
 James P. McAllister II, Ph.D.
CURRICULUM VITAE**James Patterson (Pat) McAllister II, Ph.D.****SOCIAL SECURITY NUMBER:**

OFFICE ADDRESS:

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PERSONAL DATA:

Birth: 1/19/48, Ann Arbor, MI
Spouse: Phyllis Anne McAllister
Children: Elysha Cacciatore McAllister

EDUCATION:

B.A. (Biology), Earlham College, Richmond, IN	June 1970
Ph.D. (Neurobiology), Purdue University, West Lafayette, IN	December 1976
Gopal D. Das, PhD, advisor	

TRAINING:

1977-78 Postdoctoral Fellow, Department of Anatomy and Neurobiology,
 University of Vermont College of Medicine (Dr. Joseph Wells, advisor)

1978-81 Assistant Research Anatomist, UCLA, Mental Retardation Research Center
 Neurophysiology Research Group (Dr. Nathaniel Buchwald, director)

FACULTY APPOINTMENTS:

1981-88 Assistant Professor
 Department of Anatomy, Temple University School of Medicine

1985-88 Assistant Professor
 Department of Neurosurgery, Temple University School of Medicine

1988-93 Associate Professor (with tenure)
 Department of Anatomy and Cell Biology (primary), Department of
 Neurosurgery (secondary), Temple University School of Medicine

FACULTY APPOINTMENTS (Continued):

- 1988-93 Associate Professor (with tenure)
Departments of Anatomy and Cell Biology (primary), and Neurosurgery (secondary),
Temple University School of Medicine
- 1991-93 Adjunct Visiting Professor
University of Medicine and Dentistry of New Jersey School of Osteopathic Medicine
- 1993-97 Associate Professor of Neurosurgery, Director of Neurosurgical Research,
and co-director of the Cleveland Clinic Hydrocephalus Project
Department of Neurosurgery, The Cleveland Clinic Foundation
- 1994-97 Associate Professor (secondary appointment)
Department of Neuroscience, The Cleveland Clinic Foundation Research Institute
- 1994-97 Adjunct Associate Professor
Department of Cell Biology, Neurobiology and Anatomy, and Department of Surgery,
The Ohio State University School of Medicine
- 1997- Present Professor and Director of Basic Science Research
Department of Neurological Surgery (Primary) and Department of Anatomy and
Cell Biology (Secondary), Wayne State University School of Medicine
- 1999 - Present Director, Cortical Implant Project, Ligon Research Center for Vision
Departments of Neurological Surgery, Ophthalmology, and Electrical and
Computer Engineering
- 2000 - Present Member, Cellular and Clinical Neurobiology Training Program
Department of Psychiatry, Wayne State University School of Medicine
- 2001 - Present Associate Appointment
Department of Physiology
Wayne State University School of Medicine
- 2003 - Present Joint Appointment
Department of Physiology
Wayne State University School of Medicine and the Kresge Eye Institute
- 2003 - Present Joint Appointment
Department of Ophthalmology
Wayne State University School of Medicine and the Kresge Eye Institute

MAJOR PROFESSIONAL SOCIETIES:

- National Society for Neuroscience 1976 -
present
- American Association of Neurological Surgeons 1994 -
present
- Pediatric Section, American Association of Neurological Surgeons 1994 -
present
- North American Hydrocephalus Research Society, President 1993 -
present

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International Neurotrauma Society present	1994 -
Society for Research into Hydrocephalus and Spina Bifida present	1993 -
Hydrocephalus Association	1995 - present
Association for Research in Vision and Ophthalmology (ARVO) present	2001-
Hydrocephalus Research Foundation (Co-founder & Scientific Director) 1998	1994 -
National Hydrocephalus Foundation (Scientific Director) 1998	1996 -

MAJOR PROFESSIONAL SOCIETIES (Continued):

Philadelphia Chapter, Society for Neuroscience - President, Vice President 1993	1989 -
- Secretary, Councilor 1990	1989 -
American Association of Anatomists 1988	1970 -

LICENSURE AND BOARD CERTIFICATION: Not applicable

HONORS AND AWARDS:

NIH Study Section, Chronic Fatigue/Fibromyalgia Syndrome Special Emphasis Panel, 12/1/00 and 12/5/01 2001	2000 -
Wendell Stanley Scholar Athlete Award - Earlham College, Richmond, IN 1970	
Faculty College Teaching Award - Wayne State University School of Medicine 2002	
Hydrocephalus Award to Martin Schuhmann, MD, PhD; American Association of Neurological Surgeons Section on Pediatric Neurosurgery, Salt Lake City, UT; 12/6/03 (Fellowship Advisor) 2003	
First Place Neuroscience Award to Kimberly Ostrowski, BS, MS; Eastern Student Research Forum, Miami, FL; 2/27/04 (Advisor) 2004	
Hydrocephalus Association Medical Advisory Board 2006	2004 -

SERVICE:

1. Patient Care: Not Applicable

2. Professional consultation:

A. Public presentations as an expert in the discipline:

“The Future of Neuroscience Research”, Keynote Address, Premier, Inc., Technology Futures Panel on Neuroscience, St. Petersburg, Florida, April 11, 1996.

“Current Progress in Hydrocephalus Research”, Hydrocephalus Association Workshop for Patients and Families with Hydrocephalus, Monterey, California, January 12-13, 1996.

“Research in Pediatric Hydrocephalus”, Hydrocephalus Foundation of Ohio Support Group, Cleveland, Ohio, August 19, 1995

“Hydrocephalus Research”, Channels and Brainstormers, (Detroit area Hydrocephalus Support Groups), Detroit, Michigan, November 13, 1997

“Hydrocephalus Research”, Pediatric Section of the AANS Meeting, Pediatric Neurosurgical Nurses Association, December 2-5, 1997.

“Pathophysiology of Hydrocephalus”, World Conference on Pediatric Neurosurgery, November 27, 1999, Martinique.

“Hydrocephalus Research”, Detroit Area Hydrocephalus Support Group, Detroit, Michigan, January 13, 2000.

“Early vs. Late Shunts in Pediatric Hydrocephalus: Point – Counterpoint”, with Harold ReKate, MD, Biannual Conference of the Hydrocephalus Association, May 27-29, 2000, Phoenix, AZ.

SERVICE (Continued):

2. Professional consultation (Continued):

A. Public presentations as an expert in the discipline (Continued):

“Current Status of Hydrocephalus Research”, Detroit Area Hydrocephalus Support Group, Detroit, Michigan, January 11, 2001.

“Brain Implants for Artificial Vision”, Northwest Regional Seminar on Wayfinding, Western Michigan University, Department of Blind Rehabilitation, Kalamazoo, Michigan, April 13, 2002.

Brain Damage and Neuroprotective Strategies in Hydrocephalus, 3rd International Hydrocephalus Conference, Chicago, IL, May 29-31, 2002.

“Overview and Biocompatibility Issues with Cortical Implants”, The Eye and the Chip World Congress on Artificial Vision, Detroit, Michigan, June 8, 2002.

Neuroprotection in Pediatric Disorders, VI Detroit Neurosurgery Symposium, Detroit, Michigan, September 14, 2002.

