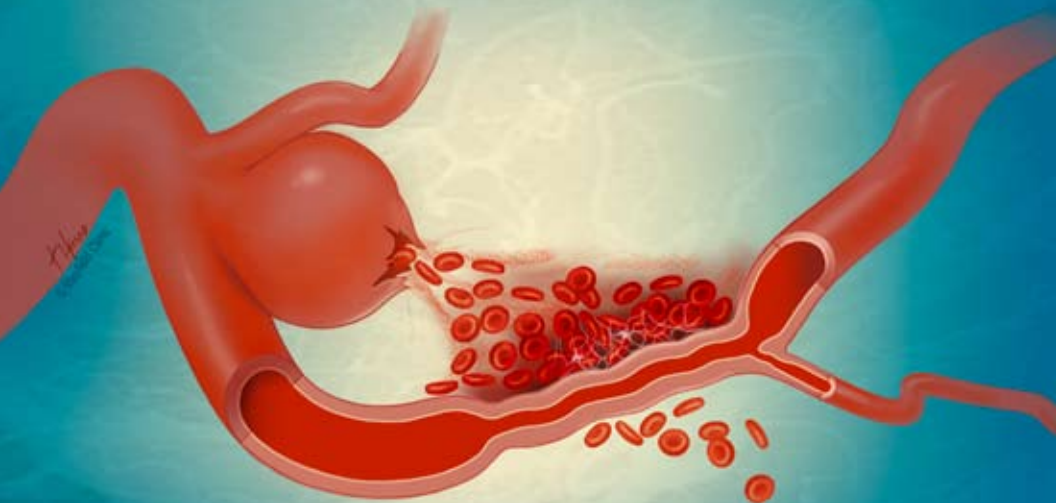


# Program Guide



# VASOSPASM 2011

11<sup>th</sup> International Conference on Neurovascular Events after SAH

July 21-23, 2011

[www.vasospasm11.com](http://www.vasospasm11.com)

Cincinnati, Ohio, USA

Hosted by

UNIVERSITY OF  
Cincinnati

UC Neuroscience Institute

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## Welcome

We would like to welcome you to Vasospasm 2011: The 11th International Conference on Neurovascular Events after Subarachnoid Hemorrhage!

Vasospasm 2011 will engender a true translational and international ethos. Continuing the excellent tradition of previous meetings, we aim to address both clinical management strategies and basic science studies on cerebral vasospasm and neuronal damage occurring after SAH. This meeting format includes plenary sessions, workshops, and platform and poster presentations based on abstract submissions.

Despite intensive research effort, there is still no optimal clinical management strategy for SAH patients. This conference will focus on the neurovascular events following SAH, and how we can use this information to further clinical management strategies via translational and clinical research efforts. In order to maximize this effort, there is a special White Paper session to formulate an International Consensus Document regarding the clinical management of SAH patients in a Neurocritical Care setting.

We are delighted to welcome both COSBID investigators and Neuro Nurses to this meeting for the first time. The Co-Operative Study on Brain Injury Depolarizations facilitates collaborative international research on cortical spreading depression, which complements our conference focus. We are pleased to announce their joint participation throughout the program.

Young investigators and early career practitioners and scientists have been encouraged to participate with novel research ideas and compete for a range of awards, including Young Investigator, Bench to Bedside and Back Again, and The Next Big Idea.

Cincinnati is located on the banks of the river Ohio, and was founded in 1788, making it the first major inland city in America. Cincinnati boasts several fine restaurants, historic architecture and many opportunities for sightseeing. Cincinnati is a great family destination, with professional athletics, beautiful parks and attractions such as Coney Island Amusement Park and King's Island Theme Park, world-class performing arts, and a vibrant nightlife.

We believe that this conference will build on previous meetings, and lead to a greater understanding of the multidisciplinary nature of SAH research and management, from molecular events to clinical trials and treatment.

We hope you enjoy the meeting!



Mario Zuccarello, MD  
Conference Chairman



Joseph Clark, PhD  
Conference Co-Chairman

## Committees

### Local Organizing Committee

Mario Zuccarello, Chair  
Joseph Clark, Co-Chair  
Todd Abruzzo  
Opeolu Adeoye  
Norberto Andaluz  
Krissy Atchley  
Pat Bell  
Jed Hartings  
Tonya Hines  
Christa McAlpin  
Joanie Pope  
Gail Pyne-Geithman  
Andrew Ringer  
Tom Rosenberger  
Faye Smith

### International Organizing Committee

Hua Feng PR China  
Chul-Jin Kim Korea  
Talat Kiris Turkey  
Aij-Lie Kwan Taiwan  
Shigeru Nishizawa Japan  
Hans-Jakob Steiger Germany  
Claudius Thome Austria  
Peter Vajkoczy Germany  
John Zhang USA

### Local Scientific Committee

Joseph Clark, Chair  
Opeolu Adeoye  
Norberto Andaluz  
Jed Hartings  
Gail Pyne-Geithman  
Mario Zuccarello

