

# Diagnosis and Management of Hypertrophic Cardiomyopathy and Prevention of Sudden Death: The Next 50 Years

International Summit IV

**Barry J. Maron, MD**  
Summit Director

Dates: Friday – Sunday, October 16 – 18, 2009

Location: Hyatt Regency on Nicollet Mall,  
Minneapolis, Minnesota, USA

Major support through unrestricted  
educational grants provided by  
Boston Scientific; Medtronic, Inc.  
and St. Jude Medical

 **Minneapolis  
Heart Institute  
Foundation™**  
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## Summit Description

This summit will provide attendees with an opportunity to learn the clinical, morphologic and genetic spectrum of hypertrophic cardiomyopathy (HCM) from a world-renowned faculty. The program will explore the diverse views on the natural history and assessment of risk for sudden death.

## Who Should Attend

- Practicing cardiologists, internists, pediatricians and other health care professionals with an interest in HCM.
- Clinicians and basic researchers directly involved with cardiomyopathies.

## Summit Objectives

- Identify the clinical, morphologic and genetic spectrum of HCM.
- Explore the diverse views on the natural history and assessment of risk for sudden death.
- Review contemporary management strategies for high-risk and other patient subgroups, including surgical septal myectomy, alcohol septal ablation, pacing, and prevention of sudden death with implantable defibrillators.
- Assess and determine appropriate management of heart failure and arrhythmias, including atrial fibrillation and ventricular tachyarrhythmia.
- Identify mechanisms responsible for adverse clinical events and natural history.
- Learn the role of new diagnostic modalities including magnetic resonance imaging (MRI), positron emission tomography (PET), and advanced echocardiographic techniques.
- Understand the significance and occurrence of left ventricular outflow obstruction.
- Learn to detect and profile HCM in athletic populations.

## Accreditation

This activity has been planned and implemented in accordance with the Essential Areas and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint sponsorship of Allina Hospitals & Clinics and Minneapolis Heart Institute Foundation. Allina Hospitals & Clinics is accredited by the ACCME to provide continuing medical education for physicians.

The Center for Learning & Innovation, Office of Accreditation at Allina Hospitals & Clinics designates this educational activity for a maximum of 20.25 AMA PRA Category 1 Credits™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

The Center for Learning & Innovation, Office of Accreditation at Allina Hospitals & Clinics is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation. Participants can earn up to 20.25 nursing contact hours.

Individuals representing other professional disciplines may submit summit materials to their respective professional associations for 20.25 hours of continuing education credit.

# Faculty

**Michael J. Ackerman, MD, PhD**

Mayo Clinic  
Rochester, Minnesota

**Cristina Basso, MD, PhD**

Institute of Anatomic Pathology  
University of Padua  
Padua, Italy

**Eugene Braunwald, MD**

Harvard Medical School and  
Brigham and Women's Hospital  
Boston, Massachusetts

**Franco Cecchi, MD**

Referral Center for Cardiomyopathies  
Careggi University Hospital  
Florence, Italy

**Domenico Corrado, MD, PhD**

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Padua, Italy

**Joseph A. Dearani, MD**

Mayo Clinic  
Rochester, Minnesota

**N.A. Mark Estes, III, MD**

Director, Cardiac Arrhythmia Service  
Tufts Medical Center  
Boston, Massachusetts

**Robert G. Hauser, MD**

Senior Consulting Cardiologist  
Minneapolis Heart Institute Foundation  
Minneapolis, Minnesota

**Carolyn Y. Ho, MD**

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**Rutai Hui, MD, PhD**

Fu Wai Hospital and Cardiovascular Institute  
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**Harry M. Lever, MD**

Cleveland Clinic Foundation  
Cleveland, Ohio

**Barry J. Maron, MD**

Director, Hypertrophic Cardiomyopathy Center  
Minneapolis Heart Institute Foundation  
Minneapolis, Minnesota

**Martin S. Maron, MD**

Hypertrophic Cardiomyopathy Center  
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Boston, Massachusetts

**Rick Nishimura, MD**

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Careggi University Hospital  
Florence, Italy

**Steven R. Ommen, MD**

Mayo Clinic  
Rochester, Minnesota

**Antonio Pelliccia, MD**

Medical Director, Institute of Sports Medicine  
Italian National Olympic Committee  
Rome, Italy

**Heidi L. Rehm, PhD**

Laboratory for Molecular Medicine  
Partners Center for Genetics and Genomics  
Harvard Medical School  
Cambridge, Massachusetts

**Lisa Salberg**

CEO and Founder, Hypertrophic  
Cardiomyopathy Association (HCMA)  
Hibernia, New Jersey