B. Testimony before public bodies: None

C. Consulting to public agencies, foundations, professional associations:

NIH Study Section, Chronic Fatigue Syndrome, Fibromyalgia Syndrome Special
Emphasis Panel
2001
2000 and

Tenure and Promotion Reviewer – James M. Drake, MD, University of Toronto,
Toronto Sick Children’s Hospital
4/2001

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Tenure and Promotion Reviewer – Marc R. Del Bigio, University of Manitoba,
Department of Pathology
10/2001
Hydrocephalus Association 1988 -
present
Hydrocephalus Association – Medical Advisor Board member 2004 -
2006 Brain Child Foundation
Hydrocephalus Research Foundation
Hydrocephalus News and Notes - quarterly patient support newsletter
Wayne State University School of Medicine 7th Annual Graduate Student Research
Day- Judge

D. Consulting to private enterprises:

Codman, Inc. – division of Johnson and Johnson, Inc. 2003 -
present
Integra LifeSciences, Inc.-neurosurgical instrumentation company; 1999 -
present *Medtronic, Inc.* – neurosurgical instrumentation company 1999 -
present
DiaCeph™ - development of patient monitoring system 2000 -
present
Inner Vision Imaging – endoscopy/laparoscopy imaging company 2000 -
2002
NeuroCare Group - neurosurgical instrumentation company, Scientific
Advisory Board 1996-
1999
Premier, Inc. - hospital advisory group 1996-
1997

3. Journal/Editorial activity:

A. Editorships None

SERVICE (Continued):

3. Journal/Editorial activity (Continued):

B. Editorial board memberships

Developmental Brain Dysfunction
BioMedCentral Cerebrospinal Fluid

C. Guest Editor

Neurological Research, Special Issue on Hydrocephalus January
2000
Pediatric Neurosurgery, Special issue for the First STARS Symposium on
Intracranial Pressure Control and Management in Hydrocephalus
2004

D. Reviewer

Journal of Comparative Neurology

Brain Research
Experimental Neurology
Journal of the Neurological Sciences
Neurological Research
American Journal of Pathology
Investigative Ophthalmology and Vision Science

4. Other professionally related service:

A. Department of Neurological Surgery Committees

Education Committee	1997 - present
Symposium Planning Committee	1997 - present
Research Committee – Chair	2000 - present
Merit Evaluation Committee	2002 – present
Organizer and Chair, Alexa I. Canady, MD Retirement Symposium	2001
Co-Chair, First STARS Symposium on Intracranial Pressure Control and Management in Hydrocephalus	2004

B. Wayne State University School of Medicine Committees

Neurosurgery Internal Review Committee – Chair, Research Subcommittee	1999 - 2000
Dean's Scientific Advisory Committee	1999 - 2003
Strategic Planning Committee, Children's Research Center of Michigan	1999 - 2002

C. Wayne State University Committees

Biomedical Engineering Task Force for Life Science Corridor	1999 - present
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D. Semi-Annual Detroit Neurosurgery Symposium

Department of Neurological Surgery, Wayne State University School of Medicine, Moderator	1998, 2000, 2002
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SERVICE (Continued):

4. Other professionally related service (Continued):

E. Academic Promotion Reviewer

Department of Pathology, University of Manitoba, invited professional reviewer for the promotion of Marc R. Del Bigio, MD, PhD to Professor	2001
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Department of Neurosurgery, University of Toronto, Toronto Sick Children's Hospital, invited reviewer for the tenure and promotion of James M. Drake, MD to Professor

2001

F. Consultations

- with patients and families concerning basic research in hydrocephalus 1988 - present
- with local and national Hydrocephalus Support Groups
- STARS, (Seeking Research in Advancing Research into Shunts), Local Hydrocephalus Support Group, and the Hydrocephalus Association, San Francisco, CA 1992 – present

G. Organ Donation

- several times each year families and patients with hydrocephalus inquire about donating their brain for research. I provide background on the value of such a donation, the general procedures involved, and the key issues that must be addressed 1992 – present

H. Community Service

- Introduction of hydrocephalus and artificial vision research to High School students 1/18/01
- Introduction of the brain and artificial vision research to 3rd grade students, Grass Lake, MI, 4/27/01
- Introduction of the brain for “tongue twisters” to 6th grade students, Grass Lake, MI, 4/25/03

5. National and international boards and committees:

A. Positions held in professional associations

Hydrocephalus Research Foundation (co-founder & Scientific Director), Atlanta, Georgia
North American Hydrocephalus Research Society, President, Chicago, Illinois

B. Memberships and offices held in public agencies related to discipline None

6. State and local boards and committees:

Philadelphia Chapter, Society for Neuroscience - President, Vice President, Secretary, Councilor 1981 - 1993

TEACHING:

1. Years at Wayne State:

	Human Medical Gross Anatomy, August – October; 6 years	1998 - 2003
	Neuroscience Survey 7190, Part C: Nervous System in Behavior and Pathology, "Neurobiology of Hydrocephalus", lectures October, 1997, November, 15, 1999; 2 years	1997 - 1999
	Advanced Neurophysiology (PSL 7660), Department of Physiology, lectures on CSF physiology and hydrocephalus, and artificial vision research 1998, 2000, 2002, 2004 4 years	1998 -
2004	Basic Mechanisms of Human Disease (IHS 3200), Pharmacy and Allied Health Professions, lectures on GI and Reproductive Systems, February-March, 2001; 1 year 2001	
	Cellular and Clinical Neurobiology Training Program, Psychiatry 7890, Journal Club and lectures, "Neurobiology of Artificial Vision", January-March, 2001; 1 year	2001
	Biology of the Eye (ANA 6050 and PYC 6050), Anatomy and Cell Biology graduate elective, "Cortical and Retinal Implants and Artificial Vision" lectures November 27, 2001 (with Raymond Iezzi, MD); 2 years	2001 - 2004
	Neurobiology II (PYC 7020 and IBS 7050), "Vision – Visual Pathways" Lecture, January 17, 2002; 1 year 2002	
	Medical Neuroscience Year 1, "Ventricles and Cerebrospinal Fluid", Lecture, March 2003-2005, 3 years 2005	2003 -

2. Years at other colleges/universities

Earlham College, Richmond, IN

	Comparative Anatomy Lab, 1 year	
1969		
	Limnology/Freshwater Biology (Dewart Lake), 1 year	
1970		

Eaton High School, Eaton, OH

	General Science/Biology – 9 th grade, 1 year	1970 -
1971		

Purdue University, West Lafayette, IN

	Graduate Neuroanatomy Lab, Neurobiology Doctoral Program, 3 years	1974 -
1976	Medical Physiology Lab, Indiana University Medical School – Purdue University Extension, 1 year	
1974	Sophomore Structural Biology Lecture and Lab, 3 years	
1971 - 1973		

University of Vermont Medical School, Burlington, VT

	Medical Neuroscience, 1 year	
1978	Gross Anatomy Lab for Physical Therapists, 1 year	
1977		

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Temple University School of Medicine, Philadelphia, PA

1993 Human Medical Gross Anatomy, 12 years 1981 -
Brain Development, Plasticity and Toxicity, 5 years 1987 -
1992
1986 Clinically Related Neuroscience, graduate/medical student elective, 1 year

TEACHING (Continued):

