

## CURRICULUM VITAE – MICHAEL ASCHNER

Part I. ADMINISTRATIVE, RESEARCH, SERVICE, PUBLICATION INFORMATION

**CURRENT ACADEMIC TITLE:** Harold and Muriel Block Chair in Molecular Pharmacology;

Professor of Molecular Pharmacology, Neuroscience,

Pediatrics:

Investigator, Rose F. Kennedy Intellectual and Developmental

Disabilities Research Center:

Member, Nathan Shock Center of Excellence in the Basic

Biology of Aging

ADDRESS: **BUSINESS:** Department of Molecular Pharmacology

Room 209 Forchheimer

Albert Einstein College of Medicine of Yeshiva University

Jack and Pearl Resnick Campus

1300 Morris Park Avenue, Bronx NY 10461

Telephone: 718.430.2317

E-mail: michael.aschner@einstein.yu.edu

640 West 237th Street RESIDENCE:

> Apartment 8C Bronx, NY 10463

PERSONAL INFORMATION:

BIRTHPLACE AND DATE: Jerusalem, Israel; November 11, 1955

Dual: USA and Israel CITIZENSHIP:

CHILDREN: Yael - 35; Eitan - 30; Nadav - 29; Amir - 26

**EDUCATION:** 

1979-1980 University of Rochester, Rochester, NY, BS, Natural Sciences

University of Rochester, School of Medicine and Dentistry, 1980-1983

Rochester, NY - MS, Anatomy

1983-1985 University of Rochester, School of Medicine and Dentistry,

> Rochester, NY - Ph.D., Neurobiology and Anatomy Dissertation Title: Methylmercury's Effects on Axonal Transport under Acute and Systemic Exposure Patricia M. Rodier, Ph.D., Thesis Advisor

POSTDOCTORAL TRAINING:

1985-1987 Environmental Health Sciences Center, Division of Toxicology,

> University of Rochester, School of Medicine and Dentistry, Rochester, NY. Thomas W. Clarkson, Ph.D., Advisor

Paratrooper (35<sup>th</sup> Brigade, Battalion 202) SPECIAL TRAINING:

## EMPLOYMENT:

2012-2013	Senior Faculty Fellow, Vanderbilt Institute for Integrative Biosystems Research and Education, Vanderbilt University, Nashville, TN
2011-2013	Director, Center of Molecular Toxicology, Department of Pediatrics, Vanderbilt University Medical Center, Nashville, TN
2011-2013	Director, Training Grant in Molecular Toxicology, Department of Pediatrics, Vanderbilt University Medical Center, Nashville, TN
2007-2008	Adjunct Professor, Department of Pharmacology and Environmental Toxicology, University of Madras, Chennai, India.
2005-	Director, Division of Pediatric Toxicology, Department of Pediatrics, Vanderbilt University Medical Center, Nashville, TN
2004-2013	Gray E. B. Stahlman Chair in Neuroscience Professor, Departments of Pediatrics and Pharmacology, and Senior Scientist at the Kennedy Center for Research on Human Development, Member Vanderbilt Brain Institute, Vanderbilt University Medical Center, Nashville, TN
2003-2007	Adjunct Professor, Department of Morphology, Ben-Gurion University of the Negev, Beer-Sheba, Israel.
2004-2007	Adjunct Professor, Department of Physiology and Pharmacology, Wake Forest University School of Medicine, Winston-Salem, NC
1999-2004	Professor, Department of Physiology and Pharmacology, Wake Forest University School of Medicine, Winston-Salem, NC
1994-1999	Associate Professor, Department of Physiology and Pharmacology, Wake Forest University School of Medicine, Winston-Salem, NC
1992-1994	Associate Professor, Department of Pharmacology and Toxicology, Albany Medical College, Albany, NY
1988-1992	Assistant Professor, Department of Pharmacology and Toxicology, Albany Medical College, Albany, NY
ND AWARDS:	
1985-1987	"Young Investigator Travel Award", Teratology Society

# **HONORS AN**

1988	Albany Medical College Nominee for the Alexandrine and
	Alexander L. Sinsheimer Scholar Award
1991	Albany Medical College, Wiggers' Travel Award
May 1996	Diplomat, American Board of Forensic Examiners
April 2002	Certificate of Merit, American Chemical Society, for first paper presentation which was judged outstanding for material
	content and for manner of presentation.
June 1997-present	Fellow (Elected), Academy of Toxicological Sciences, USA

Fellow (Elected), Academy of Toxicological Sciences, USA (recertified by Board of Trustees, 2002 and 2007)

Member, Faculty of 1000, Toxicology Section, Pharmacology July 2006-present

and Drug Discovery Faculty, <a href="mailto:editorial@f1000biology.com">editorial@f1000biology.com</a> Recipient, Vanderbilt University Medical Center (VUMC)

Postdoctoral Association (PDA) 2<sup>nd</sup> Annual Postdoc Mentor of

the Year Award.

April 2008

September 2009 U.S. Food and Drug Administration, Advisory Committee

Service Award, National Center for Toxicological Research.

March 2011 Merit Award, Society of Toxicology, in recognition of

distinguished contributions to toxicology throughout an entire career in research, teaching, regulatory activities, consulting

and service to the Society.

August 30, 2012 Honorary Visiting Professorship, Fourth Military Medical

School, Xi'an, China.

November, 2012 Fellow (Elected), American Association for the Advancement

of Science (AAAS), Pharmaceutical Sciences Section.

March 2016 Career Achievement Award, Metal Specialty Section, Society

of Toxicology

# OTHER PROFESSIONAL APPOINTMENTS AND INSTITUTIONAL SERVICE:

# AD HOC REVIEWER:

Acta Neurobiologiae Experimentalis

Alcoholism: Clinical and Experimental Research

American Journal of Physiology

Annals of the New York Academy of Sciences

Archives of Environmental Contamination and Toxicology

**Biochemical Pharmacology** 

Bioelectromagnetics

Biology of Trace Element Research Brain Behavior and Immunology

Brain Research

Brain Research Bulletin

Cellular and Molecular Biology

Cellular and Molecular Life Sciences

Chemical Research in Toxicology

Clinica Chimica Acta

Comparative Biochemistry and Physiology

**Environmental Bioindicatrs** 

**Environmental Health Perspectives** 

**Environmental Pollution** 

Environmental Research

**Environmental Toxicology and Pharmacology** 

**Experimental Neurology** 

Fundamental and Applied Toxicology (through 1997)

Glia

Human and Ecological Risk Assessment (HERA)

Human and Experimental Toxicology

International Journal of Developmental Neuroscience

## AD HOC REVIEWER:

International Journal of Toxicology

Journal of Biological Chemistry

Journal of Biological Inorganic Chemistry

Journal of Cellular Physiology

Journal of Cerebral Blood Flow and Metabolism

Journal of Environmental Analytical Chemistry

Journal of Histochemistry and Cytochemistry

Journal of Neurochemistry

Journal of Neurological Sciences

Journal of Neuroprotection and Neurodegeneration

Journal of Neuroscience

Journal of Neuroscience Research

Journal of Pharmacology and Experimental Therapeutics

Journal of Radiation Biology

Journal of Toxicology and Environmental Health

Life Sciences

Molecular and Cellular Biochemistry

Neurobehavioral Toxicology and Teratology

**Neurochemistry International** 

Neurodegeneration

Neurolmage

**Neuroscience Letters** 

Neuropharmacology

Neuroscience

**Neuroscience Research Communications** 

Neurobiology of Aging

Neurotoxicology

Neurotoxicity Research

Neurotoxicology and Teratology

Pharmacology and Toxicology

Physiology and Behavior

PLoS One

Science of the Total Environment

Teratology

Toxicology and Applied Pharmacology

Toxicology

**Toxicology Letters** 

**Toxicological Sciences** 

The Scientific World Journal

Therapeutic Drug Monitoring

Trends in Pharmacological Sciences (TIPS)

**BOOK PROPOSAL REVIEWS:** 

Multimedia Criteria for Iron and Compounds, CRC Press Neuropathology for Toxicologists, John Wiley and Sons

MEMBER EDITORIAL BOARDS:

1994-1995 Editorial Board, Neurotoxicology 1995-present Associate Editor, Neurotoxicology

1995-1998 Editorial Board, Fundamental & Applied Toxicology (FAAT).

1998-2004 Editorial Board, Toxicological Sciences (formerly FAAT).

1998-present Editorial Board, inScight (Academic Press)

1999-present Editorial Board, Acta Neurobiologiae Experimentalis 2002-2012 Editorial Board (2002-2005) and Associated Editor (2005-

present), the Scientific World Journal, Toxicology and

Neuroscience Sections.

2004-present Associate Editor, Toxicological Sciences

2005-2006 Associate Editor, Journal of Alzheimer's disease

2005-present Editorial Board, Clinical Nutrition

2006-2015 Editorial Board, Biology of Trace Element Research 2006-present Editorial Board, Journal of the Centre for Scientific

Investigations and Training, Oweri, Nigeria

2006-present Editorial Board, Alcohol

2007-present International Referee Board, Acta BioMedica 2007-present Editorial Board, Environmental Bioindicators

2000-2015 Editorial Board, Toxicology

2008-2012 Editorial Board, Journal of Toxicology

2008-present Editorial Board, Journal of Biomedicine and Biotechnology

2009-present Editorial Board, Toxins

2009-present Editorial Board, American Journal of Clinical Neurology 2010-present Editorial Advisory Board, Micronutrient Information Center,

Linus Pauling Institute, Oregon State University, Corvallis, OR

2010-present Associate Editor, Journal of Environmental Neuroscience and

Biomedicine (2010-present)

2011-present Editorial Board, Journal of Clinical Toxicology 2011-present Associate Editor, Frontiers in Toxicogenomics 2011-2015 Editorial Board, Neurotoxicology and Teratology

2011-present Editorial Board, Omics Publishing Group 2011-present Associate Editor, Neurochemical Research

2012-present Editor, BioMed Central Pharmacology and Toxicology

2012-present Editorial board of Journal of Trace Analysis in Food and Drugs

2012-present F1000 Research's Editorial Board

2013-present Editorial Board, Toxics

2013-present Associate Editor, Biochemistry and Pharmacology 2014-present Section-Editor, Frontiers in Toxicogenomics

2014-present deciron-Editor, i fortiers in Toxicogenion

2014-present Associate Editor, Toxicology Reports

2014-present Editorial Board, Chemical Research in Toxicology

2015-present Editorial Board, Advances in Neurobiology

2016-present Founding Editor of Advances in Neurotoxicology (with Dr.

Lucio Costa)

2017-present Editorial Board, Archives of Industrial Hygiene and Toxicology

# RESEARCH REVIEW COMMITTEES/CONSULTS:

- OLANOITINE VIEW OOMMITTEEO	
1986	Member "Working Group", Rochester Conference on
	Biological Monitoring, University of Rochester
1988	Ad hoc reviewer, Metallobiochemistry Study Section, NIH
1991-1992	Ad hoc reviewer, Scientific Review, The Welcome Trust
1992	Consultant (unpaid), Lead Screening in Pregnancy, American
	College of Obstetrics and Gynecology
May 1995	Site-Visitor, NIGMS
1995-1996	Ad hoc reviewer, Technical Review Panel, U.S. EPA
Nov. 1996	Ad hoc reviewer, International Human Frontier Science
	Program (HFSP), Bureaux Europe, Strasbourg, France
March 1997	Reviewer, Special Emphasis Panel, NIGMS
April 1997	Reviewer, Special Emphasis Panel, NIEHS
April 1997	Ad hoc reviewer, International Programme on Chemical Safety
7.5111 1007	(IPCS), WHO
May 1997	Reviewer, Neurological Foundation of New Zealand
AugOct. 1997	Reviewer, Agency for Toxic Substances and Disease Registry
AugOct. 1997	(ATSDR), Center for Disease Control and Prevention (CDC)
1997-2004	Member (1997-2001) and Consultant (2001-2004), Technical
1997-2004	Advisory Panel on the Health Effects of Methylcyclopenta-
	dienyl Manganese Tricarbonyl, Chemical Industry Institute of
1007 0000	Toxicology, Research Triangle Park, NC
1997-2002	Advisory Committee Member, Research Infrastructure in
	Minority Institutions (RIMI), Winston-Salem State University,
0 / 1007	Winston-Salem, NC
Oct. 1997	Ad hoc reviewer, NIH Alcohol and Toxicology 4 Study Section
Nov. 1997	Reviewer, National Center for Toxicological Research (NCTR)
	Research Scientist Peer Review Panel, Washington, DC
Nov. 1997	Ad hoc reviewer, International Human Frontier Science
	Program (HFSP), Bureaux Europe, Strasbourg, France
Jan. 1998	Reviewer, Agency for Toxic Substances and Disease Registry
<b>-</b> 1 1000	(ATSDR), Center for Disease Control and Prevention (CDC)
Feb. 1998	Ad hoc reviewer, National Science Foundation (NSF)
Feb. 1998	Ad hoc reviewer, Technical Review Panel, U.S. EPA
May 1998	Ad hoc reviewer, Alcohol and Toxicology 3 Study Section, NIH
July 1998	Ad hoc reviewer, Technical Review Panel, U.S. EPA
July 1998	Reviewer, Chemistry and Related Sciences Special Emphasis
	Panel, Alcohol and Toxicology 4 Study Section, NIH
July 1998	Reviewer, Agency for Toxic Substances and Disease Registry
	(ATSDR), Center for Disease Control and Prevention (CDC)
1998-2004	Member, Scientific Advisory Group (SAG) of the International
	Manganese (Mn) Institute, Paris, France
Oct. 1998	Ad hoc reviewer, International Human Frontier Science
	Program (HFSP), Bureaux Europe, Strasbourg, France.
1998	International referee, Neurological Foundation of New Zealand
December, 1998	Consultant, Novartis, Crop Protection Division, Greensboro,
	NC
1998-2002	Member, Alcohol and Toxicology 3 Study Section, NIH
January, 1999	Reviewer, Agency for Toxic Substances and Disease Registry
••	(ATSDR), Center for Disease Control and Prevention (CDC)

# RESEARCH REVIEW COMMITTEES/CONSULTS:

1999 Biomedical Consultant, United States - Israel Binational

Science Foundation, Jerusalem, Israel

1998-2001 Member. Committee on Health Effects Associated With

Exposures Experienced During the Gulf War, Institute of Medicine, National Academy of Sciences, Division of Health

Promotion and Disease Prevention

**April 1999** Ad hoc reviewer. Medical Research Council of Canada June 1999 Member, Review Committee, Department of Economical

Affairs, Office of Research, Milan, Italy

1999-2000 Member, Committee to Review EPA's maximum Contaminant

Level Goal for Copper in Drinking Water, National Research

Council, National Academy of Sciences

Ad hoc Reviewer, Texas A & M University pilot projects May 1999 July 1999

Ad hoc member, Technical Qualifications Board (TQB), U.S.

EPA

Ad hoc Reviewer, Research Grants Council of Hong Kong, August 1999

China. University Grants Committee

Ad hoc Reviewer, National Institute of Environmental Health October 1999

Sciences (NIEHS), Superfund Site Grant Proposals

Ad hoc Reviewer, National Science Foundation, BIO/IBN October 1999

Program

Ad hoc Reviewer, The Welcome Trust, London, UK October 1999

November 1999 Reviewer, Agency for Toxic Substances and Disease Registry

(ATSDR), Center for Disease Control and Prevention (CDC), review of draft toxicological profile document on manganese work assignment 20 under ATSDR contract 205-93-0641

Member, Committee to Review Navv's Proposed Submarine 2000-2001

> Escape Action Levels (SEALs) for Selected Chemicals, National Research Council, National Academy of Sciences

Member, Special Emphasis Panel, NIEHS/NS, RFA ES 00-March 2000

002. The Role of Environment in Parkinson's disease, NIEHS,

Research Triangle Park, NC

External Reviewer, National Academy of Science, Committee May 2000

on Toxicological Effects of Mercury, Board on Environmental Studies and Toxicology, Commission on Life Sciences, National Research Council, National Academy Press,

Washington DC

Peer reviewer, Agency for Toxic Substances and Disease October 2000

Registry (ATSDR), Center for Disease Control (CDC)

Member, SBIR Special Emphasis Panel ZRG1 SSS-3 10 B, November 2000

NIEHS, Chevy Chase, MD

March 2001 Chair, Special Emphasis Panel, NIH IFCN1-04

March 2001 Member, SBIR Special Emphasis Panel ZRG1 SSS-3 10 B.

NIEHS, Gaithersburg, MD.

Reviewer, National Alliance for Autism Research (NAAR), March 2001

Princeton, NJ

May 15, 2001 Reviewer, Special Emphasis Panel, NIH ZEH-D-RC, NIEHS,

Research Triangle Park, NC

# RESEARCH REVIEW COMMITTEES/CONSULTS:

:SE/	ARCH REVIEW COMMITTEES/COM	NSULTS:
	June 27, 2001	Member, SBIR Special Emphasis Panel ZRG1 SSS-3 10 B, NIEHS, Chevy Chase, MD
	July 20, 2001	Chair, Special Emphasis Panel, NIH IFCN1-03 C (telephone conference)
	l.:h.: 2004	,
	July 2001	Reviewer, EPA Special Study Section, Postdoc Applications
	July 2001	Peer reviewer, Agency for Toxic Substances and Disease
		Registry (ATSDR), Center for Disease Control and Prevention
		(CDC), Program Announcement Number 01037
	August 2001	Reviewer, RfP-NT-01-01: Indicators of Damage to the
		Developing Nervous System, American Chemical Council,
		Arlington, VA
	August 2001	External Reviewer, National Academy of Science, Committee
	7 tagast 200 i	on Thimerosal and Neurodevelopmental Outcomes, Institute of
		Medicine Immunization Safety Review Committee, National
	0-1-10 0004	Academy Press, Washington DC
	October 9, 2001	Reviewer, Special Emphasis Panel, NIH RFA ES 01-001,
		Transition into Independent Positions (TIP), NIEHS, Research
		Triangle Park, NC
	October 30, 2001	Reviewer, Special Emphasis Panel, NIH IFCN1-03 C
		(telephone conference)
	October 2001 – March 2002	Chair, Distinguished Investigator Award Committee,
		Neurotoxicology Specialty Section, Society of Toxicology
	December 13-14, 2001	Reviewer, Special Emphasis Panel, NIH RFA ES 01-006,
	200011201 10 11, 2001	Developmental Toxicology Exploratory Research Grants
		(R21), NIEHS, Research Triangle Park, NC
	Dec. 2001 - April 2002	Consultant to Health Canada, Review of Manganese
	Dec. 2001 - April 2002	
	Fobruary 2002	Toxicokinetics, Ottawa, ON, Canada.
	February 2002	Reviewer, Proposal for Conference and Meetings, New York
		Academy of Sciences, New York, NY
	March 5-6, 2002	Peer Reviewer, EPA's Revised Draft, Perchlorate
		Environmental Contamination: Toxicological Review and Risk
		Characterization, Sacramento, CA
	June 12-13, 2002	COBRE Special Emphasis Panel, National Center for
		Research Resources (NCRR), Bethesda, MD
	July 2002 – June 2003	Chair, Alcohol and Toxicology (ALTX) 3 Study Section, NIH
	August 2002	Consultant, Midwest Consulting Services, South Bend, IN
	September 2002	Reviewer, March of Dimes, Basil O'Connor Research Award
	September 2002	Reviewer, EPA Special Study Section, Postdoctoral
		Applications
	September 2002	Peer reviewer, Agency for Toxic Substances and Disease
	Coptombol 2002	Registry (ATSDR), Center for Disease Control and Prevention
		(CDC), Office of the Associate Administrator for Science,
		, , , , , , , , , , , , , , , , , , , ,
	Contouch on 2000	Atlanta, GA
	September 2002	Reviewer, Center for the Neurobehavioral Study of Alcohol
		(CNSA), Wake Forest University School of Medicine, Winston-
		Salem, NC
		0 1 1 0 0 0

