

Pak Hoo Chan, Ph.D.
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Stanford University School of Medicine
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EDUCATION

B.S. in Biology, The Chinese University of Hong Kong (1960-1964)
M.A. in Biochemistry, University of California, Los Angeles (1968-1970)
Ph.D. in Biology, University of California, Los Angeles (1970-1972)

TRAINING

Research Assistant, Department of Surgery, Dr. Paul I. Terasaki, University of California, Los Angeles, School of Medicine (1968-1970)
Postgraduate Research Fellow, Department of Biology, Dr. Samuel G. Wildman, University of California, Los Angeles (1970-1972)
Postdoctoral Fellow, Department of Biochemistry, Dr. W. Z. Hassid, University of California, Berkeley (1972-1974)
Postdoctoral Fellow, Department of Pathology, Neuropathology, Dr. Amico Bignami, Stanford University (1974-1975)

ACADEMIC APPOINTMENTS

Assistant Research Biochemist, Department of Neurology, School of Medicine, University of California, San Francisco (1975-1980)
Associate Research Biochemist, Department of Neurology, School of Medicine, University of California, San Francisco (1980-1983)
Associate Adjunct Professor, Department of Neurology, School of Medicine, University of California, San Francisco (1983-1989)
Director, Neurochemistry Laboratory, Brain Edema Research Center, University of California, San Francisco (1986-1991)
Co-Director, CNS Injury and Edema Research Center, University of California, San Francisco (1986-1991)
Principal Investigator, Brain Tumor Research Center, Department of Neurosurgery, School of Medicine, University of California, San Francisco (1989-1997)
Professor, Department of Neurological Surgery, School of Medicine, University of California, San Francisco (1989-1997)
Professor, Department of Neurology, School of Medicine, University of California, San Francisco (1989-1997)
Director, CNS Injury and Edema Research Center, School of Medicine, University of California, San Francisco (1991-1997)
Founding Member, Cancer Center Program in Radiation Oncology, Program in Neuro-Oncology, School of Medicine, University of California, San Francisco (1994-1997)
Professor (Tenured), Department of Neurosurgery, Stanford University School of Medicine (1997-2014)

Pak H. Chan, Ph.D.

Professor, Department of Neurology & Neurological Sciences Stanford University School of Medicine (1997-2014)

Vice Chairman for Research, Department of Neurosurgery, Stanford University School of Medicine (1997-2012)

Director, Neurosurgical Laboratories, Stanford University School of Medicine (1997-2012)

Faculty, Program in Neurosciences, Stanford University School of Medicine (1998-2014)

The James R. Doty Professor in Neurosurgery and Neurosciences (2007-2014)

The James R. Doty Professor in Neurosurgery and Neurosciences, Emeritus (2014-present)

HONORS AND AWARDS

Mencius Type A & Type B Scholarships, Chinese University of Hong Kong (1960-1961)

University Scientific Achievement Scholarship, Chinese University of Hong Kong (1962-1963)

University Distinguished Scholarship, Chinese University of Hong Kong (1963)

Yale-New Haven Scholarship, Chinese University of Hong Kong (1964)

Teaching Assistantship, UCLA (1970-71)

FSTIP Award, UCLA (1971)

Post-Graduate Research Fellowship, UCLA (1971-1972)

Jacob Javits Neuroscience Investigator Award, NIH (1997-2004)

American Heart Association Bugher Foundation Award (2001-2004)

Chairman, 22nd Princeton Conference on Cerebrovascular Disease (2000)

President, National Neurotrauma Society (2000-2001)

Thomas Willis Award, American Stroke Association (2008)

Lifetime Achievement Award, International Society for Cerebral Blood Flow & Metabolism (2015)

ACTIVE GRANT SUPPORT--PRINCIPAL INVESTIGATOR

NIH-NINDS 2RO1 NS025372-25

"Reperfusion and Neurovascular Injury in Stroke"

7/1/11-6/30/16

Total cost \$1,997,950

Memberships

American Association for the Advancement of Science
American Heart Association, Stroke Fellow
American Heart Association/American Stroke Association Silver Heart Member; Fellow,
Council on Stroke
American Society for Biochemistry and Molecular Biology
American Society for Neurochemistry
International Society of Cerebral Blood Flow & Metabolism
National Neurotrauma Society
Society for Neuroscience

UNIVERSITY SERVICE

University Hearing Committee, UCSF (1979-1980)
Ad Hoc Review Committees for Appointments and Advancement, UCSF (1981-1982, 1982-1983, 1983-1984, 1984, 1985, 1985-1986, 1986-1987, 1988-1989, 1989-1990, 1990-1991, 1991-1992 Chair, 1993-1994 Chair, 1994-1995 Chair, 1995-1996) Faculty Search Committee, Department of Neurology (1992, 1993)
Faculty Search Committee, Department of Physiological Nursing, UCSF (1992)
Faculty Search Committee, Department of Neurological Surgery, UCSF (1992, 1993, 1994, 1997)
Faculty Appraisal Committee, Department of Neurology, UCSF (1994)
Departmental Scientific Research Review Committee, UCSF (1994-1997)
Internal Advisory Committee, "Mechanisms of Ischemic Neonatal Brain Injury," UCSF
PI: Donna Ferriero, M.D. (1995-1997)
Subcommittee, University of California Systemwide Academic Senate Education Abroad Program (EAP) (1996-1997)
Biological Sciences Ph.D. Thesis Committee, Stanford University (1998-2014)
Neurosciences Ph.D. Thesis Committee, Stanford University School of Medicine (1998-2014)
Faculty Mentor of Paul Matz, M.D., Assistant Professor, Department of Neurosurgery, Stanford University School of Medicine (1998-2001)
Faculty Mentor of Victor Tse, M.D., Ph.D., Assistant Professor, Departments of Neurosurgery and Neurology, Stanford University School of Medicine (1998-2009)
Department Representative and Host, Neurobiology of Disease Seminar, Program in Neurosciences (1998-2001)
Medical Student Scholars Program, Stanford University School of Medicine (Student: Justin Massengale, 1998-2000)
Stanford University School of Medicine Admissions Panel (1998-2014)
Course Instructor, Department of Biological Sciences, Course 199, Stanford University School of Medicine (1998-2006)
Interdepartmental Neuroscience Faculty Search Committee, Stanford University School of Medicine (2001-2002)
Faculty, Vice Provost for Undergraduate Education, VPUE Faculty Grant for Undergraduate Research, Stanford University School of Medicine (2001-2014)
Undergraduate Honors Thesis Reader, Department of Biological Sciences (2002-2014)
Cerebrovascular Scientist Search Committee, Department of Neurosurgery, Stanford University School of Medicine (2004-2005)

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Brain Tumor Scientist (UTL) Search Committee, Chair, Department of Neurosurgery, Stanford University School of Medicine (2004-2005)

Faculty Mentor of Heng Zhao, Ph.D., Assistant Professor (Research), Department of Neurosurgery, Stanford University School of Medicine (2005-2014)

Spine Scientist Search Committee, Department of Neurosurgery, Stanford University School of Medicine (2007-2008)

Appointments and Promotions Committee, Member and Chair, Department of Neurosurgery, Stanford University School of Medicine (2005-2014)

Evaluation Committee, Department of Neurology and Neurological Sciences, Stanford University School of Medicine (2011-2014)

EXTRACURRICULAR ACTIVITIES

National Institutes of Health

Member, Neurology A Study Section (1985-1989)

Member, NINDS Neurological Disorders Program Project Review A (NSDA) Committee (1996-2000)

DRG National Reviewers Reserve (1989-1993)

Ad Hoc Member, Neurology A Study Section (1985, 1991, 1994, 1995)

Ad Hoc Review Member, NINDS NSPA Study Section (1990-1995)

Ad Hoc Review Committee, Neurology Institute Committee on Alzheimer's Disease (July 8-10, 1991)

Ad Hoc Member, NINDS NSPB Study Section (1993, 1994)

Ad Hoc Member, NIA Review Committee (1994-1996)

Ad Hoc Member, NLS-3 Study Section (1996)

Member, Stroke Progress Review Group, NINDS, Arlington, VA (March 27, 2001)

Co-Chair, Neurovascular Protective Mechanisms, Stroke Progress Review Group, NINDS, Englewood, CO (July 15-18, 2001)

Ad Hoc Committee Member, MCDN-2 Study Section, Washington, DC (October 28-29, 2001)

Member, NINDS NS1 SRB-K (02) Special Emphasis Panel (December 11, 2001)

Participant, Workshop on Neurocognitive Changes Following Cardiac Surgery, NHLBI/NINDS/NIA, NIH Campus, Bethesda, MD, (April 14-15, 2002)

Member, NINDS ZNS1 SRB-K (01) SPOTRIAS Special Emphasis Panel (August 4-5, 2002)

Member, NINDS ZNS1 SRB-K (03) SPOTRIAS Special Emphasis Panel (December 16-17, 2002)

Member, NINDS Stroke Progress Review Group (January 6, 2003)

Member, NIMH Board of Scientific Counselors (April 27-28, 2003)

Member, NINDS ZNS1 SRB-K (01) SPOTRIAS Study Section (June 9-10, 2003)

Member, NINDS ZNS1 SRB-M (01) Special Emphasis Panel (July 21, 2003)

Ad Hoc Member, NINDS NSD-B Study Section (October 16-17, 2003)

Member, NINDS ZNS1 SRB-K (01) SPOTRIAS Special Emphasis Panel (December 10-12, 2003)

Member, NINDS ZNS1 SRB-M (07) Special Emphasis Panel (March 4, 2004)

Member, NINDS ZNS1 SRB-M (11) Special Emphasis Panel (June 30, 2004)

Member, NINDS ZNS1 SRB-K (01) SPOTRIAS Special Emphasis Panel (August 18-20, 2004)

Member, NHLBI ZHL1 CSR-HO1R (RFA: HL-05-004) Special Emphasis Panel (July 7-8, 2005)

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Member, NINDS ZNS1 SRB-K (01) SPOTRIAS Special Emphasis Panel (July 22, 2005)
Member, NINDS ZNS1 SRB-M (28) Special Emphasis Panel (November 3, 2005)
Member, NOMD Study Section, NIH (June 19-20, 2006; May 27-28, 2008)
Member, ZRG1 BDCN-T(58)-2009/10 (July 20-21, 2009)
Distinguished Editor, RFA-OD-09-003 Challenge Grant Panel II (July 20-21, 2009)
Member, Distinguished Editors, ZRG1 BDCN-A (55)R Study Section; RFA-OD-10-005:
Director's Opportunity 5 Themes: Neuroscience Mental Diseases and Aging (June 29, 2010)