2. Years at other colleges/universities (Continued):

Temple University School of Medicine, Philadelphia, PA (Continued)

1992 Department of Neurosurgery Resident Teaching Seminars, 6 years 1987 -
Anatomy for Lawyers, evening elective, 9 years
1984 - 1992 Summer Educational Reinforcement Activity, 6 years
1986 - 1991
1992 Summer Educational Reinforcement Activity, Course Director, 1 year
Department of Anatomy CME course on Anatomical Basis of Diagnostic
Imaging, 1 year
1990 National Board Part I Review, 4 years
1988 - 1991

The Ohio State University School of Medicine, Columbus, OH

1993 Medical Neuroscience, 2 years 1992 -

The Cleveland Clinic Foundation, Cleveland, OH

1995 Neurosurgery Board Review, co-director, 2 years 1994 -
Scientific Basis of Clinical Practice, director, 1 year
1993 Neuroanatomy Workshop - International Epilepsy Symposium, 1 year
1995 Fundamentals of Neuroanatomy, director, 2 years
1995 - 1996

3. Courses taught at Wayne State in last five years:

2004 Human Medical Gross Anatomy, 7 years August - October 1998-
Neuroscience Survey 719, Part C Nervous System in Behavior
and Pathology, Neurobiology of Hydrocephalus", lecture, 2 years November, 1997 &
1999
2004 Advanced Neurophysiology (PSL 7660), lectures on CSF physiology
and hydrocephalus, 4 years 1998, 2000, 2002,
Basic Mechanisms of Human Disease (IHS 3200), Pharmacy and Allied Health
Professions, lectures on GI and Reproductive Systems, 1 year February-March,
2000 Biology of the Eye (ANA 6050 and PYC 6050), Anatomy and Cell Biology
graduate elective, "Cortical and Retinal Implants and Artificial Vision"
lectures, 1 year (with Raymond Iezzi, MD) November 27,
2001
2004 Biology of the Eye (ANA 6050 and PYC 6050), Anatomy and Cell Biology
graduate elective, "Cortical Implants for Artificial Vision" lecture,
1 year December 2,

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Neurobiology II (PYC 7020 and IBS 7050), "Vision – Visual Pathways"
Lecture, 1 year
2002

January 17,

Medical Neuroscience Year 1, "Ventricles and Cerebrospinal Fluid",
Lecture, 3 years
2005

2003 -

4. Essays/Theses/Dissertations directed:

Parthasarathy Kaushik Saranath, Departments of Biomedical Engineering
and Electrical and Computer Engineering, Advisory Committee Member
present

2/04 -

Kruti Patel, Department of Biomedical Engineering, Masters Thesis Advisor
present

2/04 -

Saida Khan, Departments of Biomedical Engineering and Electrical
and Computer Engineering, Advisory Committee Member

9/03-present

Sachin Thanawala, Departments of Biomedical Engineering and Electrical
and Computer Engineering, Advisory Committee Member

1/02-present

TEACHING (Continued):

4. Essays/Theses/Dissertations directed (Continued):

Claudine Jaboro, Departments of Biomedical Engineering and Electrical
and Computer Engineering, Advisory Committee Member

1/02-present

Chaim Colen, M.D., Department of Physiology, Wayne State University
School of Medicine, Ph.D. Advisory Committee Member

6/03 -

present

John J. Steele, M.D., Department of Physiology, Wayne State University
School of Medicine, Ph.D. Advisor

7/01 -present

Janet M. Miller, B.S., Department of Physiology, Wayne State University
School of Medicine, Major Ph.D. Advisor

1/01 -present

Tiffany Walraven, B.S., Department of Physiology, Wayne State University
School of Medicine, Major Ph.D. Advisor

1/02 -present

Richard Rhiew, M.D., Department of Physiology, Wayne State University
School of Medicine, Ph.D. Advisory Committee member

7/02 – 6/04

Jorge Gonzalez-Cruz, M.D., Department of Physiology, Wayne State
University School of Medicine, Ph.D. Advisory Committee Member

1/03 -

6/03

Julie Pilitsis, M.D., Department of Physiology, Wayne State University
School of Medicine, Major Ph.D. Advisor

7/00 –

6/02

Bill Underwood, M.D., Department of Anatomy and Cell Biology,
Wayne State University School of Medicine, PhD Advisor

7/98 - 6/00

Lisa Guyot, M.D., Ph.D., Department of Physiology, Wayne State University
School of Medicine, PhD Advisor

10/98 - 6/00

Kees F.P. Braun, M.D., Ph.D., University of Utrecht, Utrecht, Netherlands,
Invited External Ph.D. Reviewer

9/00

Kaveh Barami, M.D., Ph.D., Children's Research Center of Michigan

7/99 - 9/00

Ramin Abdolvahabi, M.D., Ph.D., Department of Anatomy and Cell Biology,
Wayne State University School of Medicine, Major PhD Advisor

7/97 - 6/99

Eileen Foley (Williamson), MS, Department of Anatomy and Cell Biology,
Temple University School of Medicine (Permanent Committee and
External Advisor)

6/89 - 8/95

Marcia da Silva, MD, Masters thesis, Department of Anatomy,

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University of Toronto (External Advisor)	1/91 - 6/93
Donna Hermey, Department of Anatomy and Cell Biology, Temple University School of Medicine (Permanent Committee)	1/90 - 3/93
Christopher Wolfgang, Doctoral Program, Temple University School of Medicine	6/91 - 5/92
Linda R. Asbury, Department of Anatomy and Cell Biology, Temple University School of Medicine (Temporary Committee)	7/89 - 6/90
Wallied Al-Ghoul, Ph.D., Department of Anatomy, UMDNJ, School of Osteopathic Medicine (External Advisor)	6/90 - 6/91
James M. Drake, M.D. - M.S. received 6/89, University of Toronto (External Advisor)	7/87 - 6/89
Paul D. Walker, Ph.D. received 8/87, Department of Anatomy and Cell Biology, Temple University School of Medicine (Major Advisor)	7/84 - 8/87

5. Course or curriculum development:

Eaton High School

General Science & Biology - formulated and taught entire 9th grade course 1 year

TEACHING (Continued):

5. Course or curriculum development (Continued) :

Purdue University

Graduate Neuroanatomy Lab - formulated and directed entire
laboratory portion 3
years

Temple University School of Medicine

Human Gross Anatomy for medical students - revised and directed Abdomen
and Head & Neck sections for conference and dissection lab; assisted in
revising entire course syllabus; assisted in adding new case presentations
for entire course; assisted in revision of cross-sectional anatomy 12 years

Brain Development, Plasticity and Toxicity - formulated and directed entire
course as an elective for graduate and medical students 2 years

National Board Part I Review - formulated and presented various portions for
gross anatomy 10
years

SERA (Summer Educational Reinforcement Activity) program for disadvantaged
medical students - directed and revised program 1 year

Clinically Related Neuroscience - formulated and directed entire course
as an elective for graduate and medical students 1 year

Department of Neurosurgery teaching seminars - organized and directed 5 years

Anatomy for Lawyers - formulated and directed entire course as an elective
for insurance and malpractice attorneys 9 years

