

19th Annual

Challenges in Critical Care

A Multidisciplinary Approach

**Friday
August 22, 2014**



The Hotel Hershey
100 Hotel Road
Hershey, Pennsylvania 17033



A continuing education service of Penn State College of Medicine and Penn State Milton S. Hershey Medical Center in cooperation with:



PA Chapter of the Society
of Critical Care Medicine
(PASCCM)



Susquehanna Valley Chapter
of the American Association of
Critical Care Nurses (SVAACN)



PA Society for Respiratory Care
(PSRC) Educational content of
this program has been endorsed
by PSRC

Call for Poster Abstracts and Case Studies

► **Deadline: July 11, 2014**

Posters will be viewed throughout the conference and winners from each category will receive a \$500 cash award. Guidelines and online submission information are available on our website at: pennstatehershey.org/web/ccs



Planning Committee

- **Barbara Birriel, MSN, ACNP-BC, FCCM***
PASCCM, Penn State College of Nursing
- **Sandralee Blosser, MD, FCCM***
PASCCM, Critical Care Medicine
- **Lori Cox, MSN, ACNP-BC, ACNPC, CCRN, FCCM***
Neuroscience Critical Care Unit
- **Tina Jackson, MS, RN, ACNS-BC, CCRN**
SVAACN, Clinical Nurse Specialist, Heart and Vascular Surgery
WellSpan Health York Hospital
- **Erin Sarsfield, MSN, RN***
Clinical Nurse Specialist, Adult ICUs
- **Dana W. Stauffer, MS, RRT-NPS***
PSRC, Manager, Respiratory Care and Pulmonary Diagnostics
- **Ashley Quintili, PharmD, BCPS***
Clinical Specialist, Adult Critical Care
- **Margaret M. Wojnar, MD, FCCM***
PASCCM, Pulmonary and Critical Care Medicine
- **Ashley Woy, BS, RRT-NPS***
Respiratory Clinical Educator, Respiratory Therapy

*Penn State Milton S. Hershey Medical Center;
Penn State College of Medicine

This publication is available in alternative media on request.

The Pennsylvania State University is committed to the policy that all persons shall have equal access to programs, facilities, admission, and employment without regard to personal characteristics not related to ability, performance, or qualifications as determined by University policy or by state or federal authorities. It is the policy of the University to maintain an academic and work environment free of discrimination, including harassment. The Pennsylvania State University prohibits discrimination and harassment against any person because of age, ancestry, color, disability or handicap, genetic information, national origin, race, religious creed, sex, sexual orientation, gender identity, or veteran status. Discrimination or harassment against faculty, staff, or students will not be tolerated at The Pennsylvania State University. Direct all inquiries regarding the nondiscrimination policy to the Affirmative Action Director, The Pennsylvania State University, 328 Boucke Building, University Park, PA16802-5901; Tel 814-865-4700/V, 814-863-0471/TTY. U.Ed. MED B5460-15-Y

Purpose

This annual conference is designed to promote the scientific evaluation of methods of care and to translate current literature into strategies to optimize the care of the critically ill patient.

Audience

Physicians • Nurses • Respiratory Therapists
Pharmacists • Dietitians • Health-Care Professionals
involved in critical care may benefit from attendance

Credit

6.0 AMA PRA Category
1 Credit(s)[™]

5.0 hours of patient
safety/risk management
education (†)

6 ACPE contact hours
(0.6 CEUs)

7.2 AACN contact hours

6.25 contact hours for
American Association for
Respiratory Care (AARC)

Penn State College of Medicine is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

Penn State College of Medicine designates this live activity for a maximum of **6.0 AMA PRA Category 1 Credit(s)[™]**. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

This program includes **5.0 hours of patient safety/risk management** education as required by the Pennsylvania State Board of Medicine. Please see the program schedule for the topic marked with a "†."

Penn State Milton S. Hershey Medical Center is accredited by the Accreditation Council for Pharmacy Education as a provider of continuing pharmacy education.

This knowledge-based activity has been assigned the Universal Activity Number of 0322-0000-14-017-L04-P. It has been approved for **6 contact hour (6.0 CEU) of continuing pharmacy education credit** in states that recognize ACPE providers. The attendee list will be uploaded into CPE Monitor approximately one week after completion of the program. Statements of credit indicated in contact hours and CEUs will be available through CPE Monitor. Successful completion includes signing in at registration with personal NABP number and date of birth, attending the entire session for which credit is claimed, and completing the activity evaluation. Penn State Milton S. Hershey Medical Center complies with the Accreditation Standards for Continuing Education.



