

JOHN THEODORE POVLISHOCK

CURRENT POSITION

Professor and Chair
Department of Anatomy and Neurobiology
Director, Commonwealth Center for the Study of Brain Injury
Virginia Commonwealth University
PO Box 980709
Richmond, Virginia 23298-0709
Phone: 804.828.9623
Fax: 804.828.9477
Email: jtpovlis@vcu.edu

EDUCATION

Ph.D., Saint Louis University, 1973
Anatomy

M.S. (R), Saint Louis University, 1971
Anatomy

B.S., Loyola College, 1969
Biology

ACADEMIC APPOINTMENTS OR OTHER SIGNIFICANT WORK EXPERIENCE

Professor and Chair Department of Anatomy and Neurobiology Virginia Commonwealth University	October 1995 - present
Director Commonwealth Center for the Study of Brain Injury Virginia Commonwealth University	July 1993 - present
Co-Director VCU Neuroscience Center	July 1993 - 2005
Professor of Surgery Division of Neurosurgery Virginia Commonwealth University	October 1989 - present
Professor of General Dentistry Adjunct Virginia Commonwealth University	July 1988 - present
Professor of Anatomy Department of Anatomy and Neurobiology Virginia Commonwealth University	July 1982 - present

Associate Professor of Anatomy Department of Anatomy Virginia Commonwealth University	July 1978 - June 1982
Assistant Professor of Anatomy Department of Anatomy Virginia Commonwealth University	July 1975 - June 1978
Instructor in Anatomy Department of Anatomy Virginia Commonwealth University	August 1973 - July 1975
Graduate Fellow Department of Anatomy Saint Louis University	September 1969 - August 1973

SCIENTIFIC, HONORARY AND PROFESSIONAL SOCIETIES MEMBERSHIP

National Advisory Neurological Disorders and Stroke Council, Member	2007 - 2011
Society for Neuroscience	1980 - present
National Neurotrauma Society President	1986 - present 1989 - 1990
Sigma Xi	1990 - 1998
American Association for the Advancement of Science	1976 - present

MEMBERSHIP IN COMMUNITY ORGANIZATIONS

Big Brothers of Richmond	1974 - 1976
Board of Directors, Fox Fire Homeowners' Association	1979 - 1981

SPECIAL AWARDS, FELLOWSHIPS AND HONORS

Institutional – All Awards at Virginia Commonwealth University

Outstanding Teacher School of Medicine (Class of 1979)	1976
Outstanding Teacher School of Dentistry (Class of 1980)	1977
Outstanding Teacher School of Medicine (Class of 1980)	1977

Outstanding Faculty Member Department of Anatomy	1977
Teacher of the Year School of Dentistry (Class of 1981)	1978
Outstanding Teacher School of Medicine (Class of 1981)	1978
Teacher of the Year School of Medicine (Class of 1982)	1979
Best Professor School of Medicine (Class of 1982)	1979
Teacher of the Year School of Dentistry (Class of 1983)	1980
Best Professor School of Medicine (Class of 1983)	1980
Alpha Sigma Chi Outstanding Faculty Member of MCV	1980
Best Professor School of Medicine (Class of 1984)	1981
Best Professor School of Medicine (Class of 1985)	1982
University Award of Excellence in Teaching	1983
Outstanding Teacher School of Medicine (Class of 1986)	1983
Best Professor School of Medicine (Class of 1984)	1984
Outstanding Teacher School of Medicine (Class of 1987)	1984
Best Professor School of Medicine (Class of 1985)	1985
Outstanding Teacher School of Medicine (Class of 1988)	1985
Best Professor School of Medicine (Class of 1986)	1986
Outstanding Teacher School of Medicine (Class of 1989)	1986

Best Professor School of Medicine (Class of 1987)	1987
Best Professor School of Medicine (Class of 1990)	1987
Best M I Professor School of Medicine (Class of 1988)	1988
Outstanding Teacher School of Medicine (Class of 1991)	1988
Best M I Professor School of Medicine (Class of 1989)	1989
Best Professor School of Medicine (Class of 1992)	1989
Outstanding Teacher School of Medicine (Class of 1993)	1990
Outstanding Teacher School of Medicine (Class of 1994)	1991
MCV Annual Faculty Award for Excellence in Teaching	1991
University Award of Excellence	1992
Distinguished Faculty Award School of Basic Health Sciences	1992
Outstanding Teacher School of Medicine (Class of 1995)	1992
Outstanding Teaching Award School of Medicine (Class of 2005)	2002
Outstanding Teaching Award School of Medicine (Class of 2007)	2004

National and International

Javits Neuroscience Investigator Award National Institute of Neurological Disorders and Stroke	1983 - 1990
Javits Neuroscience Investigator Award National Institute of Neurological Disorders and Stroke	1990 - 1997
FIDIA Research Foundation and National Institute of Neurological Disorders and Stroke Award for Brain Injury Research	1990

Caveness Award National Head Injury Foundation	1991
AQA (Alpha Omega Alpha) Medical College of Virginia - Brown-Sequard Chapter	1992
Brain Trauma Foundation Lecturer Award Joint Congress of Neurological Surgery	1994
Award for Distinguished Service to the Neurotrauma Society	1994
Abbie Lecturer Award University of Adelaide, Australia	1994
William Henry Hudson Lecturer Award Southern Association of Neurological Surgeons	1997
OKY (Omicron Kappa Upsilon), Kappa Chapter	1998
Virginia's Outstanding Scientist Award	2006
Bass Lecturer Award, Society of Neurological Surgeons	2008
Deborah L. Warden Lectureship Defense and Veterans Brain Injury Center	2010
Doctor of Science (honoris causa) University of Pécs, Hungary	2011

EXTERNAL GRANTS FROM THE NATIONAL INSTITUTES OF HEALTH

Principal Investigator, P30NS12587
Neural and Vascular Alterations in Experimental Brain Trauma
12/01/76 - 03/31/79

Principal Investigator, P30NS12587
Subtle and Transient Neural and Vascular Alterations in Experimental Brain Injury
04/01/79 - 03/31/82

Principal Investigator, P30NS12587
Neural and Vascular Change with Trauma and Experimental Subarachnoid Hemorrhage
04/01/82 - 03/31/84

Principal Investigator, NINCDS, P30NS12587
Morphopathologic Core Facility
04/01/82 - 03/31/84

Principal Investigator, R01NS20193
Axonal Change in Minor Head Injury
12/01/83 - 11/30/90 *Designated as a Javits Neuroscience Investigator Award*

Principal Investigator, P30NS12587
Neural and Vascular Change with Trauma and Experimental Subarachnoid Hemorrhage
04/01/84 - 03/31/87

Principal Investigator, P30NSI2587
Morphologic Core Facility
04/01/84 - 03/31/89

Principal Investigator, T32NS07288
The Brain Parenchymal and Vascular Response to Trauma
07/01/86 - 06/30/91

Principal Investigator, P30NSI2587
Continuing and Widespread Neural and Vascular Change with Trauma
04/01/87 - 03/31/89

Principal Investigator, P30NSI2587
Blood-brain barrier alterations with brain injury
04/01/89 - 03/31/92

Principal Investigator, R01NS20193
Neural change following traumatic brain injury
12/01/90 - 11/30/97
Designated as a 2nd Javits Neuroscience Investigator Award

Principal Investigator, R01NS29469
The Role of Microvascular Change in Brain Injury
04/01/91 - 03/31/94

Principal Investigator, T32NS07288
The Brain Parenchymal and Vascular Response to Trauma
07/01/91 - 06/30/96

Principal Investigator, R03NS29625
Neurotrauma Symposium
07/01/90 - 06/30/91

Principal Investigator, P30NS12587
Laboratory Core
08/01/94 - 7/31/99

Principal Investigator, P302NS20193
The Axonal Response to Traumatic Brain Injury
12/01/97 - 11/30/02

Principal Investigator, T32NS07288
The Brain Parenchymal and Vascular Response to Trauma
07/01/96 - 06/30/01

Principal Investigator, R01NS045824-08
Neuronal Somatic Response to Traumatic Brain Injury
08/09 – 07/11

Co-Investigator - HL 35935
Brain Microcirculation and Endothelial Injury
Principal Investigator: Dr. William Rosenblum
10/01/85 - 09/30/90

Co-Investigator - NINDS NS25871
Cerebrovascular Consequences of Systemic rIL-2 Infusion
Principal Investigator: Dr. Mary D. Ellison
07/01/88 - 06/30/91

Co-Investigator - NS19316
Cerebral Microcirculation in Experimental Brain Injury
Principal Investigator: Dr. H.A. Kontos
04/01/86 - 03/31/93

Co-Investigator - NS19316
Cerebral Microcirculation in Experimental Brain Injury
Principal Investigator: Dr. H. A. Kontos
04/01/93 - 06/30/00

Co-Investigator - NS 21851
Cerebral Microcirculation in Experimental Hypertension
Principal Investigator: Dr. H. A. Kontos
07/01/90 - 06/30/95

Principal Investigator, R01HD055813-28
The Axonal Response to Traumatic Brain Injury
02/07 – 01/13
\$1,540,952 - Direct Costs

CURRENT FUNDING

Principal Investigator, P30NS047463-08
VCU Neuroscience Center Core Grant
08/08 - 11/13
\$2,132,442 – Direct Costs

Principal Investigator, T32NS007288-25
The Brain Parenchymal and Vascular Response to Trauma
07/07 - 06/13
\$1,407,924 - Direct Costs

Principal Investigator, R01 NS077675-01
Mild TBI Alters Axonal Structure, Neuronal Electrophysiology & Vascular Function
10/11-09/16
\$1,996,419 Direct Costs

Co-Investigator, DOD 001973
Operation Brain Trauma Therapy
9/10 – 9/15
Principal Investigator: Dr. Patrick M. Kochanek
\$1,250,000 Total Costs

INVITED SEMINARS AND PRESENTATIONS

Third Chicago Symposium on Neural Trauma, Chicago, Illinois, 1977

Virginia Trial Lawyers Association, Medical Institute for Attorneys, Injuries to the Brain and Spinal Cord, Richmond, Virginia, 1976

Virginia Trial Lawyers Association, Medical Institute for Attorneys, Injuries to the Extremities, Richmond, Virginia, 1977

T.C. Williams School of Law, Richmond, Virginia, 1977

American Association of Critical Care Nurses, 1978

Virginia Trial Lawyers Association, Medical Institute for Attorneys, Injuries to the Head and Neck, Hyatt House, Richmond, Virginia, 1979

Satellite Symposium on the Cerebral Microvascular: Investigation of the Blood- Brain Barrier, University of Texas, Galveston, Texas, 1979

Pathology Grand Rounds, Medical College of Virginia, Richmond, Virginia, 1980

Spinal Cord Injury Center, Ohio State, 1980

Erwin Riesch Symposium on Cerebral Microcirculation - Berlin, 1980

Virginia Trial Lawyers Association, Medical Institute for Attorneys, Injuries to the Abdomen and Thorax, Hyatt House, Richmond, Virginia, 1980

Fourth Chicago Symposium on Neural Trauma, Chicago, Illinois, 1980

University of Virginia, Department of Neurosurgery, Charlottesville, Virginia, 1980

American College of Surgeons, Atlanta, Georgia, 1981

University of Maryland, Department of Anatomy, 1981

Neurosurgical Conference by the Sea, Virginia Beach, Virginia, 1982

Department of Neurology, University of Miami, 1983

Law and Medicine Seminar, Virginia Trial Lawyers, Richmond, Virginia, 1983

Medical College of Virginia, Pharmacology Departmental Seminar, Richmond, Virginia, 1984

Colorado State University, Anatomy Departmental Seminar, 1984

University of Virginia, Neurosurgery Departmental Seminar, Charlottesville, Virginia, 1984

NINCDS Grand Rounds, National Institutes of Health, 1984

Postgraduate Course on the Rehabilitation of the Brain Injured Adult and Child, Williamsburg, Virginia, 1984

Neuroscience Conference by the Sea, Norfolk, Virginia, 1984

Medical College of Virginia, Anesthesiology Grand Rounds, Richmond, Virginia, 1984

Medical College of Virginia, Neurology Grand Rounds, Richmond, Virginia, 1985

University of Virginia, Neurosurgery Departmental Seminar, Charlottesville, Virginia, 1985

American Association of Neuroscience Nurses, Atlanta, Georgia, 1985

Third Annual Neural Trauma Symposium, Satellite Symposium of the Society for Neuroscience, Dallas, Texas, 1985

Postgraduate Course on the Rehabilitation of the Brain Injured Adult and Child, Williamsburg, Virginia, 1986

UCLA School of Medicine, Neurosurgery Seminar, 1986

UCLA School of Medicine, Interdepartmental Conference, September, 1986

The George William Church Lecturer in Neuroscience, University of Texas, Health Science Center at San Antonio, Texas, 1986

University of Medicine and Dentistry of New Jersey, Anatomy Departmental Seminar, 1986

Moody Foundation Conference on Mild Head Injury, Galveston, Texas, 1987

Fifth National Head Injury Conference, Charlottesville, Virginia, 1986

Fourth Annual Neural Trauma Symposium, Satellite Symposium of the Society for Neuroscience, Washington, D. C. 1986

Vasospasm Conference, Cooperative Aneurysm Study, Charlottesville, Virginia, 1987

Presidential Symposium, American Association of Neuropathologists, Seattle, Washington, 1987

Commencement, Hermitage High School, Richmond, Virginia, 1987

The University of Washington Medical Center, Neuroscience Seminar, 1987

University of California, San Francisco Neuroscience Seminar, 1987

New Medico Head Injury Conference, Chicago, Illinois, 1987

National Invitational Conference on Traumatic Brain Injury Research, Washington, D.C., 1987

Michigan Symposium Series on Trauma, University of Michigan, 1987

Symposium on the Cellular and Molecular Correlates of CNS Trauma, University of Texas, 1988

Symposium: American Association of Neurological Surgeons, Toronto, Canada, 1988

Medical College of Virginia, Neurology Grand Rounds, Richmond, Virginia, 1988

Canadian Congress of Neurological Science, 1989

NIH STEP Program Speaker, The Problems Facing Peer Review, 1989

Postgraduate Course on the Rehabilitation of Brain Injured Adults, Williamsburg, Virginia, 1989

Review and Update in Neurobiology, Marine Biological Lab, Woods Hole, Massachusetts, 1989

Conference on Head-Injured Patient: Advances in the 80s, St. Louis University Medical Center, St. Louis, Missouri, 1989

Neurology Grand Rounds, Medical College of Virginia, Virginia Commonwealth University, Richmond, Virginia, 1990

The Alton D. Brashear Postgraduate Course in Head and Neck Anatomy, Medical College of Virginia, Richmond, Virginia, 1975-1992

11th International Congress of Neuropathology, Kyoto, Japan, 1990

Neurology Ground Rounds, Fukushima Medical College, Fukushima City, Japan

Nihon University School of Medicine, Neurosurgery Seminar, Japan, 1990

Second Japanese Congress of Neurotrauma, Tokyo, Japan, 1990

Seventh Conference on Neural Trauma "Status Report on CNS Trauma and Clinical Scientific Aspects," Charlottesville, Virginia, 1990