The Cleveland Clinic Foundation

Neurosurgery Board Review - co-director	2 years
Scientific Basis of Clinical Practice - director	1 year
Neuroanatomy Workshop - International Epilepsy Symposium - teaching assistant	1 year
Fundamentals of Neuroanatomy - director	2 years

The Ohio State University School of Medicine

Medical Neuroscience - revised and taught section on visual system	2 years
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6. Course materials (unpublished):

Temple University School of Medicine

Human Medical Gross Anatomy course syllabus
Human Medical Gross Anatomy lab guide
Human Medical Gross Anatomy conferences - Abdomen, Head & Neck

The Cleveland Clinic Foundation

Scientific Basis of Clinical Practice course syllabus

Wayne State University School of Medicine

Neuroscience Survey 719, Part C Nervous System in Behavior and Pathology,
Neurobiology of Hydrocephalus syllabus

TEACHING (Continued):

6. Course materials (unpublished): (Continued) :

Wayne State University School of Medicine (Continued):

Advanced Neurophysiology (PSL 7660), lectures on CSF physiology and hydrocephalus,
literature and syllabus
IHS 3200, Basic Mechanisms of Human Disease, Pharmacy and Allied Health
Professions, lectures on GI and Reproductive Systems, February-March, 2000,
Syllabus
Medical Neuroscience Year 1, "Ventricles and Cerebrospinal Fluid", March, 2003,
Syllabus and online slide presentation

GRANT SUPPORT: (Principal Investigator unless indicated)

1. Active

- \$582,263 (McAllister portion of project); \$2,651,826; Michigan Life Sciences Corridor Fund; Functionally Active Biocompatible Encapsulation (FABE) for Neural Stimulation; Co-PI with Gregory W. Auner, Ph.D., Department of Electrical and Computer Engineering, Wayne State University; 9/15/02 – 9/14/06
- \$238,856; Wayne State University Research Enhancement Program; Technological Advances to Aid Children with Brain Injury: Smart Shunts for the Improved Treatment of Hydrocephalus 5/1/04 – 4/31/06
- \$344,274; Novel Detachment Mechanisms for Implantable Coils; Co-PI with Gregory W. Auner, Ph.D., Department of Electrical and Computer Engineering, Wayne State University, and Richard Fessler, M.D., Department of Neurological Surgery 10/1/04 – 9/31/06
- \$25,000; STARS Support Group; Inhibition of Glial Scar Formation in Neonatal Hydrocephalus 12/1/04 – 12/31/05
- \$25,000; STARS Support Group; Development of Laser Ablation for Clearing Shunt Obstructions in Hydrocephalus; with Mohammed Islam, Ph.D. University of Michigan Department of Electrical Engineering 12/1/04 – 12/31/05
- \$50,000 (McAllister portion of project); \$150,000; Michigan Universities Commercialization Initiative; Mid-Infrared Light Source for Selective Laser Ablation; Co-PI with Mohammed N. Islam, PhD, PI, University of Michigan Department of Electrical Engineering 3/1/04 – 12/31/04
- \$40,000 per year; Ligon Center for Artificial Vision; Department of Ophthalmology, Kresge Eye Institute and Wayne State University School of Medicine; Retinal and Cortical Implants for Artificial Vision; Co-Investigator with Gary Abrams, M.D. 7/1/03 - present
- \$32,000 (\$177,000 initially); WOMC Christmas Is For Kids; Children's Hospital of Michigan, Pathophysiology of Hydrocephalus and Spina Bifida 1/1/99 - present
- \$430,000; Hydrocephalus Patient Support Group; Children's Hospital of Michigan, Hydrocephalus Research, Co-PI with Steven D. Ham, DO, Division of Pediatric Neurosurgery, present 10/1/97 –

2. Pending

- \$4,967,174; NIH Bioengineering Research Partnership; Functionally Active Bioencapsulation for Neural Implants; Co-PI with Gregory Auner, Ph.D., Department of Electrical and Computer Engineering, Wayne State University; pending, revision submitted 7/1/04 9/30/04 – 9/29/08
- \$1,334,746; NIH/NINDS R01: Ischemic Area Infusion: A Potential Therapy in Stroke; Consultant with Yuchuan Ding, M.D., Ph.D., PI; submitted 2/3/03 10/1/03- 9/30/07
- ????: NIH R01; Exercise and Neurovascular Mechanisms for Stroke Therapy; Co-Investigator with Yuchuan Ding, M.D., Ph.D., PI, submitted 6/1/04 4/1/05 – 3/31/08

3. Past/Inactive

\$3,293; 1 year; BRSG (UCLA); Anatomical Bases of Behavioral Recovery Following Hemispherectomy
1979 - 1980
\$4,478; 1 year; BRSG (UCLA); Quantification of Dendritic Morphology in the Developing and Aged Basal Ganglia 1980 - 1981
\$10,000; 1 year; BRSG (Temple); The Morphological Basis for Transplant-Mediated Recovery of Function in an Animal Model of Parkinson's Disease 1982 - 1983
\$4,000; 1 year; BRSG (Temple); Morphological Analysis of Embryonic Neostriatal Transplants in an Animal Model of Huntington's Disease 1983 - 1984

GRANT SUPPORT (Continued):

3. Past/Inactive (Continued)

\$1,600; 1 year; Grant-In-Aid, (Temple); Brain Transplants in an Animal Model of Huntington's Disease 1985 - 1986
\$7,720; 1 year; BRSG (Temple); Morphological Effects of Hydrocephalus; Co-Investigator with Raymond C. Truex, Jr., Department of Neurosurgery 1985 - 1986
\$5,000; 1 year; BRSG (Temple); Viral-induced Experimental Hydrocephalus 1987 - 1988
\$36,000; 2 year; American Osteopathic Association; Hydrocephalus Effects on Neurochemical Anatomy; with Dr. Richard M. Kriebel, Philadelphia College of Osteopathic Medicine 1990 - 1992
\$6,500; 1 year; BRSG (Temple); Effects of Hydrocephalus on Cerebral Metabolism 1992 - 1993
\$281,307 direct costs; 3 year; NIH; Neuronal Effects of Hydrocephalus 7/1/88 - 6/30/91
No cost extension 7/1/91 - 6/30/93
\$414,450 direct costs; 5 year; NIH Clinical Investigator Development Award; "Role of Adenosine in Normal and Epileptic Hippocampus"; No Cost Consultant (PI - Thomas H. Swanson, MD, Cleveland Clinic Foundation Department of Neurology) 10/1/94 - 9/30/99
\$24,793; 2 years; RPC #4830 (Cleveland Clinic); Molecular and Biochemical Studies of Experimental Hydrocephalus 10/1/94 - 11/30/97
\$24,669; 2 years; RPC #4938 (Cleveland Clinic); Cerebrospinal Fluid Alterations in Animal Models of Communicating and Non-communicating Hydrocephalus; Co-PI with Mark G. Luciano, MD, PhD 2/1/95 - 1/31/97
\$24,948; 2 years; RPC #5517 (Cleveland Clinic); Physiological Assessment of Neural Function in a Model of Canine Acquired Obstructive Hydrocephalus; Co-Investigator with Martha J. Johnson, PhD 4/23/96 - 4/22/98
\$100,000; Private Donation to establish the Leede Hydrocephalus Research Fund; continuous from September 1, 1995
\$250,000 total costs; 2.5 years; Johnson & Johnson (Codman) Professional, Inc.; Development of Animal Models for Improved Assessment and Treatment of Hydrocephalus; Co-Principal Investigator with Mark G. Luciano, MD, PhD 7/1/95 - 09/30/97
\$100,000 total costs; 2 years; Wayne State University School of Medicine Dean's Startup Account; Pathophysiology of Hydrocephalus 10/1/97 -

