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13. ABSTRACT (Maximum 200 Words) The 9 th Safar Symposium was held on June 23-24, 2011 at the Biomedical Science Tower of the University of Pittsburgh School of Medicine. The Conference was attended by ~150 people including faculty, fellows, residents, and other trainees and nurses and other allied personnel from the University and the Greater Pittsburgh Area. There was no registration fee. The Conference was a two day event that focused on the topic of traumatic brain injury—with a special emphasis on the topic of traumatic brain injury as it relates to resuscitation in U. S. combat casualty care. Approximately 70 trainee presentations in posters and platform format were made by fellows, residents, medical students, nurses, and undergraduates that were judged for scientific merit. Plenary presentations were made by faculty from Uniform Services University and multiple VA medical centers, along with other civilian medical centers.				
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INTRODUCTION

Traumatic brain injury has become one of the most important problems in current U. S. combat casualty care and remains a national public health concern. The 9th Safar Symposium was held on June 23-24, 2011 at the University of Pittsburgh School of Medicine to bring together scientists and clinician scientists, trainees, and allied personnel with a specific interest in traumatic brain injury as it relates to resuscitation in U. S. combat casualty care to present the latest in information and research findings in the field.

BODY

The 9th Safar Symposium was held on June 23-24, 2011 at the Biomedical Science Tower of the University of Pittsburgh School of Medicine. The Conference was attended by ~150 people including faculty, fellows, residents, and other trainees and nurses and other allied personnel from the University and the Greater Pittsburgh Area. There was no registration fee. The Conference was a two day event that focused on the topic of traumatic brain injury—with a special emphasis on the topic of traumatic brain injury as it relates to resuscitation in U. S. combat casualty care.

On day 1, the conference included participation and presentation of research~70 Trainees in both poster and platform sessions. Each presentation was formally judged by a distinguished panel of experts. The trainees were from 5 sites, the Departments of Anesthesiology, Critical Care Medicine, Emergency Medicine, and Physical Medicine and Rehabilitation, and also from the Winter Institute for Simulation Education and Research (WISER).

The symposium also included presentations from renowned clinicians and scientists (nationally) who shared their expertise with members of the local Pittsburgh medical research community interested in the topic of traumatic brain injury as it relates to resuscitation in U. S. combat casualty care. Plenary presentations were made by faculty from Uniform Services University and multiple VA medical centers, along with other civilian medical centers.

Traumatic brain injury has become one of the most important problems in current U. S. combat casualty care and remains a major public health concern in the civilian sector. It is also noteworthy that Safar Center investigators and other clinician scientists and scientists in the medical center are involved in a number of important initiatives in experimental and clinical traumatic brain injury research that are supported by U. S. Army including USAMRMC, DARPA, and the Veterans Administration—thus, this symposium also allowed University of Pittsburgh investigators to interface with the latest information on this topic. Specifically, the program included leaders in traumatic brain injury relevant to combat casualty care including Dr. Daniel Perl from Uniformed Services University and Dr. David Brody from Washington University St. Louis who addressed TBI in combat casualty care and chronic traumatic encephalopathy.

The Symposium was run by Dr. Patrick Kochanek, who has served as the Director of the Safar Center for Resuscitation Research for 18 years and is the PI of numerous research projects in the area of traumatic brain injury. He is Professor and Vice Chairman of Critical Care Medicine at the University of Pittsburgh and is committed to both brain injury research and investigation in the area of combat casualty care. He has a number of grants from the U.S. Army and serves on a number of advisory boards for the U.S. Army in that area or work and has over 350 citations on PubMed related to TBI and resuscitation medicine.

KEY RESEARCH ACCOMPLISHMENTS

Given that the award supported a conference rather than a research project, the major accomplishments were the 12 plenary lectures that were given and the 70 poster and oral presentations by trainees from the departments of critical care medicine, emergency medicine, physical medicine and rehabilitation, and anesthesiology. This included a diverse group of fellows, residents, medical students, nursing, pharmacy, and undergraduate trainees. Each trainee presentation was judged by an august group of faculty and a total of seven awards were given for high quality poster and oral presentations. Regarding the plenary lectures, the following speakers addressed the general topic of traumatic brain injury and traumatic brain injury resuscitation, namely Dr. Daniel Perl, Uniformed Services University (Neuropathology of traumatic encephalopathy); Dr. David Brody, Washington University St. Louis—(Diffusion Tensor Imaging of axonal injury in blast-induced traumatic brain injury); Dr. David Warner, Duke University (Novel issues in brain ischemia and neuroanesthesia relevant to traumatic brain injury); Dr. Grace Griesbach, PhD, UCLA (Exercise after mild traumatic brain injury: Implications for Sports and Rehabilitation); Dr. Kees Polderman (Therapeutic cooling for traumatic brain injury; Still a place?); and Dr. Brian Blasiole, (Effect of hyperoxia on resuscitation of experimental combined traumatic brain injury and hemorrhagic shock). A second plenary session was devoted to the use of Simulation in medical education and included five plenary lectures by the following speakers, Dr Rosalyn Scott, Simulation Center, Veterans Affairs Medical Center, Dayton, OH and Wright State University (Beyond Mannequins); Dr. Neal Benedict, UPMC Presbyterian Hospital (Building branched-outcome virtual patients into your curriculum); Dr Haru Okuda, SimLEARN Veterans Health Administration, National Center (Simulation dating: Matching the appropriate technology with your goals); and Dr. William McIvor, University of Pittsburgh (Simulation and Medical Student Proficiency).