Baylor Medical College, Neuroscience Seminar Series, 1990

Baylor Medical College, Neurosurgery Seminar, 1990

Eighth Annual Meeting of the Neurotrauma Society, St. Louis, Missouri, 1990

Neurology/Neurosurgery Grand Rounds, New York University, 1991

Toxicology Division Seminar Series, Medical College of Virginia, Richmond, Virginia, 1991

Department of Physiology Seminar Series, Medical College of Virginia, Richmond, Virginia, 1991

Department of Oral Surgery Seminar Series, Medical College of Virginia, Richmond, Virginia, 1991

First International Neurotrauma Symposium, Fukushima, Japan, 1991

Rehabilitation Medicine Grand Rounds, Veterans General Hospital, Taipei, Taiwan, 1991

Introductory Lecture, Neurotransmitter Satellite Symposium of Brain 91, Key West, Florida, 1991

67th Annual Meeting of the American Association of Neuropathologists, Special Course, Baltimore, Maryland, 1991

12th Annual Trauma Head Injury Conference, Braintree Hospital, Boston, Massachusetts, 1991

Plenary Address - Annual Meeting of the National Head Injury Foundation, Los Angeles, California, 1991

Massachusetts General Hospital, Stroke Program Seminar Series, 1992

McKnight Visiting Professor Lecture Series, The Miami Project, 1992

Visiting Professor, Department of Neurosurgery, University of Tennessee

JFK 4th Annual Conference on Rebuilding Shattered Lives, Edison, New Jersey

Neurotrauma: Concepts, Current Practice & Emerging Therapies Conference, Wayne State University, Dearborn, Michigan

FASEB Summer Conference - Neurobiology of Central Nervous System Injury, Copper Mountain, Colorado, 1992

Annual Congress of the Japanese Human Cell Society, Tokyo, Japan, 1992

Workshop on Models of Ischemic Brain Injury, Bethesda, Maryland, 1992

13th Annual Braintree Hospital Traumatic Brain Injury Conference, Braintree, Massachusetts, 1992

Synaptic Pharmaceuticals, Paramus, New Jersey, 1993

ComaCon 1992 Consensus Conference, Ontario, Canada, 1992

Microcirculatory Stasis in the Brain, Tokyo, Japan, 1993

Second International Neurotrauma Symposium, Glasgow, Scotland, 1993

3rd Annual Conference of the International Association for the Study of Traumatic Brain Injury, Tokyo, Japan, 1993

Pittsburgh Head Injury Conference, 1993

San Diego AANS Meeting, Brain Trauma Foundation Lecture, 1994

Advances in Acute Neurotrauma Care Conference, Hartford, Connecticut, 1994

Bowman Gray School of Medicine, Winston-Salem, North Carolina, 1994

12th International Congress on Neuropathology, Toronto, Canada, 1994

Allegheny General Conference on Mild Head Injury, Pittsburgh, Pennsylvania, 1994

Synergen, Boulder, Colorado, 1994

Frontiers in Acute Case of Traumatic Brain Injury, INOVA Health System, Fairfax, Virginia, 1994

Head Injury '94, Department of Transportation, Washington, D.C., 1994

Mild Traumatic Brain Injury - Doctor-to-Doctor Conference, McGee Rehabilitation Institute, Philadelphia, Pennsylvania, 1994

UCLA Symposium on Traumatic Brain Injury, Los Angeles, California, 1994

12th Annual Meeting of the National Neurotrauma Society, Miami Beach, Florida, 1994

Winter Conference on Brain Research, Steamboat Springs, Colorado, 1995

Department of Pharmacology and Toxicology Seminar, Craig Institute, Denver, Colorado

Wayne State University, Department of Anatomy and Cell Biology, Detroit, Michigan, 1995

Henry Ford Hospital, Neurosurgery Distinguished Researcher Seminar Series, 1995

Mauls Conference on Secondary Brain Injury, Sterzing, Italy, 1995

Neurology Grand Rounds, University of Innsbruck, Innsbruck, Austria, 1995

Grand Rounds of the Neurological Institute of the University of Pennsylvania, 1995

Temple University, Department of Anatomy and Cell Biology, 1995

First World Congress on Brain Injury, Copenhagen, Denmark, 1995

Acute CNS Injury Meeting in Williamsburg, Virginia, 1995

The Dana Alliance for Brain Initiatives, Washington, DC, 1995

Canada - INTS - Toronto, Canada, 1995

First Quebec Conference on Traumatic Brain Injury, Quebec, Canada, 1995

Congress, Canada, Toronto, 1995

13th Annual Neurotrauma Symposium, San Diego, California, 1995

The 1996 Advances in Acute Neurotrauma Conference, Philadelphia, Pennsylvania, 1996

The 26th Winter Conference on Brain Research, Snowmass Village, Colorado, 1996

FASEB Summer Research Conference, Copper Mountain, Colorado, 1996

Annual Meeting of the Neurosurgical Society of Australia, Cairns, Australia, 1996

Eighth Abbie Memorial Lecture, Adelaide, Australia, 1996

NIH Workshop on Spinal Cord Injury: Emerging Concepts, Washington, D.C., 1996

J. Douglas Miller Memorial Meeting, Edinburgh, Scotland, 1996

VII Lubeck Workshop of Legal Medicine and Neurotraumatology in Lubeck, Germany, 1996

Society of Neuroscience, Washington, D.C., 1996

Second World Congress on Brain Injury, Seville, Spain, 1997

Brain Injury Session at the Society for Academic Emergency Medicine Annual Meeting, Washington, DC, 1997

Southern Neurosurgical Society, Inc., William Henry Hudson Lecture, Pinehurst, North Carolina, 1997

Seminar, Department of Neurobiology & Anatomy, University of Texas, Houston, Texas, 1997

Neuroscience Seminar, University of Florida, Gainesville, Florida, 1997

4th International Neurotrauma Symposium, Seoul, Korea, 1997

International Maulls Neurotrauma Symposium, Mechanisms of Secondary Brain Damage, Maulls, Italy, 1998

Parke-Davis Pharmaceutical Research, Ann Arbor, Michigan, 1998

Klinikum GroBhadern, Munich, Germany, 1998

International Symposium for Researchers and Jurists, Basel, Switzerland, 1998

Current Research in the International Study of Injury, Basel, Switzerland, 1998

VI Indo Pacific Congress on Legal Medicine and Forensic Sciences, Kobe, Japan, 1998

Neurotrauma Conference with Professor Povlishock, Tokyo, Japan, 1998

University of Pécs, Pécs, Hungary, 1998

12th Annual Conference for Attorneys, Palm Beach, Florida, 1998

Yale University School of Medicine, 1998 Annual Symposium, New Haven, Connecticut, 1998

Neurological Surgeons Meeting, Seattle, Washington, 1998

Funsten Lecture Series, Science Museum of Virginia, 1998

NIH Consensus Development Conference, Bethesda, Maryland, 1998

75 Years of Neurosurgery in Canada 1923-1998, Toronto, Canada, 1998

University of St. Louis, St. Louis, Missouri, 1999

9th Annual Rotman Research Institute Conference, Toronto, Canada, 1999

Toronto Hospital, Western Division, Toronto, Canada, 1999

University of Miami, Miami, Florida, 1999

3rd World Congress on Traumatic Brain Injury, Montreal, Canada, 1999

American Congress of Rehabilitative Medicine, Baylor College of Medicine, 1999

Immunophilins in the Brain Meeting, Frankfort, Germany, 1999

Purdue University, West Lafayette, Indiana, 2000

Wayne State University, Detroit, Michigan, 2000

First Pannonian Symposium on CNS Injury, Hungary, 2000

Year 2000 Conference on Brain Injury, Brazil, 2000

5th International Neurotrauma Symposium, Germany, 2000

International Neuropsychology Society, Chicago, Illinois, 2001

12th Annual Meeting, American Neuropsychiatric Association, Florida, 2001

University of Pennsylvania, Grand Rounds, 2001

Guilford Pharmaceuticals, Baltimore, Maryland, 2001

American Academy of Neurology, Philadelphia, Pennsylvania, 2001

American Academy of Sports Medicine, Baltimore, Maryland, 2001

21st Annual U.S. Army Medical Department Neurology Conference, Washington, D.C., 2001

Update on the Pathobiology of TBI, Frankfurt, Germany, 2002

Traumatic Axonal Injury in Therapeutic Modulation, Pécs, Hungary, 2002

Annual Meeting of the Brain Injury Association of Colorado, Vail, Colorado, 2002

Keynote Speaker, CNS Injury 2nd Pannonian Symposium, Pécs, Hungary, May 2003

Presenter, 2nd Annual Safar Symposium, Pittsburgh, Pennsylvania, October 2003

Roundtable on Neuro-Brain Research, Bridges in Life Sciences Workshop, Budapest, Hungary, October 2003

Workshop on CNS Injury, 37th Annual Winter Conference on Brain Research, Copper Mountain, Colorado, January 2004

Principal Speaker, International Brain Hypothermia Symposium, Tokyo, Japan, February 2004

Keynote Speaker, 14th Annual Rotman Research Institute Conference, Toronto, Ontario, Canada, March 2004

Presenter, TBI Main Conference, Tampa, Florida, May 2004

Guest Speaker, 5th Annual University of California Neurotrauma Meeting, Carmel, California, August 2004

Guest Lecturer, Seminars in Neuroscience, University of Louisville School of Medicine, Louisville, Kentucky, January 2005

Grand Rounds Lecturer, Department of Neurological Surgery, University of California Davis, Davis, California, February 2005

Guest Speaker, Trial Lawyers Association of British Columbia, Medical and Legal Issues in Brain Injury Program, Vancouver, BC, April 2005

Keynote Speaker, American Association of Neurosurgical Nurses, Neuroscience Nursing Foundation Special Lecture, Washington, DC, April 2005

Guest Lecturer, American Association of Neurological Surgeons Annual Meeting, Young Neurosurgeons Luncheon, New Orleans, Louisiana, April 2005

Guest Speaker, Third Pannonian Symposium on CNS Injury/17th Congress of the Hungarian Neurosurgical Society, Pécs, Hungary, April 2005

Guest Lecturer, National Traumatic Brain Injury Meeting, Shanghai Second Medical University, Shanghai, People's Republic of China, May 2005

Keynote Speaker, 4th International Symposium on Biochemical Markers for Brain Damage, Boothbay Harbor, Maine, September 2005

Presenter, Spinal Cord and Brain Injury Neuro-Rehabilitation Symposium and Spinal Cord Injury Association of Kentucky Summit, September 2005

Presenter, "Finding a 'Cure' for Brain Injury; Improving Outcomes" International Symposium, Johnstown, Pennsylvania, October 2005

Guest Lecturer, "The Diverse and Complex Pathogenesis of Traumatically Induced Axonal Damage: Mechanistic and Therapeutic Insights" Medical College of Georgia, October 2005

Workshop Speaker, American Academy of Neuropsychology, San Antonio, Texas, October 2006

Guest Speaker, Fudan University, Key National Research Laboratory, Shanghai, People's Republic of China, September 2006

Guest Speaker, Chinese Neurosurgical Society, Shen-Zhen, People's Republic of China, September 2006

Keynote Speaker, Italian Immunocytochemical Society, Messina, Italy, June 2007

Keynote Speaker, Japanese Hypothermia Society, Shimonoseki, Japan, July 2007

Invited Speaker, British Association of Surgical Anatomists, Padua, Italy, July 2007

Invited Speaker, Department of Neurological Surgery, Padua, Italy, July 2007

Keynote Speaker, Chinese Trauma Society Meeting, Beijing, China, September 2007

Keynote Speaker, Meeting of the WFNS Neurorehabilitation Society, Taipei, Taiwan, September 2007

Speaker and Session Chair, European Society of Intensive Care, Berlin, Germany, October 2007

Speaker and Session Chair, International Hypothermia Meeting, Miami, Florida, November 2007

Invited Speaker, International Brain Injury Association, Seventh World Congress on Brain Injury,

Lisbon, Portugal, April 2008

Guest Lecturer, *Neurobiology of Disease*, The Vollum Institute, Oregon Health and Science University, April 2008

Bass Lecturer, Society of Neurological Surgeons, Madison, Wisconsin, May 2008

Invited Speaker, The 10th Cincinnati Neurofest, Cincinnati, Ohio, May 2008

Invited Speaker, The 12th Congress of the European Federation of Neurological Societies, Madrid, Spain, August 2008

Speaker and Co-Chair, The 4th Pannonian Symposium on CNS Injury, Pécs, Hungary, September 2008

Invited Speaker, Blast-Related Brain Injury: Imaging for Clinical and Research Applications, Mallinckrodt Institute of Radiology, Washington University, St. Louis, Missouri, October 2008

Invited Speaker, Chinese Neurosurgical Society Meeting, Shanghai, China, October 2008

Invited Speaker, Cleveland Clinic Neuroimaging in Traumatic Brain Injury Symposium, Cleveland, Ohio, October 2008

Invited Speaker, Consensus Conference for Hyperbaric Oxygen Therapy in TBI, Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury, Alexandria, Virginia, December 2008

Guest Lecturer, West Virginia University School of Medicine, January 2009

Guest Lecturer, University of Messina, Italy, March 2009

Keynote Speaker, 15th Annual Blood-Brain Barrier Consortium Meeting, Oregon, March 2009

Invited Speaker, Society of Critical Care Medicine, 11th International Consensus Conference, San Juan, Puerto Rico, April 2009

Invited Speaker, 7th National Congress of Trauma, Chongqing City, China, September 2009

Guest Lecturer, Wayne State University, Detroit, Michigan, November 2009

Invited Speaker, Eighth World Congress on Brain Injury, International Brain Injury Association, Washington, DC, March 2010

Invited Speaker, 2nd Forum of Chinese Head Trauma, Shanghai, China, April 2010

Co-Chair, 5th Pannonian Symposium on CNS Injury, Pécs, Hungary, May 2010

Deborah L. Warden Lectureship, Defense and Veterans Brain Injury Center, 4th Annual TBI Military Training Conference, Washington, DC, August 2010

Invited Speaker, LIV National Congress of the Society of Anatomy and Histology, Messina, Italy, September 2010

Invited Speaker, XXI International Symposium on Morphological Sciences, Taormina, Italy,

September 2010

Invited Speaker, Stark Neurosciences Institute, Indiana University School of Medicine, Indianapolis, Indiana, February 2011

Invited Speaker, National Heart, Lung and Blood Institute/Department of Defense, Bethesda, Maryland, February 2011

Invited Speaker, 4th Annual Translational Neuroscience Conference, University of Denver, Colorado, March 2011

Keynote Speaker, National Capital Region TBI Research Symposium, Gaithersburg, Maryland, April 2011

Invited Speaker, National Institutes of Neurological Disorders and Stroke Workshop on Therapy Development for Diffuse Axonal Injury, Rockville, Maryland, May, 2011

Invited Speaker, Federal Interagency Conference on Traumatic Brain Injury, Washington, DC, June, 2011

Invited Speaker, National Neurotrauma Symposium, Ft. Lauderdale, Florida, July 2011

Invited Speaker, Advanced Technology Applications for Combat Casualty Care (ATACCC), Ft. Lauderdale, Florida, August 2011

Invited Speaker, Department of Neurosurgery, UCLA School of Medicine, California, February 2012

Invited Speaker, Therapeutic Hypothermia and Temperature Management Symposium, Miami, Florida, March 2012

Session Chair, National Neurotrauma Symposium, Phoenix, Arizona, July 2012

Keynote Speaker, Neuroscience Research Day, University of Miami Miller School of Medicine, November 2012