2002-2003

Consultant, Bayer CropSciences, Research Triangle Park, NC

# RESEARCH REVIEW COMMITTEES/CONSULTS:

2002-2004 Consultant, Phillips, Lytle, Hitchcock, Blaine, and Huber, Buffalo, NY Consultant, Ranier, Gavle, and Elliot, Lake Charles, LA Nov. 2002-April 2004 January 2003 Reviewer, Occupational Exposure Limits Criteria Document for Manganese, prepared by the Institute of Environmental Health (IEH) and the Institute of Occupational Medicine (IOM), United Kingdom. Consultant, Smith, Anderson, Blount, Dorsett, Mitchell and January - October 2003 Jernigan, Raleigh, NC February 2003 Reviewer, Postdoctoral Grant Proposal, EPA. March 2003 Peer Reviewer, Agency for Toxic Substances and Disease Registry (ATSDR). Center for Disease Control and Prevention (CDC) Atlanta, GA Member, Pediatric Advisory Committee of the Anti-June 11-12, 2003 Inflammatory Drugs, Food and Drug Administration, Gaithersburg, MD. August 7, 2003 Peer Reviewer, Environmental Health, Health Services, and Toxicology Research, program Number 03040, Agency for Toxic Substances and Disease Registry (ATSDR), Center for Disease Control and Prevention (CDC), Atlanta, GA August 2003 Reviewer, Agency for Toxic Substances and Disease Registry (ATSDR), Center for Disease Control and Prevention (CDC), review of draft toxicological profile document on tin work assignment 20 under ATSDR contract 200-1999-00058 Invited Expert, Perchlorate State of the Science Symposium Sept. 29 – Oct. 1, 2003 (PS<sup>3</sup>), The University of Nebraska, Center for Environmental Toxicology, Omaha, NE Oct. 2003 - 2013 Member, Steering Committee Manganese Health Research Program (MHRP), Army Environmental Quality Technology. PE #603779A - Demonstration and Validation. External Reviewer, Neurotoxicology Program, National Center January 14 – 15, 2004 for Toxicological Research (NCTR), Food and Drug Administration, Pine Bluff, AR (last minute change in schedule precluded my physical participation in the site visit; a written review was submitted). Jan. - Feb. 2004 Consultant, Cranfill, Sumner and Hartzog, L.L.P., Raleigh, NC February 2004 Reviewer, Interim Report #8 on Spacecraft Water Exposure Guidelines, National Research Council of the National Academics, Washington, DC. February 2004 Consultant, MetaPhore Pharmaceuticals, Inc., St. Louis, MO April, 2004 External Reviewer, Life Sciences and Biotechnology Institute (LSBI) Seed Grants, Mississippi State University, MS. Chair, Special Emphasis Panel Review of Superfund Basic April 4, 2006 Research Program (SBRP) supplement applications, NIEHS.

April 7, 2004

(NIEHS).

Special Emphasis Panel, ZES1 LKB-E K2 1, K23 Review

Panel, National institute of Environmental Health Sciences

# RES

ESEARCH REVIEW COMMITTEES	
April 20, 2004	Special Emphasis Panel, ZES1 SET-A S1, Superfund Basic Research Program (SBRP), Conference Support 2004-2005,
June 21-22, 2004	National institute of Environmental Health Sciences (NIEHS) Member, Expert Panel Review, the Risk Science Institute
Julie 21-22, 2004	(RSI) of the International Life Sciences Institute (ILSI),
	Washington, DC
September, 2004	Ad hoc reviewer, Health Implications of Perchlorate Ingestion,
	Board on Environmental Studies and Toxicology, Commission
	on Life Sciences, National Research Council, National
	Academy of Sciences, Washington, DC: National Academy
October, 2004	Press, 2004.  Ad hoc member, Technical Qualifications Board (TQB), U.S.
200001, 2001	EPA, Research Triangle Park, NC
December, 2004	Ad hoc member, Technical Qualifications Board (TQB),
	NIOSH, CDC, Morgantown, WV.
January 24, 2005	Reviewer, Eastern Research Incorporated, Teratologic
Fabruary 2005	Evaluation of FDA 71-33 (Stannous Chloride)
February 2005 February 4-6, 2005	Consultant, Wallace and Graham, Salisbury, NC Member, the White Matter Think Tank, Cure Autism Now
rebluary 4-0, 2005	(CAN), Malibu, CA
April 26, 2005	Ad hoc member, Technical Qualifications Board (TQB), U.S.
,	EPA, Research Triangle Park, NC
April, 2005	Consultant, Womble, Carlyle, Sandridge and Rice, Winston-
M 45 0005	Salem, NC
May 4-5, 2005	Chair, External Advisory Committee, Collaborative Centers for Parkinson's Environmental Research (CCPDER) Program, the
	National Institute of Environmental Health Sciences (NIEHS),
	Asilomar Conference Grounds, Pacific Grove, CA
May 16, 2005	National Institute of Environmental Health Sciences Center,
•	Grant Pilot Project Review, Harvard School of Public Health.
July 2005-2008	Consultant, development of pre- and post-exposure neural
	protectants against organophosphorous compounds
	Biomedical Technology, CFD Research Corporation, Huntsville, AL
July 2005	Ad hoc reviewer Hobbs/Marino proposal, Kennedy Center,
5d.y 2555	Vanderbilt University Medical Center, Nashville, TN
August 2005	Reviewer, Agency for Toxic Substances and Disease Registry
	(ATSDR), Center for Disease Control and Prevention (CDC),
	review of draft toxicological document on Response Inhibition
	at 8 and 9 ½ Years of Age in Children Prenatally Exposed to PCBs.
September 2005	Reviewer, Agency for Toxic Substances and Disease Registry
	(ATSDR), Center for Disease Control and Prevention (CDC),
	review of draft protocol on Chronic Exposures to Airborne Manganese and Neurological and Respiratory Outcomes.
October 2005	Reviewer, Philip Morris External Program, Research
20.000. 2000	Management Group

Management Group.

# RESEARCH REVIEW COMMITTEES/CONSULTS:

January 2006-2010 Member, External Advisory Board, The Wake Forest and Brigham and Women's Center for Botanical Lipids, Wake

Forest University Health Sciences, Department of Physiology

and Pharmacology, Winston-Salem, NC.

April 17-18, 2006 Site Visit, Review of the MHRP project on the health effects of

manganese in ferroalloys workers, Zunyi Medical College,

Zunyi, China.

April 2006-2007 Member, External Advisory Board, Toxicology Center,

Environmental and Occupational Health Sciences Institute, Department of Environmental and Occupational Medicine, Robert Wood Johnson Medical School, University of Medicine and Dentistry of New Jersey (stepped down due to competing

Vanderbilt application).

May 2006-2009 Member, Scientific Advisory Board, National Center for

Toxicological Research (NCTR), Food and Drug

Administration (FDA), Jefferson, AR.

May 2006-2008 Consultant, Neurotoxic Mechanisms of the Anti-Malarial Drug

Mefloquine, CFD Research Corporation, Huntsville, AL. Member, Program Advisory Committee (PAC), National

Institute of Neurological Disorders and Stroke (NINDS), Specialized Neuroscience Research Program (SNRP; 2 U54 NS041071-06) at Meharry Medical College, Nashville, TN

June 2006-present Consultant, System Fundamental Characterization of Agent

Neurotoxicity Using a Systems Biology Approach, CFD

Research Corporation, Huntsville, AL

July 2006 Reviewer, Agency for Toxic Substances and Disease Registry

(ATSDR), Center for Disease Control and Prevention (CDC), review of draft toxicological profile document on aluminum work assignment Task Order No. 200-2006-F-17036 under

CDC contract GS-10F-0036K

August 2006-2011 Consultant, the National Vaccine Injury Compensation

Program, US Department of Justice and the Alliance for

Quality Education, Landover, MD

September 2006 Member, Joint Meeting of the Center for Radiological Health

(CDRH) Dental Products Panel and the Center for Drug Evaluation and Research (CDER) Peripheral and Central Nervous System Drugs Advisory Committees, Food and Drug

Administration (FDA). Safety of Dental Amalgams.

September 2006-present

October 2006-2009

June 2006-2008

Consultant, Rainey, Kizer, Reviere and Bell, PLC Jackson, TN. Member, Program Committee, American College of Toxicology

(ACT).

November 13, 2006 Member, Special Emphasis Review Panel, ZRG1 IFCN-

A(03)M, National institute of Environmental Health Sciences

(NIEHS). Telephone conference.

January – February, 2007 Reviewer, Oklahoma State Regents for Higher Education,

evaluating the Doctor of Philosophy in Cellular and Behavioral Neurobiology, as proposed by Oklahoma State University

(written report).

# RESEARCH REVIEW COMMITTEES/CONSULTS:

<u> SEARCH REVIEW COMMITTEES/C</u>	ONSULTS:
January 2007-present	Member, Scientific Committee on the Toxicology of Metals under the International Commission on Occupational Health
	(ICOH).
January 2007	Member, Scientific Advisory Board, Superfund Basic Research Program Project, University of Florida, Gainesville, FL.
March 2005 - 2008	Member, Program Committee, Society of Toxicology (SOT).
March 13-14, 2007	Member, Special Emphasis Panel/Scientific Review Group
	2007/05 ZES1 JAB-C (R1)(1), Research Triangle Park, NC.
April 30, 2007	Special Emphasis Panel ZNS1 SRB-M (48), National Institute of Neurological Disorders and Stroke (NINDS).
April 2007-May 2008	Member, Committee on Health Effects Associated With
,	Exposures Experienced During the Gulf War, Institute of
	Medicine (IOM), National Academy of Sciences, Division of
	Health Promotion and Disease Prevention. Gulf War and
	Health: Depleted Uranium
May 2007	Reviewer, Task Order No. 123, Contract No. 68-C-02-060,
Way 2007	
	External Peer Review of the Draft Provisional Toxicity Value
	(PPRTV) Manuscript for 2,4-Dichlorophenol Developed for the
0 1 1 10 0007	Superfund Health Risk Technical Support Center (STSC).
September 10, 2007	Panelist, Autism and the Environment, Vanderbilt University
	Kennedy Center for Research on Human Development,
	Leadership Council, Nashville, TN
September 2007	Member, Environmental Subcommittee of Autism Speaks.
October 11-12, 2007	Member, Neurotoxicology and Alcohol (NAL) Study Section,
	NIH, Washington, DC
November 2-3, 2007	Site Visit, Review of the MHRP project on the health effects of
	manganese in ferroalloys workers, Zunyi Medical College,
	Zunyi, China.
November 27, 2007	Member, Society of Toxicology Board of Publications Strategic
	Planning meeting, Reston, VA
Dec, 2007-August 2008	Consultant, Development of a Drug-Delivery Device to the
	CNS, Physical Optics Corporation, Torrance, CA
January 2008-2010	Consultant, Trackable Nanopolymer Agents for Inhibiting
	Endopeptidase Activity of Botulinum Neurotoxin, CFD
	Research Corporation, Huntsville, AL
February 24-25, 2008	Member, Board of Scientific Councilors, National Institute of
	Environmental Health Sciences (NIEHS), review of the
	Laboratory of Neurobiology, Research Triangle Park, NC
February 26-27, 2008	Member, National Institute of Environmental Health Sciences
	(NIEHS), 2008/05 ZES1 LWJ-G (CN) 1, Environmental
	Factors in Neurodegenerative Diseases, review of Centers for
	Neurodegeneration Science, Research Triangle Park, NC
March 2008	Consultant, Napo Pharmaceuticals, Inc., San Francisco, CA.
June 2008-2009	Consultant, Eramet, SA, Marietta, OH.
August 2008	Reviewer, RFA on the Role of Environment Factors and Gene-
- 5	Environment Interactions in the Etiology and Course of Autism
	Spectrum Disorders, Autism Speaks, New York, NY.
August 2008-2011	Member, Education Committee, American College of
7 tagast 2000 2011	Tayladami

Toxicology

RESEARCH REVIEW COMMITTEES/CONSULTS:

August 2008-2009 Consultant, Medtronic Neuromodulation, CNS Drug Delivery

Research and Development, Minneapolis, MN.

September 2008 Reviewer, Spacecraft Water Exposure Guidelines for Selected

Contaminants, Volume 3, National Research Council of the

National Academics, Washington, DC

December 2008-present Member, Restless Leg Syndrome (RLS) Foundation Scientific

Advisory Board, Rochester, MN.

February 2009-2011 Member, Board of Directors, Academy of Toxicological

Sciences.

March 2009-present Member, Scientific Committee on Neurotoxicology and

Psychophysiology of the International Commission on

Occupational Health (ICOH).

April 2009 Member, NIEHS Special Emphasis Panel/Scientific Review

Group 2009/08 ZES1 RAM-G (L9). (Internet Assisted Review).

April 2009 Member, Study Section, Restless Leg Syndrome (RLS)

Foundation (Telephone Grant Review).

April 2009 Reviewer, Medical Research Council (MRC), United Kingdom.

April 2009-present Member, External Advisory Board, P30 Environmental Health

Sciences Center at Wayne State University, Detroit, MI.

April 2009 Consultant, Goldberg and Segalla, White Plains, NY.

April 2009 Consultant, Development of a Drug-Delivery Device to the

CNS, Physical Optics Corporation, Torrance, CA.

July 2009 Member, NIEHS Special Emphasis Panel/Scientific Review

Group, ZRG1 IFCN-A (58) R RFA OD-09-003: Challenge

Grants Panel 8. (Internet Assisted Review).

August 2009 Member, National Institute of Neurological Disorders and

Stroke Special Emphasis Panel 2009/10 ZNS1 SRB-W (34).

(Internet Assisted Review).

October 2009-2010 Member, Scientific Advisory Board, X-BYO Ltd, Budapest,

Hungary: Hydros Inc, Herndon, VA

November 2009-2013 Member, Steering Committee, Molecular Toxicology Center

(Guengerich, PI), Vanderbilt University Medical Center,

Nashville, TN

2009-2011 Member, Gordon Research Conference 2011, Mechanisms of

Toxicity Steering Group.

February 2010 Reviewer, Pilot Project, The Center for Environmental

Exposures and Disease (CEED), Environmental and Occupational Health Sciences Institute (EOHSI), Robert Wood Johnson Medical School, University of Medicine and

Dentistry of New Jersey and Rutgers University. NJ.

April 2010 Reviewer, Agency for Toxic Substances and Disease Registry

(ATSDR), Center for Disease Control and Prevention (CDC), review of Toxicological Profile for Manganese, Minimum Risk

Level, Task order No. 200-2009-F-30327.

2010-2013 Member, Research Funding Committee, Society of Toxicology

(SOT).

# RESEARCH REVIEW COMMITTEES/CONSULTS:

VESEARCH MEVIEW COMMINITIEES/C	ONSULTS.
May 13, 2010	Chair, ZES1 LWJ-G (LR) Study Section, National institute of Environmental Health sciences, Research Triangle Park, NC.
June 2010-2013	Member, External Advisory Board, Superfund Research
December 13-14, 2010	Program (SRP), Wayne State University, Detroit, MI Member, Joint Meeting of the Center for Radiological Health
	(CDRH) Dental Products Panel and the Center for Drug
	Evaluation and Research (CDER) Peripheral and Central Nervous System Drugs Advisory Committees, Food and Drug
	Administration (FDA). Safety of Dental Amalgams.
January 19, 2011	External Examiner for Paleah Black, Ph.D. candidate in
	Biology (Chem & Environ Toxicol). Thesis entitled: Interactions of Dietary Antioxidants and Methylmercury on Health
	Outcomes and Toxicodynamics: Evidence from Developmental
	Rat Model Studies and Human Epidemiology. Faculty of
luka 2044	Science, University of Ottawa, Ottawa, Canada.
July 2011	Reviewer, Governor's Council for Medical Research and Treatment of Autism, Trenton, NJ
October 4-6, 2011	Committee member, Center for Alternatives to Animal Testing
	(CAAT)-Europe workshop: Identification of Relevant Toxicants
	for Developmental Neurotoxicity, University of Konstanz, Konstanz, Germany.
October 13, 2011	Member, Neurotoxicology and Alcohol (NAL) Scientific Review
0	Group, NIH, Washington, DC.
October 2011-2013	Vice President, International Society of Trace Element Research in Humans (elected).
2011-2012	Member, Congress Operating Committee, World Toxicology
10.0010	Summit and Expo, San Antonio, TX, September 17-19, 2012.
January 18, 2012	Chair, the Denis O'Day Professor of Ophthalmology Endowed Chair Review Committee, Vanderbilt University Medical
	School, Nashville, TN
April 10-13, 2012	Member, Federal Insecticide, Fungicide, and Rodenticide Act
	Scientific Advisory Panel (FIFRA SAP) meeting: Chlorpyrifos Health Effects, Environmental Protection Agency, Arlington,
	VA.
May 2-3, 2012	External Consultant, Program in Toxicology, Oklahoma State
May 9, 2012	University, Stillwater, OK External Consultant, the Institute for Prevention and
Way 9, 2012	Occupational Medicine of the German Social Accident
	Insurance Institute of the Ruhr-Universität Bochum (IPA),
luly 2012   luno 2016	Bochum, Germany Member, Neurotoxicology and Alcohol (NAL) Study Section,
July 2012 – June 2016	NIH
October 26, 2012	Review, Pilot Project, Harvard-NIEHS Center For
Nevember 7, 2012	Environmental Health.
November 7, 2012	Ad hoc member, Technical Qualifications Board (TQB), U.S. EPA
December 2012-present	Member, Steering Team of the Subcommittee on Translational
	Safety Biomarker Assessment of Neurotoxicity, ILSI Health
	and Environmental Sciences Institute (HESI), Washington, DC.

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March 26-28, 2013	Review Committee Member, National Center for Environmental Research Science to Achieve Results (STAR)
	Program, EPA-G2012-STAR-F1, US Environmental Protection
	Agency (EPA), Development and Use of Adverse Outcome
	Pathways that Predict Adverse Developmental Neurotoxicity,
	Arlington, VA.
2013-2015	President, International Society of Trace Element Research in
2013-2013	Humans (elected).
2013-present	Scientific Advisory Board Member, International Academy of
2010 procent	Oral Medicine and Toxicology (IAOMT).
2013-present	Consultant, Bonne Bridges, Mueller Okeefe & Nichols, Los
	Angeles, CA.
November, 2013	Reviewer, NIEHS Children's Environmental Health Sciences
	Core Center Pilot Project Review, University of Wisconsin –
	Milwaukee.
December, 2013	Reviewer, Pilot Grants, Rose F. Kennedy Intellectual and
	Developmental Disabilities Research Center (RFK IDDRC),
	Albert Einstein College of Medicine, Bronx, NY.
2013-present	Member, External Advisory Board, Superfund Research
	Program (SRP), Mount Sinai School of Medicine, New York,
	NY.
2014-present	Member, External Advisory Board, Superfund Research
	Program (SRP), University of Washington, Seattle, WA.
2014-present	Chair and member, Science Advisory Committee, NIEHS/EPA
	Children's Environmental Health Center, the University of
F-1	California at Davis, CA.
February, 2014	Reviewer, Center for Urban Responses to Environmental
	Stressors (CURES) Pilot Grants, Wayne State University, Detroit, MI (web review).
March, 2014	Reviewer, Special Emphasis Panel for Career Awards (K
Maich, 2014	Applications), National Institute of Environmental Health
	Sciences (NIEHS), Research Triangle Park, NC
	(Teleconference).
March, 2014	Reviewer, Michigan Bloodspot Environmental Epidemiology
,	Project (BLEEP) Pilot reviews, University of Michigan School
	of Public Health, Ann Arbor, MI (mail review).
March, 2014 - March 2017	Member, Awards Committee, Society of Toxicology (elected).
March, 2014	Reviewer, Pilot Grants, P30 Center in Molecular Toxicology,
	Vanderbilt University Medical Center, Nashville, TN.
May, 2014 – present	Member, External Advisory Committee, Rhode Island IDeA
	Network of Biomedical Research Excellence (INBRE),
	University of Rhode Island, Kingston, RI.
April, 2014 – present	Member, External Advisory Committee, NIEHS P30 Center for
	Research on Environmental Disease (CRED), University of
2015 propert	Kentucky, Lexington, KY.  Member, External Advisory Committee, the NIEUS Center for
2015 - present	Member, External Advisory Committee, the NIEHS Center for Environmental Health in Northern Manhattan, Columbia
	University New York NV

University, New York, NY.

