

FACULTY DATA SHEET

NAME: PATRICK MICHAEL KOCHANЕК, M.D.
CAMPUS ADDRESS: Safar Center for Resuscitation Research
CURRENT TITLE & EFFECTIVE DATE: Professor, October 1, 2002
DATE APPOINTED TO FACULTY: July 1, 1986 TITLE: Assistant
Professor
DATE APPOINTMENT EXPIRES: June 1999 LENGTH OF TERM:
DATES OF PROMOTIONS: February 1991

CERTIFICATION: ABA: American Board of Pediatrics
Sub-Board of Pediatric Critical Care Medicine
TENURE: Tenured - 1997

MEDICAL SCHOOL GRADUATE: University of Chicago
HOSPITAL OF RESIDENCY: University of California, San Diego
YEAR RESIDENCY COMPLETED: 1983

LICENSE NUMBER: MD-035634-E
DEA NUMBER: BK0401606
SOCIAL SECURITY NUMBER: 385-62-6623
DATE OF BIRTH: July 1, 1954
CITIZEN USA
NAME OF SPOUSE: Denise
UPDATED: May 20, 2009

CURRICULUM VITAE

BIOGRAPHICAL

NAME:	Patrick M. Kochanek, M.D.	BIRTH DATE:	July 1, 1954
HOME ADDRESS:	114 Altadena Drive Pittsburgh, PA 15228	BIRTH PLACE:	Detroit, MI
HOME PHONE:	(412) 561-5987	CITIZENSHIP:	USA
BUSINESS ADDRESS:	Safar Center for Resuscitation Research 201 Hill Building 3434 Fifth Avenue Pittsburgh, PA 15260	SOCIAL SECURITY NO:	385-62-6623
BUSINESS PHONE:	(412) 383-1900		

EDUCATION AND TRAINING

Undergraduate

1972 - 1976	University of Michigan Ann Arbor, Michigan	B.S., 1976 Zoology
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Graduate

1976 - 1980	University of Chicago Chicago, Illinois	M.D., 1980
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Post Graduate

1980 - 1981	University of California San Diego, California	Pediatric Internship William Nyhan, M.D.
1981 - 1983	University of California San Diego, California	Pediatric Residency William Nyhan, M.D.
1983 - 1986	Children's Hospital National Medical Center Washington, DC	Pediatric Critical Care Fellowship Peter Holbrook, M.D.

APPOINTMENTS AND POSITIONS

ACADEMIC

1986-1991	University of Pittsburgh School of Medicine Department of Anesthesiology/CCM Pittsburgh, PA	Assistant Professor
1991 -2002	University of Pittsburgh School of Medicine Department of Anesthesiology/CCM Pittsburgh, PA	Associate Professor

Patrick M. Kochanek, MD

1986 - 1991	University of Pittsburgh School of Medicine Department of Pediatrics Pittsburgh, PA	Assistant Professor
1991 - 2002	University of Pittsburgh School of Medicine Department of Pediatrics Pittsburgh, PA	Associate Professor
2002 – present	University of Pittsburgh School of Medicine Department of Critical Care Medicine Pittsburgh, PA	Professor
2002 – present	University of Pittsburgh School of Medicine Department of Pediatrics Pittsburgh, PA	Professor
2002 – present	University of Pittsburgh School of Medicine Department of Anesthesiology Pittsburgh, PA	Professor
<u>NON ACADEMIC</u>		
1983 - 1986	Hyperbaric Medicine Program Center/Naval Medical Research Institute Washington, DC	Guest Scientist
1986 - present	Children's Hospital of Pittsburgh One Children's Place Pittsburgh, PA	Associate Director Pediatric Intensive Care Unit
1992 - present	Children's Hospital of Pittsburgh One Children's Place Pittsburgh, PA	Director Pediatric Critical Care Research
1994 - present	Safar Center for Resuscitation Research 3434 Fifth Avenue Pittsburgh, PA	Director
2002 - present	University of Pittsburgh School of Medicine Department of Critical Care Medicine Pittsburgh, PA	Vice Chairman

CERTIFICATION AND LICENSURE

SPECIALTY CERTIFICATION

1985	Diplomate, American Board of Pediatrics, #32806
1987	American Board of Pediatrics Sub-board of Pediatric Critical Care Medicine, #0081

Patrick M. Kochanek, MD

1995 American Board of Pediatrics Sub-board of Pediatric
Critical Care Medicine, Recertification

2003 American Board of Pediatrics Sub-board of Pediatric
Critical Care Medicine, Recertification

2008 Fellow of the American Academy of Pediatrics
Member, AAP Section of Critical Care

MEDICAL LICENSURE

1981 California, #G46392

1985 Maryland, #D32599

1986 District of Columbia, #15785

1986 - present Pennsylvania, MD# 035634-E

MEMBERSHIPS IN PROFESSIONAL AND SCIENTIFIC SOCIETIES

1985 American Association for the Advancement of Science

1987 Society of Critical Care Medicine

1988 Pennsylvania Society of Critical Care Medicine

1988 International Society of Cerebral Blood Flow and Metabolism

1988 New York Academy of Sciences

1989 Stroke Council, American Heart Association

1989 National Neurotrauma Society

1990 Society for Neuroscience

1990 Society for Pediatric Research

1994 Council on Cardiopulmonary and Critical Care, American Heart Association

1996 International Neurotrauma Society

1997 The American Association of Neurological Surgeons, Associate Member

2002 World Association of Medical Editors

2006 Society of Neurosurgical Anesthesia and Critical Care

HONORS

1976 Phi Beta Kappa

1980 Alpha Omega Alpha

1977 - 1980 Joseph Collins Foundation Scholar

1984 - 1985 Fellow of the Year
Department of Critical Care Medicine
Children's Hospital National Medical Center

Patrick M. Kochanek, MD

- 1985 - 1986 Fellow of the Year
Department of Critical Care Medicine
Children's Hospital National Medical Center
- 1991 Fellow, American College of Critical Care Medicine
- 1992 Cited in *Best Doctors in America*, Woodward/White, Inc.
- 1992 Named one of "Pittsburgh's Best Doctors", *Pittsburgh Magazine*
- 1993 Society of Critical Care Medicine Pediatric Award
- 1993 - 1995 Society of Critical Care Medicine Established Investigator Award
- 1993 Cited in *Best Doctors in America*, 2nd Edition
- 1993 Neurotrauma Society Poster Award
(Research Mentor to Dr. Susan Kaczorowski)
- 1993 Society of Critical Care Medicine
Educational Scholarship
(Research Mentor to Dr. Susan Kaczorowski)
- 1994 Outstanding Faculty
University of Pittsburgh Honors Convocation
- 1995 Society of Critical Care Medicine
Scientific Award
(Research Mentor to Dr. Robert Clark)
- 1996 Presidential Citation
Society of Critical Care Medicine
- 1996 Poster Award Finalists
Neurotrauma Society of Medicine
(Research mentor to Dr. Michael Bell and Dr. Michael Forbes)
- 1996 - 1997 Cited in *Who's Who in America*
- 1997 Educational Scholarship
Society of Critical Care Medicine
(Research mentor to Dr. Michael Bell)
- 1997 Young Investigator's Award
Society for Neurosurgical Anesthesiology and Critical Care
(Research mentor to Dr. Elizabeth Sinz)
- 1997 Poster Award Finalists
Neurotrauma Society of Medicine
(Research mentor to Dr. Michael Bell)
- 1998 The American Board of Pediatrics
Sub-Board in Pediatric Critical Care Medicine
- 1998 Taubin Lecture, Children's National Medical Center, Washington, DC

Patrick M. Kochanek, MD

- 1998 SCCM In-Training Fellow Award
Society of Critical Care Medicine
(Research mentor to Dr. Michael Bell)
- 1999 Women in Neurotrauma Award
National Neurotrauma Society
(Research Mentor to Dr. Kimberly Statler)
- 2000 Educational Scholarship
Society of Critical Care Medicine
(Research mentor to Dr. Randall Ruppel)
- 2000 Educational Scholarship
Society of Critical Care Medicine
(Research mentor to Dr. Kimberly Statler)
- 2000 Educational Scholarship
Society of Critical Care Medicine
(Research co-mentor to Dr. Yong Han)
- 2000 Jr. Investigator of the Year
Women in Neurotrauma Award
National Neurotrauma Society
(Research Mentor to Dr. Kimberly Statler)
- 2001 Nominated, Pittsburgh Men and Women of
the Year Award (in Science and Medicine),
Vectors of Pittsburgh
- 2001 Educational Scholarship
Society of Critical Care Medicine
(Research co-mentor to Dr. Hülya Bayır)
- 2001 Editor-in Chief, *Pediatric Critical Care Medicine*
- 2001 Fellow Clinical Research Award, Society for Pediatric Research
(Research co-mentor to Dr. Hülya Bayır)
- 2001 Ambulatory Pediatric Association Fellows Award, The Ambulatory Pediatric
Association (Research co-mentor to Dr. Rachel Berger)
- 2001 America's Top Doctors, 1st Edition
Castle Connolly Medical Ltd.
- 2002 Cited in *Who's Who in America*
- 2002 Neuroscience Specialty Award, Society of Critical Care Medicine
- 2002 Distinguished Service Award
Society of Critical Care Medicine
- 2002 Scientific Award
Society of Critical Care Medicine
(Research co-mentor to Dr. Hülya Bayır)
- 2002 Vice-Chairman of Research
Department of Critical Care Medicine
Safar Center for Resuscitation Research
University of Pittsburgh School of Medicine
Pittsburgh, Pennsylvania

Patrick M. Kochanek, MD

- 2002 Cited in *Best Doctors in America*, and *Pittsburgh Magazine*
- 2002 Asmund S. Laerdal Memorial Lecturer
- 2002 Pfizer Professorship, University of Illinois Dept. of Pediatrics
- 2002 Dolph Adams Award Nomination-Five most cited research article 1997-2001
Carols TM, et al. *J Leukoc Biol* 61, 279-285.
- 2003 Scientific Award, 32nd Congress of SCCM
(Research co-mentor to Dr. Hülya Bayır)
- 2003 Educational Scholarship, 32nd Congress of SCCM
(Research mentor to Dr. Paul Shore)
- 2003 Young Investigator Award, 4th World Congress on Pediatric Intensive Care (WFPICCS)
(Research mentor to Dr. Paul Shore)
- 2003 America's Top Doctors, 3rd Edition
Castle Connolly Medical Ltd.
- 2003-04 Cited in *Best Doctors in America*
- 2004 America's Top Doctors, 4th Edition
Castle Connolly Medical Ltd.
- 2004-05 Guide to America's Top Pediatricians
Consumers' Research Council of America
- 2005 Cited in *Who's Who in the East*
- 2005 Young Investigator Award, 34th Critical Care Congress (SCCM)
(Research mentor to Dr. Xianren Wu)
- 2005 Cited in the *Top Doctors* feature article
Pittsburgh Magazine, May 2005 issue
- 2005 First Tomas Vargo Visiting Professor
Department of Pediatrics
University of Texas, Houston
May 26-27, 2005
- 2005 *America's Top Doctors*, 5th Edition
Castle Connolly Medical Ltd.
- 2005-06 Cited in *Best Doctors in America*
- 2006 Cited in Marqui's *Who's Who in American Education*
- 2006 Cited in Marqui's *Who's Who in Medicine and Healthcare*
- 2006 Cited in Marqui's *The Who's Who 60*
60th Anniversary Edition of *Who's Who in America*
- 2006 Cited in *Guide to America's Top Pediatricians*
Consumers' Research Council of America 2006 Consumer Guide
- 2006 3rd Place, Children's Hospital of Pittsburgh 2006 Summer Student Research Day
(Research mentor to Evan Lebowitz)

Patrick M. Kochanek, MD

- 2006 *America's Top Doctors*, 6th Edition
Castle Connolly Medical Ltd.
- 2007 American College of Critical Care Medicine Distinguished Investigator Award
- 2007 SCCM In-Training Fellow Award
36th Critical Care Congress of SCCM
(Research mentor to Dr. Alia Dennis)
- 2007 Scientific Award, 36th Critical Care Congress of SCCM
(Research mentor to student Lee Haselkorn)
- 2007 Cited in Marqui's *Who's Who in American Education*
- 2007 First Visiting Professor
Center of Critical Illness and Health Engineering
Washington University, St. Louis School of Medicine
- 2007 1st Place, Children's Hospital of Pittsburgh 2007 Summer Student Research Day
(Research Mentor to student Lauren Bueke)
- 2007-08 Cited in *Best Doctors in America*
- 2008 Ray Helfer Award, American Pediatric Association
(Research mentor to Dr. Jennifer Arnold)
- 2008 2nd Bakken Lecturer, Cleveland Clinic
Cleveland, Ohio, June 4-5, 2008
- 2008 Guide to America's Top Pediatricians
Consumer's Research Council of America
- 2008 2008 AAP Section on Critical Care Distinguished Career Award
Boston, Massachusetts, October 12, 2008

PUBLICATIONS

Refereed Articles

1. Weiss DS, Kochanek PM. Photochemistry of 2-Methylcyclododecanone: Tetrahedron Letters 9:763, 1977.
2. Weiss DS, Kochanek PM, Lipka J: Photochemistry of 2-Methylcycloalkanones. Tetrahedron Letters 14:1261, 1977.
3. Kochanek PM, Zaritsky A: Nifedipine in the treatment of pulmonary hypertension in a patient with severe bronchopulmonary dysplasia. Clin Pediatr 25:214-216, 1986.
4. Hallenbeck JM, Dutka AJ, Tanishima T, Kochanek PM, Kumaroo KK, Thompson CB, Obrenovitch TP, Contreras TJ: Polymorphonuclear leukocyte accumulation in regions with low blood flow during the early postischemic period. Stroke 17:246-253, 1986.
5. Dutka AJ, Hallenbeck JM, Kochanek PM: A brief episode of severe arterial hypertension induces delayed deterioration of brain function and worsens blood flow after transient multifocal cerebral ischemia. Stroke 18:386-395, 1987.

6. Kochanek PM, Dutka AJ, Tanishima T, Kumaroo KK, Hallenbeck JM: Indomethacin prostacyclin and heparin improve postischemic cerebral blood flow without affecting early postischemic granulocyte accumulation. *Stroke* 18:634-637, 1987.
7. Kochanek PM, Dutka AJ, Kumaroo KK, Hallenbeck JM: Platelet-activating factor receptor blockade enhances early postischemic neuronal recovery after multifocal ischemia. *Life Sci* 41:2639-2644, 1987.
8. Kochanek PM, Dutka AJ, Kumaroo KK, Hallenbeck JM: Effects of prostacyclin, indomethacin, and heparin on cerebral blood flow and platelet adhesion after multifocal ischemia of canine brain. *Stroke* 19:693-699, 1988.
9. Dutka AJ, Kochanek PM, Hallenbeck JM, Storey MD: Air Embolism May Cause Unrecognized Ischemia of the Gray-White Junction. *Undersea Biomed Res*, 15:99-106, 1988.
10. Hallenbeck JM, Dutka AJ, Kochanek PM, Siren A, Pezeshkpour GH, Feuerstein G: Stroke Risk Factors Prepare Rat Brainstem Tissues For a Modified Localized Shwartzman Reaction. *Stroke* 19:863-869, 1988.
11. Kochanek PM, Nemoto EM, Melick JA, Evans R, Burke DF: Cerebrovascular and Cerebrometabolic Effects of Intracarotid-Infused Platelet-Activating Factor in Rats. *J Cereb Blood Flow Metab* 8:546-551, 1988.
12. Frattallone JM, Fuhrman BP, Kochanek PM, Orr RA, Siewers RD, Thompson AE, Trento A: Management of Pulmonary Barotrauma By Extracorporeal Membrane Oxygenation, Apnea and Lung Rest. *J Pediatrics* 112:787-789, 1988.
13. Trento A, Thompson A, Siewers R, Orr R, Kochanek P, Fuhrman B, Beerman L, Fischer F, Griffith B, Hardesty R: Extracorporeal Membrane Oxygenation For Newborn Respiratory Failure: New trends. *J Thorac Cardiovasc Surg* 96:542-547, 1988.
14. Dutka AJ, Kochanek PM, Hallenbeck JM: The Influence of Granulocytopenia on Cerebral Ischemia Induced by Air Embolism. *Stroke* 20:390-395, 1989.
15. Kochanek PM, Melick JA, Schoettle RJ, Magargee MJ, Evans RW, Nemoto EM: Endogenous Platelet-Activating Factor Does Not Modulate Blood Flow and Metabolism in Normal Rat Brain. *Stroke* 21:459-462, 1990.
16. Keating J, Smith, S, Kochanek P, Perper J, Orenstein S, Nakayama D: Fatal Aortoesophageal Fistula Due to Double Aortic Arch: An Unusual Complication of Prolonged Nasogastric Intubation. *J Pediatr Surg* 25:1298-1300, 1990.
17. Schoettle RJ, Kochanek PM, Magargee MJ, Uhl MW, Nemoto EM: Early Polymorphonuclear Leukocyte Accumulation Correlates with the Development of Posttraumatic Cerebral Edema in Rats. *J Neurotrauma* 7:207-217, 1990.
18. Kochanek PM, Schoettle RJ, Uhl MW, Magargee M, Nemoto E: Platelet-Activating Factor Antagonists Do Not Attenuate Delayed Posttraumatic Cerebral Edema in Rats. *J Neurotrauma* 8:19-25, 1991.
19. Singh NC, Kochanek PM, Schiding JK, Melick JA, Nemoto EM: Uncoupled Cerebral Blood Flow and Metabolism After Severe Global Ischemia in Rats. *J Cereb Blood Flow Metab* 12:802-808, 1992.
20. Biagas KV, Uhl MW, Schiding JK, Nemoto EM, Kochanek PM: Assessment of posttraumatic polymorphonuclear leukocyte accumulation in rat brain using tissue myeloperoxidase assay and vinblastine treatment. *J Neurotrauma* 9:363-371, 1992.
21. Uhl MW, Kochanek PM, Schiding JK, Nemoto EM: Effect of phorbol myristate acetate on cerebral blood flow in normal and neutrophil-depleted rats. *Stroke* 24:1977-1982, 1993.
22. Grundl PD, Biagas KV, Kochanek PM, Schiding JK, Barmada M, Nemoto EM: Early cerebrovascular response to head injury in immature and mature rats. *J Neurotrauma* 11:135-148, 1994.
23. Uhl MW, Biagas KV, Grundl PD, Barmada MA, Schiding JK, Nemoto EM, Kochanek PM: Effects of Neutropenia On Edema, Histology, and Cerebral Blood Flow After Traumatic Brain Injury in Rats. *J Neurotrauma* 11:303-315, 1994.

