Resuscitation Science Symposium 2015

Final Program

November 7–9, 2015 | Orange County Convention Center | Orlando, Florida

Sponsored by the American Heart Association Emergency Cardiovascular Care Committee and the Council on Cardiopulmonary, Critical Care, Perioperative and Resuscitation

Register online at scientificsessions.org/ress
## ReSS 3-Day Program at a Glance

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<th>Time</th>
<th>Friday, Nov. 6</th>
<th>Saturday, Nov. 7</th>
<th>Sunday, Nov. 8</th>
<th>Monday, Nov. 9</th>
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<tbody>
<tr>
<td>8:00 AM</td>
<td>8:00–8:15 AM Symposium Opening: Welcome and Introduction</td>
<td></td>
<td>8:00–9:30 AM Poster Session Valencia Ballroom W415 CD</td>
<td>8:00–9:30 AM Poster Session Valencia Ballroom W415 CD</td>
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<tr>
<td></td>
<td>8:15–9:15 AM IOM Report on Cardiac Arrest</td>
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<tr>
<td>9:15 AM</td>
<td>9:15–10:00 AM 2015 Awards for Lifetime Achievement in Cardiac Resuscitation Science and Trauma Resuscitation Science and Presentation of the Ian G. Jacobs Award for International Group Collaboration to Advance Resuscitation Science</td>
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<tr>
<td>9:30 AM</td>
<td>10:00 AM 10:00–10:15 AM Break</td>
<td>10:15–11:30 AM Best of the Best Oral Abstract Presentations and Presentation of the Best Abstract Awards for Cardiac and Trauma Resuscitation Science</td>
<td>10:30–11:30 AM Concurrent Oral Abstract Presentations Basic Science/Translational Room W414 AB Clinical Room W414 CD</td>
<td>10:30 AM–12:00 PM Oral Abstract Session Room W414 CD</td>
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<tr>
<td>10:00 AM</td>
<td>10:15 AM Break</td>
<td></td>
<td>11:30 AM–1:00 PM Hemodynamic Monitoring from the Field to the ICU</td>
<td>12:00–12:30 PM Break</td>
</tr>
<tr>
<td>10:30 AM</td>
<td>10:30 AM–12:00 PM Break</td>
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<td>12:00–1:30 PM NIH Report</td>
<td>12:30–1:30 PM NIH Report</td>
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<tr>
<td>11:00 AM</td>
<td>12:00 PM 12:00–1:00 PM Concurrent Breakout Sessions Women in Resuscitation Networking Meeting Room W414 CD ReSS/JCS Joint Session Room W414 AB</td>
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<tr>
<td>1:00 PM</td>
<td>1:00 AM–2:30 PM Poster Session Valencia Ballroom W415 CD</td>
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<td>1:00–3:30 PM Scientific Sessions Opening Session Hall D</td>
<td>1:30–2:45 PM Personalized Resuscitation: One Size Does Not Fit Al</td>
</tr>
<tr>
<td>1:30 PM</td>
<td>1:30 PM–3:00 PM</td>
<td></td>
<td>3:00–4:30 PM Concurrent Oral Abstract Presentations Trauma Room W414 AB</td>
<td>3:15–4:30 PM 2015 Resuscitation Guidelines</td>
</tr>
<tr>
<td>2:00 PM</td>
<td>2:30 PM–3:45 PM Therapeutic Hypothermia: My Target Temperature is…</td>
<td></td>
<td>3:15–4:30 PM 2015 Resuscitation Guidelines</td>
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<tr>
<td>2:45 PM</td>
<td>4:00 PM Digital Media</td>
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<tr>
<td>3:00 PM</td>
<td>4:15 PM Break</td>
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<td>3:15 PM</td>
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<td>3:30 PM</td>
<td>5:00 PM</td>
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<td>3:45 PM</td>
<td>5:30 PM</td>
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<tr>
<td>4:00 PM</td>
<td>6:00 PM 6:00–9:30 PM Young Investigator Networking Dinner Cuba Libre Restaurant</td>
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<tr>
<td>5:00 PM</td>
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<td>5:30 PM</td>
<td>7:00 PM</td>
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<tr>
<td>6:00 PM</td>
<td>9:00 PM</td>
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</tbody>
</table>

Note: Unless otherwise listed all sessions will take place in the Valencia Ballroom, W415 AB. During breaks food and beverage will be available for purchase outside of the Valencia Ballroom.
The American Heart Association gratefully acknowledges educational grants from the following companies:

Philips Healthcare  
PhysioControl  
ZOLL Medical
Program Committee

The American Heart Association thanks the members of the Program Committee for their dedication and leadership in planning the program.

Benjamin S. Abella, MD, MPH, MPhil, FACEP, FAHA, Symposium Co-Chair, University of Pennsylvania, Philadelphia, Pennsylvania
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Lance Becker, MD, FAHA, University of Pennsylvania, Philadelphia, Pennsylvania
Marc Berg, MD, FAAP, University of Arizona, Tucson, Arizona
John S. Berry IV, MD, Brooke Army Medical Center, San Antonio, Texas
Clifton W. Callaway, MD, PhD, University of Pittsburgh, Pittsburgh, Pennsylvania
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Carrie Sims, MD, University of Pennsylvania, Philadelphia, Pennsylvania
Brian O’Neil, MD, Wayne State University, Detroit, Michigan
Robert Neumar, MD, PhD, University of Michigan, Ann Arbor, Michigan
Fumito Ichinose, MD, PhD, Mass General Hospital, Charlestown, Massachusetts
Judith Finn, PhD, RN, FAHA, Curtin University, Perth, Australia
Kelly Sawyer, MD, MS, William Beaumont Hospital, Royal Oak, Michigan
Sandra Wanek, MD, Legacy Emanuel Medical Center, Portland, Oregon
Raúl Gazmuri, MD, PhD, Rosalind Franklin University of Medicine and Science, North Chicago, Illinois
Mark Angelos, MD, Ohio State University, Columbus, Ohio
ReSS Room Locator

Abstracts on USB................................................................. Science & Technology Hall, Booth 557
AHA Hands-Only CPR Training ............................................. Science & Technology Hall, Booth 135
Business Center (FedEx Kinko’s).............................................. Level 2, Hall C Lobby
Concurrent Oral Abstract Breakout Sessions...............................W414 AB and W414 CD
ePoster Workstations ........................................................... Valencia Ballroom, W415 CD
JCS/ReSS Joint Session (Saturday).................................................. W414 CD
Plenary Sessions ................................................................. Valencia Ballroom, W415 AB
Poster Sessions................................................................. Valencia Ballroom, W415 CD
Registration (Scientific Sessions)* .................................................. West Building, Hall C, Level 2
Science & Technology Hall......................................................... West Building, Halls B1 – B4
Speaker Resource Room (Scientific Sessions)* ........................ West Building, Hall C, Level 2
Women in Resuscitation Networking Meeting ................................. W414 AB

* New in 2015: your Scientific Sessions registration now includes access to ReSS. There is no longer a separate Registration and Speaker Resource Room since ReSS is now part of Scientific Sessions.
Information for Presenters

**On-Site Registration**

Registration for ReSS, now a part of Scientific Sessions (attendees, invited speakers, exhibitors and groups), will be in the West Building, Hall C, Level 2. Hours for on-site registration are as follows:

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

**Speaker Resource Room**

All speakers must submit their presentations, and moderators must submit their disclosure slide, at least three hours before their session is scheduled to begin. Please note that **no personal laptops will be permitted**.

Hours for the Speaker Resource Room, located in the West Building, Hall C are:

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

**Abstract Presentations**

Abstracts from ReSS and Scientific Sessions 2015 are available on USB (visit West Building, Halls B1-B4, Science & Technology Hall, Booth #557, Level 2), Circulation online (circ.ahajournals.org), the Mobile Meeting Guide (scientificsessions.org/mobile) and the Online Program and Itinerary Planner (scientificsessions.org).

