



Mayo School of Continuous Professional Development

2016 Pediatric and Adult Congenital Cardiology Review Course

August 21-26, 2016

The Ritz-Carlton, Laguna Niguel - Dana Point, California

Register Today!



Program Directors:

Benjamin W. Eidem, M.D., FACC, FASE

Frank Cetta, M.D., FACC, FASE

Bryan C. Cannon, M.D., FACC, FHRS

Anthony C. Chang, M.D., MBA, MPH

REGISTER ONLINE TODAY!

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*Co-sponsored by Children's
Hospital of Orange County*



General Information

Course Description

The 2016 *Pediatric & Adult Congenital Cardiology Review Course* will be a comprehensive, state-of-the-art review of all aspects of pediatric and adult congenital cardiology. Well-known experts in the fields of Pediatric Cardiology, Adult Congenital Heart Disease, Cardiac Anesthesia, Cardiac Pathology, and Cardiovascular Surgery as well as specialists in Medical Genetics, Infectious Diseases, Pulmonary Medicine, and Critical Care, will provide in-depth lectures, case presentations, and interactive discussions. This course will cover the wide spectrum of subspecialty content important to individuals preparing for certification in Pediatric Cardiology or Adult Congenital Heart Disease. A question and answer session will be held each evening to review the daily course content as well as hone the participant's test-taking skills. It will also provide the practicing pediatric congenital cardiologist, adult congenital cardiologist, adult cardiologist, and primary care physician with a comprehensive review of the most up-to-date knowledge and newest scientific advances in our field.

Course Learning Objectives

Upon conclusion of this program, participants should be able to:

- Describe how to evaluate, diagnose, and treat the fetus, infant, child, and adult with congenital heart disease
- Demonstrate salient anatomic and hemodynamic features of congenital heart disease utilizing two-dimensional, Doppler, transthoracic, transesophageal and fetal echocardiography
- Analyze hemodynamics, angiography, and interventions in the diagnosis and management of patients with congenital heart disease
- Interpret ECG's and electrophysiology studies in infants, children, and adults with rhythm disorders
- Interpret the various physiologic responses to exercise and how these responses are impacted in patients with congenital heart disease
- Describe the rationale for treatment of the postoperative and critically ill patient in the cardiac ICU setting
- Identify statistical principles accurately and effectively in research study design

Attendance at this Mayo course does not indicate nor guarantee competence or proficiency in the performance of any procedures which may be discussed or taught in this course.

Intended Audience

This course is intended for recent graduates of Pediatric Cardiology subspecialty training programs preparing to take the Pediatric Cardiology Sub Board certification examination as well as the adult congenital heart specialist preparing to certify in Adult Congenital Heart Disease. This course is also ideally designed for the pediatric cardiologist, adult cardiologist, or primary care practitioner who desires a comprehensive review of all aspects of pediatric cardiology and the practicing pediatric cardiologist planning to re-certify for the Board examination.

Teaching Materials/Syllabus

Attendees will be provided a flash drive as well as a link to obtain course materials on the internet. Attendees should bring their own laptop or iPad.

Credit

Mayo Clinic College of Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

Mayo Clinic College of Medicine designates this live CME activity for a maximum of 46 AMA PRA Category 1 Credits™. Physicians should only claim credit commensurate with the extent of their participation in the activity.

Educational Grants

At the time of this printing, a complete listing of commercial supports was not available. Appropriate acknowledgment will be given to all supporters at the time of the meeting.

Exhibits will be available for viewing at all scheduled breaks.

Location

The sessions will be held at the Ritz-Carlton, Laguna Niguel Resort located at One Ritz-Carlton Drive, Dana Point, CA 92629. The sessions will be held in the Pacific Promenade Room at the hotel.



