

June 2, 2008

**** CURRICULUM VITAE ****

L. Creed Pettigrew, M.D., M.P.H.

I. GENERAL INFORMATION

Office Address: University of Kentucky
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Board Certification: American Board of Psychiatry and Neurology, 2005
Vascular Neurology, #177

Board Certification American Board of Psychiatry and Neurology, 1985
Adult Neurology, #27715

Certification of Advanced Training: American Society of Neuroimaging, 1994
Neurosonology

Licensure: Kentucky 26574 (1989-present)
Texas F7048 (1980-present)

II. EDUCATION

1973-1976 BA - Biology
Southwestern University
Georgetown, Texas

1976-1980 M.D.
University of Texas Medical Branch
Galveston, Texas

1979-1981 M.P.H. (Health Services Administration)
University of Texas School of Public Health
Houston, Texas

- 1980-1981 Intern - Depts. of Neurology and Internal Medicine
University of Texas Medical School
Houston, Texas
- 1981-1983 Resident - Department of Neurology
University of Texas Medical School
Houston, Texas
- 1983-1984 Chief Resident - Department of Neurology
University of Texas Medical School
Houston, Texas
- 1984-1986 Fellow in Cerebrovascular Disease
Department of Neurology
University of Texas Medical School
Houston, Texas
- 1990 Fourth International Symposium on Intracranial Hemodynamics
(Workshop on Transcranial Doppler Diagnosis), held by
Institute of Applied Physiology and Medicine in Orlando,
Florida, on 02/11-14/90.
- 1993 "Neurovascular Ultrasound," Center for Medical Ultrasound,
Bowman Gray School of Medicine, Winston-Salem, North
Carolina, 10/18-22/93. (32 hours CME Category I credit).
- 1993 "Concepts in Molecular Medicine," Department of Veterans
Affairs Course, 01/13-17/93.
- 1996 "Interpretation and Advanced Clinical Applications in
Neurovascular Ultrasound," Center for Medical Ultrasound,
Wake Forest University School of Medicine, Winston-Salem,
North Carolina, 01/15-19/96. (35 hours CME Category I credit)
- 1998 One-on-One Preceptorship in Acute Stroke; Kenneth Maiese,
M.D., Preceptor; Wayne State University Medical Center,
Detroit Michigan, 07/24/98

III. PROFESSIONAL EXPERIENCE

- 1990-present Department of Veterans Affairs Medical Center
Cooper Drive Division
Lexington, Kentucky
- 1989-present University of Kentucky College of Medicine
Lexington, Kentucky

1995-1998	Joint Associate Professor (full time; non-tenured) University of Kentucky Graduate Center for Toxicology Lexington, Kentucky
1992-1998	Associate Professor, Neurology (full time; tenured) University of Kentucky Albert B. Chandler Medical Center Department of Neurology Lexington, Kentucky
1992-1998	Associate Professor, Surgery/Neurosurgery (full time, non-tenured) University of Kentucky Albert B. Chandler Medical Center Department of Surgery Lexington, Kentucky
1989-1992	Assistant Professor, Neurology (full time; tenure track) University of Kentucky Albert B. Chandler Medical Center Department of Neurology Lexington, Kentucky
V. HOSPITAL OR CLINICAL APPOINTMENTS	
1997-present	Cardinal Hill Hospital Consulting Physician (Courtesy Staff Privileges) Lexington, Kentucky
1996-present	Federal Medical Center Consulting Neurologist Lexington, Kentucky
1992-present	Columbia Hospital Consulting Neurologist (Courtesy staff privileges) Lexington, Kentucky
1990-present	Department of Veterans Affairs Medical Center Staff neurologist (Attending; full time) Lexington, Kentucky

1989-present	Division of Maternal and Child Health (Neurology Regional Clinic Program) Commonwealth of Kentucky Associate Medical Staff (part time)
1989-present	University of Kentucky Hospital Staff neurologist (Attending; full time) Lexington, Kentucky
1987-1989	M.D. Anderson Cancer Center Staff neurologist (Attending; volunteer/part time) Houston, Texas
1984-1989	Hermann Hospital Staff neurologist (Attending; full time) Houston, Texas

VI. CONSULTING ACTIVITY

**** National ****

1994	Invited Speaker (with Michael Chopp, Ph.D., and Brian Meldrum, Ph.D.) "Therapeutic Conference on Acute Neurological Disorders," Marion Merrell Dow Research Institute, Cincinnati, Ohio; October 17, 1994.
1991-1995	Educational Council on Calcium Channel Antagonists in Cerebrovascular Disorders Miles, Incorporated New Haven, Connecticut
1991-1995	Educational Council on Ticlopidine in the Prevention of Recurrent Stroke Syntex Corporation Palo Alto, California
1990-1991	Educational Council on Advance in the Diagnosis and Treatment of Subarachnoid Hemorrhage National Stroke Association Denver, Colorado

**** State ****

1989-present

Kentucky Medical Review Board
 Division of Driver Licensing
 Frankfort, Kentucky

**** Local ****

1991-1993

Medical Advisory Board
 Stroke Association of Kentucky
 Lexington, Kentucky

1990-1991

Organizational Committee
 Stroke Association of Kentucky
 Lexington, Kentucky

VII. TEACHING ACTIVITY**** Special Assignments ****

Since joining the faculty of the University of Kentucky in 1989, I have organized a monthly Neurology/Neurosurgery Stroke Conference, attended by Neurology and Neurosurgery faculty and housestaff and third-year medical students rotating on the Neurology clinical services. This conference is sponsored jointly by the Department of Neurology, the Division of Neurosurgery in the Department of Surgery, and the Sanders-Brown Center on Aging. It is unique in that it provides the only recurring opportunity for structured interaction between faculty, housestaff, and students associated with these three units. Each conference involves presentation of one or more patient cases illustrating clinical aspects of cerebrovascular disease and includes open discussion, review of radiologic studies, distribution of a reference list, and commentary from participants. The topics I have presented before the Neurology/Neurosurgery Stroke Conference or other research seminars held within the Sanders-Brown Center include the following:

01/16/90	<i>Moya Moya Disease</i>
02/09/90	<i>Carotid Cavernous Sinus Fistula</i>
04/17/90	<i>Cerebral Air Embolism</i>
04/20/90	<i>Vasoactive Eicosanoids in Cerebral Ischemia</i>
05/15/90	<i>Anterior Choroidal Artery Occlusion</i>
06/19/90	<i>Vertebral Artery Dissection</i>
09/18/90	<i>Update on Stroke Research</i>
10/16/90	<i>Dysarthria and Dysphasia in the Stroke Patient</i>
12/14/90	<i>Noninvasive Diagnosis of Extracranial Vascular Disease</i>
01/15/91	<i>Cerebral Venous Sinus Thrombosis</i>
06/18/91	<i>Unruptured PICA Aneurysm Causing Brain Stem Compression</i>

- 09/27/91 *Pharmacologic Manipulation of Thromboxane Metabolism in Cerebral Ischemia*
- 09/27/91 *Update on Stroke Research*
- 11/22/91 *Intraluminal Thrombus of the Carotid Artery*
- 06/12/92 *Neurological Complications of Whipple's Disease*
- 09/18/92 *Journal Club on Aspirin for Stroke Prophylaxis*
- 10/23/92 *Cerebral Emboli Associated with Atrial Myxoma*
- 11/13/92 *Journal Club on Stroke and Atrial Fibrillation*
- 01/08/93 *Lateral Medullary Syndrome*
- 05/11/93 *Journal Club on Symptomatic Carotid Endarterectomy*
- 08/20/93 *Update on Stroke Research (with Alex Tikhtman, Stroke Fellow)*
- 09/17/93 *Fibromuscular Dysplasia (with Alex Tikhtman, Stroke Fellow)*
- 12/17/93 *Anterior Spinal Artery Syndrome (with Alex Tikhtman, Stroke Fellow)*
- 03/11/94 *Amyloid Precursor Protein in Ischemic Neuronal Necrosis*
- 04/22/94 *Endovascular Thrombolysis (with Dr. Jonathan Hodes and Alex Tikhtman, Stroke Fellow)*
- 02/23/96 *Excitotoxicity and Microtubular Proteolysis in Focal Cerebral Ischemia*
- 03/20/97 *Update on Stroke Research*
- 07/17/97 *Sickle Cell Hemoglobinopathy and Stroke*
- 08/21/97 *Middle Cerebral Arterial Stenosis (with Ed Escobar, Neurology Chief Resident)*
- 10/16/97 *Multiple Extracranial Arterial Dissections*
- 03/19/98 *PROACT, Fiblast, and CLASS: Clinical Research in Acute Stroke for 1998*
- 7/16/98 *Practical Management of Acute Stroke in the Emergency Department*
- 8/20/98 *Ultrasound in the Clinical Diagnosis of Cerebrovascular Disease*
- 12/17/98 *Central Transtentorial Brain Herniation as a Complication of Ischemic Stroke*
- 1/21/99 *Duel of the Super-Aspirins: Antiaggregant Therapy for Stroke Prophylaxis 1999*
- 4/15/99 *Does Carotid Endarterectomy Improve Cognitive Function?*
- 10/21/99 *Paraparesis with Intact Proprioception after Hemodialysis*
- 12/16/99 *Hemicraniectomy in Massive Cerebral Infarction*
- 1/20/00 *Doing the Drip-Dry Waltz: Intracerebral Hemorrhage after Taking a Shower*
- 6/15/00 *Multiple Cerebral Emboli of Unknown Cause (with Dev Kumar, Neurology Resident)*
- 9/21/00 *Management of Bihemispheric Cerebral Ischemia*
- 12/21/00 *St. Jude's Fire: Acute Cerebral Infarction Associated with Prosthetic Cardiac Valves (with Michael R. Dobbs, Neurology Resident)*
- 8/16/01 *Update on Clinical Stroke Research in the University of Kentucky Hospital*
- 1/24/02 *Update on Stroke Prevention in 2002*
- 6/30/02 *"Doctor, I'm Dizzy." Vertebrobasilar Insufficiency and Other Causes of Vertigo*

9/19/02	<i>Diagnosis and Management of Acute Ischemic Stroke for 2002</i>
2/20/03	<i>Holy Cow, Batman! Can Vampire Bats Help Stroke Patients? The DEDAS Study: IV Thrombolysis after tPA</i>
4/17/03	<i>Homotaurine (Cerebril™) in the Prevention of Recurrent Hemorrhage due to Amyloid Angiopathy of the Brain</i>
12/17/04	<i>Endovascular Therapy of Basilar Artery Thrombosis</i>
7/22/05	<i>Thrombolytic Therapy for Acute Ischemic Stroke</i>
11/17/06	<i>Unholy Trinity: Cancer, Clots and Cerebral Infarcts</i>