### International Scientific Committee

Isao Date Japan  
Michael Diringer USA  
Jens Dreier Germany  
Javier Fandino Switzerland  
Hua Feng PR China  
Jennifer Frontera USA  
Giovanni Grasso Italy  
Daniel Hanggi Germany  
Carla Jung Germany  
Kenji Kanamaru Japan  
Hidetoshi Kasuya Japan  
Emanuela Keller Switzerland  
Chul-Jin Kim South Korea  
Talat Kiris Turkey  
Peter Kirkpatrick UK  
Giuseppe Lanzino USA  
Kwan-Sung Lee South Korea  
R. Loch Macdonald Canada  
David Mendelow UK  
Tadayoshi Nakagomi Japan  
Shigeru Nishizawa Japan  
Audrey Quinn UK  
Alejandro Rabinstein USA  
Tatsuya Sasaki Japan  
Lothar Schilling Germany  
Fatima Sehba USA  
Seung Hun Sheen South Korea  
Lori Shutter USA  
Hans-Jakob Steiger Germany  
Jose Suarez USA  
Rafael Tamargo USA  
Claudius Thome Austria  
Francesco Tomasello Italy  
Peter Vajkoczy Germany  
George Wellman USA  
Christine Wijman USA  
George KC Wong PR China  
Howard Yonas USA  
John Zhang USA

## Session Co-Chairs

### Session 1a: Clinical Trials and Dilemmas

Co-Chairs: Hidetoshi Kasuya (Tokyo, Japan), Ferdinand Miteff (New South Wales, Australia)

### Session 1b: Clinical Trials and Dilemmas

Co-Chairs: R. Loch Macdonald (Toronto, Ontario, Canada), Javier Fandino (Aarau, Switzerland)

### Session 2a: Neurocritical Care: Monitoring

Co-Chairs: Emanuela Keller (Zurich, Switzerland), Jennifer Frontera (New York, New York, USA)

### Session 2b: Neurocritical Care: Management

Co-Chairs: Michael Diringer (St. Louis, Missouri, USA), Paulo Henrique Pires de Aguiar and Renata Simm (Sao Paulo, Brazil)

### Award Finalist Presentations

Co-Chairs: John Zhang (Loma Linda, California), Ryszard Pluta (Bethesda, Maryland, USA), Daniel Hänggi (Dusseldorf, Germany)

### COSBID Social/Workshop

Co-Chairs: Jed Hartings (Cincinnati, Ohio, USA), Martin Fabricius (Copenhagen, Denmark)

### Session 3a: Spreading Depolarizations: Clinical Studies

Co-Chairs: Ryszard Pluta (Bethesda, Maryland, USA), Anthony Strong (London, England)

### Session 3b: Spreading Depolarizations and Neurovascular Coupling: Animal Studies

Co-Chairs: R. Loch Macdonald (Toronto, Ontario, Canada), Cenk Ayata (Boston, Massachusetts, USA)

### White Paper Discussion

Co-Chairs: Emanuela Keller (Zurich, Switzerland), Jose Suarez (Houston, Texas, USA)

### Session 4: Inflammation and Blood-Brain Barrier

Co-Chairs: Javier Provencio (Cleveland, Ohio, USA), Gail Pyne-Geithman (Cincinnati, Ohio, USA)

### Neurosurgery Breakfast Seminar

Co-Chairs: Kenji Kanamaru (Suzuka, Japan), Talat Kiris (Istanbul, Turkey)

### Session 5a: Early Brain Injury

Co-Chairs: George Wellman (Burlington, Vermont, USA), Shigeru Nishizawa (Fukuoka, Japan)

### Session 5b: Vascular and Microvessel

Co-Chairs: John Zhang (Loma Linda, California, USA), Fatima Sehba (New York, New York, USA)

### Session 6: Genetic and Environmental Factors

Co-Chairs: Joseph Broderick (Cincinnati, Ohio, USA), Paul Nyquist (Baltimore, Maryland, USA)

### Breakout: COSBID

Session A & B Co-Chairs: Oliver Sakowitz (Heidelberg, Germany), Martin Fabricius (Copenhagen, Denmark)

### Breakout: COSBID

Session C & D Co-Chairs: Johannes Woitzik (Berlin, Germany) Rudolf Graf (Cologne, Germany)

## A Cincinnati Gift — limited edition Rookwood tile

Rookwood Pottery was founded in 1880 by Marie Longworth Nichols. Rookwood pottery's initial work demonstrated an Oriental and European influence. Throughout Rookwood's years they mastered such diverse styles as Victorian, art nouveau, arts and crafts, and art deco.

Rookwood Pottery of Cincinnati was the first to gain artistic recognition and respect for the United States on an international level. In 1889, Rookwood was awarded the First Prize Gold Medal at the Paris Exposition Universelle. This was a shock to the international artistic community who had never really paid much attention to American ceramics. In less than a decade after starting as a hobby pottery shop, Rookwood had grown to become a company with an international reputation for ceramic excellence.

We selected three tiles for attendees to remember the Cincinnati Vasospasm 2011 conference. The tiles depict venerable icons of Cincinnati:

### Carew Tower-Netherland Plaza Hotel:

Built during the Great Depression, this complex is one of the finest examples of skyscraper modernism in America. A national historic landmark, it is beautifully adorned in French Art Deco and Rookwood tile.

### Roebling Suspension Bridge:

The John A. Roebling Suspension Bridge spans the Ohio River between Cincinnati, Ohio and Covington, Kentucky. Completed in 1866, it was the longest suspension bridge in the world. The Cincinnati Roebling bridge became the model for the famous Brooklyn Bridge in New York City.

### Tyler Davidson Fountain:

The fountain was a gift to Cincinnati in 1871 by Henry Probasco in honor of his brother-in-law Tyler Davidson. The 9-foot central figure, "The Genius of Water," stands with arms outstretched over groupings of figures representing the uses of water. Probasco gave the fountain to Cincinnati on the condition that it be placed in the city's center - today known as Fountain Square.



