

ACCREDITATION STATEMENT

This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education through the joint sponsorship of the University of California, Irvine School of Medicine and Aligned Management Associates, Inc. The University of California, Irvine School of Medicine is accredited by the ACCME to provide continuing medical education for physicians.

CME Credit Designation Statement

The University of California, Irvine School of Medicine designates this live activity for a maximum of **24 AMA PRA Category 1 Credits™**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Disclosure Policy

It is the policy of the University of California, Irvine School of Medicine and the University of California CME Consortium to ensure balance, independence, objectivity and scientific rigor in all CME activities. Full disclosure of conflicts and conflict resolutions will be made prior to the activity in writing via handout materials, insert, or syllabus.

PRODUCT THEATERS

Product Theaters offer you an in-depth look at the commercial products that shape your work environment and have the potential to change your practice. Plan to attend PTs to gain valuable insight into new CPB products and services, hear about some of the latest findings in CPB care, experience firsthand demonstrations of innovative equipment and technologies, and get answers from key experts and vendors.

Your CREF badge is your ticket to every Product Theater (PT) offered. PTs do not compete with other educational programming, so plan to attend as many as you wish. CME credit is not offered for Product Theaters.

CPR RECERTIFICATION COURSE

AHA Certification in BCLS-CPR is mandatory for all healthcare professionals. The fee for this hands-on course on Wednesday afternoon covers everything you need to recertify: course materials and CPR card—as well as additional Category III CEUs.

PERFUSION SCHOLARSHIPS

Perfusion scholarships to attend **CREF 2014** are available to all current, active perfusion students. Directors from United States perfusion training institutions have an excellent opportunity to reward their top students by nominating them to receive one of the following scholarships to attend the CREF meeting next February:

- One student will receive free CREF meeting registration, four nights in the conference hotel, a \$500 travel stipend, and a 10-minute speaking opportunity at the conference.
- Four additional applicants will receive free meeting registration.

In addition to hearing and learning about superb scientific content of the meeting, student scholars will connect with veteran perfusionists, who will introduce them to other colleagues and help them feel at ease. In addition, they will meet industry representatives in the exhibit hall and in Product Theaters, experiencing the most advanced products available in their field.

If you know someone who might be interested in applying for a scholarship, email info@crefmeeting.com.

CEU Designation Statement

The American Board of Cardiovascular Perfusion has allotted **38.1 CEU hours** to perfusionists in attendance.

The Cardiothoracic Education and Research Institute is approved by the California Board of Registered Nursing, Provider Number CEP9793, for **38.1 contact hours**.

California Assembly Bill 1195

This activity is in compliance with California Assembly Bill 1195, which requires continuing medical education activities with patient care components to include curriculum in the subjects of cultural and linguistic competency. For specific information regarding Bill 1195 and definitions of cultural and linguistic competency, please visit the CME website at www.cme.uci.edu.

ADA Accommodation

In compliance with the Americans With Disabilities Act, we will make every reasonable effort to accommodate your needs. For special requests, please call 1-805-541-3118 on or before January 1, 2014.

Acknowledgment of Commercial Support

We wish to thank Medtronic for their grant in support of this activity.

CARDIAC SURGERY & PERFUSION ART GALLERY

CREF 2014 attendees will have a special opportunity to view a gallery of cardiac surgery and perfusion art images, courtesy of Circuit Surfers (www.circuitsurfers.com). This gallery features a collection of perfusion-related images submitted by international artist-perfusionists. Its large-format canvas images will be displayed in the hotel foyer during the meeting, and some will be available for purchase.

All artwork is part of the Circuit Surfer's online photo gallery highlighting the lives and events of people in the perfusion profession. The project aims to provide a bridge between perfusion cultures, introduce the vivid world of perfusion to people unfamiliar with the profession, and graphically answer the question *What is a Perfusionist?*



CREF 2014

793-A E. Foothill Blvd., #119
San Luis Obispo, CA 93405

Return Service Requested



COURSE REGISTRATION

Your registration for **CREF 2014** includes conference materials, continental breakfasts, Welcome Reception, coffee breaks, and admission to all industry-sponsored Product Theaters.