Invited Speaker, College of Engineering and School of Medicine, Wayne State University, Detroit, Michigan, December 2012

Invited Speaker, Department of the Army, Office of the Surgeon General, San Antonio, Texas, January 2013

Invited Speaker, Therapeutic Hypothermia and Temperature Management Symposium, Miami, Florida, March 2013

Invited Speaker, 5th Chinese Forum on Head Trauma, Guangzhou, China, March 2013

Invited Speaker, 6th Pannonian Symposium on CNS Injury, Pécs, Hungary, April 2013

33rd Peter & Eva Safar Lectureship in Medical Sciences and Humanities at the University of Pittsburgh School of Medicine, May 2013

Invited Speaker, Concussion Awareness Summit, Brewer Sports Symposium, Minneapolis, Minnesota, June 2013

UNIVERSITY COMMITTEE SERVICE

School of Dentistry, Academic Performance Committee, 1977-1986

School of Dentistry, Academic Affairs Committee, 1980-1981

School of Medicine, Respiratory-Renal Subject Matter Committee, 1977-1978

Graduate Council, 1980-1983

Chairman, University Internal Faculty Senate, 1979-1982

Ad Hoc Committee for the Creation of a Tenure and Promotion Document, School of Basic Sciences, 1980-1981

Chairman, Anatomy Department Committee for Tenure and Promotion, 1982

Chairman, Physical Resources Committee, School of Basic Sciences, Self-Study for the Southern Association of Colleges and Schools, 1982

Chairman, Faculty Committee, School of Basic Sciences, 1983-1985

Faculty Committee, School of Medicine, 1983-1987

Vice-Chairman Neurology Chair Search Committee, 1984-1985

Member, Search Committee for Dean of Medicine, 1984-1985

Medical School Admissions, Adjunct Committee, 1985-1989

Curriculum Review Subcommittee, School of Medicine, 1986

Professors' Advisory Committee, 1986-1990

Committee for Excellence in Teaching, School of Medicine, Chairman, 1987-1989

University Committee for the creation of a document on Misconduct in Science and Scholarly Activity, 1989

Task Force to Review the Center for Educational Development and Faculty Resources, 1990

Internal Review of the Chair of Human Genetics, 1991

University Committee on the Future of Interdisciplinary Centers, 1991-1992

Futures III Committee of the School of Basic Health Sciences, 1991-1992

Vice President's Strategic Planning Work Group, Neural Sciences, 1992

Task Force 3, School of Dentistry Self-Study, 1992

Co-Chair, University Roles and Rewards System Committee, 1992-1993

Dean of Medicine Search Committee, 1993-1994

School of Medicine, Tenure and Promotion Committee, 1994-1995

Chair, University Committee on Center Evaluation, 1994-1996

Chair, Search Committee for the Chair of Microbiology, 1997-1998

Member, Guidelines Committee for Promotion and Tenure in the School of Medicine, 1996-1997

Chair, Tenure Committee for Chair of Microbiology, 1998

Chair, Research Subcommittee, LCME, 1999-2001

Member, Search Committee for Chair of Neurology, 2000-2001

Council of Advisors to the President, 1999-2003

University Research Advisory Council, 2002-2006

Member, Search Committee for the Dean, School of Medicine, Virginia Commonwealth University, 2004-2005

Member, Search Committee for Provost and Vice President for Academic Affairs, Virginia Commonwealth University, 2004-2005

Member, Optional Retirement Plan Investment Committee, Virginia Commonwealth University, 2004-2013

Member, Search Committee for Vice President for Finance and Administration, Virginia Commonwealth University, 2005

Member, Search Committee for Associate Vice President for Finance and Administration, Virginia Commonwealth University, School of Medicine, 2007-2008

Chair, Search Committee for the Chair of Pharmacology and Toxicology, 2010

Member, Search Committee for Chair of Neurosurgery, 2012

NATIONAL/INTERNATIONAL COMMITTEE SERVICE

American Association of Anatomists, Educational Affairs Committee, 1982-1985

National Head Injury Foundation Awards Committee, 1988-1992

New Medico Award Committee of the Joint Section on Neurotrauma and Critical Care, 1990-1995

Organizing Committee, First International Neurotrauma Symposium, Fukushima, Japan, 1990-1991

Organizing Committee, The Role of Neurotransmitters in Brain Injury, Key West, Florida, Satellite Meeting of Brain 91, 1991

Co-Chairman, FASEB Conference of Neural Injury, Copper Mountain, Colorado, 1991-1992

Scientific Advisory Committee, Kent Waldrep National Paralysis Association, 1991-1996

Scientific Advisory Committee, National Head Injury Foundation, 1991-2000

Organizing Committee, Workshop on Animal Models of Traumatic Brain Injury, Richmond, Virginia, 1992

Organizing Committee, Second International Neurotrauma Symposium, Glasgow, United Kingdom, 1992 and 1993

Organizing Committee, Third International Neurotrauma Symposium, Toronto, Canada, 1993-1995

Member, Pannonian Symposia Committee on CNS Injury, Pécs, Hungary, 2000-2010

Member, International Scientific Advisory Board, Fifth International Neurotrauma Symposium, Munich, Germany, 2000

Member, International Scientific Advisory Board, Uppsala Brain Injury Center, Uppsala, Sweden, 2005-present

Member, International Advisory Board, Shanghai Brain Center, Shanghai, People's Republic of China, 2006-2008

Chair, Advisory Committee for the International Neurotrauma Society 2011 Meeting, Shanghai, China, 2009-2011

REFEREE

- *Acta Neuropathologica*
- *American Journal of Anatomy*
- *Investigative Ophthalmology and Visual Science*
- *Circulation Research*
- *Journal of Neurocytology*
- *The Journal of Neuroscience*
- *Journal of Cerebral Blood Flow & Metabolism*
- *Brain Research*
- *Science*
- *Journal of Neuropathology and Experimental Neurology*
- *Journal of Neurosurgery*
- *Journal of Comparative Neurology*
- *American Journal of Physiology*

- *Journal of Neurochemistry*
- *Magnetic Resonance in Medicine*
- *Stroke*
- *Journal of Neurotrauma*

EDITORIAL BOARD

Editorial Board, *Brain Injury*, 1986-1991

Editor-in-Chief, *Journal of Neurotrauma*, 1991-present

Editorial Board, *Acta Neuropathologica*, 1999-2005

Editorial Board, *Therapeutic Hypothermia*, 2010-present

PEER REVIEWER

American Heart Association, Virginia Affiliate, Research Review Subcommittee, 1982, 1983

Neurology A Study Section, 1983, Ad Hoc

Neurology A Study Section, Member 1984-1988

Neurology A Study Section, 1989, 1990, Ad Hoc

Chair, Special Neurology A Study Section, 1990

National Institutes of Health Reviewers Reserve (NRR), 1988-1992

Neurology B1 Study Section Ad Hoc, 1993

Neurology B1 Study Section, Special Emphasis Panel, 1994

Department of Veterans Affairs (VA) Merit Review Committee for Neurobiology, 1995-1998

Department of Veterans Affairs (VA) Merit Review Committee for Neurobiology, Committee Chair, 1996-1998

Neurological Sciences Program Review Committee A, Member, 1996-2000

Kentucky Head Injury and Spinal Cord Injury Trust, Review Committee Chair, 2000-present

NINDS – ZNS1SRB-M, Ad Hoc, June 2003

NCRR – R1RG-6, Ad Hoc, September 2003

CSR – ZRG1 CNNT, Ad Hoc, February 2004

NIH – ZRG1 BDCND, Ad Hoc, August 2004

NSDA Study Section, Chair, November 2004

ZNS1 SRB-M, NIH Fellowship Review Group, November 2004

NSDA Study Section, Ad Hoc, June 2005

NSDA Study Section, Ad Hoc, February 2006

NIH - ZRG1 BDCN-W, Ad Hoc, March 2013

CONSULTANT

Neuroscience Program, University of North Texas, 1989-1992

Head Injury Program Project, University of Pittsburgh, 1991-1997

Head Injury Program Project, University of Texas, Houston, 1992-1994

External Reviewer, Department of Anatomy, University of South Florida, 2000

External Reviewer, Department of Neuroscience, University of Florida, 2001

External Reviewer, The Miami Project, University of Miami, 2004

External Reviewer, Department of Neuroscience and Experimental Therapeutics, Texas A & M Health Sciences Center, 2006

External Reviewer, Department of Neuroscience, University of Virginia, 2010

External Reviewer, Graduate Program in Neuroscience, Georgia Health Sciences University, 2011

OTHER SIGNIFICANT SCHOLARLY EXPERIENCE

Advisor, Chairman of Graduate Committee for:

Clark, Hal, PhD, 1977

Jenkins, Larry, PhD, 1978

Dietrich, Dalton, PhD, 1979

Christman, Carole, PhD, 1979

Levine, Joseph, MD, PhD, 1980

Bennett, Mary D, PhD, 1985

Cheng, Charles LY, MD, MS, 1985

Erb, Daniel, PhD, 1989

Chou, Ching-Long, MD, MS, 1990

Yaghamai, Amy, MS, 1990

Meattle, Manisha, PhD, 1992

Said, Sheriff, MD, PhD, 1993

Pettus, Ted, PhD, 1996

Lesko, Kathryn, MS, 1993

Gordon, Donna, MD, PhD, 1996

Wilborn, Amy, MS, 1996
Campbell, Matt, MS, 1997
Leuthauser, Amy D, MS, 1998
Okonkwo, David, MD, PhD, 1999
Stone, James, PhD, 2000
Singleton, Richard, MD, PhD, 2004
Marmarou, Christina, PhD, 2005
Kelley, Brian, MD, PhD, 2008
Dunn, Brian, MS, 2008
Zacko, Chris, MD, PhD, 2009
Greer, John, MD, PhD, 2011
Wang, Jiaqiong, MD, PhD, 2012
Vascak, Michal, MD, PhD, current

Member, Graduate Committee for:

Wozniak, David, MS (Anat), 1976
Batten, Bruce E, PhD (Anat), 1977
Somori, Gabe, MS (Anat), 1977
McGeorge, Margaret, MS (Micro), 1978
Linwood, Sawyer, PhD (Anat), 1978
Craig, Shirley, PhD (Anat), 1979
Salisbury, Ron, PhD (Anat), 1979
Hill, Michael E, PhD (Anat), 1980
Gaede, Sarah, PhD (Anat), 1980
Porter, John, PhD (Anat), 1980
Bieber, Fred, PhD (Gen), 1981
Fry, Dennis, PhD (Micro), 1982
Moore, James W, PhD (Anat), 1983
McCrary, Carl, PhD (Anat), 1983
Kosco, Marie H, PhD (Anat), 1985
Newlon, Polly, PhD (Physiol), 1987
Smith, Gerald, PhD (Anat), 1987
Batson, Judy, PhD (Anat), 1989
Muir, Judy, PhD (Pharm), 1991
Wright, James, PhD (Anat), 1991
Stout, Amy K, PhD (Pharm), 1993
Copeland, James R, MD/PhD (Pharm), 1995
Gordon, John, PhD (Anat), 1995
Tranduc, Matthew (Bio) 1996
Novitzki, Monica, MD/PhD (Anat), 1996
Zhu, Jiepei, PhD (Anat), 1998
Kim, Helen, MS (Anat), 1998
Rice, Melody, MS (Anat), 1998
Willoughby, Karen (Pharm), 1998
Sharma, Karun, MD/PhD (Anat), 1999
Chen, Tao, PhD (Anat), 2000
DeFord, S. Michelle, PhD (Psych), 2000
Ahmed, Mohi, PhD (Physiol), 2000
Daugherty, Wilson, MD/PhD (Physiol), 2003
Richardson, Mark, MD/PhD (Anat), 2004
Falo, Cristina, PhD (Anat), 2004
Haar, Peter, MD/PhD (Anat), 2004
Zhang, Yin, PhD (Pharm Tox), 2005
Clark, Aaron, MD/PhD (Anat), 2006

Hamilton, Heather, PhD (Anat), 2007
Reid, Wendy Murdock, PhD (Anat), 2008
George, Amanda, PhD (Anat), 2008
Harris, Janna, PhD (Anat), 2008
Bakos, Steve, PhD (Physiology), 2010
Forrest-Lafrenaye, Audrey, PhD (Anat), 2010
Pullen, Nick, PhD (Anat), 2010
Warren, Kelly, PhD (Anat), 2010
Campbell, John, PhD (Neuroscience), 2011
Chan, Julie, PhD (Neuroscience), 2013
Baer, Matthew - current

Postdoctoral Scholars:

Ellison, Mary, PhD, 1986
Williams, Charles, MD, 1987-1989
Ohada, Kenji, MD, PhD, 1988-1990
Valadka, Alex, MD, 1991-1992
Moroi, Junta, MD, 1995-1997
Koizumi, Hiro, MD, PhD, 1997-1999
Büki, Andras, MD, PhD, 1997-2000
Suehiro, Eiichi, MD, PhD, 1999-2001
Ueda, Yuji, MD, PhD, 2001-2003
Zacko, Christopher, MD, 2003
Farkas, Orsolya, MD, PhD, 2003-2006
Lifshitz, Jonathan, PhD, 2004-2007
Baranova, Anya, PhD, 2005-2007
McGinn, Melissa, PhD, 2006-2008
Gao, Guoyi, MD, PhD, 2007-2008
Oda, Yasutaka, MD, 2007-2009
Fujita, Motoki, MD, 2010-2012
Forrest-Lafrenaye, Audrey, PhD, 2010-present
Miyachi, Takashi, MD, 2012-present
Haanell, Anders, PhD, 2012-present

Fellows/Visiting Professors:

Gabriel, Mounir, PhD, Professor, University of Adelaide
Neiss, Connie, MD, University of Frankfurt