REPORTABLE OUTCOMES

The program from the 9th Safar Symposium and the trainee abstract booklet are both attached as appendices #1 and #2, respectively.

CONCLUSIONS

The 9th Safar Symposium was held on June 23-24, 2011 at the Biomedical Science Tower of the University of Pittsburgh School of Medicine. The Conference was attended by ~150 people including faculty, fellows, residents, and other trainees and nurses and other allied personnel from the University and the Greater Pittsburgh Area. There was no registration fee. The Conference was a two day event that focused on the topic of traumatic brain injury—with a special emphasis on the topic of traumatic brain injury as it relates to resuscitation in U. S. combat casualty care. Approximately 70 trainee presentations in posters and platform format were made by fellows, residents, medical students, nurses, and undergraduates that were judged for scientific merit. Plenary presentations were made by faculty from Uniform Services University and multiple VA medical centers, along with other civilian medical centers.

REFERENCES: N/A

APPENDICES

- 1. Program of the 9th Safar Symposium**
- 2. Program of the Trainees Research Day component of the 9th Safar Symposium**

Safar Symposium

9th Annual



June 22-23, 2011

9th Annual Safar Symposium Multi-Departmental Trainees' Research Day June 22, 2011

Location: Starzl Biomedical Science Tower
200 Lothrop St.—South-Room S100

- 11:00 – 11:30 am Registration
Poster Session 1 - Setup
- 11:30 – 11:45 am Welcome – Dr. Patrick Kochanek
Director, Safar Center for Resuscitation Research
- 11:45 – 1:15 pm **First Session Poster Presentations**
- 1:15 – 2:00 pm Lunch
-
- 2:00 – 2:15 pm Second Session Poster Setup
- 2:15 – 3:45 pm **Oral Presentations**
Moderators: Yan Xu, MD and Amy Wagner, MD
- 3:45 – 5:15 pm **Second Session Poster Presentations**
- 5:15 – 5:45 pm **Abstract Judges Meeting**
-
- 5:45 – 6:00 pm **Awards Presentation and Concluding Remarks**
- 6:00 pm **Afternoon Poster Take Down**

9th Annual Safar Symposium

June 23, 2011

Morning Session

Location: Starzl Biomedical Science Tower
200 Lothrop St. — South-Room S100

7:45 am	Continental Breakfast
8:15 – 12:00	Breakthroughs in Resuscitation – “New Developments in Traumatic Brain Injury”
8:15 – 8:20	Opening Comments – Morning Session
	Patrick M. Kochanek, MD Professor and Vice Chair, Department of Critical Care Medicine; Director, Safar Center for Resuscitation Research, University of Pittsburgh School of Medicine
Moderators:	Hülya Bayır, MD Associate Professor, Department of Critical Care Medicine and Environmental and Occupational Health, University of Pittsburgh
	Anthony E. Kline, PhD Associate Professor, Physical Medicine & Rehabilitation, Psychology, and Center for Neuroscience, University of Pittsburgh
8:20 – 8:50	Daniel P. Perl, MD Professor of Pathology (Neuropathology), Director, Military Brain Injury Studies (MilBIS), Uniformed Services University of Health Sciences, Bethesda, MD Topic: “Traumatic Brain Injury in a Military Setting, What Do We (Really) Know”
8:50 – 8:55	Discussion
8:55 – 9:25	David L. Brody, MD, PhD Assistant Professor of Neurology, Washington University School of Medicine, St. Louis, MO Topic: “Advanced MRI Detection of Blast-Related Traumatic Brain Injury in US Military Personnel: Early Prediction of Post-Traumatic Stress Disorder Severity”
9:25 – 9:30	Discussion
9:30 – 9:45	Break
9:45 – 10:10	David S. Warner, MD Professor of Anesthesiology, Neurobiology and Surgery Duke University, Durham, NC Topic: “Why After 30 Years of Failure, I’m More Optimistic Than Ever Before for a Breakthrough in Neuroresuscitation”
10:10 – 10:15	Discussion

10:15 – 10:40	Grace Griesbach, PhD Adjunct Assistant Professor, Department of Neurosurgery, David Geffen School of Medicine at UCLA, CA Topic: “Exercise after Mild Traumatic Brain Injury: Implications for Sports and Rehabilitation”
10:40 – 10:45	Discussion
10:45 – 11:10	Kees Polderman, MD, PhD Professor, Critical Care Medicine, Medical Director, Neurocritical Care Services, University of Pittsburgh Medical Center Topic: “Therapeutic Cooling for Traumatic Brain Injury: Still a Place?”
11:10 – 11:15	Discussion
11:15 – 11:35	Brian Blasiole, MD, PhD PGY-4, Department of Anesthesiology, Research Fellow, Safar Center for Resuscitation Research, University of Pittsburgh School of Medicine Topic: “Effect of Hyperoxia on Resuscitation of Experimental Combined Traumatic Brain Injury and Hemorrhagic Shock”
11:35 – 11:40	Discussion
11:40 – 11:45	Presentation of the 9th Nancy Caroline Fellowship Award Presented by Patrick M. Kochanek, MD
11:45 – 12:00	Break
12:00 – 12:05	Introduction of the Safar Lecture—John P. Williams, MD
12:05 – 12:10	Introduction of Safar Lecturer—Patrick M. Kochanek, MD
12:10 – 12:50	31st Annual Safar Lecture – Hugo Van Aken, MD, PhD, FRCA
12:50 – 1:00	Questions and Discussion
1:00 – 1:45	Reception – Foyer

The 31st Peter and Eva Safar Annual Lectureship in Medical Sciences and Humanities

Guest Speaker:	Hugo Van Aken, MD, PhD, FRCA Department of Anesthesiology and Intensive Care Medicine University Hospital, Münster, Germany
Topic:	Update on Thoracic Epidural Anesthesia and the Stress Response—Are the Benefits Worth the Trouble and Risks?