Visiting Professorships

Department of Neurosurgery, Institute for Brain Diseases, Tohoku University, Sendai, Japan
(August 5-9, 1991)
Department of Neurosurgery, Teikyo University School of Medicine, Tokyo, Japan
(August 9-11, 1991)
Department of Neurosurgery, Tohoku University School of Medicine. Sendai, Japan (February
16-20, 1995) Lecture: Studies of Ischemic Brain Injury Using SOD Transgenic and Knockout
Mice (February 17, 1995)
Department of Neurosurgery, Virginia Commonwealth University, Richmond, VA
(May 3-4, 1998)
Neuroscience Center of Excellence, Louisiana State University School of Medicine, New
Orleans, LA (May 21, 1999) Dean's Award Lecture in Neuroscience: Oxidative Stress as Cell
Death Signaling in Cerebral Ischemia
Safar Center for Resuscitation Research, University of Pittsburgh, Pittsburgh, PA
(May 15-16, 2002)
Department of Neurology, University of New Mexico School of Medicine, Albuquerque, NM
(October 3, 2003) Neurology Grand Rounds: Neuronal Death/Survival in Stroke and
Neurodegeneration: Mitochondrion and Oxidative Stress as Molecular Switches
Department of Neurology, Yonsei University Seoul, Korea
(November 14-15, 2003) Neurology Grand Rounds: Oxidative Stress as a Molecular Switch
for Cell Death/Survival in Ischemia and Neurodegeneration
Department of Neurosurgery, Akita University School of Medicine, Akita, Japan (April 21-22,
2005)
Second Department of Internal Medicine, Nippon Medical School, Tokyo, Japan (April 23,
2005)
Department of Neurosurgery, University of Yamanashi, Kofu, Japan (May 24-26, 2007)
Department of Neurology, VA Medical Center/University of California, San Francisco (February
27, 2008)
Department of Neurology, Nippon Medical University, Tokyo, Japan (June 8-9, 2010)

Symposia, Conference and Meeting Advisory Board/Committee Member

International Advisory Board, XVI International Symposium on Cerebral Blood Flow and Metabolism (Brain 93) Sendai, Japan (1993)
International Advisory Board, XVII International Symposium on Cerebral Blood Flow and Metabolism (Brain 95) Cologne, Germany (1995)
International Advisory Board, XVIII International Symposium on Cerebral Blood Flow and Metabolism (Brain 97) Baltimore, MD (1997)
Scientific Advisory Board, Twenty-First Princeton Conference on Cerebrovascular Disease, St. Louis, MO (May 7-10, 1998)
Organizer and Chair, Twenty-Second Princeton Conference on Cerebrovascular Disease, Redwood City, CA (March 10-12, 2000)
Scientific Advisory Board, 8th Symposium on Pharmacology of Cerebral Ischemia, Marburg, Germany (July 23-26, 2000)
Member, Program Committee, International Neurotrauma Society/National Neurotrauma Society Joint Meeting, Orlando, FL (2002)
Chair, Nominating Committee, National Neurotrauma Society (2002)
Scientific Advisory Board, 9th Symposium on Pharmacology of Cerebral Ischemia, Marburg, Germany (July 21-24, 2002)
Member, Program Committee, National Neurotrauma Society, Biloxi, MS (2003)
Scientific Advisory Board, 10th Symposium on Pharmacology of Cerebral Ischemia, Marburg, Germany (July 25-28, 2004)
Member, International Advisory Board, International Symposium on Neurodegeneration and Neuroprotection, Munster, Germany (July 23-26, 2006)
Member, Scientific Program Committee, IBRO World Congress of Neuroscience, Melbourne, Australia (July 12-17, 2007)
XXIVth International Symposium on Cerebral Blood Flow, Metabolism and Function, Chicago, IL (June 29-July 3, 2009)
Scientific Program Committee, 27th Princeton Conference on Cerebrovascular Disease, Boston, MA (April 22-24, 2010)
Poster Reviewer, 28th Princeton Conference on Cerebrovascular Disease. Cincinnati, OH (May 17-20, 2012)

Pharmaceutical and Biotech Companies

Consultant, Neurex Corporation (1997)
Consultant, SmithKline Beecham Pharmaceuticals (1998-2000)
Scientific Advisory Board, SynZyme Technologies (1998-present)
Consultant, DuPont Pharmaceuticals (2000-2002)
Consultant, Galileo Laboratories (2000-present)
Consultant, Pharmacyclics (2001-present)
Consultant, Aventis Pharmaceuticals (2001-present)
Consultant, Intrabiotics Pharmaceuticals (2004-2006)
Consultant, Johnson & Johnson Pharmaceutical Research & Development (2004)
Consultant, Maxygen (2004-2005)
Consultant, Renovis (2003-2006)

Other Service and Honors

Visiting Examiner, Department of Biology, The Chinese University of Hong Kong (1997-2000)
External Reviewer, Department of Neuroscience, College of Medicine & Public Health, Ohio State University, Columbus, OH (March 1999)
External Advisory Committee, UCLA Brain Injury Research Program, University of California, Los Angeles, September 24, 1999; Ojai, CA (August 8-10, 2001)
Council Member, National Neurotrauma Society (1990-1994, 1997-2000)
President, National Neurotrauma Society (1999-2000)
External Advisor, Micro/Nano-Neural Engineered Study of Neuro(dys)function. PI, Charles J. Robinson, Louisiana Tech University (2002)
Member, Board of Trustees, 23rd Princeton Conference on Cerebrovascular Disease, Coronado, CA (March 21-23, 2002)
Member, Board of Directors, International Society for Cerebral Blood Flow and Metabolism (2001-2005)
Member, Committee on Education and Publication, International Society for Cerebral Blood Flow and Metabolism (2001-2005)
Invited Speaker and Participant, National Academy of Sciences USA, Institute of Medicine, Spinal Cord Injury Workshop (May 24, 2004)
Member, External Scientific Review Committee, Canadian Stroke Network (2004-2014)
Lecturer, Meeting of the History Session. 23rd International Symposium on Cerebral Blood Flow, Metabolism and Function (Brain 07), Osaka, Japan (May 22, 2007)
Plenary Luncheon Lecture. 30th Annual Meeting of the Japanese Congress of Neurological Surgeons, Yokohama, Japan (May 7-9, 2010) "Oxidative Stress and Mitochondrial Dysfunction in Neurovascular Injury in Stroke"
1st World Forum on Cerebral Blood Flow Metabolism & Function, Kyoto, Japan (October 18-20, 2010); 1) Invited Speaker: "Signal Transduction and Mechanisms of Ischemic Brain Damage"; 2) Special Lunch Speaker
38th Annual Meeting of The Japan Stroke Society. Tokyo, Japan (March 21-23, 2013); 1) Invited Keynote Speaker; 2) Special Lunch/Dinner Speaker

Editorial Boards

Journal of Neurotrauma (1989-2013)
Stroke (1991-2014)
Journal of Cerebral Blood Flow and Metabolism (1996-2014)
Journal of Neuroscience, Associate Editor (2001-2006)
Neurotherapeutics (2010-2013)

Ad Hoc Reviewer and Referee--Journals

Acta Neurochirurgica
American Journal of Physiology
Annals of Neurology
Antioxidants & Redox Signaling
Archives of Neurology
Arteriosclerosis, Thrombosis,
and Vascular Biology
Biochimica et Biophysica Acta
Brain
Brain Research
Canadian Journal of Physiology
and Pharmacology
Cell Death and Differentiation
Circulation
Circulation Research
European Journal of Neuroscience
European Journal of Pharmacology
Experimental Neurology
FASEB Journal
Free Radical Biology & Medicine
Gastroenterology
Glia
Journal of Biological Chemistry
Journal of Cerebral Blood Flow
and Metabolism
Journal of Chromatography
Journal of Clinical Investigation
Journal of Immunology
Journal of the Institute for Laboratory
Animal Research
Journal of Neurochemistry
Journal of Neuroscience
Journal of Neurosurgery
Journal of Neuroscience Research
Journal of Neurotrauma
Journal of Pharmacology
and Experimental Therapeutics
Journal of Stroke and
Cerebrovascular Diseases
Life Sciences
Lipids
Molecular and Chemical
Neuropathology
Molecular Brain Research
Molecular Medicine
Nature
Nature Chemical Biology
Nature Medicine
Nature Neuroscience
Neurobiology of Aging
Neurobiology of Disease
Neurochemical Pathology
Neurochemical Research
Neurology
NeuroReport
Neuroscience
Neuroscience Letters
Neurotherapeutics
Pediatric Research
PLoS One
Proceedings of the National
Academy of Sciences USA
Science
Stroke
Surgical Neurology
Trends in Neuroscience

Ad Hoc Reviewer and Referee--Grant Proposals

National Multiple Sclerosis Society of Australia (1984)
Alberta Cancer Board, Alberta Heritage Savings Trust Fund (1981, 1984)
National Science Foundation, Molecular and Cellular Neurobiology (1984, 1986, 1987, 1988)
Veterans Administration Site Visit (1986)
Veterans Administration Merit Review (1986-2014)
Spinal Cord Research Foundation (1986)
Arizona Disease Control Research Commission (1987)
Arizona Disease Control Research Commission, Panel Member (1988, 1989, 1990)
International Human Frontier Science Program Organization (1990, 1991, 1992, 1993)
State of California Department of Health Services, Alzheimer's Disease and Related Diseases (1992)
International Science Foundation (1993)
The Wellcome Trust, London, England (1995, 1996)
Henry Ford Health Sciences Center (1997, 1999)
American Heart Association, National Center, Cardiovascular Immunology Study Section (1998)
American Alzheimer Association (1998-2014)
American Heart Association, Bugher Foundation Award Review Committee (2000, 2005)
American Heart Association, National Center, Brain Study Committee (1990-1991, 1991-1992, 1992-1993, 1993-1994, 1996-1997, 2001-2002)

NIH Program Project Grant Reviews and Site Visits

Post-Resuscitation Syndrome (1PO1 NS211420-01) PI: Peter Safar, University of Pittsburgh, Pittsburgh, PA (June 20-24, 1984). Special Review Committee
CBF and Metabolism in Stroke and Shock (2P50 NS10939-13A1) PI: Martin Reivich, University of Pennsylvania, Philadelphia, PA (Nov. 19-21, 1984). Special Review Committee
Program Project on Post-Resuscitation Syndrome (1PO1 NS21420-01A1) PI: Peter Safar, University of Pittsburgh, Pittsburgh, PA (Feb. 27-Mar. 1, 1985). Special Review Committee
Spinal Cord Injury Research Center (2PO1 NS11066-14) PI: Phanor Perot, University of South Carolina, Charleston, SC (June 3-5, 1986). Special Review Committee
Spinal Cord Injury Research Center (2P50 NS10165-16) PI: William Hunt, Ohio State University, Columbus, OH (Oct. 29-31, 1986). Special Review Committee
Medical College of Virginia Epilepsy Research Center (1PO1 NS25630-01A1) PI: Robert J. Delorenzo, Medical College of Virginia, Richmond, VA (July 21-22, 1988). Special Review Committee
Biology of the Blood-Brain Barrier (1PO1 NS25554-01A2) PI: William M. Pardridge, University of California, Los Angeles, CA (Feb. 20-22, 1990). Special Review Committee
Improving Outcome in Severe Head Injury, PEG-SOD Trial (1RO1 INS29267-01) PI: Harold Young, Virginia Commonwealth University, Richmond, VA (Aug. 6-8, 1990). Special Review Committee
Pathogenesis of Perinatal Hypoxic-Ischemic Brain Damage (1PO1 NS29337-01) PI: Robert Vannucci, Pennsylvania State University, Hershey, PA (Sept. 25-27, 1990). NSPA Ad Hoc Review Committee
Cerebral Blood Vessels (2PO1 NS24621-06) PI: Donald D. Heistad, University of Iowa, Iowa City, IA (Sept. 11-13, 1991). NSPA Ad Hoc Review Committee