GUEST REGISTRATION

Guest registration is available only for a person who accompanies a full-conference attendee. Guests may attend Product Theaters, social functions, and meals. Guest registrants may not attend educational sessions or receive continuing-education credit for their attendance.

FREE SATURDAY CMES AND CEUS FOR TEAM MEMBERS

CREF is an interdisciplinary meeting, so it offers education to meet the needs of the entire cardiac surgery team. Our guiding philosophy is simple: teams who learn together make positive, well-informed changes together to improve patients' lives. To support this concept, team members may accompany full-conference attendees for the Saturday safety and team-building sessions *at no cost* and receive *free CME* and *free CEU credits* for that day only.

If you or a colleague are interested in taking advantage of this opportunity, email info@crefmeeting.com to receive complete registration instructions.

www.crefmeeting.com • 1-805-534-0300 • info@crefmeeting.com

SAN DIEGO ATTRACTIONS

Why limit yourself to downtown San Diego? The meeting ends early on Saturday, so stay an extra day or two to explore by rental car or trolley all that the area has to offer:

- Sea World
- Balboa Park
- Coronado Island
- San Diego Zoo
- San Diego Zoo Safari Park
- Old Town & Mission San Diego
- Legoland
- La Jolla Beaches

For more information, visit www.crefmeeting.com.

ONLINE REGISTRATION

- Step 1:** Visit www.crefmeeting.com and select Conference Registration from menu.
- Step 2:** Click the "Register Now" button, enter information, and pay by American Express, MasterCard, Visa, check, or wire transfer.
- Step 3:** Receive email confirmation of your registration. Using your account password, log in at any time to print an invoice or modify your registration.

REGISTRATION TYPE:	ON OR BY NOV. 15	ON OR BY JAN. 10	AFTER JAN. 10
MDs & Biomedical Professionals	\$449	\$475	\$499
CCPs, RNs, PAs	\$399	\$425	\$449
Residents/Students (with verification of status)	\$275	\$300	\$325
CPR Recertification Course	\$85	\$85	\$100
Guest Registration	\$50	\$75	\$100

GROUP DISCOUNT: If three or more colleagues from the same U.S. hospital or medical center register together, then each will receive a 20% discount to attend CREF 2014.

To take advantage of this special registration discount, please contact CREF Registration at info@crefmeeting.com.

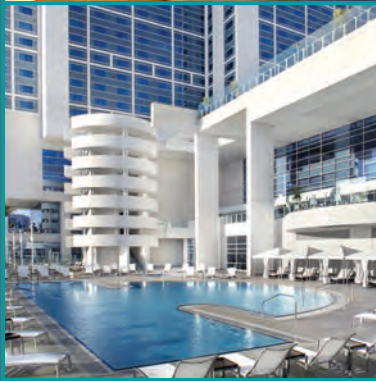
REFUND INFORMATION: Refunds (less \$100 administrative fee) will be made only if written notice is received **before January 22, 2014**.

HOTEL REGISTRATION

The Hilton San Diego Bayfront Hotel serves once again as the CREF conference hotel, and no other hotel in the city can compare to its elegance and sophistication. Walk to the Gaslamp Quarter, Horton Plaza, and PETCO Park, or stroll along the bay to visit Seaport Village. Minutes from the San Diego International Airport, this beautiful hotel offers the finest amenities and lays the best of San Diego at your doorstep.

Conference attendees reserve their own rooms directly by phone or internet. Rates for Single or Double are \$224/night. To obtain this specially discounted rate, register by **Friday, January 10, 2014**, and remember to mention **CREF**.

