

American Heart  
Association



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**scientific  
sessions  
2008**

# RESUSCITATION SCIENCE SYMPOSIUM 2008 FINAL PROGRAM AND ABSTRACT BOOK

November 8-9, 2008  
Ernest N. Morial Convention Center  
New Orleans, Louisiana

Sponsored by the American Heart Association Emergency Cardiovascular Care Committee

**Resuscitation**

# Program at a Glance

	Saturday, November 8, 2008	Sunday, November 9, 2008
7:00 AM	<b>Continental Breakfast</b>	
7:30 AM		
8:00 AM	Welcome and Introduction Session I: 2008 Awardee for Lifetime Achievement in Cardiac Resuscitation Science	Session VII: Best Original Resuscitation Science Moderated Poster Session and Continental Breakfast <i>Abstracts P-106 through P-198 will be presented</i>
8:30 AM	Session II: Best of the Best Oral Abstract Presentations – Part I <i>Abstracts 1 through 6 and 199 will be presented</i>	Session VIII: Beyond Return of Spontaneous Circulation — Bundling Postresuscitation Care (AHA Sunday Morning Program)
9:00 AM		
9:30 AM		
10:00 AM	<b>Refreshment Break (:15)</b>	Session IX: 2008 Awardee for Lifetime Achievement in Trauma Resuscitation Science
10:30 AM	Session III: Debate – Hyperoxygenation Is Good	
11:00 AM		
NOON	<b>Awards Luncheon</b>	<b>Hot Topics Luncheon</b>
12:30 PM		
1:00 PM		
1:30 PM	Session IV: Mass Resuscitation	2008 Scientific Sessions Opening Session Hall F
2:00 PM		
2:30 PM		
3:00 PM	<b>Refreshment Break</b>	Session X: Just Do It — Implementation of Evidence Into Action
3:30 PM	Session V: Inflammation and Repair After Ischemia-Reperfusion Injury	
4:00 PM		<b>Refreshment Break (:15)</b>
4:30 PM		
4:45 PM	Session VI: Best Original Resuscitation Science Moderated Poster Session and Reception <i>Abstracts P-14 through P-105 will be presented</i>	Session XI: Best of the Best Oral Abstract Presentations – Part II <i>Abstracts 7 through 12 will be presented</i>
5:00 PM		
5:30 PM		<b>Refreshment Break (:15)</b>
6:00 PM		
6:15 PM		
6:30 PM		Session XII: An Evening with Resuscitation “Giants” (AHA Cardiovascular Seminar)
7:00 PM		
7:30 PM		
8:00 PM		Closing Remarks/Adjourn

**The American Heart Association is a national voluntary health agency whose mission is:  
"Building healthier lives, free of cardiovascular diseases and stroke."**

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The American Heart Association gratefully acknowledges the educational grants from the following companies::

**Laerdal Medical**  
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**ZOLL Medical**

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ReSS is sponsored by the American Heart Association Emergency Cardiovascular Care Program, and co-sponsored by the Council on Cardiopulmonary, Perioperative and Critical Care; the National Heart, Lung, and Blood Institute (NHLBI); the National Association of EMS Physicians (NAEMSP); and the Society of Critical Care Medicine (SCCM).



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The American Heart Association is grateful to the members of the Program Committee for their dedication and leadership in the organization and planning of the program.

## **Program Committee**

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Daniel Meldrum, MD, FAHA, Indiana University, Indianapolis, Indiana  
Jon Mogford, MD, PhD, Defense Advanced Research Projects Agency/DSO, Arlington, Virginia  
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*(continued on the next page)*

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## Abstract Graders

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Ahamed H. Idris, MD	Terry L. Vanden Hoek, MD
Jeffrey D. Kerby, MD, PhD, FACS	Jean-Louis Vincent, MD
Karl B. Kern, MD, FAHA, FACC	Greg Walcott, MD
Ronald V. Maier, MD, FACS	Volker Wenzel, MD, MSc

# Program Information

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The Resuscitation Science Symposium (ReSS) is an international forum for fundamental, translational, clinical, and population scientists and care providers to discuss recent advances related to treating cardiopulmonary arrest and life-threatening traumatic injury.

With a growing understanding of the shared pathophysiology between cardiac arrest and traumatic injury at multiple levels of biological organization, ReSS provides a unique opportunity for transdisciplinary interactions that rapidly translate advances in the resuscitation field from fundamental to translational to clinical to population science.

## Target Audience

Appropriate audiences include emergency physicians, trauma surgeons, neurosurgeons, cardiologists, critical care nurses, intensivists, emergency medical providers, resuscitation educators, and researchers with basic, bioengineering, clinical, or other experience related to treating cardiac arrest and trauma.

## Learning Objectives

At the conclusion of the symposium, participants will be able to identify recent advances related to:

- Treating cardiopulmonary arrest
- Treating life-threatening traumatic injury
- Studying cardiopulmonary arrest
- Studying life-threatening traumatic injury

## Continuing Education Accreditation – Physicians

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 the American Heart Association; the National Heart, Lung, and Blood Institute (NHLBI); the National Association of EMS Physicians (NAEMSP); and the Society of Critical Care Medicine (SCCM). The American Heart Association and SCCM are accredited by the ACCME to provide continuing medical education for physicians.