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- Mechanisms of Brain Injury and Its Systemic Sequelae (1PO1 NS31220-01) PI: Byron A. Young, University of Kentucky Medical Center, Lexington, KY (Apr. 9-11, 1992). NSPA Ad Hoc Review Committee
- Oxygen Free Radicals in Brain Damage (1PO1 NS31507-01) PI: Frederick E. Samson, University of Kansas Medical Center, Kansas City, KS (Sept. 30-Oct. 1, 1992). NSPA Ad Hoc Review Committee
- Cellular Mechanisms of Traumatic Brain Injury (1PO1 NS31998-01) PI: Ronald L. Hayes, University of Texas Health Science Center, Houston, TX (Mar. 15-17, 1993). Special Review Committee, Chair
- Mechanisms of Injury in the Developing Brain (1PO1 NS32263-01) PI: M. V. Johnston, Kennedy Krieger Research Institution, Baltimore, MD (June 1993). Special Review Committee
- Mechanisms of Brain Injury and Its Systemic Sequelae (1PO1 NS1220-01A1) PI: Byron A. Young, University of Kentucky Medical Center, Lexington, KY (Oct. 29, 1993). NSPA Ad Hoc Review Committee
- Center for Stroke Research (2PO1 NS23393-09) PI: Michael Chopp, Henry Ford Health Systems, Detroit, MI (Dec. 2, 1993). Special Review Committee
- Interdepartmental Stroke Program (2PO1 NS10828-19) PI: Michael A. Moskowitz, Massachusetts General Hospital, Harvard Medical School, Boston, MA (Feb. 8-9, 1994). NSPA Ad Hoc Review Committee
- Brain Oxidation in the Pathogenesis of Alzheimer's Disease (2PO1 AG05119-10) PI: William R. Markesbery, University of Kentucky, School of Medicine, Lexington, KY (April 18-19, 1994). Reverse Site Visit, NIA Ad Hoc Review Committee
- Cell-Cell Interaction and Hypoxic Brain Injury (1PO1 NS32636-01A1) PI: Dennis W. Choi, Washington University, School of Medicine, St. Louis, MO (June 6-7, 1994). NSPA Ad Hoc Review Committee
- Gene Transfection in the Traumatized Brain (1PO1 NS31998-02S1) PI: Ronald Hayes, Houston, TX (June 27-28, 1994). NSPB Ad Hoc Review Committee
- Center for CNS Injury Studies (1P50 NS34115-01) PI: Wise Young, New York University Medical Center (Oct. 3, 1994). Teleconference, NSPA Ad Hoc Review Committee
- Alzheimer's Disease Center Core Grant (2P50 AG05144-12) PI: William R. Markesbery, University of Kentucky Research Foundation, Lexington, KY (Oct. 17-18, 1994). NIA Ad Hoc Site Visit Review Committee
- Superoxide Dismutase in Aging and Neurodegeneration (1PO1 AG12922-01) PI: Robert H. Brown, Jr., Massachusetts General Hospital (Nov. 30-Dec. 1, 1994). NIA Ad Hoc Review Committee
- Research Center for Cerebral Vascular Disease (2PO1 NS05820-30) PI: Myron D. Ginsberg, University of Miami School of Medicine, Miami, FL (March 16-17, 1995), Chevy Chase, MD. NINDS Special Review Committee
- Brain Oxidation in the Pathogenesis of Alzheimer's Disease (2PO1 AG05119-10A1) PI: William R. Markesbery, University of Kentucky, Lexington, KY (May 14-15, 1995). NIA Ad Hoc Reverse Site Visit Committee
- Brain Oxidation in the Pathogenesis of Alzheimer's Disease (2P01 AG05119-10A1) PI: William R. Markesbery, University of Kentucky, Lexington, KY (June 8, 1995), Bethesda, MD. NIA NBSA-A Committee
- Center for CNS Injury Studies (1P01 NS34115-01) PI: Wise Young, New York University Medical Center, New York (June 6, 1995), Bethesda, MD. NINDS NSPA Committee (by teleconference)

Identification and Transgenic Studies of ALS Genes (2P50 NS 31248-06) PI: Teepu Siddique, Northwestern University, Bethesda, MD (Dec. 4, 1996), NINDS Special Emphasis Panel

SCIENTIFIC/PROFESSIONAL MEETINGS AND WORKSHOPS

International

- International Symposium on Neural Membranes. National Yang Ming Medical College, Taipei, Taiwan (August 2-5, 1982) Invited Speaker
- International Symposium on Cerebral Ischemia. Toulouse, France (November 3-4, 1983) Invited Speaker
- International Symposium on Mechanisms of Secondary Brain Damage. Innsbruck, Austria (February 19-23, 1984) Invited Participant and Speaker
- Sendai Forum 84, Workshop on Molecular Mechanisms of Ischemic Brain Damage. Sendai, Japan (November 1-2, 1984) Invited Participant and Speaker
- Second International Symposium on New Frontiers of Biochemistry of Spinal Cord Injury and Paraplegia. Florence, Italy (June 2-4, 1985) Invited Speaker
- Eric K. Fernstrom Symposium. Pathophysiology of the Blood-Brain Barrier: Long-term Consequences of Barrier Dysfunction for the Brain. Lund, Sweden (July 4-7, 1989) Invited Participant
- Sendai Forum 91, International Workshop on Molecular Mechanisms of Ischemic Brain Damage. Sendai, Japan (February 15-17, 1991) Invited Speaker
- The First International Neurotrauma Symposium. Fukushima Cultural Center. Fukushima City, Japan (May 14-17, 1991) Invited Speaker and Participant
- International Symposium on Cerebral Ischemia and Basic Mechanisms. Lake Bodensee, Germany (June 21-24, 1992) Invited Speaker
- The XVIth International Symposium on Cerebral Blood Flow and Metabolism (Brain 93). Sendai, Japan (May 22-28, 1993) Plenary Speaker
- The XVIth International Symposium on Cerebral Blood Flow and Metabolism (Brain 93), Session VI: Active Oxygen Species and Free Radicals. Sendai, Japan (May 22-28, 1993) Chair
- Eric K. Fernstrom Symposium on Cellular and Molecular Mechanisms of Ischemic Brain Damage: Neuroprotective Role of CuZn-Superoxide Dismutase in Ischemic Brain Damage. Lund, Sweden (June 13-16, 1994) Invited Speaker
- Neuroscience 1994 Finland: Superoxide Dismutase Transgenic Animals in Studies of Excitotoxicity. Kuopio, Finland (June 17-18, 1994) Invited Speaker
- Fifth International Symposium on Pharmacology of Cerebral Ischemia: SOD-1 Transgenic Mice--A Model for Studies in Cerebral Ischemia. Marburg, Germany (June 20-22, 1994) Invited Speaker
- The XVII International Symposium on Cerebral Blood Flow and Metabolism (Brain 95), Plenary Session 21: Genetic Modeling for Brain Diseases. Cologne, Germany (July 2-5, 1995) Chair
- The XVII International Symposium on Cerebral Blood Flow and Metabolism (Brain 95), Plenary Session 21: Neurotoxicity, HSP70 and c-Fos Gene Expression, and Apoptosis Induced by Kainic Acid in Transgenic Mice Overexpressing CuZn-Superoxide Dismutase. Cologne, Germany (July 2-6, 1995) Plenary Session Speaker
- Sixth International Symposium on Pharmacology of Cerebral Ischemia. Marburg, Germany (July 22-24, 1996) Invited Speaker: Free Radical Mechanisms in Cerebral Ischemia Using SOD Knockouts

- Third International Workshop on Maturation Phenomenon in Cerebral Ischemia: Defensive Mechanisms versus Apoptosis; Neuronal Recovery and Protection in Infarction. Pozzilli, Italy (April 20-22, 1998) Invited Speaker: Studies of Neuronal Apoptosis after Global Cerebral Ischemia in SOD Transgenic and Knockout Mutants
- Summer School '98 of The International Society of Cerebral Blood Flow and Metabolism. Tokyo, Japan (June 28-July 1, 1998) Invited Speaker: Effects of the Transgenic or Knockout SOD Gene in Brain Ischemia
- Summer School '98 of The International Society of Cerebral Blood Flow and Metabolism. Tokyo, Japan (June 28-July 1, 1998) Session Chair, Gene Therapy for Stroke
- 7th International Symposium on Pharmacology of Cerebral Ischemia. Marburg, Germany (July 27-29, 1998) Invited Speaker: Mitochondrial Dysfunction and Neuronal Apoptosis after Cerebral Ischemia
- 1st Biennial Kuopio Symposium on Ischemic Stroke. Kuopio, Finland (June 10-11, 1999) Invited Speaker: Role of Oxidative Stress in Ischemic Cell Death
- XIX International Symposium on Cerebral Blood Flow and Metabolism (Brain '99). Copenhagen, Denmark (June 13-18, 1999) Platform Session 32 Speaker and Chair: Free Radicals: Exacerbation of Delayed Neuronal Cell Injury after Transient Global Ischemia in Mutant Mice with CuZn-Superoxide Dismutase Deficiency
- Shanghai 2000 Conference of Neurobiology for Cerebral Ischemia. Shanghai, China (January 20-22, 2000) Invited Speaker
- 8th International Symposium on Pharmacology of Cerebral Ischemia. Marburg, Germany (July 23-26, 2000) Invited Speaker
- 5th International Neurotrauma Symposium. Garmisch-Postenkirchen, Germany (October 1-5, 2000) Keynote Lecturer
- 12th Annual Meeting, Japanese Cerebral Blood Flow and Metabolism. Sendai, Japan (December 5-6, 2000) Presidential Session Speaker: Oxygen Free Radicals in CNS Disorders
- International Conference on Research Advances of Cerebrovascular Diseases. Guang Zhou, China (April 16-18, 2001) Invited Participant and Discussant
- XX International Symposium on Cerebral Blood Flow and Metabolism (Brain 2001) Taipei, Taiwan (June 9-13, 2001) Invited Speaker: Molecular Mechanisms of Neural Injury: Mitochondria, Apoptosis and DNA Repair
- Fifth International Workshop on Maturation Phenomenon in Cerebral Ischemia. Banff, Canada (April 28-May 1, 2002) Invited Speaker: Cytochrome C-Dependent Apoptosis in Cerebral Ischemia: Role of Oxidative Signaling
- 9th International Symposium on Pharmacology of Cerebral Ischemia. Marburg, Germany (July 21-24, 2002) Invited Speaker
- 4th International Conference on Antioxidants and Free Radicals. Vancouver, Canada (August 4-6, 2002) Invited Speaker
- Summer School 2002 of The International Society of CBFM and Joint International Symposium on Molecular Mechanisms and Epochal Therapeutics for Ischemic Stroke and Dementia. Okayama, Japan (October 18-20, 2002) Invited Speaker
- 4th International Taipei Symposium of Cerebrovascular Disease. Taipei, Taiwan (November 9-10, 2002) Invited Speaker: Role of Oxidative Stress in Cell Death/Survival After Cerebral Ischemia
- Institute of Biomedical Sciences, Academia Sinica. Taipei, Taiwan (November 11, 2002) Invited Speaker: Mitochondria as a Subcellular Target/Switch in Neuronal Death in CNS Injuries
- XXI International Symposium on Cerebral Blood Flow and Metabolism (Brain 03). Calgary, Canada (June 29-July 3, 2003) Abstract Reviewer; Session Chair