24. Morton A, Dalton H, Kochanek P, Janosky J, Thompson A: Extracorporeal membrane oxygenation (ECMO) in pediatric respiratory failure (PRF): Five-year experience at the University Of Pittsburgh. *Crit Care Med* 22:1659-1667, 1994.
25. Clark RS, Schiding JK, Kaczorowski SL, Marion DW, Kochanek PM: Neutrophil accumulation after traumatic brain injury in rats: comparison of weight-drop and controlled cortical impact models. *J Neurotrauma* 11:499-506, 1994.
26. DeKosky ST, Goss JR, Miller PD, Styren SD, Kochanek PM, Marion D: Upregulation of nerve growth factor following cortical trauma. *Exp Neurol* 130:173-177, 1994.
27. Goss JR, Styren SD, Miller PD, Kochanek PM, Palmer A, Marion D, DeKosky ST: Hypothermia attenuates the normal increase in interleukin 1 β RNA and nerve growth factor following traumatic brain injury in the rat. *J Neurotrauma* 12:159-167, 1995.
28. VanRollins M, Kochanek PM, Evans RW, Schiding JK, Nemoto EM: Optimization of epoxyeicosatrienoic acid syntheses to test their in vivo effects on cerebral blood flow. *Biochimica et Biophysica Acta* 1256:263-274, 1995.
29. Kaczorowski SL, Schiding JK, Toth CA, Kochanek PM: Effect Of Soluble Complement Receptor-1 On Neutrophil Accumulation After Traumatic Brain Injury in Rats. *J Cereb Blood Flow Metab* 15:860-864, 1995.
30. Kochanek PM, Marion D, Zhang W, Schiding J, White M, Palmer A, Clark RSB, O'Malley M, Styren S, Ho C, DeKosky S: Severe Cortical Impact in Rats: Assessment of Cerebral Edema, Blood Flow, and Contusion Volume. *J Neurotrauma* 12:1015-1025, 1995.
31. Clark R, Kochanek PM, Marion D, Schiding JK, White M, Palmer A, DeKosky ST: Mild Posttraumatic Hypothermia Reduces Mortality After Severe Controlled Cortical Impact in Rats. *J Cereb Blood Flow Metab* 16:253-261, 1996.
32. Mansfield RT, Schiding JK, Hamilton RL, Kochanek PM: Effects of Hypothermia on Traumatic Brain Injury in Immature Rats. *J Cereb Blood Flow Metab* 16:244-252, 1996.
33. DeKosky ST, Styren SD, O'Malley ME, Goss JR, Kochanek PM, Marion D, Evans CH, Robbins PD: Interleukin-1 Receptor Antagonist Suppresses Neurotrophin Response in Injured Rat Brain. *Ann Neurol* 39:123-127, 1996.
34. Biagas KV, Grundl PD, Kochanek PM, Schiding JK, Nemoto EM: Posttraumatic cerebral hyperemia in rats: autoradiographic determination of age-related differences in the response to percussive injury. *J Neurotrauma* 13:189-200, 1996.
35. Clark RS, Kochanek PM, Schwarz MA, Schiding JK, Turner DS, Chen M, Carlos TM, Watkins SC: Inducible nitric oxide synthase expression in cerebrovascular smooth muscle and neutrophils after traumatic brain injury in immature rats. *Pediatr Res* 39:784-790, 1996.
36. Clark RSB, Carlos TM, Schiding JK, Bree M, Fireman L, DeKosky ST, Kochanek PM. Antibodies against Mac-1 attenuate neutrophil accumulation after traumatic brain injury in rats. *J Neurotrauma* 13:333-341, 1996.
37. Clark RSB, Kochanek PM, Obrist WD, Wong HR, Billiar TR, Wisniewski SR, Marion DW: Cerebrospinal fluid and plasma nitrite and nitrate concentrations after head injury in humans. *Crit Care Med* 24:1243-1251, 1996.
38. Adelson PD, Robichaud P, Hamilton RL, Kochanek PM: A model of diffuse traumatic brain injury in the immature rat. *J Neurosurg* 85:877-884, 1996.
39. Adelson PD, Dixon CE, Robichaud P, Kochanek PM: Motor and cognitive functional deficits following diffuse traumatic brain injury in the immature rat. *J Neurotrauma* 14:99-108, 1997.
40. Marion DW, Penrod LE, Kelsey SF, Obrist WD, Kochanek PM, Palmer AM, Wisniewski SR, DeKosky ST: Treatment of traumatic brain injury with moderate hypothermia. *N Engl J Med* 336:540-546, 1997.
41. Carlos TM, Clark RSB, Francicola-Higgins D, Schiding JK, Kochanek PM: Expression of endothelial adhesion molecules and recruitment of neutrophils following traumatic brain injury in rats. *J Leuk Biol* 61:279-285, 1997.

42. Clark RSB, Kochanek PM, Dixon CE, Chen M, Marion DW, Heineman S, DeKosky ST, Graham SH: Early neuropathologic effects of mild or moderate hypoxemia after controlled cortical impact injury in rats. *J Neurotrauma* 14:179-189, 1997.
43. Goss JR, Taffe KM, Kochanek PM, DeKosky ST: The antioxidant enzymes glutathione peroxidase and catalase increase following traumatic brain injury in the rat. *Exp Neurol* 146:291-294, 1997.
44. Bell M, Kochanek PM, Doughty LA, Carcillo JA, Adelson PD, Clark RSB, Wisniewski SR, Whalen MJ, DeKosky ST: Interleukin-6 and Interleukin-10 in cerebrospinal fluid after traumatic brain injury in children. *J Neurotrauma* 14:451-457, 1997.
45. Forbes ML, Hendrich KS, Kochanek PM, Williams DS, Schiding JK, Wisniewski SR, Kelsey SF, DeKosky ST, Graham SH, Marion DW, Ho C: Assessment of cerebral blood flow and CO₂ reactivity after controlled cortical impact by perfusion magnetic resonance imaging using arterial spin labeling in rats. *J Cereb Blood Flow Metab* 17:865-874, 1997.
46. Whalen MJ, Carlos TM, Clark RSB, Marion DW, DeKosky ST, Heineman S, Schiding JK, Memarzadeh F, Kochanek PM: The effect of brain temperature on acute inflammation after traumatic brain injury in rats. *J Neurotrauma* 14:561-572, 1997.
47. Clark RSB, Chen J, Watkins SC, Kochanek PM, Chen M, Stetler RA, Graham SH: Apoptosis-suppressor gene *bcl-2* expression after traumatic brain injury in rats. *J Neurosci* 17:9172-9182, 1997.
48. Clark RSB, Carcillo JA, Kochanek PM, Obrist WD, Jackson EK, Mi Z, Wisniewski SR, Bell MJ, Marion DW: Cerebrospinal fluid adenosine concentration and uncoupling of cerebral blood flow and oxidative metabolism after severe head injury in humans. *Neurosurgery* 41:1284-1293, 1997.
49. Adelson PD, Clyde B, Kochanek PM, Wisniewski S, Marion DW, Yonas H: Cerebrovascular response in infants and young children following severe traumatic brain injury: A preliminary report. *Pediatr Neurosurg* 26:200-207, 1997.
50. Forbes ML, Clark RSB, Dixon CE, Graham SH, Marion DW, DeKosky ST, Schiding JK, Safar P, Kochanek PM: Augmented Neuronal Death in CA3 Hippocampus Following Hyperventilation Early After Controlled Cortical Impact. *J Neurosurg* 88:549-556, 1998.
51. Chen M, Clark RSB, Kochanek PM, Chen J, Schiding JK, Stetler RA, Simon RP, Graham SH: 72-kDa heat shock protein and mRNA expression after controlled cortical impact injury with hypoxemia in rats. *J Neurotrauma* 15:171-181, 1998.
52. Bell MJ, Kochanek PM, Carcillo JA, Mi Z, Schiding JK, Wisniewski SR, Clark RSB, Dixon CE, Marion DW, Jackson E: Interstitial adenosine, inosine, and hypoxanthine, are increased after experimental traumatic brain injury in the rat. *J Neurotrauma* 15:163-170, 1998.
53. Goss JR, O'Malley ME, Zou L, Styren SD, Kochanek PM, DeKosky ST: Astrocytes are the major source of nerve growth factor upregulation following traumatic brain injury in the rat. *Exp Neurol* 149:301-309, 1998.
54. Sinz EH, Kochanek PM, Heyes MP, Wisniewski SR, Bell MJ, Clark RSB, DeKosky ST, Blight AR, Marion DW: Quinolinic acid is increased in CSF and associated with mortality after traumatic brain injury in humans. *J Cereb Blood Flow Metab (Rapid Communication)* 18:610-615, 1998.
55. Katz L, Callaway C, Kagan V, Kochanek P: Electron spin resonance measure of brain antioxidant activity during ischemia/reperfusion. *Neuroreport* 9:1587-1593, 1998.
56. Zou L, Burmeister LA, Styren SD, Kochanek PM, DeKosky ST: Induction of Type 2 iodothyronine deiodinase messenger RNA in reactive astrocytes following traumatic brain injury in the rat. *J Neurochem (Rapid Communication)* 71:887-890, 1998.
57. Whalen MJ, Carlos TM, Kochanek PM, Bell MJ, Wisniewski SR, Carcillo J, Adelson PD: Soluble adhesion molecules in CSF after severe head injury in children. *J Neurotrauma* 15:777-787, 1998.

58. Carcillo JA, Korzekwa K, Jones G, Parise RA, Gillespie D, Whalen MJ, Kochanek PM, Branch RA, Kost C: The Cytochrome P450 Suice Inhibitor, 1-Aminobenzotriazole, Sensitizes Rats to Zymosan-Induced Toxicity. *Res Commun Mol Pathol Pharmacol* 102:57-68, 1998.
59. Bell MJ, Kochanek PM, Heyes M, Wisniewski SR, Sinz EH, Clark RSB, Blight AR, Adelson PD: Quinolinic Acid in Cerebrospinal Fluid of Children After Traumatic Brain Injury. *Crit Care Med* 27:493-497, 1999. (Accompanying editorial)
60. Dixon CE, Kochanek PM, Yan HQ, Schiding JK, Griffith RG, Baum E, Marion DW, DeKosky ST: A One-Year Study of Spatial Memory Performance, Brain Morphology and Cholinergic Markers After Moderate Controlled Cortical Impact in Rats. *J Neurotrauma* 16:109-122, 1999.
61. Whalen MJ, Carlos TM, Dixon CE, Wisniewski SR, Schiding JK, Clark RSB, Baum E, Marion DW, Kochanek PM: Effect of Traumatic Brain Injury in Mice Deficient in Intercellular Adhesion Molecule-1: Assessment of Histopathologic and Functional Outcome. *J Neurotrauma* 16:299-309, 1999.
62. Clark RSB, Kochanek PM, Chen M, Watkins SC, Marion DW, Chen J, Hamilton RL, Loeffert JE, Graham SH: Increases in Bcl-2 and cleavage of caspase-1 and caspase-3 in human brain after head injury. *FASEB J* 13:813-821, 1999.
63. Whalen MJ, Carlos TM, Kochanek PM, Clark RSB, Heineman S, Schiding JK, Franicola D, Memarzadeh F, Lo W, Marion DW, DeKosky ST: Neutrophils do not mediate blood-brain barrier permeability early after controlled cortical in rats. *J Neurotrauma* 16:583-594, 1999.
64. Whalen MJ, Clark RSB, Dixon CE, Robichaud P, Marion DW, Vagni V, Graham S, Virag L, Hasko G, Stachlewitz R, Szabo C, Kochanek PM: Reduction of cognitive and motor deficits after traumatic brain injury in mice deficient in Poly (ADP-Ribose) polymerase. *J Cereb Blood Flow Metab (Rapid Communication)* 19:835-842, 1999.
65. Sinz EH, Kochanek PM, Dixon CE, Clark RSB, Carcillo JA, Watkins SC, Schiding J, Carlos TM, Billiar TR: Inducible nitric oxide synthase is an endogenous neuroprotectant after traumatic brain injury in rats and mice. *J Clin Invest* 104:647-656, 1999.
66. Hendrich K, Schiding J, Kochanek P, Williams D, Ho C: Early Perfusion After Controlled Cortical Impact in Rats: Quantification by Arterial Spin-Labeled MRI and the Influence of Spin-Lattice Relaxation Time Heterogeneity. *Magn Reson Med* 42:673-681, 1999.
67. Kochanek PM, Clark RSB, Ruppel RA, Adelson PD, Bell MJ, Whalen MJ, Robertson CL, Satchell MA, Seidberg NA, Marion DW, Jenkins LW: Biochemical, cellular and molecular mechanisms in the evolution of secondary damage after severe traumatic brain injury in infants and children: Lessons learned from the bedside. *Pediatr Crit Care Med* 1:4-19, 2000.
68. Whalen MJ, Carlos TM, Dixon CE, Robichaud P, Clark RSB, Marion DW, Kochanek PM: Reduced Brain Edema after Traumatic Brain Injury in Mice Deficient in P-Selectin and Intercellular Adhesion Molecule-1. *J Leuk Biol* 67:160-168, 2000.
69. Clark RSB, Kochanek PM, Watkins, SC, Chen M, Dixon CE, Seidberg N, Melick J, Loeffert JE, Nathaniel PD, Jin KL, Graham SH: Caspase-3 mediated neuronal death after traumatic brain injury in rats. *J Neurochem* 74:740-753, 2000.
70. Adelson PD, Dixon CE, Kochanek PM: Long term dysfunction following diffuse traumatic brain injury in the immature rat. *J Neurotrauma* 17:277-286, 2000.
71. Woods RJ, Prueckner S, Safar P, Takasu A, Tisherman SA, Jackson EK, Radovsky A, Kochanek P, Behringer W, Stezoski SW, Hans R: Adenosine by aortic flush fails to augment the brain preservation effect of mild hypothermia during exsanguination cardiac arrest in dogs. An exploratory study. *Resuscitation* 44:47-59, 2000.
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445. Smith RL, Lin J, Adelson PD, Kochanek P, Fink E, Wisniewski S, Bayir H, Clark RS, Brown D, Bell MJ: Effects of hyperglycemia and insulin administration on outcome in severe traumatic brain injury (TBI) in children. 38th Critical Care Congress, January 31-February 4, 2009, Nashville, TN *Crit Care Med* 36(Suppl):A45, 2008.
446. Sanchez de Toledo J, Watson RS, Kochanek PM, Clark RSB, Bell MJ, Adelson PD, Brown SD, Gaines B: Relationship between pancreatitis and cerebral events in children after traumatic brain injury (TBI). *Crit Care Med* 36(Suppl):A121, 2008.