The American Heart Association designates this educational activity for a maximum of 17.00 *AMA PRA Category 1 Credits™*. Physicians should only claim credit commensurate with the extent of their participation in the activity.

All faculty participating in CME/CE activities sponsored by The American Heart Association will disclose to the audience (1) significant financial relationships with the manufacturer(s) of products from the commercial supporter(s) and /or the manufacturer(s) of products or devices discussed in their presentation, and (2) unlabeled/unapproved uses of drugs or devices discussed in their presentation. Such disclosures will be made in writing in course presentation materials.

## Continuing Education Accreditation – Physician Assistants

AAPA accepts Category I credit from AOACCME, Prescribed credit from AAFP, and *AMA PRA Category 1 Credit™* from organizations accredited by ACCME.

## Continuing Education Accreditation – Nurses

This program (08-PP-187) has been approved by the American Association of Critical Care Nurses (AACN) for 17.00 Contact Hours, Category A, File number 00014666.

Successful completion of the CME/CE activity includes the following:

1. Attend the program lectures and poster sessions.
2. Complete the activity evaluation survey and claim CME/CE credit online at [learn.heart.org](http://learn.heart.org).
3. Statements of credit may be printed on your printer following completion of the required information. There is no fee for continuing education credits for this activity.

## Program Information (continued)

### Abstract Presentations

Abstracts, lectures, and presentations from ReSS 2008 are embargoed for release at the time of presentation. Information may not be released before the scheduled presentation time.

Abstracts presented at ReSS 2008 will be published in the American Heart Association October 28, 2008 supplement to *Circulation*. Each ReSS conference registrant will receive a copy of the ReSS abstracts in the registration materials. Abstracts 1-13 and 199 will be presented orally. Abstracts presented as posters will be presented as follows:

- Saturday, November 8, 5:00 PM – 6:30 PM (attended), P14-P105
- Sunday, November 9, 7:30 AM – 9:00 AM (attended), P106-P198

Abstract poster presenters are asked to comply with the set-up and tear-down schedule below.:

Poster Session Date	Presentation Time	Attendance Time	Set-up Time	Tear-down Time
Session VII: Saturday, Nov. 8	5:00 PM – 6:30 PM	5:00 PM – 6:30 PM	1:30 PM – 5:30 PM	6:30 PM – 8:30 PM
Session VIII: Sunday, Nov. 9	7:30 AM – 9:00 AM	7:30 AM – 9:00 AM	8:30 PM, Saturday 7:00 AM, Sunday	9:00 AM – 1:30 PM

### On-Site Registration

Registration is located in Hall H. Hours for on-site registration are:

Saturday, November 8..... 7:00 AM – 5:30 PM  
 Sunday, November 9..... 7:00 AM – 5:30 PM  
 Monday, November 10..... 7:00 AM – 5:30 PM  
 Tuesday, November 11..... 7:30 AM – 5:30 PM  
 Wednesday, November 12 ..... 7:30 AM – 1:00 PM

### Speaker Resource Room

The Speaker Resource Room is located in Hall G of the Morial Convention Center. All speakers must submit their presentations at least 3 hours before their scheduled presentation. The Speaker Resource Room will be open during the following hours, with technicians available to assist you. *Please note that no personal laptops will be permitted.*

Saturday, November 8..... 7:00 AM – 5:30 PM  
 Sunday, November 9..... 7:00 AM – 5:30 PM  
 Monday, November 10..... 7:00 AM – 5:30 PM  
 Tuesday, November 11..... 7:00 AM – 5:30 PM  
 Wednesday, November 12 ..... 7:00 AM – 4:00 PM



## Conference Highlights and Awards

On Saturday, November 8, 12:00 NOON, plan to join us for the **Awards Luncheon**, where we will recognize the recipients of the AHA-Philips Resuscitation Fellowship Award, ReSS Best Abstract Awards, and ReSS Young Investigator Awards. The luncheon is open to all ReSS participants; there is no additional cost to attend.

Network with colleagues and experience the best original resuscitation science at the **Abstract Poster Sessions**, scheduled for Saturday and Sunday, November 8 and 9. On Saturday abstracts P14-P105 will be presented from 6:30 PM – 8:00 PM. A reception will be held, and hors d'oeuvres will be served. On Sunday morning, from 7:30 AM – 9:00 AM, abstracts P106-P198 will be presented, and a continental breakfast will be provided.

The Resuscitation Science Symposium is pleased to announce the recipients of the following awards.

**The Lifetime Achievement Awards** were established by the Emergency Cardiovascular Care Committee in 2003 to honor scientists for their outstanding contributions in cardiac and trauma science.

The 2008 Award for Lifetime Achievement in Cardiac Resuscitation Science will be presented to Douglas Chamberlain, CBE DSc (Hon), FRCP, FRCA, FACC, FESC, on Saturday morning, November 8, at 8:10 AM.

The 2008 Award for Lifetime Achievement in Trauma Resuscitation Science will be presented to John B. Holcomb, MD, FAHA, FACS, on Sunday, November 9, at 12:00 NOON.