**** Didactic Courses ****

1994, 1996, 1998	PHR 645/TOX 780 (graduate students) <i>Introduction to Clinical Neurotoxicology</i> Department of Toxicology College of Pharmacy University of Kentucky
1994, 1996	MD 817 (first-year medical students) Problem-Based Learning instructor for <i>Neurosciences</i> Department of Neurology University of Kentucky
1995	BSC 778 (graduate students) Lecturer with Dr. Lee Blonder for <i>Stroke</i> Department of Behavioral Sciences University of Kentucky
1994	PGY 626 (graduate students) Lecturer for <i>Stroke: Diagnosis and Clinical Management</i> Department of Anatomy and Neurobiology University of Kentucky
1994	GRN-643 (SW-643; graduate students) Lecturer for <i>Stroke</i> Sanders-Brown Center on Aging Lexington, Kentucky
1993	PGY 604 (graduate students) Lecturer for <i>Cerebral Circulation and the Pathogenesis of Stroke</i> Department of Physiology University of Kentucky
1991, 1992	NEU 605 (graduate students) Lecturer for <i>Mechanisms of Stroke</i> Department of Neurology University of Kentucky

- 1991-1992 Conjoint 818 (second-year medical students)
Lecturer for *Overview of Stroke*
University of Kentucky
- 1990-present NEU 821 (second-year medical students)
Basic Neurosciences, Lecturer for *Stroke I & II*
Department of Neurology
University of Kentucky
- 2005-present PHR 967 Advanced Therapeutics & Pharmacokinetics
(pharmacy students)
Pathophysiology, Diagnosis, and Management of Ischemic Stroke
College of Pharmacy
University of Kentucky
- 2005-present Neurology #621 (osteopathic medical students)
Diagnosis and Management of Acute Ischemic Stroke
Pikeville College of Osteopathic Medicine
Pikeville, Kentucky
- 2008 ANA 780 Mechanisms of Neurologic Disease (graduate students)
Stroke and Cerebral Ischemia (03/24/08) and *Animal Models of Global
and Focal Cerebral Ischemia* (03/26/08)
College of Medicine
University of Kentucky
- 2008 CDS 680 Clinical Medicine for Postgraduate Dental Students I
(dentistry postdoctoral students)
*Neurological Disease (Stroke, Parkinson's Disease, and Alzheimer's
Disease)*
College of Dentistry
University of Kentucky
- 2008 PHY 630 Advanced Topics in Physiology/Mechanisms of Human Disease
(graduate students)
Stroke/Carotid Artery Disease (05/19/08)
College of Medicine
University of Kentucky

**** Clinical Courses ****

- 2000 Lecturer for *Headaches* and *Diagnosis and Management of the Acute
Stroke Patient*
Department of Psychiatry
University of Kentucky
11/01/00 and 11/08/00

- 1995 Lecturer for *Stroke*
Department of Physical Medicine and Rehabilitation
University of Kentucky
10/19/95
- 1994-present MD832/833 (third-year medical student clerkship in Neurology and
Psychiatry)
Clinical Neurosciences Problem-Based Learning Instructor
- 1994-present MD832/833 (third-year medical student clerkship in Neurology and
Psychiatry)
Attending physician and lecturer for *Stroke*
- 1991-1994 NEU 841 (fourth-year medical student clerkship in Neurology)
Attending physician and lecturer for *Stroke*
- 1990 NEU 831 (third-year medical student clerkship in Neurology)
Attending physician and clinical teacher
University of Kentucky
- 1989-present Internal Medicine Housestaff Conference
Yearly participant, giving lectures on diagnosis and management of stroke

**** Continuing Education ****

- 2005 Lecturer, *Diagnosis and Management of Acute Stroke for Emergency Care
Providers*; Springview Hospital, Lebanon, Kentucky (April 25, 2005),
Pattie A. Clay Hospital, Richmond, Kentucky (June 1, 2005), Berea
Hospital, Berea, Kentucky (June 22, 2005), and Ephraim McDowell
Regional Medical Center, Danville, Kentucky (June 29, 2005)
- 2004 Lecturer, *Treatment and Prevention of Ischemic Stroke in 2004*, March
Madness Continuing Education Series, Radisson Plaza Hotel, Lexington,
Kentucky, March 19, 2004
- 2000 - 2004 I have been the Director and sole organizer for the annual Stroke
Conference organized by the University of Kentucky and held in
Lexington, Kentucky (*Stroke Care 2000; Stroke Care 2001; Stroke Care
2002; Stroke Care 2003; Stroke Care 2004*). This event is co-sponsored by
the Sanders-Brown Center on Aging, clinical departments organized
within the Kentucky Neuroscience and Orthopedic Institute, and the
Office of Continuing Medical Education in the University of Kentucky
College of Medicine. Conference lecturers included nationally recognized
experts in neurological disorders and University of Kentucky faculty
members.

- 2000 Lecturer, *Pharmacological Insights and Stroke Management*, King's Daughters Medical Center, Ashland, Kentucky, September 1, 2000
- 2000 *Geriatric Update (Stroke Update, 2000)*
Workshop presented for the Seventeenth Annual Summer Series on Aging Sanders-Brown Center on Aging, Hyatt Regency Hotel, Lexington, Kentucky
07/09/00 – 07/12/00
- 1998 I was the Director and sole organizer for *Neurological Sciences Symposium*, held in Lexington, Kentucky October 23-24, 1998 and co-sponsored by the Departments of Neurology and Family Practice, the Kentucky Neurosciences Institute, and the Office of Continuing Medical Education in the University of Kentucky College of Medicine. Conference lecturers included nationally recognized experts in neurological disorders and University of Kentucky faculty members.
- 1997 I was the Director and sole organizer for *Stroke Management in 1997*, held in Lexington, Kentucky on November 21, 1997, and co-sponsored by the Departments of Neurology and Family Practice and the Office of Continuing Medical Education in the University of Kentucky College of Medicine. Conference lecturers included nationally recognized experts in stroke treatment and University of Kentucky faculty members.
- 1997 Issues in Geriatric Neurology for the Primary Care Provider
University of Kentucky
Lecturer, *Stroke*
03/22/97
- 1996 *Medical Update Panel - Diagnosis and Management of the Acute Stroke Patient in the Dawn of the Thrombolytic Era*
Workshop presented for the Thirteenth Annual Summer Series on Aging Sanders-Brown Center on Aging
07/16/96 - 07/19/96
- 1995, 1996 Neurology for the Primary Care Provider
University of Kentucky
Lecturer, *Stroke*
10/23/95 and 10/19/96
- 1995 Topics in Geriatric Medicine
University of Kentucky
Lecturer, *TIA/CVA*
04/22/95

- 1993 I was the Director and sole organizer for "Stroke & Related Disorders: New Approaches & Practical Solutions," an educational conference held in Lexington, Kentucky, on October 8-9, 1993, and co-sponsored by the National Stroke Association, the University of Kentucky Neurosciences Institute, and the Sanders-Brown Center on Aging. Conference lecturers included nationally recognized experts in stroke treatment, along with members of the University of Kentucky Medical School faculty. The conference attracted 107 participants from 11 states.
- 10/8/93 *Advanced Neuroimaging Techniques for Diagnosis of Stroke*
"Stroke & Related Disorders: New Approaches & Practical Solutions"
Educational conference presented by the National Stroke Association
Lexington, Kentucky
- 1992-present I have been a faculty lecturer in the University of Kentucky Family Medicine Review since 1992. The Family Medicine Review sponsored by the University of Kentucky is the oldest general medical review course accredited to award AMA Category 1 Continuing Medical Education credits in the United States. It is held three times annually and attracts a national audience of primary care physicians and medical specialists. Various topics that I have presented before the Annual Family Medicine Review include *New Frontiers in Stroke Therapy* (02/25/92 and 05/19/92), *Practical Management of the Acute Stroke Patient in the Thrombolytic Era* (02/24/97, 05/19/97, and 11/10/97), and *Diagnosis and Treatment of Acute Ischemic Stroke* (11/08/04 and 02/14/05).
- 1989-present Clinical Neuroscience Grand Round Lecturer
University of Kentucky
Department of Neurology
(one or two presentations yearly)

**** Other Teaching Activity ****

I have solicited monetary gifts from private donors outside the University of Kentucky to fund nationally known guest lecturers with special expertise in stroke (see **XIV. RESEARCH AND/OR CREATIVE PRODUCTIVITY**). This funded lectureship is designed to build a framework for communications between the University of Kentucky Stroke Program and leading authorities in stroke research. This funding mechanism has brought nationally recognized experts to speak before the clinical neuroscience community in the University of Kentucky from 1990 to the present.

VIII. MENTORSHIP

- Junior Faculty Anand Vaishnav, M.D.: Assistant Professor of Neurology and faculty member, University of Kentucky Stroke Program, 2002 – present; enrolled in K30 Career Training in Therapeutics and Translational Research Program, University of Kentucky

LaRoy P. Penix, M.D.: Assistant Professor of Neurology and faculty member, University of Kentucky Stroke Program, 1996 – 1999; received a Minority Supplement Award, “Magnetic Resonance Imaging of the Brain in Vascular Dementia,” Alzheimer’s Disease Research Center grant (P50 AG05144)

Postdoctoral Fellows Alex J. Tikhtman, M.D.: Cerebrovascular research fellowship (Clinical), University of Kentucky, 1992 – 1995; received a Research Career Development Award from the National Stroke Association, 1993, and support from the University of Kentucky General Clinical Research Center (GCRC), funded by NIH/National Center for Research Resources grant M01 RRD2602, to support magnetic resonance spectroscopy studies performed in elderly normal volunteers; published with Dr. Pettigrew in *Annals of Neurology* and *Journal of Clinical Pharmacology*

Stephen R. Minger, Ph.D.: Cerebrovascular research fellowship (Laboratory), University of Kentucky, 1995 – 1996; received grants-in-aid from the Kentucky Affiliate of the American Heart Association and from the American Health Assistance Foundation/National Heart Foundation – conducted research with Dr. Pettigrew on post-ischemic microtubular proteolysis in neurons, as affected by glutamate neurotransmission, with results published in *Brain Research* and *Neurological Research*

Dr. Minger is presently appointed as Lecturer in Biomolecular Sciences in King’s College, University of London, and is the Director of the Stem Cell Biology Laboratory in the GKT Centre for Neuroscience Research in London.

Virginia Smith-Swintosky, Ph.D.: Neurodegenerative disease fellowship (Laboratory of Dr. Mark Mattson), 1994 – 1995; conducted research with Dr. Pettigrew on basic mechanisms of ischemic neuronal degeneration with results published in *Journal of Neurochemistry*

Dr. Smith-Swintosky is presently employed as a Senior Scientist in Drug Discovery with the R. W. Johnson Pharmaceutical Research Institute, a division of Johnson and Johnson Pharmaceuticals, Inc.

Mary-Louise Holtz, Ph.D.: Graduate studies with doctoral degree in Neurotoxicology awarded by the University of Kentucky in 2000 (Dr. Pettigrew was the chair of Dr. Holtz's dissertation committee), Cerebrovascular research fellowship (Laboratory), 2000 – 2003; received postdoctoral fellowship support from University of Kentucky Brain Aging Training Grant (T32 AG000242) and Postdoctoral Fellowship Grant #120234B awarded by the Southern and Ohio Valley Research Consortium of the American Heart Association; conducted research with Dr. Pettigrew on basic mechanisms of ischemic neuronal degeneration with results published in *Molecular Brain Research*, *Journal of Cerebral Blood Flow & Metabolism*, *Brain Research*, and *Neuroscience Letters*

Dr. Holtz is presently employed as a Research Scientist at the University of Wisconsin/Milwaukee.