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447. Smith CM, Kochanek P, Clark R, Bayir H, Hinchberger J, Bell MJ, Adelson D, Chang YF, Brown D: Brain-systemic temperature gradient is temperature-dependent in children with severe traumatic brain injury (TBI). Crit Care Med 36(Suppl): A124, 2008.
448. Lahoud-Rahme M, Stezoski J, Melick J, Tisherman SA, Kochanek PM, Drabek T: Blood-brain barrier integrity in emergency preservation and resuscitation rat model. AHA Resuscitation Science Meeting, November 8, 2008, New Orleans, Louisiana (in press).
449. Fink EL, Clark RSB, Kochanek PM, Bell MJ, Watson RS: Implementation of Mild Therapeutic Hypothermia for Neuroprotection after Pediatric Cardiac Arrest. Society for Pediatric Research (in submission).
450. Manole MD, Foley LM, Bayir H, Hitchens TK, Ho C, Alexander H, Hickey RW, Marco CD, Kochanek PM, Clark RSB: Colloid based resuscitation from asphyxial cardiac arrest: MRI assessment of cerebral blood flow and functional outcome. International Symposium on Cerebral Blood Flow, Metabolism and Function and the IXth International Conference on Quantification of Brain Function with PET, Chicago, Illinois, June 29th - July 3rd, 2009 (in submission).
451. Cousar JL, Conley YP, Sarnaik AA, Kochanek PM, Okonkwo DO, Clark RSB: Mitochondrial uncoupling protein-4 polymorphisms are associated with depth of coma after traumatic brain injury. International Symposium on Cerebral Blood Flow, Metabolism and Function and the IXth International Conference on Quantification of Brain Function with PET, Chicago, Illinois, June 29th - July 3rd, 2009 (in submission).
452. Berger R, Fromkin J, Kochanek P, Squires J, Songer T, Dias M, Higginbotham M, Fabio A: Inflicted traumatic brain injury (ITBI) in children >1yr of age: An emerging concern. 2009 American Public Health Association Meeting (in submission).
453. Ho C, Wu X, Ho NT, Shellington D, Vagni V, Simplaceanu V, Shen TJ, Kochanek PM: Recombinant hemoglobins as resuscitation fluids in mouse models for traumatic brain injury and hemorrhagic shock. XII Symposium on Blood Substitutes, Parma, Italy, August 25-28, 2009.
454. Kochanek PM, Wu X; Ma L, Du L, Shellington D; Vagni V, Clark RSB, Hsia C: PNPH, A neuroprotectant HBOC: Studies of in vivo and in vitro traumatic brain injury. XII Symposium on Blood Substitutes, Parma, Italy, August 25-28, 2009.
455. Garman R, Jenkins LW, Bauman R, Swauger P, Parks S, Switzer R, Dixon CE, Clark R, Bayir H, Kagan V, Jackson EK, Kochanek PM: Blast overpressure injury in rats with body protection produces acute and sub-acute axonal, dendritic and synaptic neuropathology. The 2nd Joint Symposium of the International and National Neurotrauma Societies, Santa Barbara, California, September 7-11, 2009
456. Wu X, Ho NT, Shellington D, Ho C, Vagni V, Simplaceanu V, Shen TJ, Kochanek PM: Recombinant hemoglobins as resuscitation fluids in a mouse model of traumatic brain injury plus hemorrhagic shock. The 2nd Joint Symposium of the International and National Neurotrauma Societies, Santa Barbara, California, September 7-11, 2009.
457. Wu X, Du L, Ma L, Shellington DK, Vagni V, Clark RSB, Bayir H, Hsia C, Kochanek PM: PNPH, A neuroprotectant HBOC: Studies of in vivo and in vitro traumatic brain injury. The 2nd Joint Symposium of the International and National Neurotrauma Societies, Santa Barbara, California, September 7-11, 2009.
458. Du L, Chen Y, Bayir H, Chu CT, Au AK, Kochanek PM, Clark RS: Sex-dependent autophagic neuronal death after oxygen-glucose deprivation. Neuroscience 2009, Chicago, Illinois, October 17-21, 2009 (in submission).

Media-Related Activities:

October 26, 2004	CBS Radio interview: Caffeine in TBI
October 27, 2004	KQV Radio interview: Caffeine and human head injury
November 16, 2004	KDKA-TV interview: Biomarkers in Shaken Baby Syndrome
April 13, 2005	The Pittsburgh Post-Gazette: Biomarkers in Shaken Baby Syndrome
April 20, 2005	The Wallstreet Journal: Suspended Animation
April 21, 2005	The Pittsburgh Post-Gazette: Suspended Animation
April 29, 2005	US News and World Report: Hibernation-article appeared in May 23, 2005 issue
June 28, 2005	WTAE-TV interview: Suspended Animation

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June 29, 2005 Pittsburgh Tribune Review: Pitt Scientists Resurrect Hope of Cheating Death
December 11, 2005 NY Times: Zombie Dogs
NY Times Year in Ideas
February 1, 2006 The Pittsburgh Post-Gazette: Adapted to nap
February 16, 2006 The Pittsburgh Post-Gazette: New test for shaken baby syndrome
February 19, 2006 The Pittsburgh Tribune-Review: Study: blood chemicals may show brain injury
May 31, 2007 The Pittsburgh Tribune-Review: Shock wave injuries top Pitt symposium
August 10, 2007 Science Magazine: The Big Chill

PROFESSIONAL ACTIVITIES

TEACHING:

March 1987 Grand Rounds
Controversy Surrounding Corticosteroids Administration in
Septic Shock
Children's Hospital of Pittsburgh
Pittsburgh, PA

October 1987 Instructor - Pediatric Advanced Life Support
Children's Hospital of Pittsburgh
Pittsburgh, PA

March 1988 Pediatric Grand Rounds
The Pediatric Arrest
Children's Hospital of Pittsburgh
Pittsburgh, PA

April 1988 University of Pittsburgh Anesthesiology/CCM Grand Rounds
Reperfusion Injury after Cerebral Ischemia
Pittsburgh, PA

October 1988 University of Pittsburgh Anesthesiology/CCM
Research Conference
How Important is Inflammation to the Evolution of Brain Injury?
Pittsburgh, PA

April 1989 Research Conference
Granulocytes and Cerebral Trauma
International Resuscitation Research Center
University of Pittsburgh, Pgh, PA

June 1989 Instructor for Board Review Course -
Pediatric Critical Care Medicine
Section on Cerebral Resuscitation
New Orleans, LA

November 1989 Pediatric Grand Rounds
Pathobiology of the Pediatric Arrest
Children's Hospital of Pittsburgh
Pittsburgh, PA

November 1989 Research Conference
Inflammation and Brain Injury: An Update
International Resuscitation Research Center
University of Pittsburgh
Pittsburgh, PA

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February 1990	Pediatric Grand Rounds Pathobiology of the Pediatric Arrest Mercy Hospital Pittsburgh, PA
March 1990	Neonatology Grand Rounds Pathobiology of the Pediatric Arrest Magee-Womens Hospital Pittsburgh, PA
April 1990	Scientific Affairs Research Conference University of Pittsburgh, Anesthesia Department Activation of Endogenous Neutrophils in the Cerebral Circulation Pittsburgh, PA
April 1991	Children's Hospital of Pittsburgh Trauma Conference Age-Related Differences in the Cerebrovascular Response to Neurotrauma Pittsburgh, PA
April 1991	IRRC Hornbein Research Symposium Adult Brain Distress Syndrome International Resuscitation Research Center Pittsburgh, PA
May 1991	University of Pittsburgh Neurosurgery Department Basic and Clinical Science Conference Biochemistry of Cellular Injury and Repair Mentor to Dr. Peter Miller Children's Hospital of Pittsburgh Pittsburgh, PA
May 1991	Neuroanesthesia and CCM Lecture Series Inflammation and Brain Injury Eye and Ear Hospital Pittsburgh, PA
April 1992	IRRC Research Conference Trauma Studies at CHP International Resuscitation Research Center Pittsburgh, PA
November 1992	IRRC Research Conference Blood Flow after Brain Injury International Resuscitation Research Conference Pittsburgh, PA
November 1992	University of Pittsburgh Interdisciplinary Seminars in Cerebral Blood Flow and Metabolism Cerebral Blood Flow After Traumatic Brain Injury (with Dr. Walter Obrist) Pittsburgh, PA
November 1993	Novel Therapeutic Approach to Traumatic Brain Injury Pediatric Grand Rounds Children's Hospital of Pittsburgh Pittsburgh, PA

Patrick M. Kochanek, MD

November 1993	Head Injury in Children Pulmonary Medicine Conference Children's Hospital of Pittsburgh Pittsburgh, PA
November 1993	Inflammatory Response to Traumatic Brain Injury Pediatric Clinical Pharmacology Conference Children's Hospital of Pittsburgh Pittsburgh, PA
January 1994	Update on Traumatic Brain Injury Studies International Resuscitation Research Center Pittsburgh, PA
June 1994	Plans for the Future International Resuscitation Research Center Pittsburgh, PA
November 1994	Acute Inflammatory Response to Traumatic Brain Injury Department of Neurology University of Pittsburgh Medical Center Pittsburgh, PA
February 1995	Inflammatory Response to Traumatic Brain Injury Neuroscience Seminar Program University of Pittsburgh Medical Center Pittsburgh, PA
April 1995	Mini Symposium Department of Anesthesiology and Critical Care Medicine Safar Center for Resuscitation Research Overview and Traumatic Brain Injury Program University of Pittsburgh Medical Center Pittsburgh, PA
April 1995	Traumatic Brain Injury Safar Center Bendixon Symposium University of Pittsburgh Medical Center Pittsburgh, PA
May 1995	Pathophysiological Mechanisms in Head Injury Center for Clinical Pharmacology University of Pittsburgh Pittsburgh, PA
March 1996	Inflammatory Response to Traumatic Brain Injury Research Mini-symposium for Dr. Paul Knight Department of Anesthesiology/CCM Pittsburgh, PA
February 1997	MRI-assessment of Cerebrovascular Failure after Traumatic Brain Injury in Rats Pittsburgh NMR Center for Biomedical Research Carnegie Mellon University, February 12, 1997 Pittsburgh, PA

Patrick M. Kochanek, MD

- February 1997 MRI-Applications to TBI in Rats
Safar Center Monthly Lecture Series
Department of Anesthesiology/CCM
University of Pittsburgh, February 12, 1997
Pittsburgh, PA
- February 1997 Adhesion Molecules and Quinolinic Acid in CSF after Head Injury in Humans
University of Pittsburgh Brain Trauma Research Center
University of Pittsburgh, February 25, 1997
Pittsburgh, PA
- March 1997 MRI-assessment of Head Injury in Rats
Pittsburgh NMR Center for Biomedical Research
Carnegie Mellon University, March 11, 1997
Pittsburgh, PA
- August 1997 Traumatic Brain Injury in Children: From Bench to Bedside
Pediatric Grand Rounds
Children's Hospital of Pittsburgh, August 14, 1997
Pittsburgh, PA
- December 1997 MRI-Facilitated Assessment of Outcome After Traumatic Brain Injury in Rats
Pittsburgh NMR Center External Advisory Committee Meeting
Carnegie Mellon University, December 3, 1997
Pittsburgh, PA
- December 1997 Mechanisms and Pharmacology in Suspended Animation
Suspended Animation Investigators Meeting
University of Pittsburgh, December 6, 1997
Pittsburgh, PA
- March 1998 New Concepts in Traumatic Brain Injury
Safar Center Monthly Lecture Series
Department of Anesthesiology/CCM
University of Pittsburgh, March 11, 1998
Pittsburgh, PA
- April 1998 Traumatic Brain Injury in Children: From Bench to Bedside
Trauma Conference
Children's Hospital of Pittsburgh, April 9, 1998
Pittsburgh, PA
- May 1998 Update on Adenosine
University of Pittsburgh Brain Trauma Research Center
University of Pittsburgh, May 26, 1998
Pittsburgh, PA
- July 1998 General Clinical Research Center
Children's Hospital of Pittsburgh, July 14, 1998
Pittsburgh, PA
- October 1998 Special Investigator Research Update
Journal Club
Children's Hospital of Pittsburgh, October 23, 1998
Pittsburgh, PA
- March 1999 Pediatric TBI: Results from the Pediatric CSF Bank
Trauma Department
Children's Hospital of Pittsburgh, March 14, 1999
Pittsburgh, PA

Patrick M. Kochanek, MD

- June 1999 MRI-in the Assessment of Experimentally Induced Traumatic Brain Injury in Rats
Pittsburgh NMR Center External Advisory Committee Meeting
Carnegie Mellon University, June 11, 1999
Pittsburgh, PA
- October 1999 CSF analysis of secondary mediators in neurotrauma
Brain Trauma Research Center
Department of Neurological Surgery, October 13, 1999
Pittsburgh, PA
- March 2000 Traumatic Brain Injury in Infants and Children
Trauma Department
Children's Hospital of Pittsburgh, March 23, 2000
Pittsburgh, PA
- August 2000 MRI-in the Assessment of Experimentally Induced Traumatic Brain Injury in Rats: An Update
Pittsburgh NMR Center External Advisory Committee Meeting
Carnegie Mellon University, August 11, 2000
Pittsburgh, PA
- August 2000 Quinolinic Acid in Cerebrospinal Fluid Early After Severe Head Injury in Victims of Child Abuse
CIRCL Internal Advisory Committee Meeting, August 31, 2000
University of Pittsburgh
- November 2000 Biochemical, Cellular and Molecular Mechanisms in the Evolution of Secondary Damage After Severe TBI in Infants and Children: Lessons Learned from the Bedside (*3 hours of medical education*)
Integrated Life Science Electives in Clinical Neurosciences Lecture
University of Pittsburgh Medical School, November 10, 2000
Pittsburgh, PA
- November 2000 Brain Injury in Infants and Children from Bench to Bedside
Presbyterian Magnetic Resonance Center
University of Pittsburgh Medical Center, November 17, 2000
Pittsburgh, PA
- November 2000 Manuscript Writing: Interfacing with a Journal
Pediatric Intensive Care Unit
Children's Hospital of Pittsburgh, November 20, 2000
Pittsburgh, PA
- November 2000 Current Laboratory Studies in Traumatic Brain Injury
Critical Care Medicine Grand Rounds (Adult)
Department of Anesthesiology/CCM, November 29, 2000
Pittsburgh, PA
- December 2000 Head Injury – Bench to Bedside
Anesthesiology Grand Rounds
Department of Anesthesiology/CCM, December 7, 2000
Pittsburgh, PA
- April 2001 Traumatic Brain Injury in Infants and Children
Department of Anesthesiology/CCM, April 25, 2001
Children's Hospital of Pittsburgh
Pittsburgh, PA
- September 2001 Manuscript Writing: Interfacing with a Journal

Patrick M. Kochanek, MD

Department of Anesthesiology/CCM, September 10, 2001
Children's Hospital of Pittsburgh
Pittsburgh, PA

- October 2001 Biochemical, Cellular and Molecular Mechanisms in the Evolution of Secondary Damage After Severe TBI in Infants and Children: Lessons Learned from the Bedside (*3 hours of medical education*)
Integrated Life Science Electives in Clinical Neurosciences Lecture
University of Pittsburgh Medical School, October 23, 2001
Pittsburgh, PA
- October 2001 Quinolinic Acid in Cerebrospinal Fluid Early after Severe Head Injury in Victims of Child Abuse
Center for Injury Research and Control
Internal Advisory Committee Meeting
University of Pittsburgh Medical Center, October 26, 2001
Pittsburgh, PA
- November 2001 Biochemical, Cellular and Molecular Mechanisms in the Evolution of Secondary Damage After Severe TBI in Infants and Children: Lessons Learned from the Bedside
Pediatric Anesthesia Residents Lecture
Children's Hospital of Pittsburgh, November 14, 2001
Pittsburgh, PA
- January 2002 Delayed Neuronal Death after Traumatic Brain Injury in Mice: Effect of Hypothermia and Hemorrhagic Shock
Department of Surgery Weekly Conference
Presbyterian University Hospital, January 22, 2002
Pittsburgh, PA
- March 2002 How to Mentor Fellows
Emergency Department Divisional Meeting
Children's Hospital of Pittsburgh, March 13, 2002
Pittsburgh, PA
- October 2002 Guidelines on the Management of Head Injury in Infants and Children-Part I
Department of Anesthesiology (fellows lecture)
Children's Hospital of Pittsburgh, October 23, 2002
Pittsburgh, PA
- November 2002 Guidelines on the Management of Head Injury in Infants and Children-Part II
Department of Anesthesiology (fellows lecture)
Children's Hospital of Pittsburgh, November 6, 2002
Pittsburgh, PA
- November 2002 Traumatic Brain Injury in Infants and Children: From the Bedside to the Bench.
Doctoral Seminar-NUR 3040 Research Emphasis: Physiological Alterations
Guest Lecture, University of Pittsburgh School of Nursing, November 7, 2002
Pittsburgh, PA
- December 2002 Current Research at the Safar Center for Resuscitation Research
School of Pharmacy Lecture Series
University of Pittsburgh School of Pharmacy, December 3, 2002
Pittsburgh, PA
- February 2003 Hypothermia in brain injury
Brain Trauma Research Center
University of Pittsburgh, Department of Neurological Surgery
Pittsburgh, PA, February 25, 2003