Registration

To register online, visit <http://ce.mayo.edu> (search: cardiology). The registration fee includes tuition, electronic syllabus, continental breakfasts, break refreshments and lunches. Although it is not Mayo School of Continuous Professional Development (CPD) policy to limit the number of registrants for a course, conference room facilities may necessitate closing of enrollment; therefore, early registration is advised. A letter of confirmation will be sent upon receipt of payment and completed registration form. Please present the confirmation letter when checking in at the meeting registration desk.

Registration Fees:

MD, PhD, DO.....	\$995
Fellows in Training, Resident, RN, Physician Assistant, Sonographer	\$795

For additional information, contact:

Mayo School of Continuous Professional Development Plummer 2-60/200 First Street SW Rochester, MN 55905	Website: <i>ce.mayo.edu</i> E-mail: <i>cme@mayo.edu</i> Phone: 800-323-2688 or 507-284-2509 Fax: 507-284-0532
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Cancellation Policy

If you cancel your participation in this course, your registration fee, less a \$75 administrative fee, will be refunded when written notification is received by Mayo School of CPD before August 7, 2016 (cme@mayo.edu or fax #: 507-284-0532). No refunds will be made on or after August 7, 2016. Canceled registrations are non-transferable.

Mayo School of CPD reserves the right to cancel or postpone any course due to unforeseen circumstances. In the unlikely event Mayo School of CPD must cancel or postpone this course, Mayo School of CPD will refund the registration fee, but is not responsible for any related costs, charges, or expenses to participants, including fees assessed by airline/travel/lodging agencies.

Travel

The Ritz-Carlton, Laguna Niguel is located in South Orange County on a bluff overlooking the Pacific Ocean, midway between Los Angeles and San Diego.

John Wayne Airport/Orange County - 25 minutes/23 miles

Los Angeles International Airport - 60 minutes/63 miles

San Diego Lindbergh Field Airport - 75 minutes/67 miles

Private transportation services (sedan/limousine) to/from all airports can be arranged by contacting The Ritz-Carlton, Laguna Niguel Concierge Desk at 949-240-5094. 24-hour advance notice required.

Travel arrangements are the sole responsibility of the individual registrant.

Lodging Accommodations

Guest rooms have been reserved for attendees and their guests with special course rates of \$295.00 for Run of House. In order to receive the special rate, reservations must be made before the room block is filled or before **Monday, July 18, 2016**, whichever comes first. Reservations will be taken following this date based on space and rate availability. Please call reservations at 877-266-6065 and identify yourself as a participant of the Mayo Clinic 2016 Pediatric Cardiology Review Course when making your reservation.

On-line reservations can be made at: <https://resweb.passkey.com/go/mayoclinicaug2016>

The Ritz-Carlton, Laguna Niguel is a beautiful luxury beach resort in Southern California. The Pacific Ocean caresses long, unspoiled stretches of beach under the gentle warmth of year-round sunshine, creating an area that attracts visitors from around the world. A choice of land and water activities abound including sailing, deep sea fishing and whale watching to golfing at nearby links. There is direct access to two miles of sandy beach.

For our program, the resort fee has been WAIVED and includes high speed internet access in all guestrooms, unlimited use of the tennis courts, full use of the fitness center, and beach recreation equipment.

Lodging and travel arrangements are the sole responsibility of the individual registrant.

Parking

The Ritz-Carlton, Laguna Niguel provides valet parking for all vehicles. Self-parking is NOT available. Valet parking is at a reduced rate of \$15 per night.

Recreation/Leisure Activities

- Dana Point, whose offshore waters provide abundant opportunities for sailing, sport fishing, jet-skiing and whale watching.
- Laguna Beach artists' colony, a cluster of more than 70 art galleries and boutiques
- Catalina Island, a land of enchantment and beauty 22 miles off the California coast
- Disneyland/California Adventure, offering entertainment, attractions and more
- LEGOLAND California, with 5,000 LEGO models, interactive attractions and rides
- San Diego Zoo, world-famous home to 4,000 exotic animals in natural habitats
- Sea World San Diego, for stunning animal shows and waves of excitement
- Golfing at the Oceanside Monarch Beach Golf Links adjacent to the resort, plus seven other unique Orange County courses within close proximity