June 23, 2011 Afternoon Session

Location: WISER, 230 McKee Place, Suite 300

2:00 – 5:00	<i>“The Spectrum of Simulation—A Quest to Improving Healthcare Education”</i>	3:05 – 3:25	Coffee Break
2:00 – 2:05	Opening Comments—Afternoon Session Paul E. Phrampus, MD Director, Winter Institute for Simulation, Education and Research (WISER), University of Pittsburgh, Associate Professor of Emergency Medicine and Anesthesiology, University of Pittsburgh School of Medicine	3:25 – 3:50	Haru Okuda, MD SimLEARN National Medical Director, Veterans Health Administration; SimLEARN National Center, VHA Employee Education System Topic: <i>“Simulation Dating: Matching the Appropriate Technology with your Goals”</i>
Moderators:	William R. McIvor, MD Associate Professor of Anesthesiology, Associate Director, WISER for Medical Student Simulation Education, and Director, MOCA Simulation, University of Pittsburgh John O'Donnell, DrPH, CRNA, MSN Director and Associate Professor, Nurse Anesthesia Program, University of Pittsburgh School of Nursing Associate Director, Nursing Programs, WISER	3:50 – 3:55	Discussion
		3:55 – 4:20	Gayle Gliva-McConvey Director, Theresa Thomas Professional Skills Teaching and Assessment Center, Eastern Virginia Medical School Topic: <i>“The Spectrum of Simulation—Using Standardized Patients”</i>
2:05 – 2:30	Rosalyn P. Scott, MD, MSHA Professor of Surgery, Boonshoft School of Medicine, Professor of Biomedical, Industrial and Human Factors Engineering, University College of Engineering and Computer Science, Wright State University; Associate Chief of Staff for Medical Education and Director, Simulation Center Veterans Affairs Medical Center, Dayton, Ohio Topic: <i>“Beyond Mannequins”</i>	4:20 – 4:25	Discussion
		4:25 – 4:50	William R. McIvor, MD Associate Professor of Anesthesiology, Associate Director, WISER for Medical Student Simulation Education, and Director, MOCA Simulation, University of Pittsburgh Topic: <i>“Simulation and Medical Student Proficiency”</i>
2:30 – 2:35	Discussion	4:50 – 4:55	Discussion
2:35 – 3:00	Neal Benedict, PharmD Assistant Professor, Department of Pharmacy and Therapeutics, University of Pittsburgh School of Pharmacy, Critical Care Pharmacist, UPMC Presbyterian Hospital Topic: <i>“Building Branched-Outcome Virtual Patients into Your Curriculum”</i>	4:55 – 5:00	Concluding Comments Paul E. Phrampus, MD Patrick M. Kochanek, MD
3:00 – 3:05	Discussion		

9th Annual Safar Symposium

June 23, 2011

Morning Session Speakers

Breakthroughs in Resuscitation—

“New Developments in Traumatic Brain Injury”

Location: Starzl Biomedical Science Tower,
200 Lothrop St. – South-Room S100



Dr. Daniel Perl was born and raised in New York City and received his undergraduate degree from Columbia and his medical training at the State University of New York, Downstate Medical Center. He then took postgraduate training in Anatomic Pathology and Neuropathology at Yale University, following which he served for two years as a pathologist at the Centers for Disease Control in Atlanta, Georgia. In subsequent years he served on the faculty of the

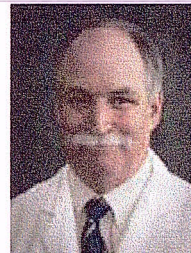
Brown University Medical School and then the University of Vermont College of Medicine. It was at Vermont that he began working on Alzheimer's disease and other age-related neurodegenerative disorders. In 1986, Dr. Perl was recruited to the Mount Sinai School of Medicine in New York where for 24 years he served as Director of the Neuropathology Division and was Professor of Pathology, Psychiatry and Neurosciences.

Dr. Perl has authored over 250 peer-reviewed publications and book chapters and is co-author of the 3rd edition of Oppenheimer's Diagnostic Neuropathology, one of the leading textbooks in his field. He is highly regarded for his work on various aspects of the neuropathology of age-related neurodegenerative disorders, especially the role of environmental factors in their induction. He is the leading authority on the pathology of the fascinating complex of neurodegenerative disorders occurring among the native population living on Guam. He most recently became involved in investigations of the long-term effects of repeated head trauma in former NFL football players and other athletes in collaboration with the Boston University Alzheimer's Disease Center, Center for the Study of Traumatic Encephalopathy and the Sports Legacy Institute. In September, 2010, Dr. Perl left Mount Sinai to join the faculty of the Uniformed Services University of the Health Sciences in Bethesda, MD. In conjunction with the congressionally mandated Center for Neuroscience and Regenerative Medicine, he is in the process of establishing a state-of-the-art neuropathology laboratory dedicated to research on the acute and long term effects of traumatic brain injury among military personnel.