**Christine E. Seidman, MD**

Department of Genetics  
Brigham and Women's Hospital and Harvard  
Medical School  
Boston, Massachusetts

**Christopher Semsarian, MD, PhD**

Centenary Institute, University of Sydney  
Royal Prince Alfred Hospital  
New South Wales, Australia

**Pravin M. Shah, MD**

Hoag Heart & Vascular Institute  
Newport Beach, California

**Mark V. Sherrid, MD**

St. Luke's-Roosevelt Hospital Center  
Columbia University, College of Physicians  
and Surgeons  
New York, New York

**Paolo Spirito, MD**

Ente Ospedaliero Ospedali Galleria  
Genoa, Italy

**Gaetano Thiene, MD**

Institute of Anatomic Pathology  
University of Padua  
Padua, Italy

**Jeffrey A. Towbin, MD**

Cincinnati Children's Hospital Medical Center  
Cincinnati, Ohio

**E. Douglas Wigle, MD, FRCPC**

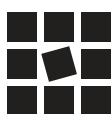
Toronto General Hospital  
Toronto, Ontario

**Anna Woo, MD, FRCPC**

Toronto General Hospital  
Toronto, Ontario

**Acknowledgements**

Minneapolis Heart Institute Foundation wishes to thank the following companies for unrestricted educational grants providing major support for this summit:



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We also wish to acknowledge the following companies for unrestricted educational grants in support of this summit:

**GeneDx, a subsidiary of Bio-Reference Laboratories, Inc.**

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**PGxHealth, a division of Clinical Data, Inc.**

**BIOTRONIK, Inc.**

**Correlagen Diagnostics, Inc.**

# Agenda (Note: Time between sessions will be used for Q&A and audience participation.)

## Friday, October 16, 2009

7:30 – 8:30 am Registration, continental breakfast, exhibits

8:30 – 8:35 am **Welcome: The Next 50 Years of HCM**  
Barry J. Maron, MD — Minneapolis Heart Institute Foundation

### Diagnosis/Structure/Etiology and Disease Expression

8:35 – 9:00 am **Basic principles: Definition, names, phenotypic expression, prevalence, pathophysiology and differential diagnosis**  
Barry J. Maron, MD — Minneapolis Heart Institute Foundation

9:10 – 9:40 am **The first 20 years of genomics: Clinical role of genetic testing, animal models, and phenocopies**  
Christine E. Seidman, MD — Brigham and Women's Hospital

9:50 – 10:10 am **Genetic testing for the diagnosis of HCM: How to interpret the reports**  
Heidi L. Rehm, PhD. — Harvard Medical School

10:20 – 10:45 am Break

10:45 – 11:10 am **Preclinical HCM: Identification and management considerations**  
Carolyn Y. Ho, MD — Brigham and Women's Hospital

11:20 – 11:45 am **HCM and spectrum of related cardiomyopathies in infancy and childhood, including Fabry, Noonan and other HCM phenocopies**  
Jeffrey A. Towbin, MD — Cincinnati Children's Hospital

11:55 – 12:20 pm **New diagnostic imaging modalities: What we have learned from CMR about the HCM phenotype...myocardium and mitral valve...beyond echocardiography**  
Martin S. Maron, MD — Tufts Medical Center

12:40 – 1:35 pm **Luncheon Panel: The Three Masters**  
E. Douglas Wigle, MD — Toronto General Hospital  
Pravin M. Shah, MD — Hoag Heart & Vascular Institute  
Eugene Braunwald, MD — Brigham and Women's Hospital

### Clinical Course and Prognosis: Heart failure

1:35 – 2:00 pm **Overview of natural history and clinical course**  
Barry J. Maron, MD — Minneapolis Heart Institute Foundation

2:10 – 2:35 pm **Genes and prognosis: Can mutations predict the future?**  
Michael J. Ackerman, MD — Mayo Clinic

2:45 – 3:10 pm **The left atrium and atrial fibrillation**  
Iacopo Olivotto, MD — Careggi University Hospital

3:20 – 3:45 pm **The spectrum of progressive heart failure in HCM: Clinical-pathologic correlations**  
Gaetano Thiene, MD — University of Padua

3:55 – 4:20 pm Break

- 4:20 – 4:45 pm     **Clinical evidence for myocardial ischemia, coronary flow reserve, and mechanisms of heart failure**  
Franco Cecchi, MD — Careggi University Hospital
- 4:55 – 5:20 pm     **HCM as a predominantly obstructive disease: The historical context of LV outflow obstruction, and full-circle from IHSS to obstructive HCM**  
Eugene Braunwald, MD – Brigham and Women’s Hospital
- 5:30 – 5:55 pm     **Clinical spectrum of the “end-stage”**  
Iacopo Olivotto, MD — Careggi University Hospital
- 6:05 pm             Adjournment
- 7:00 – 10:00 pm    Private dinner cruise on the Mississippi River aboard the Betsey Northrup, departing from Harriet Island in downtown St. Paul
- 10:00 pm            Cruise returns to dock