Penn State Milton S. Hershey Medical Center is accredited by the Accreditation Council for Pharmacy Education as a provider of continuing pharmacy education.

The American Association of **Critical-Care Nurses** is approved by the California Board of Registered Nursing, Provider Number 01036. This program has been approved for **7.2 Contact Hours**, Synergy CERP Categories A, B and C.

American Association for Respiratory Care (AARC)

This program has been approved for **6.25 contact hours Continuing Respiratory Care Education (CRCE)**

It is our policy to ensure balance, independence, objectivity, and scientific rigor in all of our sponsored educational programs. Faculty and course directors have disclosed relevant financial relationships with commercial companies, and Penn State has a process in place to resolve any conflict of interest. Complete faculty disclosure will be provided to program participants at the beginning of the activity.

Faculty

Kathleen Bailey, RN, MSN, AG-ACNP

Adult/Gerontology Acute Care
Johns Hopkins Hospital

Barbara Birriel, MSN, ACNP-BC, FCCM*

The Pennsylvania State University
Penn State College of Nursing
Penn State Hershey Heart and Vascular Institute

John Gallagher, MSN, RN, CCRN, CCNS, RRT

Trauma Program Manager/Clinical Nurse Specialist
Division of Traumatology
Surgical Critical Care and Emergency Surgery
Hospital of the University of Pennsylvania

Dan Galvan, MD, FACS

Regional Chair
Department of Surgery
Texas Tech University Health Science Center in Amarillo

John Kellum, MD, MCCM

Professor of Critical Care Medicine
Bioengineering and Clinical and Translational Science Director
Center for Critical Care Nephrology
University of Pittsburgh

Geoffrey Ling, MD, PhD, FANA, FAAN

Director, Biological Technologies Office
Defense Advanced Research Projects Agency
Arlington, VA
Attending Physician, Neuro Critical Care
Johns Hopkins Hospital

Dana Mirman

Secretary, Board of Directors
Sepsis Alliance

Michael Pinsky, MD, CM, Dr Hc, FCCP, MCCM

Professor of Critical Care Medicine, Bioengineering
Cardiovascular Disease and Anesthesiology
Vice-Chair, Academic Affairs
University of Pittsburgh

Ashley Quintili, PharmD, BCPS*

Clinical Specialist, Adult Critical Care
Department of Pharmacy

Alison Sabados, PharmD

WellSpan Health York Hospital

Chris Zacko, MD*

Assistant Professor of Neurosurgery

Jennifer Zanni, PT, DSc

Clinical Specialist
Johns Hopkins Hospital

Dmitriy Zubkus, MD

Attending Intensivist and Pulmonologist
WellSpan Health York Hospital

Educational Goals

Upon conclusion of the program, participants should be able to:

- Identify the long-term effects and presenting symptoms of the ICU-specific PTSD, focusing on real point-of-care measures to minimize it
- Define the scope of the social, economic and medical devastation for the post-ICU syndrome survivor and their families
- Identify advances in direct neural control of prosthetic limbs and memory prosthetics
- Describe the pathogenesis of severe asthma and identify the treatment options for near fatal asthma exacerbations
- Explain the consequences of blunt thoracic injury
- Argue for a more selective approach in the imaging of blunt thoracic trauma
- Review the pathophysiology of the clotting cascade and identify pharmacologic targets of new anticoagulants
- Report the impact of new anticoagulants on emergent reversal, along with the pharmacology and indications for new reversal agents
- Identify dosing options and potential risk factors associated with currently available reversal agents for anticoagulants
- Describe the physiologic effects of saline and the physical chemical basis of saline-induced acidosis
- State the effects of hyperchloremic acidosis on the kidney
- Convey the basic operation of capnography monitoring devices
- Identify normal and abnormal capnography parameters and waveforms
- Express the clinical applications of capnography for ventilation and circulation monitoring in the critically ill patient
- Identify and understand the most recent 2010 AAN Guidelines for brain injury and brain death
- Recite the history of death by neurologic criteria and also some of the ethical questions revolving around this diagnosis
- Identify the benefits and limitations of CVP monitoring
- Identify alternative strategies for patient monitoring and resuscitation
- Explain the complications associated with immobility and the benefits of an early mobility approach to critically ill patients
- Express the barriers and challenges of implementing an early rehabilitation program in the ICU, along with strategies needed to implement a successful early mobility program in the ICU
- Identify the experience of the patient suffering from post-ICU syndrome and how health-care professionals can have a positive impact on these individuals