Abstracts and presentations are embargoed for release at the date and time of presentation or the time of the AHA news event. Written embargoed information cannot be shared with anyone, but one-on-one embargoed media interviews can be conducted as long as the reporter agrees to abide by the embargo policy. Failure to honor embargo policies will result in the abstract being withdrawn and barred from presentation.

**Oral abstracts** will be presented in Valencia Ballroom, W415 AB on Saturday, Sunday, and Monday. Abstracts 1-41 will be presented orally.

**Poster abstracts** will be presented in Valencia Ballroom, W415 CD on Saturday afternoon, Sunday morning, and Monday morning. Posters for all three sessions will be displayed throughout the meeting to give attendees the opportunity to view all posters. Attendees are encouraged to visit the posters during breaks and lunch. Poster abstract presenters will be available for questions and discussion during the dates/times specified below.

Abstracts presented as posters will be presented as follows:
- Saturday, November 7, 1:00–2:30 PM: 100-181
- Sunday, November 8, 8:00–9:30 AM: 200-284
- Monday, November 9, 8:00–9:30 AM: 300-379, and Late Breaking Science: 380-384

The schedule is provided below. Please note that poster presenters are required to attend their posters during the allotted times and comply with the set-up, attendance and tear-down times shown below:

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<thead>
<tr>
<th>Poster Session Date</th>
<th>Attendance Time</th>
<th>Set-up Time</th>
<th>Tear-down Time</th>
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<tbody>
<tr>
<td>Saturday, Nov. 7</td>
<td>1:00–2:30 PM</td>
<td>Saturday, 7:30 AM</td>
<td>Monday, by 6:00 PM</td>
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<tr>
<td>Sunday, Nov. 8</td>
<td>8:00–9:30 AM</td>
<td>Saturday, 7:30 AM</td>
<td>Monday, by 6:00 PM</td>
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<tr>
<td>Monday, Nov. 9</td>
<td>8:00–9:30 AM</td>
<td>Saturday, 7:30 AM</td>
<td>Monday, by 6:00 PM</td>
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</tbody>
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**ePosters**

In addition to the traditional poster format, poster abstract presenters were invited to upload their posters electronically. During the meeting, ePosters are available only to attendees and may be viewed from the Communication Center in the Valencia Ballroom, W415 CD and throughout the convention center, the Scientific Sessions on Demand website and the ReSS website.

**QR Codes**

QR codes enable attendees with smart phones to view ePosters and, if applicable, the author’s narration of the poster. QR codes for all ReSS posters will be displayed on the poster boards.
ReSS Highlights & Awards

Women in Resuscitation Science Networking Meeting

On Saturday, beginning at 12:00 PM, the fifth annual Women in Resuscitation Science Networking Meeting will be in Room W414 CD. We invite you to join us in an informal setting to network with leaders in resuscitation.

Japanese Circulation Society/ReSS Joint Session

Join us in Room W414 AB on Saturday at 12:00 PM for a session on the implementation and maintenance of a National Out-of-Hospital Registry in Japan and a discussion on the possibility/challenges of implementing a similar registry in the United States.

Late-Breaking Abstracts in Resuscitation Science

Late-breaking resuscitation abstracts were evaluated on the basis of their impact and the novelty of the science. These oral and poster abstracts are innovative and provide the latest breakthroughs in either basic or clinical science, presenting cutting-edge, exciting and pivotal research results. Oral abstracts will be presented in Valencia Ballroom, W415 AB on Monday, from 4:30–5:30 PM. Poster abstracts will be presented in Valencia Ballroom, W415 CD on Monday, from 8:00–9:30 AM. Late-breaking resuscitation science abstracts will be published in Circulation Research and will be available online at http://circres.ahajournals.org/.

Lifetime Achievement Awards

The Lifetime Achievement Awards in Cardiac and Trauma Resuscitation Science were established by the AHA Committee on Emergency Cardiovascular Care in 2003 to honor scientists for their outstanding contributions in cardiac and trauma science. The 2015 Awards for Lifetime Achievement will be presented Saturday at 9:15 AM. Plan to join us to celebrate and recognize these giants in cardiac and trauma resuscitation science.

The 2015 Award for Lifetime Achievement in Cardiac Resuscitation Science will be presented to Mary Fran Hazinski, MSN, FAAN, FAHA, FERC, a pediatric critical care and cardiovascular Clinical Nurse Specialist since 1975. She is currently a Professor at Vanderbilt University School of Nursing with adjunct appointments in the Departments of Surgery and Pediatrics at Vanderbilt School of Medicine. Mary Fran has worked continuously for the AHA in Emergency Cardiovascular Care (ECC) since 1988, first as a volunteer member and then Co-chair of the Pediatric Resuscitation Subcommittee, and as Vice-Chair and then Chair of the ECC Committee. In 1999 Mary Fran became the AHA ECC Senior Science Editor and since that time she has co-edited the ILCOR International Consensus on CPR and ECC Science with Treatment Recommendations, and edited or co-edited the AHA Guidelines for CPR and ECC in 2000, 2005, 2010 and 2015. She has also provided science review for the AHA ECC training materials. Mary Fran has authored more than 115 peer-reviewed publications on pediatric critical care, cardiovascular and resuscitation topics, including original research on pediatric injury prevention and the accuracy of AED analyses of pediatric rhythms. She has written more than 50 book chapters and edited two multi-edition pediatric critical care nursing textbooks. She is a member of the Editorial Board for the Journal of the American Heart Association. Mary Fran has been elected to Fellowships in the American Academy of Nursing, the American Heart Association and the European Resuscitation Council; in 2010 ILCOR recognized her as a Giant in Resuscitation.

The 2015 Award for Lifetime Achievement in Trauma Resuscitation Science will be presented to Ellen MacKenzie, PhD. Dr. MacKenzie is the Fred and Julie Soper Professor and Chair of the Department of Health Policy and Management of the Johns Hopkins Bloomberg School of Public Health. She is a graduate of the Bloomberg School where she earned her doctoral degree in biostatistics. Dr. MacKenzie has contributed to the development of tools for measuring the severity and outcome of injury and used these tools in evaluating the organization, financing and performance of trauma systems. Her research has also advanced our understanding of how personal and environmental factors influence recovery post-injury. Most recently, Dr. MacKenzie has been instrumental in establishing the Major Extremity Trauma Research Consortium (www.metrc.org), whose goal is to produce the evidence needed to establish treatment guidelines for the optimal care of the wounded warrior and ultimately improve outcomes of both service members and civilians who sustain high energy extremity trauma.