Hilton San Diego Bayfront
1 Park Boulevard, San Diego, CA 92101
Phone: 1-619-564-3333
Internet: www.crefmeeting.com/hotel.html



34th Annual

CARDIOTHORACIC SURGERY SYMPOSIUM

February 5 – 8, 2014

Hilton San Diego Bayfront Hotel
San Diego, California

ACTIVITY CO-DIRECTORS



ALFRED H. STAMMERS MSA CCP PBMT
*Pocono Medical Center
East Stroudsburg, Pennsylvania*



JULIE A. SWAIN MD
*Program Co-Director
Cardiothoracic Surgery Symposium*

FEATURED SPEAKER



SR. SIMONE CAMPBELL SSS JD
*Executive Director, NETWORK
Washington, DC*

SESSION & LECTURE TOPICS

Affordable Care Act

Cardiac Surgery Update

Neurological and Renal Protection

Management of Blood and Bleeding

Improving Safety: Individual and Team Strategies

Short- and Long-Term Circulatory Assist

Bullet Abstracts and Challenging Cases

Medtronic 15th Annual Utley Award

Fireside Chats: Cases and Questions

Retirement / Reinvention Planning

38.1 CEUs and 24 CME Credits!

Jointly sponsored by the University of California, Irvine School of Medicine and Aligned Management Associates, Inc.

www.crefmeeting.com

**CREF
2014**



COURSE DESCRIPTION & ATTENDEE PROFILE

Since 1981, the **Cardiothoracic Surgery Symposium (CREF)** has provided a premier educational forum for healthcare professionals whose work relates to cardiopulmonary bypass and extracorporeal perfusion.

This annual four-day conference provides Category 1 CME and CEU credits, meeting the specific educational needs of all members of the cardiac surgery team: cardiac surgeons, cardiovascular anesthesiologists, nurses, perfusionists, and physician assistants.

CREF 2014 offers an unparalleled educational experience you won't find anywhere else: in-depth presentations, hands-on training workshops, open fireside discussions, panel and case discussions, and Product Theaters on topics related to cardiovascular surgery and extra corporeal perfusion. Its impressive exhibit show features a comprehensive display of new equipment and technology.

COURSE OBJECTIVES

After completion of this activity, you should be able to:

- Apply specific emotional, financial, and practical strategies to plan for a meaningful, satisfying retirement
- Safely implant and manage mechanical circulatory assist devices in adult and pediatric patients with cardiac failure, including diagnosing and treating clinical dilemmas associated with these devices
- Employ practical, evidence-driven strategies to minimize neurological complications associated with cardiac surgery, including reducing gaseous microemboli, selecting an appropriate cerebral monitoring system, and employing an appropriate postoperative ICU strategy
- Apply specific evidence-based strategies to effectively mitigate acute kidney injury associated with cardiac surgery, and select future treatment options that may improve patients' short- and long-term outcomes
- Identify how the Affordable Care Act will affect healthcare delivery in your practice and/or hospital so that you can best prepare for those changes; help patients understand ACA-related opportunities and challenges they may face
- Review the latest evidence-based approaches to blood management to develop practical strategies to optimize blood conservation, reduce transfusion-related risks, and effectively administer allogeneic products in your clinical practice
- Apply quality-assurance principles, team-building techniques, and human-factors-engineering strategies to improve safety and performance, reduce and better manage errors, revise protocols, increase consistency of care, contain costs, and improve clinical outcomes.