Agenda continues on next page



**Padelford Mississippi Riverboat Tour**

The dinner cruise is a unique social activity created to encourage interaction between faculty and Summit registrants. We encourage everyone to participate! The “Mighty Mississippi” is a huge part of the rich cultural and industrial history of the Minneapolis-St. Paul area. This private dinner cruise will depart near the Science Museum of Minnesota and take you through the heart of the Great River National Park, offering views of Fort Snelling and other St. Paul and Minneapolis historical sites.

## Agenda (continued)

### Saturday, October 17, 2009

7:30 – 8:20 am Continental breakfast and exhibits

#### Identification of the High-Risk Patient

- 8:20 – 8:30 am **Brief introduction to risk stratification strategies and selection of high risk patients in HCM**  
Barry J. Maron, MD — Minneapolis Heart Institute Foundation
- 8:30 – 8:50 am **Three Primary Prevention Risk Markers: Prognostic significance of syncope, LVH and the ambulatory Holter. Sudden death risk without risk factors?**  
Paolo Spirito, MD — Ente Ospedaliero Ospedali Galleria
- 9:00 – 9:25 am **Two Primary Prevention Risk Markers: Prognostic significance of family history of sudden death...and blood pressure response to exercise**  
Steven R. Ommen, MD — Mayo Clinic
- 9:40 – 10:05 am **New potential risk markers. Status of CMR post-contrast delayed enhancement and LV mass**  
Martin S. Maron, MD — Tufts Medical Center
- 10:15 – 10:40 am Break
- 10:40 – 11:05 am **Prevention of sudden death with the implantable cardioverter-defibrillator**  
Barry J. Maron, MD — Minneapolis Heart Institute Foundation
- 11:20 – 11:45 am **An electrophysiologist's perspective on mechanisms and decision-making for sudden death prevention**  
N.A. Mark Estes, III, MD — Tufts Medical Center
- 12:00 – 12:25 pm **The defibrillator industry and HCM: The good and the bad: progress in device quality with optimism for the future**  
Robert G. Hauser, MD — Minneapolis Heart Institute Foundation
- 12:35 – 1:45 pm Luncheon  
**The HCMA after one decade: Evolution of HCM centers in the U.S.**  
Lisa Salberg — Hypertrophic Cardiomyopathy Association

#### HCM Around the World

- 1:45 – 2:10 pm **Cardiovascular pathology is "alive and well" in Italy: Evidence for the unstable myocardial substrate and significance (or lack thereof) of myocardial bridging as a risk factor**  
Cristina Basso, MD — University of Padua
- 2:20 – 2:45 pm **From "Down Under": Insights on establishing a national HCM center in a "small" country**  
Christopher Semsarian, MD, PhD — Royal Prince Alfred Hospital
- 2:55 – 3:20 pm **Athlete's heart and its distinction from HCM: Consensus guidelines for eligibility/disqualification from sports competition to reduce risk**  
Antonio Pelliccia, MD — Italian National Olympic Committee

- 3:30 – 4:00 pm Break
- 4:00 – 4:35 pm **Debate: What is the most effective strategy for preparticipation screening to detect cardiovascular abnormalities in trained athletes?**  
**Point: The Italian model saves lives and is best...even here**  
Domenico Corrado, MD – University of Padua ...for the Italians  
**Counterpoint: The U.S. perspective**  
Barry J. Maron, MD - Minneapolis Heart Institute Foundation ...for the American Heart Association
- 4:45 – 5:10 pm **Prevalence and clinical/genetic spectrum of HCM in China**  
Rutai Hui, MD — Fu Wai Hospital and Cardiovascular Institute (Beijing)
- 5:20 pm Adjournment

## Sunday, October 18, 2009

7:30 – 8:30 am Continental breakfast and exhibits

### Strategies for Treatment of Heart Failure

- 8:30 – 8:50 am **The spectrum of pharmacologic treatment**  
Mark V. Sherrid, MD — Roosevelt-St. Luke's Hospital
- 9:00 – 9:30 am **Techniques, indications and results of surgical septal myectomy: The historic gold standard**  
Joseph A. Dearani, MD — Mayo Clinic
- 9:40 – 10:05 am **The Toronto surgical myectomy experience: Determinants of success and prognosis**  
Anna Woo, MD and E. Douglas Wigle, MD — Toronto General Hospital
- 10:15 – 10:40 am **Does surgical septal reduction prolong life and is there a case for earlier intervention?**  
Steve R. Ommen, MD — Mayo Clinic
- 10:50 – 11:15 am **Alternatives to surgery: A decade of alcohol ablation...where do we stand now?**  
Rick Nishimura, MD — Mayo Clinic
- 11:25 – 11:50 am **Surgical myectomy vs. alcohol septal ablation: What about a randomized trial? Role of the mitral apparatus**  
Harry M. Lever, MD — Cleveland Clinic Foundation
- 12:00 – 12:10 pm **Closing: The Next 50 Years**  
Barry J. Maron, MD — Minneapolis Heart Institute Foundation
- 12:10 pm Adjournment