Dr. David Brody received both MD and PhD degrees from the Johns Hopkins University in 2000 as part of the NIH Medical Scientist Training Program. He completed an internship in Internal Medicine in 2001 and Neurology residency in 2004, both at Barnes-Jewish Hospital. He was a post-doctoral fellow at Washington University in the laboratory of Dr. David Holtzman.

Dr. Brody is an Assistant Professor in the Department of Neurology. He treats patients with subacute and chronic sequelae of traumatic brain injury in the Traumatic Brain Injury Clinic. He is the Washington University site director for the National Football League player care program. He has advised the US Army Vice Chief of Staff and assisted the Medical Advisor to the Chairman of the Joint Chiefs of Staff on a recent site visit to TBI care centers in Afghanistan. Research in Brody laboratory and collaborative group is focused on the development of novel therapeutic and diagnostic strategies for traumatic brain injury (TBI).



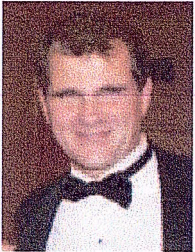
Dr. David Warner was trained in psychology and medicine at the University of Wisconsin-Madison, USA (1971-1980). Dr. Warner received medical specialty training in neuroanesthesiology at the University of Iowa, USA (1980-1984). He then trained in basic research techniques relevant to the study of acute brain injury at the Laboratory for Experimental Brain Research, University of Lund, Lund, Sweden (1984-1985). After 10 years on the faculty in the

Department of Anesthesiology at the University of Iowa, Dr. Warner transferred to Duke University in Durham, North Carolina, USA. Dr. Warner currently holds the rank of Professor in the departments of Anesthesiology, Neurobiology, and Surgery. He is a practicing clinical neuroanesthesiologist and Vice-Chair for Research in the Department of Anesthesiology. Dr. Warner serves as the Director of the Multidisciplinary Neuroprotection Laboratories, which are dedicated to the study of mechanisms and treatment of stroke, cardiac arrest, traumatic brain and spinal cord injury, aneurysmal subarachnoid hemorrhage, perinatal asphyxia, and neurocognitive sequelae of cardiopulmonary bypass. Dr. Warner has held continuous National Institutes of Health funding to support research in these areas since 1987. He is an author on over 200 peer-reviewed articles dealing with both scientific and clinical factors related to acute brain injury and sits on numerous editorial boards of scholarly journals in this field.



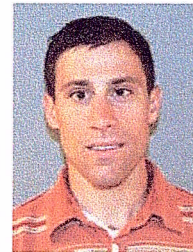
Dr. Grace Griesbach received her doctorate in Behavioral Neuroscience from the Department of Psychology at the University of Texas at Austin, and did a post-doc at the University of California, Los Angeles. She is currently an Assistant Professor in the Department of Neurosurgery, at the University of California, Los Angeles and is a member of the UCLA Brain Injury Research Center.

Dr. Griesbach's research focuses on mild and moderate traumatic brain injury and addresses mechanisms that facilitate recovery and enhance rehabilitation. Her work has shown that voluntary exercise improves outcome from experimental traumatic brain injury when administered at the appropriate post injury time. In addition, she is exploring the stress response to physiological activity after TBI.



Dr. Kees Polderman studied medicine at the University of Amsterdam and trained as an internist and subsequently as an intensivist at the Free University Hospital in Amsterdam. His PhD thesis, entitled "Interactions of endocrine systems with cardiovascular significance," was completed in 1993. He obtained the European diploma in intensive care medicine in 2000. He has previously worked at the VU University Medical Center in Amsterdam and at the Utrecht University Medical Center in the Netherlands. He moved to the United States in August 2009 to become medical director of Neurocritical care services at the University of Pittsburgh Medical Center.

He is a member of the board of directors of the Neurocritical Care Society. He has co-authored 114 international (84 PubMed cited) and 62 national (Dutch) publications. His main lines of research are use of therapeutic hypothermia for neuroprotection and cardioprotection, systemic and cardiovascular consequences of neurological injuries, and quality assessment in the ICU.



Dr. Brian Blasiole received his doctorate in Cell and Molecular Biology in 2005 from the Pennsylvania State University College of Medicine with a thesis entitled, "Molecular genetic analysis of vestibular system development in zebrafish." In 2007, he graduated from medical school at Penn State where he was elected to the National Medical Honor Society, AOA. He is now finishing his residency in Anesthesiology at the University of Pittsburgh.

Brian spent his senior year of residency working under the mentorship of Dr. Patrick Kochanek at the Safar Center for Resuscitation Research on optimizing resuscitation of combined traumatic brain injury and hemorrhagic shock in a mouse model system. Dr. Blasiole will continue his training this year as a clinical fellow in Pediatric Anesthesiology at Children's Hospital of Pittsburgh followed by additional work in Dr. Kochanek's lab under the Department of Anesthesiology's T32 fellowship award.

The 31st Peter and Eva Safar Annual Lectureship in Medical Sciences and Humanities

Guest Speaker: Hugo Van Aken, MD, PhD, FRCA
Professor and Chairman
Anesthesiology and Intensive-Care Medicine
University Hospital, Münster, Germany

Topic: Update on Thoracic Epidural Anesthesia and
the Stress Response—Are the Benefits Worth
the Trouble and Risks?



Hugo Van Aken is Professor and Chairman of the Department of Anesthesiology and Intensive-Care Medicine at the University Hospital in Münster, Germany. After completing his medical studies at the Catholic University of Louvain, Belgium, in 1976, he worked as an assistant in the Department of Anesthesiology there and qualified as a specialist in anesthesiology in Belgium in 1980. He completed his PhD in anesthesiology at the University of Münster, Germany, in 1983. He was chairman of the Department of Anesthesiology and Intensive-Care Medicine at the Catholic University of Louvain from 1986 to 1995, and was appointed to his present post in Münster in August 1995.