Faculty

Course Directors

Benjamin W. Eidem, M.D., FACC, FASE
Professor of Pediatrics and Medicine,
Mayo Clinic;
Consultant, Division of Cardiovascular
Diseases and Pediatric Cardiology;
Director, Pediatric and Fetal
Echocardiography Laboratory;
Co-Director, Cardiovascular Ultrasound
Imaging and Hemodynamic Laboratory,
Mayo Clinic, Rochester, MN

*Bryan C. Cannon, M.D., FHRS, FACC,
CEPS, CCDS*
Associate Professor of Pediatrics,
Mayo Clinic; Consultant, Divisions of
Cardiovascular Diseases and Pediatric
Cardiology; Director, Pediatric
Arrhythmia and Pacing Service; Director,
Pediatric Cardiology Fellowship
Program, Mayo Clinic, Rochester, MN

Frank Cetta, M.D., FACC, FASE
Professor of Pediatrics and Medicine,
Mayo Clinic; Chair, Division of Pediatric
Cardiology;
Consultant, Division of Cardiovascular
Diseases and
Pediatric Cardiology, Mayo Clinic,
Rochester, MN

Anthony C. Chang, M.D., MBA, MPH
Chief Intelligence and Innovation Officer
Medical Director, the Sharon Disney
Lund Medical Intelligence and
Innovation Institute; Medical Director,
Heart Failure Program,
Children's Hospital of Orange County,
Orange, CA

Mayo Faculty

Michael J. Ackerman, M.D., Ph.D.
Windland Smith Rice Cardiovascular
Genomics Research Professor
Professor of Medicine, Pediatrics, and
Pharmacology
Director, Long QT Syndrome/Genetic
Heart Rhythm Clinic
Director, Windland Smith Rice Sudden
Death Genomics Laboratory
Consultant, Cardiovascular Diseases and
Pediatric Cardiology
President, Sudden Arrhythmia Death
Syndromes (SADS) Foundation
Mayo Clinic, Rochester, MN

Crystal R. Bonnicksen, M.D.
Assistant Professor of Medicine,
Mayo Clinic; Senior Associate
Consultant, Division of Cardiovascular
Diseases and Internal Medicine, Mayo
Clinic, Rochester, MN

Heidi M. Connolly, M.D. FACC
Professor of Medicine, Mayo Clinic;
Consultant, Division of Cardiovascular
Diseases; Director, Mayo Clinic Adult
Congenital Heart Center; Chair for
Education, Division of Cardiovascular
Diseases, Mayo Clinic, Rochester, MN

David J. Driscoll, M.D., FACC, FAHA
Professor of Pediatrics, Mayo Clinic;
Consultant, Division of Pediatric
Cardiology; Mayo Clinic, Rochester, MN

Justin M. Horner, M.D.
Assistant Professor of Pediatrics,
Consultant, Division of Pediatric
Cardiology, Mayo Clinic, Rochester, MN

Joseph J. Maleszewski, M.D., FCAP, FACC
Associate Professor of Pathology and
Medicine, Mayo Clinic College of Medicine
Consultant, Divisions of Anatomic
Pathology, Cardiovascular Diseases, and
Medical Genetics, Mayo Clinic,
Rochester, MN

Timothy J. Nelson, M.D., Ph.D.
Associate Professor of Medicine and
Pharmacology
Director, Todd and Karen Wanek
Program for Hypoplastic Left Heart
Syndrome
Medical Director, Regenerative Medicine
Consult Service Transplant Center
Mayo Clinic, Rochester, MN

Timothy M. Olson, M.D.
Professor of Pediatrics and Medicine,
Mayo Clinic;
Consultant, Division of Pediatric
Cardiology;
Director, Cardiovascular Genetics
Research Laboratory;
Mayo Clinic, Rochester, MN

Muhammad (Yasir) Qureshi, MBBS
Associate Consultant, Pediatric Cardiology
Assistant Professor of Pediatrics,
Mayo Clinic, Rochester MN

Philip L. Wackel, M.D.