CO-DIRECTORS AND INVITED FACULTY

ACTIVITY CO-DIRECTORS



Alfred H. Stammers
MSA CCP PBMT
Pocono Medical Center
East Stroudsburg, Pennsylvania



Julie A. Swain MD
Program Co-Director
Cardiothoracic Surgery Symposium

INVITED FACULTY

Stephen F. Barnes PhD
Adjunct Professor of Adult Education
San Diego State University, San Diego, California

Eugene H. Blackstone MD
Head of Clinical Investigations
Sydell and Arnold Miller Family Heart & Vascular Institute
Staff Surgeon, The Cleveland Clinic, Cleveland, Ohio

Charles H. Brown IV, MD MHS
Assistant Professor
Department of Anesthesiology and Critical Care Medicine
The Johns Hopkins University School of Medicine
Baltimore, Maryland

Sr. Simone Campbell SSS JD
Executive Director
NETWORK, Washington, DC

David C. Fitzgerald BS CCP
Chief of Cardiovascular Perfusion
INOVA Fairfax Hospital for Children
INOVA Heart and Vascular Institute
Falls Church, Virginia

A. Marc Gillinov MD
Staff Surgeon and the Judith Dion Pyle Chair in Heart Valve Research
Department of Thoracic & Cardiovascular Surgery
The Cleveland Clinic Foundation, Cleveland, Ohio

William E. Harris CCP LP FFP
Chief Perfusionist, Department of Extracorporeal Technology
Ochsner Medical System, New Orleans, Louisiana

Mary B. Hartley CCP RN
UCSD Medical Center, San Diego, California

William D. "Scott" Killgore PhD
Associate Professor & Director, SCAN Lab
Harvard Medical School
Center for Depression, Anxiety, & Stress Research
McLean Hospital, Boston, Massachusetts

Robert S. Kramer MD FACS
Director of Research and Quality Improvement
Division of Cardiothoracic Surgery
Maine Medical Center, Portland, Maine

Ahmses S. Maat RRT CCP DMD
President, Ta Meri, Inc., Lake Elsinore, California

Richard F. Newland CCP BSc
Chief Perfusionist
Flinders Medical Centre, Bedford Park, South Australia

Eyal E. Porat MD
Professor of Cardiothoracic and Vascular Surgery
The University of Texas Health Science Center
Houston, Texas

Craig H. Selzman MD
Associate Professor of Cardiothoracic Surgery
Surgical Director, Cardiac Mechanical Support and Heart Transplant Program
Surgical Director, Lung and Heart/Lung Transplant Program
University of Utah, Salt Lake City, Utah

George Silvay MD PhD
Professor of Anesthesiology
The Mount Sinai School of Medicine, New York, New York

Bruce D. Spiess MD FAHA
Professor of Anesthesiology and Emergency Medicine
Senior Fellow VCURES Institute
Virginia Commonwealth University Medical Center
Richmond, Virginia

Bryan M. Stebel CFP RFC CRPC
President, Stebel Financial Group, LLC
Solana Beach, California

Paul N. Uhlig MD MPA FACS
Associate Professor
University of Kansas School of Medicine
Medical Director, Cardiovascular Intensive Care Unit
Wesley Medical Center, Wichita, Kansas

Jonathan H. Waters MD
Chief of Anesthesia Services, Magee-Women's Hospital
Medical Director, Perioperative Blood Management Program
University of Pittsburgh Health System
Pittsburgh, Pennsylvania

Robert L. Wiebe MD invited
EVP/Chief Medical Officer, Dignity Health
San Francisco, California

Douglas A. Wiegmann PhD
Associate Professor of Industrial and Systems Engineering
University of Wisconsin, Madison, Wisconsin

Y. Joseph Woo MD
Professor of Surgery
Director, Cardiac Transplantation and Mechanical Circulatory Support Program
Director, Minimally Invasive and Robotic Cardiac Surgery
University of Pennsylvania Health System
Philadelphia, Pennsylvania

WEDNESDAY, FEBRUARY 5

11:00 AM Registration Opens

11:30 – 3:30 CPR RECERTIFICATION COURSE
Instructor: Ahmses S. Maat RRT CCP DMD

11:30 – 1:30 RETIREMENT or REINVENTION: WHAT'S NEXT?
Moderator: Julie A. Swain MD

11:30 Retirement: Are You Ready?
Stephen F. Barnes PhD

12:15 Financial Planning for Retirement: Preparing Now for Success Later
Bryan M. Stebel CFP RFC CRPC