Dr. MacKenzie’s awards include the A.J. Mirkin Service Award from the Association for the Advancement of Automotive Medicine, the Ann Doner Vaughan Kappa Delta Award from the American Academy of Orthopaedic Surgeons, the Distinguished Career Award from the American Public Health Association (Injury Control and Emergency Health Services Section) and the American Trauma Society’s Distinguished Achievement Award. She is an honorary fellow of the American Association for the Surgery of Trauma and in 2012 was named by CDC as one of 20 leaders and visionaries who have had a transformative effect on the field of violence and injury prevention over the past 20 years.
ReSS Awards (continued)

Previous winners of the Lifetime Achievement Awards

Cardiac Resuscitation Award Recipients

2014  Leonard A. Cobb, MD
2013  Michael K. Copass, MD
2012  Lance Becker, MD, FAHA
2011  Fritz Sterz, MD, PhD
2010  G. Guy Knickerbocker, PhD, and James R. Jude, MD
2009  Mickey S. Eisenberg, MD, PhD
2008  Douglas Chamberlain, CB, DSc (Hon), FRCP, FRCA, FACC, FESC
2007  Joseph P. Ornato, MD, FAHA, FACP, FACC, FACEP
2006  Robert Berg, MD, FAHA, FAAP
2005  Petter Steen, MD, PhD
2004  Max Harry Weil, MD, PhD
2003  Myron L. Weisfeldt, MD, FAHA

Trauma Resuscitation Award Recipients

2014  Kenneth L. Mattos, MD
2013  Demetrios Demetriades, MD, PhD, FACS
2012  Ernest Moore, MD
2011  Thomas M. Scalea, MD
2010  Donald Trunkey, MD
2009  Samuel A. Fisherman, MD
2008  John B. Holcomb, MD, FAHA, FACS
2007  Ronald V. Maier, MD, FACS
2006  David B. Hoyt, MD, FACS
2005  Irshad H. Chaudry, PhD
2004  G. Tom Shires, MD
2003  James Atkins, MD

2015 Ian G. Jacobs Award for International Group Collaboration to Advance Resuscitation Science

The Award for International Group Collaboration to Advance Resuscitation was established in 2010 to recognize international collaboration among individuals over an extended period of time that has resulted in major contributions to fundamental or clinical science related to cardiac arrest or traumatic injury. The Award was named posthumously in honor of Professor Ian George Jacobs, PhD, OStJ, FERC, FAHA in 2014 in recognition of his tireless efforts to bring clinicians and researchers together from multiple disciplines and countries to improve acute resuscitation care throughout the world. The award will be presented Saturday at 9:15 AM.

The 2015 award will be presented to the TTM Investigators. The Target Temperature Management (TTM) after Out-of-Hospital Cardiac Arrest trial recruited 950 patients in 36 intensive care units in ten countries (Europe and Australia) between 2010 and 2013. Close to 300 investigators were involved in randomization, patient treatment, data capture, prognostication, follow up, blood sampling and trial administration. An international steering group led the trial, with representatives from each country. The main results were presented at American Heart Association Scientific Sessions in Dallas 2013 and simultaneously published in New England Journal of Medicine. The trial did not demonstrate a difference in survival or neurological outcome with TTM at either 33 or 36 C for comatose patients admitted to an intensive care unit for post cardiac arrest treatment. After the main publication, the focus of the trial group has been on the predefined sub-studies and post hoc studies performed on the TTM-trial data set. The predefined sub-studies included a large blood bio-bank with 22000 samples, prospectively collected ECG and EEG data, detailed cognitive outcome and quality of life investigations and prognostication algorithms. The results from the TTM-trial have significantly influenced treatment and neurological prognostication guidelines from international societies world-wide. Most importantly the trial group has shown that full-scale international collaboration can help provide the evidence base that is needed within resuscitation science to better define optimal care for patients, relatives, professionals and society. The TTM-trial group will through increased international collaboration continue to strive for performing large, low-risk of bias, clinical trials to improve post-cardiac arrest care.
2015 Best Abstract Awards

Four recipients have been selected to receive this award for the top-scoring abstracts submitted to the Resuscitation Science Symposium. The winners of the Best Abstract Awards will be recognized during ReSS.04: Best of the Best Oral Abstract Presentations on Saturday, November 15, at 10:15 AM.

<table>
<thead>
<tr>
<th>Name</th>
<th>Presentation Number</th>
<th>Title</th>
<th>Category</th>
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<tbody>
<tr>
<td>Sandar Ansari, MD</td>
<td>1</td>
<td>A Novel Portable Polyvinylidene Fluoride Based Sensor for Detection of Hemorrhage</td>
<td>Trauma Resuscitation Science</td>
</tr>
<tr>
<td>Ken Nagao, MD, PhD</td>
<td>2</td>
<td>Cooling Duration of Therapeutic Hypothermia for Patients Undergoing Extracorporeal Cardiopulmonary Resuscitation: The SAVE-J study</td>
<td>Cardiac Resuscitation Science</td>
</tr>
<tr>
<td>Hiromichi Naito, MD, PhD</td>
<td>3</td>
<td>Interruptions of Views Are Associated With Failed Endotracheal Intubation and Shallow Laryngoscopic Blade Position is Associated With Longer Attempt Time in the Prehospital Settings</td>
<td>Trauma Resuscitation Science</td>
</tr>
<tr>
<td>Jonathan Elmer, MD, MS</td>
<td>4</td>
<td>Early Withdrawal of Life-Sustaining Therapy for Perceived Neurological Prognosis is Associated With Excess Mortality After Out-of-Hospital Cardiac Arrest</td>
<td>Cardiac Resuscitation Science</td>
</tr>
</tbody>
</table>
### 2015 Young Investigator Awards

These awards are presented for the top-scoring abstracts submitted by young investigators who are within the first 5 years of their appointment. The Young Investigator Event recognized the following winners of these awards on Friday, November 6.