Houta Sabet, Ph.D.: Cerebrovascular research fellowship (Clinical), 2001 – 2004; received intramural research funding through the University of Kentucky General Clinical Research Center (NIH/NCRR M01 RR02602), the University of Kentucky Center for Biomedical Research Excellence Project Grant (NIH/NCRR P20 RR15592), and the K30 Career Training in Therapeutics and Translational Research Program at the University of Kentucky; conducted research with Dr. Pettigrew on hyperhomocysteinemia as a contributing factor in ischemic stroke and vascular dementia with results published in *Carotid Artery Stenosis: Current and Emerging Treatments* (Taylor & Francis, 2005)

Dr. Sabet is presently employed as a Research Scientist in the University of Kentucky Stroke Program.

Medical Students

Nita Doshi (University of Kentucky): first-year medical student enrolled in 1993 Summer Research Fellowship Program, University of Kentucky College of Medicine, "Magnetic Resonance Spectroscopy and Perfusion Imaging in Patients with Alzheimer's Disease"

Chikezie C. Amadi (University of Kentucky): completed student research fellowships in Dr. Pettigrew's laboratory during the summers of 1998 and 1999; received Academic Medicine Fellowship from National Medical Fellowships, Inc., and the Bristol-Myers Squibb Company, 1999; received American Heart Association (AHA) Cerebrovascular Student Scholarship, 1999; presented results before the 25th International Stroke Conference hosted by the AHA in New Orleans, Louisiana in 2000

Shea Godwin (University of Kentucky): completed student research internships in Dr. Pettigrew's laboratory during the summers of 2001 and 2002; received American Heart Association Cerebrovascular Student Scholarship, 2002; received one of only two Medical Student Travel Scholarships to present research results before the 127th Annual Meeting of the American Neurological Association, 2002

Graduate Students Dena Dubal, M.D., Ph.D. (University of Kentucky – 2003; Dr. Pettigrew was a member of the candidate's dissertation committee): Established animal model of focal brain ischemia in Dr. Pettigrew's laboratory and published results in *Journal of Cerebral Blood Flow & Metabolism*, published subsequent findings in *Journal of Neuroscience* and *Proceedings of the National Academy of Science USA*; received Fellow Travel Scholarship to present research results before the 127th Annual Meeting of the American Neurological Association, 2002.

Dr. Dubal is pursuing a Neurology clinical residency at the University of California/San Francisco and is enrolled in a Physician-Scientist Preparatory Track.

Shane W. Rau, M.D., Ph.D. (University of Kentucky – 2004; Dr. Pettigrew was a member of the candidate's dissertation committee): published results in *Journal of Neuroscience*

Dr. Rau is pursuing a Psychiatry clinical residency and is preparing for a career as an academic physician.

IX. ADMINISTRATIVE ACTIVITY AND UNIVERSITY SERVICE

**** Other Institutions ****

1988-1989	Director, Medical Student Educational Program Department of Neurology University of Texas Medical School Houston, Texas
1988-1989	Voting Member, Animal Welfare Committee University of Texas Health Science Center Houston, Texas

**** University of Kentucky ****

2008-present	Chairperson Scientific Advisory Committee Center for Clinical and Translational Science
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2007-2008	Committee Member Search Committee for Recruitment of Stroke Program Director Sanders-Brown Center on Aging
2006-2008	Chairperson General Clinical Research Center Advisory Committee
2005-2008	Member, General Clinical Research Center Advisory Committee
2005-2006	Committee Member Department of Physical Medicine & Rehabilitation Six-Year Review Committee
2000-2001	Chairperson Sanders-Brown Center on Aging Six-Year Review Committee
1996-present	Director University of Kentucky Stroke Program
1998-2002	Alternate Member Medical Institutional Review Board
1998-2002	Committee Member Advisory Committee Kentucky Center for Clinical Research and Investigator Services
1997-1998	Member Medical Institutional Review Board
1997	Committee Member Collaborative Practices Committee Group Practice Governance Committee
1996, 1997	Committee Member Faculty Search Committee Magnetic Resonance Imaging and Spectroscopy Center
1996	Chairperson, Working Group on Faculty Activities Task Force on Research
1995-1998	Committee Member University Research Advisory Committee Medical Center Subcommittee

1995-1996	Acting Director University of Kentucky Stroke Program
1993-1994	Member Neurology Chair Search Committee
1993	Member Sanders-Brown Center on Aging Six-Year Review Committee
1993	Member Department of Neurology Six-Year Review Committee
1992-present	Member Protocol Review Subcommittee General Clinical Research Center
1992-1998	Member Organ Donation Committee
1992-1995	Chairperson (1994-1995) Committee Member (1992-1995) College of Medicine Research Committee
1991-1992	Committee Member Applied Basic Sciences Colloquium Task Force Robert Wood Johnson Foundation Grant
1989-1995	Associate Director and Program Leader in Clinical Research University of Kentucky Stroke Program

**** Department of Veterans Affairs Medical Center – Lexington, Kentucky ****

2007-2008	Committee Member Data Safety & Security Subcommittee Research and Development Committee
2004-2008	Chairperson (2007-2008) Committee Member (2004-2007) Research and Development Committee
1996-1997	Committee Member Equipment Subcommittee Research and Development Committee

1993-1995	Chairperson Research Space Subcommittee Research and Development Committee
1992-1995	Chairperson (1994-1995) Committee Member (1992-1995) Research and Development Committee
1991-1992	Committee Member Animal Studies Subcommittee Research and Development Committee

X. SPECIAL ASSIGNMENTS/APPOINTMENTS

**** Editorships ****

International

2004	Ad Hoc Referee, PHARMACOTHERAPY and MOLECULAR BRAIN RESEARCH
2003	Ad Hoc Referee, NEUROBIOLOGY OF AGING
2003	Ad Hoc Referee, CLINICAL PHARMACOKINETICS
2002	Ad Hoc Referee, DRUG SAFETY
2001 – Present	Editorial Board Member, JOURNAL OF NEUROLOGICAL SCIENCES
1999 - 2004	Ad Hoc Referee, BRAIN RESEARCH
1994 - 2007	Ad Hoc Referee, JOURNAL OF CEREBRAL BLOOD FLOW AND METABOLISM
1993	Ad Hoc Referee, JOURNAL OF NEUROLOGY, NEUROSURGERY, AND PSYCHIATRY
1996	Ad Hoc Referee, JOURNAL OF NEUROCHEMISTRY

National

2006	Ad Hoc Referee, JOURNAL OF NEUROIMAGING
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1986 Primary Referee, METABOLIC BRAIN DISEASE
 1985 Ad Hoc Referee, ANNALS OF NEUROLOGY
 1985 Ad Hoc Referee, ARCHIVES OF INTERNAL MEDICINE
 1985, 1990-present Ad Hoc Referee, NEUROLOGY
 1984-present Ad Hoc Referee, STROKE

**** Peer Review Committee Memberships ****

National

2005-2008 Chair, Brain 2 Study Group (2008)
 Member, Brain 2 Study Group (2005-2007)
 American Heart Association

2006 Ad Hoc Member
 Developmental Brain Disorders
 National Institute of Neurological Disorders and Stroke
 National Institutes of Health

2000-2004 Member, Neurological Sciences and Disorders-A
 National Institute of Neurological Disorders and Stroke
 National Institutes of Health

1998-2000 Member, Affiliate Brain/Stroke Peer Review Committee
 American Heart Association

1997-2000 Neurological and Sensory Disorders Medical Research Advisory Group
 United States Department of Veterans Affairs

1996-2000 Member, Brain Study Committee
 American Heart Association

1990 Ad Hoc Member
 Human Development and Aging Study Section 3
 National Institutes of Health

Local

1988-1989 Member, Research Committee
 Texas Neurological Society
 Houston, Texas

**** Special Committee Assignments ****

- 2007 – Present Neurology Endpoint Reviewer
INcreasing Stroke Treatment through Interventional behavior Change
Tactics (INSTINCT; R01 grant awarded to University of Michigan Health
System, Ann Arbor, Michigan)
- 2006 – 07 Abstract Reviewer in Cerebrovascular Disease for 2007 Annual Meeting
of the American Academy of Neurology, Boston, MA, April 28 – May 5,
2007
- 2005 – Present Neurology Executive Committee Member
Randomized Evaluation of Recurrent Stroke Comparing PFO Closure to
Establish Current Standard of Care Treatment (RESPECT)
AGA Medical Corporation
Golden Valley, Minnesota
- 2001 External Advisory Committee
Stroke Prevention/Intervention Research Program
Morehouse School of Medicine
Atlanta, Georgia
05/13-14/01
- 2000 – 2005 Endpoint Committee Member
VA Cooperative Study 410
"The Iron and Atherosclerosis Study (FeAST)"
- 1999 VA QUERI (Quality Research Enhancement Initiative)
Acute Stroke Management Expert Panel
Department of Veterans Affairs
Durham, North Carolina
03/09-10/99
- 1999 Planning Committee Member
VA Cooperative Study 469
"Cooperative Trial of HMG-CoA Inhibitors in Stroke Regulation"
Submitted for review, February, 1999
- 1996-present Executive Committee Member
Vitamin Intervention in Stroke Prevention (VISP)
Multi-Centered Clinical Study
NIH 1 R01 NS34447

- 1996-2001 Executive Committee Member
Warfarin Aspirin Recurrent Stroke Study (WARSS)
Multi-Centered Clinical Study
NIH 1R01 NS28371
- 1996-1998 Scientific Program Committee
American Academy of Neurology
- 1992-1994 Committee Member
Task Force on Hospital Utilization for Stroke
Ad Hoc Practice Committee
American Academy of Neurology

XI. HONORS

International

- 2000 Invited Participant, Fifth Annual Symposium
Advances in Stroke Management
Bermuda
09/22-25/00
- 1999 Invited Participant, Fourth Annual Symposium
Advances in Stroke Management
Sardinia, Italy
09/25-26/99
- 1997 Invited Participant, Second Annual Symposium
Advances in Stroke Management
Cancun, Mexico
09/19-21/97
- 1996 Invited Participant, First Annual Symposium
Advances in Stroke Management
Aspen, Colorado, USA
09/27-10/01/96

National

- 2008 Invited Participant, 26th Princeton Conference on
Cerebrovascular Disease, Houston, Texas
- 2003-2004 *Best Doctors, 2003-2004*
Peer-rating survey by Best Doctors, Inc.

- 2001-2002 *Best Doctors, 2001-2002*
Peer-rating survey by Best Doctors, Inc.
- 2002 Preceptor for Shea Godwin, recipient of a Student Scholarship in Cerebrovascular Diseases (\$2,000 for support of a 2-month summer research project) from the American Heart Association
- 2000 Invited Speaker, Seventeenth Annual Black Hills Neurology Seminar – Clinical Adult Neurology in the 21st Century
Spearfish Canyon, South Dakota
02/17-19/2000
- 1999 McKeen Cattell Memorial Award
for outstanding research paper for 1998 in the *Journal of Clinical Pharmacology* (Pharmacokinetics, Pharmacodynamics, and Safety of Metrifonate in Patients with Alzheimer's Disease. *J Clin Pharmacol* 1998;38:236-245)
American College of Clinical Pharmacology
- 1999 *Best Doctors in America, 1999*
Peer-rating survey by Woodward/White Inc.
- 1999 Preceptor for Chikezie Amadi, recipient of a Student Scholarship in Cerebrovascular Diseases (\$2,000 for support of a 2-month summer research project) from the American Heart Association
- 1999 Mentor for Chikezie Amadi, recipient of a Bristol-Myers Squibb Academic Medicine Fellowship (\$6,000 for the support of a summer research project) from National Medical Fellowships Inc.
- 1996 Invited Co-Chair with Marc Fisher, M.D., Stroke: Magnetic Resonance Imaging, Scientific Session at the 48th Annual Meeting of the American Academy of Neurology
San Francisco, California
03/27/96
- 1996 Invited Participant, 20th Princeton Conference on Cerebrovascular Disease, Memphis, Tennessee
- 1996 *Best Doctors in America, 1996*
Peer-rating survey by Woodward/White Inc.