## RESEARCH REVIEW COMMITTEES/CONSULTS:

July, 2015 Member, Special Emphasis Panel ZRG1 DKUS-C (50) R PAR 14-050: Virtual Consortium for Translational/Transdisciplinary,

National Institute of Environmental Health Sciences (NIEHS),

Research Triangle Park, NC (Teleconference).

September, 2015 – present Member, T32 on Children's Environmental Hea

Member, T32 on Children's Environmental Health Research, National Institute of Child Health and Human Development

(NICHD), Mount Sinai University School of Medicine.

December, 2015 Ad hoc member, National Center for Environmental

Assessment's (NCEA), Technical Qualifications Board (TQB),

U.S. EPA.

April, 2016 Reviewer, Alaska IDeA Network of Biomedical Research

Excellence (INBRE), University of Alaska, Fairbanks, AK.

May, 2016 - 2019 Treasurer-Elect (2016-2017) and Treasurer (2017-2019),

Society of Toxicology.

May, 2016 - 2019 Member, Council, Society of Toxicology.

August, 2016 Reviewer, External Peer Review of 2-Hexanone Toxicological

Profile, Reviewer, Agency for Toxic Substances and Disease Registry (ATSDR), Center for Disease Control and Prevention

(CDC), Atlanta, GA.

October, 2016 Reviewer, Pilot Grants, the NIEHS Center for Environmental

Health in Northern Manhattan, Columbia University, New York,

NY.

November 2-3, 2016 Ad hoc reviewers, Systemic Injury by Environmental Exposure

(Digestive, Kidney and Urological Systems Integrated Review

Group), NIH Study Section, San Francisco, CA (by phone).

January, 2017 – present Consultant, General Electric (GE) Healthcare Inc. and its

Affiliates, 100 Results Way, Marlborough, MA

February, 2017 - present Consultant, tranexemic acid (TXA) case, Wadleigh, Starr &

Peters, P.L.L.C., Manchester, NH.

VISITING FACULTY APPOINTMENTS:	
1992	Jan Albrecht, Ph.D., Professor, Nencki Medical Research
1002	Center, Polish Academy of Sciences, Warsaw, Poland.
July 1999	Sharon C. Roseman, M.S., Instructor of Biology, Lenoir-Rhyne
	College, Hickory, NC.
Sept, 2002 - May, 2003	Tore Syversen, Professor, Norwegian University of Science
	and Technology, Department of Clinical Neuroscience, Faculty
	of Medicine, Trondheim, Norway
February – April, 2003	Magdalena Zielinska, Ph.D., Instructor, Department of
	Neurotoxicology, Polish Academy of Sciences, Warsaw,
Cont. Documber 2004	Poland.
Sept – December, 2004	Ana Paula Marreilha dos Santos, Auxiliary Professor, Faculty
	of Pharmacy, University of Lisbon, Portugal (recipient of Fulbright Fellowship for 3-month sabbatical).
Jan 2006 – June, 2007	Lu Rongzhu, Ph.D., Associate Professor, Department of
3aii 2000 – 3uiie, 2007	Preventive Medicine, School of Medicine, Jiangsu University,
	Jiangsu, PR China.
August 21 – 30, 2006	Yoram Finkelstein, M.D., Ph.D., Sharei Zedek Hospital and
, tagast = 1	Hebrew University, Jerusalem, Israel.
September – October, 2005	Ana Paula Marreilha dos Santos, Auxiliary Professor, Faculty
•	of Pharmacy, University of Lisbon, Portugal.
September – October, 2006	Ana Paula Marreilha dos Santos, Auxiliary Professor, Faculty
	of Pharmacy, University of Lisbon, Portugal.
August 2007 - present	Eunsook Lee, Assistant Professor, Meharry Medical College,
_	Nashville, TN
August 29 – Sept 12, 2008	Yoram Finkelstein, M.D., Ph.D., Sharei Zedek Hospital and
	Hebrew University, Jerusalem, Israel.
February-April, 2010-2012	Yoram Finkelstein, M.D., Ph.D., Sharei Zedek Hospital and
January 2015 2016	Hebrew University, Jerusalem, Israel.
January 2015 – 2016	Maria Rosa Chitolina, Professor, Universidade Federal de Santa Maria, Rio Grande do Sul, Brazil
	Santa Maria, Rio Grande do Sul, Brazil
UNIVERSITY COMMITTEES:	
ALBANY MEDICAL COLLEGE	
1989-1992	Member, Graduate Curriculum
1990-1991	Member, Annual Research Fund
1990-1991	Member, Self-Study Committee on Basic Science Facilities
1999-2001	Member, Accelerated BS/MD Admissions
1992-1994	Member, Executive Graduate Studies Program (Elected by
	Faculty)
1993-1994	Member, Executive Committee of the Academic Governing
4000 4004	Council  Magabara Biana dia da Brancara Baliana & Brancations
1993-1994	Member, Biomedical Program Policy & Promotions
1993-1994	Member, Medical Education Program Policy & Promotions
1993-1994 1993-1994	Chair, Middle States Association - Curriculum Committee
1990-1994	Member, Middle States Association - Coordinating Committee
University of Rochester	
1993-2003	Member, Undergraduate Admissions Network
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Wake Forest University School of Medicine		
1994-present	Interviewer at-Large, Medical Student Admissions	
1995-1999	Faculty Representative to Neuroscience Graduate Student	
	Body (Elected)	
1995-2004	Resource Partner, Howard Hughes Problem-Based Learning	
	Initiative	
1997-1998	Chair, Biosafety and Environmental Health Committee.	
1998-2001	Chair, Chemical Safety Committee	
1997-2003	Member, Medical Student Admissions and Biomedical	
	Relations Committee	
1997-2000	Member, Radiation Safety Committee	
1997-1998	Member, Curriculum for 2002 Phase III Committee	
	Subcommittee on Systems Integration & Pathophysiology II	
1998-2004	Member, Academic Merit Scholarship Committee	
1999-2002	Member, Undergraduate Medical Education (CUME).	
1999-2000	Member, Grading Committee	
1999-2001	Liaison Committee on Medical Education (LCME) Self-Study	
	Task Force, Educational Program for the MD Degree	
April-May, 2000	Member, Nutrition Research Center Faculty Review Panel	
2000	Member, Committee to Evaluate the Interdisciplinary Graduate	
	Program in Neuroscience	
2000-2004	Member, AMA Scholarship Committee	
2000-2003	Member, Graduate Council Committee (Elected by Graduate	
	Faculty)	
2000-2004	Member, Scholarship and Student Finance Committee (Sub-	
	Committee of the Admissions Committee).	
2000-2001	Member, Subcommittee, Course and Clerkship Evaluation	
	Plan	
2001-2004	Member, Chemical Safety Committee	
2002-2003	Member, Outstanding Doctoral (Ph.D.) Student Award	
	Committee	
2002-2003	Member, Research Advisory Committee (RAC) to the Dean	
2002-2003	Member, Research Excellence Award Committee	
2002-2003	Program Evaluation Committee (Medical Curriculum)	
2002-2004	Member, Bioterrorism Committee	
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# VANDERBILT UNIVERSITY SCHOOL OF MEDICINE

2005-2013 Member, Chemical Safety Committee

# ALBERT EINSTEIN COLLEGE OF MEDICINE

2014-present	iviember, Experimental Therapeutics Advisory Committee
2014-2016	Member, Faculty Senate

2014-2016 Member, Committee on Appointments and Tenure to

Professor

# **DEPARTMENTAL COMMITTEES:**

ALBANY MEDICAL COLLEGE

1989-1992 Member, Graduate Education 1990-1991 Member, Seminar Speaker Selection

DEPARTMENTAL COMMITTEES:
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EPAF	PARTMENTAL COMMITTEES:		
	ALBANY MEDICAL COLLEGE		
	1988-1994	Member, Sterling Visiting Professor	
	1999-2001	Member, Medical Education	
	1991-1994	Allied Health Teaching	
	WAKE FOREST UNIVERSITY SO	CHOOL OF MEDICINE	
	1994-1998	Member, Seminar Committee	
	1995-1997	Chair, Seminar Committee	
	1994-2004	Chair, Environmental Health and Safety Committee	
	1995-2000	Chair, Library Committee	
	1995-2004	Member, Graduate Studies Curriculum Committee	
	1995-1998	Chair, Departmental Facilities Committee	
	1995-1999	Member, Programmatic Area: Neuroscience	
	1995-1999	Member, Neuroscience Program Graduate Student	
		Recruitment Committee	
	1995-2001	Co-Chair, United Way Campaign	
	2000-2001	Member, PTCRC Animal Space Allocation Committee	
	2001	Chair, Strategic Planning Committee	
	2003-2004	Member, Promotions and Tenure Committee	
	2004	Member, Research Space Committee	
	VANDERBILT UNIVERSITY MED	ICAL CENTER	
	2005-2006	Department of Anesthesiology Junior Faculty	
		Advisory/Mentoring Committee	
	2005-2007	Member, Membership Committee Kennedy Center for	
		Research on Human Development	
	2005-2006	Member, Junior Faculty Mentoring Committee, Department of	
		Pediatrics	
	2006-2008	Member, Lecture Committee, Vanderbilt Kennedy Center for	
		Research on Human Development	
	2007-2008	Chair, Membership Committee, Vanderbilt Kennedy Center for	
		Research on Human Development	
	2007-2013	Member, Research Compliance and Effort (RCE) Committee	
	2009-2013	Member, Department of Pharmacology Core Curriculum	
		Committee	
	2010-2013	Member, Department of Pharmacology, Pharmacological	
		Sciences Training Program Oversight Committee	
	ALBERT EINSTEIN COLLEGE OF	MEDICINE	
	2014	Ad hoc Member, Committee on Appointments and Promotions	
	2014 – present	Member, Graduate Executive Committee	

ALBERT EINSTEIN COLLEG	GE OF MEDICINE
2014	Ad hoc Member, Committee on Appointments and Promotions
2014 – present	Member, Graduate Executive Committee
2015-2016	Co-Chair of the Professors Committee on Appointments and
	Promotions
2016-2017	Chair of the Professors Committee on Appointments and
	Promotions
2015-2017	Member, Committee on Patents
2016 – present	Member, Committee on Committee's, Faculty Senate

## PROFESSIONAL MEMBERSHIPS:

Society of Toxicology (since 1986)

American Society for Neurochemistry (since 1987)

Society for Neuroscience (since 1988)

International Neurotoxicology Association (since 1991)

New York Academy of Sciences (1990-2000) Research Society on Alcoholism (1998-2003)

Division of Environmental Chemistry, American Chemical Society (since 2002)

American College of Toxicology (since 2003) Israel Society for Neuroscience (since 2005)

International Society of Trace Element Research in Humans (since 2007)

# PROFESSIONAL APPOINTMENTS:

PROFESSIONAL APPOINTMENTS:	
1992-1994	Secretary/Treasurer, Neurotoxicology Specialty Section, SOT (Elected)
1992-1995	Member, Society of Toxicology (SOT) Placement Service
1993-1995	Chairman, SOT Placement Service (Appointed)
1995-1997	Sage Advisor, SOT Placement Service (Appointed)
1995-1996	Vice President-Elect, Neurotoxicology Specialty Section (NSS), SOT (Elected)
1996-1997	Vice President, Neurotoxicology Specialty Section, SOT (Elected)
1997-1998	President, Neurotoxicology Specialty Section, SOT, (Elected).
1998-1999	Member, Executive Committee, Neurotoxicology Specialty Section, SOT
1995-1999	Award Committee for Predoctoral and Postdoctoral Students, Neurotoxicology Specialty Section, SOT (Appointed; Chair, 1999)
1998-1999	President-Elect, International Neurotoxicology Association (Elected)
1999-2001	President, International Neurotoxicology Association (Elected).
2001-2003	Member, Executive Committee, International Neurotoxicology Association
2004-2007	Member, Publicity, Public Policy and Education Committee, American Society of Neurochemistry
2006-	Member, Program Committee, American College of Toxicology
2006-2007	Member, Nomination Committee, Neurotoxicology Specialty Section, SOT
2007-2010	Member, Program Committee, Society of Toxicology
2008-2010	Member, Education Committee, American College of Toxicology (ACT)
2014-2015	President, International Society for Trace Elements Research

in Humans

# GRANTS: CURRENT, PENDING, AND PAST SUPPORT:

CURRENT SUF	PPORT:
2010-2016	NIEHS R01 ES07331 (14-21), Total Direct Costs-\$1,250,000; Title: Mechanisms of Methylmercury-induced Neuronal Toxicity. M Aschner, Principal Investigator, 33.3% effort.
2012-2017	NIEHS R01 ES10563 (13-19), Total Direct Costs-\$2,100,000. Title: Mechanisms of manganese neurotoxicity; M Aschner, AB Bowman, Principal Investigators, Multiple PI proposal, 20% effort.
2012-2016	The Acrylonitrile Group, Total Direct Costs-\$360,000; Title: Differential Sensitivity of Astrocytes and Microglia to In Vivo Acrylonitrile Treatment. M Aschner, Principal Investigator, 10% effort.
2012-2017	NIEHS 1R01 ES020852, Total Direct Costs-\$1,250,000; Title: Genetic Modulation of MeHg-Induced Oxidative Stress in the Developing Brain. M. Aschner, Principal-Investigator, 20% effort.
2013-2016	Title: CNPq - National Council for Scientific and Technological, International cooperation; FAA Soares, Principal Investigator (University of Santa Maria, Rio Grande do Sul, Brazil); M Aschner, Co-investigator, 0% effort.
2014-2019	NIEHS 2R01 ES016931-06A1, Total Direct Costs-\$1,250,000. Title: Gene- Neurotoxicant Interactions in Huntington Disease. AB Bowman, PI (Vanderbilt University Medical Center), M Aschner, Co-I, 3% effort.
2013-2017	Virtual Consortium for Translational/Transdisciplinary Environmental Research (ViCTER), supplement to R01 ES10563 (13-19), Total Direct Costs-\$750,000. Title: The Role of Manganese in Restless Leg Syndrome (RLS); M Aschner, AB Bowman (Vanderbilt University Medical Center), Principal Investigators, Multiple PI proposal, 5% effort.
2015-2020	NIEHS R01 ES024756-01A1, Total Direct Costs-\$289,200. Title: Mechanisms of manganese-induced impairment of astrocytic glutamate transporters. E Lee, PI (Meharry Medical College), M Aschner, Co-I, 10% effort.
2015-2017	NIEHS 1R03 ES024849, Total Direct Costs-\$100,000. Title: Retinal Neurotoxicity of Manganese Exposure. Nancy Parmalee, PI, M Aschner, Co-I, 3% effort.
2015-2020	NIEHS R01 ES024812-01, Total Direct Costs-\$101,920. Regulation of Manganese Homeostasis and Detoxification by SLC30A10. Somshuvra Mukhopadhyay (University of Texas at Austin), PI, M Aschner, Co-I, 5% effort.
2015-2017	NIEHS 1R21 ES025415-01A1, Total Direct Costs-\$275,000. Title: Genetic Susceptibility to Manganese Neurotoxicity. M Aschner, Principal-Investigator, 10% effort.
2016-2021	NIEHS R01 ES07331 (21-26), Total Direct Costs-\$1,250,000; Title: Mechanisms of Methylmercury-induced Neuronal Toxicity. M Aschner, Principal Investigator, 33.3% effort.

# PENDING SUPPORT:

2015-2020	NIH ?????, Total Direct Costs-\$55,590. Title: N-Modified Phosphatidylethanol-
	amines. S Davies, PI (Vanderbilt University Medical Center), M Aschner, Co-I, 3%
	effort.
2015-2020	NIGM R01?????, Total Direct Costs-\$130,820. Title: Fluoroguinolone Safety:
	Prediction and Mechanism. B Golomb, PI (University of California at San Diego), M
	Aschner, Co-I, 5% effort.
2016-2018	Pan Chen?

PAST SUPPOR	RT'
1985-1987	NIEHS ES07026, Postdoctoral Fellowship (Institutional).
1987	PHS Project # 31, P4 1RR01828-03, the Role of Methylmercury (MeHg) Transport in
	MeHg Toxicity.
1988-1989	BRSG S07RR05394-26, In Vitro Lead Exposure: Its Effect on Corticospinal Neuron
	Origin and Migration in the Rat. M Aschner, Principal Investigator, 20% effort.
1992-1994	USEPA R-819210, Total Direct Costs-\$189,941, The Role of Astrocytes in
	Methylmercury Neurotoxicity. M Aschner, Principal Investigator, 25% effort.
1989-1995	FIRST AWARD, NIEHS 1R29 ESO5223, Total Direct Costs-\$347,635, Manganese
	Transport across the Blood-Brain Barrier. M Aschner, Principal Investigator, 50% effort.
1996-1998	USEPA R-824087 (Renewal of R-819210), Total Direct Costs-\$180,781, the Role of
1990-1990	Astrocytes in Methylmercury Neurotoxicity. M Aschner, Principal Investigator, 25%
	effort.
1996-1999	NIH R01DA10467, Total Direct Costs-\$336,782, AIDS, Drug Abuse and Cellular
	Neurotoxicity, BA Bennett, Principal Investigator, M Aschner, Co-Investigator, 5%
	effort.
1997-1999	NIAAA R03, Total Direct Costs-\$69,808, Analysis of brain glucose metabolism by <sup>13</sup> C
	NMR. CC Cunningham, Principal Investigator, M Aschner, Consultant, 0% effort
0.044000	(supplies only).
8-9/1999	American Physiological Society, Physiology Insights Fellowship support for Dr.
1999	Sharon C. Roseman, Instructor of Biology, Lenoir-Rhyne College, \$8,600.  NIAAA R01, AA11617, supplement, Total Direct Costs-\$2,000, Astrocyte Mediated
1999	Ethanol Neurotoxicity. M Aschner, Principal Investigator, 0% effort.
1998-1999	Center for Investigative Neurosciences, Total Direct Costs-\$12,069, Wake Forest
.000 .000	University School of Medicine Involvement of Heavy Metals in Dopamine
	Neurotoxicity, KE Vrana, Principal Investigator; M Aschner, Co-Investigator, 5%
	effort.
1996-2000	NIEHS R01 ES07331 (01-04), Total Direct Costs-\$472,629, Mechanisms of
	Methylmercury-Induced Neuronal Toxicity, M Aschner, Principal Investigator, 25%
1005 1000	effort.
1995-1999	NIAAA 5T32 AA07565, Total Direct Costs-\$867,843, Multi-Disciplinary Training in the Biology of Alcoholism. HH Samson, Director, M Aschner, Training Faculty, 5%
	effort.
1999-2000	Contract, University of California, Center for Accelerator Mass Spectrometry,
.000 =000	Lawrence Livermore National Laboratory, Livermore, CA. Analysis of Astrocytes and
	protein Extracts from Astrocytes exposed to Methylmercury by μ-PIXE. Total Direct
	Costs-\$14,750, M Aschner, Principal Investigator, 5% effort.
1999-2001	International Institute of Manganese, Total Direct Costs-\$174,400, Manganese:
	Oxidative Stress and Bioenergetics, M Aschner Principal Investigator, 20% effort.
2000-2001	NIEHS R01 ES07331, Total Direct Costs-\$49,974. Administrative Supplement for
	Microarray Studies in Environmental Health Sciences. M Aschner, Principal
1996-2002	Investigator, 0% effort.  NCRC, 2 P20 RR11583, Total Direct Costs-\$152,776, Research Infrastructure for
1990-2002	Minority Institutions (RIMI) Astrocyte Gene Expression & Methylmercury
	Neurotoxicity, KH Tan, Principal Investigator, (Project 1) Subcontract from Winston-
	Salem State University; M Aschner Co-Investigator, 10% effort.
1998-2003	NIAAA R01AA11617, Total Direct Costs-\$580,000, Astrocyte Mediated Ethanol
	Neurotoxicity. M Aschner, Principal Investigator, 30% effort.