Previous recipients of the Lifetime Achievement Award are:

- 2003 Cardiac Award Recipient, Myron L. Weisfeldt, MD  
Trauma Award Recipient, James Atkins, MD
- 2004 Cardiac Award Recipient, Max Harry Weil, MD, PhD  
Trauma Award Recipient, G. Tom Shires, MD
- 2005 Cardiac Award Recipient, Petter Steen, MD, PhD  
Trauma Award Recipient, Irshad H. Chaudry, PhD
- 2006 Cardiac Award Recipient, Robert Berg, MD, FAHA, FAAP  
Trauma Award Recipient, David B. Hoyt, MD, FACS
- 2007 Cardiac Award Recipient, Joseph P. Ornato, MD, FAHA, FACP, FACC, FACEP  
Trauma Award Recipient, Ronald V. Maier, MD, FACS

The **AHA-Philips Resuscitation Fellowship Award** will be presented to Ohad Ziv, MD, Rhode Island Hospital, Providence, RI, for his project, "The Influence of Underlying Heart Disease and Genetic Background on Mechanism of Ventricular Fibrillation."

Four recipients have been selected to receive the **Best Abstract Awards** for the top-scoring abstracts submitted to the Resuscitation Science Symposium.

Name	Presentation Number	Category
Steven M. Bradley	1	Cardiac Resuscitation Science
Theresa M. Olasveengen	13	Cardiac Resuscitation Science
Richard L. Summers	6	Trauma Resuscitation Science
Dongmei Wu	2	Trauma Resuscitation Science

## Conference Highlights and Awards

**Young Investigator Awards** are presented for the top-scoring abstracts submitted by young investigators who are within the first 5 years of appointment. The recipients of the 2008 awards are:

Name	Presentation Number
Oluwakemi Badakj	P83
Jocelyn Berdowski	7
Michael Fries	P118
Shuchien Huang	P158
Rong Jiang	P124
Kentaro Kajino	3
Manuella Lahoud-Rahme	P37
Christian McClung	P180
Nathan Menke	P33
Niklas Nielsen	P96
Jose Osorio	P20
Peter Radsel	P70
Joshua Reynolds	P88
Willard Sharp	P135
Noah Sugerman	5
Jai Udassi	P40
Zhi Wan	P29
Sebastian Wolfrum	P190
Franklin Wright	P67
Demetris Yannopoulos	P26

The winners of these awards will be recognized at the Awards Luncheon on Saturday, November 8.



# Policy Information

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## Disclosure of Faculty Commercial Relationship(s)

It is the policy of the American Heart Association to ensure balance, independence, objectivity, and scientific rigor in all of its sponsored educational programs. All faculty participating in continuing medical education activities sponsored by the association are required to disclose to the program audience any real or apparent conflict of interest related to the content of their presentations.

## Embargo Guidelines

Abstracts, lectures, and presentations for ReSS 2008 are embargoed for release at the time of presentation. Information may not be released before the scheduled presentation time.

## No Smoking Policy

AHA policy prohibits smoking in conference meeting rooms and exhibits/registration areas. Thank you for your cooperation.

## Recording Policy

Unauthorized recording of the AHA Scientific Sessions, scientific conferences, and International Stroke Conference is prohibited, whether by video, still or digital photography, audio, or any other recording or reproduction mechanism. This includes recording of presentations and supporting audiovisual materials and of poster presentations and supporting poster materials.

The American Heart Association and American Stroke Association reserve the rights to all recordings or reproductions of presentations at AHA/ASA scientific conferences and meetings. Check the program for information about the availability of videotapes or audiotapes for purchase.

Exceptions to this policy prohibition are as follows: (1) nonflash photography of the speaker and his/her presentation materials is permitted by attendees or AHA/ASA accredited reporters with the prior written consent of the AHA/ASA and of the speaker; (2) other photography and videotaping by AHA/ASA accredited reporters is permitted if not disruptive; (3) audiotape recording for strictly personal and noncommercial use is permitted if not disruptive; and (4) exhibitors may photograph their own booth for their own promotional purposes with the prior written consent of the AHA/ASA.

## Conference Photography

Please be aware that during The Resuscitation Science Symposium 2008, attendees, vendors, and guests may be photographed and videotaped by AHA vendors in capturing the course of the event. Some of these photographs or videos may be displayed by the AHA in future publications or materials connected with the event. If you do not wish your image to be displayed by the AHA, please contact the AHA in writing at 7272 Greenville Avenue, Dallas, TX 75231, Attention: Manager, Scientific Conferences, Resuscitation Science Symposium, no later November 21, 2008.

## Seating/Badge Requirement

Seating is on a first-come, first-served basis. According to fire code, a session must be closed if the room fills to capacity. You must wear your name badge at all times during the symposium. Nonregistered guests may not be permitted into the sessions or food and beverage events. Be sure to remove your badge when you leave the conference or your hotel room.

The American Heart Association reserves the right to revoke or deny attendance to any registered participant, speaker, exhibitor, news media reporter, or photographer of presentations or activities at AHA Scientific conferences and meetings.

## Disclaimer

The Resuscitation Science Symposium 2008 is a scientific and educational conference for the purpose of exchanging and discussing research results and scientific developments in the field of cardiovascular disease. Accordingly, the American Heart Association cannot and does not offer any assurance or warranty of the accuracy, truthfulness, or originality of the information presented at the conference.