- 1993-95 Sponsorship of Alex Tikhtman, M.D., recipient of Career Development Fellowship (\$30,000 salary support for each of two years) from National Stroke Association of Englewood, Colorado
- 1994 *Best Doctors in America*, 1994
Peer-rating survey by Woodward/White Inc.
- 1994 Invited participant, 19th Princeton Conference on Cerebrovascular Disease, Boston, Massachusetts, 03/18-20/94
- 1993 Invited oral examiner, Part II Adult Neurology, American Board of Psychiatry and Neurology, Chicago, Illinois, 11/08-09/93
- 1993 Invited participant, Department of Veterans Affairs Course: Concepts in Molecular Medicine, San Francisco, California, 04/13-17/93
- 1993 Sponsorship of Claudia Schwab, Ph.D., recipient of Honorable Mention for 1993 Robert G. Siekert Young Investigator in Stroke Award, given in public ceremony held before the 18th International Joint Conference on Stroke and Cerebral Circulation in Miami, Florida, February 12, 1993
- 1992 Invited participant, 18th Princeton Conference on Cerebrovascular Disease Rochester, Michigan, 05/29-31/1992
- 1991-1996 Clinical Investigator Development Award
NINDS/NIH
04/01/91-03/31/96

Local

- 1998 Master Teacher Award
University of Kentucky College of Medicine
Lexington, Kentucky
- 1987-1988 Dean's Teaching Excellence List 1988-1989
University of Texas Medical School
Houston, Texas

1980 Chauncey and Elizabeth Leakie Award for Best Essay in
Humanities and Medicine
University of Texas Medical Branch
Galveston, Texas

XII. PROFESSIONAL ACTIVITY AND PUBLIC SERVICE

**** Memberships in Professional Societies ****

International

1991-present Active member
International Society of Cerebral Blood Flow and
Metabolism

National

1999-present Adjunct Associate Member
Section on Cerebrovascular Surgery
American Association of Neurological Surgeons and
Congress of Neurological Surgeons

1996-present Elected member
American Neurological Association

1991-present Active member
Society for Neuroscience

1988-2000 Active member
New York Academy of Sciences

1987-present Emeritus member
American Society for Neurologic Investigation

1985-present Member
Stroke Council, American Heart Association

1982-present Active member
American Academy of Neurology

1979-present Active member
American Medical Association

Local

1997-present

Elected member
Fayette County Medical Society**XIII. SPEAKING ENGAGEMENTS*****International***

Neuropharmacology of Cerebrovascular Disease and Treatment of Cerebrovascular Disorders. Presented before the INTERNATIONAL SYMPOSIUM ON ISCHEMIC CEREBROVASCULAR DISEASE sponsored by Institute National de Neurologia Neurocirugia. Mexico City. October, 1988.

National

The “New” Neuroprotective Therapy in Acute Stroke, invited lecturer, Department of Neurology Grand Rounds, Medical College of Georgia, Augusta, Georgia, on May 8, 2008

Antiplatelet Rx and Prevention of Stroke, Hypertension Treatment in Acute Stroke and ICH, Diagnosis and Management of Acute Stroke, and “New” Neuroprotective Therapies in Stroke (four lectures). 30th Annual Contemporary Clinical Neurology Symposium, Department of Neurology, Vanderbilt University College of Medicine, Hilton Head, South Carolina on July 17, 2007

Vitamin Intervention for Stroke Prevention: Results of the VISP Trial. Federation of American Societies for Experimental Biology Summer Research Conference, Snowmass, Colorado on August 1, 2004

Emerging Neuroprotective Strategies, COURSE 8AC.003 THERAPY IN NEUROLOGY, 55th Annual Meeting, American Academy of Neurology, Honolulu, Hawaii on April 5, 2003

Stroke Care 2003, COURSE 7FC.006 THERAPY IN NEUROLOGY, 55th Annual Meeting, American Academy of Neurology, Honolulu, Hawaii on April 4, 2003

Stroke Care, 2002, COURSE 3FC.005 THERAPY IN NEUROLOGY, 54th Annual Meeting, American Academy of Neurology, Denver, Colorado, April 15, 2002

Stroke: Clot Busters and Code Breakers – Stroke Therapy in 2001 and Beyond, COURSE 7FC.004 THERAPY IN NEUROLOGY, 53rd Annual Meeting, American Academy of Neurology, Philadelphia, Pennsylvania, May 11, 2001

Prevention of Stroke—Medical and Surgical Techniques. Seventeenth Annual Black Hills Neurology Seminar—Clinical Adult Neurology in the 21st Century in Spearfish Canyon, South Dakota on February 19, 2000

Status Migrainosis—Treatment Approaches. Seventeenth Annual Black Hills Neurology Seminar—Clinical Adult Neurology in the 21st Century in Spearfish Canyon, South Dakota on February 18, 2000

Intractable Headaches—Office Management. Seventeenth Annual Black Hills Neurology Seminar—Clinical Adult Neurology in the 21st Century in Spearfish Canyon, South Dakota on February 17, 2000

Battle of the Super Aspirins: Stroke Prevention, 2000. 105th Annual Convention and Scientific Seminar held by the American Osteopathic Association in Orlando, Florida, on October 31, 2000

Stroke Prevention and Management and The Development of Primary Stroke Centers. CRITICAL ISSUES IN STROKE PREVENTION AND MANAGEMENT, sponsored by Boehringer Ingelheim Pharmaceuticals, Inc., at Little Rock, Arkansas, September 9, 2000

Secondary Prevention of Strokes. 23RD SEMI ANNUAL FALL FAMILY PRACTICE REVIEW presented by Temple University School of Medicine with Lancaster General Hospital at The Lancaster Host Golf Resort and Conference Center, Lancaster, Pennsylvania, October 1, 1999

Stroke Risk Factors. STROKE PREVENTION SPEAKERS CONFERENCE, sponsored by Boehringer Ingelheim Pharmaceuticals, Inc., at Amelia Island, Florida, March 23, 1999

The Rationale for Neuroprotection. THE ROLE OF NEUROPROTECTIVES IN ACUTE STROKE THERAPY. a continuing medical education activity sponsored by the Postgraduate Institute for Medicine and presented during the 24th American Heart Association International Conference on Stroke and Cerebral Circulation. Opryland Hotel and Convention Center, Nashville, Tennessee, February 5, 1999.

Neuroprotection. BRAIN ATTACK: UPDATE ON MEDICAL AND SURGICAL MANAGEMENT sponsored by Columbia University College of Physicians and Surgeons Departments of Neurology and Neurological Surgery at the Columbia-Presbyterian Medical Center in association with the American Heart Association New York Affiliate, June 6, 1998.

Neuroprotection: Theory and Practice. ISCHEMIC BRAIN ATTACK: UPDATE ON MANAGEMENT AND PREVENTION sponsored by Columbia University College of Physicians and Surgeons Department of Neurology at the Columbia-Presbyterian Medical Center in association with the American Heart Association New York Affiliate, June 21, 1997.

Management of Acute Stroke . MANAGEMENT OF ACUTE STROKE FOR PRIMARY CARE (Satellite Teleconference). Department of Veterans Affairs, Birmingham Education Center, Birmingham, Alabama, February 21, 1996.

Carotid Endarterectomy: A Practical Course for Neurosurgeons, Congress of Neurological Surgeons, Chicago, Illinois October 2, 1994.

Regional

Stroke Care 2003, Hyatt Regency Lexington, Lexington, Kentucky, Moderator *Stroke Case Management Seminar*, May 23, 2003

Medicine Grand Rounds Series, Deaconess Hospital, Evansville, Indiana, *Aggressive Medical Management in the Ischemic Stroke Patient*, May 20, 2003

Medicine Grand Rounds Series, Deaconess Hospital, Evansville, Indiana, *Critical Issues in Stroke Treatment*, May 19, 2003

34th Annual University of Kentucky Family Medicine Review, Hyatt Regency Lexington, Lexington, Kentucky, *Diagnosis and Management of Acute Stroke in 2003*, February 21, 2003

Medicine Grand Rounds Series, Marshall University Medical Center, Huntington, West Virginia, *Diagnosis and Management of Headache*, November 12, 2002

Medicine Grand Rounds Series, Marshall University Medical Center, Huntington, West Virginia, *Update on Stroke Prevention 2002*, November 2002

Grand Rounds, Department of Neurology, The University of Kansas Medical Center, Kansas City, Kansas, *Secondary Stroke*, November 1, 2002

Grand Rounds, Department of Neurology, Southern Illinois University School of Medicine, Springfield, Illinois, *Making PROGRESS after WARSS: Stroke Prevention in 2002 and Beyond*, April 9, 2002

Grand Rounds, Department of Internal Medicine, Wright-Patterson Air Force Base, Dayton, Ohio, *Secondary Stroke Prevention in the New Millennium*, February 14, 2002

Invited lectureship, Stroke Update 2001, Indianapolis Stroke Coalition/St. Vincent Indiana Neuroscience Institute, Indianapolis, Indiana, *Stroke Prevention in 2001 and Beyond*, December 14, 2001

Invited lectureship, Annual Vanderbilt Stroke Symposium, Vanderbilt University College of Medicine, Nashville, Tennessee, *Stroke Prevention after WARSS*, November 16, 2001

Antiplatelet Therapy/Secondary Prevention. STROKE CONFERENCE, St. Vincent Indiana Neuroscience Institute, Indianapolis, Indiana, December 14, 2001

Stroke Prevention after WARSS. 4TH ANNUAL VANDERBILT STROKE SYMPOSIUM, Vanderbilt University Medical Center, November 16, 2001

Cardiovascular Disease: Management Strategies for Beyond 2000. Pikeville Methodist Hospital, Pikeville, Kentucky, April 28, 2001.

Aspirin, Thienopyridines, and Extended Release Dipyridamole in Stroke Prevention. CRITICAL ISSUES IN STROKE PREVENTION AND MANAGEMENT, (Moderator and Guest Lecturer), sponsored by Boehringer Ingelheim Pharmaceuticals, Inc., at Lexington, Kentucky, August 19, 2000.

Grand Rounds, Department of Internal Medicine and Division of Neurology, USC School of Medicine – Palmetto Richland Memorial Hospital, Columbia, South Carolina, *Battle of the Superaspirins: Anti-thrombotic Prophylaxis for Stroke in 2000* and *Diagnosis and Management of Acute Stroke in the Emergency Room*, August 3, 2000.

Grand Rounds, Lawrence County Medical Center, Ironton, Ohio, *Tissue Plasminogen Activator in the Treatment of Acute Stroke*, August 22, 1997.