Assistant Professor of Pediatrics;
Senior Associate Consultant,
Division of Pediatric Cardiology
Mayo Clinic, Rochester, MN

Guest Faculty

Michael G. Earing, M.D.

Director of the Wisconsin Adult
Congenital Heart Disease Program
(WAtCH)
Professor of Internal Medicine and
Pediatrics
Divisions of Adult Cardiovascular
Medicine and Pediatric Cardiology
Medical College of Wisconsin
Milwaukee, WI

Stephen M. Paridon, M.D., FACC

Professor of Pediatrics, The University
of Pennsylvania School of Medicine,
The Children's Hospital of Philadelphia,
Philadelphia, PA

*James C. Perry, M.D., FACC, FAHA,
FHRS, FAAP*

Professor of Pediatrics, University of
California San Diego; Director,
Electrophysiology and Adult Congenital
Heart Programs, UCSD/Rady
Children's Hospital, San Diego, CA

Sabrina D. Phillips, MD, FACC, FASE

Associate Professor of Medicine
Director, Adult Congenital Heart
Disease Services
Department of Medicine,
Cardiovascular Section
The University of Oklahoma Health
Sciences Center
Oklahoma City, OK

Robert E. Shaddy, M.D.

Jennifer Terker Professor of Pediatrics
Chief, Pediatric Cardiology
Vice Chair, Department of Pediatrics
Perelman School of Medicine at the
University of Pennsylvania
The Children's Hospital of Philadelphia
Philadelphia, PA

Thomas L. Spray, M.D.

Chief, Division of Cardiothoracic
Surgery, Alice Langdon Warner
Endowed
Chair in Pediatric Cardiothoracic
Surgery, The Children's Hospital of
Philadelphia, Philadelphia, PA

Evan M. Zahn, MD, FACC, FSCAI

Director, Guerin Family Congenital
Heart Program
Director, Pediatric Cardiology
Cedars-Sinai Medical Center
Los Angeles, CA

Faculty Disclosure

As a provider accredited by ACCME, Mayo Clinic College of Medicine (Mayo School of Continuous Professional Development) must ensure balance, independence, objectivity and scientific rigor in its educational activities. Course directors, planning committee, faculty, and all others who are in a position to control the content of this educational activity are required to disclose all relevant financial relationships with any commercial interest related to the subject matter of the educational activity. Safeguards against commercial bias have been put in place. Faculty also will disclose any off-label and/or investigational use of pharmaceuticals or instruments discussed in their presentation. Disclosure of this information will be published in course materials so those participants in the activity may formulate their own judgments regarding the presentation.

Program Schedule

Saturday, August 20, 2016

6:00-7:00 p.m. **Early Registration**

Sunday, August 21, 2016

7:00 a.m. **Registration and Continental Breakfast**

8:00 a.m. **Introduction and Welcome**
Benjamin W. Eidem, M.D.

Adult Congenital Heart Disease Mini-Symposia

8:15 a.m. **Overview of ABIM Test Content for ACHD Certification**
Drs. Heidi M. Connolly and Frank Cetta

8:30 a.m. **Pregnancy and Congenital Heart Disease**
Sabrina D. Phillips, M.D.

9:00 a.m. **Eisenmenger Disease and Pulmonary Hypertension**
Michael G. Earing, M.D.

9:30 a.m. **Refreshment Break**

9:45 a.m. **Anatomy of the Semilunar Valves and Great Arteries**
Joseph J. Maleszewski, M.D.

10:15 a.m. **Aortic Diseases, Marfan Syndrome, and Coarctation**
Heidi M. Connolly, M.D.

10:45 a.m. **Post-operative D-TGA and CC-TGA in the Adult**
Frank Cetta, M.D.

11:15 a.m. **Tetralogy of Fallot: Management Issues in Adults**
Crystal R. Bonnicksen, M.D.