# Program Agenda

## FRIDAY, NOVEMBER 7

6:30 PM – 9:30 PM

Young Investigator Networking Event

*\*Advance Registration Required*

Lucy's Retired Surfer's Bar and Restaurant –  
Attic Room

## SATURDAY, NOVEMBER 8

7:00 AM – 8:00 AM

Continental Breakfast

La Nouvelle Ballroom A/B

8:00 AM – 8:10 AM

Welcome and Introduction

La Nouvelle Ballroom C

Timothy J. Gardner, MD, FAHA, AHA President

8:10 AM – 8:30 AM

**Session I: 2008 Awardee for Lifetime Achievement  
in Cardiac Resuscitation Science**

**Moderator:**

Joseph P. Ornato, MD, FAHA, FACP, FACC, FACEP,  
Virginia Commonwealth University Medical Center,  
Richmond, VA

**Award Recipient:**

Douglas Chamberlain, CBE DSc (Hon), FRCP, FRCA,  
FACC, FESC

8:30 AM – 10:15 AM

**Session II: Best of the Best**

**Oral Abstract Presentations – Part I**

**Moderators:**

Bernd W. Böttiger, MD, University of Cologne,  
Köln, Germany

Jeffrey D. Kerby, MD, PhD, FACS, The University of  
Alabama at Birmingham, Birmingham, AL

- 8:30 **Survival Increases with CPR Before Defibrillation of Out-of-Hospital Ventricular Fibrillation or Ventricular Tachycardia: Observations from the Resuscitation Outcomes Consortium** 1
- Steven M Bradley, VA Puget Sound Health Care System, Seattle, WA; Erin E Gabriel, Univ of Washington, Seattle, WA; Tom P Aufderheide, Medical Coll of Wisconsin, Milwaukee, WI; Roxy Barnes, Vancouver Fire Dept, Vancouver, WA; Jim Christenson, Univ of British Columbia, Vancouver, BC, Canada; Daniel P Davis, Univ of California, San Diego, CA; Ian G Stiell, Univ of Ottawa, Ottawa, ON, Canada; Graham Nichol, Univ of Washington, Seattle, WA; and the Resuscitation Outcomes Consortium Investigators

- 8:45 **Sodium-Hydrogen Exchanger Inhibition Attenuates Traumatic Hemorrhage Induced Acute Lung Injury in Pigs** 2
- Dongmei Wu, Jiansong Qi, William Abraham, Mt Sinai Med Ctr, Miami, FL
- 9:00 **Impact of Transport to Critical Care Centers vs Non-Critical Care Hospitals on Outcomes from Out-of-Hospital Cardiac Arrest In Osaka, Japan** 3
- Kentaro Kajino, Osaka Univ Graduate Sch of Med, Suita, Japan; Taku Iwami, Kyoto Univ Health Service, Kyoto, Japan; Mohamud Daya, Oregon Health and Science Univ, Portland, OR; Naohiro Yonemoto, Kyoto Univ Sch of Public Health, Kyoto, Japan; Tatuya Nishiuchi, Osaka Prefectural Senshu Critical Care Medical Ctr, Izumisano, Japan; Yasuyuki Hayashi, Senri Critical Care Medical Ctr, Osaka Saiseikai Senri Hosp, Suita, Japan; Taro Irisawa, Osaka Univ Graduate School of Med, Suita, Japan; Hisashi Ikeuchi, Osaka General Medical Ctr, Osaka, Japan; Hiroshi Tanaka, Juntendo Univ Urayasu Hosp, Urayasu, Japan; Takeshi Shimazu, Kinki Univ Sch of Med, Osaka-Sayama, Japan; Atushi Hiraide, Ctr for Medical Education, Kyoto Univ Graduate Sch of Med, Kyoto, Japan; Hisashi Sugimoto, Osaka Univ Graduate Sch of Med, Suita, Japan
- 9:15 **What Is the Impact of Prehospital Intubation in Survival in Patients with Moderate to Severe Traumatic Brain Injury?** 4
- Shawn Dowling, Erik P Hess, Christian Vaillancourt, George A Wells, Ian G Stiell, Univ of Ottawa, Ottawa, ON, Canada
- 9:30 **Multicenter Characterization of Rescuer Fatigue During In-Hospital Cardiopulmonary Resuscitation** 5
- Noah T Sugerman, Univ of Pennsylvania, Philadelphia, PA; Elizabeth K Weidman, Dana P Edelson, Univ of Chicago, Chicago, IL; Marion Leary, Univ of Pennsylvania, Philadelphia, PA; Terry L Vanden Hoek, Univ of Chicago, Chicago, IL; Lance B Becker, Benjamin S Abella, Univ of Pennsylvania, Philadelphia, PA
- 9:45 **Validation of a Computational Platform for the Analysis of the Physiologic Mechanisms of a Human Experimental Model of Hemorrhage** 6
- Richard L Summers, Univ of Mississippi Medical Ctr, Jackson, MS; Kevin Ward, Tarynn Witten, Virginia Commonwealth Univ Reanimation Engineering Shock Ctr, Richmond, VA; Victor Convertino, Kathy Ryan, US Army Inst of Surgical Res, San Antonio, TX; Thomas G Coleman, Robert Hester, Univ of Mississippi Medical Ctr, Jackson, MS
- 10:00 **Neurological Recovery “Life after Death” following Total Brain Ischemia with Controlled Reperfusion** 199
- Eui Ho Whang, Zhongtuo Tan, Gerald D. Buckberg, Sean Sakhai, Bradley S. Allen, UCLA Sch of Med, Los Angeles, CA