MAJOR TEACHING ASSIGNMENTS

Dental Neuroanatomy (Course Director), 1975-2002

Neurochemical Pharmacology, 1980-2008

Graduate Neuroanatomy, 1973-2007

Systems Neuroscience, 2008-present

Medical Embryology, 1973-1975

Medical Neuroscience, 1973-present

BIBLIOGRAPHY

Papers Published

1. Povlishock, J.T.: The presence of perisomatic processes during the maturation of the hypoglossal, vagal and red nuclei of the rat. *Brain Res.*, 82:272-278, 1974.
2. Povlishock, J.T., Kriebel, R.M., and Seibel, H.R.: A light and electron microscopic study of the pineal gland of the ground squirrel, Citellus tridecemlineatus. *Am. J. Anat.*, 143:465-484, 1975.
3. Povlishock, J.T.: Dense core vesicles in cerebral cortex of the human fetus. *Experientia*, 31:1447-1449, 1975.
4. Povlishock, J.T.: The fine structure of axons and growth cones of the human fetal cerebral cortex. *Brain Res.*, 114:379-389, 1976.
5. Shelton, K.B., Cobbs, C.S., Povlishock, J.T., and Burkat, R.: Nuclear envelope fraction proteins: Isolation and comparison with the nuclear protein of the avian erythrocyte. *Arch. Biochem. Biophys.*, 174:177-186, 1976.
6. Leichnetz, G.R., Povlishock, J.T., and Astruc, J.: A prefronto-amygdaloid projection in the monkey: Light and electron microscopic evidence. *Neuroscience Letters*, 2:261-265, 1976.
7. Povlishock, J.T., Martinez, A.J., and Moosy, J.: The fine structure of blood vessels of the telencephalic germinal matrix in the human fetus. *Am. J. Anat.*, 149:439-452, 1977.
8. Povlishock, J.T., Becker, D.P., Sullivan, H.G., and Lovings, E.T.: Neural and vascular alterations in experimental brain trauma. *Proceedings of the American Association of Neurological Surgeons*, No. 51:1-7, 1977.
9. Povlishock, J.T., Taylor, J.J., and Seibel, H.R.: An electron microscopic study of the maturing rat red nucleus. I. The large neuron population. *Acta Anat.*, 102(2):129-146, 1978.
10. Povlishock, J.T., Becker, D.P., Sullivan, H.G., and Miller, J.D.: Vascular permeability alterations to horseradish peroxidase in experimental brain injury. *Brain Res.*, 153:223-239, 1978.
11. Povlishock, J.T., Becker, D.P., Miller, J.D., and Dietrich, W.D.: The morphopathologic substrates of concussion? *Acta Neuropathol. (Berl.)*, 47: 1-12, 1979.
12. Jenkins, L.W., Povlishock, J.T., Becker, D.P., Miller, J.D., and Sullivan, H.G.: Complete cerebral ischemia: An ultrastructural study. *Acta Neuropathol. (Berl.)*, 48:113-125, 1979.
13. Wei, E.P., Dietrich, W.D., Povlishock, J.T., and Kontos, H.A.: Functional, morphologic, metabolic abnormalities of the cerebral microcirculation after concussive brain injury in cats. *Circ. Res.*, 46(1):37-47, 1980.
14. Dietrich, W.D., Wei, E.P., Povlishock, J.T., and Kontos, H.A.: A method for the morphological study of specific pial microvessels. *Am. J. Physiol.*, 238:172- 175, 1980.
15. Povlishock, J.T., Kontos, H.A., Rosenblum, W.J., Becker, D.P., and Jenkins, L.W.: A scanning electron microscopic analysis of the intraparenchymal brain vasculature subsequent to

- systemic hypertension. *Acta. Neuropathol. (Berl.)*, 51:203-213, 1980.
16. Saunders, M.L., Young, H.F., Becker, D.P., Greenberg, R.P., Newlon, P.G., Corales, R.L., Ham, W.T. and Povlishock, J.T.: The use of the laser in neurological surgery. *Surg. Neurol.* 14(1):1-10, 1980.
 17. Christman, C.W., and Povlishock, J.T.: Use of retrograde peroxidase as an effective tool for morphologic analysis. *Neurosci. Lett.*, 20:227-231, 1980.
 18. Kontos, H.A., Wei, E.P., Povlishock, J.T., Dietrich, W.D., Ellis, E.F., and Magiera, C.J.: Cerebral arteriolar damage by arachidonic acid and prostaglandin G. *Science*, 209:1242-1245, 1980.
 19. Kontos, H.A., Wei, E.P., Dietrich, W.D., Povlishock, J.T., Ghatak, G., and Ellis, E.F.: Functional, morphological and metabolic abnormalities of the cerebral microcirculation after acute systemic hypertension. *Am. J. Physiol.*, 240: 511-527, 1981.
 20. Wei, E.P., Kontos, H.A., Dietrich, W.D., Povlishock, J.T., and Ellis, E.F.: Inhibition by free radical scavengers and by cyclooxygenase inhibitors of pial arteriolar abnormalities from concussive brain injury in cats. *Circ. Res.*, 48: 95-103, 1981.
 21. Kontos, H.A., Wei, E.P., Ellis, E.F., Dietrich, W.D., and Povlishock, J.T.: Prostaglandins in physiological and in certain pathological responses of the cerebral Circulation. *Fed. Proc.*, 40:2326-2330, 1981.
 22. Jenkins, L.W., Povlishock, J.T., Lewelt, W., Miller, J.D., and Becker, D.P.: The role of post-ischemic recirculation in the development of ischemic neuronal injury following complete cerebral ischemia. *Acta. Neuropathol.*, 55:205-220, 1981.
 23. Narayan, R.K., Rosner, M.J., Povlishock, J.T., Girevendulis, A., and Becker, D.P.: Primary dural melanoma: A clinical and morphological study. *Neurosurg.*, 9:710-717, 1981.
 24. Kontos, H.A., Wei, E.P., and Povlishock, J.T.: Pathophysiology of vascular consequences of experimental concussive brain injury. *Trans. Am. Clin. Climatol. Assoc.*, 30:111-121, 1981.
 25. Levine, J.E., Povlishock, J.T., and Becker, D.P.: The morphological correlates of primate cerebrospinal fluid absorption. *Brain Res.*, 241:31-41, 1982.
 26. Povlishock, J.T., Rosenblum, W.I., Sholley, M.M., and Wei, E.P.: An ultrastructural analysis of endothelial change paralleling platelet aggregation in a light/dye model of microvascular insult. *Am. J. Path.*, 110:148-160, 1983.
 27. Povlishock, J.T., Becker, D.P., Cheng, C.L.Y., and Vaughan, G.W.: Axonal change in minor head injury. *J. Neuropath. Exp. Neurol.*, 42:225-242, 1983.
 28. Kontos, H.A., Wei, E.P., Christman, C.W., Povlishock, J.T., and Ellis, E.F.: Free oxygen radicals in cerebral vascular response. *The Physiologist*, 26:265-269, 1983.
 29. Hayes, R.L., Pechura, C.M., Katayama, Y., Povlishock, J.T., Yeatts, M.L., and Becker, D.P.: Activation of midbrain cholinergic sites implicated in unconsciousness following cerebral concussion in the cat. *Science*, 223:301-303, 1984.
 30. Kontos, H.A., Wei, E.P., Povlishock, J.T., and Christman, C.W.: Oxygen radicals mediate the cerebral arteriolar dilation from arachidonate and bradykinin in cats. *Circ. Res.*, 55:295-303,

1984.

31. Christman, C.W., Wei, E.P., Kontos, H.A., Povlishock, J.T., and Ellis, E.F.: Effects of 15-hydroperoxy-eicosatetraenoic acid (15-HPETE) on cerebral arterioles of cats. *Am. J. Physiol.*, 247:631-637, 1984.
32. Wei, E.P., Christman, C.W., Kontos, H.A., and Povlishock, J.T.: Effects of oxygen radicals on cerebral arterioles. *Am. J. Physiol.*, 248:157-162, 1985.
33. Gamache, D.A., Povlishock, J.T., and Ellis, E.F.: Carrageenan-induced brain inflammation: Characterization of the model and the effects of indomethacin, ibuprofen and probenecid. *J. Neurosurg.*, 65:679-685, 1986.
34. Kontos, H.A., Wei, E.P., Ellis, E.F., Jenkins, L.W., Povlishock, J.T., Rowe, G.T., and Hess, M.L.: Appearance of superoxide anion radical in cerebral extracellular space during increased prostaglandin synthesis in cats. *Cir. Res.*, 57:142-151, 1985.
35. Povlishock, J.T. and Becker, D.P.: The fate of reactive axonal swellings induced by head injury. *Lab. Invest.*, 52:540-552, 1985.
36. Povlishock, J.T. and Kontos, H.A.: Continuing axonal and vascular change following experimental brain trauma. *Cen. Nerv. Sys. Trauma*, 2:285-298, 1985.
37. Wei, E.P., Kontos, H.A., Christman, C.W., DeWitt, D.S., and Povlishock, J.T.: Superoxide generation and reversal of acetylcholine-induced cerebral arteriolar dilation after acute hypertension. *Circ. Res.*, 57:81-787, 1985.
38. Ellison, M.D., Povlishock, J.T., and Hayes, R.L.: Examination of the blood-to-brain transfer of alpha-aminoisobutyric acid and horseradish peroxidase: Regional alterations in blood-brain barrier function following acute hypertension. *J. Cereb. Blood Flow Metabol.*, 6:471-480, 1986.
39. Povlishock, J.T.: Traumatically induced reactive axonal change without concomitant change in focally related neuronal somata and dendrites. *Acta Neuropathol.*, 70:53-59, 1986.
40. Wei, E.P., Kontos, H.A., Ellison, M.D., and Povlishock, J.T.: Oxygen radicals in arachidonate-induced increased blood-brain barrier permeability to proteins. *Am. J. Physiol.*, 251:H693-H699, 1986.
41. Kontos, H.A. and Povlishock, J.T.: Oxygen radicals in brain injury. *Cen. Nerv. Sys. Trauma*, 3:257-263, 1986.
42. Hayes, R.L., Stalhammar, D., Povlishock, J.T., Allen, A.M., Galinant, B.J., Becker, D.P., and Stonnington, H.H.: A new model of concussive brain injury in the cat produced by extradural fluid volume loading: II: Physiological and Neuropathological Observations. *Brain Injury*, 1:93-112, 1987.
43. Dixon, C.E., Lyeth, B.G., Povlishock, J.T., Findling, R.L., Hamm, R.J., and Hayes, R.L.: A fluid-percussion model of experimental brain injury in the rat. *J. Neurosurg.*, 67:110-119, 1987.
44. Povlishock, J.T. and Rosenblum, W.I.: Injury of brain microvessels with a helium-neon laser and Evans blue can elicit local platelet aggregation without endothelial denudation. *Archiv. Pathol. & Lab Med.*, 111:415-421, 1987.

45. Rosenblum, W.I., Povlishock, J.T., Wei, E.P., Kontos, H.A., and Nelson, G.H.: Ultrastructural studies of pial vascular endothelium following damage resulting in loss of endothelium-dependent relaxation. *Stroke*, 18:927-930, 1987.
46. Ellison, M.D., Povlishock, J.T., and Merchant, R.E.: Alterations in cerebrovascular permeability subsequent to systemic IL-2 infusion. *Cancer Res.*, 47:5765-5770, 1987.
47. Becker, D.P., Cheung, M., Povlishock, J.T., and Verity, M.A.: Brain cellular injury and recovery. *West. J. Med.*, 148:670-684, 1988.
48. Rosenblum, W.F., Nelson, G.H., and Povlishock, J.T.: Laser-induced endothelial damage inhibits endothelial relaxation in the cerebral microcirculation of the mouse. *Circ. Res.*, 60:169-176, 1988.
49. Erb, D.E., and Povlishock, J.T.: Axonal change with severe head injury. *Acta Neuropathol.*, 76:347-358, 1988.
50. Cheng, C.L.Y. and Povlishock, J.T.: The effect of head injury on the visual system: A morphological characterization of reactive axonal change. *J. Neurotrauma*, 5:47-60, 1988.
51. Hayes, R.L., Katayama, Y., Jenkins, L.W., Lyeth, B.G., Clifton, G.L., Gunter, J., Povlishock, J.T., and Young, H.F. Regional rates in glucose utilization in the cat following concussive head injury. *J. Neurotrauma*, 5(2):121-137, 1988.
52. Kim, H.J., Levasseur, J.E., Patterson, J.L., Madge, G.E., Povlishock, J.T., and Kontos, H.A.: Reduction of mortality in experimental brain injury by pretreatment with indomethacin. *J. Neurosurg.*, 71:565-572, 1989.
53. Kontos, H.A., Wei, E.P., Povlishock, J.T., Kukreja, R., and Hess, M.L.: Inhibition by arachidonate of cerebral arteriolar dilation from acetylcholine. *Am. J. Physiol.*, 256:H655-H671, 1989.
54. Jenkins, L.W., Moszynski, K., Lyeth, B.G., Lewelt, W., DeWitt, D.S., Allen, A., Opoku, J., Povlishock, J.T., Majewski, T.J., Clifton, G.L., Young, H.F., and Hayes, R.L.: Increased vulnerability of the mildly traumatized rat brain to cerebral ischemia: The use of controlled secondary ischemia as a research tool to identify common or different mechanisms contributing to mechanical and ischemic brain injury. *Brain Res.*, 477:211-224, 1989.
55. Ellison, M.D., Erb, D.E., Kontos, H.A., and Povlishock, J.T.: Recovery of impaired endothelium-dependent relaxation after fluid-percussion brain injury. *Stroke*, 20(7):911-917, 1989.
56. Ellison, M.D., Krieg, R.J., and Povlishock, J.T.: Differential CNS responses following single and multiple recombinant interleukin-2 infusions. *J. Neuroimmunol.*, 28:249-260, 1990.
57. Ohata, K., Marmarou, A., Povlishock, J.T.: An Immunocytochemical study of protein clearance in brain infusion edema. *Acta Neuropathol.*, 81:162-177, 1990.
58. Povlishock, J.T.: Diffuse Deafferentation as the Major Determinant of Morbidity and Recovery Following Traumatic Brain Injury. *Advances in Neurotrauma Research*, 2:1-11, 1990.
59. Ohata, K., Marmarou, A., and Povlishock, J.T. Immunocytochemical studies of oedema protein clearance in the rat. *Acta Neurochir. Suppl. (Wien)* 51:93-95, 1990.

60. Povlishock, J.T.: Current Concepts on Axonal Damage Due to Head Injury. Proceedings of the XIth International Congress of Neuropathology, Supplement 4, 749-753, 1991.
61. Erb, D.E., and Povlishock, J.T.: Neuroplasticity in cat following traumatic brain injury: An immunocytochemical study of terminal loss and recovery. *Exp. Brain Res.*, 83:253-267, 1991.
62. Aydin, F., Rosenblum, W.I., and Povlishock, J.T.: Myoendothelial junctions in human brain arterioles. *Stroke*, 22:1592-1597, 1991.
63. Povlishock, J.T.: Traumatically induced axonal injury: Pathogenesis and pathobiological implications. *Brain Pathology*, 2:1-12, 1992.
64. Enters, E.K., Pascua, J.R., McDowell, K.P., Kapasi, M.Z., Povlishock, J.T., and Robinson, S.E.: Blockade of acute hypertensive response does not prevent changes in behavior or in CSF acetylcholine (ACH) content following traumatic brain injury (TBI). *Brain Res.*, 576(2):271-276, 1992.
65. Yaghamai, A., and Povlishock, J.T.: Traumatically induced reactive change as visualized through the use of monoclonal antibodies targeted to the neurofilament subunits. *J. Neuropathol. Exp. Neurol.*, 51(2):158-176, 1992.
66. Povlishock, J.T.: Effects of Nicardipine on Tube Formation of Bovine Vascular Endothelial Cells In Vitro. *Stroke*, 23:1642, 1992 – Editorial.
67. Jiang, J. Y., Lyeth, B.G., Kapasi, M.Z., Jenkins, L.W., and Povlishock, J.T.: Moderate Hypothermia Reduces Blood-Brain Barrier Disruption and Acute Hypertension Following Traumatic Brain Injury. *Acta Neuropath.*, 84:495-500, 1992.
68. Churn, S.B., Willey, A.L., Povlishock, J.T., Rafiq, A., and DeLorenzo, R.J.: Global forebrain ischemia results in decreased immunoreactivity of calcium/calmodulin-dependent protein kinase II. *J. Cerebral Blood Flow Metab.*, 12(5):784-793, 1992.
69. Kontos, C.D., Wei, E.P., Williams, J.I., Kontos, H.A., and Povlishock, J.T.: Cytochemical detection of superoxide in cerebral inflammation and ischemia in vivo. *Am. J. Physiol.*, 263:H1234-1242, 1992.
70. Nelson, C.W., Wei, E.P., Povlishock, J.T., Kontos, H.A. and Moskowitz, M.A.: Oxygen radicals in cerebral ischemia. *Am. J. Physiol. (Heart Circ. Physiol. 32)*, 263:H1356-1362, 1992.
71. Grady, M.S., McLaughlin, M.R., Christman, C.W., Valadka, A.B., Fligner, C.L., and Povlishock, J.T.: The use of antibodies targeted against the neurofilament subunits for the detection of diffuse axonal injury in humans. *J. Neuropath. and Exp. Neur.*, 52:143-152, 1993.
72. Povlishock, J.T. and Kontos, H.A.: The role of oxygen radicals in the pathobiology of traumatic brain injury. *Human Cell*, 5(4):3435-353, 1992.
73. Povlishock, J.T.: The pathobiology of traumatically induced axonal injury in animals and man. *Annals of Emergency Medicine*, 22:980-986, 1993.
74. Said, S., Rosenblum, W.I., Povlishock, J.T., and Nelson, G.H.: Correlations between morphological changes in platelet aggregates and underlying endothelial damage in cerebral microcirculation of mice. *Stroke*, 24(12): 1968-1976, 1993.
75. Christman, C.W., Grady, M.S., Walker, S.A., Holloway, K.L., and Povlishock, J.T.:

- Ultrastructural studies of diffuse axonal injury in humans. *J. Neurotrauma*, 11(2):173-186, 1994.
76. Phillips, L.L., Lyeth, B.G., Hamm, R.J., and Povlishock, J.T. Combined fluid percussion brain injury and entorhinal cortical lesion: A model for assessing the interaction between neuroexcitation and deafferentation. *J. Neurotrauma*, 11(6):641-656, 1994.
 77. Pettus, E.H., Christman, C.W., Giebel, M.L., and Povlishock, J.T.: Traumatically induced altered membrane permeability: Its relationship to traumatically induced reactive axonal change. *J. Neurotrauma*, 11(5):507-522, 1994.
 78. Povlishock, J.T.: Reduced blood-brain barrier permeability after cardiac arrest by conjugated superoxide dismutase and catalase. *Stroke*, 25(9): 1834-1835, 1994 – Editorial.
 79. Povlishock, J.T., Hayes, R.L., Michel, M.E., and McIntosh, T.: Workshop on Animal Models of TBI. *J. Neurotrauma*, 11(6):723-732, 1994.
 80. Reeves, T., Lyeth, B.C., and Povlishock, J.T.: Long-term potentiation deficits and excitability changes following traumatic brain injury. *Exp. Brain Res.*, 106:248-256, 1995.
 81. Schröder, M.L., Muizelaar, J.P., Bullock, R., Wyper, D., Salvant, J.B., Povlishock, J.T., and Teasdale, G.M.: Focal ischemia due to traumatic contusions, documented by SPECT-, Stable Xenon-CT, and ultrastructural studies. *J. Neurosurgery*, 82:966-971, 1995.
 82. Ellis, E.F., McKinney, J.S., Willoughby, K.A., Liang, S., and Povlishock, J.T.: A new model for rapid stretch-induced injury of cells in culture: Characterization of the model using astrocytes. *J. Neurotrauma*, 12(3):325-339, 1995.
 83. Povlishock, J.T., and Christman, C.W.: The pathobiology of traumatically induced injury in animals and humans - A Review of Current Thought: Review Article. *J. Neurotrauma*, 12(4):555-564, 1995.
 84. Povlishock, J.T., and Jenkins, L.W.: Are the pathobiological changes evoked by traumatic brain injury immediate and irreversible? *Brain Pathology*, 5:415-426, 1995.
 85. Povlishock, J.T., and Pettus, E.H.: Traumatically induced axonal damage: Evidence for enduring changes in axolemmal permeability with associated cytoskeletal change. *Acta Neurochirurgica*, 66:81-86, 1996.
 86. Pettus, E.H., and Povlishock, J.T.: Characterization of a distinct set of intra-axonal ultrastructural changes associated with traumatically induced alterations in axolemmal permeability. *Brain Res.*, 722:1-11, 1996.
 87. Povlishock, J.T., Marmarou, A., McIntosh, T, Trojanowski, J.Q., and Moroi, T.: Impact acceleration injury in the rat: Evidence for focal axolemmal change and related neurofilament sidearm loss. *J. Neuropath. and Exp. Neurol.*, 56: 347-359, 1997.
 88. Reeves, T.M., Zhu, J., Povlishock, J.T., and Phillips, L.L.: The effect of combined fluid percussion and entorhinal cortical on long-term potentiation. *Neuroscience*, 77(2):431-444, 1997.
 89. Reeves, T.M., Lyeth, B.G., Hamm, R.J., Phillips, L.L. and Povlishock, J.T.: The effects of traumatic brain injury on inhibition in the hippocampus and dentate gyrus. *Brain Res.*, 757:119-132, 1997.

90. Maxwell, W.L., Povlishock, J.T., and Graham, D.I.: A mechanistic analysis of nondisruptive axonal injury: A Review. *J. Neurotrauma*, 14(7):419-440, 1997.
91. Phillips, L.L., Lyeth, B.G., Hamm, R.J., Jiang, J.Y., Povlishock, J.T., and Reeves, T.M.: Effect of prior receptor antagonism on behavioral morbidity produced by combined fluid percussion injury and entorhinal cortical lesion. *J. Neurosci. Res.*, 49:197-206, 1997.
92. Christman, C.W., Salvant, J.B., Walker, S.A., and Povlishock, J.T.: Characterization of a prolonged regenerative attempt to diffusely injured axons following traumatic brain injury in adult cat: a light and electron microscopic immunocytochemical study. *Acta Neuropath.*, 94:329-337, 1997.
93. Okonkwo, D.O., Pettus, E.H., Moroi, J., and Povlishock, J.T.: Alteration of the neurofilament sidearm and its relation to neurofilament compaction occurring with traumatic axonal injury. *Brain Res.*, 784(1-2):1-6, 1998.
94. Phillips, L.L., Lyeth, B.G., Hamm, R.J., Reeves, T.M., and Povlishock, J.T.: Glutamate antagonism during secondary deafferentation enhances cognition and axo-dendritic integrity after traumatic brain injury. *Hippocampus*, 8:390-401, 1998.
95. Koizumi, H., and Povlishock, J.T.: Posttraumatic hypothermia protects against axonal damage in an animal model of traumatic axonal injury. *J. Neurosurg.*, 89:303-309, 1998.
96. Okonkwo, D.O. and Povlishock, J.T. An intrathecal bolus of cyclosporin A before injury preserves mitochondrial integrity and attenuates axonal disruption in traumatic brain injury. *J. Cerebral Blood Flow and Metabol.*, 19(4):443-451, 1999.
97. Povlishock, J.T. An update on the pathobiology of traumatically induced axonal injury and its implications for forensic medicine. *Proceedings of VI INPALMS*, pp.1-6, 1999.
98. Okonkwo, D.O., Büki, A, Siman, R., Povlishock, J.T. Cyclosporin A limits calcium-induced axonal damage following traumatic brain injury. *Neuro Report* 10 (2):353-358, 1999.
99. Stone, J.R., Walker, S.A., Povlishock, J.T. The visualization of a new class of traumatically injured axons through the use of a modified method of microwave antigen retrieval. *Acta Neuropathologica*, 97:335-345, 1999.
100. Büki, A., Siman, R., Trojanowski, JQ, and Povlishock, J.T. The role of calpain-mediated spectrin proteolysis in traumatically induced axonal injury. *J. Neuropath. Exp. Neurol.*, 58:365-375, 1999.
101. Büki, A., Okonkwo, D.O. Povlishock, J.T. Postinjury cyclosporin A administration attenuates traumatic axonal injury. *J. Neurotrauma*, 16(6): 511-521, 1999.
102. Büki, A., Koizumi, H., and Povlishock, J.T. Moderate Posttraumatic Hypothermia Decreases Early Calpain-Mediated Proteolysis and Concomitant Cytoskeletal Compromise in Traumatic Axonal Injury. *Experimental Neurology*, 159:319-328, 1999.
103. Povlishock, J.T., Büki, A., Koizumi H., Stone, J. Okonkwo, D.O. Initiating mechanisms involved in the pathobiology of traumatically induced axonal injury and interventions targeted at blunting their progression. *Acta Neurochir Supply*, 73:15-20, 1999.
104. Büki, A., Okonkwo, D.O., Wang, K.W., Povlishock, J.T. Cytochrome C Release and Caspase

- Activation in Traumatic Axonal Injury. *J. Neurosci.*, 20:8, 2825-2834, 2000.
105. Reeves, T.M., Kao, C.Q., Phillips, L.L. Bullock, M.R., Povlishock, J.T. Presynaptic excitability changes following traumatic brain injury in the rat. *J. Neurosci. Res.*, 1:60(3):370-9, 2000.
 106. Büki, A., Walker, S.A. Stone, J.R., Povlishock, J.T. Novel application of tyramide signal amplification (TSA): ultrastructural visualization of double-labeled immunofluorescent axonal profiles. *J.Histochem Cytochem*, 48(1):153-61, 2000.
 107. Stone, J.R., Singleton, R.H. and Povlishock, J.T. Antibodies to the C-terminus of the β -amyloid precursor protein (APP): A site specific marker for the detection of traumatic axonal injury. *Brain Res.*, 871:288-302, 2000.
 108. Zhu, J., Hamm, R.J., Reeves, T.M., Povlishock, J.T. and Phillips, L.L.: Postinjury administration of L-deprenyl improves cognitive function and enhances neuroplasticity after traumatic brain injury. *Experimental Neurology*, 166: 136-152, 2000.
 109. Temple, M.D., Delahunty, T.M., Hamm, R.J., Phillips, L.L., Lyeth, B.G., Povlishock, J.T. Subtle alterations in NMDA-stimulated cyclic GMP levels following lateral fluid percussion brain injury. *J. Neurotrauma*, 18(1):47-55, 2001.
 110. Singleton, R.H., Okonkwo, D.O., Povlishock, J.T.: The immunophilin ligand FK506 attenuates axonal injury in an impact-acceleration model of traumatic brain injury. *J. Neurotrauma*, 18(6):607-614, 2001.
 111. Suehiro, E., Singleton, R.H., Stone, J.R. and Povlishock, J.T. The immunophilin ligand FK-506 attenuates the axonal damage associated with rapid rewarming following posttraumatic hypothermia. *Experimental Neurology*, 172(1):199-210, November 2001.
 112. Suehiro, E., and Povlishock, J.T. Rapid post hypothermic rewarming exacerbates traumatically induced axonal injury which is attenuated by cyclosporin A. *J. Neurosurgery*, 94(3):473-498, 2001.
 113. Harris, L.K., Black, R.T., Golden, K.M., Reeves, T.M., Povlishock, J.T. and Phillips, L.L. Traumatic brain injury-induced changes in gene expression and functional activity of mitochondrial cytochrome c oxidase. *Journal of Neurotrauma*, 18(10):993-1009, 2001.
 114. Singleton, R.H., Stone, J.R., Zhu J., and Povlishock, J.T. Traumatically induced axotomy adjacent to the soma does not result in acute neuronal death. *J. Neurosci.*, 22(3):791-802, 2002.
 115. Stone, J.R., Singleton, R.H., and Povlishock, J.T. Intra-axonal neurofilament damage does not evoke local axonal swelling in all traumatically injured axons. *Experimental Neurology*, 172(2):320-331, 2001.
 116. Stone, J.R., Okonkwo, D.O., Singleton, R.H., Mutlu, L., Helm, G.A. and Povlishock, J.T. Caspase-3 mediated cleavage of amyloid precursor protein and formation of amyloid β peptide in traumatic axonal injury. *J. Neurotrauma*, 19(5):601-14, 2002.
 117. Suehiro, E., Ueda, Y., Wei, E.P., Kontos, H.A., and Povlishock, J.T.: Posttraumatic hypothermia followed by slow rewarming protects the cerebral microcirculation. *J Neurotrauma*, 20(4):381-390, 2003.
 118. Büki, A., Farkas O., Doczi T., and Povlishock, J.T.: Preinjury administration of the calpain

- inhibitor MDL-28170 attenuates traumatically induced axonal injury. *J. Neurotrauma*, 20(3):261-8. 2003.
119. Prins, M.L., Povlishock, J.T., and Phillips, L.L.: The effects of combined fluid percussion traumatic brain injury and unilateral entorhinal deafferentation on the juvenile rat brain. *Brain Res Dev Brain Res.*, 10;140(1):93-104, 2003.
 120. Suehiro, E., Ueda, Y., Wei, E.P., Kontos, H.A., and Povlishock, J.T.: Posttraumatic Hypothermia followed by Slow Rewarming Protects the Cerebral Microcirculation. *J. Neurotrauma*, Volume 20, Number 4, 381-90, 2003.
 121. Reeves, T.M., Prins, M.L., Zhu, J., Povlishock, J.T., and Phillips, L.L.: Matrix metalloproteinase inhibition alters functional and structural correlates of deafferentation-induced sprouting in the dentate gyrus. *J. Neuroscience*, 23(32):10182-9, 2003.
 122. Singleton, R.H., Povlishock, J.T.: Identification and characterization of heterogeneous neuronal injury and death in regions of diffuse brain injury: evidence for multiple, independent injured phenotypes. *J. Neuroscience*, 24(14), 2004.
 123. Ueda, Y., Wei, E.P., Kontos, H.A., Suehiro, E., Povlishock, J.T.: Effects of delayed, prolonged hypothermia on the pial vascular response after traumatic brain injury in rats. *J. Neurosurgery*, 99(5):899-906, 2003.
 124. Ueda, Y., Suehiro, E., Wei, E.P., Kontos, H.A., Povlishock, J.T.: Uncomplicated rapid posthypothermic rewarming alters cerebrovascular responsiveness. *Stroke*, 35(2):601-6, 2004.
 125. Stone, J.R., Okonkwo, D.O., Diallo, A.O., Rubin, D.G., Mutlu, L.K., Povlishock, J.T., Helm, G.A.: Impaired axonal transport and altered axolemmal permeability occur in distinct populations of traumatic axonal injury following traumatic brain injury. *Exp Neurol.*, 190(1):59-69, 2004.
 126. Farkas, O., Tamas, A., Zsombok, A., Reglodi, D., Pal, J., Büki, A., Lengvari, I., Povlishock, J.T., Doczi, T.: Effects of pituitary adenylate cyclase activating polypeptide in a rat model of traumatic brain injury. *Regul Pept.*, 123(1-3):69-75, 2004.
 127. Povlishock, J.T., Katz, D.I.: Update of neuropathology and neurological recovery after traumatic brain injury. *J. Head Trauma Rehabil.*, 20(1):76-94, 2005.
 128. Kurz, J.E., Hamm, R.J., Singleton, R.H., Povlishock, J.T., Churn, S.B.: A persistent change in subcellular distribution of calcineurin following fluid percussion injury in the rat. *Brain Res.*, 1048(1-2):153-60, 2005.
 129. Farkas, O., B.P., Szekeres-Bartho, J., Doczi, T., Povlishock, J.T., Büki, A.: Spectrin breakdown products in the cerebrospinal fluid in severe head injury— preliminary observations. *Acta Neurochir (Wien.)*, 147(8):855-61, 2005.
 130. Reeves, T.M., Phillips, L.L., Povlishock, J.T.: Myelinated and unmyelinated axons of the corpus callosum differ in vulnerability and functional recovery following traumatic brain injury. *Exp. Neurol.*, 196(1):126-37, 2005.
 131. Marmarou, C.R., Walker, S.A., Davis, C.L., Povlishock, J.T.: Quantitative Analysis of the Relationship between Intra-Axonal Neurofilament Compaction and Impaired Axonal Transport following Diffuse Traumatic Brain Injury. *J. Neurotrauma*, 22(10):1066-1080, 2005.

132. Marmarou, C.R., Povlishock, J.T.: Administration of the immunophilin ligand FK506 differentially attenuates neurofilament compaction and impaired axonal transport in injured axons following diffuse traumatic brain injury. *Exp. Neurol.*, 197(2):353-62, Feb. 2006.
133. Büki, A., Povlishock, J.T.: All roads lead to disconnection? - Traumatic axonal injury revisited. *Acta Neurochir (Wien)*., 148(2):181-93, Feb. 2006.
134. Farkas, O., Lifshitz, J., Povlishock, J.T.: Mechanoporation induced by diffuse traumatic brain injury: an irreversible or reversible response to injury? *J. Neuroscience*, 26(12):3130-40, Mar. 22, 2006.
135. Kelley, B.J., Farkas, O., Lifshitz, J., Povlishock, J.T.: Traumatic axonal injury in the perisomatic domain triggers ultrarapid secondary axotomy and Wallerian degeneration. *Exp. Neurol.* 198(2):350-60, Apr. 2006.
136. Ueda, Y., Walker, S.A., Povlishock, J.T.: Perivascular nerve damage in the cerebral microcirculation following traumatic brain injury. *Acta Neuropathol. (Berl)*. May 23, 2006.
137. Tamas, A., Zsombok, A., Farkas, O., Reglodi, D., Pal, J., Büki, A., Lengvari, I., Povlishock, J.T., Doczi, T.: Postinjury Administration of Pituitary Adenylate Cyclase Activating Polypeptide (PACAP) Attenuates Traumatically Induced Axonal Injury in Rats. *J. Neurotrauma*, 23(5):686-95, May 2006.
138. Lifshitz, J., Kelley, B.J., Povlishock, J.T.: Perisomatic thalamic axotomy after diffuse traumatic brain injury is associated with atrophy rather than cell death. *J. Neuropath. Exp. Neuro.* 66(3):218-29, March 2007.
139. Reeves, T.M., Phillips, L.L., Lee, N.N., Povlishock, J.T.: Preferential neuroprotective effect of tacrolimus (FK506) on unmyelinated axons following traumatic brain injury. *Brain Res.* 1154(4):225-36, April 2007.
140. Zhang, Z., Tang, W., Zhou, R., Shen, X., Wei, Z., Patel, A., Povlishock, J.T., Bennett, J., Strauss, J.R.III. Accelerated mortality from hydrocephalus and pneumonia in mice with a combined deficiency of SPAG6 and SPAG16L reveals a functional interrelationship between the two central apparatus proteins. *Cell Motil. Cytoskeleton*, 64:360-376, May 2007.
141. Kelley, B.J., Lifshitz, J., Povlishock, J.T.: Neuroinflammatory responses after experimental diffuse traumatic brain injury. *J. Neuropath. Exp. Neurol.* 66(11):989-1001, Nov 2007.
142. Farkas, O., Povlishock, J.T. Cellular and subcellular change evoked by diffuse traumatic brain injury: a complex web of change extending far beyond focal damage. *Prog Brain Res*, 161:43-59, 2007.
143. Wei, EP, Hamm, RJ, Baranova, AI, Povlishock, JT: The Long-term Microvascular and Behavioral Consequences of Experimental Traumatic Brain Injury after Hypothermic Intervention. *J. Neurotrauma*, 26:527-537, April 2009.
144. McGinn MJ, Kelley BJ, Akinyi L, Oli MW, Liu MC, Hayes RL, Wang KKW, Povlishock JT. Biochemical, structural and biomarker evidence for calpain-mediated cytoskeletal change following diffuse brain injury uncomplicated by contusion. *J Neuropathol Exp Neurol.* 2009 Mar;68(3):241-9.
145. Povlishock JT, Wei EP. Posthypothermic Rewarming Considerations following Traumatic Brain

- Injury. *J. Neurotrauma*, 26(3): 333-340, 2009.
146. Baranova, AI, Wei, EP, Ueda, Y, Sholley, MM, Kontos, HA, Povlishock, JT, (2008 Sept). Cerebral vascular responsiveness after experimental traumatic brain injury: The beneficial effects of delayed hypothermia combined with superoxide dismutase administration. *J. Neurosurg.* 109(3):502-9.
 147. Zitnay GA, Zitnay KM, Povlishock JT, Hall ED, Marion DW, Trudel T, Zafonte RD, Zasler N, Nidiffer FD, DaVanzo J, Barth JT, (2008 Oct). Traumatic brain injury research priorities: the Conemaugh International Brain Injury Symposium. *J Neurotrauma.* 25(10):1135-52.
 148. Margulies S, Hicks R, Combination Therapies for Traumatic Brain Injury Workshop Leaders. Combination therapies for traumatic brain injury: Prospective considerations. *J Neurotrauma.* 2009 Jun;26(6):925-39.
 149. Mazzeo AT, Brophy G, Gilman C, Alves OL, Robles J, Hayes R, Povlishock JT, Bullock R (2009 Dec). Safety and Tolerability of Cyclosporin A in Severe Traumatic Brain Injury Patients: Results from a Prospective, Randomized Trial. *J Neurotrauma.* 26(12): 2195-2206.
 150. Gao G, Oda Y, Wei EP, Povlishock JT. The adverse pial arteriolar and axonal consequences of traumatic brain injury complicated by hypoxia and their therapeutic modulation with hypothermia in rat. *J. of Cerebral Blood Flow and Metabolism.* 2010 Mar;30(3):628-37.
 151. Neuwelt EA, Bauer B, Fahlke C, Fricker G, Iadecola C, Janigro D, Leybaert L, Molnar Z, O'Donnell M, Povlishock J, Saunders N, Sharp F, Stanimirovic D, Watts R, Drewes L. Engaging Neuroscience to Advance Brain Barriers Translational Research. *Nature Reviews Neuroscience.* 2011 Mar;12(3):169-82.
 152. Oda Y, Gao G, Wei EP, Povlishock JT. Combinational Therapy using Hypothermia and the Immunophilin Ligand FK506 to Target Altered Pial Arteriolar Reactivity, Axonal Damage and Blood-Brain Barrier Dysfunction after Traumatic Brain Injury in Rat. *J. Cerebral Blood Flow and Metabolism.* 2011 Apr;31(4):1143-54.
 153. Kochanek PM, Bramlett H, Dietrich WD, Dixon CE, Hayes RL, Povlishock JT, Tortella FC, Wang KKW. A novel multi-center preclinical drug screening and biomarker consortium for experimental traumatic brain injury: Operation Brain Trauma Therapy. *J. Trauma.* 2011 Jul;71(1 Suppl):S15-24.
 154. Greer JE, McGinn MJ, Povlishock JT. Diffuse Traumatic Axonal injury in the Mouse Induces Atrophy, c-Jun Activation and Axonal Outgrowth in the Axotomized Neuronal Population. *J Neuroscience* 31(13) 5089-5105. PMC3076099.
 155. Fujita M, Oda Y, Wei EP, Povlishock JT. The Combination of Either Tempol or FK506 with Delayed Hypothermia: Implications for Traumatically Induced Microvascular and Axonal Protection. *J. Neurotrauma* 28:1209-18. July 2011.
 156. Wang J, Hamm RJ, Povlishock JT. Traumatic Axonal Injury in the Optic Nerve: Evidence for Axonal Swelling, Disconnection, Dieback, and Reorganization. *J Neurotrauma* 28:1185-98. July 2011.
 157. Fujita M, Wei EP, Povlishock JT. Effects of Hypothermia on Cerebral Autoregulatory Vascular Responses in Two Rodent Models of Traumatic Brain Injury. *J Neurotrauma* 29:1491-98. May 1, 2012.

158. Greer JE, Povlishock JT, Jacobs KM. Electrophysiological Abnormalities in Both Axotomized and Nonaxotomized Pyramidal Neurons following Mild Traumatic Brain Injury. *J Neurosci* 32(19):6682-7. May 9, 2012.
159. Tamas A, Reglodi D, Farkas O, Kovessi E, Pal J, Povlishock JT, Schwarcz A, Czeiter E, Szanto Z, Doczi T, Buki A, Bukovics P. Effect of PACAP in central and peripheral nerve injuries. *Int J Mol Sci.* 2012 Jul; 13(7): 8430-848.
160. Fujita M, Wei EP, Povlishock JT. Intensity and Interval-Specific Repetitive Traumatic Brain Injury can Evoke both Axonal and Microvascular Damage. *J. Neurotrauma.* 2012 Aug 10;29(12):2172-80.
161. Lafrenaye AD, McGinn MJ, Povlishock JT. Increased intracranial pressure after diffuse traumatic brain injury exacerbates neuronal somatic membrane poration but not axonal injury: Evidence for primary intracranial pressure-induced neuronal perturbation. *J Cereb Blood Flow Metab.* 2012 Oct;32(10):1919-32.
162. Smith DH, Hicks R, Povlishock JT. Therapy development for diffuse axonal injury. *J Neurotrauma.* 2013 Mar 1;30(5):307-23.
163. Greer JE, Hånell A, McGinn MJ, Povlishock JT. Mild traumatic brain injury in the mouse induces axotomy primarily within the axon initial segment. *Acta Neuropathol.* 2013 Jul; 126(1):59-74.
164. Miyauchi T, Wei EP, Povlishock J. Therapeutic Targeting of the Axonal and Microvascular Change Associated with Repetitive Mild Traumatic Brain Injury. *J Neurotrauma.* 2013 Jun 24. [Epub ahead of print]
165. Wang J, Fox MA, Povlishock JT. Diffuse traumatic axonal injury in the optic nerve does not elicit retinal ganglion cell loss. *J Neuropathol Exp Neurol.* 2013 Aug;72(8):768-81.

ABSTRACTS

1. Povlishock, J.T., and Taylor, J.J.: Acetylcholinesterase distribution in the hypoglossal nucleus of the mouse. *J.S. Carolina Med. Assoc.*, 69:29, 1973.
2. Povlishock, J.T.: The postnatal development of the rat red nucleus. *Anat. Rec.*, 175: 415, 1973.
3. Seibel, H.R., and Povlishock, J.T.: A light and electron microscopic study of the pineal gland of ground squirrel. *Anat. Rec.*, 181:475, 1975.
4. Povlishock, J.T., and Seibel, H.R.: The perivascular spaces within the pineal gland of the ground squirrel, Citellus tridecemlineatus. *Va. J. Science*, 25(2): 92, 1975.
5. Shelton, K.B., Lindsey, W.W., Cobbs, C.S., Povlishock, J.T., and Vandenberg, R.D.: Isolation of nuclear structural proteins. *J. Cell Biol.*, 67:(2, pt. 2), 395a, 1975.
6. Kitces, E.N., Tew, J.G., Abbey, L.M., Povlishock, J.T., and Murray, B.K.: Effects of prior immunization on oral herpetic lesions and their sequelae in a mouse model system. *Va. J. Science*, 27(2): 90, 1976.
7. Povlishock, J.T., Leichnetz, G.R., and Astruc, J.: Light and electron microscopic evidence for a

- prefrontal-hippocampal projection in macaque. Proceedings of the Society for Neuroscience, Toronto, 1:395, 1976.
8. Leichnetz, G.R., Povlishock, J.T., and Astruc, J.: The prefrontal-amygdaloid projection in the monkey: A silver and ultrastructural study. Proceedings of the Society for Neuroscience, Toronto, 1:392, 1976.
 9. Astruc, J., Leichnetz, G.R., and Povlishock, J.T.: Corticofugal fiber degeneration following lesions in the medial prefrontal cortex of Macaca mulatta. Proceedings of the Society for Neuroscience, Toronto, 1:379, 1976.
 10. Povlishock, J.T., Becker, D.P., and Lovings, E.T.: The transport of horseradish peroxidase across the brain stem vasculature of normal and mechanically brain injured cats. Anat. Rec., 187: 686, 1977.
 11. Martinez, A.J., Moossy, J., and Povlishock, J.T.: Ultrastructural developmental features of human telencephalic capillaries. Proceedings of the American Association of Neuropathologists, 1977.
 12. Jenkins, L., Povlishock, J.T., and Becker, D.P.: An ultrastructural analysis of total global ischemia in cats. Va. J. Science, 28(2): 102, 1977.
 13. Jenkins, L., Povlishock, J.T., and Becker, D.P.: A morphological study of neuronal alterations in the cat brain following global ischemia. Proceedings of the Society for Neuroscience, Anaheim, III:396, 1977.
 14. Leichnetz, G.R., Astruc, J., and Povlishock, J.T.: Prefrontal corticofugal projections in macaque monkeys. Proceedings of the Society for Neuroscience, Anaheim, III:69, 1977.
 15. Povlishock, J.T., Becker, D.P., and Miller, J.D.: Neuronal uptake of horseradish peroxidase in mechanically brain injured cats. Proceedings of the Society for Neuroscience, St. Louis, 1978.
 16. Christman, C.W., and Povlishock, J.T.: Morphological analysis of maturing cerebellar nuclei. Va. J. Science, 29(2):100, 1978.
 17. Dietrich, W.D., Povlishock, J.T., and Becker, D.P.: Acetyl-cholinesterase activity in the brain stem of normal and mechanically brain injured cats. Va. J. Science, 29(2):100, 1978.
 18. Kontos, H.A., Wei, E.P., Dietrich, W.D., Povlishock, J.T., and Ellis, E.F.: Effects of inhibition of prostaglandin synthesis or microcirculatory alterations from experimental head injury. International Conference on Prostaglandins, Washington, D.C., 1979.
 19. Povlishock, J.T., Rosenblum, W.I., Kontos, H.A., and Becker, D.P.: The occurrence of endothelial lesions within the cerebral vasculature and their relation to the passage of horseradish peroxidase. Proceedings of the Society for Neuroscience, Atlanta, 517, 1979.
 20. Jenkins, L.W., Povlishock, J.T., and Becker, D.P.: Morphological correlation of the neuronal and glial response to complete cerebral ischemia. Proceedings of the Society for Neuroscience, Atlanta, 512, 1979.
 21. Levine, J.E., Povlishock, J.T., and Becker, D.P.: A morphological study of the baboon arachnoid villi under various CSF pressure gradients. Va. J. Science, 30(2):94, 1979.
 22. Christman, C.W., and Povlishock, J.T.: An integration of retrograde peroxidase and Golgi

- techniques for the evaluation of neuronal morphogenesis and synaptogenesis. *Va. J. Science*, 30(2):89, 1979.
23. Dietrich, W.D., Povlishock, J.T., and Kontos, H.A.: The pial vasculature subsequent to mechanical brain injury. *Va. J. Science*, 30(2):91, 1979.
 24. Salisbury, R.L., Krieg, R.J., Povlishock, J.T., and Seibel, H.R.: Comparative ultrastructure of Nutria. *Va. J. Science*, 30(2), 1979.
 25. DeWitt, D.S., Povlishock, J.T., Hayes, R.L., and Becker, D.P.: Vascular endothelial responses to acute hypertensive insult: A scanning and transmission electron microscopic study. *Proceedings of the Society for Neuroscience*, Cincinnati, Ohio, 80, 1980.
 26. Jenkins, L.W., DeWitt, D.S., Povlishock, J.T., and Becker, D.P.: A morphological assessment of the effects of the microsphere cerebral blood flow method on the feline cerebrovasculature and brain parenchyma. *Anat. Rec.*, 1980.
 27. Povlishock, J.T., DeWitt, D.S., Jenkins, L.W., and Becker, D.P.: Brain stem intraparenchymal vascular change following experimental subarachnoid hemorrhage. *Society for Neuroscience*, Los Angeles, 1981.
 28. Pechura, C.M., Povlishock, J.T., Becker, D.P., and Hayes, R.L.: Histopathological correlates of regional uptake of the C-deoxyglucose (DG) in cat brain after concussive injury. *Society for Neuroscience*, Los Angeles, 1981.
 29. Pechura, C.M., Povlishock, J.T., Becker, D.P., and Hayes, R.L.: Patterns of C-deoxyglucose uptake after closed head injury in cats. *Society for Neurochemistry*, Richmond, p. 171, 1981.
 30. Povlishock, J.T., Rosenblum, W.I., and Sholley, M.M.: Platelet aggregation without attendant endothelial denudation. *Am. Assoc. Neuropath.*, 1982.
 31. Ghatak, N.R., Povlishock, J.T., Wei, E.P., and Kontos, H.A.: A morphologic study of small subarachnoid arteries after acute hypertension. *Am. Assoc. Neuropath.*, 1982.
 32. Hayes, R.L., Lewelt, W., Yeatts, M.L., Jenkins, L.W., Katayama, Y., Newlon, P.G., Pechura, C.M., Povlishock, J.T., Becker, D.P., and Miller, J.D.: Metabolic behavioral and electrophysiological Correlates of experimental brain injury in the cat. *J. Cerebral Blood Flow and Metabol.*, 3:(Suppl.) 539-540, 1983.
 33. Povlishock, J.T., Becker, D.P., and Cheng, C.L.Y.: Microvascular status during reactive axonal change following minor brain injury. *Anat. Rec.*, 205:140, 1984.
 34. Povlishock, John T. and Jenkins, L.W.: Traumatically induced reactive axonal change and its correlation with focal brain parenchymal abnormalities. *Anat. Rec.*, 205:140, 1984.
 35. Ellison, Mary D., Povlishock, J.T., and Hayes, R.L.: Correlation between the blood to brain transfer of protein and that of α -aminoisobutyric acid: Changes in cerebrovascular permeability following acute hypertension. *Anat. Rec.*, 208:51A, 1984.
 36. Povlishock, J.T., and Becker, D.P.: The fate of reactive axonal swelling occurring with head injury. *Society for Neuroscience*, Anaheim, 1984.
 37. Ellison, M.D., Povlishock, J.T., and Hayes, R.L.: Examining blood-brain barrier permeability to horseradish peroxidase and to alpha-aminoisobutyric and following acute hypertension: A

- comparative, quantitative and morphological study. Society for Neuroscience, Anaheim. 1984.
38. Povlishock, J.T.: Sustained reactive sprouting following minor head injury. Society for Neuroscience, Dallas, 1985.
 39. Wei, E.P., Kontos, H.A., and Povlishock, J.T.: Oxygen radicals in arachidonate-induced increased blood-brain barrier permeability to proteins. *Stroke*, 1986.
 40. Povlishock, J.T., and Erb, D.E.: Widespread neuronal IgG deposition following experimental brain injury. Society for Neuroscience, Washington, D.C., 1986.
 41. Kontos, H.A., Wei, E.P. and Povlishock, J.T.: Role of hydroxyl radicals in the cerebral arteriolar abnormalities from arachidonate. *Proc. Int. Phys. Soc.*, 16:449, 1986.
 42. Rosenblum, W.I. and Povlishock, J.T.: In vivo demonstration of EDRF loss in brain microvessel. *Fed. Proc.*, 45:1141, 1986.
 43. Povlishock, J.T., and Erb, D.E.: Dendritic change following minor and moderate traumatic brain injury. Proceedings for the Society for Neuroscience, New Orleans, 1987.
 44. Ellison, M.D., Povlishock, J.T., and Merchant, R.E.: Altered cerebrovascular permeability and ultrastructure following the infusion of rIL-2 and/or its vehicle. Proceedings for the Society for Neuroscience, New Orleans, 1987.
 45. Povlishock, J.T., Williams, J.I., Wei, E.P., and Kontos, H.A.: Histochemical demonstration of superoxide in cerebral vessels. *Fed. Proc.*, 2:A835, 1988.
 46. Erb, D.E. and Povlishock, J.T.: Traumatically induced deafferentation and reorganization in the lateral vestibular nucleus of cat. 18th Annual Neurotrauma Meeting, Toronto, Canada, 1988.
 47. Williams, C., Jenkins, L., and Povlishock, J. Postischemic neuronal flooding with IgG: An early predictor of rat hippocampal cell death. Proceedings for the Society for Neuroscience, Phoenix, 1989.
 48. Povlishock, J.T. and Lyeth, B.G.: Traumatically induced blood-brain barrier disruption: A conduit for the passage of circulating excitatory neurotransmitters. Proceedings for the Society for Neuroscience, Phoenix, 1989.
 49. Yaghamai, A., and Povlishock, J.T.: Antibodies to the 68 kD neurofilament subunit readily identify traumatically induced axonal swellings. Proceedings for the Society for Neuroscience, St. Louis, 1990.
 50. Enters, E.K., Pascua, J.R., McDowell, K.P., Stanford, C.A., Povlishock, J.T., and Robinson, S.E.: Blockade of acute hypertensive response does not prevent changes in behavior or in CSF acetylcholine (ACH) content following traumatic brain injury (TBI). Proceedings for the Society for Neuroscience, St. Louis, 1990.
 51. Makiyama, Y., Jenkins, L.W., Povlishock, J.T., and Hayes, R.L.: Hippocampal ultrastructure following mild and moderate traumatic brain injury. Proceedings for the Eighth Annual Neurotrauma Meeting, St. Louis, 1990.
 52. Chou, C.-L., Lyeth, B.G., Jenkins, L.W., Hayes, R.L., and J.T. Povlishock: Regional cerebral blood flow changes after traumatic brain injury in the rat. Proceedings for the Society of

Neuroscience, New Orleans, 1991.

53. Valadka, A.B., Yaghamai, A.A., Astruc, J., and Povlishock, J.T.: Initial intra-axonal abnormalities associated with traumatic brain injury. Proceedings for the Society of Neuroscience, New Orleans, 1991.
54. Kapasi, M., Giebel, M.L., and Povlishock, J.T.: Time course of traumatically induced blood-brain barrier alteration. Proceedings for the Society of Neuroscience, Anaheim, California, 1992.
55. Povlishock, J.T.: Ultrastructural findings in endothelial injury: The possible cause or consequences. Microcirculatory Stasis in the Brain. Tokyo, 1993.
56. Pettus, E., Salvant, J., Coburn, T., Walker, S., and Povlishock, J.T.: The relationship between altered axolemmal permeability and the genesis of reactive axonal change in traumatically brain-injured animals. Proceedings for the 11th Neurotrauma Society Meeting, Washington, D.C., 1993.
57. Schröder, M.L., Muizelaar, J.P., Bullock, R., Kuta A.J., Povlishock, J.T., and Salvant, J.B.: Pericontusional brain edema; evidence for microvascular hypoperfusion in humans. Presented at the 9th International Symposium on ICP and Its Related Problems, Japan.
58. Pettus, E., Christman, C., and Povlishock, J.: The relationship of traumatically induced altered axolemmal permeability to the genesis of delayed reactive axonal change. Proceedings for the 24th Neuroscience Meeting, Miami, Florida, 1994.
59. Gordon, D., Phillips, L., Astruc, J., and Povlishock, J.: The interaction of neuroexcitation and target deafferentation in the pathobiology of traumatic brain injury: Immunocytochemical and ultrastructural evidence of disordered recovery. Proceedings for the 24th Neuroscience Meeting, Miami, Florida, 1994.
60. Phillips, L.L., Lyeth, B.G., Hamm, R.J., Delahunty, T.M., Reeves, T.M., and Povlishock, J.T.: Effect of receptor antagonism on behavioral morbidity produced by combined fluid percussion injury and entorhinal cortical lesion. *Neurosci. Abs.*, 20:197, 1994.
61. Povlishock, J.T., Giebel, M.L., and Pettus, E.H.: Rapid neurofilament changes initiate the delayed axotomy seen with moderate traumatic brain injury. Proceedings for the 24th Neuroscience Meeting, Miami, Florida, 1994.
62. Salvant, J.B., Walker, S.A., Christman, C.W., and Povlishock J.T.: Nerve growth factor enhances neuritic outgrowth following experimental traumatic brain injury. Proceedings for the 12th Society for Neurotrauma Society Meeting, Miami, Florida, 1994.
63. Willoughby, K. Povlishock, J., Walker, S., Coburn, T, and Ellis, E.: Stretch-induced injury of astrocytes in culture: A morphologic examination. Proceedings for the 12th Society for Neurotrauma Society Meeting, Miami, Florida, 1994.
64. Reeves, T.M., Lyeth, B.G., and Povlishock, J.T.: Time course of LTP deficits following moderate traumatic brain injury. *Neurosci. Abs.*, 20:425, 1994.
65. Reeves, T.M., Lyeth, B.G., and Povlishock, J.T.: Time course of LTP deficits following moderate traumatic brain injury. *Neurosci., Abs.* 20:425, 1994.
66. Reeves, T.M., Povlishock, J.T., Lyeth, B.G., and Phillips, L.L.: Long-term potentiation and

- excitability changes following deafferentation, fluid percussion, or combined injuries. *J. Neurotrauma*, 11, 1994.
67. Pettus, E., and Povlishock, J.T.: Evidence for prolonged alterations and axonal permeability following traumatic brain injury. 3rd International Neurotrauma Symposium, Toronto, Canada, 1995.
 68. Phillips, L.L., Lyeth, B.G., Hamm, R.J., Reeves, T.M., and Povlishock, J.T.: Effect of receptor antagonism on cognitive performance after combined fluid percussion injury and entorhinal cortical lesion. 3rd International Neurotrauma Symposium, Toronto, Canada, 1995.
 69. Reeves, T.M., Lyeth, B.G., Povlishock, J.T., and Phillips, L.L.: Posttraumatic neuroexcitation attenuates deafferentation-induced plasticity. 3rd International Neurotrauma Symposium, Toronto, Canada, 1995.
 70. Gordon, D.E., Phillips, L.L., and Povlishock, J.T.: The interaction of neuroexcitation and target deafferentation in the pathobiology of traumatic brain injury: Immunocytochemical and ultrastructural evidence of disordered recovery. 3rd International Neurotrauma Symposium, Toronto, Canada, 1995.
 71. Zauner, A., Bullock, R., Kuta, A.J., Muizelaar, J.P., Schroder, M.L., and Povlishock, J.T.: Documentation of focal brain ischemia and ultrastructural changes in traumatic contusions in humans. 3rd International Neurotrauma Symposium, Toronto, Canada, 1995.
 72. Hofstede, D.J., Bullock, R., and Povlishock, J.T.: Ultrastructural analyses of pericontusional tissue harvested from foci of known glutamate and cerebral blood flow levels. Proceedings of the 13th Annual Neurotrauma Meeting, San Diego, California, 1995.
 73. Phillips, L.L., Lyeth, B.G., Hamm, R.J., Reeves, T.M., and Povlishock, J.T.: MK-801 administration during deafferentation enhances cognitive recovery after combined fluid percussion and entorhinal cortical lesion. Proceedings of the 13th Annual Neurotrauma Meeting, San Diego, California, 1995.
 74. Reeves, T.M., Lyeth, B.G., Hamm, R.J., Phillips, L.L., and Povlishock, J.T.: Changes in hippocampal recurrent inhibition after traumatic brain injury. *J. Neurotrauma*, 12(5):975, 1995.
 75. Povlishock, J.T., Trojanowski, J., and Moroi, J.: Double labeling studies using antibodies targeted to the neurofilament and sidearm domains in the study of the genesis of traumatically induced axonal injury. Proceedings of the 26th Annual Meeting of the Society for Neuroscience, Washington, D.C., 1996.
 76. Moroi, J., Trojanowski, J., and Povlishock, J.: Evidence for ultra-early cytoskeletal change and its relation to the pathobiology of traumatic axonal injury. Proceedings of the 26th Annual Meeting of the Society for Neuroscience, Washington, D.C., 1996.
 77. Gordon, D.E., Phillips, L.L., and Povlishock, J.T.: The interaction of neuroexcitation and target deafferentation in the pathobiology of traumatic brain injury (TBI): An assessment of disordered recovery in the rat dentate gyrus. Proceedings of the 26th Annual Meeting of the Society for Neuroscience, Washington, D.C., 1996.
 78. Fitzpatrick, M.O., Giebel, M.L., and Povlishock, J.T.: Alterations in the axolemma following traumatic brain injury: Comparison of two extracellular tracers of different molecular weights. Proceedings of the 26th Annual Meeting of the Society for Neuroscience, Washington, D.C., 1996.