*Penn State Milton S. Hershey Medical Center; Penn State College of Medicine

Program

7:00am Final Registration/Posters/Exhibits

7:45 **Welcome**
PaSCCM President
Barb Birriel MSN, ACNP-BC, FCCM

8:00 **Keynote**
What's New and What's Cool
Geoffrey Ling, MD, PhD, FANA, FAAN

- Discuss advances in direct neural control of prosthetic limbs and memory prosthetics
- Describe what is beyond MRI

9:00 Break/Exhibits/Posters

9:30am • Concurrent Session 1 – Choose to attend one

- **1A †** **Post-ICU Syndrome: Clinical Perspective**
Michael Pinsky, MD, CM, Dr Hc, FCCP, MCCM
- Identify the long-term events and presenting symptoms of the ICU-specific post-traumatic stress disorder
 - Focus on real point-of-care measures to minimize it
 - Define the scope of the social, economic and medical devastation for the survivor and their families
- **1B †** **Near-Fatal Asthma**
Alison Sabados, PharmD
Dmitriy Zubkus, MD
- Describe the pathogenesis of severe asthma
 - Discuss the frequency of near-fatal asthma in a group of severe asthma patients
 - Identify the treatment options for near-fatal asthma exacerbations
- **1C †** **Thoracic Trauma**
Dan Galvan, MD, FACS
- Discuss the consequences of blunt thoracic injury
 - Argue for a more selective approach in the imaging of blunt thoracic trauma
 - Identify selective groups of blunt thoracic trauma patients
- 10:30 Break/Exhibits/Posters

10:45am • Concurrent Session 2 – Choose to attend one

- **2A †** **Anti-Coagulants from the Trauma Perspective**
Ashley Quintili, PharmD, BCPS
- Review the pathophysiology of the clotting cascade and identify pharmacologic targets of new anticoagulants
 - Discuss impact of new anticoagulants on emergent reversal
 - Describe pharmacology and indications for new reversal agents
 - Compare dosing options and potential risk factors associated with currently available reversal agents
- **2B †** **Fluid Resuscitation, Just Saline: How Can it be Harmful?**
John Kellum, MD, MCCM
- Describe the physical chemical basis of saline-induced acidosis
 - Review the physiologic effects of saline
 - Discuss the effects of hyperchloremic acidosis on the kidney

- **2C †** **End Tidal CO₂ Monitoring: The ECG of Ventilation**
John Gallagher, MSN, RN, CCRN, CCNS, RRT
- Describe the basic operation of capnography monitoring devices
 - Identify normal and abnormal capnography parameters and waveforms
 - Describe the clinical applications of capnography for ventilation and circulation monitoring in the critically ill patient

11:45 Lunch/Exhibits/Posters

1:00pm • Concurrent Session 3 – Choose to attend one

- **3A †** **Death by Neurological Criteria: Current Standards and Persisting Questions**
Chris Zacko, MD
- Discuss the most recent 2010 AAN Guidelines
 - Review the history of death by neurologic criteria
 - Express some of the ethical questions revolving around death by neurologic criteria
- **3B †** **Is CVP a Useful Tool in Patient Management?**
Dan Galvan, MD, FACS (Point)
John Kellum, MD, MCCM (Counterpoint)
- Discuss the limitations of central venous monitoring
 - Review the results of recent fluid trials
 - Discuss alternative strategies for patient monitoring and resuscitation
- **3C †** **Case Studies In Critical Care**
- 2:00 Break/Exhibits/Posters – Return to general session room
- 2:15 †** **Early Mobility in the ICU: A Multidisciplinary Approach**
Jennifer Zanni, PT, DSc
Kathleen Bailey, RN, MSN, AG-ACNP
- Discuss the complications associated with immobility and the benefits of an early mobility approach to patients with critical illness
 - Review the barriers and challenges of implementing an early rehabilitation program in the ICU
 - Identify strategies needed to implement a successful early mobility program in the ICU
- 3:15 †** **Post-ICU Syndrome: A Survivor's Story**
Dana Mirman
- Describe a patient's perspective on experiencing emergency room and ICU treatment for sepsis
 - Discuss the experience of post-sepsis/post-ICU syndrome from a patient's perspective
 - Identify ways in which professionals can have a positive impact for patients who may experience post-ICU syndrome
- 4:30 Evaluation and Adjournment



Fee

\$150 per person

Includes:

- Instruction
- Break refreshments
- Lunch

Those eligible for a reduced fee are:

- SVAACN member—\$130 per person
- PSRC member—\$130 per person
- PASCCM member—\$50 per person

Accommodations

Accommodations are the responsibility of the program participant. A list of Hershey area lodging is available upon request or online at: pennstatehershey.org/web/ce/home/resources/links.