# Program Agenda (continued)

**10:15 AM – 10:30 AM**  
**Refreshment Break**  
La Nouvelle Ballroom A/B

**10:30 AM – 12:00 NOON**  
**Session III: Debate – Hyperoxygenation Is Good?**  
La Nouvelle Ballroom C

**Moderators:**

Lorne Blackburne, MD, FACS, USA Institute of Surgical Research, San Antonio, TX  
Samuel A. Tisherman, MD, University of Pittsburgh, Pittsburgh, PA

- 10:30 **Neonatal Perspective For and Against Hyperoxygenation**  
Jeffrey M. Perlman, MD, ChB, Weill-Cornell Medical Center, New York Presbyterian Hospital, New York, NY
- 10:50 **Molecular Insights For and Against Hyperoxygenation After Cardiac Arrest**  
Gary Fiskum, PhD, University of Maryland School of Medicine, Baltimore, MD
- 11:10 **Supply-Dependent Oxygen Consumption: Reversing Cause and Effect**  
Frank Lewis, MD, American Board of Surgery, Philadelphia, PA
- 11:30 **Discussion / Q&A**

**12:00 NOON – 1:30 PM**  
**Awards Luncheon**  
La Nouvelle Ballroom A/B

**Moderators:**

Stephen Archer, MD, FAHA, FACC, FRCP, The University of Chicago, Chicago, IL  
Robert E. O'Connor, MD, MPH, University of Virginia Health System, Charlottesville, VA

**1:30 PM – 3:00 PM**  
**Session IV: Mass Resuscitation**  
La Nouvelle Ballroom C

**Moderators:**

Romergryko G. Geocadin, MD, Johns Hopkins School of Medicine, Baltimore, MD  
Thomas Scalea, MD, FACS, R. Adams Cowley Shock Trauma Center, Baltimore, MD

- 1:30 **Katrina: From Ruination to Recovery**  
Peter DeBlieux, MD, Louisiana State University Health Science Center, New Orleans, LA
- 1:50 **Receiving Katrina**  
Norman E. McSwain, Jr, MD, FACS, NREMT-P, Tulane University School of Medicine, New Orleans, LA

2:10 **Lessons Identified from Major Incidents in the United Kingdom**  
Fionna Moore, MD, London Ambulance Service, London, UK

2:30 **Discussion / Q&A**

**3:00 PM – 3:30 PM**  
**Refreshment Break**  
La Nouvelle Ballroom A/B

**3:30 PM – 5:00 PM**  
**Session V: Inflammation and Repair After Ischemia-Reperfusion Injury**  
La Nouvelle Ballroom C

**Moderators:**

Irshad H. Chaudry, PhD, University of Alabama at Birmingham, Center for Surgical Research, Birmingham, AL  
Jerry Nolan, FRCA, FCEM, Royal United Hospital, Bath, UK

- 3:30 **Clinical Systems Biology**  
Ronald Tompkins, MD, ScD, Massachusetts General Hospital, Boston, MA
- 3:50 **Stem Cell Therapy After Global Ischemia**  
Daniel Meldrum, MD, FAHA, Indiana University, Indianapolis, IN
- 4:10 **Immune Modulating Therapies After Global Ischemia**  
Pierre Carli, MD, SAMU de Paris, Paris, France
- 4:30 **Discussion / Q&A**

**5:00 PM – 6:30 PM**  
**Session VI: Best Original Resuscitation Science**  
**Moderated Poster Session and Reception**  
La Nouvelle Ballroom A/B  
Abstracts P14 – P105 will be presented.

SATURDAY

# Program Agenda (continued)

## SUNDAY, NOVEMBER 9

7:30 AM – 9:00 AM

### Session VII: Best Original Resuscitation Science

#### Moderated Poster Session and Continental Breakfast

La Nouvelle Ballroom A/B  
Abstracts P106 – P198 will be presented.

9:00 AM – 12:00 NOON

### Session VIII: Beyond Return of Spontaneous Circulation — Bundling Postresuscitation Care

(AHA Sunday Morning Program)

La Nouvelle Ballroom C

#### Moderators:

Matthew H. Ma, MD, PhD, National Taiwan University Hospital, Taipei, Taiwan

Robert W. Neumar, MD, PhD, FACEP, University of Pennsylvania, Philadelphia, PA

9:00 **Therapeutic Hypothermia Improves CNS Function Following Cardiac Arrest**

Michael Holzer, MD, Waehringer Guertel 18-20/6D, Vienna, Austria

9:20 **Myocardial Effects of Therapeutic Hypothermia During and After Cardiac Arrest**

Richard Kerber, MD, FAHA, University of Iowa, Iowa City, IA

9:40 **Emergency Preservation and Resuscitation (EPR) for Cardiac or Traumatic Arrest: Will EPR Be the New CPR?**