- First ISN/APSN Joint Meeting. Hong Kong (August 3-8, 2003) Program Chair and Speaker: Cellular Mechanisms and Molecular Signaling in Cell Death/Survival in CNS Injuries
- International Society of Neurochemistry Satellite Meeting. Beijing, China (August 10-13, 2003) Co-Organizer. Oxidative Mechanisms in Neurodegenerative Disorders
- International Symposium on Recent Advances in ROS and Cell Signaling. Crown Palace, Kyung Hee University, Seoul, Korea (November 13-14, 2003) Invited Speaker: Oxidative Stress as a Molecular Switch for Cell Death/Survival in Ischemia and Neurodegeneration
- Sixth Biennial Meeting of the Asian-Pacific Society for Neurochemistry. Hong Kong (February 4-7, 2004) Invited Speaker: Oxidative Stress as a Molecular Switch in Neuronal Death/Survival After Stroke
- ISN/APSN Satellite Meeting. Guilin, China (February 7-11, 2004) Invited Speaker: Signal Transduction of Oxygen Radicals in Cerebral Ischemia
- State Key Laboratory of Medical Neurobiology, Shanghai Medical College, Fudan University. Shanghai, China (February 12-14, 2004) Invited Lecture: Oxidative Stress as a Molecular Switch for Cell Death/Survival After Cerebral Ischemia and Neurodegeneration
- Second Scientific Meeting of the Asian Society for Mitochondrial Research and Medicine. Taipei, Taiwan (April 1-2, 2004) Plenary Lecture: Mitochondria and Oxidative Stress as Determinants for Neuronal Death after Stroke and Neurodegeneration
- Tenth International Symposium on Pharmacology of Cerebral Ischemia. Marburg, Germany (July 25-26, 2004) Invited Speaker
- 34th Annual Meeting of the Japanese Society for Cerebral Stroke. Morioka, Japan (April 22-23, 2005) Invited Lecturer. Plenary Lecture: Oxidative Mechanisms of Neuronal Injury in Cerebral Ischemia (April 22, 2005). Luncheon Lecture: Mitochondrion as a Switch for Cell Death/Survival in Cerebral Ischemia (April 23, 2005)
- Beijing International Symposium on Neurodegenerative Disease and Stroke. Beijing, China (September 21-23, 2005) Invited Speaker: Neuronal Death and Survival Signaling in Stroke: A Converging Mechanism?
- 2005 Neuroplasticity Symposium and Second TMU Neuroscience Symposium. Taipei, Taiwan (October 22-23, 2005) Keynote Speaker: Novel Signaling Pathways for Neuronal Death and Survival in Stroke and Neurodegeneration
- Institute of Biomedical Sciences, Academia Sinica. Taipei, Taiwan (October 24, 2005) Institute Lecture: Novel Signaling in Neuronal Survival in Cerebral Ischemia
- Seventh Biennial Meeting of the Asian Pacific Society for Neurochemistry 2006. Singapore (July 3-5, 2006) Invited Speaker: Neurovascular Dysfunction and Oxidative Stress Signaling in Neuronal Apoptosis After Stroke
- International Symposium on Neurodegeneration and Neuroprotection. Münster, Germany (July 23-26, 2006) Invited Speaker: Mitochondrial Translocation of p53 Underlies the Selective Death of Hippocampal CA₁ Neurons After Global Ischemia
- 13th Biennial Congress of the Society for Free Radical Research--International (SFRRI). Davos, Switzerland (August 15-19, 2006) Co-Chair and Invited Speaker: Oxidative Stress and Mitochondria as Determinants for Neuronal Death After Stroke
- Dr. Chi-Chin Huang Endowed Lecture. Taipei Medical University, Taipei, Taiwan (November 2-6, 2006)
- 23rd International Symposium on Cerebral Blood Flow, Metabolism and Function (Brain 07). Osaka, Japan (May 22, 2007) Symposium--Mechanism of Ischemic Brain Damage and Neuroprotection, Invited Speaker: Targeting the Oxidative Mechanism for Reperfusion Injury and Neuroprotection After Stroke. Special Lunch Seminar--Mechanisms of Ischemic Brain

Damage and Risk Factors and Management of Chronic Stroke, Invited Speaker: Mechanisms of Ischemic Brain Damage
17th Yamanashi Neuroscience Symposium. Kofu, Japan (May 24, 2007) Invited Speaker: Novel Molecular Signaling in Ischemic Neuronal Damage
The 3rd ISN Special Neurochemistry Conference, 8th International Meeting for Brain Energy Metabolism, "Neurodegeneration and Regeneration". Beijing, China (June 27-July 1, 2008)
Invited Speaker: Oxidative Stress and Mitochondrial Dysfunction as Determinants in Ischemic Neuronal Death and Survival
Bis08--Brain Ischemia and Stroke. Rome, Italy (October 1-3, 2008) Invited Speaker:
PIDDosome Signaling in Selective Neuronal Death After Transient Global Cerebral Ischemia
The 22nd Biennial Meeting of the ISN/APSN--Joint Satellite Conference, "Novel Strategies for Intervention in Neurodegenerative Diseases". Taipei, Taiwan (August 30-September 2, 2009)
Plenary Speaker: Reperfusion and Neurovascular Dysfunction in Stroke: From Basic Mechanisms to Potential Strategies for Neuroprotection
The 30th Annual Japanese CNS Meeting. Yokohama, Japan (May 6-10, 2010) Keynote Speaker: Oxidative Stress and Mitochondrial Dysfunction in Neurovascular Injury in Stroke
1st World Forum on Cerebral Blood Flow, Metabolism & Function. Kyoto, Japan (October 13-16, 2010) Invited Speaker: Signal Transduction and Mechanisms of Ischemic Brain Damage.
Honorary Lunch Seminar: Mitochondria and Neuronal Death in Brain Ischemia
XXVth International Symposium on Cerebral Blood Flow, Metabolism, and Function (Brain 2011). Barcelona, Spain (May 24-28, 2011) Invited Speaker: 1) Symposium--Mechanisms of Mitochondrial Dysfunction: Protection After Brain Ischemia. Title: Neuroprotective Targets of Oxidative Stress (May 27, 2011); 2) Special Symposium--Journal of Cerebral Blood Flow and Metabolism: Highlights and Awards. Title of the Award Paper: Inhibition of NADPH Oxidase is Neuroprotective After Ischemia-Reperfusion (May 27, 2011)
38th Annual Meeting of The Japan Stroke Society. Tokyo, Japan (March 21-23, 2013)
Symposium Participant and Keynote Speaker

National

American Society for Neurochemistry, Workshop: Oxygen-Free Radicals and Lipid Peroxidation in the Nervous System. Honolulu, HI (March 20-25) Invited Speaker
American Society for Neurochemistry. Symposium: Involvement of Phospholipids in Brain Injury. Portland, OR (March 11-16, 1984) Invited Speaker
American Society for Neurochemistry. Workshop: High Performance Liquid Chromatography of Lipids. Portland, OR (March 11-16, 1984) Invited Speaker
Brook Lodge Workshop: Ischemic Injury in the Central Nervous System. Kalamazoo, MI (September 12-14, 1984) Invited Participant and Speaker
Gordon Research Conferences: Oxygen Radicals in Biology and Medicine. Santa Barbara, CA (February 11-15, 1985) Invited Speaker
Oxidative Workshop. Lawrence Berkeley Laboratory, University of California, Berkeley, CA (February 11-15, 1986) Invited Participant
Special Neuroscience Seminar: Free Fatty Acids and Oxygen Radicals in Brain Injury and Edema. Medical College of Virginia, Richmond, VA (February 9, 1987) Invited Speaker
Symposium: The Biochemical Pathology of Astrocytes. University of Miami, Miami, FL (May 26-29, 1987) Invited Speaker
Fourth International Congress in Oxygen Radicals. University of California, San Diego, CA (June 27-July 3, 1987) Invited Speaker

Pak H. Chan, Ph.D.

New York Academy of Sciences, Conferences on Arachidonic Acid Metabolism in the Nervous System, Physiological and Pathological Significance. Washington, DC (April 14-16, 1988)

Invited Speaker

American Society for Neurochemistry, Workshop: Cell Culture Models for Ischemia, Hypoxia and Trauma. New Orleans, LA (March 6-11, 1988) Chair

The Sixteenth Princeton Conference on Cerebrovascular Diseases. Miami, FL (March 17-19, 1988) Invited Speaker

FASEB Nutrition Mini-Symposium: Nutrients and CNS Function. Las Vegas, NV (May 1-5, 1988) Invited Speaker

Second Society of Chinese Bioscientists in America, International Symposium and Workshops. San Francisco, CA (June 27-30, 1988) Invited Speaker

The American Physiological Society. New Orleans, LA (March 19-24, 1989) Invited Participant

The Seventh Annual Neurotrauma Symposium: Primary Cell Cultures as Models for Ischemia and Hypoxia. Phoenix, AZ (October 28-29, 1989) Invited Speaker

Preuss Foundation Symposium: Role of the Blood-Brain Barrier in the Therapy of Brain Tumors. Phoenix, AZ (November 4-5, 1989) Invited Speaker

American Society for Neurochemistry. Phoenix, AZ, (1990) Program Committee Member

American Society for Neurochemistry. Symposium: Oxidative Injury. Phoenix, AZ (March 4-9, 1990) Invited Speaker

The Seventeenth Princeton Conference on Cerebrovascular Diseases: Reduced Neurotoxicity in Transgenic Mice Overexpressing SOD. Durham, NC (March 16-18, 1990) Invited Speaker

FASEB Symposium: The Role of Transport in Regulating Use of Nutrients by the Central Nervous System. Washington, DC, (April 1-5, 1990) Invited Speaker

Society for Neuroscience, 1990 Neurobiology Disease Workshop: The Neurobiology of Apoplexy: Why Do Neurons Die? St. Louis, MO (October 28, 1990) Faculty Workshop

Neurotrauma Symposium, The Neurotrauma Society. New Orleans, LA (November 8-10, 1991) Invited Speaker

Texas Medical Center, Special Seminar on CNS Trauma and Stroke. Oxidative Stress: A Role in Ischemic and Traumatic Brain Injury. Baylor College of Medicine, Houston, TX (March 17, 1992) Invited Speaker

FASEB President's Symposium. American Physiological Society: Advances in Understanding Cerebral Ischemia Reperfusion Damage. Anaheim, CA (April 5-10, 1992) Invited Speaker

The Eighteenth Princeton Conference on Cerebrovascular Diseases. Detroit, MI (May 29-31, 1992) Invited Participant

FASEB Summer Research Conference. Neurobiology of CNS Injury. Copper Mountain, CO (June 28-July 3, 1992) Invited Speaker

NIH Workshop: Biological Models of Ischemic Brain Injury. Bethesda, MD (September 14-15, 1992) Invited Participant

American Society for Neurochemistry. Mini-Symposium: Signaling Between Cells Comprising the Cerebrovascular Wall. Richmond, VA (March 23-25, 1993) Invited Speaker

Harvard Medical School, Massachusetts General Hospital, Stroke Program Project Lecture: Copper Zinc Superoxide Dismutase Transgenic Mice--A Model for the Study of Stroke. Boston, MA (June 24, 1993)

Cephalon, Inc. Research Seminar: Copper Zinc Superoxide Dismutase Transgenic Mice--A Model for the Study of Stroke. West Chester, PA (September 7, 1993)