PAST SUPPOR	RT.
1999-2004	NIAAA 5T32 AA07565 (05-09), Total Direct Costs-\$1,296,891, Multi-Disciplinary
	Training in the Biology of Alcoholism. HH Samson, Director, M Aschner, Training
	Faculty, 2% effort.
2000-2003	Syngenta, Total Direct Costs-\$135,300. The Discovery of an Appropriate Animal
	Model for Prepubertal Toxicity Testing of Neurotoxic Agents and Chemicals that
	Interact with the P-Glycoprotein Active Transport System. JT Stevens, Principal
	Investigator; M Aschner Co-Principal Investigator, 10% effort.
2001-2003	NSF s.a., France, Total Direct Costs-\$145,326. Effect of Acrylamide on Astrocyte
	Proliferation. M Aschner, Principal Investigator, 15% effort.
2003	NIEHS R13 ES012418, Total Direct Costs-\$12,000. 9th International Neurotoxicology
	Association (INA) Meeting in Dresden, Germany. M Aschner, Principal Investigator,
	0% effort.
2000-2003	NIEHS R01 ES07331 (05-08), Total Direct Costs-\$700,000, Mechanisms of
	Methylmercury-induced Neuronal Toxicity. M Aschner, Principal Investigator, 30%
	effort.
2003-2004	NanoSonic, Inc., Total Costs-\$10,000. Neurotoxicity associated with nanospheres. M
	Aschner, Principal Investigator, 1% effort.
2004	International Society of Neurochemistry. Total Direct Costs-\$6,000. Support for
	young investigators to attend the Fifth International Conference on Metallothionein:
	Metal and Metallothionein in Biology and Medicine, Beijing China, October 10-13,
	2004. M Aschner, Principal Investigator, 0% effort (\$ returned; due to SARS
	epidemic conference was cancelled).
2001-2004	NIEHS, P32 ES07331, Total Direct Costs-\$1,071,059. Multidisciplinary Training in
	Molecular Toxicology, AJ Townsend (Wake Forest University School of Medicine),
0004 0004	Director; M Aschner, Training Faculty, 2% effort.
2001-2004	NIAAA 5T32 AA07565 (09-14), Total Direct Costs-~\$1,350,000, Multi-Disciplinary
	Training in the Biology of Alcoholism. K Grant, Director (Wake Forest University
2004-2010	School of Medicine), M Aschner, Training Faculty, 2% effort.  NIEHS R01 ES07331 (09-13), Total Direct Costs-\$1,250,000; Title: Mechanisms of
2004-2010	Methylmercury-induced Neuronal Toxicity. M Aschner, Principal Investigator, 20%
	effort.
2005	International Society of Neurochemistry. Total Direct Costs-\$6,000. Support for
2000	young investigators to attend the Fifth International Conference on Metallothionein:
	Metal and Metallothionein in Biology and Medicine, Beijing China, October 8-12,
	2005. M Aschner, Principal Investigator, 0% effort.
2005-2006	NIEHS P30 000267 Total Direct Costs-\$40,000; Pilot Project from the Molecular
	Toxicology Center; Title: Manganese and MR Spectroscopy. V Fitsanakis, Principal
	Investigator; M Aschner, Co-Principal Investigator, 0% effort (no salary support).
2001-2006	NIEHS R01 ES10563 (04-07), Total Direct Costs-\$750,000; Title: Blood-Brain Barrier
	Transport of Methylcyclopentadienyl Manganese Tricarbonyl (MMT). M Aschner,
	Principal Investigator, 20% effort.
2001-2005	US Army Department of Defense (DoD), DAMD17-01-1-0685, Total Direct Costs-
	\$560,000; Title: Blood-Brain Barrier Transport of Uranium. M Aschner, Principal
	Investigator, 19% effort.
2001-2006	Subcontract from Afton Chemical Company, Richmond, VA and the Chemical
	Industry Institute of Toxicology (CIIT), Total Direct Costs-\$700,000, Tier II
	Supplement to: The Effects of Manganese on Brain. M Aschner, Principal
	Investigator, 1% effort.

PAST SUPPOR	RT:
2007-2010	DoD Phase II STTR, Total Direct Costs-\$78,174. Title: A Systems Biology Approach
	to Enable Safe Administration of Mefloquine. J Jenkins, Principal Investigator (CDF Research Corporation); M. Aschner, Co-Investigator, 5% effort.
2006-2007	NIEHS P30 000267 Total Direct Costs-\$40,000. Pilot Project from the Molecular
	Toxicology Center; Title: Anticholinesterase neurotoxicity is mediated by oxidative
2000 2007	injury. D Milatovic, Principal Investigator; M Aschner, Co-Investigator, 0% effort.
2006-2007	Department of Defense. Total Direct Costs-\$14,570. Title: Neurotoxic mechanisms of the anti-malarial drug mefloquine. J Jenkins, Principal Investigator (CDF Research
	Corporation); M. Aschner, Co-Investigator, 1% effort.
2006-2009	NIEHS, ES R21, Total Direct Costs-\$275,000. Mitochondrial Oxidative Stress and
	Protection in Pesticide-Induced Neurotoxicity. J Cai, Principal Investigator (Vanderbilt University Medical Center); M Aschner, Co-Investigator, 5% effort.
2006-2009	1ES013730, Total Direct Costs-\$275,000; Title: Brain Manganese Uptake in High
	Risk Neonates. J Aschner (Vanderbilt University Medical Center), Principal
2000	Investigator; M Aschner Co-Principal Investigator, 5% effort.
2009	RES017370A, Total Direct Costs-\$7,500. Title: International Neurotoxicology Association 12, PA08-149, NIH Support for Conferences and Scientific Meetings; M
	Aschner, Principal Investigator, 0% effort.
2007-2009	Pilot Grant, Simons Foundation, Total Direct Costs-\$265,000. Title: MET Receptor
	Tyrosine Kinase and Autism Spectrum Disorder. P Levitt, Principal Investigator (Vanderbilt Kennedy Center for Research on Human Development); DB Hood, Co-Pl
	(Meharry Medical College); M Aschner, Consultant, 0% effort.
2007-2010	R21, Total Direct Costs-\$275,000. Anticholinesterase neurotoxicity is mediated by
	oxidative injury. D Milatovic, Principal Investigator; M Aschner, Co-Investigator, 10% effort.
2009-2010	NIH SBIR 1R43GM087129-01, Total direct Costs-\$24,730, Title: Novel
	Physiologically Realistic Microfluidic in vitro Blood-Brain Barrier Model. S Sundaram,
	Principal Investigator (CDF Research Corporation); M. Aschner, Co-Investigator, 5% effort.
2006-2011	NIEHS 1 S11 ES014156-01, RFA-ES-009, Total Direct Costs-\$3,176,314; Title:
	Advanced Research Cooperation in Environmental Health (ARCH), Mechanisms of
	Polycyclic Aromatic Hydrocarbon Toxicity. Subcontract, Vanderbilt University Medical Center, Total Direct Costs- \$503,254.00. DH Hood, Principal Investigator; M
	Aschner, Research Intensive University (RIU) Leader, 10% effort (administrative).
2006-2011	The Gerber Foundation, Total Direct Costs-\$750,000; Title: Neurodevelopment and
	Neuroimaging in Parenterally-Fed Infants and Young Children. J Aschner (Vanderbilt
	University Medical Center), Principal Investigator; M Aschner Co-Principal Investigator, 5% effort.
2010-2011	The Acrylonitrile Group, Total Direct Costs-\$93,000; Title: Differential Sensitivity of
	Astrocytes and Microglia to In Vivo Acrylonitrile Treatment. M Aschner, Principal
2005-2011	Investigator, 5% effort.  Department of Defense (DoD), Total Direct Costs-\$4,593,986; Title: Manganese
	Health Research Program (MHRP). The funds will be administered by the Vanderbilt
	University Medical Center, and competitively awarded to other research institutions.
	M Aschner, Breakdown of Aschner effort follows:

PAST SUPPO	RT:
2005-2011	Department of Defense (DoD), Total Direct Costs-\$434,248; Title: Magnetic resonance imaging (MRI) of manganese accumulation in the rat brain associated with iron-deficiency and supplementation, Project 5, Manganese Health Research Program (MHRP). The funds will be administered by the Vanderbilt University
	Medical Center, and competitively awarded to other research institutions. M. Aschner, Principal Investigator, 3% effort.
2005-2011	Department of Defense (DoD) Award W81XWH-05-1-0239, Total Direct Costs-\$2,672,418. Administrative Core, Manganese Health Research Program (MHRP). The funds will be administered by the Vanderbilt University Medical Center, and competitively awarded to other research institutions. M. Aschner, Principal Investigator, 10% effort.
2005-2011	Department of Defense (DoD), Total Direct Costs-\$5,000; Title: Biomarkers of Early Onset of Manganese Neurotoxicities among Occupationally Exposed Chinese Workers Project 2, Manganese Health Research Program (MHRP). W Zheng (Purdue University), Principal Investigator; M Aschner consultant, 2% effort.
2005-2011	Department of Defense (DoD), Total Direct Costs-\$120,000; Pilot Project; Title: Role of Toxins and Genetics in Manganese-Induced Dopamine Neuron Degeneration. R Nass (Vanderbilt University Medical Center), Principal Investigator; M Aschner Co-Principal Investigator, 8% effort.
2005-2011	Department of Defense (DoD), Total Direct Costs-\$120,000; Pilot Project; Title: Developing Biomarkers for Manganese Toxicity. B. McLaughlin (Vanderbilt University Medical Center), Principal Investigator; M Aschner Co-Principal Investigator, 5% effort.
2005-2011	Department of Defense (DoD), Total Direct Costs-\$120,000; Pilot Project; Title:  Mechanisms of Manganese-Induced Damage at the Cell and Mitochondrial Level T Gunter (University of Rochester School of Medicine and Dentistry), Principal Investigator; M Aschner Co-Principal Investigator, 0% effort (no salary support).
2006-2012	R01 ES10563 (7-12), Total Direct Costs-\$1,250,000. Title: Mechanisms of manganese neurotoxicity; M Aschner, Principal Investigator, 20% effort.
2006-2011	NIEHS, 1 R01 ES 014459-01, Total Direct Costs-\$1,125,000; Title: Molecular Genetics of Manganese-Induced Dopamine Neuron Toxicity. R Nass (Vanderbilt University Medical Center), Principal Investigator; M Aschner Co-Principal
2006-2011	Investigator, 5% effort.  NIEHS, ES R01, Total Direct Costs-\$226,982; Title: Mitochondrial Role in  Manganese Toxicity. TE Gunter (University of Rochester School of Medicine and Dentistry), Principal Investigator; M Aschner Co-Principal Investigator, 9% effort.
2006-2010	NIEHS, 1 S11 ES014156-01, RFA-ES-009, Total Direct Costs-\$133,119; Title: Advanced Research Cooperation in Environmental Health (ARCH), Mechanisms of Polycyclic Aromatic Hydrocarbon Toxicity. Project 4: Mechanisms of B(a)P Induced Neurotoxicity. DH Hood (Meharry Medical College), Principal Investigator; M Aschner Co-Principal Investigator, 5% effort.
2009-2012	Proposal 2007214, Title: United States - Israel Binational Science Foundation (BSF), Total Direct Costs-\$142,000, Characterization of a novel counter-irritating peptide and its mechanism of action. Wormser U (Hebrew University, Jerusalem, Israel), Principal Investigator; M Aschner, Co-Investigator, 0% effort.
2009-2012	Susan G. Komen for the Cure, #KG090434, Real Time Assessment Of Self-Reporting Chemotherapeutics For Targeted Treatment Of Metastatic Breast Cancer, O McIntyre, (Vanderbilt University Medical Center, Cancer Biology), Principal Investigator; M Aschner, Co-Investigator, 5% effort.

	DT.
PAST SUPPO 2009-2012	
2009-2012	NIEHS K12 grant. Title: Influence of Perinatal Exposure to Methylmercury and Bisphenol A on Neurophysiology and Neurodevelopment of Premature Infants. The Vanderbilt Environmental Health Science Scholars (VEHSS) Program, Vanderbilt University School of Medicine. Institutional Patient-Oriented Career Development
	Program in the Environmental Health Sciences. N Maitre, PI (Vanderbilt University Medical Center), M Aschner, Mentor, 0% effort.
2009-2012	RGA0903, Environment and Health Fund, Israel, Total Direct Costs-\$283,000, Title: Organophosphates in Hula Basin: atmospheric levels, transport, degradation products and neurotoxic hazards in children following low-level long-term exposure. Y Finkelstein and Y Dubowski, Principal Investigators (Israel), M Aschner, Co-Investigator, 2% effort.
2008-2013	1R01ES016931-01, Title: Mechanisms of Gene-Environment Interactions between Manganese Exposure and the Pathophysiology of Huntington disease. A Bowman (Vanderbilt University Medical Center, Neurology), Principal Investigator; M Aschner, Co-Investigator, 5% effort.
2010-2013	5P30 ES000267-44, Center in Molecular Toxicology, Total Direct Costs-\$914,899/yr, M Aschner, Principal Investigator, 20% effort.
2009-2013	5T32 ES007028-37, Training Program in Environmental Toxicology, Total Direct Costs-\$546,265/yr, M Aschner, Principal Investigator, 10% effort.
2008-2013	1T32 MH 064913-06, Total Direct Costs-\$4,058,131, Training in Fundamental Neuroscience. Mark Wallace, Director (Vanderbilt University Medical Center), M
2008-2013	Aschner, Training Faculty. 5T32 GM 007628-31, Total Direct Costs-\$3,056,737, Training in Pharmacological Sciences. H Hamm, Director (Vanderbilt University Medical Center), M Aschner,
2009-2014	Training Faculty. 5T32 ES 007028-31, Total Direct Costs-\$3,088,415, Training Program in Environmental Toxicology. PF Guengerich, Director (Vanderbilt University Medical Contact) M Applying Faculty.
2008-2013	Center), M Aschner, Training Faculty. 5T32 Training Program in Human Genetics. S Williams, Director (Vanderbilt University Medical Center), M Aschner, Training Faculty.
2007-2012	5T32 Training Program in Human Genetics. J. Haines, Director (Vanderbilt University Medical Center), M Aschner, Training Faculty.
2007-2012	Environmental Health Science Scholars Program, NIEHS (K12), Vanderbilt Physician Scientist Development (VPSD) Awards Program. N Brown, PI (Vanderbilt
2008-2013	University Medical Center), M Aschner, Training Faculty. 2T32 HD 049337-01, Total Direct Costs-\$1,280,605, Postdoctoral Training Program in Developmental Pharmacology. J Barnett, Director (Vanderbilt University Medical Center), M Aschner, Training Faculty.
2012-2013	3P30 ES000267-45S1, Total Direct Costs-\$75,000; Title: Supplement to Molecular Toxicology Center. M Aschner, Principal Investigator, 1% effort.
2012-2013	NIEHS R01 ES07331-17S1, Total Direct Costs-\$45,000; Title: Diversity Supplement for Ebany Martines-Finley, Mechanisms of Methylmercury-induced Neuronal
2013-2014	Toxicity. M Aschner, Principal Investigator, 0% effort.  1R13 ES023270-01, Total Direct Costs-\$15,000. Title: 14th Biennial Meeting of the International Neurotoxicology Association: The Neurodevelopmental Basis of Health
2010-2015	and Disease in Neurotoxicology; M Aschner, Principal Investigator, 0% effort.  RO1HL097566. Title: Chronic progressive hypoxia-induced pulmonary hypertension in newborns. C. Fike, PL (Vandarbitt University Medical Center), M Aschner, Co. L. 5%

effort.

in newborns. C Fike, PI (Vanderbilt University Medical Center), M Aschner, Co-I, 5%

# PAST SUPPORT:

2012-2015	NIGM 2R44GM087129, SBIR, Subcontract from CFDRC, Huntsville, AL, Total Direct Costs-\$, \$57,935; Title: A Novel Physiologically Realistic Microfluidic In-Vitro Blood-
	Brain Model. M. Aschner, Co-Investigator, 5% effort.
2014	Title: Gene expression in manganese (Mn) exposed <i>C. elegans</i> . Total Direct Costs-
	\$4,800. Rose F. Kennedy Intellectual and Developmental Disabilities Research
	Center NGEN Core Micro-Grants; M Aschner and NL Parmalee (PIs), 0% effort.
2014-2015	Albert Einstein College of Medicine, Global Health Center pilot project. Total Direct
	Costs-\$289,200. Title: Mixed Metal Exposures and Developmental Outcomes of
	Children Less than 5 Years Old: Exposure to Lead and Manganese. M Markowitz,
	PI, M Aschner, Co-I, 0% effort. Funded, but refused by PI due to budget cut.

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- Neuromethods, Cell Culture Techniques, Series Ed. W Walz, Volume Ed. Aschner M, Sunol C, Price A. Springer Science-Business Media, ISSN: 0893-2336, 2011.
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#### LECTURES AND PRESENTATIONS:

Department of Radiation Biology and Biophysics, University of Rochester School of Medicine and Dentistry, Rochester, NY, June 1985.

Review of Current Concepts in Methylmercury Toxicity with Major Emphasis on its Effects on the Protein Synthetic Machinery and Axonal Transport. "Jozef Stefan" Institute, Ljublijana, Yugoslavia, November 1985.

Mechanisms of Methylmercury Brain Uptake and Axonal Transport. Department of Pharmacology, Hebrew University, Jerusalem, Israel, November 13, 1986.

Effects of Methylmercury on Axonal Transport and CNS Methylmercury Uptake Mechanisms. Department of Pharmacology and Toxicology, Albany Medical College, Albany, NY, November 26, 1986.

Methylmercury Uptake across the Blood-Brain Barrier. Hudson-Berkshire Chapter of the Society of Neuroscience, Albany, NY, January 30, 1989.

Methylmercury Uptake and Influx in Primary Astrocyte Cultures. Division of Neurosurgery, Albany Medical College, Albany NY, April 5, 1989.

Mechanisms of Methylmercury-Induced CNS Injury: Role of Neutral Amino Acids. BRSG Lecture Series, Albany Medical College, Albany, NY, September 13, 1989.

Advances in Toxicology and the Implications for Pediatricians. Pediatric Grand Rounds, Albany Medical College, Albany, NY, May 23, 1990.

The Use of Astrocytes in Culture as Model Systems for Evaluating Neurotoxic-Induced-Injury. Eighth International Neurotoxicology Conference, Little Rock, AR, October 4, 1990.

Mercury Toxicity. N.Y. State Department of Health, School of Public Health, Albany, NY, November 1, 1990.