Samuel A. Tisherman, MD, University of Pittsburgh, Pittsburgh, PA

10:00 **Importance of Early PCI During and After Cardiac Arrest**

Marko Noc, MD, University Medical Center, Ljubjana, Slovenia

10:20 AM – 10:50 AM

### Refreshment Break

La Nouvelle Ballroom A/B

### Session VIII Continued

10:50 **Hemodynamic Support After Traumatic and Cardiac Arrest**

Thomas Scalea, MD, FACS, R. Adams Cowley Shock Trauma Center, Baltimore, MD

11:10 **Glycemic Control Post Resuscitation: Does It Matter?**

Risto Roine, MD, PhD, Helsinki University Central Hospital, Helsinki, Finland

11:30 **Improved Survival with “Bundled Postresuscitation Care”**

Kjetil Sunde, MD, PhD, Ulleval University Hospital, Oslo, Norway

11:50 **Discussion / Q&A**

12:00 NOON – 12:30 PM

### Session IX: 2008 Awardee for Lifetime Achievement in Trauma Resuscitation Science

La Nouvelle Ballroom C

#### Moderator:

Ronald V. Maier, MD, FACS, Harborview Medical Center, Seattle, WA

#### Award Recipient:

John B. Holcomb, MD, FAHA, FACS, University of Texas Health Science Center, Houston, TX

12:30 PM – 1:30 PM

### Hot Topics Luncheon

La Nouvelle Ballroom C

#### Moderators:

Elliott Antman, MD, FAHA, Brigham and Women's Hospital, Boston, MA

Harlan M. Krumholz, MD, SM, FAHA, Yale University School of Medicine, New Haven, CT

Thomas Scalea, MD, FACS, R. Adams Cowley Shock Trauma Center, Baltimore, MD

12:30 **A Prospective Randomized Controlled Trial on the Effects of Intravenous Drug Administration on Survival to Hospital Discharge After Out-of-Hospital Cardiac Arrest** 13

Theresa M Olasveengen, Kjetil Sunde, Inst for Experimental Medical Res and Ulleval Univ Hosp, Oslo, Norway; Jon Thowsen, Ulleval Univ Hosp, Oslo, Norway; Petter Andreas Steen, Univ of Oslo and Inst for Experimental Medical Res, Ulleval Univ Hosp, Oslo, Norway; Lars Wik, The Natl Competence Ctr for Emergency Med and Inst for Experimental Medical Res, Ulleval Univ Hosp, Oslo, Norway

12:50 **Early Versus Delayed Therapeutic Hypothermia After VF and Non-VF Cardiac Arrest**

Stephen Bernard, MD, FACEM, FJFICM, Alfred Hospital, Melbourne, Australia

1:10 **A Randomized Trial of Endotracheal Intubation in Patients with Head Injury**

Stephen Bernard, MD, FACEM, FJFICM, Alfred Hospital, Melbourne, Australia

1:30 PM – 3:00 PM

### 2008 Scientific Sessions Opening Session

Hall F

*ReSS will reconvene at 3:00 PM*

SUNDAY

# Program Agenda (continued)

3:00 PM – 4:30 PM

**Session X: Just Do It — Implementation of Evidence into Action**

**Moderators:**

Rudolph W. Koster, MD, PhD, Academic Medical Center, Amsterdam, Netherlands  
 Peter Morley, MBBS, FRACP, FANZCA, Royal Melbourne Hospital, Parkville, Victoria, Australia

- 3:00 **Simulation Translates Evidence into Action**  
 Elizabeth (Betsy) Hunt, MD, MPH, Johns Hopkins Simulation Center, Baltimore, MD
- 3:20 **Community-Based Training Improves Cardiac and Trauma Care**  
 Dan Isbye, MD, Copenhagen University Hospital, Rigshospitalet, Copenhagen, Denmark
- 3:40 **Adherence to Evidence-Based Trauma Guidelines Improves Resuscitation Outcomes**  
 Jeffrey L. Johnson, MD, Denver Health Medical Center/University of Colorado Health Sciences Center, Denver, CO
- 4:00 **Discussion / Q&A**

4:30 PM – 4:45 PM

**Refreshment Break**

La Nouvelle Ballroom A/B

4:45 PM – 6:15 PM

**Session XI: Best of the Best**

**Oral Abstract Presentations – Part II**

**Moderators:**

Basil A. Pruitt, MD, UT Health Science Center, San Antonio, San Antonio, TX  
 George Sopko, MD, MPH, NIH/NHLBI, Rockville, MD

- 4:45 **Professionals Decrease Survival After Takeover from Lay Rescuers by Interrupting the Automated External Defibrillator Protocol** **7**  
 Jocelyn Berdowski, Ron J Schulten, Rudolph W Koster, AMC, Amsterdam, Netherlands
- 5:00 **Influence of Receiving Hospital Characteristics on Survival After Cardiac Arrest** **8**  
 Clifton W Callaway, Univ of Pittsburgh, Pittsburgh, PA; Rob Schmicker, Univ of Washington, Seattle, WA; Mitch Kampmeyer, Univ of Pittsburgh, Pittsburgh, PA; Judy Powell, Graham Nichol, Thomas D Rea, Univ of Washington, Seattle, WA; Mohamud Daya, OHSU, Portland, OR; Tom Aufderheide, Univ of Wisconsin, Milwaukee, WI; Dan Davis, UCSD Sch of Med, San Diego, CA; Jon Rittenberger, Univ of Pittsburgh, Pittsburgh, PA; Ahamed H Idris, Univ of Texas, Dallas, TX

5:15 **Hydrogen Sulfide Improves Outcome After Cardiac Arrest and Cardiopulmonary Resuscitation in Mouse** **9**