79. Phillips, L.L., Zhu, J., Lyeth, B.G., Reeves, T.M., and Povlishock, J.T.: Long-term enhancement of IL1 and IL3 expression after combined fluid percussion and bilateral entorhinal cortical lesion. Proceedings of the 26th Annual Meeting of the Society for Neuroscience, Washington, D.C., 1996.
80. Zhu, J., Povlishock, J.T., Lyeth, B.G., Hamm, R.J., Reeves, T.M., and Phillips, L.L.: Up regulation of TrkB^{gp95} in rat hippocampus after combined fluid percussion and bilateral entorhinal cortical brain injury. Proceedings of the 14th Annual Meeting of the Neurotrauma Society, Washington, D.C., 1996.
81. Povlishock, J.T., Okonkwo, D.O., and Astruc, JA: The pathogenesis of delayed axotomy in a gyrencephalic model of traumatic brain injury (TBI). Proceedings for the 27th Annual Meeting of the Society for Neuroscience, New Orleans, 1997.
82. Stone, J., Christman, C., and Povlishock, J.T.: The EM visualization of antibodies targeted to amyloid precursor protein in axons undergoing traumatically induced reactive change. Proceedings of the 27th Annual Meeting of the Society for Neuroscience, New Orleans, 1997.
83. Okonkwo, D.O., Pettus, E.H., and Povlishock, J.T.: Alterations of neurofilament sidearms after traumatic axonal injury. Proceedings for the 27th Annual Meeting of the Society for Neuroscience, New Orleans, 1997.
84. Temple, M.D., Delahunty, T.M., Hamm, R.L., Lyeth, B.G., Phillips, L.L., and Povlishock, J.T.: Glycine enhances NMDA-stimulated cGMP release in adult rat hippocampus. Proceedings for the 27th Annual Meeting of the Society for Neuroscience, New Orleans, 1997.
85. Zhu, J., Hamm, R.L., Lyeth, B.G., Reeves, T.M., Povlishock, J.T., and Phillips, L.L.: Postinjury administration of L-deprenyl improves cognitive outcome and enhances plasticity following traumatic brain injury. 15th Annual Neurotrauma Society Meeting, New Orleans, 1997.
86. Kim, H., Fillmore, H., Zhu, J., Hasty, K., Reeves, T.M., Povlishock, J.T., and Phillips, L.L.: Increase in MMP-3 staining in rat hippocampus following traumatic brain injury. 15th Annual Neurotrauma Society Meeting, New Orleans, 1997.
87. Harris, L.K., Fillmore, H.L., Broaddus, J.T., Povlishock, J.T., and Phillips, L.L.: Traumatic brain injury induces differential gene expression. 15th Annual Neurotrauma Society Meeting, New Orleans, 1997.
88. Kao, C-Q, Povlishock, J.T. Phillips, L. L., Reeves, T.M. Presynaptic excitability increases following traumatic brain injury. 16th Annual Neurotrauma Society Meeting, Los Angeles, 1998.
89. Phillips, L.L., Gong, Q.-Z, Reeves, T.M. and Povlishock, J.T. Postinjury agonism of DI receptors differentially affects cognitive outcome. 16th Annual Neurotrauma Society Meeting, Los Angeles, 1998.
90. Harris, L.K., Golden, K.M., Reeves, T.M., Povlishock, J.T. and Phillips, L.L. Cytochrome C oxidase II in trauma: An index of metabolic dysfunction and recovery mechanisms. Proceedings of the 28th Annual Meeting Soc. of Neuroscience, Los Angeles, 1998.
91. Okonkwo, D.O. and Povlishock, J.T. Cyclosporin A (CsA) limits mitochondrial damage and attenuates axonal disruption, but does not accelerate motor recovery in traumatic brain injury

- (TBI). 16th Annual Neurotrauma Society Meeting, Los Angeles, 1998.
92. Okonkwo, D.O. and Povlishock, J.T. Cyclosporin A (CsA) before injury preserves mitochondrial integrity and attenuates axonal disruption in traumatic brain injury (TBI). Proceedings of the 28th Annual Meeting for Soc. of Neuroscience, 1998.
 93. Büki, A., Povlishock, J.T., and Christman, C.W. The role of calpain-mediated spectrin proteolysis (CMSP) in traumatically induced axonal injury (AI). Proceedings of the 28th Annual Meeting for Soc. of Neuroscience, 1998.
 94. Koizumi, H., and Povlishock, J.T. Axonal protection with hypothermia following traumatic brain injury in the rat. Proceedings of the 28th Annual Meeting for Soc. of Neuroscience, 1998.
 95. Stone, J.R. and Povlishock, J.T. The ultrastructural characterization of two distinct classes of traumatically injured axons through the use of antibodies to amyloid precursor protein (APP). 16th Annual Neurotrauma Society Meeting, Los Angeles, 1998.
 96. Singleton, R.H, Stone, J.R., Okonkwo, D. O., Leichnetz, G.R., Povlishock, J.T. FK506 is more effective than cyclosporin A in ameliorating traumatic axonal injury. Proceedings of the 30th Annual Meeting for Society of Neuroscience, 2000.
 97. Stone, J.R., Singleton, R.H., Povlishock, J.T. Antibodies to the C-terminus of the β -amyloid precursor protein: A site specific marker for the detection of traumatic axonal injury. Proceedings of the 30th Annual Meeting for Society of Neuroscience, 2000.
 98. Povlishock, J.T., Suehiro, E., Zhu, J., Phillips, L.L. Evidence for neuronal plasmalemmal mechanoporation following traumatic brain injury (TBI) Proceedings of the 30th Annual Meeting for Society of Neuroscience, 2000.
 99. Suehiro, E., Astruc, J. Povlishock, J.T. Rapid post hypothermic rewarming exacerbates traumatically in direct axonal injury which is attenuated by cyclosporin A. Proceedings of the 30th Annual Meeting for Society of Neuroscience, 2000.
 100. Marmarou, C.R., Walker, S.A., Stone, J.T., Suehiro, E., Ueda, Y, Singleton, R.H., Povlishock, J.T. Quantitative analysis of neurofilament compaction and axonal transport following diffuse traumatic brain injury. *J. Neurotrauma*, 19(10):1273, 2002.
 101. Singleton, R.H. and Povlishock J.T. Identification of multiple distinct pathologic neuronal phenotypes within diffusely injured brain. *J. Neurotrauma*, 19(10):1278, 2002.
 102. Ueda, Y., Wei, E.P., Suehiro, E. and Povlishock, J.T. The effects of delayed but prolonged hypothermia on the pial vascular response after traumatic brain injury in rats. *J. Neurotrauma*, 19(10):1357, 2002.
 103. Ueda, Y., Walker, S.A., Marmarou, C.R., Singleton, R.H., and Povlishock, J.T. Perivascular nerve damage in the cerebral circulation following traumatic brain injury. *J. Neurotrauma*, 19(10):1358, 2002.
 104. Wei, E.P., Ueda, Y., Suehiro, E. and Povlishock, J.T. Hypothermic cerebrovascular protection is regulated to the rate of post hypothermic rewarming. *J. Neurotrauma*, 19(10):1358, 2002.
 105. Reeves, T.M., Phillips, L.L., Povlishock, J.T. Traumatic axonal injury differentially impairs fast- vs. slow-conducting corpus callosum fibers. *J. Neurotrauma*, 19(10):1362, 2002.

106. Suehiro, E., Koziom, H., Fujisawa, H., Suzuki, M., Povlishock, J. Modulation of hypothermic delay, duration and rewarming rates positively influence the genesis of traumatic axonal injury (TAI). *J. Neurotrauma*, 19(10):1383, 2002.
107. Faló, M.C., Reeves, T.M., Povlishock, J.T. and Phillips, L.L. Assessment of agrin expression during trauma-induced synaptic plasticity. *J. Neurotrauma*, 19(10):1384, 2002.
108. Phillips, L.L., Harris, L.K., Black, R.T. Reeves, T.M., Povlishock, J.T. Mitochondrial gene expression following traumatic brain injury: analysis of the ND4 subunit of complex I. *J. Neurotrauma*, 19(10):1384, 2002.
109. Büki, A., Farkas, O., Polgar, B., Szekeres-Bartho, J., Doczi, T., Povlishock, J.T. Calpain-mediated spectrin breakdown products in the cerebrospinal fluid of severely head injured patients. *J. Neurotrauma*, 19(10), 2002.

BOOKS/CHAPTERS

1. Povlishock, J.T., Becker, D.P., Kontos, H.A., and Jenkins, L.W.: Neural and vascular alterations in brain injury. In: *Neural Trauma - Seminars in Neurological Surgery* (eds. A.J. Popp, R.S. Bourke, L.R. Nelson, and H.K. Kimelberg) Vol. IV, New York: Raven Press, pp. 79-93, 1979.
2. Povlishock, J.T., Kontos, H.A., Wei, E.P., Rosenblum, W.I., and Becker, D.P.: A study of the cerebral vasculature under various perturbations: A combined scanning and transmission electron microscopic analysis. In: *The Cerebral Microvasculature*. (eds. H.M. Eisenberg and R.L. Suddith), Plenum Press, pp. 227-241, 1980.
3. Kontos, H.A., Dietrich, W.D., Wei, E.P., Ellis, E.F., and Povlishock, J.T.: Functional morphological and metabolic abnormalities of the cerebral microcirculation after experimental brain injury and their mechanism. In: *The Cerebral Microvasculature*. (eds. H.M. Eisenberg and R.L. Suddith), Plenum Press, pp. 243-256, 1980.
4. Povlishock, J.T., Kontos, H.A., DeWitt, D.E., and Wei, E.P.: The effects of mechanical brain injury and acute hypertension upon the cerebral vasculature: A morphophysiological consideration of those factors involved in the genesis of cerebrovascular dysfunction. In: *Cerebral Microcirculation and Metabolism*. (eds. J. Cervos-Navarro and E. Fritschka), Raven Press, pp. 15-30, 1980.
5. Povlishock, J.T., and Kontos, H.A.: Brain Injury: The pathophysiology of pial and intraparenchymal vascular dysfunction. In: *Neural Trauma - Seminars in Neurological Surgery*. (eds. R.G. Grossman and P.L. Gildenberg), Raven Press, pp. 15-30, 1982.
6. Povlishock, J.T., and Levine, J.E.: The morphophysiological correlates of cerebrospinal fluid absorption. In: *Cerebral Venous System and its Disorders* (Grune and Stratton), pp. 251-294, 1983.
7. Levine, M.E., S. Digelman, M.K., Zapulla, Povlishock, J.T., Malis, L.I., and Holland, J.F.: Anatomical studies of blood-brain barrier disruption following intracarotid bile salt infusion. In: *Intracranial Pressure, V*. (eds. S. Fshii, H. Nagai, and M. Brock), Springer-Verlag, Berlin, pp. 367-371, 1983.
8. Povlishock, J.T.: The brain's morphopathological response to injuries of graded severity. In: *NIH Central Nervous System Trauma - Status Report*. Becker, D.P. and Povlishock, J.T.,

- (eds). William Byrd Press, 1985.
9. NIH Central Nervous System Trauma - Status Report. Becker, D.P. and Povlishock, J.T. (eds). William Byrd Press, 1985.
 10. Hayes, R.L., Pechura, C.M., Povlishock, J.T., and Becker, D.P.: Changes in blood-brain barrier function associated with conditioned fear in the rat. In: Proceeding of the 6th International Symposium Brain Edema, Springer-Verlag, New York, pp. 224-227, 1985.
 11. Nazar GB, Kassell NF, Povlishock JT, Lee J, Hudson S. Subarachnoid hemorrhage causes adherence of white blood cells to the cerebral arterial luminal surface. In: Cerebral vasospasm. (Wilkins RH, ed.). Raven Press, New York, 1988.
 12. Povlishock, J.T. and Coburn, T.H.: Morphopathological changes associated with mild head injury. In: Mild Head Injury. Eisenberg, H.M., Levin, H.S., and Benton, A.L., (eds.) Oxford Press, New York, pp. 37-54, 1989.
 13. Povlishock, J.T.: Experimental studies of head injury. In: Head Injury. W. B. Saunders, pp. 437-450, 1989.
 14. Povlishock, J.T., Kontos, H.A., and Ellis, E.F.: New insights in experimental brain injury. In: Head Injury. W.B. Saunders, pp. 451-465, 1989.
 15. Povlishock, J.T.: Structural aspects of brain injury: In: Traumatic Brain Injury. Back-y-Rita, P. (ed.) Demos Publications, New York, pp. 87-98, 1989.
 16. Povlishock, J.T.: Neurochemistry and neuropathology of mild to moderate head injury: In: Mild to Moderate Head Injury, Hoff, J.T., Anderson, T.E., and Cole, T.M. (eds.) Blackwell Scientific Publications, Boston, pp. 219-223, 1989.
 17. Povlishock, J.T., Erb, D.E., and Astruc, JA: Axonal response to traumatic brain injury: Reactive axonal change, deafferentation and neuroplasticity. In: NIH Central Nervous System Trauma Status Report, Jane, JN, Torner, J., Anderson, D., and Young, W. (eds.), J. Neurotrauma, 9(1):S189-S200, 1989.
 18. Jiang, Ji Y., Lyeth, B.G., Kapasi, M., and Povlishock, J.: Moderate hypothermia reduces blood-brain barrier disruption following traumatic brain injury. In: Proceeding of the Neurotransmitter Satellite Symposium of Brain. Plenum Press, pp. 285-291, 1991.
 19. Povlishock, J.T., and Dietrich, W.D.: The blood-brain barrier following injury: An Overview. In: Proceedings of the Neurotransmitter Satellite Symposium of Brain. Plenum Press, pp. 265-269, 1991.
 20. Hayes, R.L. and Povlishock, J.T. and Singha, B.: Pathophysiology of mild head injury. In: Physical Medicine and Rehabilitation. Rehabilitation of Post-Concussive Disorders. Lawrence J. Horn, M.D., and Nathan D. Zasler, M.D. (eds.) Hanley and Belfus, Inc., Philadelphia, pp. 9-20, 1992.
 21. Povlishock, J.T.: Traumatic Brain Injury: The pathobiology of injury and repair. In: Neuroregeneration, Gorio, A., ed., Raven Press, pp. 185-216, 1993.
 22. Povlishock, J.T., and Valadka, A.B.: Pathobiology of traumatic brain injury. In: Head Injury Rehabilitation. Williams and Wilkins Co., Finlayson, M.A.J., and Garner, S. (eds). pp. 11-33, 1993.

23. Povlishock, J.T., and Christman, C.W.: Diffuse axonal injury. In: The Axon. S.G. Waxman, J. Kocsis, and P. Stys (eds.), Oxford University Press, pp. 504-529, 1995.
24. Povlishock, J.T., and Kapasi, M.: Ultrastructural features of altered cerebrovascular permeability: Structural/functional relationships. In: Microcirculatory Stasis in the Brain. M. Tomita et. al. (eds). Excerpta Medica, pp. 219-226, 1993.
25. Narayan, R.K., Willberger, J.E. and Povlishock, J.T.: Neurotrauma, McGraw-Hill, Inc., 1995.
26. Povlishock, J.T.: An overview of brain injury models. In: Neurotrauma. R.K. Narayan, J.E. Willberger and J.T. Povlishock (eds.). McGraw-Hill, Inc., pp. 1325-1337, 1996.
27. Povlishock, J.T.: The Pathophysiology of blood-brain barrier dysfunction due to traumatic brain injury. In: An Introduction to the Blood-Brain Barrier: Methodology and Biology. W.M. Pardridge (ed.) Cambridge University Press pp. 441-453, 1998.
28. Povlishock, J.T.: Pathophysiology of neural Injury: Therapeutic Opportunities and Challenges. Proceedings of the Congress of Neurological Surgeons Vol. 46 pp. 113-126, 2000.
29. Povlishock, J.T. and Christman, C.W.: The pathobiology of traumatic brain injury. In: The Neurobiology of Central Nervous System Trauma. Salzman, S.K. and Faden, A.I. (eds.), Oxford Press, pp. 108-120, 2000.
30. Povlishock, J.T. and Stone J.R. Traumatic Axonal Injury. In: Head Trauma: Basic, Preclinical and Clinical Directions. Ed: L.P. Miller, R.L. Hayes, J.K. Newcome, J. Wiley & Sons, Inc. 2001.
31. Povlishock, J.T., Ueda, Y., Wei, E P.: A Review of the Protective Effects of Hypothermia on the Axonal and Vascular Pathobiology Associated with Traumatic Brain Injury. Hayashi, N., Bullock, R., Dietrich, D.W., Mackawa, T., Tamura, A. (Eds.) Springer-Verlag, Tokyo, 2004.
32. Ueda, Y., Wei, E.P., Povlishock, J.T.: Pial Microcirculation Evaluated by Closed Cranial Window Method 7 Days After Impact Acceleration Injury in Rats: Does Post-Traumatic Hypothermia Provide Persisting Pial Vascular Protection? Hayashi, N., Bullock, R., Dietrich, D.W., Mackawa, T., Tamura, A. (Eds.) Springer-Verlag, Tokyo, 2004.

SELF-INSTRUCTIONAL PACKAGE

Leichnetz, G.R., Spencer, R.F., and Povlishock, J.T.: Gross and sectional anatomy of the central nervous system. 35 pp. of descriptive text and photographic illustrations.