11:45 a.m. **Arrhythmias in ACHD**
Bryan C. Cannon, M.D.

12:15 p.m. **Refreshment Break**

12:30 p.m. **Adult with Single Ventricle/Fontan**
Frank Cetta, M.D.

1:00 p.m. **ICU Management in the Adult with CHD**
Anthony C. Chang, M.D.

1:30 p.m. **Classic Images in ACHD**
Drs. Cetta, Chang, Phillips, Cannon

2:00 p.m. **Afternoon free to enjoy the beach and sun**

6:00 p.m. **ACHD - Review of the Current Guidelines**
Heidi M. Connolly, M.D.

6:30 p.m. **Lipid Management Guidelines**
Crystal R. Bonnicksen, M.D.

7:00 p.m. **Non-cardiac Disease in the ACHD Patient**
Sabrina D. Phillips, M.D.

7:30 p.m. **SIMULATED BOARD QUESTIONS**
All Faculty

Monday, August 22, 2016

6:30 a.m. **Continental Breakfast**

7:00 a.m. **Overview of Congenital Heart Embryology**
Michael G. Earing, M.D.

8:00 a.m. **Congenital Cardiac Anatomy 1**
Joseph J. Maleszewski, M.D.

9:00 a.m. **Clinical Diagnosis of Heart Disease in Children**
David J. Driscoll, M.D.

10:00 a.m. **Refreshment Break**

10:30 a.m. **Heart Failure in CHD**
Robert E. Shaddy, M.D.

11:30 a.m. **Echocardiography**
Benjamin W. Eidem, M.D.

12:30 p.m. **Lunch**

2:00 p.m. **Primer on Statistics & Epidemiology**
Anthony C. Chang, M.D.; Justin M. Horner, M.D.

4:00 p.m. **Congenital Cardiac Anatomy II**
Joseph J. Maleszewski, M.D.

5:00 p.m. **Echo Challenge**
*Benjamin W. Eidem, M.D.;
Frank Cetta, M.D.*

5:30 p.m. **SIMULATED BOARD QUESTIONS**
All Faculty

6:30 p.m. **Adjourn**

Tuesday, August 23, 2016

6:30 a.m. **Continental Breakfast**

7:00 a.m. **Exercise Physiology: Cardiovascular and Ventilatory Responses to Exercise and Training**
David J. Driscoll, M.D.

8:00 a.m. **Cardiac Lesions I – ASD, VSD, AVSD, APVC**
Stephen M. Paridon, M.D.

9:30 a.m. **Refreshment Break**

10:00 a.m. **Outpatient Cardiology**
David J. Driscoll, M.D.

11:00 a.m. **Pulmonary Physiology/ Pulmonary Hypertension**
Stephen M. Paridon, M.D.

12:00 p.m. **Question & Answer**

12:30 p.m. **Afternoon free to enjoy the beach and sun**

4:30 p.m. **Cardiac Transplantation**
Robert E. Shaddy, M.D.

5:30 p.m. **Cardiac Pharmacology**
Justin M. Horner, M.D.

6:30 p.m. **SIMULATED BOARD QUESTIONS**
All Faculty

7:30 p.m. **Adjourn**

Wednesday, August 24, 2016

6:30 a.m. **Continental Breakfast**

7:00 a.m. **Surgical Palliation of CHD**
Thomas L. Spray, M.D.

8:00 a.m. **Cardiac Lesions II – TOF, TGA, Truncus**
Philip L. Wackel, M.D.

9:30 a.m. **Refreshment Break**

10:00 a.m. **12 ECG's that You Should Recognize**
Bryan C. Cannon, M.D.

11:00 a.m. **Cardiac Catheterization**
Evan M. Zahn, M.D.

12:00 p.m. **Question & Answer**

12:30 p.m. **Afternoon free to enjoy the beach and sun**

1-3:00 p.m. **MOC – Optional Session**

4:30 p.m. **Cardiac Lesions III – HCM, DCM, RCM, LVNC**
Benjamin W. Eidem, M.D.