Dr. Van Aken was actively involved in various anesthesiology organizations in Europe for 20 years. As President of the European Academy of Anaesthesiology (EAA), he was the driving force behind the amalgamation of the three different European organizations into the newly formed European Society of Anaesthesiology (ESA) in 2005. He left the Board of the ESA in December last year. He was elected as Secretary-General of the German Society of Anesthesiology and Intensive-Care Medicine (DGAI) in 2010.

He is also an honorary member of the Association of University Anesthesiologists (AUA), the Polish Society of Anesthesiology and Intensive-Care Therapy (1992), the Belgian Society for Anesthesia and Resuscitation (2000), the Association of Anesthesiologists of Georgia (2003), the American Society of Anesthesiologists (2003), and the Dutch Association of Anesthetists (2009). In 2009 he was appointed as an ordinary member of the German National Academy of Sciences (Leopoldina).

He is a Fellow of the Royal College of Anaesthetists (FRCA), a Fellow of the Australian and New Zealand College of Anaesthetists (FANZCA), and a member of the Board of Trustees of the International Anesthesia Research Society (IARS).

Dr. Van Aken has published more than 450 articles in journals listed in *Current Contents* and has contributed many chapters to national and international textbooks, as well as publishing seven books. His major research interests are in regional anesthesia, postoperative pain, cardiac function, intestinal microcirculation, and thrombocyte function. He is currently Editor-in-Chief of *Current Opinion in Anesthesiology* and *Best Practice & Research: Clinical Anaesthesiology*. He is also a member of several international editorial boards and scientific societies in the field of anesthesiology.

Afternoon Session Speakers

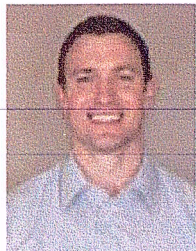
“The Spectrum of Simulation—A Quest to Improving Healthcare Education”

Location: WISER, 230 McKee Place, Suite 300



Rosalyn P. Scott, MD, MSHA is Professor of Surgery at Wright State University's Boonshoft School of Medicine. She holds a joint appointment in the Department of Biomedical, Industrial and Human Factors Engineering in the College of Engineering and Computer Science. Dr. Scott also serves as Associate Director for Medical Education and Director of the Simulation Center at Dayton VAMC. Her research interests are in the areas of mixed reality simulations and interactive virtual patients.

Dr. Scott is a member of the Board of Directors of the MedBiquitous Consortium, an ANSI-accredited developer of information technology standards for healthcare education and competence assessment. As Co-Chair of the organization's Competencies Working Group, she is leading the development of XML standards and supporting guidelines for competency data enabling educational resources and activities to be tied to a competency framework.

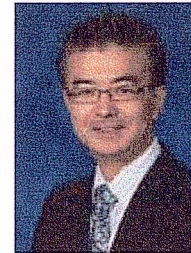


Neal Benedict, PharmD is an assistant professor in the Department of Pharmacy and Therapeutics at the University of Pittsburgh, and a critical care pharmacist for UPMC. He received his doctorate of pharmacy degree from Duquesne University, completed his pharmacy practice residency through Buffalo's Kaleida Health System, and pursued an advanced critical care specialty residency at UPMC. In 2005, Dr. Benedict joined the School of Pharmacy faculty at

Pitt. Dr. Benedict is the primary coordinator of the critical care course (Advanced Pharmaceutical Care II) at the School of Pharmacy and is involved in the cardiovascular curriculum as well. He serves as a preceptor for Introductory and Advanced Pharmacy Practice Experiences (IPPE/APPE) for the School. At UPMC Presbyterian hospital, Dr. Benedict's clinical practice sites include the Surgical/Trauma and Medical Intensive Care Units.

Dr. Benedict's primary research focus is in pharmacy education, specifically, implementing teaching methods that improve student clinical decision making and problem solving. His work with virtual patients over the past 5 years has been extensive. He holds two publications in the American Journal of Pharmaceutical Education detailing the incorporation of “branched-outcome decision-making”

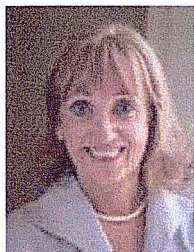
virtual patients into the classroom. His current research is focused on enhancing interprofessionalism and self-directed learning through virtual patients. Dr. Benedict received the Stan Cohen “Teacher of the Year Award” in 2009 and in 2011, the “Innovations in Teaching” award offered by Rho Chi Society at the University of Pittsburgh.



Haru Okuda, MD is the National Medical Director for the Veterans Health Administration (VHA) Simulation Learning Education and Research Network (SimLEARN) Program. Prior to this role, he was the Director of the Institute for Medical Simulation and Advanced Learning (IMSAL) for the NYC Health and Hospitals Corporation and held a position as Associate Professor of Clinical Emergency Medicine at the Mount Sinai School of Medicine. He received his MD from New York Medical College and completed his

training in Emergency Medicine at Mount Sinai Emergency Medicine Residency and recently finished a Clinical Quality Fellowship with the Greater New York Hospital Association/United Hospital Fund.