Manganese Transport across the Blood-Brain Barrier, Conference on Research Needs to Assess the Health Risks of Manganese, co-sponsored by the U.S. EPA and NIEHS, Research Triangle Park, NC. March 12-15, 1991.

Advances in Pharmacology and Toxicology and the Implications for Pediatricians. Pediatric Teaching Week, "Towards the Year 2000 - A Pediatric Update", Cordoba, Argentina, April 12, 1991.

Astrocytes: A Possible Link to Methylmercury Neurotoxicity. International Association of Great Lakes Research, Buffalo, NY, June 4, 1991.

The Role of L-Cysteine in Methylmercury Transport in Astrocytes. Second International Congress on Amino Acids and Analogues, Vienna, Austria, August 9, 1991.

The Role of Astrocytes in Metal Neurotoxicity, Immunology Research Meetings, Albany Medical College, Albany, NY, September 22, 1992.

The Role of Astrocytes in Metal Neurotoxicity, Institute of Environmental Medicine, New York University Medical Center, Tuxedo Park, NY, October 14, 1992

Lead Exposure in the Pediatric Population: Status Report, Pediatric Journal Club, Department of Pediatrics, Albany Medical College, Albany, NY, January 28, 1993.

Blood-Brain Barrier: Mn (II) and Iron Homeostasis. Workshop on Trace Metal Ions in the CNS: Dynamics and Regulation. American Society for Neurochemistry, Richmond, VA, March 24, 1993.

Effects of Heavy Metals on Astrocytic Homeostasis: Correlation with -SH Reagents. Symposium: "The Role of Glia in CNS Pathology and Repair: Basic and Clinical Aspects". Polish Academy of Sciences, Warsaw, Poland, June 14, 1993.

Mercurial- and -SH-Induced Alterations in Glutamate Homeostasis. Symposium: "Heavy Metal-Induced Alterations in Excitable Membranes". International Biophysics Satellite Congress, Tihany, Hungary, July 22-24, 1993.

Heavy Metal-Induced Neurotoxicity, Departments of Biochemistry and Molecular Biology, and Medicine Seminar Series, Albany Medical College, Albany, NY, November 8, 1993.

The Role of Astrocytes in Mercury Neurotoxicity. Department of Physiology and Pharmacology, Wake Forest University School of Medicine of Wake Forest University, Winston-Salem, NC, January 25, 1994.

-SH Groups and the Release of D-Aspartate and Rubidium from Swollen Astrocytes, Invited Platform Presentation, American Society for Neurochemistry, Albuquerque, NM, March 9, 1994.

The Astrocyte. Continuing Education Course: "In Vitro Neurotoxicology". Society of Toxicology, Dallas, TX, March 13, 1994.

Does Metallothionein Protect against Mercury Neurotoxicity? Hudson-Berkshire Chapter of the Society of Neuroscience, Albany, NY, April 4, 1994.

Astrocytes as a Target Site for Neurotoxicity. In: Alternatives in the Assessment of Toxicity: Theory and Practice. Aberdeen Proving Ground, MD, May 26, 1994.

Manganese Homeostasis in the CNS, Workshop on the Bioavailability and Oral Toxicity of Manganese, sponsored by the EPA, Omni Netherlands Plaza, Cincinnati, OH, August 30-31, 1994.

Metallothionein Attenuates Methylmercury Toxicity in Astrocytes. In: Neurotoxicity of Mercury: Indicators and Effects of Low Level Exposure. Twelfth International Neurotoxicology Conference, Hot Springs, AR, October 30 - November 2, 1994.

1995 Cadmium Chloride-Induced Metallothionein Expression in Neonatal Rat Primary Astrocyte Cultures, Poster-Discussion Session, Society of Toxicology Meeting, Baltimore, MD, March 11, 1995.

Methylmercury in Astrocytes - What Possible Significance? US Environmental Protection Agency (EPA), Research Triangle Park, NC, May 18, 1995.

Careers in Science; Forbush Elementary School; East Bend, NC; Research! NC Speakers Bureau, Target Health, May 24, 1995.

Astrocyte: Biochemical and Pathophysiologic Perspectives, Glial Club, Wake Forest University School of Medicine, Winston-Salem, NC, June 5, 1995.

Astrocytes as Modulators of Mercury-Induced Neurotoxicity. In: The Role of Glia in Neurotoxicity, Fifth Meeting of the International Neurotoxicology Association (INA), Port Ludlow, WA, June 27, 1995.

Do Astrocytes Mediate Developmental Neurotoxicity? Department of Obstetrics/Gynecology, Perinatal Group, Wake Forest University School of Medicine, January 31, 1996.

Astrocytes as Modulators of Neurotoxicity, Department of Biochemistry, Wake Forest University School of Medicine, February 6, 1996.

Heavy Metal- and pH-Induced Metallothionein Expression in Astrocytes. In: Symposium, Brain Metallothioneins: The Role in Physiology and Pathology, Society of Toxicology Meeting, Anaheim, CA, March 11, 1996.

Astrocytes and Metal Toxicity. Tutorial, Neuroscience Program, Wake Forest University School of Medicine, Winston-Salem, NC, March 22, 1996.

Astrocyte Metallothioneins and Their Neuroprotective Role. In: Third International Conference on Neuroprotective Agents: Clinical and Experimental Aspects, Varenna, Lake Como, Italy, September 12, 1996.

Invited Speaker and Discussants to the Kansas Idea Symposium/Work Session, Oxidative Regulation of Gene Expression: Role in Neurodegenerative Diseases, University of Kansas Medical Center, Kansas City, KS, October 10 - 12, 1996.

Glial Modulation of Immune Responses. In: Neuroimmunotoxicology, Fourteenth International Neurotoxicology Conference, Hot Springs, AR, October 13 - 16, 1996.

Current Issues in Manganese Neurotoxicity, Chemical Industry Institute of Toxicology (CIIT), Research Triangle Park, NC, October 29, 1996.

Manganese Homeostasis in the CNS. In: Interactive Panel, How Metals Become Available in the Brain to Induce Oxidative Injury, Winter Conference on Brain Research, Breckenridge, CO, January 28, 1997.

Manganese Neurotoxicity. In: Workshop, Should Manganese be added to Gasoline: Making Rational Public Policy in the Face of Uncertainty. Society of Toxicology Meeting, Cincinnati, OH, March 11, 1997.

Metallothioneins as Neuroprotectants. In: Brain Metallothioneins, Sixth Meeting of the International Neurotoxicology Association (INA), Szeged, Hungary, July 3, 1997.

Manganese. Invited lecture. In: Advanced Training Seminar on Heavy Metal Toxicology: Diagnosis and Treatment, Great Lakes College of Clinical Medicine, Pittsburgh, PA, September 17, 1997.

Induction of Metallothionein-I (MT-I) mRNA in Primary Astrocyte Cultures is Mediated by Hypotonicity and not Ethanol per se. In: The Fourth International Metallothionein Meeting, Kansas City, MO, September 17 - 20, 1997.

Manganese Distribution in the CNS. In: Manganese Transport and Distribution in the CNS? Fifteenth International Neurotoxicology Conference, Little Rock, AR, October 26, 1997.

Opportunities to Develop Collaborations within North Carolina, In: NC Chapter Society of Research Administrators Conference, Charlotte, NC, March 9, 1998.

In Utero Exposure to Mercury Vapor (Hg<sup>0</sup>) and Metallothionein Expression in Rat Brain and Astrocyte Cultures. International Academy of Oral Medicine and Toxicology (IAOMT), Durham, NC, March 14, 1998.

Functional Aspects of Astrocytic Metallothioneins. US Environmental Protection Agency (EPA), Research Triangle Park, NC, April 6, 1998.

Glial Function and Modulation of Immune Responses. International Congress of Toxicology (ICT), Paris, France, July 8, 1998.

Metallothioneins Attenuate MeHg-Induced Neurotoxicity in Cultured Astrocytes and Astrocytoma Cells. Fourth International Conference on Neuroprotective Agents, Annapolis, MD, November 16, 1998.

Neurotoxic Mechanisms, Classification. International Graduate School in Neurosciences, University of Tampere, Finland, December 7, 1998.

The Role of Glial Cells in Neurotoxicology. International Graduate School in Neurosciences, University of Tampere, Finland, December 7, 1998.

Neurotoxic Mechanisms of Metals. International Graduate School in Neurosciences, University of Tampere, Finland, December 8, 1998.

Metallothioneins, Metals, and CNS Protection. International Graduate School in Neurosciences, University of Tampere, Finland, December 9, 1998.

1999 Invited Seminar, Metallothioneins and Stress Signaling in Astrocytes, Department of Neuroscience & Anatomy, Penn State University School of Medicine, Hershey PA, February 4, 1999.

Molecular Mimicry of Metals. Advanced Continuing Education Course: "Metals". Society of Toxicology, New Orleans, LA, March 15, 1999.

Metallothionein and Astrocytic Stress-Response Signaling. In Workshop: Stress-Response Signaling in Glial Cells (Narayan Bhat, Chair), American Society of Neurochemistry, New Orleans, LA, March 16, 1999.

Astrocytes, Metallothioneins and Metals: Relevance to CNS Injury. In: Neuroscience Colloquium, Wake Forest University School of Medicine, Winston-Salem, NC, April 16, 1999.

Manganese Fuel Additives: an Emerging Threat? In: Environmental Influences on Children: Brain, Development, and Behavior. The New York Academy of Medicine, New York, NY, May 24, 1999.

Manganese in Health and Disease. In: Scientific Advisory Group Meeting, International Manganese Institute, Biarritz, France, June 11, 1999.

Methylmercury and Glutamate Transport in Astrocytes. In: Glutamate-Glutamine Homeostasis in the CNS: Physiological and Pathological Aspects. Wierzba, Poland, June 20, 1999.

Transfection and Overexpression of Metallothionein-I (MT-I) in MT-I/MT-II Knockout (MT-KO) Mice Increases Their Resistance to Methylmercury (MeHg-Induced Cytotoxicity). International Neurotoxicology Association Meeting, Leicester, July 5, 1999.

Induction of Astrocyte Metallothioneins by Zinc Confers Resistance against the Acute Cytotoxic Effects of Methylmercury. In Workshop on "Zinc in Astroglial and Muller Cells: Multiple Physiological Functions". European Society for Neurochemistry/International Society for Neuroscience, Berlin, August 10, 1999.

Neuronal-Glial Interactions: Molecular Targeting by Developmental Neurotoxins. In: Seventeenth International Neurotoxicology Conference. Little Rock, AR, October 18, 1999.

Metallothionein and Astrocytic Stress-Response Signaling. Invited Seminar, Health Sciences Center, College of Pharmacy, University of Oklahoma, Oklahoma City, OK, November 11, 1999.

Metallothionein and Astrocytic Stress-Response Signaling. Invited Seminar, Department of Physiology and Pharmacology, Wake Forest University School of Medicine, Winston-Salem, NC, November 18, 1999.

2000 Glial Role in Alcohol-Induced Neurotoxicity upon Acute Alcohol Withdrawal, at The Center for the Neurobehavioral Study of Alcohol at Wake Forest University School of Medicine, Winston-Salem, NC, January 18, 2000.

The Toxicology of Mercury. Invited Seminar, Environmental Health Institute, Oklahoma State University, Stillwater, OK, April 13, 2000.

Mercury Toxicity. Invited Lecture, Mercury Toxicity Workshop, American College for the Advancement in Medicine, Dallas, TX, May 4, 2000.

Neurotoxic Mechanisms of Fish-Borne Methylmercury. Invited Seminar, International Association for Great Lake Research, Cornwall, Ontario, May 24, 2000.

Volume Changes in Primary Astrocyte Cultures Exposed to Ethanol. Fifth International Conference on Neuroprotective Agents, Lake Tahoe, CA, September 18, 2000.

Alcohol and Developmental Neurotoxicity: Effects on Glutamate Transporters. In: Eighteenth International Neurotoxicology Conference. Colorado Springs, CO, September 24, 2000.

Manganese: Reactive Oxygen Species and Bioenergetics. The International Manganese Institute and the Ferroalloys Association Scientific Advisory Groups Meeting. Winston-Salem, NC, October 5, 2000.

Hot Topics in Manganese and Mercury Neurotoxicity. Invited Seminar, Laboratory for Neurotoxicity Studies, Virginia-Maryland Regional College of Veterinary Medicine. Virginia Tech, Blacksburg, VA, November 28, 2000.

Astrocytic Stress-Response Signaling. Invited Seminar, Program in Neuroscience, Florida State University, Tallahassee, FL, December 6, 2000.

2001 Ethanol Decreases Zinc Transfer to the Fetus in Normal but not Metallothionein-Null Mice. Journal Club presentation, The Center for the Neurobehavioral Study of Alcohol, Wake Forest University School of Medicine, Winston-Salem, NC, January 16, 2001.

Neuropathogenesis of Mercury Toxicity. Microbiology, Immunology and Toxicology of Autism and Other Neurodevelopmental Disorders, the Banbury Center, Cold Spring Harbor Laboratory, NY, February 12, 2001.

Neuronal-Glial Interactions: Molecular Targeting by Methylmercury. Department of Pharmacology, Wright State University, Dayton, OH, March 15, 2001

Disposition-Related Neuronal Responses: Manganese Neurotoxicity from CNS Transport to Molecular Interactions. In: Neurotoxicology of Metals: Causes and Consequences. Basic Continuing Education Course. Society of Toxicology, San Francisco, CA, March 25, 2001.

Electronic Theses and Dissertations (ETDS). General Graduate Faculty meeting, WFU, April 23, 2001.

Methylmercury Toxicity Studies in Cell Cultures. In: Brain Energy Metabolism in Neurotransmission: Function and Dysfunction. Trondheim, Norway, May 21, 2001.

Key Note Address. Open Issues from 15<sup>th</sup> International Conference on Manganese. In: INFACON 9, Quebec City, Canada, June 4, 2001.

The Uptake of Manganese in Brain Endothelial Cultures. In: INFACON 9, Quebec City, Canada, June 4, 2001.

Effects of Manganese on Oxidative-Stress in CATH.a Cells. In: INFACON 9, Quebec City, Canada, June 4. 2001.

Effects of Mn on the Developing Rat Brain: Oxidative-Stress Related Endpoints. INFACON 9, Quebec City, Canada, June 4, 2001.

Needs for Future Research: Manganese and the Nervous System. INFACON 9, Quebec City, Canada, June 5, 2001.

Needs for Future Research: Manganese and the Nervous System. International Neurotoxicology Association, Estoril, Portugal, June 18, 2001.

Neuronal-Glial Interactions: Molecular Targeting by Methylmercury. In: International Neurotoxicology Association, Estoril, June 19, 2001.

The in vitro Uptake of Manganese (Mn) in Cultured CNS Endothelium and Astrocytes. In: Parkinson's Disease, Environment and Genes, Nineteenth International Neurotoxicology Conference, Colorado Springs, CO, August 27, 2001.

Manganese: Is it the New Toxic Troublemaker? Metal Binding in Medicine, Chelation Therapy Workshop, International College of Integrative Medicine, Cleveland, OH, October 3, 2001.

US Environmental protection Agency (EPA), Manganese Transport in the CNS: in vivo and in vitro Measurements, Research triangle Park, NC, November 29, 2001.

2002 Perchlorate Environmental Contamination: Toxicological Review and Risk Characterization. Laboratory Animal Studies: Neurotoxicity. Peer Review Workshop on EPA's Draft. Sacramento, CA, March 5, 2002.

Principles of Neurotoxicology. In Research Infrastructure in Minority Institutions (RIMI) Director's Meeting Symposium, Baltimore, MD, March 17, 2002.

Blood-Brain Barrier Transport of Metals: Implications in CNS Homeostasis of Essential and Nonessential Metals. In: Innovation in Toxicological Sciences, Blood-Brain Barrier Transport of Metals: Implications in CNS Homeostasis of Essential and Nonessential Metals, Society of Toxicology, Nashville, TN, March 21, 2002.

Astrocyte-Mediated Methylmercury Toxicity. In: Mercury in the Environment: Assessing and Managing the Multimedia Risk. SETAC, Orlando, FL, April 9, 2002.

Manganese Transport and Mechanisms of Neurotoxicity. Texas A & M University, College Station, TX, April 15, 2002.

Manganese Transport and Mechanisms of Neurotoxicity. University of Washington, Seattle, WA, May 16, 2002.

Inhaled manganese and oxidative-stress related endpoints in the rat brain. The Seventh International Highway and Urban Pollution Barcelona, Spain, May 22, 2002.

Manganese Transport and Mechanisms of Neurotoxicity. Kennedy Krieger Institute, Johns Hopkins University, Baltimore, MD, June 5, 2002.

Health Canada Symposium Neurotoxicology. Role of Gene Expression in Toxicology, Canadian Federation of Biological Societies (CFBS, 45th Annual Meeting), Montreal, Quebec, Canada, June 13, 2002.

Chlorpyrifos Transport across Rat Brain Endothelium 4 Monolayers. In: Confronting Neurotoxicology: Genetics, Environment and Behavior. 8th International Symposium on Neurobehavioral Methods and Effects in Occupational and Environmental Health, Brescia, Italy, June 25, 2002.

Acrylamide Neurotoxicity: Differentiating between Astrocytomas and Astrogliosis. In: SNF sa Industry Briefing, St. Gregory's Hotel, Washington, DC, August 8, 2002.

Manganese Neurotoxicity and Glutamate, In: Glutamine, Glutamate, and GABA in the CNS: Transport and Metabolism in Health and Disease. Wierzba, Poland, August 28, 2002.

Manganese Transport into the Brain: Interactions with Other Metals. Department of Biomedical Sciences, Iowa State University, Ames, IA, September 5, 2002.

The Acute Effects of Acrylamide on Astrocyte Functions. Sixth International Conference on Neuroprotective Agents, Hilton Head, SC, September 18, 2002.

Acrylamide Neurotoxicity. In: SNF sa Industry Briefing, Brussels, Belgium, October 10, 2002.

Transport and Neurotoxic Mechanisms of Manganese in the Brain. Seminar, University of Rochester, October 24, 2002.

Manganese Transport & Speciation in the Central Nervous System (CNS) In: Oxidative Injury and CNS Toxicity. International Society for the Study of Xenobiotics, Orlando, FL, October 29, 2002.

Keynote Speaker, The Neuron-Glia Unit in Neuropathology: Is it a Double-Edged Sword? In: Fourteenth General Assembly of the Japanese Society of Cerebral Blood Flow and Metabolism, Ohmiya, Saitama, Japan, November 14, 2002.

Blood-Brain Barrier Transport of Uranium. Department of Defense Workshop on Depleted Uranium, Albuquerque, NM, December 5, 2002.

Manganese Transport & Speciation in the Central Nervous System (CNS). Invited Speaker, Seminar, Department of Physiology at Ben-Gurion University, Beer Sheba, Israel, December 12, 2002.

Metal Neurotoxicity: New Insights into Neurodegeneration. Tutorial, Neuroscience Program, Wake Forest University School of Medicine, Winston-Salem, NC, February 14, 2003.

Glial Cultures, In: Continuing Education Course, Society of Toxicology, Salt Lake City, UT, March 9 2003.

Why is the Brain so Vulnerable to Toxins? In: Prescription for Science Literacy Workshop, "Chemicals, the Environment, and You: Explorations in Science and Human Health". Wake Forest University School of Medicine, April 2, 2003.

Metal Neurotoxicity. Department of Physiology and Pharmacology, Wake Forest University Health Sciences Center, April 24, 2003.

The role of Metallothionein in Protecting against Metal Neurotoxicity. In: Zinc Signaling, Cayman Islands, May 5, 2003.