Patrick M. Kochanek, MD

March 2003 Improving the Diagnosis & Prognosis of Inflicted Head Trauma in Infants
University of Pittsburgh CDC Site Visit
Center for Injury Research and Control, March 19, 2003

October 2003 Improving the Diagnosis & Prognosis of Inflicted Head Trauma in Infants
Epidemiology Seminar: Potential Collaborators in Our Own Back Yard
Center for Injury Research and Control
Pittsburgh, PA, October 23, 2003

January 2004 Breakthroughs in Resuscitation
Neurotrauma Seminar/Grand Rounds
Allegheny General Hospital
Pittsburgh, PA, January 15, 2004

January 2004 Improving the Diagnosis and Prognosis of Inflicted Head Trauma in Infants
Center for Injury Research and Control (CIRCL)
Internal Monitoring Committee Meeting
Biomedical Science Tower
Pittsburgh, PA, January 15, 2004

March 2004 Biochemical and Molecular Response to Traumatic Brain Injury in Infants and Children
Department of Anesthesiology Residents Conference March 31, 2004
Children's Hospital of Pittsburgh
Pittsburgh, PA

May 2004 From the ABCs to Proteomics, Hunting for a Breakthrough in Cerebral Resuscitation
Pediatric Grand Rounds
Children's Hospital of Pittsburgh, May 20, 2004
Pittsburgh, PA

June 2004 MRI-in the Assessment of Experimentally Induced Traumatic Brain Injury in Rats: An
Update
Pittsburgh NMR Center External Advisory Committee Meeting
Carnegie Mellon University, June 28, 2004
Pittsburgh, PA

September 2004 Utilization of the TBI CSF and Serum Banks
Center for Injury Research and Control (CIRCL)
Pittsburgh, PA, September 15, 2004

January 2006 Breakthroughs in Resuscitation
Newborn Medicine's Grand Rounds
Magee Women's Hospital, January 19, 2006
Pittsburgh, PA

March 2006 Novel MRI Applications in Experimental TBI
Pittsburgh NMR Center - Seminar
Carnegie Mellon University, March 31, 2006
Pittsburgh, PA

June 2006 Research at the Safar Center
Fellows Lecture
Children's Hospital of Pittsburgh, June 13, 2006
Pittsburgh, PA

Patrick M. Kochanek, MD

August 2006 MRI in the Assessment of Experimentally Induced Traumatic Brain Injury in Rats
Pittsburgh NMR Center External Advisory Committee Meeting
Carnegie Mellon University, August 2, 2006
Pittsburgh, PA

February 2007 Breakthroughs in Resuscitation
AALAS Monthly Meeting
Safar Conference Room, February 22, 2007

April 2007 Detection of Silent Brain Injury in Potential Victims of Child Abuse
CIRCL University of Pittsburgh School of Medicine
CIRCL Conference Room, April 26, 2007

February 2008 Experimental Traumatic Brain Injury – MRI Assessment of Cerebral Blood Flow, Cell
Tracking, and Novel Therapies
NIH site visit to review renewal grant Application (P41 EB001977-21)
Mellon Institute Building, Social Room 328
Pittsburgh NMR Center for Biomedical Research
February 27, 2008

April 2008 Update on Research at the Safar Center
CCM Monthly Fellow/Faculty Conference
Children's Hospital of Pittsburgh, April 9, 2008
Pittsburgh, PA

June 2008 Novel Resuscitation Approaches to Combined Traumatic Brain Injury and Hemorrhagic
Shock
Brain Trauma Research Center
University of Pittsburgh, Department of Neurological Surgery
Pittsburgh, PA, June 24, 2008

July 2008 MRI Assessment of Resuscitation in Experimental Traumatic Brain Injury and Cardiac Arrest
Pittsburgh NMR Center for Biomedical Research
Pittsburgh, PA July 17, 2008

October 2008 Update on Research Opportunities at the Safar Center
Fellow Faculty Research Day
Safar Center, October 17, 2008

RESEARCH:

Grants Received:

The role of granulocytes in reperfusion injury after brain ischemia.

Health Research Service Foundation (United Way)

\$13,089 7/87 - 6/88 Principal Investigator

Cerebrovascular and cerebrometabolic effects of platelet-activating factor.

Western Pennsylvania Heart Association

\$17,908 7/88 - 6/89 Principal Investigator

Polymorphonuclear leukocytes in the genesis of posttraumatic cerebral edema.

Children's Hospital of Pittsburgh Human Rights Committee Grant

\$6,275 7/88 - 6/89 Principal Investigator

The effect of the PAF antagonist Ginkgo Biloba extract on posttraumatic cerebral edema in rats.

Willman Schwabe Pharmaceutical Corporation, Karlsruhe, West Germany

\$3,000 11/88 Principal Investigator

Patrick M. Kochanek, MD

The effect of platelet-activating factor-receptor antagonists on posttraumatic cerebral edema in rats.

University of Pittsburgh Internal Grants Program
\$10,000 7/89 - 6/90 Principal Investigator

Effect of activated polymorphonuclear leukocytes on cerebral blood flow in rats.

Western Pennsylvania Heart Association
\$47,838 7/90 - 6/92 Principal Investigator

Regional cerebral blood flow after concussive head injury in adult and immature rats.

University of Pittsburgh Department of Anesthesiology and Critical Care Medicine
\$6,715 7/90 - 6/91 Faculty Supervisor

Polymorphonuclear leukocytes in traumatic brain injury.

Sunny von Bulow Coma and Head Trauma Foundation
\$35,000 9/90 - 8/91 Principal Investigator

Effect of hyponatremia on brain Ph function morphology (Sheldon Adler PI).

NIH-RO1 \$736,936 Consultant (5% commitment)

Age related differences in blood brain barrier permeability after cerebral trauma in rats.

Children's Hospital Human Rights Committee Grant
\$7,251 3/91 - 2/92 Faculty Supervisor

Effect of hypothermia on traumatic brain injury in immature rats.

University of Pittsburgh Department of Anesthesiology and Critical Care Medicine
\$6826 2/93 - 1/94 Co-Principal Investigator

Role of inflammation in cerebrovascular failure after head injury.

Society of Critical Care Medicine, Established Investigator Grant
\$225,000 7/93-6/96 Principal Investigator

Effect of leukocyte adhesion cell molecule antagonist on the acute inflammation response after traumatic brain injury in rats.

University of Pittsburgh Department of Anesthesiology and Critical Care Medicine
\$7,998 1/94 - 12/94 Co-Principal Investigator

The effect of SCR-1 on posttraumatic neutrophil accumulation and markers of injury after cerebral trauma in rats.

University of Pittsburgh Department of Anesthesiology and Critical Care Medicine
\$4,420 1/94 - 12/94 Co-Principal Investigator

The role of inflammation in cerebrovascular failure after head injury.

American Heart Association Pennsylvania Affiliate Fellowship Grant
\$22,000 7/94 - 6/95 Mentor (Salary support of Dr. Robert Clark)

Perfusion MRI Assessment of Cerebral Blood Flow After Head Injury.

Laerdal Foundation
\$12,290 1/95 - 12/95 Principal Investigator

Exsanguinations Cardiac Arrest, Hypothermic Preservation, and Delayed Resuscitation.

Laerdal Foundation (S. Tisherman, PI)
\$10,000 1/95 - 12/95 Consultant

University of Pittsburgh Brain Trauma Research Center

NIH Program Project (Dr. Donald Marion-Principal Investigator)
\$3,051,980 4/01/95 -
3/31/00

Patrick M. Kochanek, MD

Project #4 Neutrophils and the Acute Inflammatory Response to Traumatic Brain Injury.
\$389,567 Principal Investigator

Core C RAT/SURGERY/IMAGING
\$332,240 Principal Investigator

The Role of Adenosine in the Development of Cerebrovascular Failure Following Severe Head Injury in Children.
Children's Hospital of Pittsburgh, General Clinical Research Center Advisory Committee
\$7,350 Co-Investigator and Mentor - (for Michael Bell, M.D.)

Application of Magnetic Resonance Imaging to Measure Cerebral Blood Flow, CO₂ Responsivity and Blood-Brain Barrier Integrity After Traumatic Brain Injury in Immature Rat.
Children's Hospital of Pittsburgh Research Advisory Committee Seed Grant
\$9,940 7/1/95 - Co-Investigator and Mentor-(Michael Forbes, M.D.)
6/30/96

Nitric Oxide-Mediated Cerebrovascular Failure After Brain Injury.
Schertz Fellowship Award, University of Pittsburgh, Dept. of Anesthesiology/CCM
\$60,000 7/01/96 - Mentor-(for Lisa Sinz, M.D.)
6/30/97

CSF Indexes of Inflammation and Tissue Injury to Pediatric Head Injury: Prognostic Implications.
Laerdal Foundation (S. DeKosky, PI)
\$15,000 1/01/96 - Co-Investigator
12/31/96

Nitric Oxide-Mediated Cerebrovascular Failure After Brain Injury.
American Heart Association Pennsylvania Affiliate
\$69,996 7/01/96 - Principal Investigator
6/30/98

Increasing Survival of Uncontrolled Hemorrhagic Shock in Rats: Oxygen Breathing and Hypothermia.
Geo-Centers/U.S. Department of Navy Grant
\$332,996 3/15/96 Co-Investigator (5% commitment)

Hypothermia in the Treatment of Severe Head Injury in Children.
Children's Hospital of Pittsburgh, General Clinical Research Center Advisory Committee
(P. David Adelson, M.D., PI)
\$6,510 11/95 - Co-Investigator
11/96

Emergency Interventions After Severe Traumatic Brain Injury in Rats: Effects of Neuropathology and Functional Outcome.
U.S. Army Medical Research and Material Command
\$792,237 12/96 - Principal Investigator
11/99

Cerebrovascular Response Following Severe Traumatic Brain Injury in Children.
Laerdal Foundation for Acute Medicine
(P. David Adelson, M.D., PI)
\$11,500 7/96 - Co-Investigator
6/97

Adenosine's Role in Experimental Traumatic Brain Injury in the Rat.
University Anesthesiology and Critical Care Medicine
Michael Bell, M.D., PI
\$8051 7/96 - Faculty Sponsor
6/97

Patrick M. Kochanek, MD

The Role of Inducible Nitric Oxide Synthase in Delayed Neuronal Death After Traumatic Brain Injury.

Children's Hospital of Pittsburgh, Research Advisory Committee for Faculty Start-Up Projects

Robert Clark, M.D., PI

\$75,808 7/95 - Co-Investigator
6/97

The Role of Neuroprotective Genes after Traumatic Brain Injury.

NINDS-MCSDA

Robert S.B. Clark, M.D., PI

\$409,320 12/01/96 - Co-Sponsor
12/31/01

Severe Diffuse Traumatic Brain Injury in Immature Rats.

MCSDA-NINDS/KO8

P. David Adelson, M.D., PI

\$415,260 12/01/96 - Faculty Sponsor
11/30/01

Pathogenesis of Osmotic Induced Demyelination.

NIH-RO1

Sheldon Adler, M.D., PI

\$858,487 05/31/97 - Consultant
05/31/99

The Effect of Hypothermia on the Acute Inflammatory Response to Brain Injury.

Schertz Fellowship Award, University of Pittsburgh, Dept. of Anesthesiology/CCM

Michael Whalen, M.D., PI

\$60,000 07/01/97 - Faculty Sponsor
06/30/98

Quinolinic Acid, A Novel Mediator of Neurotoxicity after Brain Injury.

Laerdal Foundation for Acute Medicine

\$6120 07/01/97 - Principal Investigator
06/30/98

Cell Trafficking and Functions in Two Models of Cold Induction: Ultraprofound Hypothermia and Hibernation.

Navy Medical Research Institute

Florence Rollwagen, Ph.D., PI

\$400,574 Co-Investigator

Augmenting Adenosine to Improve Outcome after Severe Head Injury

Laerdal Foundation for Acute Medicine

C. Robertson, M.D., PI

\$10,000 01/01/98 - Co-Principal Investigator
12/31/98

Reduction of Neuronal DNA Damage in Rats by Hypothermia after Traumatic Brain Injury.

Laerdal Foundation for Acute Medicine

Michael Whalen, M.D., PI

\$9,310 07/01/98 Co-Investigator
06/30/99

Production of a Novel Macrophage-Derived Neurotoxin, Quinolinic Acid, in Brain after Severe Head Injury in Adults and Children.

University of Pittsburgh's Center for Injury Research and Control/CDC

\$39,860 10/01/97 - Principal Investigator
08/31/98

Patrick M. Kochanek, MD

A Multidisciplinary NMR Center for Biomedical Research
Collaborative Research Project 3

Magnetic Resonance Imaging in the Assessment of Experimentally Induced Traumatic Brain Injury in Rats.
Chien Ho, Ph.D., PI

\$5,945,043 07/01/98 - Project Leader
06/30/03

Intercellular Adhesion Molecule-1 (ICAM-1) and Secondary Damage After Traumatic Brain Injury.
Seed Grant, Department of Anesthesiology/Critical Care Medicine, University of Pittsburgh School of Medicine
Michael Whalen, M.D., PI

\$7,690 Faculty Sponsor/Co-PI

A PARS Inhibitor in Brain Trauma
Inotek Corporation's Small Business Innovative Research (SBIR) Grant
NIH

George Hasko, M.D., PI

\$20,208 07/01/98 - Collaborator
12/31/98

Effect of Novel AK Inhibitor on Outcome after CCI Plus Secondary Insult in Rats.
Metabasis, Inc.

\$25,156 09/17/98 Principal Investigator
06/30/99

Caspase-Mediated Neuronal Death after Head Injury
NIH RO1

Robert S.B. Clark, M.D., PI

\$917,678 04/01/99 - Co-Investigator
03/21/03

Programmed-Cell Death after Human Head Injury
Competitive Medical Research Fund (CMRF)
University of Pittsburgh Medical Center

Robert Clark, M.D., PI

\$24,170 7/01/97 Co-Investigator
6/30/99

Relationship of CBF to Function after Severe TBI in Immature Rats Using Perfusion MRI.
CHP Seed Grant

P. David Adelson, M.D., PI

\$10,400 01/01/99 Consultant
12/31/99

Training in Trauma and Sepsis Research (T32-GM-08516-04)
NIH/NIGMS

Timothy Billiar, M.D., PI

\$137,896 7/01/94 - Trainer [3%]
6/30/99

Quinolinic Acid in Cerebrospinal Fluid Early After Severe Head Injury in Victims of Child Abuse
University of Pittsburgh CIRCL CDC

Donald Marion, M.D., PI of CIRCL Center

\$219,468 09/01/98 Principal Investigator of a project within the center
08/31/03

Cyclooxygenase 2 and Ischemic Neuronal Injury
NIH-RO1

Steven H. Graham, M.D, Ph.D., PI

12/01/98 - Consultant
11/30/02

Patrick M. Kochanek, MD

Hypothermia for Severe TBI in Children
NIH-RO1

P. David Adelson, M.D., PI
\$1,658,419 04/01/99 Consultant
03/31/02

Adenosine and Traumatic Brain Injury
NINDS/NIH-RO1

\$1,593,730 12/01/98 - Principal Investigator
11/30/03

General Clinical Research Center for Children's Hospital of Pittsburgh
NIH 5M01 RR00084-37

Silva Arslanian, M.D., PI
\$508,260 12/01/99 Associate Program Director (12.5% effort)
11/30/04 Effective 10/1/99

University of Pittsburgh Brain Trauma Research Center
NINDS/NIH Program Project

Donald Marion, M.D., PI
\$5,453,880 03/01/00
02/28/05

University of Pittsburgh Brain Trauma Research Center
NIH 2P50NS318-09 A1

Project #3 iNOS and Traumatic Brain Injury
\$633,143 03/01/00 Principal Investigator
02/28/05

University of Pittsburgh Brain Trauma Research Center
NIH 2P50NS318-09 A1

Core C Animal Modeling and Outcome
\$745,636 03/01/00 Principal Investigator
02/28/05

Training in Pediatric Neurointensive Care and Resuscitation Research

Training Grant, NICHD T-32 HD40686-03
\$915,228 07/01/00 Principal Investigator
06/30/05

Cyclooxygenase-2 Activity and the Pathogenesis of Traumatic Brain Injury
VA DOD Army Grant

\$393,400 10/01/00 Collaborator
09/30/03

Oxidative stress after severe head injury in infants and children: Effect of therapeutic hypothermia

Laerdal Medical Foundation

Hülya Bayır, M.D., PI
\$5,973 01/01/01 Co-PI
06/30/02

Gene Expression after Experimental TBI in Mice: Effect of Therapeutic Hypothermia

CuraGen Corporation

\$23,692 07/01/01 Principal Investigator

Patrick M. Kochanek, MD

Determinants of Outcome from TBI in Children from 0 to 3

James Blackman, M.D., PI
NIH

Consultant

Protein Kinase B and C in Head Injury

Larry W. Jenkins, PhD, PI
NIH

Co-Investigator

\$1,856,532
4/1/04 – 3/31/09

Novel Resuscitation from Lethal Hemorrhage - Suspended Animation (SA) for Delayed Resuscitation

US USA-MRMC #DAMD17-01-2-0038

\$1,250,000
9/15/04 – 9/14/05

Principal Investigator

Multidisciplinary Clinical Research Career Development Program

Wishwa Kapoor
NIH-K12

Mentor

Pediatric Critical Care Scientist Development Program (PCCSDP)

J. Michael Dean, MD, PI, Pediatric Critical Care, University of Utah School of Medicine

NIH-K12

\$3, 551,105
7/1/04 – 6/30/09

National Advisory Committee
PCCSDP Mentor

Adenosine and Traumatic Brain Injury

(PA-01-079 Minority Supplement for Christopher Washington)

NIH 5RO1 NS038087-06

\$38,213

Principal Investigator

Brain images, serum biomarkers and outcome measures after mild traumatic brain injury in children

Rachel P. Berger, MD PI

Consultant

The Walter L. Copeland Fund of the Pittsburgh Foundation Funding for Cranial Research

Metoclopramide prevents PICU nosocomial infection

Joseph Carcillo, M.D.