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<tr>
<th>Name</th>
<th>Presentation Number</th>
<th>Abstract Title</th>
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<tbody>
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<td>Allison C. Koller</td>
<td>325</td>
<td>Incidence of Errant Shock Delivery in Out-of-Hospital Cardiac Arrest Resuscitation</td>
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<tr>
<td>Asami Kashiwa</td>
<td>155</td>
<td>Prognostic Factors and Outcomes of Patients With Vasospastic Angina Surviving Out-of-Hospital Cardiopulmonary Arrest</td>
</tr>
<tr>
<td>Asger Granfeldt</td>
<td>327</td>
<td>Comorbidity and Medication Use Are Risk Factors of Non-shockable Rhythm in Patients With Out-of-Hospital Cardiac Arrest</td>
</tr>
<tr>
<td>Carolina Malta Hansen</td>
<td>215</td>
<td>Improved Rates of Bystander Cardiopulmonary Resuscitation And Survival Consistent Across Socioeconomic Spectrum: Results From The North Carolina HeartRescue Project</td>
</tr>
<tr>
<td>Chun Song Youn</td>
<td>151</td>
<td>Combination of Initial Neurologic Examination, A Quantitative CT Scan Measure of Brain Edema and cEEG To Predict Outcome After Cardiac Arrest</td>
</tr>
<tr>
<td>Edy Y. Kim</td>
<td>305</td>
<td>Innate T Cells Improve Brain Injury and Mortality After Cardiac Arrest And Resuscitation</td>
</tr>
<tr>
<td>Jaidip Chakravartti</td>
<td>154</td>
<td>Early Non-Contrast Head Computed Tomography for Prognostication of Neurologic Outcomes Following Cardiac Arrest</td>
</tr>
<tr>
<td>Janet Bray</td>
<td>161</td>
<td>Have We Abandoned Therapeutic Hypothermia Prematurely?</td>
</tr>
<tr>
<td>Jefferson G. Williams</td>
<td>348</td>
<td>Survivors of Adult Out-of-Hospital Cardiac Arrest Are Likely to be Neurologically Intact Despite Prolonged Prehospital Resuscitation</td>
</tr>
<tr>
<td>Johanna C. Moore</td>
<td>128</td>
<td>Head and Shoulder Elevation Improves Cerebral Perfusion Pressure during Active Compression-Decompression CPR and Conventional CPR in a Porcine Cardiac Arrest Model</td>
</tr>
<tr>
<td>Joshua C. Reynolds</td>
<td>266</td>
<td>Does the Intra-Resuscitation Pupillary Light Reflex Predict Return of Spontaneous Circulation or Neurologic Outcome?</td>
</tr>
<tr>
<td>Name</td>
<td>Presentation Number</td>
<td>Abstract Title</td>
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<tr>
<td>Kazuya Tateishi</td>
<td>107</td>
<td>Diagnostic Impact of Electrocardiogram and Emergency Coronary Angiography In Patients With Out-of-Hospital Cardiac Arrest</td>
</tr>
<tr>
<td>Kohsuke Hagisawa</td>
<td>104</td>
<td>Resuscitation by transfusion with Hemoglobin Vesicles in Trauma Hemorrhagic Shock/Coagulopathy Rabbits.</td>
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<td>Kristian Kragholm</td>
<td>232</td>
<td>Differences in Bystander Cardiopulmonary Resuscitation and First Responder Defibrillation Narrowed to Similar Levels in Urban and Non-urban Out-of-Hospital Cardiac Arrest Patients Following A Quality Improvement Program in North Carolina</td>
</tr>
<tr>
<td>Lauren E. Thompson</td>
<td>250</td>
<td>Trends in Long-Term Survival After In-Hospital Cardiac Arrest: Insights from Get With The Guidelines-Resuscitation#174;</td>
</tr>
<tr>
<td>Michael G. Scutella</td>
<td>109</td>
<td>Percutaneous Intervention (PCI) Improves Outcomes in Out-of-Hospital Cardiac Arrest (OHCA) Patients Receiving Coronary Angiography</td>
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<tr>
<td>Michele M. Salzman</td>
<td>279</td>
<td>Poloxamer 188 Protects Endothelial Cells from Hypoxia/Reoxygenation Injury - Implications for Cardio- and Neuroprotection after Cardiac Arrest</td>
</tr>
<tr>
<td>Mony Shuvy</td>
<td>330</td>
<td>Predictors of Long-Term Mortality for Survivors of Out-of-Hospital Cardiac Arrest</td>
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<tr>
<td>Jason A. Bartos</td>
<td>283</td>
<td>Potassium Infusion at the Onset of CPR Prevents Mitochondrial Impairment after Prolonged VF Arrest</td>
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<td>Regina Sordi</td>
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<td>The Role of Neuronal Nitric Oxide Synthase on The Vascular Hyporeactivity and Multiple Organ Failure Associated with Hemorrhagic Shock</td>
</tr>
<tr>
<td>Takayuki Ogura</td>
<td>100</td>
<td>Harmless Insertion, Adequate Positioning, and Safety Occlusion in Resuscitative Endovascular Balloon Occlusion of the Aorta (REBOA), using Echo-guidance and Monitoring of the Femoral Arterial Blood Pressure</td>
</tr>
<tr>
<td>Takuya Shimizu</td>
<td>273</td>
<td>Production of Plasminogen Activator Inhibitor-1 in Infarcted Lesion was Associated with Coronary Endothelial Vasomotor Dysfunction and Progressive Dysfunction of Left Ventricle in Patients with Acute Myocardial Infarction</td>
</tr>
<tr>
<td>Tasha Hanuschak</td>
<td>111</td>
<td>Coronary Angiography After Out-of-Hospital Cardiac Arrest is Associated With Improved Neurologically Intact Survival</td>
</tr>
<tr>
<td>Tsukasa Yagi</td>
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3CPR Emergency Medical Services Travel Stipends

Sponsored by the Council on Cardiopulmonary, Critical Care, Perioperative and Resuscitation (3CPR), the EMS travel stipends support the efforts of EMS chiefs, educators and other non-physician EMS leadership by providing travel stipends to attend ReSS. The recipients of the 2015 travel stipends were selected based on their commitment and interest in cardiac arrest, CPR and resuscitation care, their potential to make an impact in out-of-hospital resuscitation care, and their record of EMS accomplishments.

The 2015 3CPR EMS Travel Stipend recipients are:
- Steven Cohen, Jersey City Medical Center, USA
- Linda Mattrich, Milwaukee Fire Department, USA
- Lyndsey O’Shea, Welsh Ambulance Service, UK
- Patricia Palaia, Madison Emergency Medical Services, USA
- Daniel Phillips, Royal Oak Fire Department, USA
- Emily Pearce, University of New Mexico, USA
- Helen Pocock, South Central Ambulance Service, UK
- Rose Steen, Lane Fire Authority, USA
- Jeremiah Underwood, Stokes County EMS, USA
- Alyssa Whim, Johnson County Community College, USA
- John-Paul Couce, Cataldo Ambulance Service, USA
- Bryan Fischberg, Robert Wood Johnson University Hospital, USA
- Gary Shaw, North East Ambulance Service, UK
ReSS 2015 3-Day Event Program

Friday, November 6
6:00–9:30 PM
Young Investigator Networking Event
Cuba Libre Restaurant

Saturday, November 7
8:00–8:15 am
Valencia Ballroom, W415 AB
Symposium Opening: Welcome and Introduction
Tom Aufderheide, MD, FACEP, FAHA

8:15–9:30 AM
Valencia Ballroom, W415 AB
Plenary Session
IOM Report on Cardiac Arrest
Moderators:
Nisha Chandra-Strobos, MD
Victor Dzau, MD

8:15 Overview
Victor J. Dzau, MD

8:20 Chapters, Commissioned Papers, and Recommendations
Tom Aufderheide, MD, FACEP, FAHA
Lance Becker, MD, PhD

8:30 Panel Discussion
Tom Aufderheide, MD, FACEP, FAHA
Lance Becker, MD, PhD
Dianne Atkins, MD, FAHA
Marina Del Rios, MD, MS

9:15–10:00 AM
Valencia Ballroom, W415 AB
Plenary Session
2015 Awards for Lifetime Achievement in Cardiac Resuscitation Science and Trauma Resuscitation Science and Presentation of the Ian G. Jacobs Award for International Group Collaboration to Advance Resuscitation Science

9:15 Award Recipient for Cardiac Resuscitation Science
Mary Fran Hazinski, MSN, FAAN, FAHA, FERC

9:30 Award Recipient for Trauma Resuscitation Science
Ellen MacKenzie, PhD

9:45 Award Recipient for Ian G. Jacobs Award for International Group Collaboration to Advance Resuscitation Science
TTM Investigators

10:15–11:30 AM
Valencia Ballroom, W415 AB
Plenary Session
Best of the Best Oral Abstract Presentations and Presentation of the Best Abstract Awards for Cardiac and Trauma Resuscitation Science
Moderators: See Mobile App for Moderators

10:15 Early Withdrawal of Life-Sustaining Therapy for Perceived Neurological Prognosis is Associated with Excess Mortality After Out-of-Hospital Cardiac Arrest
Sardar Ansari, Daniel Slavin, Mohamad H. Tiba, Harm Derksen, Kenn Oldham, Kevin Ward, Kayvan Najarian, Univ of Michigan, Ann Arbor, MI

10:30 Cooling Duration of Therapeutic Hypothermia for Patients Undergoing Extracorporeal Cardiopulmonary Resuscitation: The SAV E-J Study
Ken Nagao, Tetsuya Sakamoto, Naoto Morimura, Yasufumi Asai, Hiroyuki Yokota, Satoshi Nara, Mamoru Hase, Yoshio Tahara, Takahiro Atsumi, SAVE-J, Tokyo, Japan

10:45 Interruptions of Views are Associated with Failed Endotracheal Intubation and Shallow Laryngoscopic Blade Position is Associated with Longer Attempt Time in the Prehospital Settings
Hiromichi Naito, Francis X. Guyette, Clifton W. Callaway, Univ of Pittsburgh, Pittsburgh, PA

11:00 A Novel Portable Polyvinylidene Fluoride Based Sensor for Detection of Hemorrhage
Jonathan Elmer, Univ of Pittsburgh, Pittsburgh, PA; Cesar Torres, Univ of Washington, Seattle, WA; Tom P Aufderheide, Medical Coll of Wisconsin, Milwaukee, WI; Michael A. Austin, The Ottawa Hosp, Ottawa, ON, Canada; Clifton W. Callaway, Univ of Pittsburgh, Pittsburgh, PA; Eyal Golan, Univ of Toronto, Toronto, ON, Canada; Heather Herren, Univ of Washington, Seattle, WA; Jamie Jasti, Medical Coll of Wisconsin, Milwaukee, WI; Peter J. Kudenchuk, Univ of Washington, Seattle, WA; Damon C. Scales, Univ of Toronto, Toronto, ON, Canada; Dion Stub, St Paul’s Hosp, Vancouver, BC, Canada; Derek K. Richardson, Univ of California San Francisco, San Francisco, CA; Dana M. Zive, Oregon Health & Science Univ, Portland, OR; Resuscitation Outcomes Consortium

11:30 AM–12:00 PM
Refreshment Break
Food and beverage is available for purchase outside the Valencia Ballroom.