5:30 p.m. **Cath Workshop**
Evan M. Zahn, M.D.

6:30 p.m. **SIMULATED BOARD QUESTIONS**
All Faculty

7:30 p.m. **Adjourn**

Thursday, August 25, 2016

- 6:30 a.m. **Continental Breakfast**
- 7:00 a.m. **Cardiac Physiology**
Anthony C. Chang, M.D.
- 8:00 a.m. **Cardiac Lesions IV – SV, Fontan/PLE**
Frank Cetta, M.D.
- 9:30 a.m. **Refreshment Break**
- 10:00 a.m. **Cardiac MRI, CT and HLHS**
Muhammad (Yasir) Qureshi, M.D.
- 11:00 a.m. **Cardiac Intensive Care in Congenital Heart Disease**
Anthony C. Chang, M.D.
- 12:00 p.m. **Question & Answer**
- 12:30 p.m. **Afternoon free to enjoy the beach and sun**
- 4:30 p.m. **Genetic Disorders & Translational Cardiology Frontiers in CHD**
Timothy J. Nelson, M.D.; Timothy M. Olson, M.D.
- 5:30 p.m. **Cardiac Action Potentials**
Michael J. Ackerman, M.D.
- 6:00 p.m. **Systemic Diseases & Cardiovascular Sequela**
Muhammad (Yasir) Qureshi, M.D.
- 6:30 p.m. **SIMULATED BOARD QUESTIONS**
All Faculty
- 7:30 p.m. **Adjourn**

Friday, August 26, 2016

- Electrophysiology Mini-Symposia**
Bryan C. Cannon, M.D.; James C. Perry, M.D., Philip L. Wackel, M.D., and Michael J. Ackerman, M.D.
- 6:30 a.m. **Continental Breakfast**
- 7:00 a.m. **ECG Interpretation of Arrhythmias and Medical Management of Arrhythmias**
Philip L. Wackel, M.D.
- 8:00 a.m. **Management of Arrhythmias in EP Lab**
James C. Perry, M.D.
- 9:30 a.m. **Refreshment Break**
- 10:00 a.m. **Syncope & Sudden Death and Overview of Channelopathies**
Michael J. Ackerman, M.D.
- 10:30 a.m. **ICD's and Pacemakers**
Bryan C. Cannon, M.D.
- 11:00 a.m. **EP Simulated Board Questions**
All Faculty
- 11:30 a.m. **SIMULATED BOARD QUESTIONS POST TEST**
All Faculty
- 1:00 p.m. **Adjourn**

MAYO CLINIC
200 First Street SW
Rochester, MN 55905



2016 Pediatric and Adult Congenital Cardiology Review Course

August 21-26, 2016

The Ritz-Carlton, Laguna Niguel • Dana Point, California

Course Description

The *2016 Pediatric & Adult Congenital Cardiology Review Course* will be a comprehensive, state-of-the-art review of all aspects of pediatric and adult congenital cardiology. Well-known experts in the fields of Pediatric Cardiology, Adult Congenital Heart Disease, Cardiac Anesthesia, Cardiac Pathology, and Cardiovascular Surgery as well as specialists in Medical Genetics, Pulmonary Medicine, and Critical Care, will provide in-depth lectures, case presentations, and interactive discussions. This course will cover the wide spectrum of subspecialty content important to individuals preparing for certification in Pediatric Cardiology or Adult Congenital Heart Disease. A question and answer session will be held each evening to review the daily course content as well as hone the participant's test-taking skills. It will also provide the practicing pediatric congenital cardiologist, adult congenital cardiologist, adult cardiologist, and primary care physician with a comprehensive review of the most up-to-date knowledge and newest scientific advances in our field.

REGISTER ONLINE TODAY!

ce.mayo.edu (Search: Cardiology)

If you already received a copy of this brochure, please give this brochure to an interested colleague.

REGISTER TODAY!

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