Consultant

NIH

4/1/05 – 4/1/10

Mechanisms of Chronic Dysfunction after Brain Trauma

C. Edward Dixon, PhD, PI

Co-Investigator—5% support

NIH

\$1,832,722
4/1/04 – 3/31/09

Effect of Brain Temperature on the Cytokine Response in Pediatric Traumatic Brain Injury

Sandra D. W. Buttram, M.D., PI

Mentor

Laerdal Foundation

\$10,000
1/1/05 – 12/31/05

Assessment of the delta receptor agonist in deep hypothermia circulatory arrest in rats

Tomas Drabek, M.D., PI

Mentor

Anesthesiology Seed Grant

\$7,684
1/1/05 – 12/31/05

Identification of biomarkers for inflicted traumatic brain injury using the human cerebrospinal fluid proteome

Weimin Gao, Ph.D., PI

Collaborator

CDC-CIRCL

\$10,000
3/1/05 – 4/30/06

Gender-Specific Treatment of Pediatric Cardiac Arrest

Robert S. Clark, M.D.

Co-Investigator

NIH

\$1,034,000
05/01/05 – 02/28/10

Patrick M. Kochanek, MD

Novel Nitroxide Resuscitation Strategies in Experimental Traumatic Brain Injury
Patrick M. Kochanek, M.D. Principal Investigator
USAMRAA \$1,970,155
1/1/06 – 12/31/10

Training in Pediatric Neurointensive Care and Resuscitation Research
Patrick M. Kochanek, M.D. Principal Investigator
1 T32 NS07485-06 07/01/06 – 06/30/11
NIH/NICHD \$1,598,795

University of Pittsburgh Brain Trauma Research Center
C. Edward Dixon, Ph.D., PI 07/01/06 - 06/30/11
NINDS/NIH Program Project \$6,000,000
Project 5: iNOS and Traumatic Brain Injury
Patrick M. Kochanek, M.D. \$918,452 Principal Investigator
Core C: Modeling , Imaging, and Outcomes
Patrick M. Kochanek, M.D. \$968,963 Principal Investigator

The Role of Microglia in Deep Hypothermia Circulatory Arrest
Tomas Drabek, MD, PI Mentor
Society for Cardiovascular Anesthesia 7/1/07 – 6/30/08
\$20,000

The Role of Microglia in Deep Hypothermia Circulatory Arrest
Tomas Drabek, MD, PI Mentor
Charles Schertz Fellowship Grant
7/1/07-6/30/08
\$60,000

University of Pittsburgh Clinical Translational Research Institute
Steven Reis, MD, PI
University of Pittsburgh Pediatric Clinical Translational Research Center
\$28,200 Assoc. Program Director (12.5% salary support)

Microglia - A Novel Therapeutic Target For Emergency Preservation and Resuscitation
Tomas Drabek, MD, PI
Laerdal Foundation for Acute Medicine 7/1/07-6/30/08
\$15,000 Mentor

Prevent Blast (Phase 1)
Richard Bauman, PhD, PI (Walter Reed Army Institute of Research)
DARPA
Sub-project: Molecular Biology of Blast-Induced Traumatic Brain Injury
Patrick M. Kochanek, MD, PI
11/06/07-11/05/08
\$500,000

Prevent Blast (Phase 2)
Richard Bauman, PhD, PI (Walter Reed Army Institute of Research)
DARPA
Sub-project: Molecular Biology of Blast-Induced Traumatic Brain Injury
Patrick M. Kochanek, MD, PI
Dates TBD
\$447,042

NIH R21
Hülya Bayır, MD, PI

Patrick M. Kochanek, MD

Role of Cardiolipin Oxidation after Traumatic Brain Injury in Immature Rat
7/1/07-6/30/09
\$371,250 Co- Investigator

NIH NHLBI, K23 HL078760
Eric Milbrandt, MD, MPH, PI
Mechanical Ventilation and Delirium
8/05-7/10
Co-Mentor

Grants Pending:

United States Army
James L. Atkins, MD, PhD, PI
Division of Military Casualty Research
Walter Reed Army Institute of Research
Systemic release of a vasoconstrictor contributes to cerebral hypoperfusion in models of TBI plus systemic hemorrhage
07/01/2008 – 06/3/2011
\$298,000 Co-Investigator

NIH R01
Rachel P. Berger, MD, MPH
Novel approaches to screening for inflicted childhood neurotrauma
7/1/07-6/20/08
\$3,700,125 Co-investigator

Emergency Preservation and Resuscitation Clinical Feasibility Trial
Samuel Tisherman, MD, PI
TATRC
\$813,400 Co-investigator

NIH R01
Hülya Bayır, MD, PI
Oxidative Lipidomics in Pediatric Traumatic Brain Injury
7/1/08-6/30/13
\$1,856,250 Co-Investigator

Epilepsy Foundation Grant
Amy Wagner, MD, PI
Progesterone Therapy in the A1KO Controlled Cortical Impact Model of Post Traumatic Seizures
7/1/07–6/30/09
\$150,000 Co-Investigator

NIH 1K12HD047349 (Pediatric Critical Care Scientist Development Program)
Paul M. Shore, MD
Cerebrospinal Fluid Drainage in Pediatric Traumatic Brain Injury
1/1/05 -12/31/10
\$500,000 Co-Mentor

EnSION
Expandable Cannula for Rapid Vascular Access
Consultant

US Army - USAMRAA
TBI CONCEPT AWARD
Experimental traumatic brain injury plus hemorrhagic shock in mice: Resuscitation with novel optimized recombinant hemoglobins solutions
7/1/08 – 12/31/09
\$187,125 Principal Investigator

Patrick M. Kochanek, MD

US Army USAMRAA
Operation Brain Trauma Therapy

7/1/08-6/30/12
\$4,000,000 Principal Investigator

US Army
The Consortium To Defeat Warfighter Brain Injury
\$25,000,000 Partnering Principal Investigator

US Army
Mecial College of Wisconson TBI Consortium
\$25,000,000 Partnering Principal Investigator

Laerdal Foundation for Acute Medicine
Joan Sanchez de Toledo, MD
Neuroprotective effect of dexmedetomidine in the Emergency Preservation and Resuscitation. A potential adjunct to hypothermia
2008/2009
\$10,000 Mentor

Patent and Trademark

United States Provisional Patent:

Disclosure Title: Method of Inducing Suspended Animation Following Cardiopulmonary Arrest

Filing Date: 6/22/05

Inventors: PM Kochanek, SA Tisherman, X Wu, SW Stezoski, LJ Yaffe

Seminars and invited lectureships related to your research:

1. Novel Pharmacologic Approaches to Brain Resuscitation After Ischemia. American Academy of Pediatrics, Washington, D.C., November 1-2, 1986.
2. Blood Elements as Mediators of Injury in Brain Ischemia, Society of Critical Care Medicine, Anaheim, California, May 26-29, 1987.
3. A Possible Role of Blood Elements in the Evolution of Cerebral Injury During the Postresuscitation Syndrome. International Symposium Reversibility of Clinical Death, University of Pittsburgh, Pittsburgh, Pennsylvania, May 2-6, 1987.
4. Reperfusion Brain Injury. Society of Critical Care Medicine, Orlando, Florida, May 31- June 3, 1988.
5. Blood Elements in the Evolution of Tissue Injury After Cerebral Injury. FASEB, American Physiological Society, New Orleans, Louisiana, March 19-24, 1989.
6. Quantitation of Posttraumatic Edema Formation and Granulocyte Accumulation in the Brain. Fourth International Symposium "New Frontiers of Biochemistry and Biophysics on Diagnosis and Treatment of Stroke, Neurotrauma, and Other Neurological Diseases", Florence, Italy, April 19-21, 1989.
7. Pathobiology of the Pediatric Arrest. Emergency Medicine Services - Children (EMS-C), Seattle, Washington, November 10, 1989.
8. New Directions in the Therapeutic Approach to Cerebral Trauma. EMS-C, Seattle, Washington, November 10, 1989.
9. Monitoring Cerebral Blood Flow in the Critically Ill: Monitoring Techniques. Society of Critical Care Medicine Meeting. San Francisco, California, May 31, 1990.
10. Role of Inflammation in Brain Injury: Novel Directions in the Therapeutic Approach to Cerebral Trauma. American Academy of Pediatrics Meeting. Boston, Massachusetts, October 5, 1990.
11. Novel Therapeutic Approaches to Cerebral Ischemia and Trauma: Inflammatory Response Model. Critical Care Grand Rounds, University of Virginia, Health Science Center. Charlottesville, Virginia, December 12, 1990.

12. The Role of PMNs in Ischemic and Traumatic Brain Injury. Athena Neurosciences Corporation. South San Francisco, California, May 9, 1991.
13. Asphyxial arrest. Care of the Critically Ill or Injured. Charleston, South Carolina, November 22, 1991.
14. Pediatric Neuro-intensive Care. Care of the Critically Ill or Injured. Charleston, South Carolina, November 23, 1991.
15. Neutrophils in Brain Injury: An update. Wyeth-Ayerst Corporation. Princeton, New Jersey, March 11-12, 1992.
16. Ischemic and Traumatic Brain Injury: Pathobiology and Cellular Mechanisms. Critical Care Pediatrics. University of Miami School of Medicine, Arnold Palmer Hospital for Children & Women, Lake Buena Vista, Florida, March 5-7, 1992.
17. New Directions in Neurointensive Care and Cerebral Resuscitation. Critical Care Pediatrics. University of Miami School of Medicine, Arnold Palmer Hospital for Children & Women, Lake Buena Vista, Florida, March 5-7, 1992.
18. Pediatric Neurointensive Care. Neurologic Critical Care SCCM Postgraduate Course. San Antonio, Texas, May 28, 1992.
19. Molecular Mechanisms of Ischemic and Traumatic CNS Injury. First World Congress of Pediatric Intensive Care. Baltimore, Maryland, June 24, 1992.
20. Cerebral Resuscitation. Pediatric Grand Rounds, Tod Children's Hospital, Youngstown, Ohio, December 17, 1992.
21. The Pittsburgh Head Injury Conference, Inflammatory and Neurotrophic Response to Traumatic Brain Injury, Pittsburgh, Pennsylvania, September 17, 1993.
22. Inflammation Response to Traumatic Brain Injury, Ohio State University, Department of Immunology Seminars, March 27, 1994.
23. Inflammatory Response to Traumatic Brain Injury, Johns Hopkins University, Department of Anesthesiology and Critical Care medicine, May 1994.
24. The Future of Resuscitation Pharmacology, First Joint Conference of American Heart Association and American Academy of Pediatrics on Pediatric Resuscitation, Washington, D.C., June 12, 1994.
25. Traumatic Brain Injury- Mechanisms and Management. 7th Annual Pediatric Critical Care Colloquium, Seattle, Washington, October 26-29, 1994.
26. Severe Traumatic Brain Injury in Children: Pathobiology, Management, and Controversies, SCCM's 1995 Current Concepts in Critical Care, San Francisco, California, January 30 - February 4, 1995.
27. Severe Traumatic Brain Injury in Children. Critical Care Medicine Research-in-Progress Conference, Emory University School of Medicine, Department of Pediatrics, March 16, 1995.
28. Inflammatory Responses to Traumatic Brain Injury. Basic Science Fellow's Conference, Emory University School of Medicine, Department of Pediatrics, March 16, 1995.
29. Magnetic Resonance Imaging in Assessment of Experimentally Induced Head Trauma in Rats. Advisory Committee Meeting, Pittsburgh NMR Center for Biomedical Research, Pittsburgh, Pennsylvania, June 2, 1995.
30. A Contemporary Approach to Traumatic Brain Injury in Children. Trauma Care and Injury Control...Making the Connection. 4th Annual Adult and Paediatric Symposium, Trauma Services, Victoria Hospital and the Southwest Area Emergency Health Services Committee, London, Ontario, Canada, June 15-16, 1995.
31. Pathophysiology of Brain Injury. American Academy of Pediatrics, Section on Emergency Medicine and Critical Care Medicine, San Francisco, California, October 14-18, 1995.
32. Inflammatory Response to Traumatic Brain Injury. AI duPont Institute, Wilmington, Delaware, November 7-8, 1995.

33. Basic Mechanisms of Brain Injury: An Overview and New Concepts. 2nd Annual Neuroscience Symposium, Children's Hospital of Pittsburgh, Pittsburgh, Pennsylvania, November 18, 1995.
34. Inflammatory Response. International Business Communications USA Conference, Philadelphia, Pennsylvania, December 15, 1995.
35. Inflammation Response to Brain Injury. Naval Medical Research Institute's Conference on Medical Research: Concepts for Far-Forward Casualty Care, Coolfont, Berkely Springs, West Virginia, January 17-19, 1996.
36. Inflammatory Response to Traumatic Brain Injury. The 1996 Advances in Acute Neurotrauma Conference, University of Pennsylvania Medical Center, Philadelphia, Pennsylvania, January 20-21, 1996.
37. Novel Therapeutic Approaches to CNS Injury. 34th Annual Symposium on Critical Care Trauma and Emergency Medicine, University of Southern California School of Medicine, Las Vegas Hilton Hotel, Las Vegas, Nevada, February 12-16, 1996.
38. Traumatic Brain Injury in Children. 34th Annual Symposium on Critical Care Trauma and Emergency Medicine, University of Southern California School of Medicine, Las Vegas Hilton Hotel, Las Vegas, Nevada, February 12-16, 1996.
39. Case Studies in Brain Injury. 34th Annual Symposium on Critical Care Trauma and Emergency Medicine, University of Southern California School of Medicine, Las Vegas Hilton Hotel, Las Vegas, Nevada, February 12-16, 1996.
40. Pediatric Neurointensive Care. 34th Annual Symposium on Critical Care Trauma and Emergency Medicine, University of Southern California School of Medicine, Las Vegas Hilton Hotel, Las Vegas, Nevada, February 12-16, 1996.
41. Acute Inflammatory Response to Traumatic Brain Injury. Pathophysiology of Secondary Brain Injury and Implications for Contemporary Treatment, University of Pittsburgh Medical Center, Sheraton Hotel at Station Square, Pittsburgh, Pennsylvania, May 17-18, 1996.
42. Inflammatory Process in the Pathobiology of Secondary Damage after Traumatic Brain Injury. Fifth Wiggers Bernard Conference on Shock, Sepsis and Organ Failure. Brain Damage Secondary to Hemorrhagic-Traumatic Shock, Brain Damage Secondary to Sepsis, Brain Damage Secondary to Traumatic Brain Injury. Ludwig Boltzmann Institute for Experimental and Clinical Traumatology, Vienna, Austria, May 19-23, 1996.
43. Magnetic Resonance Imaging in Assessment of Experimentally Induced Traumatic Brain Injury in Rats, Advisory Committee Meeting, Pittsburgh NMR Center for Biomedical Research, Pittsburgh, Pennsylvania, June 18, 1996.
44. Acute Inflammatory Response to Traumatic Brain Injury, FASEB Summer Research Conference, Copper Mountain, Colorado, August 11-16, 1996.
45. Traumatic Brain Injury in Children: A Contemporary View. Tri-State Appalachian Alliance for Emergency Medical Services for Children-Enhance Program, Charleston, West Virginia, September 7, 1996.
46. Pharmacology of Suspended Animation. Naval Medical Research Institute-sponsored conference on Research Planning for Suspended Animation, Pittsburgh Holiday Inn, Pittsburgh, Pennsylvania, January 19-20, 1997.
47. Established Investigator Grant Lecture: Role of Inflammation After Severe Head Injury, 26th International Symposium of the Society of Critical Care Medicine, San Diego, California, February 6-10, 1997.
48. Controversies: Is Hyperventilation Important in Treating Brain Ischemia and Head Injury? Panel Member, 26th International Symposium of the Society of Critical Care Medicine, San Diego, California, February 6-10, 1997.
49. Inflammatory Response to Traumatic Brain Injury: Bench to Bedside. Combined Neurosurgery/Neurology Grand Rounds, Henry Ford Medical Center, Detroit, Michigan, February 19, 1997.
50. Inflammatory Response to Traumatic Brain Injury. Anesthesia Grand Rounds, Harvard Medical School, Children's Hospital, Boston, Massachusetts, March 26, 1997.