Manganese (Mn) and Iron (Fe) Deficiency in Neurodegeneration. In: Role of Diet and Nutrition in Neurotoxicity, 9<sup>th</sup> International Neurotoxicology Association meeting, Dresden, Germany, June 23 2003.

Astrocyte-Mediated Methylmercury-Induced Toxicity. Environmental Health Science Center, University of Rochester School of Medicine and Dentistry, September 4, 2003.

Principles of Neurotoxicology: What Accounts for the Exquisite Vulnerability of the CNS to Toxins? Scandinavian In Vitro Toxicology Society, Murikka, Finland, September 19-21, 2003.

Astrocyte-Mediated Methylmercury-Induced Toxicity. Department of Neuroscience, University of Trondheim, Trondheim, Norway, September 22, 2003.

Perchlorate Neurotoxicity, University of Nebraska Medical Center PS<sup>3</sup> Symposium, Omaha, NE, September 29, 2003.

Manganese Toxicity, Transport, and Speciation in the CNS. Department of Biochemistry, Molecular Toxicology program, Vanderbilt University, Nashville, TN, January 19, 2004.

Manganese Toxicity, Transport, and Speciation in the CNS. Asian-Pacific Society of Neurochemistry, Hong Kong, February 4, 2004.

Workshop: Mechanisms of Methylmercury Toxicity – The Latent Phase. 21<sup>st</sup> International Neurotoxicology Conference (NTX XXI). Honolulu, Hawaii, February 12, 2004.

Manganese Transport and Speciation in the CNS. Faculty of Pharmacy, University of Lisbon, Lisbon, Portugal, March 2, 2004.

Transport of Manganese across the Blood-Brain-Barrier, its Distribution and Speciation in the CNS and Possible Mechanism(s) of Neurotoxicity. In: Health Effects, Clinical Research, and Industrial Hygiene Issues in Occupational Manganese Exposure. Conference sponsored by the U.S. Association of Occupational and Environmental Clinics and Tulane University Medical School, New Orleans, LA, April 17, 2004.

The Role of Metallothioneins in Heavy Metal Neurotoxicity, In: Second International Meeting for Autism Research (IMFAR); Special Symposium on Autism, Genes, and the Environment, Sacramento, CA, May 7, 2004.

Manganese Transport and Speciation in the CNS. MetaPhore Pharmaceuticals, Inc., St. Louis, MO, May 13, 2004.

Manganese Transport and Speciation in the CNS and its Implications for Neurodegeneration. In: Environmental Factors in Neurodegenerative Disorders, National Institute of Environmental Health Sciences, Research Triangle Park, NC, June 2, 2004.

Manganese Transport and Speciation in the CNS. In: Toxicology Forum, Aspen, CO, July 21, 2004.

Why is the Brain so Sensitive to Injury? Molecular Toxicology NIEHS Outreach Program, Videoconferencing with local and other US high schools. September 28, 2004.

Manganese Transport and Speciation in the CNS. Apoptosis Research Group, Vanderbilt University Medical Center, October 12, 2004.

Heavy Metals and Neurotoxicity, Open House, Center in Molecular Toxicology, Vanderbilt University Medical Center, October 30, 2004.

Transport and Oxidative Stress Measurements upon Manganese Exposure, EPA/Afton Briefing, CIIT CHS (Chemical Industry Institute of Toxicology, Center for Health Sciences), Research triangle Park, NC, November 4, 2004.

The Acute Effects of Acrylamide on Astrocyte Functions. Seventh International Conference on Neuroprotective Agents: Clinical and Experimental Aspects. Monterey, CA, November 17, 2004.

Neurotoxicology at Vanderbilt: The Future. Molecular Toxicology Center Retreat, Nashville, TN, January 22, 2005.

Developmental Effects of Mercury: Emphasis on Glial Effects. Cure Autism Now (CAN), White Matter Think Tank, Malibu, CA, February 4, 2005.

Live Broadcast, The Link between Environmental Mercury and Autism, "AirTalk," Larry Mantle <a href="http://www.scpr.org/programs/airtalk/index.shtml">http://www.scpr.org/programs/airtalk/index.shtml</a>, 89.3 KPCC FM, Pasadena, CA, March 21, 2005.

Thimerosal and Autism: The Vaccine Factor. In: Media Fellowship, Living with Autism: Rates, Causes and Treatment. Vanderbilt Children's Hospital, Nashville, TN, April 12, 2005.

Manganese transport, Speciation and Toxicity in the Brain, Seminar at Environmental and Occupational Health Science Institute, Rutgers University, Piscataway, NJ, April 14, 2005.

Manganese transport, Speciation and Toxicity in the Brain, Molecular Toxicology Center, Vanderbilt University Medical Center, Nashville, TN, April 18, 2005.

Manganese Transport and Speciation in the CNS, Seminar at the Department of Pharmacology and Toxicology, Indiana University School Of Medicine, Indianapolis, Indiana, April 19, 2005.

Manganese-Induced Oxidative Damage in the CNS, Oxidative Injury Research Group, Vanderbilt University Medical Center, Nashville, TN, May 12, 2005.

Metal Accumulation in Globus Pallidus, NINDS and NIH ORD Second Scientific Workshop on Neurodegeneration with Brain Iron Accumulation (NBIA), Gaithersburg, MD, May 19, 2005.

Outline of Research Program. Center in Molecular Toxicology Meeting with Oak Ridge National Laboratory, Vanderbilt University Medical Center, Nashville, TN, June 13, 2005.

What Do We Know about the Neurotoxicity of Thimerosal? Discussant, in: Oxidative Stress in Autism, Brain research Institute of NY, Staten Island, NY of June 16, 2005

Manganese Transport, Speciation, and Neurotoxicity. Department of Pediatrics, Vanderbilt University Medical Center, Vanderbilt Children's Hospital, Nashville, TN, June 20, 2005.

Manganese Transport, Toxicity and Speciation in the CNS. American Society of Neurochemistry, Madison, WI, June 26, 2005.

The Neurotoxicity of Manganese, Mechanisms and Speciation. In: Vulnerability of Brain Barriers to Toxicants and Disease, International Neurotoxicology Association (INA) 10, Porvoo, Finland, June 30, 2005.

Manganese Transport, Speciation and Toxicity in the Central Nervous System. In: Welding Conference, Morgantown, WV, July 23, 2005.

Manganese Transport, Toxicity and Speciation in the CNS. University of Porto Alegre, Brazil, August 22, 2005.

Mercury Neurotoxicity. University of Porto Alegre, Brazil, August 22, 2005.

Manganese Transport, Toxicity and Speciation in the CNS. University of Santa Maria, Brazil, August 24, 2005.

Mercury Neurotoxicity. University of Santa Maria, Brazil, August 24, 2005.

Manganese Transport, Speciation and Toxicity in the Central Nervous System, In: Glutamate in metabolism and neurotransmission: complex interactions at the inter- and intracellular level, Wierzba, Poland, August 29, 2005.

Manganese Transport in the Central Nervous System. In: Environment and Neurodevelopmental Disorders, Twenty-Second International Neurotoxicology Conference, Research Triangle Park, NC, September 14, 2005.

Neurotoxicity of Metals. Open House, Molecular Toxicology Center, Vanderbilt University Medical Center, Nashville, TN, October 1, 2005

Manganese Transport, Speciation and Toxicity in the Central Nervous System, MT-2005, Beijing, China, October 9, 2005.

Manganese Transport, Neurotoxicity and Speciation in the Brain. In: Southeastern Chapter of the Society of Toxicology, Meharry Medical College, Nashville, TN, October 21, 2005.

Manganese Neurotoxicity. Celebrating the Stahlman Chairs, in honor of Dr. Mildred Stahlman and family, Vanderbilt University Medical Center, Nashville, TN, November 21, 2005.

Use of magnetic resonance imaging (MRI) to determine brain manganese deposition in male Sprague Dawley rats. In: Annual meeting of the Israel Society for Neuroscience, Eilat, Israel, December 13, 2005.

Manganese transport, speciation and neurotoxicity, Zlotowski Center, Invited Senior Investigator lecture, Faculty of Health Sciences, Ben-Gurion University of the Negev, December 15, 2005.

2006 Manganese Transport, Toxicity and Speciation in the CNS. In: Winter Conference on Brain Research, Steamboat Springs, CO, January 21-27, 2006.

Developmental Neurotoxicity of Manganese. In: Grand Rounds, the Kennedy Center, Vanderbilt University Medical Center, Nashville, TN, February 1, 2006.

Distribution of Metals: Role of Metal Transporters and Selectivity of Disposition. In: Essentials of Metal Toxicology, Continuing Education Course, Society of Toxicology Annual Meeting, San Diego, CA, March 5, 2006.

Dietary Iron Modulates Manganese Neurotoxicity. In: Society of Toxicology Annual Meeting, Symposium on Determinants of Manganese Neurotoxicity: From Worms to Man. San Diego, CA, March 8, 2006.

Dietary Iron Modulates Manganese Neurotoxicity. In: Mn in CNS neurotoxicity and idiopathic Parkinson's disease, colloquium for the 37th annual meeting of the American Society for Neurochemistry (ASN), Portland, OR, March 14, 2006.

Manganese Neurotoxicity, Superfund Working Group, Oak Ridge National Laboratory, Oak Ridge, TN, March 22, 2006.

Seminar, Mercury Transport and Mechanisms of Neurotoxicity, Department of Anatomy and Neurobiology, University of Vermont, Burlington, VT, March 24, 2006.

Seminar, Manganese Transport, Toxicity and Speciation in the CNS, Center for Environmental Health in Northern Manhattan, Mailman School of Public Health, Columbia University, New York, NY, March 30, 2006.

Seminar, Mercury Transport and Mechanisms of Neurotoxicity, Waisman Center, Department of Pathology and Laboratory Medicine, University of Wisconsin-Madison, Madison, WI, April 12, 2006.

Overview of the Manganese Research Health Program, Site Visit Team to Zunyi Medical College, Zunyi, China, April 17, 2006.

Seminar, Manganese Transport, Mechanisms of Neurotoxicity, and Speciation. Department of Pharmacology, Zunyi Medical College, Zunyi, China, April 17, 2006.

Seminar, Manganese Transport, Toxicity and Speciation in the CNS, School of Public Health, Fudan University, Shanghai, China, April 19, 2006.

Mercury Bioindicators/Biomarkers, 4<sup>th</sup> International Conference on Environmental Bioindicators, Conference Center at the Maritime Institute, Linthicum Heights, Maryland. April 24, 2006

Brain Accumulation of Depleted Uranium (DU) in Rats Following 3- or 6-Month Treatment with Implanted DU Pellets, In: Military Health Research Forum, San Jose, Puerto Rico, May 2, 2006.

Manganese Transport, Toxicity and Speciation in the Nervous System: Recent Advances. Department of Environmental Health, University of Cincinnati, OH, May 10, 2006.

Seminar, Manganese Transport, Toxicity and Speciation in the CNS, Department of Pharmacology, University of North Dakota, Grand Forks, ND, May 12, 2006.

Manganese: Transport and Mechanisms of Neurotoxicity, 9th International Symposium on Metal Ions in Biology and Medicine, Lisbon, Portugal, May 22, 2006.

Manganese: Transport and Mechanisms of Neurotoxicity, International Conference of Occupational Health (ICOH) 2006, Fiera Milano Congressi, Milan, Italy, June 14, 2006.

Developmental Neuropathology of Environmental Agents: The Issues of Silent Neurotoxicity, Society of Toxicological Pathology, Vancouver, Canada, June 18, 2006.

Astrocyte-Neuron Interaction is altered by methylmercury (MeHg) and plays a major role in neurotoxicity. Brazilian Society of Biochemistry and Molecular Biology, Águas de Lindóia, San Paolo, Brazil, July 2, 2006.

Astrocyte-Neuron Cross-Talk is Modulating Methylmercury Neurotoxicity. In: Cell-cell Interactions in Organ System Toxicity, Gordon Conference, Colby College, New London, ME, July 27, 2006.

Neurotoxic Mechanisms of Heavy Metals: Ongoing Studies. Presentation for visiting personnel from CFD Research Corporation, Huntsville, AL. Vanderbilt University Medical Center, Nashville, TN, August 19, 2006.

Seminar, the Neurotoxicity of Manganese. In: Molecular Toxicology Center, Vanderbilt University Medical Center, Nashville, TN, August 21, 2006.

Changes in Dietary Iron Levels Affect Brain Manganese Accumulation and Distribution. In: International Neurotoxicology Conference, Little Rock, AR, September 20, 2006.

Manganese: Transport and Mechanisms of Neurotoxicity. 4th Conference on Molecular Mechanisms of Metal Toxicity and Carcinogenesis. Morgantown, WV, September 26, 2006.

Seminar, Manganese: from Worms to Humans, Department of Veterinary Science, University of Wyoming, Laramie, WY, October 26, 2006.

Manganese: Transport and Mechanisms of Neurotoxicity. University of Haifa School Public Health, Haifa, Israel, January 7, 2007.

Manganese: Transport and Mechanisms of Neurotoxicity. Division of Environmental Sciences, Tel Aviv University, Sakler School of Medicine, Tel Aviv, Israel, January 10, 2007.

Future Directions for the SBRP and MHRP. Molecular Toxicology Center Retreat. Vanderbilt University Medical Center, Nashville, TN, January 27, 2007.

Manganese: Transport and Mechanisms of Neurotoxicity. The 40<sup>th</sup> Annual Winter Conference on Brain Research (WCBR), Snowmass, CO, January 31, 2007.

Neurotoxic Mechanisms of Mefloquine. Walter Reed Institute of Research, Silver Springs, MD, February 9, 2007.

Future Directions for the SBRP and MHRP. Molecular Toxicology Center External Advisory Board meeting, Vanderbilt University Medical Center, Nashville, TN, February 14, 2007.

Manganese: Transport and Mechanisms of Neurotoxicity. Annual MARC U\*STAR/Howard Hughes Medical Institute Undergraduate Scholars Program Seminar Series. University of Maryland, Baltimore County (UMBC), March 6, 2007.

Distribution, Classifications, and Biological Roles of Metallothioneins. 11<sup>th</sup> meeting of the International Neurotoxicology Association (INA), Asilomar Conference Grounds, Pacific Grove, CA, June 11, 2007.

The Neurotoxicity of Heavy Metals. In: Infections and Brain Disorders. Inter Continental Hotel, Lusaka, Zambia, June 15, 2007.

Manganese and Neurodegeneration. Symposium on Metals and Neurodegenerative Diseases, International Congress of Toxicology (ICT)-XI, Montreal, Canada, July 17, 2007.

Mercury in Neurological Disorders. International Academy of Oral Medicine and Toxicology (IAOMT), Las Vegas, NV, September 8, 2007.

Manganese: Transport and Mechanisms of Neurotoxicity. Department of Neuroscience, University of New Mexico, Albuquerque, NM, October, 4-7, 2007

Changes in Dietary Iron Levels affect Brain Manganese Accumulation and Distribution. Joint meeting of the International Society for Trace Element Research in Humans, the Hellenic Trace Element Society, and The Nordic Trace Element Society. Conference on Trace Elements in Diet, Nutrition and Health: Essentiality and Toxicity. Hersonissos, Crete, October 24, 2007.

*C. Elegans* in Toxicology: High Throughput Testing. In: Use Of Non-Mammals for Toxicological and Drug Discovery Studies. American College of Toxicology, Charlotte, NC, November 12, 2007.

Manganese: Transport and Mechanisms of Neurotoxicity. Integrated Toxicology and Environmental Health Program, Duke University Medical School, Durham, NC, December 7, 2007.

2008 Role of Microglia in Metal Toxicity. In: Metals, Microglia, and Neuroinflammation. Society of Toxicology, Seattle, WA, March 17, 2008.

Manganese: Transport and Mechanisms of Neurotoxicity. Department of Neurobiology and Neurotoxicology, Meharry Medical College, Nashville, TN, April 21, 2008.

Metals in Autism Spectrum Disorder, Marino Autism Research Institute (MARI) Scientific Symposium Environment and Autism Etiology, Kennedy Center for Research on Human Development, Vanderbilt University Medical Center, April 22, 2008.

Manganese Transport into the Brain: Putative Mechanisms.10<sup>th</sup> international Symposium on Metal Ions in Biology and Medicine. Bastia, Corsica, May 19-22, 2008.

Gene-Environment Interaction in Manganese-Induced Neurotoxicity, 10<sup>th</sup> International Symposium on Neurobehavioral Methods and Effects in Environmental and Occupational Health. Heredia, Costa Rica, June 11-13, 2008.

Metals and Neurodegenerative Disorders. MRB-IV Inauguration. Vanderbilt University Medical Center, Nashville, TN, June 17, 2008.

Neurotoxicity of Manganese. Syngenta-Sponsored Workshop on the Basal ganglia. Chicago, IL, July 28-29, 2008.

Glutamate and Mechanisms of Manganese Neurotoxicity. In 4<sup>th</sup> Wierzba Meeting, the Tripartite Synapse: Functional and Metabolic Relations in Norm and Pathology. Wierzba, Poland, August 26, 2008.

Transport and Mechanisms of Toxicity of Mercury and Manganese: From Worms to Humans, In: XLIX Congress, Metal Toxicity and the Impact on Human Health, Remedies and Rationale, Pittsburgh, PA, October 1, 2008.

Manganese (Mn) transport at the Blood-Brain Barrier: Implications for Parkinson's-Like Disease, In: Ehrlich II, 2nd World Conference, Nuremberg, Germany, October 4, 2008.

Manganese Transport and Neurotoxicity. International Neurotoxicology Conference, University of Rochester School of Medicine and Dentistry, Rochester, NY, October 13, 2008.

*C. elegans*: an Emerging Complimentary Platform for Studies on Gene Environment Interactions. International Neurotoxicology Conference, University of Rochester School of Medicine and Dentistry, Rochester, NY, October 14, 2008.

Manganese Transport and Neurotoxicity. Molecular Toxicology Center, Vanderbilt Medical Center, Nashville, TN, October 20, 2008.

Manganese Transport and Neurotoxicity: from Worms to Humans. Oklahoma State University, OK, October 23, 2008.

Restless Leg Syndrome: Insights from Studies on a Related Metal, Manganese. Restless Legs Syndrome (RLS) Scientific Conference, Baltimore, MD, October 27, 2008.

*C. elegans*: an Emerging Complimentary Platform for Studies on Gene Environment Interactions. National Center for Toxicological Research (NCTR), Jefferson, AR, November 5, 2008.

Manganese Neurotoxicity: Mechanisms of transport and Neurotoxicity. Department of Public Health Sciences, University of Modena and Reggio Emilia, Italy, November 13, 2008.

Mechanism of Manganese Transport and Neurodevelopmental Injury: From *C. elegans* to Humans. Department of Human Physiology and Pharmacology, Sapienza, University of Rome, Italy, November 19, 2008.

2009 General Neurotoxicology: What Makes the Nervous System so Vulnerable to Chemical Injury, Master's Neurotoxicology Course, Almeria, Spain, January 27, 2009.

Glial Cultures: Advantages and Disadvantages of Tissue Cultures, Master's Neurotoxicology Course, Almeria, Spain, January 28, 2009.

Mechanisms of manganese neurotoxicity and commonalities with Parkinson's disease, Master's Neurotoxicology Course, Almeria, Spain, January 28, 2009.

Mechanisms of mercury neurotoxicity and relationship to neurodegenerative diseases including autism, Master's Neurotoxicology Course, Almeria, Spain, January 29, 2009.

*C. elegans* as a model for toxicological studies, Master's Neurotoxicology Course, Almeria, Spain, January 29, 2009.

Mechanism of Manganese Transport and Neurodevelopmental Injury: From *C. elegans* to Humans. Department of Environmental and Radiological Health Sciences. Colorado State University, Fort Collins, CO, February 4, 2009.