Dr. Okuda holds national positions as Vice-Chair of the Simulation Academy for the Society for Academic Emergency Medicine (SAEM), co-chair of Simwars for the International Meeting on Simulation in Healthcare (IMSH), and Immediate Past Chair of the Emergency Medicine Special Interest group for Society for Simulation in Healthcare (SSIH). His educational program Simwars, an interdisciplinary simulation competition between healthcare providers, has been held at national meetings including the International Meeting on Simulation in Healthcare, American College of Emergency Medicine Scientific Assembly, and the Neurocritical Care Society's Annual Meeting. He has numerous publications in simulation and education, most recently a textbook in Emergency Medicine entitled, “Emergency Medicine Oral Boards Review Illustrated”. In 2010, Dr. Okuda was recognized by Crain's NY Business Magazine as one of 40 under 40 NY Rising Stars and more recently, by Becker's Hospital Review as one of the Rising Stars: 25 Healthcare Leaders under age 40.



Gayle A. Gliva-McConvey has been the Director of the *Theresa A. Thomas Professional Skills Teaching and Assessment Center* at Eastern Virginia Medical School (EVMS) since its inception in 1994. For over 37 years she has developed and integrated the Standardized Patient (SP) methodology in clinical skills assessment and training. As the first non-physician SP Educator, she directed the first Standardized Patient Program at McMaster University

Faculty of Health Sciences in Hamilton, Ontario Canada from 1973 to 1986. In 1986, as president of Gliva-McConvey & Associates, she served as a consultant for medical schools and corporations that were interested in augmenting traditional training and assessment techniques with the use of experiential learning. McMaster University continued to be one of the many clients of Gliva-McConvey & Associates until she left for EVMS in 1993.

She has over 18 publications on Standardized Patients and has presented at over 100 conferences, lectures or workshops in North America, Spain, the Netherlands and the West Indies. In 1994-1995 she was a Consultant to the China Medical Board of New York City, developing and evaluating new SP programs at three medical institutions in China. In 1995 – 1999 she was a Consultant to the three medical schools in Puerto Rico to develop SP Programs at the Universidad Central del Carib School of Medicine, Ponce School of Medicine, and the University of Puerto Rico School of Medicine. In 1999-2002 she was a consultant to Moldova, establishing a clinical skills training program as part of post soviet medical education restructuring. In January 2011 she will be presenting at the 8th Asia Medical Education Conference in Singapore.

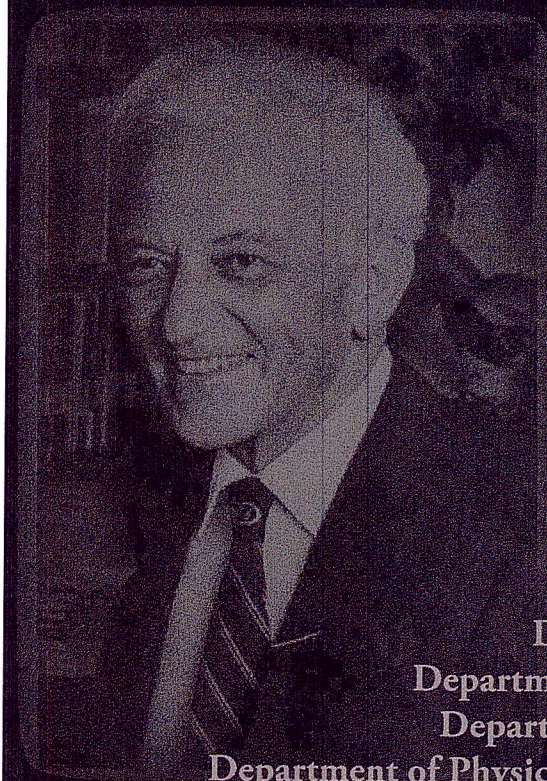
Mrs. Gliva-McConvey is past national chairperson for the Special Interest Group (SIG) on Standardized Patients for the Association of American Medical Colleges (AAMC) and past Convenor for the Southern Special Interest Group on Standardized Patients. In 1998 she received the first annual award from the American Association of Medical Colleges (AAMC) recognizing her contributions in the field of Standardized Patient Educators. She was one of the founding board members of the Association of Standardized Patient Educators (ASPE) and the past chair of the Committee for developing Standards of Practice. She represented ASPE on the Simulation Inventory Advisory

Committee with AAMC and the Society of Simulation in Healthcare (SSH). She is currently on the SSH certification committee's executive committee. She has recently been elected as president for ASPE.



William R. McIvor, MD interests are in simulation curriculum design and implementation. He has significant experience (many thousands of hours) over the last 11 years in this area, developing, teaching, and evaluating human-patient simulation courses for medical students, residents and attending physicians. He has presented his work at national and international meetings, presented several grand rounds and other talks on simulation education, and published his curriculum. Currently, he is the chair-designee for the Society of Education in Anesthesiology's Simulation committee. He is also working with a consortium of experts in simulation education and evaluation in anesthesiology to explore using human-patient simulation in high-stakes assessment. His simulation experience includes: instructor since 1999; Director of Medical Student Simulation, Department of Anesthesiology 2000-present; Associate Director of WISER for Medical Student Simulation Education, 2006 – present; Society of Education in Anesthesiology (SEA) Simulation Committee – member 2006 – present, chair-designee, 2008 – present.