51. Role of Inflammation in Cerebrovascular Failure after Head Injury. TraumaCare '97, 10th Annual Trauma Anesthesia and Critical Care Symposium (ATACCS), Baltimore, Maryland, May 15-17, 1997.
52. Traumatic Brain Injury in Children - From Bench to Bedside. European Society for Pediatric Research, European Society for Paediatric Haematology and Immunology, European Society for Paediatric Infectious Diseases, Joint Meeting, Budapest, Hungary, August 31-September 3, 1997.
53. Inflammatory Response to Severe Traumatic Brain Injury in Humans. Sixth Vienna Shock Forum, Vienna, Austria, November 8-11, 1997.
54. Inducible NOS and Other Novel Mediators of Inflammation in Brain Trauma. Sixth Wiggers Bernard Conference on Nitric Oxide and its Inhibition in Shock, Sepsis and Organ Failure. Vienna, Austria, November 12-15, 1997.
55. Mechanisms and Pharmacology in Suspended Animation. Suspended Animation Investigators Meeting, Pittsburgh Holiday Inn, University of Pittsburgh, Pittsburgh, Pennsylvania, December 5-7, 1997.
56. Severe Traumatic Brain Injury in Children: Epidemiology, Pathophysiology, Monitoring, and Management. Society of Critical Care Medicine, Current Concepts in Pediatric Critical Care, San Antonio, Texas, February 2-3, 1998.
57. Cell Injury and Response: Neurons. Society of Critical Care Medicine, 27th Educational and Scientific Symposium, San Antonio, Texas, February 4-8, 1998.
58. Resuscitation and the Prevention of Secondary Damage after Severe Traumatic Brain Injury. Pan American Congress of Emergency and Disaster Medicine, San Jose, Costa Rica, March 2-6, 1998.
59. Inflammatory Response to Trauma, 18th International Symposium on Intensive Care & Emergency Medicine, Brussels, Belgium, March 17-20, 1998.
60. New Developments in Head Trauma, 18th International Symposium on Intensive Care & Emergency Medicine, Brussels, Belgium, March 17-20, 1998.
61. Head Trauma, 18th International Symposium on Intensive Care & Emergency Medicine, Brussels, Belgium, March 17-20, 1998.
62. Magnetic Resonance Imaging Assessment of Experimental Traumatic Brain Injury in Rats, Advisory Committee Meeting, Pittsburgh NMR Center for Biomedical Research, Pittsburgh, Pennsylvania, May 28, 1998.
63. Immune/Inflammatory Responses in Traumatic Brain Injury, Spinal Cord Injury and Ischemia. FASEB Summer Research Conference on the Neurobiology of Central Nervous System Injury. Wilsonville, Oregon, June 21-26, 1998.
64. Traumatic Brain Injury in Children - Bench to Bedside, 3rd International Symposium on the Advances in Management of Critically Ill Children, Buenos Aires, Argentina, June 25-27, 1998.
65. Novel Approaches to Cerebral Resuscitation, 3rd International Symposium on the Advances in Management of Critically Ill Children, Buenos Aires, Argentina, June 25-27, 1998.
66. Acute Cerebral Injury: Hypothermia, 3rd International Symposium on the Advances in Management of Critically Ill Children, Buenos Aires, Argentina, June 25-27, 1998.
67. Pediatric Neurointensive Care: Unique Aspects of Pediatric Brain Failure and Resuscitation, 3rd International Symposium on the Advances in Management of Critically Ill Children, Buenos Aires, Argentina, June 25-27, 1998.
68. Critical Care-Pediatric Practical Course 024. Congress of Neurological Surgeons Annual Meeting, Seattle, Washington, October 3-8, 1998.
69. Frontiers in Cerebral Resuscitation: Lessons Learned from Human Head Injury. 12th Annual Society for Pediatric Anesthesia Meeting, Orlando, Florida, October 16, 1998.

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70. Neurosurgical Issues in the Pediatric Intensive Care Unit: Biochemical Derangements in the Evolution of Secondary Damage After Severe Traumatic Brain Injury (TBI) in Infants and Children. American Academy of Pediatrics 1998 Annual Meeting, San Francisco, California, October 17-21, 1998.
71. Frontiers in Cerebral Resuscitation – Lessons Learned from Head Injury. The Toronto Critical Care Medicine Symposium, Toronto, Ontario, Canada, October 29 – November 1, 1998.
72. Severe Traumatic Brain Injury in Infants and Children – From Bedside to the Bench – and Back. Distinguished Lecture Series, Pediatric Grand Rounds, Children’s Hospital of Omaha, Omaha, Nebraska, November 12-13, 1998.
73. Several – Not So Crazy- Resuscitation Strategies for the Troubled Brain. Distinguished Lecture Series, Pediatric Research Conference, Children’s Hospital of Omaha, Omaha, Nebraska, November 12-13, 1998.
74. Severe Traumatic Brain Injury in Infants and Children – From Bedside to the Bench– and Back. 1998 Grand Rounds- Taubin Lecture, Children’s National Medical Center, Washington, DC, December 1-2, 1998.
75. Several –Not So Crazy- Resuscitation Strategies for the Troubled Brain. Pediatric Research Conference, Children’s National Medical Center, Washington, DC, December 1-2, 1998.
76. Evolution of Secondary Damage after Traumatic Brain Injury: Studies in Controlled Cortical Impact. Pediatric Research Conference, NIH, Washington, DC, December 3, 1998.
77. Inflammatory Cascades in Neurotrauma. Mechanisms of Brain Injury: Lessons from the Bench. Proceedings of the 28th Educational & Scientific Symposium. Society of Critical Care Medicine, San Francisco, California, January 23-27, 1999.
78. Traumatic Brain Injury in Children: From Bench to Bedside. Gladys Fashena Lecture - Grand Rounds, University of Texas Southwestern Medical Center, Dallas, Texas, March 9-10, 1999.
79. Novel Therapeutic Approaches to Brain Injury. Pediatric Research Conference, University of Texas Southwestern Medical Center, Dallas, Texas, March 9-10, 1999.
80. Frontiers in Cerebral Resuscitation: Lessons learned from Studies in Experimental and Clinical Head Injury. Uppsalla, Sweden, April 29, 1999.
81. Molecular Biology and Brain: III Argentine Congress of Emergency and Critical Care in Pediatrics, Buenos Aires, Argentina, September 23-25, 1999.
82. Brain Protection, III Argentine Congress of Emergency and Critical Care in Pediatrics, Buenos Aires, Argentina, September 23-25, 1999.
83. What Are the Key Mechanisms of Secondary Damage after Traumatic Brain Injury? Seventh Vienna Shock Forum, Vienna, Austria, November 13 – 16, 1999.
84. Pediatric Neuro Critical Care: Developmental Considerations in TBI. 29th Educational and Scientific Symposium of SCCM. Orlando, Florida, February 11-15, 2000.
85. Year-in-review: Pediatrics. 29th Educational and Scientific Symposium of SCCM. Orlando, Florida, February 11-15, 2000.
86. Traumatic Brain Injury in Children: Bench to Bedside. Visiting Professor, Duke University, Durham, North Carolina, February 22, 2000.
87. Traumatic Brain Injury in Infants and Children: From Bench to Bedside and Back. Grand Rounds, University of Utah, April 3-5, 2000.
88. Five General Approaches to Cerebral Resuscitation. Research Conference, University of Utah, April 3-5, 2000.

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89. Ischemic Mechanisms in Traumatic Brain Injury. 5th Annual Symposium on Applied Physiology of the Peripheral Circulation – Cerebral Blood Flow: Mechanisms of Ischemia, Diagnosis and Therapy. UPMC Stroke Institute, Pittsburgh, Pennsylvania, June 9-10, 2000.
90. Pathophysiology: What are the Key Mechanisms of Secondary Neuronal Injury in Infants and Children? 3rd World Congress on Pediatric Intensive Care, Montreal, Canada, June 24-29, 2000.
91. How I Manage Head Trauma (Meet the Experts Session). 3rd World Congress on Pediatric Intensive Care, Montreal, Canada, June 24-29, 2000.
92. Training of fellows, meeting AGE guidelines, research time: What is the end point of training? Pediatric Critical Care Colloquium 2000, Montreal, Canada, June 25, 2000.
93. Children in Clinical Trials: Can We Gather The Evidence to Impact Care? Funding Pediatric Critical Care, NIH, Bethesda, Maryland, September 21, 2000.
94. The inflammatory response in TBI as a mechanism of secondary damage. 5th International Neurotrauma Symposium, Garmisch-Partenkirchen, Germany, October 1-5, 2000.
95. The Simple vs the Supermodel. 18th Annual National Neurotrauma Society Symposium, New Orleans, Louisiana, November 3-4, 2000.
96. Traumatic Brain Injury in Infants and Children: Bench to Bedside. Grand Rounds, Temple University Children's Hospital, Philadelphia, Pennsylvania, January 9, 2001.
97. Emergency Neuroprotection in Traumatic Brain Injury: From the Bedside Back to the Bench. 30th International Educational and Scientific Symposium of SCCM, San Francisco, California, February 10-14, 2001.
98. Safar Center for Resuscitation Research: Clinical and Laboratory Study in Traumatic Brain Injury. Guest Professor, The Ohio State University, Department of Neurosurgery, Columbus, Ohio, February 28, 2001.
99. Key Mechanisms of Secondary Neuronal Damage after Brain Trauma. International symposium on Intensive Care and Emergency Medicine, Brussels, Belgium, March 17-19, 2001.
100. Key Mechanisms of Secondary Damage after Traumatic Brain Injury in Infants and Children. Pediatric Academic Society Meeting, Baltimore, Maryland, April 29-May 1, 2001.
101. Traumatic brain injury in infants and children: Mechanisms of secondary damage. Symposium of Pediatric Intensive Care, Athens, Greece, May 25, 2001.
102. An Overview of Chemical Markers of Brain Injuries. American Academy of Pediatrics 2001 National Conference & Exhibition, San Francisco, California, October 19-24, 2001.
103. Adenosine Receptor Agonists Attenuate Posttraumatic Cerebral Hypoperfusion in Rats: Perfusion MRI Assessment. 19th National Neurotrauma Society Symposium, San Diego, California, November 9, 2001.
104. Mechanisms of Secondary Damage after Traumatic Brain Injury in Infants and Children” The Role of Child Abuse. Visiting Professor, Baylor Clinical Scientist Training Program Seminar, Baylor College of Medicine, Houston, Texas, January 2, 2002.
105. The Hunt for Clues to the Next Breakthrough in Resuscitation Research. Asmund S. Laerdal Memorial Lecture at the 31st Critical Care Congress. January 26-30, 2002.
106. Novel Investigation in Cerebral Resuscitation at the Safar Center for Resuscitation Research. Visiting Professor, UCLA Brain Injury Research Center, Brain Injury Research Seminar Series, Los Angeles, California, February 27, 2002.
107. Biochemical and Molecular Response to Severe Traumatic Brain Injury in Children: The Role of Child Abuse. Visiting Professor, UCLA Brain Injury Research Center, Brain Injury Research Seminar Series, Los Angeles, California, February 27, 2002.

108. Pathogenesis and Means of Amelioration of Traumatic Brain Injury. 12th Annual Pediatric Neurology Update. Children's National Medical Center, Washington, DC, March 6, 2002.
109. Molecular Biology of Traumatic Brain Injury. International symposium on Intensive Care and Emergency Medicine, Brussels, Belgium, March 19-22, 2002.
110. How to Protect the Brain. International Symposium on Intensive Care and Emergency Medicine, Brussels, Belgium, March 19-22, 2002.
111. Strategies in Neurotrauma. International Symposium on Intensive Care and Emergency Medicine, Brussels, Belgium, March 19-22, 2002.
112. Cerebral Resuscitation. International Symposium on Intensive Care and Emergency Medicine, Brussels, Belgium, March 19-22, 2002.
113. Development of Novel Approaches to Detect Shaken Baby Syndrome. Pfizer Visiting Professor Award, University of Illinois, College of Medicine at Peoria, April 16-19, 2002.
114. Brain Physiology and Traumatic Brain Physiology. Pfizer Visiting Professor Award, University of Illinois, College of Medicine at Peoria, April 16-19, 2002.
115. Pediatric Traumatic Brain Injury – From Bedside to Bench – and Back. Pediatric Grand Rounds, Pfizer Visiting Professor Award, University of Illinois, College of Medicine at Peoria, April 16-19, 2002.
116. Initial Resuscitation of the Child with Traumatic Brain Injury. Pfizer Visiting Professor Award, University of Illinois, College of Medicine at Peoria, April 16-19, 2002.
117. Novel Therapeutic Strategies in Neurotrauma. Pfizer Visiting Professor Award, University of Illinois, College of Medicine at Peoria, April 16-19, 2002.
118. Tools That Can Be Used to Link Bench and Bedside in Clinical Brain Injury Research. Pfizer Visiting Professor Award, University of Illinois, College of Medicine at Peoria, April 16-19, 2002.
119. Preview of the Guidelines for the Management of Head Injury in Children. Pfizer Visiting Professor Award, University of Illinois, College of Medicine at Peoria, April 16-19, 2002.
120. Mechanisms of Secondary Damage after Severe Traumatic Brain Injury in Infants and Children: The Role of Child Abuse. Visiting Professor, University of Kentucky, Department of Anatomy and Neurobiology, May 13, 2002.
121. Should Therapeutic Hypothermia in Brain Injury be Tested in Clinical Trials? 2002 Trauma Care (ITACCS), Stavanger, Norway, May 23-25, 2002.
122. Is There a Clinical role for Therapeutic Hypothermia in Neurotrauma? 2002 Trauma Care (ITACCS), Stavanger, Norway, May 23-25, 2002.
123. Pediatric Considerations. World Congress on Drowning 2002, Amsterdam, The Netherlands, June 26-28, 2002.
124. Pro-Con Debate: Use of Induced Hypothermia For the Drowning Victim. World Congress on Drowning 2002, Amsterdam, The Netherlands, June 26-28, 2002.
125. Mechanisms of secondary injury in pediatrics as related to child abuse. EuroNeuro Meeting, Munich, Germany, September 12-14, 2002.
126. The Response of Neurons and Glial Cells to Injury. 14th Annual Pediatric Critical Care Colloquium and Trauma Conference, San Diego, California, October 2-5, 2002.
127. The Physiopathology Basis for the Therapy of Brain Injury. 14th Annual Pediatric Critical Care Colloquium and Trauma Conference, San Diego, California, October 2-5, 2002.