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9/30/99
\$175,000 total costs; 5 years; Children's Hospital of Michigan;
Pathophysiology of Infantile Hydrocephalus; 10/1/97 - 9/30/02
\$35,000; Research Stimulation Grant; 1 year; Wayne State University School of
Medicine Dean's Office; Pathological Relations to Visual Impairment in
Hydrocephalus; Co-Principal Investigator with Yuchuan Ding, M.D., Ph.D. 1/1/99 -
12/30/99
\$10,000; Research Incentive Fund; 1 year; Wayne State University School
of Medicine; Learning and Memory Formation of Motor Skills in Clinical
Hydrocephalus; Co-Investigator with Yuchuan Ding, M.D., Ph.D. & Qin Lai 5/15/99 -
5/14/00
\$35,000; Diabetes Research Grant; Diabetes Center; Wayne State University
School of Medicine; Effects of Diabetes on C-peptide Function in the
Central Nervous System; Co-Investigator with Zhen-quo Li, M.D., Ph.D. 5/15/99 -
5/14/00
\$275,000; NIH/NIBIB R21 (RFA EB-03-011): Development of Novel Drug
and Gene Delivery Systems and Devices; Co-Investigator with
Raymond Iezzi, M.D., M.S., PI; to be re-submitted
\$2,100; Inner Vision Imaging, Inc.; Development of Endoscopic Real-Time
Imaging 1/5/01 -
8/1/02
\$25,000 per year; Pathophysiology of Hydrocephalus; from Ligon Center for
Artificial Vision; Department of Ophthalmology, Kresge Eye Institute and
Wayne State University School of Medicine 6/20/99 -
8/1/02
\$100,000; Graduate Research Assistants (4) for Bioengineering (not funded) 7/1/04 - 6/30/05

PUBLICATIONS:

Original observations in refereed journals:

1. Das GD, Lammert GL, **McAllister JP II**: Contact guidance and migratory cells in the developing cerebellum. *Brain Research* 69: 13-29, 1974.
2. Pfaffenroth MJ, Das GD, **McAllister JP II**: Teratologic effects of ethylnitrosourea on brain development in rats. *Teratology* 9:305-316, 1974.
3. **McAllister JP II**, Das GD: Neurogenesis in the epithalamus, dorsal thalamus and ventral thalamus of the rat: An autoradiographic and cytological study. *Journal of Comparative Neurology* 172: 647-686, 1977.
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PRESENTATIONS (Refereed Abstracts Published in Conference Programs)(Continued):

25. Liakos AM, Bradley NK, **McAllister, JP II**, Magram G, Kinsman, SL: Maternal Shunt Dependency: Implications for Obstetrical Care, Neurosurgical Management and Pregnancy Outcomes. Presented as a Platform Talk at the Pediatric Section of the AANS, New Orleans, LA. 12/02/97 - 12/06/97.
26. Mangano FT, **McAllister JP II**, Johnson MJ, Wood AS, Luciano MG, Kriebel RM: Microglial response to progressive hydrocephalus in a model of inherited aqueductal stenosis. Poster presentation at the Pediatric Section of the AANS Meeting, New Orleans, LA, 12/02/97 - 12/06/97.
27. Chovan P, Steiner CP, Johnson MJ, Luciano MG, Ayzman I, Wood AS, Tkach JA, Hahn JF, **McAllister JP II**: Volumetric Study of the Ventricular System in a Canine Model of Obstructive Hydrocephalus. Poster Presentation at the Pediatric Section of the AANS Meeting, New Orleans, LA, 12/02/97 - 12/06/97.
28. Kinsman S, Eslin D, Jones H, Lange M, **McAllister P**: Induction of neuronal nitric oxide synthase during the late stage of congenital hydrocephalus in the HTX rat. Poster presentation at the Pediatric Section of the AANS Meeting, New Orleans, LA, 12/02/97 - 12/06/97.
29. Mangano FM, Kriebel RM, Jones HC, **McAllister JP II**: The effects of progressive hydrocephalus on the sensorimotor system in a model of inherited aqueductal stenosis. Presented at the 27th annual meeting of the American Association of Neurological Surgeons Pediatric Section, 4/19-23/98.
30. Kinsman SL, Eslin D, Jones H, Lange M, **McAllister JP II**: Induction of neuronal nitric oxide synthase during the late stage of congenital hydrocephalus in the HTX rat. Poster presentation at the 42nd Annual meeting of the Society for Research into Hydrocephalus and Spina Bifida, Genoa, Italy, June 10-13, 1998.
31. **McAllister JP II**, Mangano FT, Kriebel RM: The Microglial Response in Experimental Infantile Hydrocephalus. Poster presentation at the 42nd Annual Meeting of the Society for Research into Hydrocephalus and Spina Bifida, Genoa, Italy, June 10-13, 1998.
32. **McAllister JP II**, Chovan P, Steiner CP, Johnson MJ, Luciano MG, Ayzman I, Wood AS, Tkach JA, Hahn JF: Differential ventricular expansion in hydrocephalus. Poster presentation at the 42nd Annual Meeting of the Society for Research into Hydrocephalus and Spina Bifida, Genoa, Italy, June 10-13, 1998.
33. Abdolvahabi RM, Wolfgang CL, Diaz FG, **McAllister JP II**: Protein synthetic capacity of cortical neurons during experimental hydrocephalus: effects of early and late decompression. Oral poster presentation at the 48th Annual Meeting of the Congress of Neurological Surgeons, 10/3-8. 1998.
34. Abdolvahabi RM, Cortese JJ, Mitchell JA, Canady AI, HAM SD, Sood S, Diaz FG, **McAllister JP II**: Reproductive dysfunction and the gonadotropin releasing hormone system in fetal-onset

obstructive hydrocephalus. Poster presentation at the World Conference on Pediatric Neurosurgery, Martinique, 12/1-4/99.

35. Li ZG, Canady AI, Ham SD, Sood SS, Diaz FG, **McAllister JP II**: Apoptosis and dark neurons in hydrocephalic brains. Focus Subject Session at the World Conference on Pediatric Neurosurgery, Martinique, 12/01/99.
36. Abdolvahabi RM, Cortese JJ, Diaz FG, **McAllister JP II**: Effects of shunt treatment on the GnRH system in congenital hydrocephalus. Oral presentation at the Pediatric Section of the AANS Meeting, Atlanta, GA, 12/02/99.

