolol in CAD

CARDIZEM CD- diltazem effect on exercise tolerance

ACTION- nifedipine XL in CAD pts

ASSENT II- tenecteplase vs alteplase

COPERNICUS-carvedilol in acutely decompensated CHF

CORE- ReothRx infusion in ACS pts

VALIANT- valsartan vs captopril post myocardial infarction

CURE- carvedilol in acute coronary syndromes, one of the top enrolling sites in North America

GUSTO IV-ACS- Reopro in ACS

GUSTO V- retaplase vs Reopro in ACS

HOPE 2- vitamin E vs placebo, one of the top enrolling sites in North America

NICE-3- enoxaparin vs IIbIIIa inhibitors in ACS

PROVE-IT- atorvastatin vs pravastatin in ACS, one of the top enrolling sites in North America

SYNERGY- enoxaparin vs IIbIIIa inhibitors in ACS

ON TARGET- temilsartan vs ramipril in CAD

CAMELLIA TIMI 61- lorcacerin-Belviq in high risk obese and overweight pts

CIRT – Methotrexate in CAD pts

DECLARE TIMI 58 - Dapagliflozin in diabetic pts

SOCRATES Reduced- BAY1021189 oral sGC stimulator in HFrEF

SOCRATES Preserved- BAY1021189 oral sGC stimulator in HFpEF

REDUCE-IT- EPA ethyl esters in CAD and high risk diabetics - high enrolling site

FOURIER- evolucumab in high risk vascular pts

CASCADE/EMPA-REG- Empaglofozin to reduce CV events

PEGASUS- Ticagrelor vs ASA post MI

PARAMOUNT- LCZ696 in diastolic heart failure

PALLAS- dronedarone in CHF patients

GARFIELD- atrial fibrillation registry

ATMOSPHERE- aliskiren in CHF pts

HARMONY- albiglutide in diabetic pts to reduce CV events

STRENGTH - EPA Omega 3 in CAD pts

PROMINENT - Pemafibrate vs. Placebo in high TG diabetic pts

SODIUM HF - dietary sodium in CHF pts

VESALIUS- alirocumab in CVD pts

AZ REALIZE K- SZK in hyperkalemic pts with CHF

AZ MIRACLE- AZD9977 vs dapagliflozin in CHF pts with CKD

EMPEROR – Preserved- Empagliglozin in HFpEF

ARROWHEAD - AROAPOC3-2001 in severe hypertriglyceridemia

Summary of Investigator-Initiated Research

(1994- present)

 have designed and conducted multiple research studies that have focused on access to care, wait times, resource utilization acute coronary syndromes health outcomes in Canada and USA processes of care heart disease in South Asians Disparities in care for visible minorities

PLEASE SEE PUBLICATION LIST FOR FURTHER DETAILS

Summary of Other Research Activities

(1994- present)

- consulted for Takeda designing chronic angina trial (EXERT)
- consulted for Glock designing cholesterol absorption trial (G-PUR)
- Steering Committee SPRINT- AF study, CCRN, Canada
- Steering Committee CLASS ACT study, CCRN, Canada
- Steering Committee REACT study, CCRN, Canada
- Journal Reviewer American Heart Journal
- Journal Reviewer American Journal of Cardiology
- Journal Reviewer Canadian Medical Association Journal
- Journal Reviewer Journal of The American Medical Association
- Abstract Reviewer Canadian Cardiovascular Society meeting
- Abstract Reviewer American Heart Association meeting

- **1996** \$ 4000 Physicians Services Inc.(PSI) Foundation Grant for the Effect of Early Ambulation on Hematoma Formation and Vascular Complications Study
- **1998-** \$ 8000 Bristol-Myers-Squibb Research Grant to evaluate the presentation of Myocardial Infarctions in South Asians versus European Canadians
- **1999-** \$ 12000 Bristol-Myers Squibb Research Grant continue to evaluate the presentation of Myocardial Infarctions in South Asians versus European Canadians
- **1999-** \$ 12000 Parke-Davis Research Grant to evaluate the compliance of South Asians versus European Canadians patients with a diagnosis of CAD in the office setting
- **1999-** HCPRA 2nd place award for Excellence in Health Care Communication, Special Purpose Publication-General Category
- **2000-** \$ 12000 Parke-Davis Research Grant to evaluate the burden of CAD in South Asians vs European Canadians presenting to the cath lab
- **2000-** \$ 12000 Roche Research Grant to evaluate the presentation of South Asians versus European Canadians patients with CHF in the hospital
- **2000-** \$ 12000 Key-Schering Research Grant to evaluate the outcomes and compliance of South Asians versus European Canadians patients participating in cardiac rehabilitation
- **2001-** Awarded plaque of recognition for 6 years of contribution to the GTACC organization as the founding chair and then executive committee member
- **2001-** Presented letter of appreciation from the Prime Minister of Canada for volunteer efforts in conjunction with the Canadian Cardiovascular Society
- **2002-** Awarded plaque from CCC advisory group "in appreciation of your guidance and support for the cardiac care of the people in our community"
- **2002-** Awarded plaque from Rouge Valley Health System Foundation acknowledging "outstanding commitment and generosity of donations, time, and leadership" to RVHS Cardiac Care Program
- **2002-** Awarded plaque from RVHS Cardiologists "in recognition of outstanding clinical skills and leadership in promoting high quality care" to RVHS
- **2002-** Awarded plaque from Canadian Cardiovascular Society in appreciation of contributions as Secretary 2000-2002
- **2007-** Awarded plaque from Northside Hospital in appreciation of contributions as Section Chair, Cardiology
- **2010** Awarded \$173,000 investigator-initiated research grant from Gilead Sciences to look at the effect of ranolazine on CAD pts with metabolic syndrome and varying ethnicities
- **2010-** Awarded "Distinguished Service Award" from American College of Cardiology- GA Chapter for work as CME chair over past 6 years

- **2010-** Awarded through CCRN and Dr M Gupta investigator initiated grant from Astra Zeneca of \$3,664,353 for the PARADIGM study Primary Care Audit of Global Risk Management
- **2011** Awarded \$49,170 investigator-initiated research grant from Medtronics to look at the differential ICD utilization rates among various ethnic pts with advanced heart failure
- **2012** Awarded \$53,000 investigator-initiated research grant from Astellas to look at the Appropriate Use Criteria for outpt nuclear studies amongst physicians, gender and ethnicity
- **2012-** Awarded through CCRN and Dr M Gupta investigator initiated grant of \$2,845,668 from Bayer for the SPRINT-AF study Stroke Prevention in atrial fibrillation-A Prospective Canadian Registry
- **2014-** Awarded through CCRN and Dr M Gupta investigator initiated grant of \$600,783 from Valeant for CLASS-ACT Study Colesevelam, Lipids and Sugars, South Asian Canadian Trial
- **2016** Awarded through CCRN and Dr M Gupta investigator initiated grant of \$2,500,000 from Sanofi-Aventis REACT Study Relating Evidence to Achieving Cholesterol Targets Trial

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- **20.** Gupta M, Szmitko PE, **Singh N**, Tsigoulas M, Kajil M, Stone J. Management and control of Uncomplicated Hypertension in Canada: Insight from the Primary Care Audit of Global Risk Management (PARADIGM) Study *Canadian Journal of Cardiology 31(2015)664-670*
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NOTE: Publication list does not include multiple papers from multicenter clinical trials where authorship was given "...on behalf of the XXXXX Investigators"

Please see previous section for list of studies served as site principal investigator.

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