Shizuka Minamishima, Jia De Yu, Masahiko Bougaki, Christophe Adrie, Massachusetts General Hosp, Charleston, MA; Yoji A Minamishima, Dana-Farber Cancer Inst, Boston, MA; David J Lefer, Albert Einstein Coll of Med, New York, NY; Fumito Ichinose, Massachusetts General Hosp, Charleston, MA

5:30 **Oxygen Transport Characterization of a Human Model of Hemorrhage** **10**

M Hakam Tiba, Virginia Commonwealth Univ Reanimation Engineering Shock Ctr, Richmond, VA; Kathy Ryan, US Army Inst of Surgical Res, San Antonio, TX; Ivo Torres, Virginia Commonwealth Univ Reanimation Engineering Shock Ctr, Richmond, VA; Carloine Rickards, US Army Inst of Surgical Res, San Antonio, TX; Tarynn M Witten, Virginia Commonwealth Univ Reanimation Engineering Shock Ctr, Richmond, VA; Babs Soller, Univ of Massachusetts Medical Sch, Worcester, MA; Victor Convertino, US Army Inst of Surgical Res, San Antonio, TX; Kevin Ward, Virginia Commonwealth Univ Reanimation Engineering Shock Ctr, Richmond, VA

5:45 **Is the Outcome from Witnessed VF Cardiac Arrest Improved by Providing More CPR? Results from DEF12005, a Randomized Controlled Trial of 2 AED Protocols** **11**

Daniel Jost, Herve Degrange, Brigade Sapeurs Pompiers de Paris, Paris, France; Isabelle L Banville, Physio-Control, Redmond, WA; Olivier Hersan, Frédérique Briche, David Fontaine, David Lallement, Franck Calamai, Brigade Sapeurs Pompiers de Paris, Paris, France; Fred W Chapman, Physio-Control, Redmond, WA; Jean-Luc Petit, Claude Fuilla, Brigade Sapeurs Pompiers de Paris, Paris, France

6:00 **Direct Mechanical Ventricular Actuation Significantly Augments Left Ventricular Function in Failing Rabbit Heart Model** **12**

Subbaraju Budharaju, Scott A Kerns, Benjamin Schmitt, Rebecca J Darner, Lawrence J Prochaska, Mark P Anstadt, Wright State Univ, Dayton, OH

6:15 PM – 6:30 PM

**Refreshment Break**

La Nouvelle Ballroom A/B

SUNDAY

# Program Agenda (continued)

6:30 PM – 8:00 PM

**Session XII — An Evening with Resuscitation  
“Giants”** (AHA Cardiovascular Seminar)  
La Nouvelle Ballroom C

**Moderators:**

Lance Becker, MD, MPH, University of Pennsylvania,  
Philadelphia, PA  
Rudolph W. Koster, MD, PhD, Academic Medical  
Center, Amsterdam, Netherlands

6:30 **EMS Role in Cardiac Arrest: Past and Future**  
Leonard Cobb, MD, FAHA, Harborview Medical  
Center, Seattle, WA

6:45 **Cardiocerebral Resuscitation: The Next 5 Years**  
Gordon A. Ewy, MD, FAHA, FACC, University of  
Arizona, Tucson, AZ

7:00 **Defibrillation Advances**  
Richard Kerber, MD, FAHA, University of Iowa,  
Iowa City, IA

7:15 **Saving More Lives in 2010: The US Perspective**  
Max H. Weil, MD, PhD, Institute of Critical Care  
Medicine, Rancho Mirage, CA

7:30 **Saving More Lives in 2010: The European  
Perspective**  
Petter Steen, MD, PhD, Ulleval University Hospital,  
Oslo, Norway

7:45 **Clinical Trials in Resuscitation**  
Joseph P. Ornato, MD, FAHA, FACP, FACC, FACEP,  
Virginia Commonwealth University Medical Center,  
Richmond, VA

**8:00 PM**  
**Closing Remarks / ReSS Adjourns**

SUNDAY

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# Scientific Sessions Program Information

*A separate registration fee is required to attend Scientific Sessions*

## MONDAY, NOVEMBER 10

7:45 AM – 8:45 AM

### How-To Session HTS.01

#### How to Improve Outcomes After Out-of-Hospital Cardiac Arrest

Room 353-354

#### Moderator:

Robert A. Niskanen, Resurgent Biomedical Consulting, Shoreline, WA

#### Comply with AHA Guidelines

Tom P. Aufderheide, MD, FACEP, Medical College of Wisconsin, Milwaukee, WI

#### Take Heart America

Keith Lurie, MD, University of Minnesota Health Center, Minneapolis, MN

#### Cardiocerebral Resuscitation

Ben Bobrow, MD, Mayo Clinic Arizona, Phoenix, AZ

7:45 AM – 8:45 AM

### How-To Session HTS.25

#### How to Use Cardiopulmonary Exercise Testing in CHF and PAH

Room 228-230

#### Moderator:

Marc Semigran, MD, Massachusetts General Hospital, Boston, MA

#### Exercise Physiology in Systolic Heart Failure: Do We Need to Go Beyond $VO_2$ max?

Andrew Coats, MD, University of Sydney, Sydney, Australia

#### Limitation of Exercise Capacity in Heart Failure with Normal EF

Barry A. Borlaug, MD, Mayo Clinic College of Med, Rochester, MN

#### The Patient with Dyspnea: Is It Heart or Lungs?

David Systrom, MD, Massachusetts General Hospital, Boston, MA

5:15 PM – 6:45 PM

### Cardiovascular Seminar CVS.14

#### Cool Applications of Therapeutic Hypothermia

Room 228-230

#### Moderator:

Terry L. Vanden Hoek, MD, University of Chicago, Chicago, IL

#### Emergency Preservation: Role of Hypothermia

Clifton W. Callaway, MD, PhD, University of Pittsburgh Medical Center, Pittsburgh, PA