128. Pediatric Intensive Care Perspective. 14th Annual Pediatric Critical Care Colloquium and Trauma Conference, San Diego, California, October 2-5, 2002.
129. Hypothermia Expands Contusion Volume After Traumatic Brain Injury in Fentanyl-Anesthetized Rats. 14th Annual Pediatric Critical Care Colloquium and Trauma Conference, San Diego, California, October 2-5, 2002.
130. Hypothermia in Brain Resuscitation: History, Present and Future. Grand Rounds, Jersey Shore Medical Center, New Jersey, January 6-7, 2003.
131. Adenosine and Central Nervous System Injury. Society of Critical Care Medicine 32nd Annual Critical Care Medicine Congress, San Antonio, Texas, January 29-February 3, 2003.
132. Review "Best of the Best" papers published by the new journal "Pediatric Critical Care Medicine," Society of Critical Care Medicine 32nd Annual Critical Care Medicine Congress, San Antonio, Texas, January 29-February 3, 2003.
133. State of the Journal and Plans. PCCM and CCM Editorial Board Meeting, Society of Critical Care Medicine 32nd Annual Critical Care Medicine Congress, San Antonio, Texas, January 29-February 3, 2003.
134. Controversies in Neurointensive Care. Society of Critical Care Medicine 32nd Annual Critical Care Medicine Congress, San Antonio, Texas, January 29-February 3, 2003.
135. Rationale for Hypothermia for Brain Protection. Society of Critical Care Medicine 32nd Annual Critical Care Medicine Congress, San Antonio, Texas, January 29-February 3, 2003.
136. Traumatic Brain Injury: How Can We Rescue Injured Brain Cells? The Cutting Edge of Pediatric Intensive Care. University of Arkansas Children's Hospital, Little Rock, Arkansas, March 31, 2003.
137. Severe Traumatic Brain Injury in Infants and Children. 6th Annual Pediatric Acute Care Symposium, Sunrise Hospital and Medical Center, Sunrise Children's Hospital, Las Vegas, Nevada, April 11-12, 2003.
138. Continuous vs Intermittent Cerebrospinal Fluid Drainage After Traumatic Brain Injury in Children: Effect on Biochemical Markers. CDC Injury Prevention Symposium, Taskforce for Child Survival and Development, April 28-29, 2003.
139. Building a Research Program in Pediatric Critical Care. NCMRR Advisory Board Meeting, Silver Springs, Maryland, May 1-2, 2003.
140. Complete Map of Mediators of Excitotoxicity/Inflammation of Lesions. 4th World Congress on Pediatric Intensive Care (WFPICCS), Boston, Massachusetts, June 8-12, 2003.
141. How to Get Published. 4th World Congress on Pediatric Intensive Care (WFPICCS), Boston, Massachusetts, June 8-12, 2003.
142. Session: The New Head Injury Guidelines. 4th World Congress on Pediatric Intensive Care (WFPICCS), Boston, Massachusetts, June 8-12, 2003.
143. Session: Getting your Paper Published. Meet the Professor Session. Dare to Care Congress, Cape Town, South Africa, August 24-28, 2003.
144. Research Training in Critical Care Medicine. Dare to Care Congress, Cape Town, South Africa, August 24-28, 2003.
145. Hypothermia in Cerebral Resuscitation. How Cold Might the Future Be? Dare to Care Congress, Cape Town, South Africa, August 24-28, 2003.
146. Inflicted Childhood Neurotrauma – Diagnosis and ICU Course. Dare to Care Congress, Cape Town, South Africa, August 24-28, 2003.
147. Biochemical and Molecular Events in Pediatric Traumatic Brain Injury: Insight into Diagnosis and Treatment. Presidential Symposium of the Child Neurology Society meeting, Miami, Florida, October 2-3, 2003.

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148. Hunting for Breakthroughs in Resuscitation and Neurointensive Care. American Heart Association, Pittsburgh, Pennsylvania, February 13, 2004.
149. Novel Potentials for Emergency Hypothermia. 2004 International Brain Hypothermia Symposium, Tokyo, Japan, February 4-7, 2004.
150. Breakthroughs in resuscitation research. Grand Rounds, Nation Center for Child Health and Development, Tokyo, Japan, February 6, 2004.
151. Intraoperative Hypothermia. 2004 International Brain Hypothermia Symposium, Tokyo, Japan, February 6, 2004.
152. The PCCM Perspective. National Institute of Child Health & Human Development (NICHD), Office of Rare Diseases, Children with Special Needs: Planning a Research Future, Rockville, MD, May 18, 2004.
153. The Pediatric Critical Care Perspective. National Institute of Child Health & Human Development (NICHD), Office of Rare Diseases, Children with Special Needs: Planning a Research Future, Rockville, MD, May 19, 2004.
154. Novel Resuscitation from Lethal Hemorrhage – Suspended Animation (SA) for Delayed Resuscitation. Telemedicine and Advanced Technology Research Center (TATRC) Product Line Review, Fort Detrick, Maryland, July 13, 2004.
155. A Novel Approach to Cerebral Resuscitation: Suspended Animation using Profound Hypothermia for Delayed Resuscitation. Hypothermia in Clinical Practice Meeting, Houston, Texas, September 11, 2004.
156. Current Treatment in Intracranial Hypertension. IX Brazilian Congress on Pediatric Intensive Care and VI Latin-American congress on Pediatric Critical Care, October 5-8, 2004.
157. Hypoxic-Ischemic Injury. IX Brazilian Congress on Pediatric Intensive Care and VI Latin-American congress on Pediatric Critical Care, October 5-8, 2004.
158. Effects of Age, Gender and Recovery Mechanisms on TBI: Recovery Mechanisms. 22nd Annual National Neurotrauma Society Symposium, San Diego, California, October 21, 2004.
159. Hypoxic-Ischemic Neurological Injury. 5th International Symposium on Pediatric Cardiac Intensive Care, Miami, Florida, December 1-4, 2004.
160. The Use of Mild Hypothermia After Deep Hypothermia Circulatory Arrest: Lessons Learned from Contemporary Studies in Animal Models. Challenging Case Discussions. 5th International Symposium on Pediatric Cardiac Intensive Care, Miami, Florida, December 1-4, 2004.
161. Controversies and Advances: The new TBI guidelines for children. 34th Critical Care Congress, Phoenix, Arizona, January 15-19, 2005.
162. Endogenous Neuroprotectants in Traumatic Brain Injury: Bench to Bedside. 11th Congress of the European Shock Society, 8th Vienna Shock Forum, Vienna, Austria, January 27-30, 2005.
163. A Novel Approach to Cerebral Resuscitation: Suspended Animation with Delayed Resuscitation. Keynote address. 3rd Annual Meeting of the Neurocritical Care Society, Scottsdale, Arizona, February 26, 2005.
164. A Novel Approach: Emergency Hypothermia with Delayed CPR. International Symposium on Intensive Care and Emergency Medicine, Brussels, Belgium, March 21-25, 2005.
165. Head Injury in Children: Present Guidelines. International Symposium on Intensive Care and Emergency Medicine, Brussels, Belgium, March 21-25, 2005.
166. Traumatic Brain Injury. International Symposium on Intensive Care and Emergency Medicine, Brussels, Belgium, March 21-25, 2005.
167. A Novel Approach to Cerebral Resuscitation: Suspended Animation with Delayed Resuscitation. Department of Anesthesiology Neuroprotection Seminar Series, University of Maryland, April 5, 2005.

168. Breakthroughs in Resuscitation Research. Pediatric Medical Grand Rounds, Montréal Children's Hospital, McGill University, Montréal (Quebec), Canada, April 27, 2005.
169. Breakthroughs in Resuscitation Research. Sainte-Justine Hospital, Université de Montréal, Montréal (Quebec), Canada, April 27, 2005.
170. Cellular and Molecular Mechanisms of Secondary Injury in Pediatric TBI. Pediatric Academic Society and Society for Pediatric Research Annual Meeting, Washington, DC, May 14-17, 2005.
171. Serious CNS Injury in the PICU Population. Grand Rounds, University of Texas, Department of Pediatrics, Houston, Texas, May 27, 2005.
172. New Developments in Brain Research at the Safar Center. Research Conference, University of Texas, Department of Pediatrics, Houston, Texas, May 27, 2005.
173. CPCCRN, the PCCR Program: The relationship with NCMRR and NICHD. Program and Growth in NCMRR, Rockville, MD, June 21, 2005.
174. Emergency Hypothermia. ATACCC 2005 Conference, St. Pete Beach, FL, August 15-17, 2005.
175. Publishing In Pediatric Critical Care Medicine (PCCM). 9th Congress of the World Federation of Societies of Intensive and Critical Care Medicine, Buenos Aires, Argentina, August 27-31, 2005.
176. Traumatic Brain Injury in Infants and Children – Beyond the Guidelines. 9th Congress of the World Federation of Societies of Intensive and Critical Care Medicine, Buenos Aires, Argentina, August 27-31, 2005.
177. Evaluation of Quality in ICU Research. 9th Congress of the World Federation of Societies of Intensive and Critical Care Medicine, Buenos Aires, Argentina, August 27-31, 2005.
178. Resuscitation Research: Past, Present, and Future. History of the Safar Center for Resuscitation Research. 33rd Annual Meeting of the Japanese Association for Acute Medicine, Saitama, Japan, October 26-28, 2005.
179. Breakthroughs in Resuscitation. Grand Rounds, University of Michigan Medical Center, Department of Pediatrics, Ann Arbor, Michigan, December 6, 2005.
180. Guidelines for the Management of Severe Traumatic Brain Injury in Children – and Beyond. Resident Conference, University of Michigan Medical Center, Department of Pediatrics, Ann Arbor, Michigan, December 6, 2005.
181. Emergency Preservation and Resuscitation. The 35th Critical Care Congress, San Francisco, CA, January 7-11, 2006.
182. Hypothermia Effect on Injury Mechanisms in Children. The 35th Critical Care Congress, San Francisco, CA, January 7-11, 2006.
183. Biochemical, Molecular and Proteomic Assessment of the Response to TBI in Infants and Children: From Animal Models to Child Abuse. 16th Annual Pediatric Critical Care Colloquium, Snowbird, Utah, February 21-24, 2006.
184. A New Model of Traumatic Brain Injury and Hemorrhagic Shock. DOD Military Health Research Forum, Puerto Rico, April 30-May 4, 2006.
185. Breakthroughs in Resuscitation. Grand Rounds, Seattle Children's Hospital and Regional Medical Center, Department of Pediatric Critical Care Medicine, Seattle, Washington, March 21, 2006.
186. Pathophysiology-Based Approach to Pediatric Brain Injury, Grand Rounds, Seattle Children's Hospital and Regional Medical Center, Department of Pediatric Critical Care Medicine, Seattle, Washington, March 21, 2006.
187. Breakthroughs in Resuscitation. Grand Rounds, Department of Critical Care Medicine, Harborview Hospital, Seattle, Washington, March 21, 2006.

188. Novel Nitroxide-Based Resuscitation from Severe Traumatic Brain Injury and Hemorrhagic Shock. DOD USAMRMC, Military Health Research Forum, San Juan, Puerto Rico, May 1-4, 2006.
189. Critical Mechanisms of Damage and Repair in Pediatric Traumatic Brain Injury: From Blood Pressure to Proteomics. Society of Neurosurgical Anesthesia and Critical Care, Chicago, Illinois, October 13, 2006.
190. Emergency Preservation for Resuscitation—EPR: Beyond CPR. 36th Critical Care Congress, Orlando, Florida, February 17-21, 2007.
191. Critical Care Research: Whether Stamp Collecting or Searching for a Breakthrough, It's the Fellows that Count. *ACCM Distinguished Investigator Award*, 36th Critical Care Congress, Orlando, Florida, February 17-21, 2007.
192. Novel Brain Resuscitation Strategies. 36th Critical Care Congress, Orlando, Florida, February 17-21, 2007.
193. Current Therapy of Traumatic Brain Injury. International CME – Advance Course in Pediatric Intensive Care (WFPICCS), Chandigarh, India, March 2-4, 2007.
194. Current Therapy of Cardiopulmonary Arrest in Children. International CME – Advance Course in Pediatric Intensive Care (WFPICCS), Chandigarh, India, March 2-4, 2007.
195. Interfacing with *Pediatric Critical Care Medicine* journal. International CME – Advance Course in Pediatric Intensive Care (WFPICCS), Chandigarh, India, March 2-4, 2007.
196. Blast-induced Injury – Severe Brain Injury. 27th International Symposium on Intensive Care & Emergency Medicine (ISICEM), Brussels, Belgium, March 27-30, 2007.
197. Emergency Induction of Hypothermia – CPR. 27th International Symposium on Intensive Care & Emergency Medicine (ISICEM), Brussels, Belgium, March 27-30, 2007.
198. Neurologic Crises and Management. 27th International Symposium on Intensive Care & Emergency Medicine (ISICEM), Brussels, Belgium, March 27-30, 2007.
199. Breakthroughs in Resuscitation. Pediatric Grand Rounds, St. Louis, Missouri, May 2-4, 2007.
200. Neurointensive Care. 5th World Congress of the World Federation of Pediatric Intensive and Critical Care Societies (WFPICCS), Geneva, Switzerland, June 24-28, 2007.
201. Emergency Preservation for Resuscitation. 5th World Congress of the World Federation of Pediatric Intensive and Critical Care Societies (WFPICCS), Geneva, Switzerland, June 24-28, 2007.
202. Update on TBI Guidelines. 5th World Congress of the World Federation of Pediatric Intensive and Critical Care Societies (WFPICCS), Geneva, Switzerland, June 24-28, 2007.
203. Publishing in *Pediatric Critical Care Medicine*. 5th World Congress of the World Federation of Pediatric Intensive and Critical Care Societies (WFPICCS), Geneva, Switzerland, June 24-28, 2007.
204. Cerebral Resuscitation: Quo Vadis. Children's Hospital of Orange County Heart Institute, Opening Ceremony, California, September 25-26, 2007.
205. The Legacy of Dr. Peter Safar. 2nd International Brain Hypothermia Symposium 2007, South Beach, Florida, October 24-27, 2007.
206. Effect of Hypothermia on Mechanisms of Secondary Damage after Pediatric TBI and Asphyxia. 2nd International Brain Hypothermia Symposium 2007, South Beach, Florida, October 24-27, 2007.
207. Breakthroughs in Resuscitation Research. Pediatric Grand Rounds, Annual Critical Care Medicine Visiting Professorship, Columbus Children's Hospital, Ohio, November 27-29, 2007.
208. New Developments in Brain Injury Research: Studies at the Safar Center, Research Conference, Annual Critical Care Medicine Visiting Professorship, Columbus Children's Hospital, Ohio, November 27-29, 2007.

209. The Molecular Biology of Blast-Induced Traumatic Brain Injury. PREVENT Kickoff Meeting. New York, December 14, 2007.
210. Neurologic Injury: Can it be modeled? SCCM Congress 2008, Hawaii, February 2-6, 2008.
211. Neuro Protection in the ICU. 17th Annual Pediatric Critical Care Colloquium, Vancouver, British Columbia, February 20-22, 2008.
212. Breakthroughs in Resuscitation Research. Pediatric Grand Rounds, Department of Pediatrics at the State University of New York at Stony Brook, New York, March 19, 2008.
213. Current Concepts Head Trauma. Society for Pediatric Anesthesia, San Diego, California, April 3-6, 2008.
214. *Pediatric Critical Care Medicine* and *Critical Care Medicine*. Society for Pediatric Anesthesia, San Diego, California, April 3-6, 2008
215. Emergent Potential Treatments for Blast-Induced Neurotrauma. National Institute of Neurological Disorders and Stroke: Neurological Effects of Blast Injury, Rockville, Maryland, April 10, 11, 2008.
216. The Brain, the Heart, and Therapeutic Hypothermia. Bakken Lecture (Keynote Lecturer), Cleveland Clinic, Cleveland, Ohio, June 4-5, 2008.
217. Pathophysiology Guided Therapeutic Approaches to Blast TBI and Polytrauma. National Neurotrauma Symposium, Orlando, Florida, July 27-30, 2008.
218. Therapeutic Hypothermia: The Safar Vision. 50th Anniversary celebration of the Multidisciplinary ICU, Baltimore, Maryland, September 26-27, 2008.
219. Searching for a Breakthrough or Stamp Collecting—It's the Fellows that Count. American Academy of Pediatrics, Section on Critical Care—Distinguished Career Award. Boston, Massachusetts, October 10-13, 2008.
220. Use of Biomarkers in Pediatric Brain Injury. European Academy of Pediatrics, Nice, France, October 23–28, 2008.
221. How to Get a Paper Published. European Academy of Pediatrics, Nice, France, October 23–28, 2008.
222. New Concepts in Cerebral Protection. European Academy of Pediatrics, Nice, France, October 23–28, 2008.
223. Neuroprotection Strategies in Traumatic Brain Injury. Society for Neuroscience Plenary Speaker, Washington, DC, November 15, 2008.
224. The Use of Hypothermia in Resuscitation. Keynote Speaker at the 7th International Symposium of the Pediatric Cardiac Critical Care Society, Miami, Florida, December 2-7, 2008.
225. The Spectrum of Biomarkers in TBI: Insight into Pathobiology and Treatment. WRAIR and NHLBI Meetings, Recent Advances in the Treatment of Traumatic Brain Injury: Efficacy and Safety of Parenteral Progesterone Symposium. Washington, DC, January 15-16, 2009.
226. Recent Studies at the Safar Center. Visiting Professor – Children's Hospital of Philadelphia, January 21-22, 2009.
227. Breakthroughs in Resuscitation. Grand Rounds, Visiting Professor – Children's Hospital of Philadelphia, January 21-22, 2009.
228. Resuscitation Cooling, and Cerebral Protection in the ICU. SOTA/ American Thoracic Society Board Reviewer Course Meeting, Chicago, IL, February 4-8, 2009.
229. Biomarkers in Pediatric Brain Injury: Diagnosis, Prognosis, and Therapeutic Monitoring Webinar, Brain Trauma Foundation, April 1, 2009.

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230. Molecular Biology of Mild Hypothermia in Central Nervous System Injury: What Does it Effect? 2009 11th International Consensus Conference (ICC), Therapeutic Hypothermia – Too Cool or Not To Cool? April 22-28, 2009.