St. Claire Medical Center, Morehead, Kentucky, *Why, When, and How to Use tPA in the Treatment of Acute Stroke*, July 9, 1997.

Visiting Professor, Department of Neurology, University of North Carolina, Chapel Hill, North Carolina, *Stroke 1994: Recent Developments in Cytoprotection*, October 12, 1994.

Invited lectureship, American Heart Association and Kansas Stroke Coalition, *Thrombotic Stroke: Etiology, Diagnosis, and Treatment*, May 24, 1994.

Visiting Professor, Department of Neurology, Wayne State University School of Medicine, Detroit, Michigan, *Thrombotic Stroke: Diagnosis and Management*, December 10, 1993.

Invited lectureship, Greensboro, North Carolina, *Update on Stroke Prevention*, January 26, 1993.

Visiting Professor, Department of Neurology, Medical College of Georgia, Augusta, Georgia, *Update on Stroke Prevention*, January 14, 1993.

Internal Medicine Update, University of Tennessee, College of Medicine and Erlanger Medical Center, Chattanooga, Tennessee, *Update on the Primary and Secondary Prevention of Stroke, and Current Recommendations in the Treatment of Stroke*, November 21, 1992.

Grand Rounds, Beckley Appalachian Regional Hospital, Beckley, West Virginia, *New Treatment Options for Stroke Prevention*, January 23, 1992.

Visiting Professor, Department of Neurology, Southern Illinois University School of Medicine, Springfield, Illinois, *New Treatment Options for Stroke Prevention*, October 6, 1992.

Sebastian Summer Medical Symposium (Humana Hospital Sebastian), Melbourne, Florida, *Stroke Prevention-Reduction of Risk*, August 15, 1992.

Grand Rounds, Tallahassee Community Hospital, Tallahassee, Florida, *New Treatment Options for Stroke Prevention*, July 14, 1992.

Grand Rounds, City Regional Medical Center, Tuscaloosa, Alabama, *New Frontiers in Stroke Prophylaxis*, January 23, 1992.

Continuing Medical Education Symposium on Current Concepts in Treatment and Recognition of Neurologic Disease, Kalamazoo, Michigan, *Calcium Channel Antagonists in Cerebrovascular Disorders*, October 16, 1991.

Southern Society of Electroencephalographic Technologists Scientific Sessions, Lexington, Kentucky, *Transcranial Doppler*, April 19, 1991.

West Michigan Neurological Society, Grand Rapids, Michigan, *Calcium Channel Antagonists in Cerebrovascular Disorders*, November 17, 1990.

Stroke Conference, Department of Neurology, Duke University School of Medicine, Durham, North Carolina, *Cavernous Hemangioma*, October 1, 1990.

Sixth Annual Conference on Epilepsy and Neurology, Florida Society of Neurology, Lake Buena Vista, Florida, *Diagnosis of Stroke in the Young Adult and Subarachnoid Hemorrhage: Advances in Diagnosis and Management*, August 5, 1990.

Michigan Society of Critical Care Medicine. Veterans Administration Medical Center, Detroit, Michigan, *Advances in the Diagnosis and Treatment of Subarachnoid Hemorrhage*, June 13, 1990.

Grand Rounds, Departments of Neurology and Internal Medicine, The Methodist Hospital, Indianapolis, Indiana, *Calcium Channel Antagonists in the Management of Cerebrovascular Disease*, December 6, 1989.

The effect of Thromboxane Synthase Inhibition on Blood Flow and Energy Metabolism in Ischemic Brain, presented before Lilly Research Laboratories, Indianapolis, Indiana, October 2, 1989.

State

Stroke Center. ANTHEM BLUE CROSS AND BLUE SHIELD HOSPITAL QUALITY PROGRAM – NINTH ANNUAL KENTUCKY MEETING, Lexington, Kentucky, September 13, 2005.

Diagnosis and Management of Acute Ischemic Stroke in 2005. Grand Rounds, Western Baptist Medical Center, Paducah, Kentucky, August 2, 2005.

Stroke Prevention in the New Millennium. Kentucky Coalition of Nurse Practitioners/Nurse Midwives Annual Meeting, Lexington, Kentucky, April 20, 2002.

Cardiovascular Disease: Management Strategies for Beyond 2000. Pikeville Methodist Hospital, Pikeville, Kentucky, April 28, 2001.

St. Claire Medical Center, Morehead, Kentucky, *Why, When, and How to Use tPA in the Treatment of Acute Stroke*, July 9, 1997

tPA for Ischemic Stroke. SYMPOSIUM ON NEW TRENDS AND NEW APPROACHES IN THE NEUROSCIENCES, Highlands Regional Medical Center, Prestonsburg, Kentucky, April 29, 1997.

Stroke Management - Drugs and Research Statistics. STROKE: THE FUNCTIONAL OUTLOOK, Area Health Education Center of Western Kentucky, Madisonville, Kentucky, April 29, 1995.

Update on Stroke Prevention. Continuing Medical Education Seminar, Quarterly Medical Staff Meeting, Mountain Comp. Hospitals, Whitesburg, Kentucky, January 21, 1993.

New Advances in the Prevention of Thrombotic Stroke, Family Practice Grand Rounds, St. Elizabeth South Hospital, Edgewood, Kentucky, May 11, 1992.

Calcium Channel Antagonists in Cerebrovascular Disease, Continuing Medical Education Seminar, Scott General Hospital, Georgetown, Kentucky, November 21, 1991.

Stroke in the Elderly, Kentucky Academy of Physician Assistants Fifteenth Annual Continuing Medical Education Symposium, Lexington, Kentucky, October 6, 1991.

Local

Summer Seminar, Bluegrass Society of Radiologic Technologists, St. Joseph Hospital, Lexington, Kentucky, *Cerebrovascular Disease*, July 23, 2005.

Seminar, Magnetic Resonance Imaging and Spectroscopy Research Center, University of Kentucky Chandler Medical Center, Lexington, Kentucky, *MR Imaging of Acute Stroke: the Citicoline Experience*, February 8, 2001.

Grand Rounds, Department of Emergency Medicine, University of Kentucky, Lexington, Kentucky, *Thrombolytic Therapy and Acute Ischemic Stroke*, August 20, 1996.

Grand Rounds, Department of Emergency Medicine, University of Kentucky, Lexington, Kentucky, *Management of the Acute Stroke Patient*, October 5, 1995.

Grand Rounds, Department of Internal Medicine, University of Kentucky, Lexington, Kentucky, *Management of the Acute Stroke Patient in 1995*, August 30, 1995.

Grand Rounds, Division of Cardiology, Department of Internal Medicine, University of Kentucky, Lexington, Kentucky, *Update on Acute Stroke Management in 1995*, July 11, 1995.

Grand Rounds, Division of Neurosurgery, Department of Surgery, University of Kentucky, Lexington, Kentucky, *Update on Acute Stroke Management in 1995*, June 8, 1995.

Grand Rounds, Department of Emergency Medicine, University of Kentucky, Lexington, Kentucky, *Emergency Management of Acute Stroke*, March 9, 1995.

Alzheimer's Disease Research Center/Monthly Research Meeting, University of Kentucky, Lexington, Kentucky, *Magnetic Resonance Imaging and Spectroscopy in the Diagnosis of Alzheimer's Disease*, January 11, 1995.

Grand Rounds, Department of Internal Medicine, University of Kentucky, Lexington, Kentucky, *Management of the Acute Stroke Patient*, March 9, 1994.

Grand Rounds, Division of Cardiology, Department of Internal Medicine, University of Kentucky, Lexington, Kentucky, *New Frontiers in Stroke Prevention*, December 8, 1992.

Third Annual Conference on Rehabilitation Management for the Primary Care Physician, Department of Rehabilitation Medicine, University of Kentucky College of Medicine, Lexington, Kentucky, *Stroke: Initial Evaluation and Management*, August 31, 1990.

XIV. RESEARCH AND/OR CREATIVE PRODUCTIVITY

A. Publications

** Peer-Reviewed Manuscripts **

1. **Pettigrew LC**, Bang H, Chambless LE, Howard VJ, Toole JF. Assessment of pre- and post-methionine load homocysteine for prediction of recurrent stroke and myocardial infarction in the Vitamin Intervention for stroke Prevention trial. *Atherosclerosis* (In press, 2008).
2. Espinosa PS, **Pettigrew LC**, Berger JR. Hereditary hemorrhagic telangiectasia and spinal cord infarct: case report with a review of the neurological complications of HHT. *Clin Neurol Neurosurg* 2008;110:484-492.
3. Vaishnav AG, **Pettigrew LC**, Ryan S. Telephonic guidance of systemic thrombolysis in acute ischemic stroke: safety outcome in rural hospitals. *Clin Neurol Neurosurg* 2008;110:451-4.
4. Ishibashi H, **Pettigrew LC**, Funakoshi Y, Hiramatsu M. Pharmacokinetics of arundic acid, an astrocyte modulating agent, in acute ischemic stroke. *J Clin Pharmacol* 2007;47:445-502.
5. Korde AS, **Pettigrew LC**, Craddock SD, Pocernich CB, Waldmeier PC, Maragos WF. Protective effects of NIM811 in transient focal cerebral ischemia suggest involvement of the mitochondrial permeability transition. *J Neurotrauma* 2007;24:895-908.
6. Blonder LX, Langer SL, **Pettigrew LC**, Garrity TF. The effects of stroke disability on spousal caregivers. *NeuroRehabilitation* 2007;22:85-92.
7. **Pettigrew LC**, Kasner SE, Albers GW, Gorman M, Grotta JC, Sherman DG, Funakoshi Y, Ishibashi H. Safety and tolerability of arundic acid in acute ischemic stroke. *J Neurol Sci* 2006;251:50-56.
8. **Pettigrew LC**, Kasner SE, Gorman M, Atkinson RP, Funakoshi Y, Ishibashi H. Effect of arundic acid on serum S-100 β in Ischemic Stroke. *J Neurol Sci* 2006;251:57-61.