12:00–1:00 PM
Room W414 CD
Women in Resuscitation Networking Meeting
12:00 Mentorship in Academia
Kathy Dracup

12:40 Discussion & Networking
12:00–1:00 pm  
Room W414 AB  
ReSS/JCS Joint Session: Establishing a National Out-of-Hospital Registry  
Moderators:  
Benjamin Abella, MD, MPH, MPhil, FACEP, FAHA  
Kei Nishiyama  
12:00 Lessons Learned from Implementing and Maintaining a Cardiac Arrest National Registry — Challenges and Opportunities  
Noritoshi Ito, MD  
12:20 Towards a US Cardiac Arrest National Registry: Where do we go from here?  
Lance Becker, MD, PhD  
1:00–2:30 pm  
Valencia Ballroom, W415 CD  
Poster Session  
2:30–3:45 pm  
Valencia Ballroom, W415 AB  
Plenary Session  
Therapeutic Hypothermia: My Target Temperature is...  
Moderators:  
Kjetil Sunde  
Monique Anderson, MD  
2:30 32-34°  
Maaret Castren, MD, PhD  
2:45 36°  
Jesper Kjaergaard, MD, PhD, DMSc  
3:00 It Depends, Individualized Care  
Kjetil Sunde  
3:15 Roll of Hypothermia in Trauma  
Eileen Bulger, MD  
3:30 Panel Discussion, Q&A  
10:00–10:15 AM  
Refreshment Break  
Food and beverage is available for purchase outside the Valencia Ballroom.  
4:15–5:30 pm  
Valencia Ballroom, W415 AB  
Plenary Session  
Digital Media  
Moderator:  
Steven Brooks, MHSC, MD, FRCPC  
Marion Leary, RN, MSN  
4:15 Drone AEDs: Opportunities and Challenges with Implementation  
Alec Momont  
4:30 PulsePoint: Application of New Approaches to Improving Bystander CPR  
Richard Price, PhD  
4:45 Telemedicine: Cardiac Arrest, Trauma, and Critical Care  
Dr. James Marcini, MD, MPH  
5:00 Big Data and Emergency Care  
Andrew Schwartz, PhD  
5:15 Panel Discussion, Q&A  
5:30 Association Between Survival and Increases in Prehospital Systolic Blood Pressure After Its Nadir in Major Traumatic Brain Injury  
Daniel W. Spaite, Chengcheng Hu, Univ of Arizona, Tucson, AZ; Bentley J. Bobrow, Arizona Dept of Health Services, Phoenix, AZ; Duane Sherrill, Univ of Arizona, Tucson, AZ; Vatsal Chikani, Arizona Dept of Health Services, Phoenix, AZ; Bruce Barnhart, Univ of Arizona, Phoenix, AZ; Joshua B. Gaither, Kurt R. Denningerhoff, Univ of Arizona, Tucson, AZ; P. David Adelson, Barrow Neurological Inst at Phoenix Children’s Hosp, Phoenix, AZ; Chad Viscusi, Univ of Arizona, Tucson, AZ; Terry Mullins, Arizona Dept of Health Services, Phoenix, AZ; Uwe Stolz, Univ of Arizona, Tucson, AZ  
5:45 Time to Target Temperature and Outcome after Out-of-Hospital Cardiac Arrest  
Alessio Della Mattia, Ospedali Riuniti and Univ of Trieste, Trieste, Italy; Tommaso Pellas, Santa Maria degli Angeli Hosp, Pordenone, Italy; Dario Gregori, Univ of Padua, Padova, Italy; Niklas Nielsen, Helsingborg Hosp, Helsingborg, Sweden; Vincenzo Campanile, Alberto Peratoner, Ospedali Riuniti and Univ of Trieste, Trieste, Italy; Iole Brunetti, Paolo Pelosi, San Martino Hosp, Genova, Italy; Jesper Kjaergaard, Christian Hassager, Copenhagen Univ Hosp, Copenhagen, Denmark  
6:00 C-GRaPH: A Validated Scoring System for the Early Risk Stratification of Neurologic Outcomes After Out-of-Hospital Cardiac Arrest Treated with Therapeutic Hypothermia  
Erich L. Kiehl, Cleveland Clinic Fndn, Cleveland, OH; Alex M Parker, Univ of Virginia, Charlottesville, VA; Ralph M Matar, Cleveland Clinic Fndn, Cleveland, OH; Matthew Gottbrecht, Michelle C. Johansen, Mark P. Adams, Univ of Virginia, Charlottesville, VA; Lori A. Griffiths, Cleveland Clinic Fndn, Cleveland, OH; Katherine L. Bidwell, Univ of Virginia, Charlottesville, VA; Venugopal Menon, Cleveland Clinic Fndn, Cleveland, OH; Kyle B. Enfield, Lawrence W. Gimple, Univ of Virginia, Charlottesville, VA
6:15  The Association of Time to First Epinephrine Administration with Neurological Outcomes in Out-of-Hospital Cardiac Arrest In Japan: Soskanto 2012 Study Report
Yosuke Homma, Hiraku Funakoshi, Takashi Shiga, Tokyo Bay Urayasu/Ichikawa Medical Ctr, Chiba, Japan; Dai Miyazaki, Japanese Redcross Maebashi Hosp, Maebashi, Japan; Naohiro Yonemoto, Nati Ctr of Neurology and Psychiatry, Tokyo, Japan; Yoshio Tahara, Nati Cerebral and Cardiovascular Ctr, Osaka, Japan; Ken Nagao, Surugadai Nihon Univ Hosp, Tokyo, Japan; Arino Yaguchi, Tokyo Women’s Medical Univ, Tokyo, Japan; Naoto Morimura, Yokohama City Univ Medical Ctr, Yokohama, Japan; Atsushi Sakurai, Nihon Univ Sch of Med, Tokyo, Japan; SOS-KANTO 2012 Study Group

10:45  Mitochondrial and Biochemical Effects of Repetitive Cycles of Remote Ischemic Conditioning (RIC) In Human Upper and Lower Extremities
Maia Y. Taft, Univ of Pittsburgh Sch of Med, Pittsburgh, PA; Elizabeth Kenny, Nicholas Krehel, Univ of Pittsburgh, Pittsburgh, PA; Hannah Airgood, Susqueniana Univ, Selinsgrove, PA; Kate Holquist, Stacey Gerstel, Catherine Corey, Jon Rittenberger, Frank X. Guyette, Sruti Shiva, Cameron Dezfulian, Univ of Pittsburgh Sch of Med, Pittsburgh, PA

11:00  S-nitrosoglutathione Reductase Deficiency Prevents Neurological Injury After Cardiac Arrest and Cardiopulmonary Resuscitation
Kei Hayashida, Shuichi Hirai, Kohei Ikeda, Shinichi Kai, Eizo Marutani, Fumito Ichinose, Massachusetts General Hosp/Harvard Medical Sch, Charlestown, MA