12:45 Panel Discussion: Profiles in Retirement: Meaningful Options for Healthcare Professionals

1:30 – 1:45 Break

1:45 – 2:00 INTRO, WELCOME, & OVERVIEW OF GUIDELINES
Moderators: Alfred H. Stammer MSA CCP PBMT and Julie A. Swain MD

2:00 – 3:45 MECHANICAL CIRCULATORY ASSIST
Moderator: Craig H. Selzman MD

2:00 Mechanical Circulatory Support: Past, Present, and Future
Craig H. Selzman MD

2:30 Update on VAD Developments
David C. Fitzgerald BS CCP

3:00 The Evolving Paradigms of ECLS/ECMO: "Have a Pump and Ready to Roll"
William E. Harris CCP LP FFP

3:30 Discussion

3:45 – 4:00 Break

4:00 – 5:00 ABSTRACT & PERFUSION SCHOLAR PRESENTATIONS
Moderators: Richard F. Newland CCP BSc and Craig H. Selzman MD

Oral presenters will be announced after the abstract deadline of December 15, 2013. Check our website then for an updated agenda.

5:00 – 6:00 WELCOME RECEPTION IN EXHIBIT HALL

THURSDAY, FEBRUARY 6

6:30 AM Registration Opens

7:00 – 8:00 TERUMO BREAKFAST PRODUCT THEATER*
Nonin Medical's EQUANOX Technology and Dynamic Compensation
Presenter: Miles Mehaffey

7:15 – 8:00 Continental Breakfast

8:00 – 9:15 UPDATES IN CARDIAC SURGERY
Moderator: Julie A. Swain MD

8:00 Surgical Treatment of Atrial Fibrillation: State of the Art
A. Marc Gillinov MD

8:30 Advances in Minimally Invasive Valve Surgery
Y. Joseph Woo MD

9:00 – 9:15 Discussion

9:15 – 10:00 Break and Exhibits Open

10:00 – 12:30 NEUROLOGICAL PROTECTION
Moderator: Julie A. Swain MD

10:00 Monitoring Cerebral Autoregulation During Cardiopulmonary Bypass to Improve Neurological Outcomes
Charles H. Brown IV, MD MHS

10:30 Gaseous Microemboli: Are They Relevant in Contemporary CPB?
Richard F. Newland CCP BSc

11:00 Cardiopulmonary Bypass Management, Neurological Monitoring and Brain Protection for Thoracic Aortic Surgical Procedures
Eyal E. Porat MD

11:30 The Impact of Postoperative Management on Neurological Outcomes Following Cardiac Surgery
Charles H. Brown IV, MD MHS

12:00 Discussion + Case Presentations

12:30 – 1:30 MAQUET LUNCH PRODUCT THEATER*

12:30 – 1:30 Exhibits Open

1:30 – 3:15 PERIOPERATIVE STRATEGIES
Moderator: Alfred H. Stammers MSA CCP PBMT

1:30 Intraoperative Strategies for the Prevention of Cardiac Surgery Associated Acute Kidney Injury
Robert S. Kramer MD

2:00 The Perfusionist's Role in the Current State of TAVRs
William E. Harris CCP LP FFP

2:30 Perioperative Fluid Management in Cardiac Surgery: Respect for the Endothelium
Robert S. Kramer MD

3:00 Discussion

3:15 – 3:45 Break and Exhibits

3:45 – 5:45 FIRESIDE CHATS I: CASES AND QUESTIONS

#1: Renal and Neurological Protection
Moderators: Charles H. Brown IV, MD MHS, Robert S. Kramer MD, and Julie A. Swain MD

#2: What Keeps You Awake at Night?
David C. Fitzgerald BS CCP, William E. Harris BS CCP, Richard F. Newland CCP BSc, and Alfred H. Stammers MSA CCP