Hershey is conveniently located in central Pennsylvania, just 90 minutes from Baltimore and Philadelphia, two hours from Washington, DC, and three hours from New York City. Come and visit the town that has been named, “the sweetest place on earth.” For more information, go to: hersheypa.com.

Access

Penn State encourages persons with disabilities to participate in its programs. If you anticipate needing any type of special accommodation or have questions about the physical access provided, please contact Continuing Education in advance of your participation.

Cancellation Policy

**Cancellations received later than:
August 15, 2014**

will incur a \$25 processing fee.

**No refunds:
After August 19, 2014**

Substitutes are accepted at any time.

The University reserves the right to cancel or postpone any course or activity because of insufficient enrollment or other unforeseen circumstances.

If a program is canceled or postponed, the University will refund registration fees but cannot be held responsible for any related costs, charges, or expenses, including cancellation/change charges assessed by airlines or travel agencies. Preregistered participants will be notified if a program is filled or canceled.

19th Annual Challenges in Critical Care

August 22, 2014 • B5460-15-Y

Name (First Name, MI, Last Name)

☐ Male ☐ Female

Degree(s)/Credential(s)

Email Address (Print legibly. Used for confirmation, registration status, and program materials.)

Home Address

City

State

Zip Code

Cell Phone (Last-minute change/cancellation only)

Daytime Phone

Evening Phone

Hospital/Organization

Specialty/Position

Street Address (HMC/COM employees—provide dept. name/mail code)

City

State

Zip Code

Special Needs (Dietary, access, etc.)

I Indicate type of credit desired:

☐ AMA

☐ AACR

☐ ACPE

☐ Safety/Risk

☐ AACN/Nursing

Choose one session in each time period:

Concurrent Session 1

☐ 1A Post ICU Syndrome

☐ 1B Near Fatal Asthma

☐ 1C Thoracic Trauma

Concurrent Session 2

☐ 2A Anti-Coagulants

☐ 2B Fluid Resuscitation

☐ 2C CO₂ Monitoring

Concurrent Session 3

☐ 3A Brain Death

☐ 3B CVP Monitoring

☐ 3C Case Studies

Check Appropriate Fee:

☐ \$150/person

☐ \$130/person SVAACN, membership # _____

☐ \$130/person PSRC, membership # _____

☐ \$50/person PASCCM, membership # _____

Indicate Method of Payment:

☐ Check enclosed—payable to Penn State

☐ Bill sponsoring organization—attach a letter of authorization

☐ HMC/COM employee fee, same as above—bill department budget

Please Note:

A photographer may be present at this event to take pictures that will include event spectators and participants. These photos may be used by the event organizers for purposes of promotion.

Cost center/budget #

Charge my: ☐ VISA ☐ MasterCard ☐ American Express

Account Number

Exp. Date

Cardholder's Signature

Registration Information

Registrations will be confirmed by email upon receipt of payment, authorization to bill, or a credit card guarantee.

If you do not receive a confirmation within two weeks, call 717-531-6483 to confirm your registration. Walk-ins and late registrations will be accepted if space is available.

Call

717-531-6483

Fax

717-531-5604

Email

ContinuingEd@hmc.psu.edu

Mail

Registrar, Penn State Hershey Continuing Education
G220 P. O. Box 851, Hershey, PA17033

Register Online Today!

pennstatehershey.org/web/ccc

THE PENNSYLVANIA STATE UNIVERSITY
PENN STATE MILTON S. HERSHEY MEDICAL CENTER
DEPARTMENT OF CONTINUING EDUCATION G220
P.O. BOX 851
HERSHEY, PA 17033-0851

PRESORTED
FIRST-CLASS MAIL
U.S. POSTAGE PAID
LANCASTER, PA
PERMIT NO. 587

PENNSTATE HERSEY



Milton S. Hershey
Medical Center

19th Annual
Challenges

in Critical Care



Register Online Today

pennstatehershey.org/web/ccc