11:15  The Effect of Resuscitation Position on Cerebral and Coronary Perfusion Pressure during Mechanical Cardiopulmonary Resuscitation in Porcine Model

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Sunday, November 8

8:00–9:30 AM
Valencia Ballroom, W415 CD
Poster Session

9:30–10:30 AM
Valencia Ballroom, W415 AB
Plenary Session
Year in Review
Moderators:
Graham Nichol, MD, MPH, FAHA
Sarah Murthi, MD

9:30  Year in Review: Cardiac Arrest
Jerry Nolan, MD

9:50  Year in Review: Trauma
Eileen Bulger, MD

10:10  Panel Discussion, Q&A

10:30–11:30 AM
Room W414 AB
Concurrent Session A
Oral Abstracts: Basic Science/Translational
Moderators:
Fumito Ichinose, MD, PhD
Raul Gazmuri, MD, PhD

10:30  Inhaled Nitric Oxide Improves Artificial Circulation and Clinical Outcomes After Prolonged Cardiac Arrest
Matthias Derwall, Andreas Ebeling, Anne Brücken, Univ Hosp, RWTH Univ, Aachen, Germany; Christoph Nix, Abiomed Europe Inc., Aachen, Germany; Kay W Nolte, Univ Hosp, RWTH Univ, Aachen, Germany; Michael Fries, St. Vincenz Hosp Limburg, Limburg, Germany

10:45  Coronary Angiography After Out-of-Hospital Cardiac Arrest is Associated With Improved Neurologically Intact Survival
Tasha Hanuschak, Steven Brooks, Queen’s Univ, Kingston, ON, Canada; Laurie Morrison, Univ of Toronto, Toronto, ON, Canada; Paul Peng, Queen’s Univ, Kingston, ON, Canada; Cathy Zhan, St. Michael’s Hosp, Toronto, ON, Canada

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10:30–11:30 am
Room W414 CD
Concurrent Session B
Oral Abstracts: Clinical
Moderators:
Jasmeet Soar
Jon Rittenberger, MD, MS

10:30  A New Therapeutic Strategy for Refractory Cardiac Arrest Including Prehospital Ecmo: A Comparison Study
11:00  Video-only Cardiopulmonary Resuscitation Education For Families Before Hospital Discharge: A Multicenter Pragmatic Clinical Trial

11:15  The Effect of Targeted Temperature Management Is Dependent Upon the Duration of Out-of-Hospital Cardiac Arrest
Ian R. Drennan, Rescu, Li Ka Shing Knowledge Inst, St Michael’s Hosp; Inst of Medical Sciences, Faculty of Med, Univ of Toronto, Toronto, ON, Canada; Steve Lin, Rescu, Li Ka Shing Knowledge Inst, St Michael’s Hosp, Toronto, ON, Canada; Kevin E. Thorpe, Dalla Lana Sch of Public Health, Univ of Toronto; Applied Health Res Ctr,St. Michael’s Hosp, Toronto, ON, Canada; Sheldon Cheskes, Laurie J. Morrison, Rescu, Li Ka Shing Knowledge Inst, St Michael’s Hosp; Div of Emergency Med, Univ of Toronto, Toronto, ON, Canada

11:30 AM–1:00 PM
Valencia Ballroom, W415 AB
Plenary Session
Hemodynamic Monitoring from the Field to the ICU
Moderator:
Lew Kaplan, MD

11:30  Prehospital Monitoring Capabilities and Limitations
Sam Galvagno, DO, PhD, MS

11:45  Continuous Vital Sign Monitoring
Craig Manifold, DO

12:00  Catheter-based Monitoring
Philip Efron, MD

12:15  Echocardiography
Sarah Murthi, MD

12:30  Panel Discussion, Q&A

1:00–3:00 PM
Scientific Sessions Opening Sessions
No ReSS Programming

3:00–4:30 PM
Room W414 AB
Concurrent Session A
Oral Abstracts: Trauma
Moderators:
Sam Fisherman, MD
Irshad Chaudry, PhD

3:00  Platelet Force Measurements are Predictive of Triage Category and Blood Transfusion after Trauma
Nathan J. White, Lucas Ting, Esther B. Lim, Ari Karchin, Xu Wang, Annie O. Smith, Diana Chien, Tessa C. Rue, Nathan Sniadecki, Univ of Washington, Seattle, WA

3:15  It would be Possible to Rescue Traumatic Hemorrhagic Shock Patients Who Failed to Fluid Resuscitation (Fluid Non-responder) but Succeed in REBOA Resuscitation (REBOA/IABO Responder)
Tomohiko Orita, Tomohiro Funabiki, Motoyasu Yamazaki, Masayuki Shimizu, Tomohiro Sato, Taku Akashi, Yousuke Kobayashi, Kousuke Yoshida, Yoshimi Nakamichi, Saori Kurata, Mitsuhide Kitano, Saiseikai Yokohamashi Tobu Hosp, Yokohama-shi, Kanagawa-ken, Japan

3:30  Respiratory Quotient Correlates with Blood Lactate During Hemorrhage
Joshua W. Lampe, Univ of Pennsylvania, Philadelphia, PA; Ralph Wijskoff, Jens Muehlsteff, Marek Bartula, Philips Res, Eindhoven, Netherlands; Marc Fuller, Philips Therapeutic Care, Andover, MA; Dawn Jorgenson, Philips Therapeutic Care, Bothell, WA; Lance B. Becker, Univ of Pennsylvania, Philadelphia, PA

3:45  Induced Hypothermia Improves a Novel Array of Metabolic Outcomes After Mouse Hemorrhagic Shock
Jing Li, Huashan Wang, Chunpei Lee, James Costakis, Xiangdong Zhu, Terry L. Vanden Hoek, Univ of Illinois at Chicago, Chicago, IL

4:00  Cardiac Ultrasound has the Potential to Detect Tension Pneumothorax as a Reversible Cause of Cardiac Arrest – An Experimental Porcine Study
Philip Caap, Rasmus Aagaard, Aarhus Univ Hosp, Aarhus C, Denmark; Erik Sloth, Aarhus Univ Hosp, Aarhus N, Denmark; Bo Løfgren, Regional Hosp of Randers, Randers NE, Denmark; Asger Granfeldt, Aarhus Univ Hosp, Aarhus C, Denmark

4:15  Association Between Elevated Initial Trauma Center Body Temperature and Non-Mortality Outcomes Following Major Traumatic Brain Injury
Joshua B. Gaither, Univ of Arizona, Tucson, AZ; Vatsal Chikani, Arizona Dept of Health Services, Phoenix, AZ; Daniel W. Spaite, Jennifer J. Smith, Merlin Curry, Moses Mhayamaguru, Bruce Barnhart, Univ of Arizona, Tucson, AZ; P. David Adelson, Phoenix Children’s Hosp, Phoenix, AZ; Chad Viscusi, Kurt Denninghoff, Bentley J. Bobrow, Univ of Arizona, Tucson, AZ
3:00–4:30 PM  
Room W414 CD  
Concurrent Session B  
Oral Abstracts: Cardiac Arrest Epidemiology  
Moderators:  
Monique Anderson, MD  
See Mobile App for Additional Moderator

3:00  
Long-term Outcomes In Elderly Survivors Of Myocardial Infarction With And Without Out-of-Hospital Cardiac Arrest  