Manganese Neurotoxicity: From *C. elegans* to Humans. Oregon Health & Science University (OHSU) and the Center for Research on Occupational and Environmental Toxicology (CROET). February 9, 2009.

The Role of Dopamine in Manganese-Induced Neurotoxicity. Symposium on Gene x Environment Interactions, 29<sup>th</sup> International Conference on Occupational Health (ICOH), Cape Town, South Africa, March 22-27, 2009.

Mechanism of Manganese Transport and Neurodevelopmental Injury: from *C. elegans* to Humans, Neurotoxicology Society (NTS) meeting, Arica, Chile, April 27, 2009.

The Role of Mercury in Neurodegeneration; Pros and Cons. Machu Picchu, Peru, April 30, 2009.

Manganese Transport: Relationship to Iron. Plenary Lecture, In: 3<sup>rd</sup> International Symposium on Trace Elements in the Food Chain – Deficiency or Excess of Trace Elements in the Environment as a Risk of Health, Budapest, Hungary, May 22, 2009.

*C. elegans*: An Emerging Complimentary Platform for Studies on Gene Environment Interactions. INA-12, Jerusalem, Israel, June 7-12, 2009.

Introductory Remarks. In: The Manganese Health Research Program (MHRP) Showcase Conference: New Discoveries – New Directions. Lansdowne Resort, Lansdowne, Virginia June 24, 2009.

Magnetic Resonance Imaging (MRI) of Manganese Accumulation in the Rat Brain Associated with Iron-Deficiency. In: The Manganese Health Research Program (MHRP) Showcase Conference: New Discoveries – New Directions. Lansdowne Resort, Lansdowne, VA, June 24, 2009.

Metals and Neurodegeneration, Gordon Research Conference on Cell Biology of Metals, Salve Regina University, Newport, RI, August 10, 2009.

Manganese Imaging in the Brain: Relationship to Iron Homeostasis. Military Health Research Forum (MHRF) 2009. Kansas City, MO, September 1, 2009

Manganese Transport and Neurotoxicity. Seventh Congress of Toxicology in Developing Countries. Sun City, South Africa, September 8, 2009.

Manganese Transport and Neurotoxicity. Featured Presentation, Western Region COBRE-INBRE Scientific Conference, Big Sky, MT, September 17, 2009.

Manganese Transport and Neurotoxicity. Departamento de Bioquímica, Universidade Federal de Santa Maria, Santa Maria, Rio Grande do Sul, Brazil, November 10, 2009.

Obtaining a Postdoctoral Position in the US. Departamento de Bioquímica, Universidade Federal de Santa Maria, Santa Maria, Rio Grande do Sul, Brazil, November 10, 2009.

Characterization of the Effects of Methylmercury on *Caenorhabditis elegans*. Departamento de Bioquímica, Centro de Ciências Biológicas, Universidade Federal de Santa Catarina, Florianópolis, SC, Brasil, November 13, 2009.

Manganese Transport and Neurotoxicity. Departamento de Bioquímica, Centro de Ciências Biológicas, Universidade Federal de Santa Catarina, Florianópolis, SC, Brasil, November 13, 2009.

2010 Manganese Transport and Neurotoxicity, the Buck Institute for Age Research, Novato, CA, February 19, 2010.

Manganese Transport and Neurotoxicity, Pediatric Research Conference, Monroe Carell Jr. Children's Hospital at Vanderbilt, Vanderbilt University Medical School, Nashville, TN, February 22, 2010.

Metals and Oxidative Impairment in Neurodegenerative Disorders. Workshop, Minerals and Metals: Pros and Cons of Deliberate Exposure. Society of Toxicology, Salt Lake City, UT, March 10, 2010.

Mechanisms of Neurotoxicity of Methylmercury, In: International Symposium on Disturbances of Cerebral Function Induced by Food and Water Contaminants, Catedra Santiago Grisolia, Valencia, Spain, March 23-25, 2010.

Novel Mechanisms of Manganese Transport and Neurotoxicity. 26<sup>th</sup> International Neurotoxicology Conference, Portland, OR, June 7, 2010.

A Systems Biology Approach to Enable Safe Administration of Mefloquine. Walter Reed Army Institute of Research, Silver Springs, MD, June 10, 2010.

Principles of Neurotoxicology. Master's Neurotoxicology Course, University of Reus, Reus, Spain, June 15, 2010.

*C. elegans* as a Model for Manganese Neurotoxicity. Master's Neurotoxicology Course, University of Reus, Reus, Spain, June 16, 2010.

Mechanisms of Neurotoxicity of Methylmercury. Master's Neurotoxicology Course, University of Reus, Reus, Spain, June 17, 2010.

Role of Astrocytes in Nervous System Diseases In: Gene Expression, Biomarkers and Glial Cells in Nervous System Diseases. Society of Toxicologic Pathology, Chicago, IL, June 22, 2010.

Manganese Neurotoxicity. Internal Molecular Toxicology Center seminar series. Vanderbilt University Medical Center, Nashville, TN, July 19, 2010.

Manganese-Induced Neurodegeneration: Genetic insights from studies in *C. elegans*. Annual Meeting Southeastern Chapter, Society of Toxicology. Georgia Center for Continuing Education in Athens, GA, October 11-12, 2010.

Novel Mechanisms of Manganese Transport and Neurotoxicity. Faculty of Pharmacy, Department of Toxicology, Yeditepe University, Istanbul, Turkey, November 12, 2010.

2011 Comparative Study on the Response of Rat Primary Astrocytes and Microglia to Methylmercury. Minamata City, Japan, January 27-28, 2011.

Neurotoxicology Goes Global: Scientific Collaboration and Mentorship. Society of Toxicology, Merit Award, Washington, DC, March 7, 2011.

*C. elegans* and the Role of Dopamine in Manganese-Induced Neurodegeneration. Neurotoxicity Research Society Conference, Uspallata, Argentina, April 7-10, 2011.

Comparative Study on the Response of Rat Primary Astrocytes and Microglia to Methylmercury. Neurotoxicity Research Society Satellite Meeting, Iguazu, Argentina, April 11-14, 2011.

Manganese Transport and Neurotoxicity. Center for Substance Abuse Research, Temple University, Philadelphia, PA, May 3, 2011.

Differential Sensitivity of Astrocytes and Microglia to *in vitro* Acrylonitrile Treatment. Acrylonitrile Group meeting, Vanderbilt University Medical Center, Nashville, TN, May 16-17, 2011.

*C. elegans* and the Role of Dopamine in Manganese-Induced Neurodegeneration. International Neurotoxicology Association, INA13, Xi'an, China, June 5-10, 2011.

Principles of Neurotoxicology. University Rovira i Virgili, Tarragona, Spain, June 14, 2011.

Caenorhabditis Elegans as a Model for Toxicological Studies. University Rovira i Virgili, Tarragona, Spain, June 15, 2011.

Keynote, Role of *smf* Transporters and Dopamine in Manganese-Induced Neurodegeneration in *C. elegans.* 11<sup>th</sup> International Symposium on Metal Ions in Biology and Medicine, Cambridge, UK, June 20-23, 2011(missed the meeting due to flight cancellation).

Future of Toxicology in the 21<sup>st</sup> Century. The XVII Brazilian Congress of Toxicology, Ribeirão Preto, Brazil, June 24, 2011.

Manganese Transport and Neurotoxicity. The XVII Brazilian Congress of Toxicology, Ribeirão Preto, Brazil, June 25, 2011.

Comparative Study on the Response of Rat Primary Astrocytes and Microglia to Methylmercury. The XVII Brazilian Congress of Toxicology, Ribeirão Preto, Brazil, June 25, 2011.

Manganese Transport and Neurotoxicity: Insights from *C. elegans* Model. University of Londrina, Londrina, Brazil, June 27, 2011.

Manganese-Induced Glutamate Transporter Impairment in Astrocytes is Reversed by Estrogen. Gordon Research Conference, Cellular & Molecular Mechanisms of Toxicity, Proctor Academy, Andover, NH, August 8-12, 2011.

*C. elegans* and the Role of Dopamine in Manganese-Induced Neurodegeneration. The 5th International Conference on Metals and Genetics (ICMG2011), Kobe, Japan, September 4-8, 2011.

*C. elegans* and the Role of Dopamine in Manganese-Induced Neurodegeneration. Leibniz Research Centre for Working Environment and Human Factors, Dortmund, Germany, September 30, 2011.

Modes-of-Action (MoAs) to define Developmental Neurotoxicology tool compounds. Center for Alternatives to Animal Testing – Europe, In: CAAT-Europe workshop: Identification of Relevant Toxicants for Developmental Neurotoxicity, University of Konstanz, Konstanz, Germany, October 4-6, 2011.

*C. elegans* and the Role of Dopamine in Manganese-Induced Neurodegeneration. International Society of Trace Element Research in Humans (ISTERH), Belek, Turkey, October 16-21, 2011.

2012 Manganese Neurotoxicity – Relationship to Parkinson's Disease. Center Molecular Toxicology, Community Forum on Parkinson's disease, Vanderbilt Clinic at Hundred Oaks, Nashville, TN, January 16, 2012.

General Neurotoxicology: What Makes the Nervous System so Vulnerable to Chemical Injury. Master's Neurotoxicology Course, Almeria, Spain, January 23, 2012.

Mechanisms of manganese-induced neurotoxicity and relationship to neurodegenerative diseases. Master's Neurotoxicology Course, Almeria, Spain, January 24, 2012.

*C. elegans* as a model for toxicological studies. Master's Neurotoxicology Course, Almeria, Spain, January 25, 2012.

Control of cellular manganese in humans, in: The control of cellular transition metal ion concentrations. King's College London, Franklin-Wilkins Building, Waterloo Campus, London, UK, February 29, 2012.

*C. elegans* and the Role of Dopamine in Manganese-Induced Neurodegeneration. 30<sup>th</sup> International Congress on Occupational Health (ICOH), Cancun, Mexico, March 18-23, 2012.

*C. elegans* and dopaminergic neurotoxicity. Southern Sleeping Society, Grand Sandestin Resort, Destin, FL March 30, 2012.

Methylmercury Neurotoxicity: Transport and Neuroprotection. Molecular Toxicology Center, Vanderbilt University Medical Center, April 16, 2012.

Manganese Neurotoxicity: From Worms to Neonates. Howard University, Sperling Memorial Lecture in Toxicology, Washington, DC, April 18, 2012.

Methylmercury Neurotoxicity: Transport and Neuroprotection. Leibniz Research Centre for Working Environment and Human Factors, Dortmund, Germany, May 7, 2012.

Research on manganese and neurotoxic effects – needs and future directions. Institute for Prevention and Occupational Medicine of the German Social Accident Insurance, Institute of the Ruhr-Universität Bochum

(IPA), Bochum, Germany, May 9, 2012.

Interdependence of Mn and Fe in the Blood and Brain. Institute for Prevention and Occupational Medicine of the German Social Accident Insurance, Institute of the Ruhr-Universität Bochum (IPA), Bochum, Germany, May 9, 2012

Anti-aging effects of deuterium depletion on Mn-induced toxicity in a *C. elegans* model. 2nd International Congress on Deuterium Depletion. Budapest, Hungary, May 18, 2012.

Manganese transport and mechanisms of neurotoxicity: lessons learned from *C. elegans*. Trieste, Italy, May 21-22, 2012.

From *C. elegans* to humans: understanding Mn-induced neurodegeneration. Eurotox 2012, Congress of the European Society of Toxicology, Stockholm, Sweden, June 18, 2012

From Worms to Humans: Mechanisms of Manganese Induced Neurotoxicity and Lessons for Dopaminergic Cell Loss. Institut d'Investigació Biomédica de Bellvitge (IDIBELL), Barcelona, July 13, 2012.

From *C. elegans* to Humans: Understanding Manganese Neurotoxicity. Department of Occupational and Environmental Health, Fourth Military Hospital, Xi'an, China, August 27, 2012.

Manganese Neurotoxicity: Lessons from Worms to Human Neonates, Wayne State University, Detroit, MI, September 7, 2012.

Manganese Neurotoxicity: From Worms to Neonates (Grand Rounds). Department of Preventive Medicine (Co-Sponsored by the MPH Program), Mount Sinai School of Medicine, New York, NY, September 14, 2012.

The Center in Molecular Toxicology. Open House for Undergraduates. Vanderbilt University Medical Center, Nashville, TN, October 6, 2012.

Neurotoxicology: From Worms to Neonates. Open House for Undergraduates. Vanderbilt University Medical Center, Nashville, TN, October 6, 2012.

Manganese Neurotoxicity: Lessons from Worms to Human Neonates, German Society of Minerals and Trace Elements, Karlsruhe, Germany, October 12.

2013 Manganese Neurotoxicity: Lessons from Worms to Human Neonates, National Institute of Environmental Health Sciences (NIEHS), Research Triangle Park, NC, January 17, 2013.

From *C. elegans* to Humans: Understanding Mn-induced Neurodegeneration. Superfund Research Program Seminar Series, Duke University. Durham, NC, February 8, 2012.

Manganese Neurotoxicity: Lessons from Worms to Human Neonates, Purdue University, West Lafayette, IN, March 4, 2013.

The Interaction between Genes and the Environment (Metals) in Triggering Brain Diseases. Albert Einstein College of Medicine Fundraisers, Palm Beach, FL, March 20, 2013.

Lessons from Worms to Human Neonates. Department of Molecular Pharmacology, Albert Einstein College of Medicine, Bronx, NY. April 1, 2013.

Manganese Neurotoxicity: Lessons From Worms to Neonates. CanBIC, Georgian Bay, Ontario, Canada, May 24, 2013.

Manganese Neurotoxicity: Lessons from Worms to Human Neonates. 14<sup>th</sup> International Neurotoxicology Association (INA) meeting, Egmond aan Zee, the Netherlands, June 10, 2013.

Keynote Address. Manganese Neurotoxicity: Lessons from Worms to Human Neonates. 2nd Ibero-American Meeting on Toxicology (IBAMTOX) and Environmental Health, Ribeirão Preto-SP, Brazil, June 17, 2013.

Manganese Neurotoxicity: Lessons from Worms to Human Neonates. Joint NBTS/TS Symposium, In Memory of Patricia Rodier, Ph.D., 2013 Neurobehavioral Teratology Society Annual Meeting, Tucson, AZ, June 24, 2013.

Manganese Neurotoxicity. Department of Biochemistry, Universidade Federal do Pampa (Unipampa), Campus São Gabriel, São Gabriel, Rio Grande do Sul, Brazil, August 15, 2013.

Manganese Neurotoxicity. Winter Conference on Biochemical Toxicology, Department of Chemistry, Universidade Federal de Santa Maria, Santa Maria, Rio Grande do Sul, Brazil, August 19, 2013.

What can be learned from Worms about Gene x Environment Interactions? International Academy of Oral Medicine and Toxicology (IAOMT), Las Vegas, NV, September 7, 2013.

Manganese Neurotoxicity and Genetic Determinants, Department of Biochemistry, Federal University of Santa Catarina, Florianopolis, Santa Catarine, Brazil, October 30, 2013.

Manganese Neurotoxicity: From Worms to Humans, University of Texas at Austin, Austin, TX, December 5, 2013.

Differential sensitivity of astrocytes and microglia to *in vitro* acrylonitrile treatment. Acrylonitrile Working Group meeting, Albert Einstein College of Medicine, Bronx, NY, December 16, 2013.

2014 Manganese Neurotoxicity: Gene x Environment Interactions, New York Medical College, Valhalla, NY, March 19, 2014.

What can be learned from the Nematode (*C. elegans*) about Molecular Targets Associated with MeHg Toxicity? Society of Toxicology, Phoenix, AZ, March 24, 2014.

Redox Signaling and Methylmercury Toxicity, Society of Toxicology, Phoenix, AZ, March 26, 2014.

Manganese (Mn) interaction with Dopaminergic Neurons: Evidence from *C. elegans*. Society of Toxicology, Phoenix, AZ, March 26, 2014.

Differential Sensitivity of Astrocytes and Microglia to *in vitro* Acrylonitrile Treatment. Acrylonitrile Science Workshop. Society of Toxicology, Phoenix, AZ, March 27, 2014.

Manganese Neurotoxicity: Gene x Environment Interactions, Department of Pharmacology and Therapeutics, Boston University Medical Center, Boston, MA, April 2, 2014.

Nature and Nurture in Parkinson's Disease: Crosstalk Between Genes and Manganese Neurotoxicity, Oberlin College, Oberlin, OH, April 8, 2014

Nature and Nurture in Parkinson's Disease: Crosstalk Between Genes and Manganese Neurotoxicity, Annual Symposium PPGbioq, University of Unipampa, Uruguaiana, Rio Grande do Sul, Brazil, April 24, 2014.

Manganese Neurotoxicity: Gene x Environment Interactions, 1º Latin-American Congress of Clinical and Laboratorial Toxicology -TOXI-LATIN 2014, Federal University of Rio Grande do Sul (UFRGS), Porto Alegre, Brazil, April 28, 2014.

Methylmercury Neurotoxicity: Gene x Environment Interactions, 1º Latin-American Congress of Clinical and Laboratorial Toxicology -TOXI-LATIN 2014, Federal University of Rio Grande do Sul (UFRGS), Porto Alegre, Brazil, April 29, 2014.

Estrogen Attenuates Manganese-Induced Glutamate Transporter Impairment, Glutamate/GABA and Neuro-Glia-Vascular Interplay in Norm and Pathology, Krakow, Poland, May 23, 2014.

Nature And Nurture: Crosstalk Between Genes And Manganese Neurotoxicity. Department of Neuroscience, Albert Einstein College of Medicine, Bronx, NY, June 4, 2014.

Manganese Neurotoxicity: Lessons From Worms to Neonates. 15<sup>th</sup> International Symposium on Trace Elements in Man & Animals (TEMA 15), Orlando, FL, June 25, 2014.

Unmasking Silent Neurotoxicity Following Developmental Exposure to Methylmercury. In: Unmasking Silent Neurotoxicity Following Developmental Exposure to Environmental Toxicants. Neurobehavioral Teratology Society, Bellevue, June 30, 2014.

Manganese Neurotoxicity: Lessons from Worms to Human Neonates. Einstein-Montefiore Transdisciplinary Center to Promote Women/Infant Health and Disease Eradication (EMPOWER), Albert Einstein College of Medicine, Bronx, NY, September 8, 2014.

Manganese Neurotoxicity: Lessons from Worms to Human Neonates. Division of Neonatology, Department of Pediatrics, Weiler Hospital, Albert Einstein College of Medicine, Bronx, NY, September 9, 2014.

*C. elegans* and the role of dopamine in manganese-induced neurodegeneration. 13<sup>th</sup> International Symposium on Metal Ions in Biology & Medicine, Jackson, MS September 14-18, 2014.

*C. elegans* and the role of dopamine in manganese-induced neurodegeneration. 8th Conference on Metal Toxicity and Carcinogenesis, Albuquerque, New Mexico, October 26-29, 2014.

Grand Rounds Neurology, Albert Einstein College of Medicine, Bronx, NY, November 6, 2014.

What can be learned from the Nematode (*C. elegans*) about Molecular Targets Associated with Manganese-Induced Neurotoxicity? 2<sup>nd</sup> International Conference on Environmental Bioinorganic and Toxicology Research – CEBiTOR, Sao Paolo, Brazil, November 15-19, 2014.

Principles of Neurotoxicology. 2<sup>nd</sup> International Conference on Environmental Bioinorganic and Toxicology Research – CEBiTOR, Sao Paolo, Brazil, November 15-19, 2014.