Planned as of April 2009

1. How Do We Re-Warm? Pathophysiology and Clinical Approaches. 2009 11th International Consensus Conference (ICC), Therapeutic Hypothermia – Too Cool or Not To Cool? April 22-28, 2009.
 2. Searching for Breakthroughs in Cerebral Resuscitation. Grand Rounds, Harvard University, Boston, MA. June 3, 2009.
 3. Acute Traumatic Brain Injury in Children and Neuroprotection. Brain Injury in Children Symposium. The Hospital for Sick Children, Toronto, Canada. July 7-10, 2009.
 4. Combat Casualty Care-relevant Studies at the Safar Center. ATACCC, St. Pete's Beach, Florida, August 10-12, 2009.
 5. XII ISBS, Parma, Italy, August 25-28, 2009.
 6. Therapeutic Hypothermia. Keynote Lecture, 3rd International Hypothermia Symposium, Lund Sweden, September 2–5 2009.
 7. CNS 2009 Integra Foundation Lecturer, New Orleans, October 27-29, 2009
3. Other research related activities:

Editorial Board

Pediatric Critical Care Medicine, Editor-in-Chief, 2001-present

Critical Care Medicine, 1996 – present

Critical Care Medicine, Scientific Editor, 1997 - present

Journal of Neurotrauma, 1996 – present

Journal of Neurotrauma, Special Issue on Inflicted Childhood Neurotrauma, Guest Editor, 2006

Journal of Neurotrauma, Special Issue on Blast-induced Traumatic Brain Injury, Guest Editor, 2007

Neurocritical Care, 2004 - present

Pediatric Critical Care Medicine, 2000-2001

Stroke, 1989-1991

Pediatric Life Support International, Founding Editor, 1996

New Horizons, Scientific Editor, 1998–2000

Obshchaya Reanimatologiya (General Reanimatology), 2004 – present

Textbooks

Brain Injury: Molecular and Cellular Biology of Critical Care Medicine-Associate Editor, 2001

Textbook of Critical Care 5th Edition –Co-Editor, 2002-2008

Textbook of Pediatric Intensive Care 4th Edition-Section Editor, 2006-2008

Textbook of Critical Care 6th Edition –Co-Editor, 2009-present

Ad Hoc Reviewer:

Journals -

American Journal of Pathology, 1999

American Journal of Physiology: Heart & Circulatory Physiology, 1996–2000

Anesthesia and Analgesia, 1994, 1995, 2005

Anesthesiology, 1996, 2003

Brain Research, 1994, 1999-2004, 2008

Brain Research Bulletin, 1997

Circulation, 2007-present

Critical Care Medicine, 1988, 1993 - present

Experimental Neurology, 1995, 2007-present

JAMA, 2003, 2007

Journal of the American College of Surgeons, 2006 - present

Journal of Cerebral Blood Flow and Metabolism, 1993 - present

Journal of Intensive Care Medicine, 1995, 1997, 2003

Journal of Neurochemistry, 1997-1998

Journal of Neuropathology and Experimental Neurology, 2006-present

Journal of Neurosurgical Anesthesia, 1988

Journal of Neuroscience, 1995, 1998-present

Journal of Neuroscience Research, 2005, 2007

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Journal of Neurotrauma, 1994 - present
Journal of Pediatrics, 2003, 2007
Molecular and Clinical Neuropathology, 1994, 1995, 1997
Neurocritical Care 2004-present
New England Journal of Medicine, 2003, 2005
Pediatric Pulmonology, 1992
PNAS-Proceedings of the National Academy of Sciences, USA, 1999
Resuscitation, 2008
Shock, 2007-present
Stroke, 1987-1989, 1995, 2003, 2004, 2008
The Lancet, 2001-2003, 2008
The Lancet Neurology, 2008
The Journal of Laboratory and Clinical Medicine, 2002-2003

Ad Hoc Reviewer:

Grants -

NIH/ADAMHA Peer Review Consultant, 1992
Western Pennsylvania Psychiatric Institute and Clinic (WPIC) Research Committee, 1992–1994, 2005
PSI Foundation, Ontario, Canada, 1994
Children's Hospital of Eastern Ontario Research Institute, Ontario Canada 1994, 1995
University of Pittsburgh ADRC Seed Grant Proposal, 1995
Department of Veterans Affairs Merit Review, 1996
The Wellcome Trust, 1998
The Hospital for Sick Children Foundation, 1998
Department of Veterans Affairs Merit Review, 2000
US Army Medical Research and Materiel Command, American Institute of Biological Sciences (AIBS), 2001
Pittsburgh Institute for Neurodegenerative Disorders, 2002
Virginia Commonwealth University, Commonwealth Neurotrauma Initiative Trust Fund, 2003
NIH/NINDS-Study Section Ad Hoc-1997, 2006, 2008
AHA National Affiliate-Cerebrovascular Study Section-2006
Neurocritical Care Society-Grant reviewer-2006
NICHD Council Liaison - National Center for Medical Rehabilitation Research (NCMRR), June 2002–Dec 2005
NIH/NINDS/NSDA Program Projects Study Section, Permanent Member-2007-present

Committees

Local -

Scientific Affairs Committee-Department of Anesthesiology and Critical Care Medicine, Univ of Pittsburgh, 1989-2003
PCTRC Advisory Committee-Children's Hospital of Pittsburgh, 1991-present
Research Advisory Committee-Department of Anesthesiology and Critical Care Medicine, Univ of Pittsburgh, 1993-1999
Reappointment and Promotion Committee-Departments of Anesthesiology and Critical Care Medicine, Univ of Pittsburgh, 1995–1996, 1998-present
23rd Annual Meeting of ISOTT-Pittsburgh, PA, August 23-27, 1995
Program Chairman, Annual Peter and Eva Safar Lecture, 1995-present
Anesthesia & CCM Newsletter, 1995-2005
PCTRC Advisory Committee-University of Pittsburgh Medical Center, 1996–September 1999
Research Advisory Committee-Children's Hospital of Pittsburgh, 1997 - present
Executive Steering Committee-Department of Anesthesiology and Critical Care Medicine, Univ of Pittsburgh, 1997-2002
Chairman, Scientific Affairs Committee-Department of Anesthesiology and Critical Care Medicine, Univ of Pittsburgh, 1998–2002
Chairman, Scientific Affairs Committee-Department of Anesthesiology, 1998-2003
Scientific Affairs Committee-Department of Critical Care Medicine, 2003–present
Associate Director, Brain Trauma Research Center-Department of Neurological Surgery, 1998-present
Health Sciences Animal Research Advisory Committee (HSARAC), 1999–2001
Strategic Planning Committee-Children's Hospital of Pittsburgh, 1999
Associate Director, PCTRC Advisory Committee-Children's Hospital of Pittsburgh, 1999–present
Scientific Advisory Committee-Pittsburgh NMR Center for Biomedical Research, 2000–present
Chairman, Scientific Advisory Committee-Pittsburgh NMR Center for Biomedical Research, 2001–present

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Board of Directors, Winter Institute of Simulation, Education and Research (WISER), Asmund S. Laerdal Foundation for Acute Medicine, July 2001-June 2006

Program Chairman, Annual Safar Symposium, 2002-present

Vice Chairman, Department of Critical Care Medicine, 2002-present

Executive Steering Committee, Department of Critical Care Medicine, 2002-present

Standing Committee for Tenured Faculty Promotions and Appointments, 2002-2005

Executive Steering Committee, Center for Injury Research and Control, 2002-present

Vice Chair, University of Pittsburgh Injury Research Council, 2002-present

Affiliate Faculty Member, Center for Inflammation and Regeneration Modeling (CIRM), McGowan Institute for Regenerative Medicine, 2006-present

Chair, Ad Hoc Review Committee for Faculty Appeal—Tenured Faculty Promotions and Appointments, June 2006

Chairman, **Space Allocation Committee**, Department of Critical Care Medicine, 2008-present

National -

Program Committee-Society of Critical Care Medicine Meeting, 1990-1993

Program Chairman-Society of Critical Care Medicine Meeting, 1994

Abstract Reviewer-Society of Critical Care Medicine Meeting, 1987-present

Selection Committee-Young Investigator Award, SCCM, 1989, 1990, 1994

Abstract Reviewer- PR (Section on Critical Care Medicine), 1993

Selection Committee-Laerdal Foundation Lecture, SCCM, 1994

Selection Committee-In Training Award SCCM, 1994

Continuing Education Committee-Society of Critical Care Medicine, 1994-1996

Critical Care Consultant-Tenth International Brain Edema Symposium, 1996

Program Committee-National Neurotrauma Society Meeting, 1997, 2000, 2001, 2003, 2008

Session Co-Chair-The 26th Annual National Neurotrauma Society Symposium, 2008

Program Committee-Sixth Vienna Shock Forum, 1997

Program Chairman-Sixth Wiggers Bernard Conference, 1997

Member-American Board of Pediatrics - Sub-board in Pediatric Critical Care Medicine, 1998 - present

Chair, Credentials Committee – American Board of Pediatrics, Pediatric Critical Care Medicine Subboard, 2000, 2002

Credentials Committee – American Board of Pediatrics, Pediatric Critical Care Medicine Subboard, 2001

Abstract Reviewer-American Academy of Pediatrics Meeting, 2001

Consultant-American Academy of Pediatrics, Moderate Head Injury Subcommittee, 2001

Advisory Board Member-National Center for Medical Rehabilitation Research (NCMRR), National Institutes of Health, December 1, 2001– present

Member –American College of Critical Care Medicine Distinguished Investigator Award Committee, 2005

Committee Member, AHA Pennsylvania Affiliate, Fellows' Research Day Task Force, 2004-present

Selection Committee Member, AHA Pennsylvania Affiliate, Pulse of Pittsburgh Award, 2004-present

Member-Advisory Board for Timmy W. Huh, MD, The Children's Hospital of Philadelphia, 2005-present

SCCM Delegate-World Federation of Critical Care Medicine, 2005-present

Member-Ntl Advisory Board-Collaborative Pediatric Critical Care Research Network (CPCCRN), 2005-present

Ad hoc Reviewer, AHA National Affiliate Brain 3, 5th Section, 2006-present

External Advisory Committee-T32 The Critically Ill Developing Host: From Pathogenesis to Treatment-M. Michele Mariscallo, MD-2006-present

Abstract Reviewer – WFPICCS World Congress- 2007

Selection Committee, Distinguished Investigator Award, ACCM, 2007

Internal Advisory Board, University of Cincinnati Clinical Consortium Coordinating Center (UC5)-2007-present

Vice President, National Neurotrauma Society-2009

Other -

Editorial Board Member-Multidisciplinary Critical Care Knowledge Assessment Program (MCCCKAP) of the Society of Critical Care Medicine, 1991-1994

Field Tester for the American Board of Pediatrics Subspecialty Board Examination in Pediatric Critical Care Medicine, 1993

Planning Committee-National Multi-Centered Animal Traumatic Brain Injury Study (NATBIS), 1993, 1995

Consultant to the First International Conference on Pediatric Resuscitation, Washington, DC, June 1994

Consultant-Cypros Pharmaceutical Corporation, 1997

Committee Member—Evidence Report: Management of Traumatic Brain Injury in Infants and Children, Oregon Health Science University, 2000–present

Patrick M. Kochanek, MD

Dissertation Committee—Michael A. Tortorici, Pharm D., Clinical Pharmaceutical Scientist Program, Department of Pharmaceutical Sciences, August 2003–2007

Thesis Committee—Ava Puccio, RN, PhD Candidate, School of Nursing, University of Pittsburgh, 2005-2008

Committee Member for American College of Critical Care Medicine, Distinguished Investigator Award, 2005

Chair—Guidelines for the Mgt of Severe TBI in Infants, Children and Adolescents. Brain Trauma Foundation 2008-present

Round Table Committee Member—St. Louis TBI Workshop, 2008-present

External Advisory Board—TBI Clinical Trials Multicenter Research Consortium funded by the Congressional Directed Medical Research Programs (CDMRP), 2009-present

External Advisory Board—Texas Multicenter TBI Research Consortium funded by the Congressional Directed Medical Research Programs (CDMRP), 2009-present

Thesis Committee—Johanna Nordmark, MD, PhD Candidate—Uppsala University, Sweden, 2009

Thesis Committee—Jocelyn Zhou, PhD Candidate—School of Pharmacy, University of Pittsburgh, 2009-

Consultant—BHR Pharmaceuticals, 2009-

ARTICLES IN SUBMISSION

1. Adelson PD, Srinivas R, Chang Y, Kochanek PM: Cerebrovascular response in children following severe traumatic brain injury. Neurosurgery (in submission 3/3/08).
2. Adelson PD, Stevenson KL, Davis DW, Fellows-Mayle W, Chang Y, Kochanek PM, Dixon CE: Age at injury experimental models of controlled cortical impact in the immature rat. J Neurotrauma (in revision 9/20/07).
3. Exo J, Shellington D, Bayir H, Vagni V, Feldman K, Ma L, Hsia C, Clark RSB, Jenkins LW, Dixon CE, Kochanek PM: Resuscitation of traumatic brain injury and hemorrhagic shock with polynitroxyl albumin: effects on acute hemodynamics, survival, and hippocampal histology. J Neurotrauma (in submission 4/15/09; in revision 5/20/09)
4. Hostler D, Zhou JQ, Bies RR, Tortorici MA, Ritterberger JC, Kochanek PM, Callaway CW, Poloyac SW: Mild hypothermia decreases the metabolism of midazolam in normal healthy subjects.
5. Kochanek PM, Fink E, Bell MJ: Re-warming after mild therapeutic hypothermia: Clinical considerations. Therapeutic Hypothermia Symposium— Too Cool or Not To Cool?
6. Lahoud-Rahme MS, Stezoski J, Kochanek PM, Melick J, Tisherman SA, Drabek T: Blood-brain barrier integrity in a rat model of emergency preservation and resuscitation. Resuscitation (in submission 7/3/08).
7. Sanchez De Toledo J, Adelson PD, Watson RS, Gaines B, Brown SD, Kochanek PM, Wisniewski SR, Fink E, Bayir H, Clark RSB, Bell MJ: Relationship between delayed pancreatitis and cerebral events in children after traumatic brain injury. Crit Care Med (in submission 3/19/09?).
8. Sarnaik A, Conley Y, Okonkwo D, Barr T, Fink E, Szabo C, Kochanek PM, Clark RSB: Genotype-phenotype relationships of PARP-1 polymorphisms after traumatic brain injury. Crit Care Med (in submission 4/3/09).
9. Tang M, Alexander H, Clark R, Kochanek P, Kagan V, Bayir H: Minocycline Reduces Neuronal Death and Attenuates Microglial Response after Pediatric Asphyxial Cardiac Arrest. J Cereb Blood Flow Metab (in submission 4/28/09).

ARTICLES IN PREPARATION

1. Chadha MS, Gao W, Bayir H, Kochanek PM, Jenkins LW: A comparison of the global proteomic profiles of inflicted and non-inflicted pediatric traumatic brain injury.
2. Chadha MS, Kochanek PM, Stezoski J, Drabek T, Gao W, Jenkins LW: A systematic proteomic assessment of the effects of hypothermia on hippocampal protein changes during 30 minutes of global and complete cerebral ischemia.
3. Haselkorn ML, Shellington D, Jackson EK, Vagni V, Janesko-Feldman K, Dubey RK, Gillespie DG, Cheng D, Bell MJ, Jenkins LW, Homanics G, Schermann J, Kochanek PM: Adenosine A₁ receptor activation as a brake on microglial proliferation after experimental traumatic brain injury in mice.

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4. Hostler D, Zhou JQ, Bies RR, Tortorici MA, Ritterberger JC, Kochanek PM, Callaway CW, Poloyac SM: Mild Hypothermia Decreases the Metabolism of Midazolam in Normal Healthy Subjects. Clin Pharmacol Ther
5. Kochanek PM, Dixon CE, Jenkins L, Clark RSB, Chen JF, Homanics G, Feldman K, Vagni V, Jackson EK: Functional and neuropathological outcome after experimental traumatic brain injury in adenosine A2a receptor knockout mice.
6. Nozari A, Safar P, Cortese-Hassett A, Bontempo F, Stezoski SW, Wu X, Tisherman S, Kochanek P, Slater B, Carcillo J: Coagulopathy and multiple organ failure after resuscitation from lethal traumatic/hemorrhagic cardiac arrest in dogs.
7. Puccio A, Kochanek PM, Jackson EK, Mi Z, Wisniewski SR, Clark RSB, Carcillo JA, Marion DW: Brain interstitial adenosine concentration after severe head injury in humans.
8. Wagner AK, Scanlon J, Miller MA, Ren D, Kochanek PM, Conley YP: Adenosine A1 receptor gene variant associated with post-traumatic seizures after severe TBI.
9. Washington C, Vagni V, Feldman K, Jenkins L, Jackson EK, Kochanek PM. Effect of acute and chronic caffeine administration on histological outcome after experimental traumatic brain injury in mice.
10. Wu X, Stezoski J, Safar P, Kentner R, Behringer W, Nozari A, Kochanek P, Tisherman SA: Delayed mild hypothermia prolongs survival following severe hemorrhagic shock in rats.