Carew Tower-Netherland Plaza Hotel



Roebling Suspension Bridge



Tyler Davidson Fountain

## Schedule at a Glance & Hotel Map

### Wednesday, July 20, 2011

16:00-18:00	Registration	Desk in Hotel Lobby
18:00-20:00	Welcome Reception	Continental Ballroom

### Thursday, July 21, 2011

7:00-8:00	Breakfast	Pavillion Ballroom
8:00-8:20	Welcome	Pavillion Ballroom
8:20-9:40	Session 1a: Clinical trials and dilemmas	Pavillion Ballroom
9:40-10:00	Break	
10:00-12:00	Session 1b: Clinical trials and dilemmas	
10:00-12:00	Concurrent Session: Neuro Nurses Breakout	Rosewood
12:00-13:00	Lunch	Pavillion Ballroom
13:00-13:30	Keynote Lecturer, Tomio Sasaki	Pavillion Ballroom
13:30-14:45	Session 2a: Neurocritical care: monitoring	Pavillion Ballroom
14:45-15:15	Break	
15:15-17:00	Session 2b: Neurocritical care: management	
17:00-18:00	Poster Session	Pavillion Ballroom & Rookwood
18:00-20:00	Award Finalist Presentations & Reception	Pavillion Ballroom

### Friday, July 22, 2011

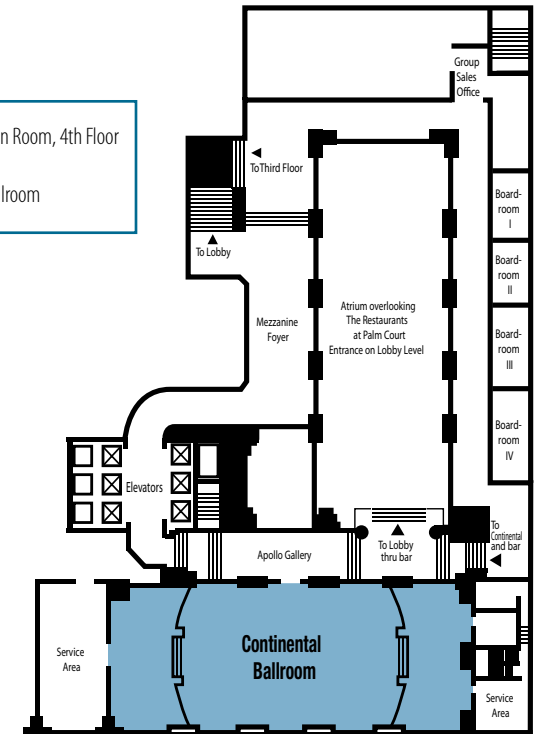
7:00-8:00	Breakfast	Pavillion Ballroom
	Breakout: COSBID Social/Workshop	Salon BC
8:00-10:00	Session 3a: Spreading depolarizations	Pavillion Ballroom
9:50-10:20	Break	
10:20-12:00	Session 3b: Spreading depolarizations	
12:00-14:00	Lunch, Breakout White Paper Discussion Lunch, Poster Session	Pavillion Ballroom Pavillion Ballroom & Rookwood
14:00-14:30	Guest Lecturer, David Mendelow	Pavillion Ballroom
14:30-16:30	Session 4: Inflammation and blood-brain barrier	Pavillion Ballroom
16:30-17:30	Bid Presentations: Vasospasm 2013	Pavillion Ballroom
17:00-18:00	COSBID business meeting	Salon BC
18:00-21:00	Dinner	Celebrations Riverboat

### Saturday, July 23, 2011

7:00-8:15	Breakfast	Pavillion Ballroom
	Breakout: Neurosurgery Breakfast Seminar	Salon BC
8:15-8:30	Announcement of Award Winners	Pavillion Ballroom
8:30-9:30	Session 5a: Early brain injury	Pavillion Ballroom
9:30-10:00	Break	
10:00-12:00	Session 5b: Vascular and microvessel	
12:00-13:00	Lunch	Pavillion Ballroom
13:00-13:30	Keynote Lecturer, Costantino Iadecola	Pavillion Ballroom
13:30-17:00	Session 6: Genetic and environmental factors	Pavillion Ballroom
13:30-17:00	Concurrent Session: COSBID Breakout	Rosewood
17:00-17:30	2013 Venue Announcement & Closing Remarks	Rosewood

**Registration:** Pavillion Foyer Registration Room, 4th Floor  
**Exhibits:** Pavillion Foyer & Caprice  
**Posters:** Rookwood & Pavillion Ballroom

Mezzanine Level



4th Floor



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## Hotel Information

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Hilton Cincinnati Netherland Plaza  
35 West Fifth Street  
Cincinnati, Ohio 45202  
Phone: 1-513-421-9100  
www.cincinnatietherlandplaza.hilton.com

The AAA Four-Diamond Hilton Cincinnati Netherland Plaza is Cincinnati's unique meeting place. The hotel has been designated a National Historic Landmark by the U.S. Department of the Interior, and continues to receive acclaim as one of the finest examples of French Art Deco architecture in existence.