PRESENTATIONS (Refereed Abstracts Published in Conference Programs)(Continued):

37. Ding Y-C, Lai Q, **McAllister JP II**, Ham SD, Sood SS, Canady AI: Impaired motor learning in children with hydrocephalus. Oral presentation at the Pediatric Section of the AANS Meeting, Atlanta, GA, 12/02/99.
38. Li ZG, Zhang H, **McAllister JP II**: Apoptosis and dark neurons in hydrocephalic brains. Poster presentation at the Pediatric Section of the AANS Meeting, Atlanta, GA, 12/02/99.
39. Iezzi R, **McAllister JP II**, Abrams GW, Auner G, Johnson RR, Cortese JJ: A feline model for retinal stimulation and simultaneous recording from multiple electrode arrays. Poster presentation at the Association for Research in Vision and Ophthalmology (ARVO), Ft. Lauderdale, FL, 4/30-5/5/00.
40. **McAllister JP II**, Abdolvahabi RM, Mitchell JA, Lawson DM, Diaz FG, Canady AI: Ventricular shunting in an animal model of fetal-onset hydrocephalus – hypothalamic alterations and functional outcome. Oral presentation at the 5th International Neurotrauma Symposium, Garmisch-Partenkirchen, Germany, 10/1-5/00.
41. Ding Y, Yao B, Lai Q, **McAllister JP II**, Diaz FG: Impaired motor learning and diffuse axonal damage in motor and visual systems of the rat following traumatic brain injury. Poster presentation at 5th International Neurotrauma Symposium, Garmisch-Partenkirchen, Germany, 10/1-5/00.
42. Francis TB, Underwood B, White BC, Diaz FG, **McAllister JP II**: The effect of traumatic brain injury on phosphorylated eukaryotic initiation factor 2 α in the rat. Oral presentation at the Eastern Atlantic Student Research Forum, Miami, FL, February, 2001.
43. Ding Y, Yao B, Zhou Y, Park H, Diaz FG, **McAllister JP II**: Therapeutic potential of local infusions prior to reperfusion on ischemia-reperfusion injury in stroke. Poster presentation at the Fifth Annual Joint Meeting of the American Association of Neurological Surgeons/Congress of Neurological Surgeons and the American Society of Interventional and Therapeutic Neuroradiology, Kono, HI February, 2001.
44. Iezzi R, Safadi M, Miller J, **McAllister JP II**, Auner G, Abrams GW: Feasibility of retinal and cortical prosthesis based upon spatiotemporally controlled release of L-glutamate. Oral presentation at the annual meeting of the (ARVO) Association for Research in Vision and Ophthalmology, Fort Lauderdale, FL April 29 – May 4, 2001.
45. Jaboro CA, Safadi MR, Lagman AL, Auner GW, Abrams G, Iezzi R, **McAllister JP**, Naik R, Naik VM: A biocompatible study of chronic implants for electrical stimulation and chemical drug delivery. Poster presentation at the Materials Research Society, Boston, MA November 26-30, 2001.

46. Safadi MR, Jaboro CA, Lagman AL, Auner GW, Abrams G, Iezzi R, **McAllister JP**, Naik R, Naik VM: Excimer laser micromachining of wide band gap semiconductor waveguide for nano-scale caged molecule drug delivery. Poster presentation at the Materials Research Society, Boston, MA November 26-30, 2001.
47. Ding Y, Azam S, DeGracia DJ, Li J, **McAllister JP**, Diaz FG: Focal brain ischemia and reperfusion associated with modifications in eukaryotic initiation factor 2 (eif2). Poster presentation at the 31st Annual Meeting of the Society for Neuroscience, San Diego, CA, November 11, 2001.

PRESENTATIONS (Refereed Abstracts Published in Conference Programs)(Continued):

48. Underwood B, Francis T, Miller J, Owen S, Rafols J, Krause G, Diaz F, **McAllister J**, White B: Phosphorylation of eukaryotic initiation factor 2 α and release of cytochrome C after traumatic brain injury in the rat. *Society for Neuroscience Abstracts* ? : ?, 2001. Poster presentation at the 31st Annual Meeting of the Society for Neuroscience, San Diego, CA, November 11, 2001.
49. Eskandari R, Shearer DM, Way JS, **McAllister JP II**: Effects of hydrocephalus and ventriculoperitoneal shunting on afferent and efferent connections of the sensorimotor cortex. *Journal of Neurotrauma* 18: 1137, 2001. Presented at the 19th Annual National Neurotrauma Symposium, San Diego, CA, November 9-10, 2001.
50. Miller JM, Brewer J, **McAllister JP II**: Progression and reversibility of reactive astrogliosis in experimental congenital hydrocephalus. *Journal of Neurotrauma* 18: 1158, 2001. Presented at the 19th Annual National Neurotrauma Symposium, San Diego, CA, November 9-10, 2001.
51. Underwood B, Francis T, Miller J, Owen S, Rafols J, Krause G, Diaz F, **McAllister J**, White B: Phosphorylation of eukaryotic initiation factor 2 α and release of cytochrome C after traumatic brain injury in the rat. *Journal of Neurotrauma* 18: 1162, 2001. Presented at the 19th Annual National Neurotrauma Symposium, San Diego, CA, November 9-10, 2001.
52. Lagman AL, Safadi MR, Jaboro CA, George S, Siy P, Iezzi R, **McAllister JP**, Abrams GW, Auner GW: Characterization of Nano- and Micro- System Neuro Interfacing Electrode Arrays for the Retina. Poster presentation at the 2002 Annual Meeting for The Association for Research in Vision and Ophthalmology (ARVO), Ft. Lauderdale, FL, May 5 – 10, 2002.
53. **McAllister JP**, Eskandari R, Miller JM, Iezzi R, Dawe E, Walraven T, Raza TM, Forman K, Schofding J, Abrams GW: Performance and Biocompatibility of Multiple Surface Electrodes in Cat Primary Visual Cortex. Poster presentation at the 2002 Annual Meeting for The Association for Research in Vision and Ophthalmology (ARVO), Ft. Lauderdale, FL, May 5 – 10, 2002.
54. Iezzi R, Walraven TL, **McAllister JP**, Givens R, Auner G, Abrams G: Biocompatibility of Caging Chromophores for Use in Retinal and Cortical Visual Prostheses. Poster presentation at the 2002 Annual Meeting for The Association for Research in Vision and Ophthalmology (ARVO), Ft. Lauderdale, FL, May 5 – 10, 2002.
55. Jaboro CA, Safadi MR, Lagman AL, Naik R, Naik V, Abrams GW, Iezzi R, **McAllister JP**, Auner GW: A Biocompatible Study of Chronic Implants for Electrical Stimulation and Chemical Drug Delivery for Vision. Poster presentation at the 2002 Annual Meeting for The Association for Research in Vision and Ophthalmology (ARVO), Ft. Lauderdale, FL, May 5 – 10, 2002.
56. Walraven TL, Iezzi R, **McAllister JP**, Auner G, Givens R, Abrams G: Biocompatibility of a Neurotransmitter Based Retinal and Cortical Visual Prosthesis. Poster presentation at the 2002

Annual Meeting for The Association for Research in Vision and Ophthalmology (ARVO), Ft. Lauderdale, FL, May 5 – 10, 2002.