SCIENTIFIC AGENDA

THURSDAY, FEBRUARY 6 *continued*

6:00 – 9:00 SORIN GROUP DINNER PRODUCT THEATER*
Location: USS Midway Aircraft Carrier



FRIDAY, FEBRUARY 7

6:30 AM Registration Opens

7:00 – 8:00 COVIDIEN BREAKFAST PRODUCT THEATER*

7:15 – 8:00 Continental Breakfast

8:00 – 9:30 AFFORDABLE CARE ACT
Moderator: Julie A. Swain MD

8:00 How the Affordable Care Act Affects Healthcare Providers
Robert L. Wiebe MD *invited*

8:30 KEYNOTE
Opportunities & Challenges for Patients in the Affordable Care Act
Sr. Simone Campbell SSS JD

9:15 – 9:30 Discussion

9:30 – 10:15 Break and Exhibits

10:15 – 12:30 BLOOD & PATIENT MANAGEMENT I
Moderator: George Silvay MD PhD

10:15 Learning to Read
Eugene H. Blackstone MD

10:45 Coagulation Monitoring: How to Make a Mole Hill Out of a Mountain
Alfred H. Stammers MSA CCP

11:15 Implementation and Efficacy of Newly Created TEG Algorithms for Peri-Operative Cardiac Blood Management
Bruce D. Spiess MD FAHA

11:45 Update on the Field of Intraoperative Autotransfusion
Jonathan H. Waters MD

12:15 – 12:30 Discussion

12:30 – 1:30 MEDTRONIC LUNCH PRODUCT THEATER*
Design Considerations in Oxygenation Systems
Speaker: Mike Hobday

*CME credit is not offered for this presentation.

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FRIDAY, FEBRUARY 7 *continued*

1:30 – 4:00 BLOOD & PATIENT MANAGEMENT II
Moderator: Richard F. Newland CCP BSc

1:30 The Least of Three Evils: Anemia, Transfusion, or Both?
Eugene H. Blackstone MD

2:00 Patient Blood Management: What Can Be Done Outside the Operating Room?
Jonathan H. Waters MD

2:30 Improving Blood Management: A New Direction for the Perfusion Downunder Collaboration
Richard F. Newland CCP BSc

3:00 Discussion

3:15 – 3:30 Break

3:30 – 5:30 FIRESIDE CHATS II: MORE CASES AND QUESTIONS

#1: Blood & Patient Management

Moderators: Eugene H. Blackstone MD, George Silvay MD PhD, Bruce D. Spiess MD FAHA, Alfred H. Stammers MSA CCP, and Jonathan H. Waters MD

#2: Affordable Care Act + Legal and Malpractice Issues
Moderators: James M. Arrowood Esq., Julie A. Swain MD, and David A. Wood BA

SATURDAY, FEBRUARY 8

7:00 – 8:00 AM Continental Breakfast

8:00 – 11:00 SAFETY IMPROVEMENTS: I
Moderator: Alfred H. Stammers MSA CCP

8:00 Principles of Human Factors Engineering and Their Application to Surgical Performance
Douglas A. Wiegmann PhD

8:45 The American Heart Association Scientific Statement on Patient Safety in the Cardiac Operating Room: What Should I Know?
Bruce D. Spiess MD FAHA

9:30 Operating Under the Influence: The Effects of Sleep Loss and Stimulants on Decision-Making and Performance
William D.S. Killgore PhD

10:15 Discussion + Case Presentations

11:00 – 11:45 Lunch Break

11:45 – 2:00 SAFETY IMPROVEMENTS: II

11:45 High-Reliability Teamwork and Safety
Paul N. Uhlig MD MPA FACS

12:30 What's in Your Perfusion Safety Toolbox?
David C. Fitzgerald BS CCP

1:15 Perfusion Safety: Nightmare Case Reports
Alfred H. Stammers MSA CCP

1:45 Discussion

2:00 Meeting Adjourns