Notes



Acknowledgements

The Laerdal Foundation
Medivance
United States Army
Department of Anesthesiology
Department of Critical Care Medicine
Department of Emergency Medicine
Department of Physical & Rehabilitation Medicine
University of Pittsburgh School of Medicine / UPMC

FIRST SESSION POSTERS

11:45-1:15

Department of Anesthesiology

Poster # Author and Title

- 1** **Ryan Matthew Almeida, MD** - "Balloon Kyphoplasty for Vertebral Compression Fractures."
- 3** **Manasi Badve, MD** - "Protein Drink Supplementation to Promote Parturient Satisfaction in Labor."
- 5** **J. Daniel Bowman** - "Isoflurane Does Not Cause Neuroapoptosis but Affects Glial Cells in Young Adult Mice."
- 7** **Thomas M. Chalifoux, MD** - "Variation in Expert Opinion on a Scale for Measuring Anesthesiology Resident Performance."
- 9** **Mary Hongying Cheng, PhD** - "Molecular Dynamics Investigation of Propofol Binding to a Pentameric Ligandgated Ion Channel: Implication of Anesthetic Inhibition Mechanism."
- 11** **Tanxing Cui, PhD** - "NMR Study of Cannabinoid Interaction with Glycine Receptor Transmembrane Domains."
- 13** **Allison E. Garda** - "Neuronal Changes in the Transition from Early to Late Phase Chronic Pancreatitis."
- 15** **John J. Hache, MD** - "Ventricular Arrhythmia in the Setting of Methadone and Normal QTc Interval."

- 17** **Jian Hu, MD, PhD** - "Intrathecal Drug Therapy-Related Granulomas."
- 19** **Jun-Ho La, DMV, PhD** - "Intraluminal Hypertonicity with Mild Acidity Induces Colorectal Hypersensitivity in Mice."
- 21** **Hui-Hua Li, PhD** - "*WISP1* Acts as a Potential Endogenous Danger Signaling to Provoke VILI in Mice."
- 25** **Koshy Mathews Mathai, MD** - "A Young Male with Low Back Pain and Pulmonary Talcosis."
- 27** **Ahdy Amin Nassif, MD** - "The Effect of Anesthesia and Ambient Light on the Pupillary Light Reflex Measured by Pupillometry."
- 31** **Kristin Schreiber, MD, PhD** - "Accidental Insertion of a Percutaneous Veno-Venous Bypass Cannula into the Left Superior Vena Cava of a Patient Undergoing Liver Transplantation."
- 33** **Tommy S. Tillman, PhD** - "Heterologous Expression of Human $\alpha 7$ Acetylcholine Receptor."
- 35** **James Wilde, BA** - "A Survey of Chronic Pain Symptoms in Malignant Hyperthermia."
- 37** **Eric Michael Wise, BS** - "Assessing the Value and the Educational Impact of Computer-Based Simulation Learning at the University of Pittsburgh School of Medicine."

Department of Critical Care Medicine

Poster #	Author and Title
39	Ricardo Castro, MD - "Winter Immunoenhancement in the Critically ill."
41	Nikki Miller Ferguson, MD - "Intracranial Hypertension in Children with Severe Traumatic Brain Injury (sTBI): Quantifying the Secondary Insult and its Effect on Outcome."
43	Rachel A. Schuster, MD - "Do Physicians Convert Uncertainty to Certainty when Disclosing Prognosis in Grave Critical illness?"
47	Laura Watkins, MD - "Possible Role for Haptoglobin and Hemoglobin Aggregates in Pathomechanism of Aneurysmal Subarachnoid Hemorrhage."
49	Feihu Zhou, MD, PhD. - "The Effect of Different Resuscitation Fluids on Experimental Sepsis-Induced AKI."

Department of Emergency Medicine

Poster #	Author and Title
51	Jestin Carlson, MD - "Variables Associated With Successful Intubation Attempts Using Video Laryngoscopy: A Preliminary Report in a Helicopter Emergency Medical Service."
53	Benjamin Cobb, BS - "Is Paraspinal Intramuscular Ropivacaine Injection an Effective Treatment for Headache in a Pediatric Emergency Department?"
55	Jaime Jordan, MD - "Comparison of Sampling Techniques for Capillary vs. Venous Lactate."
57	M. Casey Murphy - "Hypothermia Does Not Ameliorate Post-Cardiac Arrest Myocardial Dysfunction."

Department of Physical Medicine and Rehabilitation

Poster #	Author and Title
59	Michelle Carter, BS - "Variants in the Serotonin Transporter Gene Mediate Risk and Onset of Depression Following Traumatic Brain Injury."
61	Lloydine J. Jacobs, MD - "The Effects of Glucosamine Sulfate on Intervertebral Disc Degeneration."
63	Christina M. Monaco - "Reassessment of the Potential Benefits of Environmental Enrichment in Female Rats After Experimental Traumatic Brain Injury."

SECOND SESSION POSTERS

3:45-5:15

Department of Anesthesiology

Poster # Author and Title

- 2** **Mark Backeris, DO, MBA** - "Impact of an Incentive System on Faculty Teaching in the Operating Room as Evaluated by Anesthesiology Residents."
- 4** **Vasyl Bondarenko, PhD** - "NMR Study of General Anesthetic Interactions with the Neuronal n-Acetylcholine Receptor Transmembrane Domain."
- 6** **Nicole Brandon, MS, BS** - "Systemic Post-Treatment with Cell Culture Media after Cardiac Arrest is Therapeutic."
- 8** **Qiang Chen, PhD** - "NMR Investigation of Volatile Anesthetics Interaction with PDZ Domains of PSD-95."
- 10** **Daniel Cormican, MD** - "Videolaryngoscopy for Difficult Airways has the Same First Pass Success Rate as Standard Laryngoscopy in the Non-Difficult Airway."
- 12** **Bin Feng, PhD** - "Silent Afferents and Colorectal Hypersensitivity."
- 14** **Brian Gierl, MD** - "Safety Associated with the Removal of Paravertebral Catheters in Trauma Patients Receiving Enoxaparin for Thrombophylaxis."
- 16** **John Wilson Hoffman, Jr., DO, MS.** - "Postoperative Alopecia Areata in Living Related Liver Donors."