#### Inducing Therapeutic Hypothermia: The Chilling Options

Dana Edelson, MD, University of Chicago, Chicago, IL

#### The Sooner the Better: Therapeutic Hypothermia During and After Resuscitation

Wanchun Tang, MD, Institute of Critical Care Medicine, Rancho Mirage, CA

#### The Heart as Well as the Brain

Karl B. Kern, MD, FAHA, FACC, University of Arizona, Tucson, AZ

#### Monitoring the Patient During Hypothermia

Mary Ann Peberdy, MD, Virginia Commonwealth University, Richmond, VA

#### Cooling Applications Other than Cardiac Arrest

Carmelo Graffagnino, MD, Duke University Medical Center, Durham, NC

5:15 PM – 6:45 PM

### Cardiovascular Seminar CVS.03

#### Inflammation and Pulmonary Hypertension

Room 238-239

#### Moderators:

Marc Humbert, MD, PhD, Hôpital Antoine Bécclère, Clamart, France

Paul M. Hassoun, MD, Johns Hopkins University School of Medicine, Baltimore, MD

#### The Role of Inflammation in the Diagnosis, Prognosis, and Management of PAH: An Overview

Paul M. Hassoun, MD, Johns Hopkins University School of Medicine, Baltimore, MD

#### NFAT: An Integrator of Molecular and Inflammatory Signaling and a Therapeutic Target in PAH

Evangelos D. Michelakis, MD, University of Alberta, Edmonton, Alberta

#### Inflammatory Cells and Vascular Remodeling in PAH

Sonia C. Flores, PhD, University of Colorado Health Sciences Center, Denver, CO

#### Infection and PAH

Marc Humbert, MD, PhD, Hôpital Antoine Bécclère, Clamart, France

MONDAY

# Scientific Sessions Program Information (continued)

## TUESDAY, NOVEMBER 11

7:45 AM – 8:45 AM

### Ask the Experts ATE.02

#### Performing Prehospital Emergency Resuscitation Research

Room 228-230

#### Moderator:

Lance Becker, MD, MPH, University of Pennsylvania, Philadelphia, PA

#### Exception from Informed Consent

Eileen Bulger, MD, University of Washington, Seattle, WA

#### Randomization, Sample Size, and Statistical Issues

Scott Emerson, MD, PhD, University of Washington, Seattle, WA

#### Which Outcomes Are Clinically Important?

Lars Wik, MD, PhD, Ullevål University Hospital, Oslo, Norway

#### Finishing the Study: Enrollment, Data Collection, and the Unexpected

Judy Powell, BSN, University of Washington, Seattle, WA

#### The Resuscitation Outcomes Consortium (ROC) Perspective

Myron Weisfeldt, MD, FAHA, Johns Hopkins School of Medicine, Baltimore, MD

9:00 AM – 10:15 AM

### Plenary Session PS.12

#### Improving Survival from Cardiac Arrest: What Can and Should Be Done in 2008

Hall F

#### Moderators:

Mary Fran Hazinski, RN, MSN, Vanderbilt University Medical Center, Nashville, TN

Karl B. Kern, MD, FAHA, FACC, University of Arizona, Tucson, AZ

#### Cardiac Arrest: Pathophysiology and Changing Epidemiology

Graham Nichol, MD, MPH, FAHA, University of Washington, Harborview Medical Center, Seattle, WA

#### Getting Help: Increasing Bystander CPR

Robert Allen Berg, MD, FAHA, FAAP, The Children's Hospital of Philadelphia, Philadelphia, PA

#### Taking the Delay Out of Defibrillation

Paul Chan, MD, MSc, Cardiovascular Consultants, P.C., Kansas City, MO

#### Optimizing Blood Flow: The Heart and Soul of Resuscitation

Henry Halperin, MD, MA, Johns Hopkins University, Baltimore, MD

#### Postresuscitation Therapies and Predicting Outcomes

Romergrzyko G. Geocadin, MD, Johns Hopkins School of Medicine, Baltimore, MD

5:15 PM – 6:45 PM

### Cardiovascular Seminar CVS.04

#### Biomarkers in Pulmonary Hypertension

Room 280-282

#### Moderator:

Mark Geraci, MD, University of Colorado Health Science Center, Denver, CO

#### Metabolomics in Pulmonary Hypertension

Gregory Lewis, MD, Massachusetts General Hospital, Boston, MA

#### Proteomics in Pulmonary Hypertension

Barbara Meyrick, PhD, Vanderbilt School of Medicine, Nashville, TN

#### Biomarkers in Pulmonary Arterial Hypertension

Paul Yu, MD, PhD, Massachusetts General Hospital, Boston, MA

#### Genetic Determinants of Outcome in PAH

Gregory Elliott, MD, University of Utah, Murray, UT