9. Greenberg SM, Rosand J, Schneider AT, **Pettigrew LC**, Gandy SE, Rovner B, Fitzsimmons B-F, Smith EE, Gurol ME, Schwab K, Laurin J, Garceau D. A Phase II study of tramiprosate for cerebral amyloid angiopathy. *Alz Dis Assoc Dis* 2006;20:269-274.
10. Korde AS, **Pettigrew LC**, Craddock SD, Maragos WF. The mitochondrial uncoupler 2,4-dinitrophenol attenuates tissue damage and improves mitochondrial homeostasis following transient focal cerebral ischemia. *J Neurochem* 2005;94:1676-1684.
11. Toole JF, Malinow MR, Chambless LE, Spence JD, **Pettigrew LC**, Howard VJ, Sides EG, Wang C-H, Stampfer M. Lowering homocysteine in patients with ischemic stroke to prevent recurrent stroke, myocardial infarction, and death: the Vitamin Intervention for Stroke Prevention (VISP) Randomized Controlled Trial. *JAMA* 2004;291:565-575.
12. Robertson WC, **Pettigrew LC**. "Congenital" Horner's Syndrome and carotid dissection. *J Neuroimaging* 2003;13:367-370
13. Wechsler LR, Roberts R, Furlan A, Higashida R, Dillon W, Roberts H, Rowley H, **Pettigrew LC**, Callahan AS, Bruno A, Fayad P, Smith WS, Schulz GA. Factors influencing outcome and treatment effect in PROACT II. *Stroke* 2003;34:1224-1229
14. **Pettigrew LC**, Holtz ML, Minger SL, Craddock SD. Glutamate receptor antagonists modulate heat shockprotein response in focal cerebral ischemia. *Neurol Res* 2003;25:201-207.
15. **Pettigrew LC**, Williams SC. Antithrombotic Drugs for Prevention of Recurrent Stroke. *J Ky Med Assoc* 2002;100:184-193
16. Mohr JP, Thompson JLP, Lazar RM, Levin B, Sacco RL, Furie KL, Albers GW, **Pettigrew LC**, Adams HP Jr, Jackson CM, Pullicino P, and the WARSS Study Group. Comparison of warfarin vs. aspirin monotherapy in the prevention of recurrent ischemic stroke: The Warfarin-Aspirin Recurrent Stroke Study. *N Engl J Med* 2001; 345:1444-1451
17. Holtz ML, Craddock S, **Pettigrew LC**. Rapid expression of neuronal and inducible nitric oxide synthases during post-ischemic reperfusion in rat brain. *Brain Res* 2001;898:49-60
18. **Pettigrew LC**. Antithrombotic agents for stroke prophylaxis. *Pharmacotherapy* 2001;21(4):452-463
19. Spence JD, Howard VJ, Chambless LE, Malinow MR, **Pettigrew LC**, Stampfer M, Toole JF for the VISP Investigators. Vitamin Intervention for Stroke Prevention (VISP) Trial: Rationale and design. *Neuroepidemiology* 2001;20:16-25
20. Warach S, **Pettigrew LC**, Dashe JF, Pullicino P, Lefkowitz DM, Sabounjian RN, Harnett K, Schwiderski U, Gammans R for the Citicoline 010 Investigators. Effect of citicoline on ischemic lesions as measured by diffusion-weighted MRI. *Ann Neurol* 2000;48:713-722
21. **Pettigrew LC**, Thomas N, Howard VJ, Veltkamp, R, Toole JF for the Asymptomatic Carotid Atherosclerosis Study investigators. Low mini-mental status predicts mortality in asymptomatic carotid arterial stenosis. *Neurology* 2000;55:30-34. (Chosen to be highlighted (p.1) and as a premier article in Neurology's continuing medical education program, p.2)
22. Langer SL, Wilson JF, **Pettigrew LC**, Blonder LX. Channel-consistency following unilateral stroke: an examination of patient communications across verbal and nonverbal domains. *Neuropsychologia* 2000; 38:337-344
23. Smith CD, Malcein M, Meurer K, Schmitt FA, Markesbery WR, **Pettigrew LC**. MRI temporal lobe volume measures and neuropsychologic function in Alzheimer's disease. *J Neuroimaging* 1999;9(1):2-9

24. Langer SL, **Pettigrew LC**, Blonder LX. Observer liking of unilateral stroke patients. *Neuropsychiatry Neuropsychol Behav Neurol* 1998;11(4):218-224
25. Minger SL, Geddes JW, Holtz ML, Craddock SD, Whiteheart SW, Siman RG, **Pettigrew LC**. Glutamate receptor antagonists inhibit calpain-mediated cytoskeletal proteolysis in focal cerebral ischemia. *Brain Res* 1998;810:181-199
26. Dubal DB, Kashon ML, **Pettigrew LC**, Ren JM, Finklestein SP, Rau SW, Wise PM. Estradiol protects against ischemic injury. *J Cereb Blood Flow Metab* 1998;18:1253-1258
27. Langer SL, **Pettigrew LC**, Blonder LX. Personality and social competency following unilateral stroke. *J Int Neuropsychol Soc* 1998;4(5):447-455
28. **Pettigrew LC**, Bieber F, Lettieri J, Wermeling DP, Schmitt FA, Tikhtman AJ, Ashford JW, Smith CD, Wekstein DR, Markesbery WR, Orazem J, Ruzicka BB, Mas J, Gulanski B. A study of the pharmacokinetics, pharmacodynamics and safety of metrifonate in Alzheimer's Disease patients. *J Clin Pharmacol* 1998;38:236-245.
29. Clark WM, Warach S, **Pettigrew LC**, Gammans RE, Sabounjian LA. A randomized dose response trial of citicoline in acute ischemic stroke patients. *Neurology* 1997;49:671-678.
30. **Pettigrew LC**: Contemporary management of acute stroke. *Fed Pract* 1996;13 (6 suppl):18-22.
31. **Pettigrew LC**, Holtz ML, Craddock SD, Minger SL, Hall N, Geddes JW. Microtubular proteolysis in focal cerebral ischemia. *J Cereb Blood Flow Metab* 1996;16:1189-1202.
32. Geddes JW, **Pettigrew LC**, Holtz ML, Craddock SD, Maines MD: Permanent focal and transient global cerebral ischemia increase glial and neuronal expression of heme oxygenase-1, but not heme oxygenase-2, protein in rat brain. *Neurosci Lett* 1996;210:205-208.
33. Smith-Swintosky VL, **Pettigrew LC**, Sapolsky RM, Phares C, Craddock SD, Brooke SM, Mattson MP: Metyrapone, an inhibitor of glucocorticoid production, reduces brain injury induced by focal and global ischemia and seizures. *J Cereb Blood Flow Metab* 1996;16:585-598.
34. Holtz ML., Kindy MS, Craddock SD, Moore RW, **Pettigrew LC**: Induction of PGH synthase and *c-fos* mRNA during early reperfusion of ischemic rat brain. *Mol Brain Res* 1996;35:339-343.
35. **Pettigrew LC**, Meyer JJ, Craddock SD, Butler SM, Tai H-H, Yokel RA: Delayed synthesis of platelet activating factor in ischemic brain injury. *Brain Res* 1996;691:243-247.
36. Ryan SJ, **Pettigrew LC**: Cranial arteriopathy in familial Vogt-Koyanagi-Harada syndrome. *J Neuroimaging* 1996;5:244-245.
37. Smith CD, **Pettigrew LC**, Avison MJ, Kirsch JE, Schmitt FA, Wermeling DP, Wekstein DR, Markesbery WR: Frontal lobe phosphorus metabolism and neuropsychologic function in aging and in Alzheimer's disease. *Ann Neurol* 1995;38:194-201.
38. Grotta JC, Clark W, Coull B, **Pettigrew LC**, Mackay B, Goldstein L, Meissner I, LaRue L: Safety and tolerability of the glutamate antagonist CGS 19755 (Selfotel) in acute stroke patients. *Stroke* 1995;26:602-605.
39. Lanska DJ, Caplan L, Dyken ML, Easton JD, Mohr JP, **Pettigrew LC**, Schmidley JW, Toole JF, Whisnant JP, Yatsu F: Review criteria for hospital utilization for patients with cerebrovascular disease. *Neurology* 1994;44:1531-1532.

40. Cai WM, Hatton J, **Pettigrew LC**, Dempsey RJ, Chandler MHH: A simplified HPLC method for direct determination of warfarin enantiomers and their protein binding in stroke patients. *Ther Drug Monit* 1994;16:509-512.
41. Smith-Swintosky VL, **Pettigrew LC**, Craddock SD, Culwell AR, Rydel RE, Mattson MP: Secreted forms of beta-amyloid precursor protein protect against ischemic brain injury. *J Neurochem* 1994;63:781-784.
42. Geddes JW, Schwab C, Craddock S, Wilson JL, **Pettigrew LC**: Alterations in Tau immunostaining in the rat hippocampus following transient cerebral ischemia. *J Cereb Blood Flow Metab* 1994;14:554-564.
43. Blonder LX, **Pettigrew LC**, Smith CD: Anomalous cerebral dominance: Neurobehavioral studies and three-dimensional magnetic resonance imaging. *Neuropsychiatry Neuropsychol Behav Neurol* 1994;7:41-50.
44. **Pettigrew LC**, Kryscio RJ: Thromboxane receptor antagonism and synthase inhibition in cerebral ischemia. *Prostaglandins Leukot Essent Fatty Acids* 1993;48:211-217.
45. **Pettigrew LC**: Editorial Comment. *Stroke* 24:405-406, 1993 (See De Ley G., Eechaute W., Strijckmans K, Goethals P., Lemahieu I., Van De Velde E., Weyne J.: Hemodynamic and metabolic effects of flunarizine in experimental subarachnoid hemorrhage in dogs. *Stroke* 1993;24:400-405.
46. **Pettigrew LC**, Hazle JD, Gutierrez G, Smith CD, Ogletree ML: Correction of ischemic brain acidosis with SQ29, 548/1 - Benzylimidazole. *Neurol Res* 1992;14:335-339.
47. Lee C, Dean BL, Kirsch JE, Runge VM, Dempsey RJ, Howard RS, **Pettigrew LC**: Technical Note: Assessment of patterns of cerebral infarct using ultrafast MR contrast imaging. *AJNR Am J Neuroradiol* 1992;13:277-279.
48. Dean BL, Lee C, Kirsch JE, Runge VM, Dempsey RJ, **Pettigrew LC**: MR assessment of cerebral hemodynamics and cerebral blood volume using gadolinium contrast agents and T1-weighted turboflash imaging. *AJNR Am J Neuroradiol* 1992;13:39-48.
49. Rosenbaum D, Grotta J, Yatsu F, Picone C, **Pettigrew LC**, Bratina P, Zabramski J, Spetzler R, Lopez L, Marler J, Ellis D: Pilot study of nicardipine for acute ischemic stroke. *Angiology* 1990;41:1017-1022.
50. Gildenberg PL, **Pettigrew LC**, Merrell R, Butler Z, Conklin R, Katz J, Defrance J: Transplantation of adrenal medullary tissue to caudate nucleus using stereotactic techniques. *Stereotac Function Neurosurg* 1990;54, 55:268-271.
51. Newton LK, Yung WKA, **Pettigrew LC**, Steck PA: Growth regulatory activities of endothelial extracellular matrix: Mediation by transforming growth factor beta. *Exp Cell Res* 1990;190:127-132.
52. Rosenbaum DM., Grotta JC, **Pettigrew LC**, Ostrow P, Strong R, Rhoades H, Picone CM, Grotta AT: Baclofen does not protect against cerebral ischemia in rats. *Stroke* 1990;21:138-140.
53. Grotta JC, Yatsu FM, **Pettigrew LC**, Rhoades H, Bratina P, Vital D, Alam R, Earls R, Picone C: Prediction of carotid stenosis progression by lipid and hematologic measurements. *Neurology* 1989;39:1325-1331.
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B. Grant Activity**** Funded Grants in Other Institutions ****

National Institutes of Health
Calcium Blocker and Related Therapy for Cerebral Ischemia
1 RO1 NS23979--1A1 NEUA
Awarded to James C. Grotta, M.D.
\$11,550 provided to L. Creed Pettigrew, M.D.
07/01/88-06/30/90
Co-Investigator (extramural)

Clayton Foundation for Research and Neurological Diseases
Research contract awarded by the Clayton Foundation
Houston, Texas
Awarded to Frank M. Yatsu, M.D.
\$50,208 provided to L. Creed Pettigrew, M.D.
09/01/88-12/31/89
Co-Investigator (extramural)