Stanford University Medical Center. Stanford Stroke Center Research Lecture: Copper Zinc Superoxide Dismutase Transgenic Mice--A Model for the Study of Stroke. Palo Alto, CA (September 13, 1993)

- The 11th Neurotrauma Symposium. Washington, DC (November 6-7, 1993) Program Committee Member
- The 11th Neurotrauma Symposium. Session on Metabolic Dysfunction in CNS Injury. Washington, DC (November 6-7, 1993) Chair
- Symposium on the Neurobiology of NO and OH. Oxygen Club of Greater Washington, DC (November 7, 1993) Invited Speaker
- Twenty-Seventh Winter Conference on Brain Research: Molecular Biology of CNS Injury. Snowbird, UT (January 22-29, 1994) Invited Speaker and Participant
- Nineteenth Princeton Conference on Cerebrovascular Disease. Boston, MA (March 17-20, 1994) Invited Speaker and Participant. Lecture: *N*-Methyl-D-Aspartate-Mediated Neurotoxicity is Associated with Oxygen-Derived Free Radicals
- NIH NINDS Stroke Initiative Meeting: Transgenic Animals and Molecular Approaches to Stroke Research. NIH Campus, Bethesda, MD (September 14, 1994) Invited Participant
- NIH-DRG Sponsored Workshop on Role of Antioxidants and Free Radicals in Neurobiology: Antioxidant Modification of Ischemic and Traumatic Brain Injury Using Transgenic and Knockout Approaches. Hollywood Beach, FL (November 12, 1994) Invited Speaker
- The Third International IBC Symposium on Recent Advances in the Understanding and Therapy of Ischemic Stroke: Neuroprotective Studies of Cerebral Ischemia in CuZn-Superoxide Dismutase Transgenic Mice. Philadelphia, PA (November 30-December 1, 1994) Invited Speaker
- Department of Neurosurgery, School of Medicine, University of California, San Francisco. Grand Rounds: Studies of Brain Injury Using Transgenic and Knockout Mutants (August 24, 1995)
- NIH NINDS Workshop: DNA Damage and Repair in CNS Injury (September 11, 1995) Co-Chair
- Center for the Study of Nervous System Injury, Departments of Neurology and Neurosurgery, Washington University, St. Louis, MO (October 2, 1995) Lecture: Free Radicals in CNS: Ischemic Brain Injury in SOD Transgenic and Knockout Mice
- Department of Anesthesia, School of Medicine, University of California, San Francisco. Lecture: Studies of Ischemic Brain Injury Through Superoxide Dismutase Transgenic and Knockout Mice (October 18, 1995)
- Eleventh International Conference on Brain Tumor Research and Therapy. Napa, CA (October 31-November 3, 1995) Member, Program Committee
- Thirteenth Annual Neurotrauma Symposium. Molecular and Receptor Mechanisms in Brain Trauma. San Diego, CA (November 10-11, 1995) Co-Chair
- Twenty-Fifth Society for Neuroscience Annual Meeting. Slide Session: Ischemia: Molecular Mechanisms. San Diego, CA (November 13, 1995) Chair
- Twentieth Princeton Conference on Cerebrovascular Disease. Memphis, TN (March 22-24, 1996) Invited Speaker and Participant: Mitochondria as a Target in Ischemic Neuronal Injury
- American Academy of Neurology, 48th Annual Meeting. San Francisco, CA (March 23-30, 1996) Co-Chair: S53: Free Radical Mechanism
- FASEB Summer Research Conference. Neurobiology of CNS Injury. Copper Mountain, CO (August 11-16, 1996) Invited Speaker
- NIH/NINDS Workshop on Spinal Cord Injury: Emerging Concepts. Bethesda, MD (September 30-October 1, 1996) Invited Participant
- Twenty-Sixth Society for Neuroscience Annual Meeting. Slide Session: Ischemia: Molecular Biology. Washington, DC (November 18-21, 1996) Chair

- XVIII International Symposium on Cerebral Blood Flow and Metabolism (Brain 97) Platform Session 32: Oxidant Stress: Exacerbated Mitochondrial Injury and Cerebral Infarction Following Permanent Middle Cerebral Artery Occlusion in Manganese-Superoxide Dismutase Knockout Mice. Baltimore, MD (June 15-19, 1997) Platform Session Speaker
- Joint Meeting of the International Society for Neurochemistry & American Society for Neurochemistry. Boston, MA (July 24-25, 1997) Invited Speaker
- 23rd International Joint Conference on Stroke and Cerebral Circulation. Orlando, FL (February 5-7, 1998)
- Twenty-First Princeton Conference on Cerebrovascular Disease. St. Louis, MO (May 7-10, 1998) Invited Speaker: Mediators and Modulators of Ischemic Injury: Hot Topics
- Stanford Stroke Symposium IV. Monterey, CA (June 6-7, 1998) Invited Speaker: Recent Advances in Stroke Pathophysiology and Treatment
- FASEB Summer Research Conference on the Neurobiology of CNS Injury. Namaste Retreat Center, Wilsonville, OR (June 21-26, 1998) Invited Speaker: Studies of Ischemic Cell Death Mechanism Using SOD Transgenic and Knockout Mutants
- FASEB Summer Research Conference on the Neurobiology of CNS Injury. Namaste Retreat Center, Wilsonville, OR (June 21-26, 1998) Session Chair, Genetic Manipulations in Trauma and Stroke (Mutant Mice, Gene Therapy Progenitor/Stem Cells)
- Chiron Corporation. Emeryville, CA (July 13, 1998) Invited Lecture: Superoxide Dismutase in Clinical Stroke
- Sixteenth Annual National Neurotrauma Society Symposium Session 1: Common Mechanisms of Cell Death and Proliferation in CNS Neurodegenerative and Traumatic Disorders. Co-Chair. Los Angeles, CA (November 6-7, 1998)
- Twenty-Eighth Society for Neuroscience Annual Meeting. Slide Session 101. Trauma Chair. Los Angeles, CA (November 7-12, 1998)
- 25th International Stroke Conference. New Orleans, LA (February 10-12, 1999) Session Chair
- Consensus Conference on Preclinical Development Strategies for Acute Ischemic Stroke Therapies. Orlando, FL (March 6-7, 1999) Invited Speaker and Participant
- 30th Annual Meeting, American Society for Neurochemistry. New Orleans, LA (March 13-17, 1999) Invited Speaker: Cytochrome C Release, Mitochondrial Dysfunction and Neuronal Apoptosis in SOD2 Knockouts after Cerebral Ischemia
- Centaur Pharmaceuticals. Sunnyvale, CA (April 21, 1999) Invited Lecture: Cell Death Mechanisms in Cerebral Ischemia
- Genentech, Inc. South San Francisco, CA (May 6, 1999) Invited Lecture: Molecular and Cellular Mechanisms of Cell Death in Cerebral Ischemia: Focus on Oxidative Stress
- Fourth International Workshop on Maturation Phenomenon in Cerebral Ischemia, Apoptosis and/or Necrosis, Neuronal Recovery vs. Death, and Protection for Infarction. New Orleans, LA (October 30-November 2, 1999) Invited Speaker: Mitochondrial Release of Cytochrome c in Selective Vulnerable Hippocampal CA₁ Neurons in Rats After Transient Global Cerebral Ischemia
- Twenty-Second Princeton Conference on Cerebrovascular Disease. San Francisco, CA (March, 2000) Organizer and Chair
- Neurology Grand Rounds, Department of Neurology and Neurological Sciences, Stanford University, Stanford, CA (March 22, 2000) Invited Lecture: Neuronal Death after Stroke: Revisiting the Mitochondrion
- Galileo Laboratories, Inc. Santa Clara, CA (July 5, 2000) Invited Speaker: The Role of Mitochondria in Ischemic Neuronal Death
- 26th International Stroke Conference. Fort Lauderdale, FL (February 14-16, 2001) Session Chair

Pharmacocyclics, Inc., Sunnyvale, CA (February 26, 2001) Invited Speaker and Discussant:
Neuroprotective Agents in Stroke
Aventis Pharmaceuticals, Bridgewater, NJ (November 2, 2001) Invited Speaker: A
Neuroprotective Drug for Stroke: Past, Present and Future
19th Annual National Neurotrauma Society Symposium. San Diego, CA (November 9-10, 2001)
President and Chair, Program Committee
Institute for Neurodegeneration, Ohio State University School of Medicine (January 2002)
External Consultant
Keystone Symposium: Stroke—Molecular, Cellular, Pharmacological, and Development of New
Therapeutics. Taos, NM (March 9-14, 2002) Co-Chair and Participant
23rd Princeton Conference on Cerebrovascular Disease. Coronado, CA (March 21-23, 2002)
Board of Directors; Invited Participant
Ohio State University, Columbus, Departments of Physiology and Cell Biology (June 12, 2002)
Seminar: Oxidative Signaling as Molecular Switch for Cell Death/Survival in CNS Injury
Brain Injury Symposium. Honolulu, HI (June 28-29, 2002) Keynote Speaker: Molecular
Mechanisms of Cell Death in CNS Injury
First Joint Symposium of the National and International Neurotrauma Societies. Tampa, FL
(October 27-November 1, 2002) Invited Speaker
28th International Stroke Conference. Phoenix, AZ (February 13-14, 2003) Abstract Reviewer
American Society for Pharmacology and Experimental Therapeutics (ASPET) Symposium.
Stroke: From Bench to Bedside. San Diego, CA (April 12-16, 2003) Invited Speaker
Department of Neurological Surgery, University of California, Davis. Grand Rounds: Molecular
and Cellular Mechanisms of Neuronal Death/Survival in Traumatic Brain Injury (May 14,
2003)
21st National Neurotrauma Society Annual Meeting. Biloxi, MS (November 9-10, 2003)
Member, Program Committee; Abstract Reviewer
Medical College of Georgia, Augusta, GA (March 10, 2004) Neuroscience Seminar: Oxidative
Stress and PI3-K/Akt as Missing Links for Cell Death/Survival in Stroke
24th Princeton Conference on Cerebrovascular Disease. Baltimore, MD (April 2-4, 2004) Board
of Directors, Invited Speaker: Future Targets and Cascades for Neuroprotective Strategies
22nd National Neurotrauma Society Annual Meeting. San Diego, CA (October 20-22, 2004)
Abstract Reviewer
Renovis, Inc., South San Francisco, CA (December 9, 2004) Invited Speaker: Oxidative Stress
and Cell Death: An Overview of Stroke Research
XIII International Symposium on Brain Edema and Tissue Injury. Ann Arbor, MI (May 31-June
4, 2005) Invited Speaker: Pathogenesis of Brain Edema and Its Significance in Stroke and
Traumatic Brain Injury
25th Princeton Conference on Cerebrovascular Disease. Portland, OR (May 18-20, 2006) Invited
Participant
24th National Neurotrauma Society Annual Meeting. St. Louis, MO (July 7-9, 2006) Abstract
Reviewer
International Stroke Conference. San Francisco, CA (February 7-9, 2007)
25th Annual National Neurotrauma Society Meeting. Kansas City, KS (July 30-August 1, 2007)
Neuroscience 2007. San Diego (November 3-7, 2007)
International Stroke Conference 2008. New Orleans, LA (February 20-22, 2008) Thomas Willis
Lecture: Reperfusion and Neurovascular Dysfunction in Stroke: From Basic Mechanisms to
Potential Strategies for Neuroprotection

Pak H. Chan, Ph.D.