## Summit Details

### Location

Hyatt Regency Minneapolis  
1300 Nicollet Mall  
Minneapolis, MN 55403, USA  
Tel: +1 612 370 1234 Fax: +1 612 370 1463

### Discounted Hotel Reservations

Rooms have been reserved at the Hyatt Regency Minneapolis at a discounted rate of \$179 for a single or \$204 for a double (plus tax). To ensure the discounted rate, reservations should be made before Wednesday, September 23, 2009.

- Online reservations are recommended:  
<http://minneapolis.hyatt.com/groupbooking/msprm10mh2009>
- To register by phone: 800-233-1234 (U.S. callers) or 1-402-593-8615 (international callers). To get the group rate, mention 2009 Hypertrophic Cardiomyopathy Conference or Minneapolis Heart Institute Foundation and the event dates.

### Tuition

**\$595 for physicians.**

**\$295 for other health professionals, residents and fellows.**

Tuition includes conference materials, breakfast, lunch and refreshments. Advanced registrations are required and will be accepted until Thursday, October 1. To ensure a comfortable environment, attendance may be capped; early registration is recommended.

Substitutes for registered participants are accepted but must be arranged in advance by contacting Eva Kovacs at 612-863-1657 or [HCMSSummit@mhif.org](mailto:HCMSSummit@mhif.org).

Cancellations should be submitted in writing prior to Thursday, October 1, by emailing [HCMSSummit@mhif.org](mailto:HCMSSummit@mhif.org) or faxing 612-863-3801. An administrative charge of 25% of your tuition payment will be retained and a confirmation sent to you. No refunds will be issued for cancellations received after Thursday, October 1, 2009.

All continuing medical education activities are subject to cancellation. In the event that this conference would have to be cancelled, Minneapolis Heart Institute Foundation is not responsible for any airfare, hotel or other costs incurred by participants. In the event of an emergency, we reserve the right to cancel a session or substitute a qualified speaker.

### Special Needs

The sponsors of this activity are fully committed to accommodating the special needs of participants. We will do everything possible to fulfill any requests submitted in writing no later than Thursday, October 1. Accommodations or special needs requested after that time frame cannot be guaranteed. You may email [HCMSSummit@mhif.org](mailto:HCMSSummit@mhif.org) or fax 612-863-3801 with any special requests.

### Disclosure Policy

The Center for Learning & Innovation intends to provide balance, independence, objectivity and scientific rigor in all of its sponsored educational activities. All faculty and planning committee members participating in sponsored activities and their spouse/partner are required to disclose to the activity audience any real or apparent conflict(s) of interest related to the content of this conference.

# Diagnosis and Management of Hypertrophic Cardiomyopathy and Prevention of Sudden Death: The Next 50 Years

International Summit IV

Summit Begins: Friday, October 16, 2009

Registration Deadline: Thursday, October 1, 2009

Minneapolis Heart Institute Foundation  
920 East 28th Street, Suite 100  
Minneapolis, MN 55407-1139  
Fax: 612-863-3801  
Email: HCMSummit@mhif.org  
Phone: 612-863-1657

**Our easy ONLINE  
registration form is available  
at <http://mplsheart.org/HCM!>**

## Please Print:

First Name \_\_\_\_\_ Last Name \_\_\_\_\_

E-mail \_\_\_\_\_

*(Your registration confirmation, conference information & survey will be sent to you via email)*

Credentials / Job Title \_\_\_\_\_

Place of Employment \_\_\_\_\_

## Mailing Information:

Home Address \_\_\_\_\_

City State Zip \_\_\_\_\_

Phone: Work \_\_\_\_\_ Home/Mobile \_\_\_\_\_

**Special Needs:** \_\_\_\_\_

## Tuition

\$595 for physicians

\$295 for other health professionals, residents and fellows

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## Registration Confirmation

A reminder email including a map with directions will be emailed to you one week prior to the conference. If you do not receive a confirmation prior to the conference, please contact Minneapolis Heart Institute Foundation to verify your registration.



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