American Heart Association, Texas Affiliate
Eicosanoid Metabolism in Cerebral Ischemia
#87G-243
\$55,000
07/01/87-06/30/89
Principal Investigator (extramural)

Biomedical Research Support Grant
NIH/University of Texas Medical School at Houston
The Role of Thromboxane A2 in Cerebral Ischemia
\$8,640
10/01/86-09/30/87
Principal Investigator (intramural)

**** Funded Grants in the University of Kentucky *******Federal Funding (National Institutes of Health)***

NIH/NINDS

UK NETT Clinical Site Hub

U10 NS058967-01

\$1,396,324 (total costs)/\$953,123 (direct costs)

09/01/06 – 08/31/11

Senior Investigator with 25% salaried UK effort

NIH/NINDS

Focal Brain Ischemia in the TNF α -Transgenic Rat

R01 NS047395-01 (Awarded to University of Kentucky)

\$740,000 (direct costs)

02/01/04 - 01/31/08

Principal Investigator with 30% salaried UK effort

NIH/NINDS

Albumin in Acute Stroke (ALIAS) Trial

U01 NS40406-04 (Awarded to University of Miami)

\$7,000 per patient enrolled

01/01/06 – 12/31/10

Local Principal Investigator with 5% UK effort (extramural)

NIH/NINDS

Insulin Resistance Intervention after Stroke (IRIS) Trial

R01 NS044876-01A2 (Awarded to Yale University)

\$4,100 per patient enrolled

09/15/04 – 06/30/09

Local Principal Investigator with 5% UK effort (extramural)

NIH

Warfarin versus Aspirin Symptomatic Intracranial Disease Study

R01 NS36643 (Awarded to Emory University)

\$61,000 (10 patients at \$6,100 per patient)

03/01/98 – 07/31/03

Local Principal Investigator with 5% UK effort (extramural)

NIH

Warfarin versus Aspirin in Reduced Cardiac Ejection Fraction (WARCEF)

U01 NS39143 and NS43975 (Awarded to Medical and Dental Colleges of New Jersey and Columbia University)

\$274,500

03/01/02 – 07/31/06

Local Principal Investigator with 5% UK effort (extramural)

NINDS SBIR/K & K Biosciences

1,2,3-Triazolines: Highly Effective Antiischemic Agents

SBIR Phase I

\$11,826

10/01/01 – 04/30/02

Collaborating investigator with 5% UK effort (extramural)

NIH

Siblings with Ischemic Stroke Study

R01 NS39987 (Awarded to Mayo Clinic/Jacksonville, Florida)

\$3,600 (10 patients at \$360 per patient)

10/01/00 – 06/30/06

Local Principal Investigator with 5% UK effort (extramural)

NIH

Hemicraniectomy and Durotomy upon Deterioration from Infarction Related Swelling: A Prospective, Randomized Clinical Trial (HeADDFIRST)

R01 NS40299 (Awarded to University of Chicago)

09/18/99 – 06/30/02

Local Principal Investigator with 5% UK effort (extramural)

NINDS SBIR/K & K Biosciences

Drug Potential of Anticonvulsants in Stroke Therapy (SBIR Phase II proposal)

SBIR Phase II (R44-NS31479)

\$349,791 (direct costs)

Co-investigator for subcontract with 20% UK effort (extramural)

NINDS/NIH

Vitamin Intervention in Stroke Prevention

R01 NS34447-01A1 (Awarded to Wake Forest University)

\$171,578

03/01/96 - 04/30/01

Local Principal Investigator with salary for 5% UK effort (extramural)

NINDS/NIH

Microtubular Proteolysis in Cerebral Ischemia

R01 NS33773 (Awarded to University of Kentucky)

\$308,367 (direct costs)

07/01/95-05/31/99 (no cost extension)

Principal Investigator with salary for 40% UK effort (extramural)

NIA/NIH

Metabolism, Perfusion and Cognition in Vascular Dementia (Pilot project for competing continuation of Alzheimer's Disease Research Center, University of Kentucky)

P5O A605144

\$20,000 (direct cost only)

05/01/95-04/30/97

Principal Investigator with 15% effort; no UK salary

NINDS/NIH

Warfarin-Aspirin Recurrent Stroke Study (WARSS) and Antiphospholipid Antibodies and Stroke Study and Hemostatic Activation Substudy and Genes in Stroke Study

R01 NS2837-01A2 (Awarded to Columbia University)

\$180,311

07/13/92-06/30/00

Principal Investigator with salary for 10% UK effort (extramural)

NINDS/NIH Clinical Investigator Development Award

Eicosanoids Mediate Effects of PAF in Cerebral Ischemia

K08 NS01505 NST AHR ST

\$347,734

04/01/91-03/31/96

PI with 70% effort (\$50,000/year stipend) (extramural)

NINDS/NIH

Asymptomatic Carotid Artery Stenosis Collaborative Study

R01 NS22611 (Awarded to Wake Forest University)

\$216,729

03/01/86-02/28/94

Co-Investigator with 5% effort; no UK salary (extramural)

NINDS/NIH

North American Symptomatic Carotid Endarterectomy Trial

SR01 NS24456 (Awarded to Robarts Research Institute, Toronto, Ontario)

09/01/91-08/31/97

\$124,370

Co-Investigator with 5% effort; no UK salary (extramural)

Other Extramural Funding

Department of Veterans Affairs Medical Research Service
Targeting the Mitochondrial Permeability Transition in Cerebral Ischemia
\$500,000
10/01/07-09/30/11
Principal Investigator with 25% effort; no UK salary (extramural)

American Heart Association (Ohio Valley Affiliate)
Focal Brain Ischemia in the TNF α -Transgenic Rat
AHA 0255433B
\$100,000 award
07/01/2002-01/31/2004
Principal Investigator with 30% UK effort, no UK salary

American Heart Association (Ohio Valley Affiliate)
Protease-Derived Neuronal Death in Focal Brain Ischemia
AHA 0120234B
\$76,000 Postdoctoral Fellowship award to Mary L. Holtz, Ph.D.
10/01/01 – 09/30/03
Sponsor with no UK effort, no UK salary

NIH
Inhibition of Calpain-Mediated Neuronal Death by Overexpression of Calpastatin
T32 AG00242 (The Molecular and Cellular Basis of Brain Aging)
\$29,000 Postdoctoral Fellowship award to Mary L. Holtz, Ph.D.
12/18/2000 – 09/30/01
Sponsor with no UK effort, no UK salary

American Heart Association (Kentucky)
Calpain and Excitotoxicity in Focal Cerebral Ischemia
\$10,000 award to Stephen L. Minger, Ph.D.
07/01/96-06/30/97
Collaborating Investigator with 10% effort, no UK salary

American Health Assistance Foundation/National Heart Foundation
Calpain and Excitotoxicity in Focal Cerebral Ischemia
\$15,000 awarded to Stephen L. Minger, Ph.D.
04/01/96-03/31/97
Co-Principal Investigator with 10% effort, no UK salary

Alzheimer's Association Pilot Research Grant
Metabolism, Perfusion, and Cognition in Vascular Dementia
\$30,000 (direct costs only)
12/01/94-11/30/96
Principal Investigator with 15% effort, no UK salary

National Stroke Association
Calcium Metabolism, Cytoskeletal Proteins, and Ischemic Neuronal Necrosis
\$60,000 awarded to Alex Tikhtman, M.D.
07/01/93-06/30/95
Senior Sponsor with 5% effort; no UK salary (extramural)

American Heart Association, Kentucky Affiliate
Calcium Metabolism, Cytoskeletal Proteins, and Ischemic Neuronal Necrosis
\$27,000
07/01/93-06/30/95
Principal Investigator with 20% effort; no UK salary (extramural)

Department of Veterans Affairs Medical Research Service
Platelet-Activating Factor and Eicosanoids in Cerebral Ischemia
\$225,600
10/01/92-09/30/95
Principal Investigator with 30% effort; no UK salary (extramural)

American Heart Association, Kentucky Affiliate
Platelet-Activating Factor and Regulation of Eicosanoid Synthesis in Cerebral Ischemia
\$28,617
07/01/91-06/30/93
Principal Investigator with 20% effort; no UK salary (extramural)

Department of Veterans Affairs Research Advisory Group Award
Thromboxane A₂ and Platelet-Activating Factor in Cerebral Ischemia
\$39,300
07/01/91-06/30/92
Principal Investigator with 20% effort; no UK salary (extramural)

American Heart Association, Kentucky Affiliate
Thromboxane A₂ Mediates Effect of Platelet-Activating Factor in Cerebral Ischemia
\$18,000
07/01/90-06/30/91
Principal Investigator with 25% effort; no UK salary (extramural)

Pharmaceutical Industry Funding

Daiichi Asubio Pharmaceuticals, Inc.

Dose Finding Study of the Safety and Efficacy of Sun N4057 (Piclozotan)

\$18,967 per patient enrolled

01/01/05 – present

Principal Investigator with 5%UK salary

AGA Medical Corporation

Randomized Evaluation of Recurrent Stroke Comparing PFO Closure to Establish Current Standard of Care Treatment (RESPECT)

\$10,000 per patient enrolled

01/05/04 – present

Principal Investigator with 5% UK salary

ONO Pharmaceutical, Inc.

ONO II.

\$7,600 per patient enrolled

12/01/02 – 11/31/05

Principal Investigator with 5% UK salary

Paion

DEDAS

\$13,300 per patient enrolled

12/10/02 – 11/31/04

Principal Investigator with 5% UK salary

Sanofi-Synthelabo

Management of Atherothrombosis with Clopidogrel in High Risk Patients with Recent TIA or Ischemic Strokes (MATCH)

\$4,000 per patient enrolled

10/26/01 – 05/31/04

Principal Investigator with 5% UK salary

Yamanouchi, Inc., USA

AMPA Receptor Antagonist Treatment in Ischemic Stroke Trial (ARTIST).

\$12,000 per patient enrolled

04/20/01 – 04/01/03

Principal Investigator with 5% UK salary

AstraZeneca, LP

Efficacy and Safety of the Oral Direct thrombin Inhibitor H376/95 Compared with Dose-Adjusted Warfarin (Coumadin®) in the prevention of Stroke and Systemic Embolic Events in Patients with Atrial Fibrillation (SPORTIF V) Protocol #233 (SH-TPA-0005)

\$6,059 per patient enrolled

10/05/00 – 09/30/04

Principal Investigator with 5% UK salary

Bristol-Myers Squibb Pharmaceutical Research Institute

A Double-Blind Safety and Neuroimaging Trial of Intravenous BMS-204352 Versus Placebo in Patients with Acute Stroke

\$13,304 per patient

07/20/00 – 01/31/01

Principal Investigator with 5% UK salary

ONO Pharmaceutical, Inc.

A Multicenter, Double-Blind, Randomized Tolerability, Safety and Pharmacokinetics Study of 2506/USA01031.