### Social Events

Wednesday, July 20  
Welcome Reception, 18:00-20:00  
Continental Ballroom

Thursday, July 21  
Poster Session & Reception, 17:00-20:00  
Pavillion Ballroom

Friday, July 22  
Dinner, 18:00-21:00  
Celebrations Riverboat  
\* Important note: Meet in hotel lobby at 18:00 to board buses.

### Clothing

Informal for all occasions. The dinner on Friday evening will take place on a riverboat, so please feel free to dress in a casual and comfortable manner if the temperature is warm.

### Internet Station

If you are interested to check your email during conference hours, there will be a free internet station for this purpose located in the Caprice Room.

### Guest Room Internet Availability

If you are interested in internet access in your guest room, as a conference registrant, you will only be charged a one-time fee of \$9.95 USD for the duration of your stay (instead of the per day charge.) Note that the guest room internet is wired. Wireless internet is not available in the guest rooms. Cords are provided in the top drawer of the desk in each room.

### Fitness Center

The Gym at Carew Tower, located on the Hilton's lower level, is open to all registered guests. This 13,000 square-foot complex is the largest downtown and features the latest in fitness equipment, a lap pool, aerobics studio, sauna, steam room, and a whirlpool. For joggers, there are several scenic routes around downtown.

### Airport Service

The Cincinnati/Northern Kentucky International Airport is located 12 miles from downtown Cincinnati and the Hilton – just a short 15 minute drive! Shuttle service to the Hilton Cincinnati Netherland Plaza is provided by Executive Transportation. Please call 1-800-990-8841 the day prior to your arrival or departure to guarantee your reservation. Same day reservations can be accommodated based upon availability. Taxi cabs run 24 hours a day from the airport to downtown Cincinnati.

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## Speaker Information

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### Speaker preparation

Two laptop computers and technical support will be available for any speaker needing last-minute assistance with their presentation. Visit the conference registration desk on the 4th Floor of the hotel for more information.

### Pre-loading presentations

All general session speakers must report to the tech table in the back of the Pavilion Ballroom **at least 30 minutes** prior to the start of the session in which you

are speaking. You will need to bring your presentation on a flash drive or CD to pre-load on to the presentation laptop.

All breakout session speakers must report to the room in which you are speaking **at least 30 minutes prior** to the start of your session to pre-load your presentation to the breakout session laptop. If no one is in the breakout session room, visit the conference registration desk for assistance.

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## Poster Information

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### Location & Time

The Vasospasm 2011 Poster Session will be held from 17:00-20:00 on Thursday, July 21 at the Hilton Cincinnati Netherland Plaza in the Rookwood Room & Pavillion Ballroom on the 4th Floor of the hotel. There will be additional time to view the posters from 12:00-14:00 on Friday, July 22.

### Set-up

Posters may be set-up Wednesday, July 20 from 19:00 – 21:30 or Thursday, July 21 from 7:00 – 17:00 in the Rookwood Room & Pavillion Ballroom on the 4th Floor of the hotel. Set-up should be completed by 17:00 on Thursday, July 21, when the Poster Session begins. Award Finalist Presentations will take place from 18:00-19:00. The Reception will end at 20:00.

Posters can be posted for the remainder of the meeting. Tear-down of posters should take place before 17:00 on Saturday, July 23.

You will be provided one 8 ft. (width) x 4 ft. (height), maximum size, fabric poster board. Pins will be available to affix your poster. The boards are double-sided so there will be another poster displayed on the back of your board.

Thank you for your participation in the Poster Session of the Vasospasm 2011 Conference!

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## Awards

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### Award Categories

Bench to Bedside and Back  
Next Big Idea  
Young Investigator

### Announcement of Award Winners

First and Second Place award winners will be announced Saturday, July 23 from 8:15 – 8:30 during the General Session in the Pavillion Ballroom on the 4th Floor.

# Detailed Program

Thursday, July 21, 2011

7:00 - 9:40

Pavillion Ballroom

7:00-8:00 Breakfast

8:00-8:20 Welcome, Mario Zuccarello and Joseph Clark

<b>Session 1a:</b>	<b>CLINICAL TRIALS AND DILEMMAS</b>	<u>Abstract #</u>
	<b>Co-Chairs: Hidetoshi Kasuya, Ferdinand Miteff</b>	
8:20-8:50	History and Definition of Delayed Cerebral Ischemia <i>R. Loch Macdonald, Toronto, Ontario, Canada</i>	invited
8:50-9:05	Development of Nicardipine Prolonged Release Implants after Clipping for Preventing Cerebral Vasospasm: From Laboratory to Clinical Trial <i>Hidetoshi Kasuya, Tokyo, Japan</i>	39
9:05-9:20	Intracisternal magnesium injection therapy (experimental data for its clinical application) <i>Kentaro Mori, Shizuoka, Japan</i>	12
9:20-9:40	A Prospective, Randomized and Controlled Trial Investigating the Use of Lumbar Cerebrospinal Fluid Drainage Following Aneurysmal Subarachnoid Hemorrhage <i>Yahia Al-Tamimi, West Yorkshire, United Kingdom</i>	33

9:40-10:00	Break	
<b>Session 1b:</b>	<b>CLINICAL TRIALS AND DILEMMAS</b>	<a href="#">Abstract #</a>
<b>Co-Chairs:</b>	<b>R. Loch Macdonald, Javier Fandino</b>	
10:00-10:15	Effect of Clazosentan on Clinical Outcome after Aneurysmal Subarachnoid Hemorrhage and Surgical Clipping: Results of the CONSCIOUS-2 Study <i>R. Loch Macdonald, Toronto, Ontario, Canada</i>	31
10:15-10:30	Recent Developments on Nitric Oxide Research <i>Ali Reza Fathi, Aarau, Switzerland</i>	73
10:30-10:45	Safety and Feasibility of Long Term Intravenous Sodium Nitrate Infusion in Healthy Volunteers <i>Ryszard Pluta, Bethesda, Maryland, USA</i>	34
10:45-11:00	Magnesium Sulphate for Aneurysmal Subarachnoid Hemorrhage: Why, How, and Current Controversy <i>George Wong, Hong Kong, China</i>	30
11:00-11:20	Interim Analysis of Prospective Randomized Controlled Trial to Investigate the Efficacy of Endovascular Treatment in Cerebral Vasospasm after Subarachnoid Hemorrhage <i>Johannes Platz, Frankfurt, Germany</i>	38
11:20-11:35	Identifying Patient Report Outcomes (PRO's) Relevant to Aneurysmal Subarachnoid Hemorrhage Follow-up <i>Stuart Ross, West Yorkshire, United Kingdom</i>	106
11:35-12:00	Q&A	

**Concurrent Session: NEURO NURSE BREAKOUT**

[Rosewood](#)

10:00-11:15	GUEST LECTURER: MARY KAY BADER Avoiding Collateral Damage in Aneurysmal Subarachnoid Hemorrhage
11:15-11:30	Break
11:30-12:00	Continuous EEG in the NSICU: Improving the Quality of Bedside Monitoring <i>Jennifer Fields and Lisa Seiler, Cincinnati, Ohio, USA</i>

12:00-13:00	Lunch
13:00-13:30	<b>KEYNOTE LECTURER: TOMIO SASAKI</b> Proposed Mechanism of Cerebral Vasospasm: Our Hypothesis and Current Topics
<b>Session 2a:</b>	<b>NEUROCRITICAL CARE: MONITORING</b>
<b>Co-Chairs:</b>	<b>Emanuela Keller, Jennifer Frontera</b>
13:30-13:45	Monitoring of Cerebral Hemodynamics and Oxygenation to Detect DIND <i>Emanuela Keller, Zurich, Switzerland</i>
13:45-14:00	The Dilemmas Surrounding Vasospasm Screening: Pro's and Con's of CTP and Its Foreseeable Place in Assessing Vasospasm Management Strategies <i>Ferdinand Miteff, New South Wales, Australia</i>
14:00-14:15	Cerebral Hemodynamic Changes after Wartime Traumatic Brain Injury <i>Alexander Razumovsky, Hunt Valley, Maryland, USA</i>
14:15-14:30	Control of Vasospasm after Subarachnoid Hemorrhage by Means of Transcranial Doppler and Simultaneous Clinical Management <i>Renata Simm, Sao Paulo, Brazil</i>
14:30-14:45	A Platform for Multimodal Data Collection and Research in Neurocritical Care <i>Adam Wilson, Cincinnati, Ohio, USA</i>
14:45-15:15	Break

[Abstract #](#)

[invited](#)

[invited](#)

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[invited](#)

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**Thursday, July 21, 2011**

**15:15 - 20:00**

Pavillion Ballroom

<b>Session 2b:</b>	<b>NEUROCRITICAL CARE: MANAGEMENT</b>	<a href="#">Abstract #</a>
<b>Co-Chairs:</b>	<b>Michael Diringer, Paulo Henrique Pires de Aguiar, Renata Simm</b>	
15:15-15:45	Report on the 1st International Consensus Conference on Critical Care Management of Subarachnoid Hemorrhage <i>Michael Diringer, St. Louis, Missouri, USA</i>	invited
15:45-16:00	Removal of Clots in Subarachnoid Space Could Reduce the Vasospasm after Subarachnoid Hemorrhage <i>Paulo Henrique Pires de Aguiar, Sao Paulo, Brazil</i>	invited
16:00-16:15	Neurogenic Pulmonary Edema - A Complication of Aneurysmal Subarachnoid Hemorrhage: A Single Center Experience <i>Carl Muroi, Zurich, Switzerland</i>	74
16:15-16:30	Quantification of Subarachnoid Hemorrhage by 3D-CT Part 2: Correlation Between Hematoma Volume and Symptomatic Vasospasm <i>Tatsuya Sasaki, Aomori, Japan</i>	55
16:30-16:45	Early Brain Injury Linearly Correlates with Reduction in Cerebral Perfusion Pressure During the Hyperacute Phase after Subarachnoid Hemorrhage <i>Serge Marbacher, Aarau, Switzerland</i>	108
16:45-17:00	Q&A	
17:00-18:00	Poster Sessions	<a href="#">Rookwood &amp; Pavillion Ballroom</a>
<b>18:00-19:00</b>	<b>Award Finalist Presentations</b>	<a href="#">Pavillion Ballroom</a>
<b>Co-Chairs:</b>	<b>John Zhang, Ryszard Pluta, Daniel Hänggi</b>	
18:00-20:00	Reception	<a href="#">Pavillion Ballroom</a>

**Friday, July 22, 2011**

**7:00 - 10:20**

Pavillion Ballroom

7:00-8:00	Breakfast	
<b>7:00-8:00</b>	<b>COSBID SOCIAL/WORKSHOP</b>	<a href="#">Salon BC</a>
<b>Co-Chairs:</b>	<b>Jed Hartings, Martin Fabricius</b>	
<b>Session 3a:</b>	<b>SPREADING DEPOLARIZATIONS: CLINICAL STUDIES</b>	<a href="#">Abstract #</a>
<b>Co-Chairs:</b>	<b>Ryszard Pluta, Anthony Strong</b>	
8:00-8:25	Lower Incidence of Cerebral Infarction Correlates with Improved Functional Outcome after Aneurysmal Subarachnoid Hemorrhage <i>Nima Etminan, Dusseldorf, Germany</i>	36
8:25-8:50	The Role of Spreading Depolarization, Spreading Depression and Spreading Ischemia in Patients with Aneurysmal Subarachnoid Hemorrhage <i>Jens Dreier, Berlin, Germany</i>	87
8:50-9:05	Delayed Cerebral Ischemia Associated with Spreading Depolarization Can Occur Despite Absence of Proximal Vasospasm after Aneurysmal Subarachnoid Hemorrhage <i>Johannes Woitzik, Berlin, Germany</i>	82
9:05-9:20	Full-Band Electrooculography Study of Spreading Depolarizations in Patients with Aneurysmal Subarachnoid Hemorrhage <i>Jed Hartings, Cincinnati, Ohio, USA</i>	99
9:20-9:35	Impact of Body Temperature on Occurrence of Cortical Spreading Depolarizations in Subarachnoid Hemorrhage <i>Christoph Drenckhahn, Berlin, Germany</i>	89
9:35-9:50	Analgesics and Sedative Drugs Have an Impact on Frequency of Spreading Depolarizations in the Injured Human Brain <i>Daniel Hertle, Heidelberg, Germany</i>	98
9:50-10:20	Break	

<b>Session 3b:</b>	<b>SPREADING DEPOLARIZATIONS AND NEURO-VASCULAR COUPLING: ANIMAL STUDIES</b>	<a href="#">Abstract #</a>
<b>Co-Chairs:</b>	<b>R. Loch Macdonald, Cenk Ayata</b>	
10:20-10:45	Spreading Depolarizations: Modulation by Systemic Physiology and Drugs <i>Cenk Ayata, Boston, Massachusetts, USA</i>	invited
10:45-11:00	Coupling of Cerebral Blood Flow and Glucose Metabolism During Spreading Depolarizations - A Multimodal Study <i>Delphine Feuerstein, Cologne, Germany</i>	101
11:00-11:15	Spatia Temporal Patterns of Cerebral Blood Flow and Hemoglobin Oxygenation During the Propagation of Spreading Depolarizations Following Middle Cerebral Artery Occlusion <i>Rudolf Graf, Cologne, Germany</i>	100
11:15-11:30	Subarachnoid Blood Converts Neurally Evoked Vasodilation to Vasoconstriction in Rat Brain Cortex <i>Masayo Koide, Burlington, Vermont, USA</i>	70
11:30-11:45	Matrix Metalloproteinase and Epidermal Growth Factor Receptor Activation Cause Suppression of Voltage Gated Potassium (KV) Channels to Enhance Constriction of Rat Parenchymal Arterioles after Subarachnoid Hemorrhage <i>George Wellman, Burlington, Vermont, USA</i>	83
11:45-12:00	Q&A	
12:00-14:00	Lunch	Pavillion Ballroom
12:00-14:00	Poster Sessions	Pavillion Ballroom Rookwood
12:00-14:00	<b>Breakout - WHITE PAPER DISCUSSION</b> Co-Chairs: <i>Emanuela Keller, Jose Suarez</i>	Pavillion Ballroom

14:00-14:30	<b>GUEST LECTURER: DAVID MENDELOW</b> Progress with the STICH II Trial	
<b>Session 4:</b>	<b>INFLAMMATION AND BLOOD-BRAIN BARRIER</b>	<a href="#">Abstract #</a>
<b>Co-Chairs:</b>	<b>Javier Provencio, Gail Pyne-Geithman</b>	
14:30-14:50	Introduction <i>Javier Provencio, Cleveland, Ohio, USA</i>	invited
14:50-15:05	Statin Induced T- Lymphocyte Modulation and Neuroprotection Following Experimental Subarachnoid Hemorrhage <i>Robert Ayer, Loma Linda, California, USA</i>	119
15:05-15:20	Microglia (MG) Activation after Acute Subarachnoid Hemorrhage (aSAH): An Intraparenchymal Reaction to an Extraparenchymal Disease <i>Ulf Schneider, Berlin, Germany</i>	40
15:20-15:35	L-Citrulline Therapy Prevents Basilar Artery Vasospasm in Haptoglobin 2-2 Transgenic Mice after Induced Subarachnoid Hemorrhage <i>Rafael Tamargo, Baltimore, Maryland, USA</i>	24
15:35-15:50	Intracranial Pressure Controlled Rabbit Subarachnoid Hemorrhage Model for the Study of Early Brain Injury <i>Serge Marbacher, Aarau, Switzerland</i>	21
15:50-16:05	The Effect of Variation in Low Dose LPS Injection on Mouse Delayed Cerebral Vasospasm (DCV) after Subarachnoid Hemorrhage <i>Saksith Smithason, Cleveland, Ohio USA</i>	22
16:05-16:30	Q&A	
16:30-17:30	Bid Presentations: Vasospasm 2013 Co-Chairs: <i>Joseph Clark, Mario Zuccarello</i>	
17:00-18:00	<b>COSBID Business Meeting</b>	Salon BC
18:00-21:00	Dinner; Meet in hotel lobby at 18:00 to board buses.	Celebrations Riverboat

<b>Breakout: Co-Chairs:</b>	<b>NEUROSURGERY BREAKFAST SEMINAR Kenji Kanamaru, Talat Kiris</b>	<a href="#">Abstract #</a>
7:05-7:15	Neck Clipping of Paraclinoid Small Aneurysms <i>Kenji Kanamaru, Suzuka, Japan</i>	102
7:15-7:25	Comparison of Surgical or Endovascular Treated Aneurysmal Subarachnoid Hemorrhage Patients with a Special Emphasis on Cerebral Vasospasm <i>Talat Kiris, Ibrahim Akinci, Istanbul, Turkey</i>	2
7:25-7:35	Effect of Aneurysm Treatment Modalities on Cerebral Vasospasm after Aneurysmal Subarachnoid Hemorrhage <i>Hidenori Suzuki, Tsu, Mie, Japan</i>	104
7:35-7:45	Proposed New Grading System for Delayed Vasospasm Following Aneurysmal Subarachnoid Hemorrhage: Value of Cisternal Irrigation with Ascorbic Acid and Mg++ <i>Takeshi Ogura, Saitama, Japan</i>	78
7:45-7:55	Technological Innovations in Aneurysm Surgery <i>Norberto Andaluz, Cincinnati, Ohio, USA</i>	invited
7:55-8:05	The Effect of Surgical Treatment on Delayed Ischemic Neurological Deficit (DIND) in Patients with Aneurysmal Subarachnoid Hemorrhage <i>Muhammad Chohan, Albuquerque, New Mexico, USA</i>	81

7:00-8:15	Breakfast	
8:15-8:30	Announcement of Award Winners	
<b>Session 5a: Co-Chairs:</b>	<b>EARLY BRAIN INJURY George Wellman, Shigeru Nishizawa</b>	<a href="#">Abstract #</a>
8:30-8:50	The Role of Early Brain Injury in Cerebral Vasospasm Following Subarachnoid Hemorrhage <i>Shigeru Nishizawa, Fukuoka, Japan</i>	invited
8:50-9:10	Impact of Subarachnoid Hemorrhage on Parenchymal Arteriolar Function <i>George Wellman, Burlington, Vermont, USA</i>	invited
9:10-9:20	Global Cerebral Atrophy after Subarachnoid Hemorrhage: A Marker of Acute Brain Injury and Impact on Outcome <i>R. Loch Macdonald, Toronto, Ontario, Canada</i>	41
9:20-9:30	Early Activation of Cell Death after Subarachnoid Hemorrhage <i>Fatima Sehba, New York, New York, USA</i>	45
9:30-9:40	Early Platelet Activation after Subarachnoid Hemorrhage is Related to Poor Admission Hunt Hess Grade <i>Jennifer Frontera, New York, New York, USA</i>	59
9:40-10:00	Break	

**Saturday, July 23, 2011**

**10:00 - 12:00**

Pavillion Ballroom

<b>Session 5b: Co-Chairs:</b>	<b>VASCULAR AND MICROVESSEL John Zhang, Fatima Sehba</b>	<u>Abstract #</u>
10:00-10:20	Contemporary History of Subarachnoid Hemorrhage Research <i>John Zhang, Loma Linda, California, USA</i>	invited
10:20-10:40	Early Microvascular Dysfunction after Subarachnoid Hemorrhage <i>Fatima Sehba, New York, New York, USA</i>	invited
10:40-11:00	Microthrombosis and Microcirculatory Spasm: A Potential Mechanism of Neurological Deterioration after Subarachnoid Hemorrhage <i>Mohammed Sabri, Toronto, Ontario, Canada</i>	17
11:00-11:15	Preconditioning Atrovastatins Attenuate Endothelins in Chronic Vasospasm <i>Shen-Long Howng, Kaohsiung, Taiwan</i>	18
11:15-11:30	KMUP-3 Attenuates Cerebral Vasospasm after Experimental Subarachnoid Hemorrhage <i>William Winard, Poznan, Poland</i>	20
11:30-11:45	Hemodynamic and Metabolic Effects of Remote Ischemic Preconditioning in Subarachnoid Hemorrhage <i>Nestor Gonzalez, Los Angeles, California, USA</i>	invited
11:45-12:00	Q&A	

**Saturday, July 23, 2011**

**12:00 - 17:30**

Pavillion Ballroom

12:00-13:00	Lunch	
13:00-13:30	<b>KEYNOTE LECTURER: COSTANTINO IADECOLA</b> Neurovascular Regulation and Ischemic Brain Injury: Mechanisms and Translational Opportunities	
<b>Session 6: Co-Chairs:</b>	<b>GENETIC AND ENVIRONMENTAL FACTORS Joseph Broderick, Paul Nyquist</b>	<u>Abstract #</u>
13:30-14:00	Genetics <i>Joseph Broderick, Cincinnati, Ohio, USA</i>	invited
14:00-14:30	Haptoglobin Genotype and Risk of Vasospasm <i>Rafael Tamargo, Baltimore, Maryland, USA</i>	invited
14:30-15:00	Break	
15:00-15:15	Location, Interaction & Anticipation of Aneurysm Formation <i>Dan Woo, Cincinnati, Ohio, USA</i>	invited
15:15-15:30	Biomarkers and Biosystems <i>Paul Nyquist, Baltimore, Maryland, USA</i>	invited
15:30-15:45	Association of Morphological and Demographic Features of Aneurysms with Their Rupture: A Retrospective Analysis <i>Saugat Dey, Philadelphia, Pennsylvania, USA</i>	11
15:45-16:00	Lenticulostriate Brain Aneurysms <i>Paulo Henrique Pires de Aguiar, Sao Paulo, Brazil</i>	7
16:00-16:15	Addition of New Criteria to the SOFA (Sequential Organ Failure Assessment) for Patients with SAH <i>Henrique Nuss Teixeira de Oliveira, Itaperuna, Brazil</i>	109
16:15-16:30	Predeterminative Effect of Pterygopalatine Ganglion Neuron Density on Choroid Plexus Degeneration in SAH-Induced Choroidal Artery Vasospasm: Experimental Study <i>Mehmet Aydin, Yakutiye-Erzurum, Turkey</i>	15
16:30-16:45	Biological Mechanisms of Adaptive Remodeling in Flow Loaded Cerebral Arteries: Potential Significance to the Pathogenesis of Cerebral Aneurysms in a Rat Model <i>Gail Pyne-Geithman, Todd Abruzzo, Cincinnati, Ohio, USA</i>	10
16:45-17:00	Q&A	
17:00-17:30	2013 Venue Announcement & Champagne Toast, Closing Remarks	Rosewood 21

**Concurrent Session: COSBID BREAKOUT****Co-Chairs:** Oliver Sakowitz, Martin Fabricius[Abstract #](#)**A. Methods for Detection and Analysis**

13:30-13:45	Detection of Spreading Depression by Surface EEG <i>Martin Fabricius, Copenhagen, Denmark</i>	94
13:45-14:00	Intracortical Electroencephalography Monitoring for Detection of Cortical Spreading Depolarizations in 3 Patients after Traumatic Brain Injury <i>Agnieszka Zakrzewska, London, United Kingdom</i>	92
14:00-14:15	CSD Monitor: Concept and Demonstration of a Software for Online Bedside Analysis and Simultaneous Visualization of ECoG Data from Brain Injured Patients for Care and Research <i>Michael Schoell, Heidelberg, Germany</i>	110

**B. Factors Influencing Depolarizations**

14:15-14:30	Cerebral Glucose and Spreading Depression in Patients with Aneurysmal Subarachnoid Hemorrhage <i>Edgar Santos, Heidelberg, Germany</i>	95
14:30-14:45	On the Role of External Patient Movements that Can Trigger Spreading Depolarizations in Subarachnoid Hemorrhage Patients <i>Edgar Santos, Heidelberg, Germany</i>	96
14:45-15:00	Influence of Parenchymal Damage and Hemorrhage on Cortical Spreading Depression in Patients with Subarachnoid Hemorrhage <i>Nina Eriksen, Copenhagen, Denmark</i>	42
15:00-15:30	Break	

**Concurrent Session: COSBID BREAKOUT****Co-Chairs:** Johannes Woitzik, Rudolf Graf[Abstract #](#)**C. Animal Studies**

15:30-15:45	Subarachnoid Hemorrhage Increases the Susceptibility to Ischemic Stroke but not to Peri-Infarct Depolarizations after Middle Cerebral Artery Occlusion <i>Ulrike Hoffmann, Boston, Massachusetts, USA</i>	88
15:45-16:00	Spreading Depolarization Induced Injury to Neurons and Astrocytes <i>Sergei Kirov, Augusta, Georgia, USA</i>	90
16:00-16:15	Vascular, Electrophysiologic and Metabolic Consequences of Cortical Spreading Depression in a Mouse Model of Simulated Neurosurgical Conditions <i>Andrew Carlson, Albuquerque, New Mexico, USA</i>	93

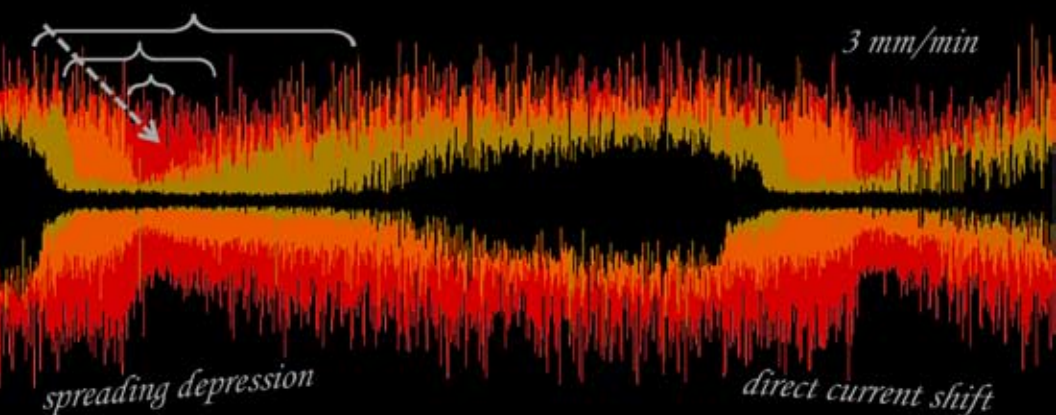
**D. Report from Steering Committee Meeting and Open Discussion**

16:15-17:00	All	
17:00-17:30	2013 Venue Announcement & Champagne Toast, Closing Remarks	Rosewood



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*Co-Operative Study on Brain Injury Depolarizations*



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