26th Princeton Conference on Cerebrovascular Disease. Houston, TX (March 27-30, 2008)

Invited Participant

26th Annual National Neurotrauma Symposium. Orlando, FL (July 27-30, 2008)

Neuroscience 2008. Washington, DC (November 15-19, 2008)

International Stroke Conference. San Diego, CA (February 18-20, 2009). Participant in
symposium: Mitochondria and Cell Death after Brain Ischemia. Invited Speaker:

Neuroprotective Targets of Oxidative Stress

Neurotrauma 2009: The Second Joint Symposium of the International and National Neurotrauma
Societies. Santa Barbara, CA (September 7-11, 2009). Symposium Session Chair: Saving
Neurons and Growing Neurons (Neuroprotection and Neurogenesis)

Neuroscience 2009. Chicago, IL (October 17-21, 2009)

International Stroke Conference. San Antonio, TX (February 23-26, 2010)

27th Princeton Conference on Cerebrovascular Disease. Boston, MA (April 22-24, 2010)

28th Annual National Neurotrauma Symposium. Las Vegas, NV (June 14-17, 2010)

Neuroscience 2010. San Diego, CA (November 13-17, 2010)

International Stroke Conference. Los Angeles, CA (February 9-11, 2011)

National Neurotrauma Symposium 2011. Fort Lauderdale, FL (July 10-13, 2011) Invited
Speaker: Symposium--Advances in Mitochondrial Pathobiology in TBI and SCI. Title: Can
We Block Mitochondrial Activation of Apoptosis?

International Stroke Conference. New Orleans, LA (February 1-3, 2012)

28th Princeton Conference on Cerebrovascular Disease. Cincinnati, OH (May 17-20, 2012)

PUBLICATIONS

Original Articles in Refereed Journals

1. CHAN PH, Sakano K, Singh S, Wildman SG (1972) Crystalline fraction I protein: Preparation in large yield. *Science* 176, 1145-1146 doi:10.1126/science.176.4039.1145
2. CHAN PH, Wildman SG (1972) Chloroplast DNA codes for the primary structure of the large subunit of Fraction I protein. *Biochim Biophys Acta* 277, 677-680 doi:10.1016/0005-2787(72)90115-3
3. CHAN PH, Hassid WZ (1975) One step purification of D-galactose and L-arabinose kinases from *Phaseolus aureus* seedlings by ATP-sepharose affinity chromatography. *Anal Biochem* 64, 372-379 doi:10.1016/0003-2697(75)90445-5
4. Fishman RA, CHAN PH (1976) Changes in ammonia and amino acid metabolism induced by hyperosmolality in vivo and in vitro. *Trans Am Neurol Assoc* 101, 34-39
5. Fishman RA, Reiner M, CHAN PH (1977) Metabolic changes associated with iso-osmotic regulation in brain cortex slices. *J Neurochem* 28, 1061-1067 doi:10.1111/j.1471-4159.1977.tb10669.x
6. CHAN PH, Fishman RA (1977) Effects of hyperosmolality on release of neurotransmitter amino acids from rat brain slices. *J Neurochem* 29, 179-181 doi:10.1111/j.1471-4159.1977.tb03943.x
7. CHAN PH, Wong YP, Fishman RA (1978) Hyperosmolality-induced GABA release from rat brain slices: Studies of calcium dependency and sources of release. *J Neurochem* 30, 1363-1368 doi:10.1111/j.1471-4159.1978.tb10467.x
8. CHAN PH, Fishman RA (1978) Brain edema: Induction in cortical slices by polyunsaturated fatty acids. *Science* 201, 358-360 doi:10.1126/science.663662
9. CHAN PH, Fishman RA (1979) Elevation of rat brain amino acids, ammonia and idiogenic osmoles induced by hyperosmolality. *Brain Res* 161, 293-301 doi:10.1016/0006-8993(79)90070-2
10. CHAN PH, Fishman RA, Lee JL, Candelise L (1979) Effects of excitatory neurotransmitter amino acids on swelling of rat brain cortical slices. *J Neurochem* 33, 1309-1315 doi:10.1111/j.1471-4159.1979.tb05278.x
11. Prioleau GR*, Fishman RA, CHAN PH (1980) Induction of brain edema by fatty acids in vivo. *Trans Am Neurol Assoc* 104, 147-150
12. CHAN PH, Fishman RA, Lee JL, Quan SC (1980) Arachidonic acid-induced swelling in incubated rat brain cortical slices. Effect of bovine serum albumin. *Neurochem Res* 5, 629-640 doi:10.1007/BF00964784

13. CHAN PH, Fishman RA (1980) Transient formation of superoxide radicals in polyunsaturated fatty acid-induced brain swelling. *J Neurochem* 35, 1004-1007 doi:10.1111/j.1471-4159.1980.tb07100.x
14. Caronna JJ, CHAN PH, Fishman RA (1980) Protective effects of corticosteroids on fatty acid-induced cerebral edema. *Trans Am Neurol Assoc* 105, 200-202
15. CHAN PH, Pollack E, Fishman RA (1981) Differential effects of hypertonic mannitol and glycerol on rat brain metabolism and amino acids. *Brain Res* 225, 143-153 doi:10.1016/0006-8993(81)90324-3
16. Fishman RA, CHAN PH (1981) Hypothesis: Membrane phospholipid degradation and polyunsaturated fatty acids play a key role in the pathogenesis of brain edema. *Trans Am Neurol Assoc* 106, 58-61
17. CHAN PH, Yurko M, Fishman RA (1982) Phospholipid degradation and cellular edema induced by free radicals in brain cortical slices. *J Neurochem* 38, 525-531 doi:10.1111/j.1471-4159.1982.tb08659.x
18. CHAN PH, Kerlan R, Fishman RA (1982) Intracellular volume of osmotically regulated C-6 glioma cells. *J Neurosci Res* 8, 67-72 doi:10.1002/jnr.490080110
19. CHAN PH, Fishman RA (1982) Alterations of membrane integrity and cellular constituents by arachidonic acid in neuroblastoma and glioma cells. *Brain Res* 248, 151-157 doi:10.1016/0006-8993(82)91156-8
20. CHAN PH, Kerlan R, Fishman RA (1983) Reductions of γ -aminobutyric acid and glutamate uptake and $(\text{Na}^+ + \text{K}^+)\text{-ATPase}$ activity in brain slices and synaptosomes by arachidonic acid. *J Neurochem* 40, 309-316 doi:10.1111/j.1471-4159.1983.tb11284.x
21. CHAN PH, Fishman RA, Caronna J, Schmidley JW, Prioleau G, Lee J (1983) Induction of brain edema following intracerebral injection of arachidonic acid. *Ann Neurol* 13, 625-632 doi:10.1002/ana.410130608
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25. CHAN PH, Fishman RA (1984) The role of arachidonic acid in vasogenic brain edema. *Fed Proc* 43, 210-213

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30. CHAN PH, Longar S, Fishman RA (1987) Protective effects of liposome-entrapped superoxide dismutase on posttraumatic brain edema. *Ann Neurol* 21, 540-547 doi:10.1002/ana.410210604
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32. Faden AI, CHAN PH, Longar S (1987) Alterations in lipid metabolism, Na⁺, K⁺-ATPase activity, and tissue water content of spinal cord following experimental traumatic injury. *J Neurochem* 48, 1809-1816 doi:10.1111/j.1471-4159.1987.tb05740.x
33. Yu ACH*, CHAN PH, Fishman RA (1987) Arachidonic acid inhibits uptake of glutamate and glutamine but not of GABA in cultured cerebellar granule cells. *J Neurosci Res* 17, 424-427 doi:10.1002/jnr.490170414
34. Hillered L*, CHAN PH (1988) Effects of arachidonic acid on respiratory activities in isolated brain mitochondria. *J Neurosci Res* 19, 94-100 doi:10.1002/jnr.490190113
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53. Yu F*, CHAN PH (2004) Overexpression of SOD1 in transgenic rats attenuates endonuclease G release from mitochondria after spinal cord injury. Abstract No. 232.12. 34th Annual Meeting, Society for Neuroscience, October 23-27, 2004, San Diego
54. Saito A*, Nishi T, Nito C, Kamada H, CHAN PH (2004) Evidence of an Omi/HtrA2 signaling pathway in mouse brains after transient focal cerebral ischemia. Abstract No. 454.21. 34th Annual Meeting, Society for Neuroscience, October 23-27, 2004, San Diego
55. Nito C*, Kamiya T, Saito A, Kamada H, Amemiya S, Inaba T, CHAN PH, Katayama Y (2004) The neuroprotective effect of a free radical scavenger and mild hypothermia following transient focal ischemia in rats. Abstract No. 456.3. 34th Annual Meeting, Society for Neuroscience, October 23-27, 2004, San Diego
56. Liu J*, Narasimhan P, CHAN PH (2004) The role of reactive oxygen radicals in neuronal erythropoietin expression after hypoxia and hypoxic preconditioning. Abstract No. 457.1. 34th Annual Meeting, Society for Neuroscience, October 23-27, 2004, San Diego
57. Narasimhan P, Liu J, CHAN PH (2004) Role of ERK signaling and VEGF expression after oxygen-glucose deprivation in cerebral endothelial cell cultures. Abstract No. 568.12. 34th Annual Meeting, Society for Neuroscience, October 23-27, 2004, San Diego
58. Song YS*, Saito A, Narasimhan P, Jin C, CHAN PH (2004) Reactive oxygen species down-regulate I κ B kinase (IKK α) transiently in mice after focal cerebral ischemia. Abstract No. 681.20. 34th Annual Meeting, Society for Neuroscience, October 23-27, 2004, San Diego
59. Paschen W, Hayashi T, Saito A, CHAN PH (2004) Superoxide radicals modify ischemia-induced GADD34 expression. Abstract No. 682.8. 34th Annual Meeting, Society for Neuroscience, October 23-27, 2004, San Diego
60. Kamada H*, Nito C, Endo H, CHAN PH (2005) Overexpression of copper/zinc superoxide dismutase attenuates activation of caspase-9 and caspase-3 by blocking the c-Jun N-terminal protein kinase signaling pathway after transient focal cerebral ischemia in rats. Program No. 95.5. 35th Annual Meeting, Society for Neuroscience, November 12-16, 2005, Washington, DC