\$16,000 per patient enrolled

10/01/99 – 10/31/00

Principal Investigator with 5% UK salary

Bristol-Myers Squibb

A Double-Blind, Placebo Controlled, Safety, Efficacy and Dose response Trial of Two Intravenous Doses of BMS-204352 in Patients with Acute Stroke. Protocol # CN123-020
Bristol-Myers Squibb

\$13,304 per patient enrolled

06/15/00 – 06/31/01

Principal Investigator with 5% UK salary

AstraZeneca LP

A Double-Blind, Placebo Controlled, Safety, Efficacy and Dose Response Trial of Two Intravenous Doses of BMS-204352 in Patients with Acute Stroke. (Protocol # CN123-010
Bristol-Myers Squibb)

\$9,080 per patient enrolled

09-01-99 - 08-31-00

Principal Investigator with 5% UK salary

AstraZeneca LP

The Clomethiazole Acute Stroke Study in Acute Intracerebral Hemorrhage (CLASS-H): A Double-Blind, Parallel Group, Multinational, Multicenter Study of Safety of IV Clomethiazole Compared with Placebo in Patients with Acute Intracerebral Hemorrhage
The Clomethiazole Acute Stroke Study in Acute Ischemic Stroke (CLASS-I): A Double-Blind, Parallel Group, Multinational, Multicenter Study of the Efficacy and Safety of IV Clomethiazole Compared with Placebo in Patients with Acute Ischemic Stroke

02/03/98 – 10/24/00

Principal Investigator with 5% UK salary

Interneuron

The Effects of 2000mg Citicoline on Clinical Outcome and the Evolution of Lesion Volume in Human Stroke (Protocol # IP 302-018)

\$10,000 per patient

10/12/98-1/31/00

Principal Investigator with 5% UK effort

Wyeth-Ayerst

A Randomized Double-Blind Placebo-Controlled Parallel-Group Multicenter Trial of Two Dosages of Fibrinolytic (Trafarmin) in Patients with Acute Stroke

04/20/98 – 07/17/98

Principal Investigator with 5% UK effort

Genentech, Inc.

Thrombolytic Therapy in Acute Ischemic Stroke ATLANTIS: Alteplase Thrombolysis for Acute Noninterventional Therapy in Acute Ischemic Stroke

\$170,070

04/01/96-12/31/98

Principal Investigator with 10% UK salary (extramural)

Abbott Laboratories

A Prospective Multicenter Dose-Ranging Study of Intra-Arterial Thrombolysis in Acute Middle Cerebral Artery Distribution Thromboembolic Stroke, Part II

(Graduated reimbursement up to \$17,000 for each of 4 patients completed)

08/01/96-01/31/99

Principal Investigator with 10% UK salary (extramural)

Interneuron Pharmaceuticals, Inc.

The Effects of 500 mg Citicoline on the Evolution of Lesion Volume in Human Stroke Using Diffusion Weighted Magnetic Resonance Imaging

\$203,800

06/15/96-11/15/97

Principal Investigator with 10% UK salary (extramural)

Boehringer Ingelheim, Inc.

Double-Blind, Randomized, Placebo-Controlled, Parallel-Group Trial of the Efficacy of Enlimomab (Anti-ICAM-1) Compared to Placebo Administered within 6 Hours of the Onset of Stroke Symptoms for Treatment of Acute Ischemic Stroke

\$88,608

11/01/94-06/01/96

Principal Investigator with 10% effort; no UK salary (extramural)

Interneuron Pharmaceuticals, Inc.

A Placebo-Controlled Study to Determine the Effects of 500mg, 1000mg, and 2000mg Citicoline in Ischemic Stroke Patients

\$83,460

05/02/94-08/31/95

Principal Investigator with 10% effort; no UK salary (extramural)

The Upjohn Company

A Randomized, Double-Blind, Placebo-Controlled Trial Testing the Efficacy of Tirilazad Mesylate in Patients with Acute Ischemic Stroke (RANTTAS)

\$114,829

07/15/93-12/01/94

Principal Investigator with 10% effort; no UK salary (extramural)

Miles Pharmaceuticals, Inc.

A Double-Blind, Placebo-Controlled, Randomized Study of the Safety, Tolerability, and Pharmacokinetics of Metrifonate (BAY a9826) in Patients with Probable Alzheimer's Disease

\$352,900

01/25/93-07/18/93 (with allowance for extension)

Principal Investigator with 10% UK salary (extramural)

Ciba-Geigy Corporation

Double-Blind, Placebo-Controlled Pilot Study Evaluating Safety and Tolerability of Two Intravenous Bolus Doses of CGS-19755 in the Treatment of Patients with Acute Ischemic Stroke

\$83,996

04/01/91-02/19/95

Principal Investigator with 15% effort; no UK salary (extramural)

Syntex Research

A Controlled Trial of Intravenous plus Oral RS-87476 in Acute, Non-hemorrhagic Cerebral Infarction.

\$21,386

Principal Investigator with 10% effort; no UK salary (extramural)

Intramural Funding

University of Kentucky College of Medicine Research Fund

Platelet-Activating Factor and Leukotrienes in Cerebral Ischemia

\$15,000

07/01/90-03/31/91

Principal Investigator with 15% effort; no salary (intramural)

University of Kentucky Medical Center Research Fund

Platelet-Activating Factor in Cerebral Ischemia

\$10,000

11/15/89-06/30/90

Principal Investigator (intramural)

**** Gift Accounts ****

The Paul G. and Nancy Blazer, Jr., Stroke Research Fund

\$16,500

12/15/91-06/30/02

Principal Investigator

Stroke Research Fund

\$10,000 contributed by Miles Pharmaceuticals, Inc.

09/01/90-08/31/01

Principal Investigator

C. Career History in Research

My entire professional career as an academic neurologist and physician-investigator has been devoted to the study of ischemic neuronal degeneration at the laboratory bench and to the treatment of stroke in the clinic. My research training began while I was a medical student at the University of Texas Medical Branch at Galveston. As a senior student, I enrolled in the University of Texas School of Public Health in Houston and upon graduation from the Medical Branch in 1980, had completed all of the required curriculum courses for a Master of Public Health degree. My graduate work at the School of Public Health included basic training in biostatistics, epidemiology, and experimental design of clinical trials that continue to be of value more than 20 years later. As I completed my hospital-based rotating internship, I wrote my thesis and received my Master of Public Health degree with emphasis in Health Services Administration in 1981. During my Neurology residency and a two-year cerebrovascular research fellowship at the University of Texas Health Science Center in Houston, I was taught by

a succession of esteemed clinical mentors that included Drs. William S. Fields, Frank M. Yatsu, and James C. Grotta. As a cerebrovascular research fellow, I served as a co-investigator in many prospective, randomized, placebo-controlled trials of experimental therapy for acute stroke. I had extended rotations in three laboratories focusing respectively on molecular mechanisms of thrombosis, rodent models of global and focal brain ischemia, and *in vitro* culture of neural cells.

I accepted my first appointment as a tenure-track Assistant Professor of Neurology at the University of Texas-Houston in 1986. As an Assistant Professor, I competed successfully for my first extramural grant awarded by the Texas Affiliate of the American Heart Association (AHA). With the support of Drs. Yatsu and Grotta, I established my own laboratory devoted to the study of eicosanoid metabolism in global cerebral ischemia. In 1989, I was recruited to join the faculty of the University of Kentucky College of Medicine as a tenure-track Assistant Professor of Neurology and Associate Director of the Stroke Program co-administered through the Department of Neurology and the Sanders-Brown Center on Aging. I re-established my laboratory at the University of Kentucky in Lexington and applied for new research funding that included several intramural awards and two grants-in-aid from the Kentucky Affiliate of the AHA. The studies funded by these grants provided preliminary data that supported my successful application for an NIH Clinical Investigator Development Award (CIDA; K08 NS01505) funded between 1991 and 1996. Dr. William R. Markesbery, the Director of the Sanders-Brown Center at the University of Kentucky, was the research sponsor for my CIDA. This grant focused on platelet activating factor as a mediator of neuronal injury in an animal model of global cerebral ischemia. Once provided with the institutional commitment accompanying the CIDA to give protected time in the laboratory, I developed an affiliation with the Department of Veterans Affairs Medical Center (DVAMC) in Lexington, Kentucky and applied successfully for one year of Research Advisory Group funding and a three-year Merit Review grant (ID # 596-459-96-6404-0003). During the tenure of my CIDA, I published 20 peer-reviewed scientific papers (see **XIV. RESEARCH AND/OR CREATIVE PRODUCTIVITY**). Because of my research productivity, I was promoted to Associate Professor of Neurology with tenure in 1992.

In the last two years of my CIDA, I established important collaborations with Drs. James W. Geddes and Mark P. Mattson, then Associate Professors of Anatomy and Neurobiology in the University of Kentucky College of Medicine. The unique environment of the Sanders-Brown Center on Aging at the University of Kentucky encouraged the fruitful development of this collaborative enterprise. Capitalizing on my interactions with Drs. Geddes and Mattson, I shifted the focus of my laboratory research to concentrate on microtubular proteolysis and the role of cysteine aspartyl-specific proteases (caspases) in ischemic neuronal degeneration. I also applied successfully for my own R01 granted awarded by the NINDS, R01 NS33773, which was funded from 1995 to 1998. In 1995, I was named as the Director of the University of Kentucky Stroke Program and have remained so to the present day. In 1998, I was promoted to Professor of Neurology with tenure.

During the past four years, my laboratory research has followed my clinical interest in immune-mediated mechanisms of vascular injury contributing to stroke. I am the principal investigator on NIH R01 NS47395, "Focal Brain Ischemia in the Tumor Necrosis Factor-Alpha-Transgenic Rat," funded from 2004 until 2008. With this grant, I will characterize a transgenic

rat that overexpresses tumor necrosis factor-alpha (TNF α) in its brain, synthesized from the murine TNF α gene activated by its native promoter. I maintain the only known breeding colony of TNF α -transgenic rats in my laboratory here in the University of Kentucky. I anticipate that this unique animal, once characterized, will have landmark capacity to enhance mechanistic understanding of cytokine-mediated signal transduction paths in ischemic brain injury.

In 2006, I collaborated with Dr. Roger Humphries, Associate Professor and Chair in the Department of Emergency Medicine, and Dr. Byron Young, Professor and Chair in the Department of Neurosurgery, to submit a grant application for the University of Kentucky to be designated as a Neurological Emergencies Treatment Trials (NETT) Network Clinical Site Hub. I conceived the grant and was principally responsible for its submission. By virtue of this strong research collaboration between the Departments of Emergency Medicine, Neurology, and Neurosurgery, the University of Kentucky was selected from a pool of approximately 30 applicant organizations as one of 11 NETT Clinical Site Hubs (NIH/NINDS U10 NS058967-01 awarded to UK). Each NETT Clinical Site Hub will interact with regional community hospitals functioning as “spokes” to conduct large, simple clinical trials focused on treatment of acute neurological emergencies. Two clinical trials of this efficient, practical design will be conducted during the five-year duration of the NETT Network.

XV. COMMUNITY SERVICE

Member, Board of Directors, Greater Lexington Region, American Heart Association, Kentucky Affiliate

1996 – present

President, 1999 – 2000 and 2006 - 07

Member, Medical Advisory Board, Kentucky Stroke Association

1999-2000

I organized a series of public screenings for stroke risk, held biennially at the University of Kentucky Hospital, between 1995 and 2002. I recruited a team of 30 volunteer nurses, pharmacists, physician assistants, research personnel, and administrators, who, under my direction, provided over 1200 members of the general public with a computer-analyzed assessment of their risk for stroke.