3:15  
Sustained Ventricular Fibrillation during CPR as the Strongest Predictor for the Favorable Neurological Outcomes in Out-of-Hospital Cardiac Arrest Patients; The Multicenter Prospective Study of SAVE-J  
Takahiro Nakashima, Yoshio Tahara, Satoshi Yasuda, Natl Cerebral and Cardiovascular Ctr, Osaka, Japan; Naoto Morimura, Yokohama City Univ Medical Ctr, Yokohama, Japan; Ken Nagao, Surugadai Nihon Univ Hosp Nihon Univ Sch, Tokyo, Japan; Yasufumi Asai, Sapporo Medical Univ, Sapporo, Japan; Hiroyuki Yokota, Nippon Med Sch, Tokyo, Japan; Mamoru Hase, Sapporo Medical Univ, Sapporo, Japan; Takahiro Atsumi, Kobe City Med Cntr General Hosp, Kobe, Japan; Tetsuya Sakamoto, Teikyo Univ Sch of Med, Tokyo, Japan; SAVE-J Study Group

3:30  
Missed Opportunities in Use of Medical Emergency Teams Prior to In-Hospital Cardiac Arrest  
Maya L. Chan, Pembroke Hill High Sch, Kansas City, MO; Fengming Tang, Mid America Heart Inst, Kansas City, MO; Paul S. Chan, Mid America Heart Inst and the Univ of Missouri-Kansas City, Kansas City, MO

3:45  
Incidence and Outcomes of Cardiopulmonary Resuscitation in Pediatric Intensive Care Units  
Robert Berg, Children’s Hosp of Philadelphia, Philadelphia, PA; Amy Clark, Univ of Utah, Salt Lake City, UT; Vinay M. Nadkarni, Children’s Hosp of Philadelphia, Philadelphia, PA; Frank Moler, Univ of Michigan, Ann Arbor, MI; Robert M. Sutton, Children’s Hosp of Philadelphia, Philadelphia, PA; David L. Wessel, John T. Berger, Children’s Natl Medical Ctr, Washington, DC; Kathleen Meert, Children’s Hosp of Michigan, Detroit, MI; J. Michael Dean, Univ of Utah, Salt Lake City, UT; Murray Pollack, Children’s Natl Medical Ctr, Washington, DC

4:00  
True Public Access Defibrillator Coverage is Overestimated  
Christopher L. F. Sun, Derya Demirtaş, Univ of Toronto, Toronto, ON, Canada; Steven C. Brooks, Queen’s Univ, Kingston, ON, Canada; Laurie J. Morrison, St. Michael’s Hosp, Toronto, ON, Canada; Timothy C. Y. Chan, Univ of Toronto, Toronto, ON, Canada

4:15  
Direct Transport to a PCI Center Following Out-of-Hospital Cardiac Arrest is Associated with Improved Survival in North Carolina  
Kristian Kragholm, Carolina Malta Hansen, Matthew Dupre, Ying Xian, Duke Clinical Res Inst, Durham, NC; Benjamin Strauss, Duke Univ, Durham, NC; Clark Tyson, Lisa Monk, Duke Clinical Res Inst, Durham, NC; Claire Corbett, New Hanover Regional Medical Ctr, Wilmington, NC; Christopher B. Fordyce, Duke Clinical Res Inst, Durham, NC; David A. Pearson, Carolinas Medical Ctr, Charlotte, NC; Emil L. Fosbol, James G. Jollis, Duke Clinical Res Inst, Durham, NC; Benjamin Abella, Univ of Pennsylvania, Philadelphia, NC; Bryan McNally, Emory Univ Sch of Med, Atlanta, GA; Christopher B. Granger, Duke Clinical Res Inst, Durham, NC

4:30–5:30 PM  
Valencia Ballroom, W415 AB  
Plenary Session  
Intra-aortic Resuscitation Strategies  
Moderators:  
See Mobile App for Moderators

4:30  
Resuscitative Endovascular Balloon Occlusion of the Aorta (REBOA) and Selective Aortic Arch Perfusion (SAAP)  
James E. Manning, MD

4:45  
Extracorporeal Support for Organ Donation  
Alvara Rojas Pena, MD

5:00  
Ventricular Support for Cardiac Arrest  
Matthias Derwall, MD

5:15  
Panel Discussion, Q&A

Monday, November 9

8:00–9:30 AM  
Valencia Ballroom, W415 CD  
Poster Session

9:30–10:30 AM  
Valencia Ballroom, W415 AB  
Plenary Session  
Dickenson W. Richards Lecture  
Moderator:  
Karl Kern, MD, FAHA

9:30  
Dickenson W. Richards Lecture  
Thomas Rea, MD, MPH
10:00 Oral Abstracts 1: Implementation of a Multidimensional Bundle for Dispatcher Telephone CPR in a Horizontal Dispatch System is Associated with Increased Bystander CPR and Good Neurological Survival from Out-of-Hospital Cardiac Arrest
Sot Shih-Hung Liu, Lo-Tung Pohai Hosp, Yilan County, Taiwan; Kah-Meng Chong, Hui-Chih Wang, Nati Taiwan Univ Hosp, Taipei, Taiwan; Yu-Wen Chen, Chi-Ming Hsu, Chung-Rong Tseng, Chao-Lun Hung, Chien-Hua Huang, Hung-Sung Lin, Yun-Chung Yang, Taipei City Government, Taipei, Taiwan; Mei-Fen Yang, Chih-Wei Yang, Nati Taiwan Univ Hosp, Taipei, Taiwan; Yueh-Ping Liu, Taipei City Government, Taipei, Taiwan; Matthew Huei-Ming Ma, Patrick Chow-In KO, Natl Taiwan Univ Hosp, Taipei, Taiwan

10:10 Discussion

10:15 Oral Abstract 2: Telecommunicator CPR Intervention Improves Recognition of Cardiac Arrest and Time to First Chest Compression
John Sutter, Blake Langlais, Arizona Dept of Health Services, Phoenix, AZ; Christian Dameff, Maricopa Medical Ctr, Phoenix, AZ; Jeffrey Tully, Phoenix Children’s Hosp, Phoenix, AZ; Micah Panczyk, Vatsal Chikani, Arizona Dept of Health Services, Phoenix, AZ; Tyler F. Vadeboncoeur, Mayo Clinic Jacksonville, Jacksonville, FL; Daniel W. Spaite, Univ of Arizona, Phoenix, AZ; Bentley J. Bobrow, Arizona Dept of Health Services, Phoenix, AZ

10:25 Discussion

10:30 AM–12:00 PM
Valencia Ballroom, W415 AB
Oral Abstract Session

Moderators:
Jerry Nolan, MD
Rudi Koster, MD, PhD

10:30 Variation of Percutaneous Coronary Intervention In Patients Resuscitated from Out-of-Hospital Cardiac Arrest – A Statewide Evaluation
Robert Swor, Lhuu Qu, Kelly N. Sawyer, WM Beaumont Hosp, Royal Oak, MI; Kevin Putman, William Fales, Hornor Stryker Western Michigan Sch of Med, Kalamazoo, MI

10:45 Health-related Quality of Life After Out-of-Hospital Cardiac Arrest: Analysis of the Parisian Registry
Guillaume Geri, Florence Dumas, Cochin Hosp, Paris, France; Franck Bonnetain, Univire Besaçon Hosp, Besançon, France; Wufran Bougouin, Benoit Champigneulle, Michel Arnaout, Jean Daniel Chiche, Frédéric Pène, Jean-Paul Mira, Cochin Hosp, Paris, France; Jean-Philippe Empana, Sudden Death Expertise Ctr, Paris, France; Alain Cariou, Cochin Hosp, Paris, France

11:00 The Prognostic Value of Pulse Oximetry Plethysmographic Waveform During CPR
Jun Xu, Peking Union Medical Coll Hosp of Chinese Acad of Medical Sciences, Beijing, China; Chens Li, Tianjin Medical Univ General Hosp, Tianjin, China; Huadong Zhu, Xuezhong Yu, Peking Union Medical Coll Hosp of Chinese Acad of Medical Sciences, Beijing, China