57. Safadi MR, Jaboro CA, Lagman AL, Abrams GW, Iezzi R, **McAllister JP**, Auner GW. Development of a Wide Bandgap Microfluidic Neural Stimulating Device for Vision. Poster presentation at the 2002 Annual Meeting for The Association for Research in Vision and Ophthalmology (ARVO), Ft. Lauderdale, FL, May 5 – 10, 2002.
58. Schwiebert L, Auner GW, Gupta S, Siy P, Iezzi R, **McAllister P**, Abrams GW: A biomedical smart sensor for the visually impaired. Presented at the IEEE Sensors 2002 conference, Orlando, FL, June 12-14, 2002.

PRESENTATIONS (Refereed Abstracts Published in Conference Programs)(Continued):

59. Mona R. Safadi, Gregory Auner, Raymond Iezzi, **Pat McAllister**, Gary Abrams; development of a Microfluidic Drug Delivery Neural Prosthesis Using a Wide Bandgap Semiconductor Waveguide Structure, SPIE Proceedings, Symposium on Micromachining and Microfabrication, Photonics West, January 2003.
60. G.W. Auner (Keynote Speaker), P. Siy, R. Naik, L. Wenger, S. Ng, G. Newaz, **P. McAllister**, R. Iezzi, and G. Abrams, Integration of Nanotechnology with Microsystems, Sensors Expo and Conference on Nanotechnology and MEMS/MST/Micromachines, Chicago, Ill. May (2003).
61. Ding Y, Li J, Phillis JW, **McAllister II JP**, Guthikonda M, Diaz FG: Local Brain Hypothermia Induced by Pre-reperfusion Infusion of Cold Saline into the Middle Cerebral Artery Supplied Territory in the Treatment of Experimental Stroke, 6th International Conference on Stroke, February 2003.
62. Diaz FG, Li J, Phillis JW, **McAllister II JP**, Guthikonda M, Ding Y: Neuroprotection by Local Saline Infusion and Induced Regional Brain Cooling in Ischemic Territory of Rats with Transient Middle Cerebral Artery, 56th Annual Meeting of the Neurosurgical Society of America, Jointly sponsored by AANS, June 2003.
63. Miller J, **McAllister JP**: Experimental hydrocephalus: reactive gliosis after short- and long-term shunt recovery. Poster presented at the Annual Meeting of the Society for Neuroscience, New Orleans, LA, November 8-12, 2003.
64. Schuhmann M, Ostrowski K, Chu JW, Draper E, **McAllister JP**, Ham S, Sood S: Serum and CSF C-Reactive Protein in Shunt Infection Management. Presented at the 32nd Annual Meeting of the AANS/CNS Section of Pediatric Neurological Surgery, Salt Lake City, Utah, December 2-5, 2003.
65. Miller J, **McAllister JP**: Short and Long-Term Shunting Reduces Reactive Astrocytosis In Experimental Hydrocephalus. Presented at the 32nd Annual Meeting of the AANS/CNS Section of Pediatric Neurological Surgery, Salt Lake City, Utah, December 2-5, 2003.
66. Schuhmann M, Sandeep S, Ham S, **McAllister JP**, Czosnyka Z, Czosnyka M: Interpretation of overnight monitoring of ICP in shunted children and observational study. Presented at the 32nd Annual Meeting of the AANS/CNS Section of Pediatric Neurological Surgery, Salt Lake City, Utah, December 2-5, 2003.
67. Ostrowski K, Draper E, Schuhmann M, Chu JW, Ham S, Sood S, **McAllister JP**: Serum and CSF C-Reactive Protein in Shunt Infection Management. Presented at the Eastern Student Research Forum, Miami, FL, February 10-12, 2004.
68. Miller JM, **McAllister JP**: Reactive Gliosis After Short-and Long-Term Shunt Recovery Periods in

Experimental Hydrocephalus. Presented at the First STARS Symposium on Intracranial Pressure Control and Management in Hydrocephalus, Dearborn, Michigan, May 20-21, 2004.

69. Zhou Y, Draper DJ, **McAllister JP**, Schuhmann MU, Sood S, Ham SD: A Research-oriented Database for Patients with Hydrocephalus. Presented at the First STARS Symposium on Intracranial Pressure Control and Management in Hydrocephalus, Dearborn, Michigan, May 20-21, 2004.
70. Jaboro C: Presented at the Annual Wayne State University School of Medicine Graduate Research Day, Detroit, MI, September 2, 2004.

PRESENTATIONS (Refereed Abstracts Published in Conference Programs)(Continued):

71. Jaboro C, McCullen E, Baird R, Auner GW, Li J, Deren KE, McAllister JP II, Finlayson PG, Naik R: A surface study of novel biomaterials chronically implanted on neural tissue for chemical drug delivery. Presented at the Annual Meeting of the Surfaces in Biomaterials Foundation, Baltimore, MD, October, 2004.
72. Schuhmann MU, Ostrowski K, Chu J-W, **McAllister, JP II**, Ham SD, Sood S: The value of C-reactive protein in serum and CSF in shunt infection management. Presented at the
73. Deren KE, Elfar SD, Cottaris NP, Iezzi R, Li J, Finlayson PG, Abrams GW, **McAllister JP**: Tissue reactions to chronic penetrating recording electrode arrays *in vivo*. Presented at the Annual Meeting of the Society for Neuroscience, San Diego, CA, October 27, 2004.
74. Li J, Deren KE, Finlayson PG, Jaboro C, Ng S, McCullen E, Baird R, Auner GW, **McAllister JP**: Chronic *in vivo* neurocompatibility of materials used for neural prostheses. Presented at the Annual Meeting of the Society for Neuroscience, San Diego, CA, October 24, 2004.
75. Wang A, Li J, Deren K, Finlayson PG, Ng S, Auner GA, Baird R, **McAllister JP**. Biocompatibility and biostability of polymer-coated silicon implanted chronically into the brain. Presented at the Annual Meeting of the Society for Neuroscience, San Diego, CA, October 24, 2004.
76. Miller JM, **McAllister JP**, Krause G: Genetic influences driving the closure of the cerebral aqueduct in congenital hydrocephalus of the H-Tx rat. Presented at the Annual Meeting of the Society for Neuroscience, San Diego, CA, October 27, 2004.
77. Schuhmann MU, Ostrowski K, Chu J-W, **McAllister, JP II**, Ham SD, Sood S: The value of C-reactive protein in serum and CSF in shunt infection management. Presented at the Annual Meeting of the Society for Neuroscience, San Diego, CA, October 26, 2004.
78. Miller JM, Krause GS, Ham SD, **McAllister JP II**: Genetic Influences Driving the Closure of the Cerebral Aqueduct in Congenital Hydrocephalus. Presented at the 33rd Annual Meeting of the AANS/CNS Section of Pediatric Neurological Surgery, San Francisco, CA, December 10, 2004.
79. Draper EJ, Zhou Y, **McAllister JP II**, Schuhmann MU, Sood S, Ham SD: A Research-Oriented Database for Patients with Hydrocephalus. Presented at the 33rd Annual Meeting of the AANS/CNS Section of Pediatric Neurological Surgery, San Francisco, CA, December 8-11, 2004.