61. Nito C*, Kamada H, Endo H, CHAN PH (2005) The role of the p38 MAPK pathway in the regulation of the water-channel protein after transient focal ischemia in rats. Program No. 190.2. 35th Annual Meeting, Society for Neuroscience, November 12-16, 2005, Washington, DC
62. Nishi T*, Maier CM, Endo H, Kamada H, CHAN PH (2005) Cu/Zn superoxide dismutase (SOD1) overexpression reduces cytokines, chemokines, and chemokine receptor gene expression after focal cerebral ischemia. Program No. 219.4. 35th Annual Meeting, Society for Neuroscience, November 12-16, 2005, Washington, DC
63. Song Y*, Lee Y, CHAN PH (2005) Neuroprotective role of NF- κ B via downstream survival signals of the Akt pathway after transient focal cerebral ischemia in mice. Program No. 219.5. 35th Annual Meeting, Society for Neuroscience, November 12-16, 2005, Washington, DC
64. Endo H*, Kamada H, Nito C, CHAN PH (2005) Evidence of glycogen synthase kinase-3 β phosphorylation and neuronal survival after transient global ischemia in rats. Program No. 219.22. 35th Annual Meeting, Society for Neuroscience, November 12-16, 2005, Washington, DC
65. Saito A*, CHAN PH, Tominaga T (2005) Evidence of a novel proline-rich Akt substrate signaling pathway after stroke. Program No. 221.2. 35th Annual Meeting, Society for Neuroscience, November 12-16, 2005, Washington, DC
66. Narasimhan P, Liu J, CHAN PH (2005) Angiotensin II induces apoptosis in mouse cerebral endothelial cells. Program No. 549.13. 35th Annual Meeting, Society for Neuroscience, November 12-16, 2005, Washington, DC
67. Lee Y-S*, Song YS, Wang J, Giffard RG, CHAN PH (2005) Effect of nuclear factor-kappa B on cell survival of SOD1 TG astrocytes after oxygen glucose deprivation. *J Cereb Blood Flow Metab* 25, S52. doi: 10.1038/sj.jcbfm.9591524.0052
68. Nishi T*, Maier CM, Endo H, Kamada H, CHAN PH (2005) SOD1 overexpression reduces MCP-1 and MIP-1 α expression after transient focal cerebral ischemia. *J Cereb Blood Flow Metab* 25, S99. doi: 10.1038/sj.jcbfm.9591524.0099
69. Kamada H*, Hayashi T, Abe K, CHAN PH (2005) Up-regulation of low-density lipoprotein receptor expression after transient MCA occlusion in rats. *J Cereb Blood Flow Metab* 25, S231. doi: 10.1038/sj.jcbfm.9591524.0231
70. Hayashi T*, CHAN PH, Jin G, Deguchi K, Nagotani S, Sehara Y, Zhang H, Wang X, Nagano I, Shoji M, Abe K (2005) Superoxide causes endoplasmic reticulum damage and activates apoptotic machinery in ischemic neurons. *J Cereb Blood Flow Metab* 25, S429. doi: 10.1038/sj.jcbfm.9591524.0429
71. Endo H*, Kamada H, Nito C, Nishi T, CHAN PH (2005) Mitochondrial translocation of P53 following transient global ischemia in rats. *J Cereb Blood Flow Metab* 25, S441. doi: 10.1038/sj.jcbfm.9591524.0441

72. Kamada H*, Nito C, Endo H, Nishi T, CHAN PH (2005) Activation of an early and novel ASK₁-MKK₄-JNK signaling pathway after focal cerebral ischemia in rats. *J Cereb Blood Flow Metab* 25, S476. doi: 10.1038/sj.jcbfm.9591524.0476
73. Song YS*, Lee Y-S, CHAN PH (2006) NF- κ B-mediated neuroprotective gene expression in superoxide dismutase 1 transgenic mice after transient focal cerebral ischemia: lymphocytotropic cytokines and anti-apoptotic factors. International Stroke Conference 2006, February 16-18, 2006, Kissimmee, FL
74. Endo H*, Yu F, Nito C, Kamada H, CHAN PH (2006) Activated Akt/GSK3 β signaling induces neuronal survival after subarachnoid hemorrhage in rats. International Stroke Conference 2006, February 16-18, 2006, Kissimmee, FL
75. Song Y*, Lee Y, Narasimhan P, Maier CM, CHAN PH (2006) Novel nuclear translocation and phosphorylation of I κ B kinase α (IKK α) by oxidative stress after transient cerebral ischemia. Presentation No. 83.24. Neuroscience 2006, October 14-18, Atlanta
76. Kamada H*, Nito C, Kamiya T, Abe K, CHAN PH (2006) Bad as a converging signaling molecule between survival PI3-K/Akt and death JNK in neurons after transient focal cerebral ischemia in the rat brain. Presentation No. 84.3. Neuroscience 2006, October 14-18, Atlanta
77. Gasche, YG*, Sugawara T, Lewen A, CHAN PH, Copin J (2006) Delayed matrix metalloproteinase inhibition reduces the risk of cerebral hemorrhagic transformation after thrombolysis after thrombo-embolic stroke in rats. Presentation No. 583.3. Neuroscience 2006, October 14-18, Atlanta
78. Endo H*, Niizuma K, Nito C, CHAN PH (2006) PUMA mediates delayed death of hippocampal CA1 neurons after transient global cerebral ischemia. Presentation No. 681.8. Neuroscience 2006, October 14-18, Atlanta
79. Nito C*, Kamada H, Endo H, Narasimhan P, Lee Y, CHAN PH (2006) Involvement of the p38 MAPK pathway in expression of the water channel protein AQP4 in rat cortical astrocytes after oxygen glucose deprivation. Presentation No. 729.14. Neuroscience 2006, October 14-18, Atlanta
80. Maier CM, Narasimhan P, Song YS, CHAN PH (2007) NADPH oxidase expression following cerebral ischemia-reperfusion in SOD2-KO mice may be associated with endothelial cell damage. Presentation No. 447.9. Neuroscience 2007, November 3-7, San Diego
81. Myer DJ*, Maier CM, CHAN PH (2007) Chronic effects of matrix metalloproteinases on blood-brain barrier integrity following transient focal ischemia in SOD2 transgenic and knockout mice. Presentation No. 698.8/R18. Neuroscience 2007, November 3-7, San Diego

82. Nito C*, Myer DJ, Niizuma K, CHAN PH (2007) Role of the p38 MAPK pathway in the activation of cytosolic phospholipase A2 after focal ischemia in rat brain cortex. Presentation No. 873.12/E22. Neuroscience 2007, November 3-7, San Diego
83. Niizuma K*, Endo H, Nito C, Tominaga T, CHAN PH (2007) PIDDosome mediates delayed death of hippocampal CA1 neurons after transient global cerebral ischemia. Presentation No. 899.13/W6. Neuroscience 2007, November 3-7, San Diego
84. Kim GS*, Jung JE, Niizuma K, Myer DJ, CHAN PH (2008) Down-regulation of casein kinase 2 activity facilitates neuronal cell death via inhibition of AKT phosphorylation after ischemic injury in mice. Presentation No. 748.19. Neuroscience 2008, November 15-19, Washington, DC
85. Chen H*, CHAN PH (2008) NADPH oxidase inhibition is neuroprotective following cerebral ischemia-reperfusion. Presentation No. 834.13. Neuroscience 2008, November 15-19, Washington, DC
86. Niizuma K*, Katsu M, Tominaga T, CHAN PH (2008) Edaravone attenuates acute brain injury after subarachnoid hemorrhage. Presentation No. 834.15. Neuroscience 2008, November 15-19, Washington, DC
87. Kim GS*, Jung JE, Niizuma K, CHAN PH (2009) Down-regulation of casein kinase 2 triggers ischemic neuronal death via Akt inhibition and ROS production after oxidative insults in mice. Poster No. 0104. Brain '09, June 29-July 3, 2009, Chicago
88. Yoshioka H*, Niizuma K, Katsu M, Okami N, Kim GS, Narasimhan P, Kinouchi H, CHAN PH (2009) Important role of NADPH oxidase in striatal neuronal injury after severe transient global ischemia in mice. Poster No. 0108. Brain '09, June 29-July 3, 2009, Chicago
89. Nito C*, Ueda M, CHAN PH, Katayama Y (2009) Involvement of mitogen-activated protein kinase pathways in expression of aquaporin-4 in rat cortical astrocytes after oxygen glucose deprivation. Poster No. 0148. Brain '09, June 29-July 3, 2009, Chicago
90. Chen H*, CHAN PH (2009) Role of NADPH oxidase in post-ischemia brain inflammation: a temporal profile study. Poster No. 0163. Brain '09, June 29-July 3, 2009, Chicago
91. Jung JE*, Kim GS, Narasimhan P, CHAN PH (2009) STAT3 regulates the transcription of the mouse Mn-SOD gene as a neuroprotectant in cerebral ischemic reperfusion. Poster No. 0243. Brain '09, June 29-July 3, 2009, Chicago
92. Narasimhan P, Maier CM, CHAN PH (2009) NADPH oxidase activation in mouse cerebral endothelial cells after *in vitro* ischemia. Presentation No. 440. Neuroscience 2009, October 17-21, 2009, Chicago
93. Veiga S, Irvine K-A, Lin A, Ly JO, CHAN PH, Bresnahan JC, Beattie MS (2009) Superoxide dismutase 1 (SOD1) -overexpressing rats as a model to investigate oxidative

- stress in oligodendrocyte lineage after spinal cord injury. Presentation No. 542. Neuroscience 2009, October 17-21, 2009, Chicago
94. Yoshioka H*, Niizuma K, Katsu M, Okami N, Sakata H, Kinouchi H, CHAN PH (2009) Development of a striatal neuronal injury model after transient global cerebral ischemia in C57BL/6 mice. Presentation No. 739. Neuroscience 2009, October 17-21, 2009, Chicago
 95. Sakata H*, Niizuma K, Yoshioka H, Kim GS, Katsu M, Jung JE, Narasimhan P, Okami N, Tominaga T, CHAN PH (2010) Reduction of apoptosis and increased survival with minocycline pretreatment in transplanted neural stem cells in rats after ischemic stroke. Poster No. 57.3. Neuroscience 2010, November 13-17, 2010, San Diego
 96. Okami N*, Yoshioka H, Sakata H, CHAN PH (2010) The neuroprotective effect of rosiglitazone in ischemic stroke injury involves c-Jun N-terminal kinase. Poster No. 153.17. Neuroscience 2010, November 13-17, 2010, San Diego
 97. Sakata H*, Niizuma K, Jung JE, Narasimhan P, Wakai T, Kim GS, Tominaga T, CHAN PH (2011) Preconditioning with IL-6 enhances survival of transplanted neural stem cells after ischemic stroke in mice. Session No. 362. Neuroscience 2011, November 12-16, 2011, Washington, DC
 98. Wakai T*, Sakata H, Yoshioka H, Kinouchi H, CHAN PH (2011) Neural stem cells overexpressing SOD1 attenuate hemoglobin-induced neurotoxicity. Session No. 787. Neuroscience 2011, November 12-16, 2011, Washington, DC
 99. Wakai T*, Sakata H, CHAN PH (2012) Enhancement of antioxidative activity facilitates cell transplantation therapy for stroke. International Stroke Conference, February 1-3, 2012, New Orleans. *Stroke* 43, A3162
 100. Wakai T*, Sakata H, Narasimhan P, Maier, CM, CHAN PH (2013) Enhancement of antioxidative activity facilitates neural stem cell transplantation therapy for hemorrhagic stroke. Poster No. MP80. International Stroke Conference, February 6-8, 2013, Honolulu
 101. Sakata H*, Niizuma K, Narasimhan P, Wakai T, Fujimura M, Tominaga T, CHAN PH (2013) Chemical preconditioning enhances the effectiveness of stem cell therapy in ischemic stroke. Poster No. P104. International Stroke Conference, February 6-8, 2013, Honolulu
 102. Okami N*, Narasimhan P, Maier CM, CHAN PH (2013) Prevention of JNK phosphorylation and activation of dual specificity phosphatase as a mechanism for rosiglitazone in neuroprotection after transient cerebral ischemia. Poster No. P165. International Stroke Conference, February 6-8, 2013, Honolulu