- 18** **James W. Ibinson, MD, PhD** - "BOLD FMRI of Pain- Does Accommodation Affect Studies That Use a Single Painful Stimulation?"
- 20** **Johnny K. Lee, MD** - "Outcomes of Continuous Paravertebral Catheters in Patients Who Underwent Minimally Invasive Cardiac Surgery: A Case Series."
- 22** **Lu Liu, PhD** - "Signal Transduction Pathways in Ligand-Gated Ion Channels Revealed by the Perturbation-Based Markovian Transmission Model."
- 24** **Andrew Patrick Lucic, MD** - "Ultrasound Guided Paravertebral Nerve Blocks Placement with In-Plane Parasagittal Approach Post-Thoracotomy."
- 28** **Manijeh Ryan, MD** - "Spinal Cord Stimulator (SCS) and Phantom Limb Pain – A Case Study."
- 30** **Kamran Saraf, MD** - "Ultrasound Guided Suprascapular Nerve Block Using Minimal Medication Dose."
- 32** **Erica S. Schwartz, PhD** - "Synergistic Antagonism of TRPV1 and TRPA1 Reduces Afferent Excitability and Inflammation in the Progression of Chronic Pancreatitis."
- 34** **Adam Tune, MD** - "Intrathecal Hydromorphone with Bupivacaine for End-Stage Pancreatic Cancer- A Case Study."
- 36** **Dan Willenbring, PhD** - "Isoflurane Perturbs Intersubunit Interactions in GLIC."

Department of Critical Care Medicine

Poster #	Author and Title
38	Alicia K. Au, MD - "Inhibition of Autophagy Using Atg7 siRNA Improves Neurological Function and Neuronal Survival After Asphyxial Cardiac Arrest in Juvenile Rats."
40	Anan Chuasuwan, MD - "Development of a Venous-Venous Hemodialysis Model in the Rat."
42	Leslie P. Scheunemann, MD MPH - "Value Elicitation in ICU Practice: An Empirical Study of How Physicians Elicit the Values of Incapacitated Patients Surrogate Decision-Makers."
44	Steven L. Shein, MD - "Impact of Hemorrhagic Shock on the Inflammatory Response to Experimental Traumatic Brain Injury."
46	David John Wallace, MD MPH - "Concentration of Mechanically Ventilated Patients Shows Regional Heterogeneity and Disorganization."

Department of Emergency Medicine

Poster #	Author and Title
50	Jestin Carlson, MD - "Injury Patterns on Brain Magnetic Resonance Imaging in Comatose Patients After Cardiac Arrest."
52	Stephanie Chan, MD & Jennifer Dorfman, MD - "Diphenhydramine Ingestion in Pediatric Population: A Poison Center's Experience."
54	Kate Stockwell Farrell, MD - "Provider Perception of Prehospital Video Laryngoscope Use."
58	Riana R Pryor, MS, ATC - "Ice Slurry Decreases Core Temperature During Exertion in Wildland Firefighting Gear"

Department of Physical Medicine and Rehabilitation

Poster #	Author and Title
60	Kaitlin A. Folweiler - "Temporal Effects of Environmental Enrichment-Mediated Functional Improvement After Experimental Traumatic Brain Injury."
62	Megan Miller, BS - "COMT Gene Variant Associations with Depression, Cognition and Recovery After Severe TBI."

ORAL PRESENTATIONS

Time	Author, Department, and Title
2:15-2:25	Young Joo Kim, MS, OTR/L (Department of Emergency Medicine) - "Associations between Post-Cardiac Arrest Discharge Disposition and the Cerebral Performance Category and Modified Rankin Scale."
2:30-2:40	Qing Liu, MD, PhD (Department of Anesthesiology) - "Peripheral Inflammation Results in a Decrease in the Potency of Local Anesthetic-Induced Conduction Block of the Rat Sciatic Nerve."
2:45-2:55	David Mowrey, BS (Department of Anesthesiology) - "Allosteric Signaling of Anesthetic Isoflurane Bound to LFA-1 Revealed by the PMT Model."
3:00-3:10	Thomas I. Phelps, BS (Department of Physical Medicine and Rehabilitation) - "The Therapeutic Efficacy of Aripiprazole After Experimental Traumatic Brain Injury."
3:15-3:25	Andrew R. Samuelsson, BS (Department of Anesthesiology) - "Discriminating Olfactory Memory Consolidation and Recall After General Anesthesia."
3:30-3:40	Erik R. Su, MD (Department of Critical Care Medicine) - "Myelin Basic Protein Level Increases in the Cerebrospinal Fluid of Children and Infants Following Traumatic Brain Injury: The Effect of Therapeutic Hypothermia."

9th Annual Safar Symposium Multi-Departmental Trainees' Research Day

June 22, 2011

**Location: Starzl Biomedical Science Tower
200 Lothrop St. – South-Room S100**

Anesthesiology * Critical Care Medicine * Emergency Medicine *

Physical Medicine & Rehabilitation

Oral Presentations 2:15-3:45

First Session Poster Presentations 11:45-1:15

Second Session Poster Presentation 3:45-5:15

Awards Presentation 5:45-6:00