11:15 Ischemic Postconditioning During Cardiopulmonary Resuscitation Normalizes Mitochondrial Function In A Porcine Model of Prolonged Cardiac Arrest
Timothy R. Matsuura, Adamantios Tsangaris, Jason A. Bartos, Kadambari Chandra Shekar, Matthew D. Olson, Jennifer N. Rees, Scott H. McKnite, Univ of Minnesota, Minneapolis, MN; Michael C. Lick, Zoll, Roseville, MN; Quinli Cheng, Vanderbilt Univ, Nashville, TN; Robert W Neumar, Univ of Michigan, Ann Arbor, MI; Martin Bienengraeber, Tom P. Aufderheide, Medical Coll of Wisconsin, Milwaukee, WI; Matthias L. Riess, TVHS VA Medical Ctr, Nashville, TN; Demetris Yannopoulos, Univ of Minnesota, Minneapolis, MN

11:30 Associations Between Endothelial Injury, Severity of Post-cardiac Arrest Syndrome and Mortality After Out-of-Hospital Cardiac Arrest
John Bro-Jeppesen, Jesper Kjaergaard, Michael Wanscher, Pår Johansson, Sisse Ostrowski, Christian Hassager, Copenhagen Univ Hosp, Copenhagen, Denmark

11:45 Poloxamer 188 Prevents Mitochondrial Impairment Induced by ST Segment Elevation Myocardial Infarction in a Time and Route-Dependent Manner
Jason A. Bartos, Timothy R. Matsuura, Adamantios Tsangaris, Univ of Minnesota, Minneapolis, MN; Guillaume Debaty, IUF-Grenoble 1, Grenoble, France; Scott H. McKnite, Jennifer N. Rees, Frank Bates, Joseph M. Metzger, Demetris Yannopoulos, Univ of Minnesota, Minneapolis, MN

12:00–12:30 pm
Refreshment Break
Food and beverage is available for purchase outside the Valencia Ballroom.

12:30–1:30 pm
Valencia Ballroom, W415 CD
Plenary Session
NIH Report

Moderator:
Tom Aufderheide, MD, FACEP, FAHA

12:30 K12 Program & The Importance of the NIH T32 Mechanism
Jane Scott, ScD, MSN

12:45 Emergency Care Research & SIREN Initiative
Jeremy Brown, MD

1:00 Trans NIH K12 Program
Drew Carlson, PhD

1:15 Discussion
**MONDAY**

1:30–2:45 PM  
Valencia Ballroom, W415 CD  
Plenary Session  
**Personalized Resuscitation:** One Size Does Not Fit All  
**Moderators:**  
Mimi Peberdy, MD, FAHA  
Michael Donnino, MD

1:30  
**Personalized Cardiopulmonary Resuscitation**  
Robert Sutton, BS, MD

1:50  
**Personalized Post-Cardiac Arrest Care 1:** Oxygenation/Ventilation/Hemodynamics  
Theresa Olasveengen, MD

2:10  
**Personalized Hemorrhage Resuscitation**  
Nathan White, MD

2:30  
**Panel Discussion, Q&A**

12:00–12:30 PM  
**Refreshment Break**  
Food and beverage is available for purchase outside the Valencia Ballroom.

3:15–4:30 PM  
Valencia Ballroom, W415 CD  
Plenary Session  
**2015 Resuscitation Guidelines**  
**Moderator:**  
Cliffton Callaway, MD, PhD

3:15  
**Basic Life Support**  
Monica Kleinman, MD

3:30  
**Advanced Cardiac Life Support**  
Mark Link, MD

3:45  
**Pediatric BLS and ACLS**  
Dianne Atkins, MD, FAHA

4:00  
Q&A/Panel Discussion

4:30–5:30 PM  
Valencia Ballroom, W415 CD  
Plenary Session  
**Late Breaking Resuscitation Abstracts**  
**Moderators:**  
Theresa Olasveengen, MD  
See Mobile App for Additional Moderator

4:30  
**Early Epinephrine for In-Hospital Cardiac Arrest Patients With a Shockable Rhythm**  
Lars W. Andersen, Aarhus Univ/Beth Israel Deaconess Medical Ctr, Boston, MA; Tobias Kurth, Univ of Bordeaux, Bordeaux, France; Katherine Berg, Maureen Chase, Michael Cocchi, Michael Donnino, Beth Israel Deaconess Medical Ctr, Boston, MA

4:45  
**Early Oral Bisoprolol Reduces the Incidence, Duration and Mortality of Pulseless Ventricular Arrhythmias in Patients With Acute NSTEMI**  
Edd Maclean, Royal Brompton Hosp, London, United Kingdom; Sean Zheng, King’s Coll Hosp, London, United Kingdom

5:00  
**Temporal Trends in Out-of-Hospital Cardiac Arrest in Southern Ontario**  
Jason E. Buick, Ian R. Drennan, St Michael’s Hosp, Toronto, ON, Canada; Steven C. Brooks, Queens Univ, Kingston, ON, Canada; Adam Byers, St Michael’s Hosp, Toronto, ON, Canada; Sheldon Cheskes, Michael Feldman, Sunnybrook Ctr for Prehospital Med, Toronto, ON, Canada; Minwook Lee, Laurie J. Morrison, St Michael’s Hosp, Toronto, ON, Canada; Damon C. Scales, Sunnybrook Health Sciences Ctr, Toronto, ON, Canada; Richard Verbeek, Sunnybrook Ctr for Prehospital Med, Toronto, ON, Canada; Cathy Zhan, Steve Lin, St Michael’s Hosp, Toronto, ON, Canada

5:15  
**Large Randomized Trial of Continuous versus Interrupted Chest Compressions in Out-of-hospital Cardiac Arrest: Results of the Resuscitation Outcomes Consortium CCC Trial**  
Graham Nichol, Univ of Washington – Harborview Ctr for Prehospital Emergency Care, Seattle, WA; Robter Schmicker, Univ of Washington Clinical Trial Ctr, Seattle, WA; Henry Wang, Univ of Alabama Sch of Med, Birmingham, AL; Cliffton Callaway, Univ of Pittsburgh, Pittsburgh, PA; Myron Weisfeldt, Johns Hopkins Med, Baltimore, MD; George Sopko, NHLBI, NIH, Bethesda, MD; Laurie Morrison, Rescu, Li Ka Shing Knowledge Inst., St. Michael’s Hosp; Dept. of Med, Uoff, Toronto, ON, Canada; Sheldon Cheskes, Univ of Toronto, Toronto, ON, Canada; Jim Christenson, Univ of British Columbia, Vancouver, BC, Canada; Ron Straight, Providence Health Care Res Inst, Vancouver, BC, Canada; Ahamed Idris, Univ of Texas Southwestern Medical Ctr, Dallas, TX; S. Marshal Isaacs, UTSW, Dallas, TX; Ian Stiell, Univ of Ottawa, Ottawa, ON, Canada; Christian Vaillancourt, Ottawa Hosp Res Inst; Univ of Ottawa, Ottawa, ON, Canada; Peter Kudenchuk, Thomas Rea, Univ of Washington, Seattle, WA; Tom Aufderheide, M Riccardo Colella, Medical Coll of Wisconsin, Milwaukee, WI; Joseph Condle, Univ of Pittsburgh, Pittsburgh, PA; Shannon Stephens, Univ of Alabama at Birmingham, Birmingham, AL; Joseph Richardson, Birmingham Fire and Rescue Service, Birmingham, AL; Brian Leroux, Univ of Washington, Seattle, WA; Debra Egan, NHLBI, Bethesda, MD; Susanne May, Univ of Washington, Seattle, WA; Joseph Ornato, Virginia Commonwealth Univ, Richmond, VA

5:30 PM  
**ReSS Closing Remarks/Adjourn**  
Tom Aufderheide, MD, FACEP, FAHA