PRESENTATIONS (Invited and/or Refereed International or National Meetings):

1. "Dendritic and Synaptic Development in Neostriatal Transplants Lacking Extrinsic Connectivity", Invited Speaker, Schmitt Neurological Sciences Symposium on Transplantation into the Mammalian CNS, Rochester, NY, July, 1987.
2. "Neurotransplantation in the Treatment of Parkinson's Disease", Neurotransplantation Symposium, Eastern Regional Osteopathic Convention, Atlantic City, NJ, April 6, 1989.
3. "The Temporal Bone", The Cleveland Clinic Foundation, Department of Neurosurgery Resident Training Program, February 19, 1992.
4. "Morphometric Analyses of Cortical Reconstitution in Experimental Infantile Hydrocephalus", Hydrocephalus 92 Symposium, Assisi, Italy, 4/27/92.

PRESENTATIONS (Invited and/or Refereed International or National Meetings)(Continued):

5. "Current Progress in Hydrocephalus Research", Hydrocephalus Association Workshop for Patients and Families with Hydrocephalus, Monterey, California, January 12-13, 1996.
6. "The Future of Neuroscience Research", Keynote Address, Premier, Inc. Technology Futures Panel on Neuroscience, St. Petersburg, Florida, April 11, 1996.
7. "Hydrocephalus Research", Pediatric Section of the AANS Meeting, Pediatric Neurosurgical Nurses Association, December 2-5, 1997.
8. "The Microglial Response in Experimental Infantile Hydrocephalus", The Society for Research into Hydrocephalus and Spina Bifida 42nd Annual Meeting, Arenzano (Genova) Italy, June 10-13, 1998.
9. "Differential Ventricular Expansion in Hydrocephalus", The Society for Research into Hydrocephalus and Spina Bifida 42nd Annual Meeting, Arenzano (Genova) Italy, June 10-13, 1998.
10. "Induction of Neuronal Nitric Oxide Synthase During the Late Stage of Congenital Hydrocephalus in the HTx Rat", The Society for Research into Hydrocephalus and Spina Bifida 42nd Annual Meeting, Arenzano (Genova) Italy, June 10-13, 1998.
11. "Pathophysiology of Hydrocephalus", World Conference on Pediatric Neurosurgery, Martinique, November 27, 1999.
12. "Early vs. Late Shunts in Pediatric Hydrocephalus: Point – Counterpoint", with Harold ReKate, MD, The Biannual Conference of the Hydrocephalus Association, Phoenix, AZ, May 27-29, 2000.
13. "Overview and Biocompatibility Issues with Cortical Implants", The Eye and the Chip World Congress on Artificial Vision, Detroit, Michigan, June 8, 2002.

PRESENTATIONS (Invited and/or Refereed Local/Regional Meetings):

1. "Morphological Analyses of Striatal Transplants", Symposium of Brain Transplantation, Philadelphia Chapter of the Society for Neuroscience, Philadelphia, January, 1988.
2. "Hydrocephalus Research: Old and New", STARS and Channels Hydrocephalus Support Groups, Detroit, Michigan, November 13, 1997.

3. "Hydrocephalus Research Update", STARS and Channels Hydrocephalus Support Groups, Detroit, Michigan, January 13, 2000.
4. "Hydrocephalus Research Update", STARS and Channels Hydrocephalus Support Groups, Detroit, Michigan, January 11 and 18, 2001.
5. "Brain Implants for Artificial Vision", Northwest Regional Seminar, Western Michigan University, Department of Blind Rehabilitation, Kalamazoo, Michigan, April 13, 2002.

PRESENTATIONS (Invited seminars or lectures presented in the last five years):

1. Has Basic Research Helped Us Treat Hydrocephalus?, Neuroscience Grand Rounds, The Cleveland Clinic Foundation, January 4, 1995.

PRESENTATIONS (Invited seminars or lectures presented in the last five years)(Continued):

2. Hydrocephalus: Mechanisms and Outcome, Neurosurgery Grand Rounds, Department of Neurosurgery, Boston Children's Hospital, Boston, MA, June 5, 1996.
3. Connectivity Impairments in Infantile Hydrocephalus, Neurosurgery Grand Rounds, Cambridge College of Medicine, Department of Neurosurgery, Addenbrooke's Hospital, Cambridge, England, July 5, 1996.
4. Irreversible Connectivity Impairments in Hydrocephalus, Neurosurgery Grand Rounds, Wayne State University School of Medicine, Detroit, MI, February 19, 1997.
5. Brain Damage in the Young and Old, Berea High School Talented and Gifted Program, March 13, 1997.
6. Pediatric Brain Injury: Molecular and Morphological Insights into Progressive Hydrocephalus, Department of Anatomy and Cell Biology, Wayne State University School of Medicine, Detroit, MI, April 11, 1997.
7. Physiopathology of Hydrocephalus, Department of Physiology, Wayne State University School of Medicine, Detroit, MI, February 26, 1998.
8. Critical Issues in Hydrocephalus, Annual Meeting of the Michigan Association of Neurological Surgeons, Crystal Mountain Resort, Thompsonville, Michigan, June 19-21, 1998.
9. Hydrocephalus, Graduate Neuroscience Course, Department of Physiology, Wayne State University School of Medicine, Detroit, MI, September 24, 1998.
10. Hydrocephalus, Neuroscience Survey Course 719, Wayne State University School of Medicine, Detroit, MI, November 30, 1998.
11. Pathophysiology of Hydrocephalus, Neurosurgery Grand Rounds, Wayne State University School of Medicine, Detroit, MI, October 21, 1998.
12. Hydrocephalus Research: Significance and Animal Models, Division of Laboratory Animal Resources, Wayne State University, March 3, 1999.
13. Hydrocephalus: Making the Correct Choice, Integra NeuroCare Training Session, New Orleans,

LA, April 24, 1999.

14. Current Progress in the Pathophysiology of Hydrocephalus: Has Treatment Improved?, Department of Neurology, Utrecht University, Utrecht, Netherlands, September 27, 2000.
15. Retinal and Cortical Implants for Artificial Vision, Department of Anatomy and Cell Biology, Wayne State University, School of Medicine, November 15, 2000.
16. The Neurobiology of Artificial Vision, Cellular and Clinical Neurobiology Training Program, Wayne State University, School of Medicine, March 27, 2001.
17. Supplemental *Neurobiological* Treatments for Hydrocephalus, Neurosurgery Grand Rounds, University of Utah, Salt Lake City, UT, February 27, 2002.
18. The Pathophysiology of Childhood Hydrocephalus: Prospects for Neuroprotective Treatments, Kansas University Medical College, Kansas City, KS, April 1, 2002.

PRESENTATIONS (Invited seminars or lectures presented in the last five years)(Continued):

19. Current Progress and the Future of Artificial Vision, Midwest Regional Seminar on Wayfinding, Sponsored by the NEC Foundation of America and jointly hosted by the Institute for Innovative Blind Navigation and Western Michigan University's Department of Blind Rehabilitation, Western Michigan University, Kalamazoo, MI, April 13, 2002.
20. Brain Damage and Neuroprotective Strategies in Hydrocephalus, 3rd International Hydrocephalus Conference, Chicago, IL, May 29 - 31, 2002.
21. The Michigan Experience, The Eye and the Chip World Congress on Artificial Vision, Detroit Institute of Ophthalmology and Oakland University, Farmington Hills, MI, June 7, 2002.
22. Neuroprotection in Pediatric Disorders, VI Detroit Neurosurgery Symposium, Detroit, MI, September 14, 2002.

Other Scholarly Work: