DEPARTMENT OF CARDIOTHORACIC SURGERY AND CRITICAL CARE MEDICINE:

UPMC Adult ECMO Review and Training Course

September 5–6, 2013

Wyndham Pittsburgh University Center • Pittsburgh, Pennsylvania

Sponsored by:
University of Pittsburgh
School of Medicine
Center for Continuing Education in the Health Sciences and
Department of Cardiothoracic Surgery and Critical Care Medicine

Visiting Faculty
Charles W. Hoopes, MD
Associate Professor of Surgery and
Jason Alexander Gill Professor in
Thoracic Surgery
Section Chief, Cardiopulmonary Transplant
and Mechanical Circulatory Support
Director, Center for Transplantation and
Organ Failure
University of Kentucky
Lexington, KY

Erik Osborn, MD
LTC MC USA
Director, Extracorporeal Service
Pulmonary Critical Care Medicine
Tripler Army Medical Center
Honolulu, HI

Course Directors
Christian A. Bermudez, MD
Associate Professor, Cardiothoracic Surgery
Division Chief, Cardiothoracic Transplantation
Surgical Director, ECMO Program

Robert L. Kormos, MD, FRCS, FACS, FAHA
Professor, Department of Cardiothoracic Surgery
Director, Artificial Heart Program
Co-Director, Heart Transplantation

Penny Lynn Sappington, MD
Assistant Professor, Critical Care Medicine
Medical Director, Surgical Intensive Care Unit
Medical Director, ECMO Program

For additional information, contact:
Lauren Wilson • email: wilsonle@upmc.edu

Department of Cardiothoracic Surgery
200 Lothrop Street • PUH C-800
Pittsburgh, PA 15213

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Intent and Objectives

The two-day program will consist of a series of lectures as well as hands-on training on day two. Experts on the subject will present technical aspects on use of extracorporeal membrane oxygenation along with risks, benefits, and outcomes.

Who Should Attend

This course is designed for cardiothoracic surgeons; heart and lung transplant surgeons; cardiologists including interventional; acute care; heart failure; and heart transplant; cardiac and cardiothoracic fellows; pulmonologists; intensivists; cardiovascular/pulmonary/cardiac care anesthesiologists; nurse practitioners; physician assistants; and perfusionists, nursing and ECMO teams as well as allied health care professionals (MD, DO, PhD, PA, RN, CRNP, NP, BSN, MSN).

Continuing Education Credit

The University of Pittsburgh School of Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The University of Pittsburgh School of Medicine designates this live activity for a maximum of 11.0 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Other health care professionals are awarded 1.1 continuing education units (CEU’s) which are equal to 11.0 contact hours.

Hands On Advanced ECMO Life Support (AELS) Training

The University of Pittsburgh School of Medicine designates this live activity for a maximum of 2.5 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Other health care professionals are awarded 0.2 continuing education units (CEU’s) which are equal to 2.5 contact hours.

Meeting Location

Wyndham Pittsburgh University Center
100 Lytton Avenue • Pittsburgh, PA 15213 • Phone: (412) 682-6200

Accommodations

For hotel reservations, contact the Wyndham Pittsburgh University Center and ask for the UPMC Cardiothoracic Surgery Department – ECMO Course room block before Thursday, August 22, 2013.

Please join us for a special Hands On Advanced ECMO Life Support (AELS) Training on Friday following the didactic portion of the course. This 2.5-hour section will cost an additional $50 and has limited space available. The following two sessions are included:

- Venovenous ECMO Simulation
- Venoarterial ECMO Simulation

See Schedule on page 4 of this brochure for session times.
Schedule ~ Thursday, September 5, 2013

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30 am</td>
<td>Registration and Breakfast</td>
</tr>
<tr>
<td>8:00 am</td>
<td><strong>Introduction</strong></td>
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<tr>
<td></td>
<td>Robert L. Kormos, MD, FRCS©, FACS, FAHA</td>
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<tr>
<td>8:10 am</td>
<td><strong>Historical Perspective of ECMO Programs</strong></td>
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<tr>
<td></td>
<td>Robert L. Kormos, MD, FRCS©, FACS, FAHA</td>
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<tr>
<td>8:35 am</td>
<td><strong>Building an ECMO Program</strong></td>
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<tr>
<td></td>
<td>Charles W. Hoopes, MD</td>
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<tr>
<td>9:00 am</td>
<td><strong>Financial Implications of Building an ECMO Program: Worth the Cost?</strong></td>
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<tr>
<td></td>
<td>Robert Dyga, RN, CCP, LP</td>
</tr>
<tr>
<td>9:25 am</td>
<td><strong>Extreme ECMO Circumstances</strong></td>
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<tr>
<td></td>
<td>Erik Osborn, MD</td>
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<tr>
<td>9:50 am</td>
<td><strong>Panel Discussion</strong></td>
</tr>
<tr>
<td></td>
<td><em>Moderators: Robert L. Kormos, MD, FRCS©, FACS, FAHA; Charles W. Hoopes, MD; Robert Dyga, RN, CCP, LP; Erik Osborn, MD</em></td>
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</tbody>
</table>

**ECMO Use in Advanced Respiratory Failure**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>10:05 am</td>
<td><strong>New Technologies Available for Respiratory Support</strong></td>
</tr>
<tr>
<td></td>
<td>William J. Federspiel, PhD</td>
</tr>
<tr>
<td>10:30 am</td>
<td><strong>ARDS and Respiratory Failure</strong></td>
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<tr>
<td></td>
<td>Penny Lynn Sappington, MD</td>
</tr>
<tr>
<td>10:55 am</td>
<td><strong>ECMO in Lung Transplantation</strong></td>
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<tr>
<td></td>
<td>Christian A. Bermudez, MD</td>
</tr>
<tr>
<td>11:20 am</td>
<td><strong>Panel Discussion</strong></td>
</tr>
<tr>
<td></td>
<td><em>Moderators: William J. Federspiel, PhD; Penny Lynn Sappington, MD; Christian A. Bermudez, MD</em></td>
</tr>
<tr>
<td>11:30 am</td>
<td>Lunch</td>
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</tbody>
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**ECMO and Mechanical Support in Acute Cardiac Failure**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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</thead>
<tbody>
<tr>
<td>12:15 pm</td>
<td><strong>Use of Percutaneous Assist Devices in Cardiogenic Shock</strong></td>
</tr>
<tr>
<td></td>
<td>Sameer J. Khandhar, MD</td>
</tr>
<tr>
<td>12:40 pm</td>
<td><strong>ECMO in Cardiogenic Shock</strong></td>
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<tr>
<td></td>
<td>Christian A. Bermudez, MD</td>
</tr>
<tr>
<td>1:05 pm</td>
<td><strong>Alternatives of Implantable and Paracorporeal Ventricular Assist Devices in Acute Heart Failure</strong></td>
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<tr>
<td></td>
<td>Robert L. Kormos, MD, FRCS©, FACS, FAHA</td>
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<tr>
<td>1:25 pm</td>
<td><strong>Panel Discussion</strong></td>
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<tr>
<td></td>
<td><em>Moderators: Sameer J. Khandhar, MD; Christian A. Bermudez, MD; Robert L. Kormos, MD, FRCS©, FACS, FAHA</em></td>
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**An Integrated Approach for Patient Care on ECMO Support**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>1:40 pm</td>
<td><strong>Physicians Approach</strong></td>
</tr>
<tr>
<td></td>
<td>Charles W. Hoopes, MD</td>
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<tr>
<td>2:05 pm</td>
<td><strong>Nursing Perspective</strong></td>
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<tr>
<td></td>
<td>Angela Brown, RN, BSN, CCRN</td>
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<tr>
<td>2:30 pm</td>
<td><strong>Anticoagulation on ECMO Support</strong></td>
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<tr>
<td></td>
<td>Penny Lynn Sappington, MD</td>
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<tr>
<td>2:55 pm</td>
<td><strong>Panel Discussion</strong></td>
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<tr>
<td></td>
<td><em>Moderators: Charles W. Hoopes, MD; Angela Brown, RN, BSN, CCRN; Penny Lynn Sappington, MD</em></td>
</tr>
<tr>
<td>3:20 pm</td>
<td><strong>Case Presentations (~4)</strong></td>
</tr>
<tr>
<td></td>
<td>Christian A. Bermudez, MD; Penny Lynn Sappington, MD; Cardiothoracic Transplantation Fellows and Critical Care Medicine Fellows</td>
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<tr>
<td>5:00 pm</td>
<td><strong>Thursday Adjournment</strong></td>
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<tr>
<td>5:15 pm</td>
<td><strong>Exhibitor Fair &amp; Cocktails / Appetizers</strong></td>
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</table>
Schedule ~ Friday, September 6, 2013

8:00 am  Registration and Breakfast

8:30 am  Biological Response to ECMO: Getting a Handle on Inflammation
         Timothy M. Maul, PhD

8:55 am  Cannulation Techniques
         Jay K. Bhama, MD

9:20 am  Concomitant Procedures While on ECMO Support
         Jeremy Ward, MD

9:45 am  Panel Discussion
         Moderators: Timothy M. Maul, PhD; Jay K. Bhama, MD; Jeremy Ward, MD

10:05 am  Break

10:25 am  Perfusionist Perspective of ECMO

11:25 am  Round Table Discussion with the UPMC Procirca Perfusionist Group

11:45 am  Lunch

12:30 pm – Hands On Advanced ECMO Life Support (AELS) Training
3:00 pm  Additional fees and registration information are required at registration.
         See inside front cover of this brochure for details.
         • 12:30 pm – 1:45 pm: Venovenous ECMO Simulation
         • 1:45 pm – 3:00 pm: Venoarterial ECMO Simulation
         Hosted by UPMC / Procirca

3:00 pm  Closing Remarks

3:20 pm  Course Adjournment

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Tripler Army Medical Center
Honolulu, HI

Faculty are affiliated with the University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania, unless noted otherwise.

Faculty for this activity has been required to disclose all relationships with any proprietary entity producing health care goods or services.
Registration Information

Registration for this course will be accepted as long as space is available, so register early. Registering online is the quickest and easiest way to reserve your space at this conference:

1. Visit our online registration site at: [https://ccehs.upmc.com/liveFormalCourses.jsf](https://ccehs.upmc.com/liveFormalCourses.jsf)
2. Scroll down to “Sep 05, 2013 – 2013 ECMO Review and Training Course”
3. Click the Registration button and enter all the requested information.
4. After registering, an electronic confirmation will be sent to the email address you provided during registration.

**Please note:** Registration is not complete until you receive the confirmation email. If you do not receive this email within 5-7 days of registration, please contact us at (412) 648-6342.

*You must bring this confirmation with you to the conference.*

Registration by Fax or Postal Mail

If you are unable to register online, please contact Lauren Wilson at (412) 648-6342 or wilsonle@upmc.edu to request a paper registration form. Registration forms must be received no later than Friday, August 23, 2013.

*Registration is not accepted without payment.*

Cancellation

All cancellations must be in writing and sent to us via U.S. mail, email or fax (see contact information below). Tuition for cancellations postmarked or date stamped before August 23, 2013 will be refunded in full. After August 23, 2013, a $35 administrative fee will be assessed, the remaining amount refunded, and no refunds will be made after August 30, 2013. Cancellation requests can be sent to:

Lauren Wilson
UPMC Presbyterian
The Department of Cardiothoracic Surgery
200 Lothrop Street, Suite C-700 • Pittsburgh, PA 15213
Phone: (412) 648-6342 • Fax: (412) 692-2184
Email: wilsonle@upmc.edu

The UPMC Center for Continuing Education in the Health Sciences reserves the right to cancel this program if sufficient registrations are not received. In the case of cancellation, the department will fully refund registration fees.
Registration Fees
$200  Outside physicians
$100  Outside residents, nurses, and other health care professionals
$100  UPMC Physicians
$50   Other UPMC staff (nurses, residents, etc.)
Registration fee is waived for all Department of Cardiothoracic Surgery and Department of Critical Care Medicine Staff.

Hands On Advanced ECMO Life Support (AELS) Training
$50 — Friday, September 6, 2013 beginning at 12:30 pm
(Space is limited, so register early!)
**Optional at registration**

Registration fee includes:
• Continuing education credit
• Registration and course materials
• Continental breakfast, refreshments, and lunch for both conference days.

For Additional Information, Contact:
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Phone: (412) 648-6342 • Fax: (412) 692-2184
Email: wilsonle@upmc.edu

Special Needs
Participation by all individuals is encouraged. Advance notification of any special needs will help us provide better service. Please notify us of your needs by August 23, 2013 by calling (412) 648-6342.

Visit the Center for Continuing Education in the Health Sciences Web Site
Our Internet address is: https://ccehs.upmc.com

The UPMC Center for Continuing Education in the Health Sciences invites you to visit our web location. Receive information on CE programs, earn CE credits on the Internet, and access information about our formal courses and much more. Discover who we are and how you can contact us. Please visit our web location often to get updated information on upcoming programs.

The University of Pittsburgh, as an educational institution and as an employer, values equality of opportunity, human dignity, and racial/ethnic and cultural diversity. Accordingly, as fully explained in Policy 07-01-03, the University prohibits and will not engage in discrimination or harassment on the basis of race, color, religion, national origin, ancestry, sex, age, marital status, familial status, sexual orientation, gender identity and expression, genetic information, disability, or status as a veteran. The University also prohibits and will not engage in retaliation against any person who makes a claim of discrimination or harassment or who provides information in such an investigation. Further, the University will continue to take affirmative steps to support and advance these values consistent with the University’s mission. This policy applies to admissions, employment, and access to and treatment in University programs and activities. This is a commitment made by the University and is in accordance with federal, state, and/or local laws and regulations. For information on University equal opportunity and affirmative action programs, please contact: University of Pittsburgh; Office of Affirmative Action, Diversity, and Inclusion; Carol W. Mohamed, Director (and Title IX, 504 and ADA Coordinator); 412 Bellefield Hall; 315 South Bellefield Avenue; Pittsburgh, PA 15260; 412-648-7860. For complete details on the University’s Nondiscrimination Policy, please refer to Policy 07-01-03. For information on how to file a complaint under this policy, please refer to Procedure 07-01-03.