* Postdoctoral Fellow or Graduate/Medical Student working in the Chan laboratory

** Visiting Scholar

RESEARCH TRAINEES

Postdoctoral Research Fellows	Dates	Present Position (or last known)
Alice Au, Ph.D.	7/1/82-6/30/83	Senior Staff Scientist California State Dept. of Health Berkeley
Lars Hillered, M.D., Ph.D.	4/1/84-4/2/86	Professor Depts. of Clinical Chemistry and Neurosurgery Uppsala University Uppsala, Sweden
Albert Yu, Ph.D.	7/1/84-6/30/89	Professor Dept. of Neuroscience Beijing University Beijing, China
Ki Moore, D.N.Sc., R.N.	7/1/87-6/30/88	Professor College of Nursing University of Arizona Tucson
Shigeki Imaizumi, M.D.	12/1/87-11/30/89	Senior Lecturer Div. of Neurosurgery Tohoku University Sendai, Japan
Vicki Woolworth, Ph.D.	4/28/88-3/31/89	Senior Scientist ProZyme, Inc. San Leandro, CA
Judith Kelleher-Andersson, Ph.D.	5/22/89-5/22/93	President and CSO NeuroNascent, Inc. Clarksville, MD
Guo-Yuan Yang, M.D.	7/6/89-6/30/92	Co-Director Med-X Institute Jiaotong University Shanghai, China
Erno Dux, M.D., Ph.D.	10/1/89-5/16/91	Associate Professor Max Planck Institute Germany

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Hiroyuki Kinouchi, M.D., Ph.D.	11/89-3/92 6/6/02-3/27/03	Professor and Chairman Dept. of Neurosurgery University Yamanashi Yamanashi, Japan
Glenn Gobbel, D.V.M., Ph.D., M.S.	9/1/90-6/30/94	Assistant Research Professor Dept. of Medicine VA Tennessee Valley Healthcare System Nashville
Hideyuki Kamii, M.D., Ph.D.	5/1/92-6/30/94	Staff Physician/Scientist Div. of Neurosurgery Tohoku University Sendai, Japan
Yibing Li, Ph.D.	1/25/93-8/31/97	Research Scientist Dept. of Neurology University of California San Francisco
Todd Sorokan, M.D.	8/1/93-7/31/94	Executive Medical Director Faculty of Medicine University of British Columbia Vancouver, British Columbia
Takeo Kondo, M.D.	6/6/94-12/27/96	Associate Professor Div. of Neurosurgery Tohoku University Sendai, Japan
Jean-Christophe Copin, Ph.D.	8/1/94-6/14/00	Research Associate Surgical Intensive Care Geneva University Hospital Geneva, Switzerland
Shuzo Sato, M.D.	1/1/95-12/20/96	Staff Physician Dept. Neurosurgery Keio University Tokyo, Japan
Jianfeng Xu, M.D.	3/4/95-3/3/96	Research Fellow in Medicine Harvard Institutes of Medicine Boston

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Kensuke Murakami, M.D.	3/14/95-6/30/97	Staff Physician Dept. of Neurosurgery Tohoku University Sendai, Japan
Gyung Whan Kim, M.D., Ph.D.	7/1/96-4/11/00	Associate Professor Dept. of Neurology Yonsei University Seoul, Korea
Makoto Kawase, M.D.	12/27/96-12/23/98	Staff Physician Dept. of Neurosurgery Tohoku University Sendai, Japan
Miki Fujimura, M.D.	7/1/97-8/27/99	Assistant Professor Dept. of Neurosurgery Tohoku University Sendai, Japan
Yung-Yee Chang, M.D.	10/6/97-6/18/99	Assistant Professor Dept. of Neurology Kaohsiung Medical College Kaohsiung, Taiwan
Yvan Gasche, M.D.	10/20/97-9/22/00	Professor, Director of Surgical Intensive Care Geneva University Hospital Geneva, Switzerland
Shirley Huang, Ph.D.	2/1/98-11/30/02	Not available
Purnima Narasimhan, Ph.D.	7/1/98-9/30/02	Research Associate Dept. of Neurosurgery Stanford University
Taku Sugawara, M.D., Ph.D.	11/23/98-11/20/01	Lecturer Dept. of Neurosurgery Akita University Akita, Japan
Anders Lewén, M.D., Ph.D.	5/10/99-4/13/01	Associate Professor Dept. of Neuroscience Uppsala University Uppsala, Sweden

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Nobuo Noshita, M.D.	7/27/99-12/21/01	Staff Physician Dept. of Neurosurgery Tohoku University Sendai, Japan
Carolina Maier, Ph.D.	11/1/99-6/30/03	Scientist Biotech Company
Fengshan Yu, M.D.	8/1/00-7/31/05	Research Associate Uniformed Services University Rockville, MD
Michel Ferrand-Drake, M.D., Ph.D.	9/1/00-5/21/03	Assistant Professor Wallenberg Neuroscience Center Lund, Sweden
Takeshi Hayashi, M.D., Ph.D.	4/2/01-7/11/03	Staff Physician Dept. of Neurology Okayama University Okayama, Japan
Shuzo Okuno, M.D.	6/29/01-1/22/04	Director, Neurosurgical Laboratory Dept. of Neurosurgery Nara Medical University Nara, Japan
Atsushi Saito, M.D.	12/17/01-6/18/04	Assistant Professor Dept. of Neurosurgery Tohoku University Sendai, Japan
Tatsuro Nishi, M.D., Ph.D.	4/1/02-3/15/05	Staff Physician Dept. of Neurosurgery Tokyo Medical University Tokyo, Japan
Jing Liu, M.D., Ph.D.	8/30/02-6/10/05	Psychiatrist Gainesville, Florida
Yun Seon Song, Ph.D.	5/7/03-2/16/07	Associate Professor College of Pharmacy Sookmyung Women's University Seoul, Korea
Yong-Sun Lee, Ph.D.	2/2/04-8/31/06	Not available

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Chikako Nito, M.D., Ph.D.	3/1/04-3/16/07	Assistant Professor Dept. of Neurology Nippon Medical School Tokyo, Japan
Hiroshi Kamada, M.D., Ph.D.	4/8/04-6/28/06	Staff Physician Dept. of Neurology Okayama University Okayama, Japan
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Chang Bae Jin, Ph.D.	8/22/05-11/15/05	Principal Research Scientist Bioanalysis & Biotransformation Research Center Korea Institute of Science & Technology Seoul, Korea
Kuniyasu Niizuma, M.D., Ph.D.	8/4/06-4/22/09	Staff Physician Dept. of Neurosurgery Tohoku University Sendai, Japan
D. Jeannie Myer, Ph.D.	8/28/06-8/8/08	Postdoctoral Fellow Dept. of Biomedical Engineering Yale University
Gab Seok Kim, Ph.D.	4/2/07-7/19/11	Research Fellow in Surgery Beth Israel Deaconess Medical Center Boston
Hai Chen, M.D., Ph.D.	5/1/07-6/17/10	Neurologist and Postdoctoral Fellow NYU
Joo Eun Jung, Ph.D.	8/20/07-7/19/11	Instructor in Radiology Massachusetts General Hospital Boston
I-Rue Lai, M.D., Ph.D.	8/20/07-8/8/08	Assistant Professor Dept. of Anatomy & Cell Biology National Taiwan University Taipei, Taiwan

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Takuma Wakai, M.D.	11/15/10-11/15/13	Assistant Professor Dept. of Neurosurgery University of Yamanashi Yamanashi, Japan

Graduate Students

Carla Cafe	6/12/93-6/12/94	Unavailable
Shigeki Mikawa	10/4/93-3/20/95	Lecturer Div. of Neurosurgery Tohoku University Sendai, Japan
Yuiko Morita-Fujimura, Ph.D.	7/1/97-8/27/99	Assistant Professor Frontier Research Institute for Interdisciplinary Sciences and Institute of Development, Aging and Cancer Tohoku University Sendai, Japan
Nina Vartiainen	12/20/97-1/28/99	Senior Research Associate Cerebricon Ltd. Kuopio, Finland
Juha Yrjänheikki, Ph.D.	12/20/97-12/14/98	CEO Aurealis Pharma Kuopio, Finland

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Susanna Miettinen, M.D., Ph.D.	12/20/97-8/18/98	Staff Physician Kuopio University Kuopio, Finland
Susanna Grzeschik, Ph.D.	10/4/99-12/17/01	Scientist Biotech Company
Candice Junge, Ph.D.	11/1/00-7/29/02	Executive Director Clinical Strategy NeoStem Irvine, CA
Ana Cañuelo Navarro	9/20/04-12/20/04	Associate Professor Dept. of Experimental Biology University of Jaén Jaén, Spain
Masataka Katsu, M.S.	1/7/08-12/1/09	Research Scientist Mitsubishi Pharma Corp. Yokohama, Japan

Medical Residents

George Prioleau, M.D.	7/1/78-6/30/79	Deceased
James Schmidley, M.D.	7/1/81-6/30/82	Professor Dept. of Internal Medicine Virginia Tech Roanoke
Neal Martin, M.D.	7/1/81-6/30/82	Professor and Chair Division of Neurosurgery University of California Los Angeles
Bryan Pereira, M.D.	7/1/86-6/30/88	Neurosurgeon Santa Rosa, CA
Ronald Warnick, M.D.	7/1/91-6/30/92	Professor Director, Brain Tumor Center University of Cincinnati Cincinnati
Scott Shepard, M.D.	7/1/95-6/30/96	Assistant Professor Dept. of Neurosurgery University of Texas Houston

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Medical Students

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Susan Langar, M.D. 10/16/80-7/31/86 Ophthalmologist
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Undergraduate Students

Bill Toy, Pharm. D. 7/1/76-9/30/76 Chief Staff Pharmacist
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Mary Yurko, M.D., Ph.D. 3/10/80-6/19/81 Dermatologist
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Tana Woodward, D.D.S.	9/13/84-8/6/85	Dentist Ripon, CA
Juliette Gafni, Ph.D.	8/1/91-7/30/93	Senior Scientist BioMarin Pharmaceutical San Rafael, CA
Michael Tsao, M.D.	10/24/97-6/30/98	Pediatrician Kaiser Permanente Santa Rosa, CA
Justin Munning	12/98-6/99	Dept. of Biology Stanford University
Lily Hsieh, M.D.	9/1/01-6/13/03	Surgeon Stony Brook, NY
Benjamin Hassid, M.D.	1/26/04-6/1/05	Clinical Fellow Dept. of Medicine University of California San Francisco
Esther Kim	5/3/04-12/1/04	Human Biology Program Stanford University
Shaili Rajput	6/20/05-8/10/05	Fellow Midwest Palliative & Hospice Care Northwestern University
Chinyere Nwaneri	6/21/05-8/10/05	Undergraduate University of Maryland Baltimore
Kei Takamura	11/8/05-2/28/06	Human Biology Program Stanford University
Mercedes Giles	6/27/06-8/16/06	Medical Student Morehouse School of Medicine Atlanta
Christina Goeders	10/1/07-5/3/10	Undergraduate Stanford University
T. L. Newsome	7/1/08-8/15/08	Undergraduate Morehouse College Atlanta

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Natalie Eisert

1/4/10-6/30/11

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University of Michigan Medical
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Doctoral/Postdoctoral Research Mentorship

Victor Tse, M.D., Ph.D.

9/98-3/09

Neurosurgeon
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