Heavy Metal Neurotoxicity. 2<sup>nd</sup> International Conference on Environmental Bioinorganic and Toxicology Research – CEBiTOR, Sao Paolo, Brazil, November 15-19, 2014.

Manganese Neurotoxicity: Lessons from Worms to Human Neonates. Neuroscience Society of Nigeria (NSN) Conference. University of Ilorin, Nigeria, November 27, 2014.

Manganese Neurotoxicity: Lessons from Worms to Human Neonates. School of Environmental Health Science, Obafemi Awolowo University, Ile-Ife, Nigeria, December 1, 2014.

Manganese Neurotoxicity: Lessons from Worms to Human Neonates. Internal Faculty Seminar, Albert Einstein College of Medicine, Bronx, NY, December 4, 2014.

Early-life exposure to mercury and manganese and the risk for dopaminergic neurodegeneration. Child Health Research Seminar, Mount Sinai University School of Medicine, New York, NY, December 16, 2014.

Early Life Exposure to Manganese: Is it a Risk Factor for Neurodegenerative Diseases. Grand Rounds, New York Medical College, Valhalla, NY, December 17, 2014.

2015 Manganese Neurotoxicity: Lessons from Worms to Human Neonates. Duke University, Integrated Toxicology and Environmental Health Program (ITEHP) Seminar SERIES, Durham, NC, January 8, 2015.

Early Life Exposure to Manganese: Is it a Risk Factor for Neurodegenerative Diseases. University of Florida, Neuroscience Seminar Series, Gainesville, FL, January 22, 2015.

*C. elegans* as an Alternative *in vivo* Model. Toxicology Program, Oklahoma State University, Stillwater, OK, e-lecture, February 17, 2015.

The Neurotoxicity of Mercury and Manganese: Multiple Faces, Common Mechanisms. Third International Conference Green Health, Mumbai, India, February 20, 2015.

The Role of Mitochondria in Mercury Induced Toxicity. International Association of Oral Medicine and Toxicology (IAOMT). Rio Grande, Puerto Rico March 7, 2015. (flight to PR cancelled due to inclement weather).

SLC30A10 Is a Cell Surface-Localized Manganese Efflux Transporter, and Parkinsonism-Causing Mutations Block Its Intracellular Trafficking and Efflux Activity. Symposium, Environmental Factors in Neurodegenerative Disease. Forty-Sixth Annual Meeting of the American Society of Neurochemistry (ASN), Atlanta, GA, March 17, 2015.

GPR30 regulates glutamate transporter GLT-1 expression in rat primary astrocytes. Symposium, Glia Amino Acid Transporters in Health and Disease. Forty-Sixth Annual Meeting of the American Society of Neurochemistry (ASN), Atlanta, GA, March 18, 2015.

Manganese Neurotoxicity: Lessons from Worms to Human Neonates. University of New Mexico Health Sciences Center, Cellular and Molecular Basis of Disease Seminar Series. Albuquerque, NM, April 24, 2015.

The Role of skn-1 in Methylmercury-Induced Latent Dopaminergic Neurodegeneration. 15<sup>th</sup> International Neurotoxicology Association (INA) meeting, Montreal, Canada, June 30, 2015.

Molecular neurotoxicology insights from *C. elegans.* 15<sup>th</sup> International Neurotoxicology Association (INA) meeting, Montreal, Canada, June 28, 2015.

Molecular neurotoxicology insights from *C. elegans*. The Medical Scientist Training Program (MSTP), Albert Einstein College of Medicine, Bronx, NY, July 8, 2015.

Manganese Neurotoxicity: From Worms to Premature Humans. Department of Nutritional Sciences, University of Brasília, Brazil, July 29, 2015.

Manganese Neurotoxicity: From Worms to Premature Humans. Department of Toxicology Management (GGTOX), the National Agency of Health Surveillance (ANVISA), Brasília, Brazil, July 31, 2015.

The Role of Mitochondria in Mercury Induced Toxicity. International Association of Oral Medicine and Toxicology (IAOMT). Las Vegas, NV, September 11, 2015.

Manganese Neurotoxicity: From Worms to Premature Humans. Twelfth International Symposium on Recent Advances in Environmental Health Research. Jackson, MS, September 15, 2015

SLC30A10 and its role in manganese transport in *C. elegans*. Department of Nutrition, University of North Carolina at Greensboro, Greensboro, NC, October 7, 2015.

Manganese Neurotoxicity: From Worms to Premature Humans. Key Note, International Society of Trace Elements Research in Humans (ISTERH), Dubrovnik, Croatia, October 20, 2015.

Neurotoxicology. In 9<sup>th</sup> Congress of Toxicology in Developing Countries, Natal, Brazil, November 7, 2015.

2016 Mn Neurotoxicity. Food and Extract Manufacturers' Association. Orlando, FL, February 24, 2016.

Gene SLC30A10 and its role in *C. elegans*. In: The Role of Gene SLC30A10 on Manganese Homeostasis and Functional Outcomes: Implications for Homeostasis and Neurotoxicity. Society of Toxicology, New Orleans, LA, March 15, 2016.

Mitochondrial TMEM-135 decreases manganese-induced dopaminergic neurodegeneration. In: Mitochondrial Dysfunction As a Pathogenic Mechanism and Therapeutic Target for Neurodegenerative Diseases. Society of Toxicology, New Orleans, LA, March 17, 2016.

Manganese neurotoxicity: from worms to humans. In Sunshine Mini Symposium, Society of Toxicology, New Orleans, LA, March 17, 2016.

Manganese neurotoxicity: from worms to humans. State University of Londrina, Rio Grande Do Sul, Brazil, April 13, 2016.

Manganese neurotoxicity: from worms to humans. University of Santa Catarina, Rio Grande Do Sul, Brazil, April 19, 2016.

Manganese neurotoxicity: From worms to human neonates. Department of Environmental Health Sciences, University of Rochester, Rochester, NY, May 19, 2016.

Manganese neurotoxicity: Lessons from worms to human neonates. School of Public Health, Florida International University, Miami, FL, June 17, 2016.

Manganese-Induced Neurotoxicity: Lessons from Worms. EPICOH, Barcelona, Spain, September 7, 2016.

Methylmercury Neurotoxicity. International Meeting of Environmental Health and Toxicology (IMEHTOX). Riberiao Preto, Brazil, September 11, 2016.

Untangling the Manganese- $\alpha$ -synuclein Web. MANGANESE2016, Mount Sinai Medical Center, New York, NY, September 27, 2016.

Contemporary Methods and Models for Predicting Human Toxicity. Northeast Regional Chapter of the Society of Toxicology (NESOT), Northeastern University, Boston, MA, September 30, 2016.

Manganese Neurotoxicity: Lessons from Worms to Human Neonates. XIV International Congress of Toxicology (ICT) in conjunction with the X Mexican Congress of Toxicology (IUTOX). Merida, Mexico, October 4, 2016.

Twitching Worms in the Big Apple. In: Seeds of Collaboration, Albert Einstein College of Medicine, Bronx, NY, October 20, 2016.

The Role of skn-1 in Methylmercury-Induced Latent dopaminergic Neurodegeneration. In: Pathomechanism of Methylmercury Toxicity -Various target organs of methylmercury, National Institute of Minamata Disease (NIMD), Minamata, Japan, December 6-7, 2016.

Manganese Neurotoxicity: Lessons from Worms to Human Neonates. Vice Chancellor Research (VCR) Distinguished Seminar Series, University of Tennessee Health Sciences Center, Memphis, TN, November 29, 2016.

Manganese Neurotoxicity: Lessons from Worms to Human Neonates. University of Para, Belem, Brazil, December 15, 2016.

Methylmercury Neurotoxicity: Gene x Environment Interactions. University of Para, Belem, Brazil, December 15, 2016.

Town Hall Meeting. University of Rochester School of Medicine and Dentistry. Rochester, NY, January 12, 2017.

Manganese Neurotoxicity; Lessons from Worms. In: Expanding *C. elegans* Research: First Latin American Worm Meeting Institut Pasteur, Latin American Society for Developmental Biology, Montevideo, Uruguay, February 22-24, 2017

Sex- and structure-specific differences in antioxidant responses to methylmercury during early development. International Neurotoxicology Association, Florianopolis, Brazil, May 24, 2017.

# MENTORING:

GRADUATE STUDENTS	
1992-1996	Domenico Vitarella. Astrocytic Involvement in Methylmercury
	Neurotoxicity and Neuroprotection. Ph.D. Thesis, Department of Pharmacology & Toxicology, Albany Medical College, Albany, NY.
1994	Hera Sambaziotis - M.S. Thesis, the Role of Astrocytic
	Metallothioneins in Lead Poisoning. School of Public Health, State
4005 4000	University of New York at Albany, Albany, NY.
1995-1996	Sheryl Stark. M.S. Thesis, Metallothionein Induction in Neonatal Rat Primary Astrocyte Cultures by Acidosis. Neuroscience Program,
	Wake Forest University School of Medicine, Winston-Salem, NC.
1997-2000	Jeffrey Allen - Ph.D. candidate, Department of Physiology and
	Pharmacology, Wake Forest University School of Medicine,
1997-2001	Winston-Salem, NC. Denise Lewis – Ph.D. candidate, Department of Physiology and
1997-2001	Pharmacology, Wake Forest University School of Medicine,
	Winston-Salem, NC (Co-advisor with Dr. Kent Vrana).
2003-2004	Ashley Donahue- Ph.D. candidate, Department of Physiology and
	Pharmacology, Wake Forest University School of Medicine,
2004-2007	Winston-Salem, NC (Co-advisor with Dr. William Sonntag).  Jiang, George Chih-Thai, Ph.D. candidate, Department of Physiology
2004 2007	and Pharmacology, matriculated at Wake Forest University School of
	Medicine, Winston-Salem, NC.
2004-2008	Catherine Au – M.S., Program in Neuroscience, Vanderbilt University
2005-2010	Medical Center, Nashville, TN. Kirsten Helmcke - Ph.D. candidate, Department of Pharmacology,
2003-2010	Vanderbilt University Medical Center, Nashville, TN.
2007-2011	Mingwei Ni - Ph.D. candidate, Department of Pharmacology,
	Vanderbilt University Medical Center, Nashville, TN.
2009-2011	Jennifer Madison - Ph.D. candidate, Department of Pharmacology, Vanderbilt University Medical Center, Nashville, TN.
2009-2012	Margaret Adams – M.S. candidate, Program in Neuroscience,
	Vanderbilt University Medical Center, Nashville, TN.
2009-2015	Sudipta Chakraborty - Ph.D. candidate, Program in Neuroscience,
2011-2012	Vanderbilt University Medical Center, Nashville, TN. Anna Griffin – M.S. candidate, Program in Neuroscience, Vanderbilt
2011-2012	University Medical Center, Nashville, TN.
2011-present	Thuy Tuong Nguyen - Ph.D. candidate, Department of Pharmacology,
	Vanderbilt University Medical Center, Nashville, TN.
2012-present	Megan E Culbreth – Ph.D. candidate, Department of Molecular
2012-2013	Pharmacology, Albert Einstein College of Medicine, Bronx, NY.  Vivian Santos - Ph.D. candidate, Ribeirão Preto University of São
2012 2010	Paulo, Ribeirão Preto, São Paulo, Brazil.
2012-2013	Patrícia Reckziegel - Ph.D. candidate, Department of Biochemistry,
	Federal University of Santa Maria, Santa Maria, Rio Grande do Sul,
2012 2014	Brazil.
2013-2014	Priscila Gubert - Ph.D. candidate, Department of Biochemistry, Federal University of Santa Maria, Santa Maria, Rio Grande do Sul,
	Brazil.
2013-2014	Tanara Peres - Ph.D. candidate, Department of Biochemistry,
	University of Santa Catarina, Florianopolis, Brazil.

GRADUATE STUDENTS

2014-present Mahfuz Miah – Ph.D. candidate, Department of Neuroscience, Albert

Einstein College of Medicine, Bronx, NY

2014-present Leticia Arantes - Ph.D. candidate, Department of Biochemistry,

Federal University of Santa Maria, Santa Maria, Rio Grande do Sul,

Brazil.

HIGH SCHOOL STUDENTS

2014

Harold Ekeh, Junior, Elmont Memorial High School, Elmont, Long Island, NY. Research conducted in our lab over the summer of 2014

qualified him as Intel Science Talent Search Semifinalist.

	(CONTINUED).	LOAL CENTER CTURENT PROCERTATION COMMITTEES (COOAL PROCENT).
VANDE	2005	ICAL CENTER, STUDENT DISSERTATION COMMITTEES (2004 – PRESENT):  Kylee M Spencer, Program in Human Genetics, Vanderbilt University
		Medical Center, Nashville, TN.
	2006-2009	Blairanne Williams, Program in Neuroscience, Vanderbilt University Medical Center, Nashville, TN.
	2007-2010	Meaghan A Neill, Program in Human Genetics, Vanderbilt University Medical Center, Nashville, TN.
	2007-2010	Molly Fricke, Program in Neuroscience, Vanderbilt University Medical Center, Nashville, TN.
	2009-2011	Gunnar Kwakye, Program in Neuroscience, Vanderbilt University Medical Center, Nashville, TN. Chair.
	2010-2014	Andrew Tidball Ph.D. candidate, Program in Neuroscience, Vanderbilt University Medical Center, Nashville, TN.
	2011-2013	Hayley E Boyd-Clay - Ph.D. candidate, Program in Neuroscience, Vanderbilt University Medical Center, Nashville, TN. Chair.
	2011-2014	Elizabeth Meredith - Ph.D. candidate, Program in Molecular Physiology and Biophysics, Vanderbilt University Medical Center, Nashville, TN.
	2011-2014	Laura Hunt - Ph.D. candidate, Program in Molecular Physiology and Biophysics, Vanderbilt University Medical Center, Nashville, TN.
	2011-2013	Sara R Savage - Ph.D. candidate, Department of Pharmacology, Vanderbilt University Medical Center, Nashville, TN.
	2012-2014	Kevin Kumar - Ph.D. candidate, MSTP (M.D./Ph.D.) student, Vanderbilt University Medical Center, Nashville, TN.
	2012-present	Terry Joe Bichell - Ph.D. candidate, Program in Neuroscience, Vanderbilt University Medical Center, Nashville, TN.
	2014	Mestre Vanda Maria Falcão Espada Lopes de Andrade – Ph.D. candidate, Faculty of Pharmacology, University of Lisbon, Lisbon, Portugal. Served on the Examining Jury, September 29, 2014.
	2016	Fiona Peris Sampedro Ph.D. candidate, Department of Psychology, Universitat Rovira i Virgili, Tarragona, Spain. Served on the Examining Jury, January 16, 2016.

OSTDOCTORAL TRAINING:	
1991-1994	Vijendra Dave, M.D., Division of Neurosurgery, and Department of Pharmacology and Toxicology, Albany Medical College, Albany, NY (Co-advisor, Dr. Harold K. Kimelberg).
1996-1999	Chang Ping Yao, Ph.D., Department of Physiology and Pharmacology, Wake Forest University School of Medicine, Winston-Salem, NC.
2000-2002	Gouri Shanker, Ph.D. Department of Physiology and Pharmacology, Wake Forest University School of Medicine, Winston-Salem, NC.
2001-2003	Keith Erikson, Ph.D. (Penn State University, Hershey, PA), Department of Physiology and Pharmacology, Wake Forest University School of Medicine, Winston-Salem, NC.
2001-2003	Allison Dobson, Ph.D. (University of South Alabama, Mobile, AL), Department of Physiology and Pharmacology, Wake Forest University School of Medicine, Winston-Salem, N.C.
2002-2005	Stephanie Garcia, Ph.D. (Duke University, Durham, NC), Department of Physiology and Pharmacology, Wake Forest University School of

Medicine, Winston-Salem, N.C. (Recipient of NIEHS F32 Individual Award, ES012768)

## POSTDOCTORAL TRAINING:

2003-2006	Vanessa Fitsanakis, Ph.D. (Vanderbilt University Medical Center, Nashville, TN), Department of Physiology and Pharmacology, Wake Forest University School of Medicine, Winston-Salem, N.C (2003-2004), and Department of Pediatrics, Vanderbilt University Medical Center, Nashville, TN (2004-2006).
2005–2011	Zhaobao Yin, M.D. Ph.D. (Taishan Medical University and Shanghai University of Chinese Medicine and Pharmacology), Department of Pediatrics, Vanderbilt University Medical Center, Nashville, TN.
2005-2008	Sarah E Owens, Ph.D. (Vanderbilt University Medical Center, Nashville, TN), Department of Pediatrics, Vanderbilt University Medical Center, Nashville, TN.
2006-2008	Alexandre Benedetto, Ph.D. (University of Strasbourg, France), Department of Pediatrics, Vanderbilt University Medical Center, Nashville, TN.
2007-2011	Marta Sidoryk, Ph.D. (Nencki Medical Research Center, Polish Academy of Sciences, Warsaw, Poland), Department of Pediatrics, Vanderbilt University Medical Center, Nashville, TN.
2008-2010	Daiana de Ávila, Ph.D. (University of Santa Maria, Brazil), Department of Pediatrics, Vanderbilt University Medical Center, Nashville, TN.
2010-2013	Ebany Martinez-Finley, Ph.D. (University of New Mexico, Albuquerque, NM), Department of Pediatrics, Vanderbilt University Medical Center, Nashville, TN.  1st Prize Award – Vanderbilt Postdoctoral Association competition, Biological Science section, April 26, 2011.  1st Prize Award – Metals Specialty Section Post-Doctoral Research Awards, Annual Society of Toxicology Meeting in San Antonio, TX, March 13, 2013.
2010-2013	Stephanie Fretham, Ph.D. (University of Minnesota, Minneapolis, MN), Department of Pediatrics, Vanderbilt University Medical Center, Nashville, TN.
2011-present	Samuel Caito, Ph.D. (University of Rochester School of Medicine and Dentistry, Rochester, NY), Department of Pediatrics, Vanderbilt University Medical Center, Nashville, TN.
2011-2014	Pan Chen, Ph.D. (University of Alabama, Tusculoosa, AL), Department of Pediatrics, Vanderbilt University Medical Center, Nashville, TN.
2012-2013	Emily Bisen-Hersh, Ph.D. (Temple University, Philadelphia, PA), Department of Pediatrics, Vanderbilt University Medical Center, Nashville, TN.
2012-2013	Julia Bornhorst, Ph.D. (University of Muenster, Muenster, Germany), Department of Pediatrics, Vanderbilt University Medical Center, Nashville, TN.
2013-present	Nancy Parmalee, Ph.D. (Columbia University, New York, NY), Department of Molecular Pharmacology, Albert Einstein College of Medicine, Bronx, NY.
2013-2014	Caridad Lopez Granero, Ph.D. (University of Almeria, Almeria, Spain), Department of Molecular Pharmacology, Albert Einstein College of Medicine, Bronx, NY.

POSTDOCTORAL TRAINING:

2014-present Alessandra Antunes dos Santos, Ph.D., Department of Biochemistry,

Federal University of Santa Catarina, Florianópolis, Santa Catarina,

Brazil.

2014-present Ziyan Zhang, Ph.D. (University of Kansas, Lawrence, KA),

Department of Molecular Pharmacology, Albert Einstein College of

Medicine, Bronx, NY.

2015-present Maria Rosa Chitolina Schetinger, Ph.D. (Federal University of Santa

Catarina, Florianópolis, Santa Catarina, Brazil). Department of

Molecular Pharmacology, Albert Einstein College of Medicine, Bronx,

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2015-present Joanna Ruszkiewicz, Ph.D. (Department of Toxicology, University of

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2015-present Christopher Barnhart, Ph.D. (Department of Environmental Health,

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ALBERT EINSTEIN COLLEGE OF MEDICINE, STUDENT DISSERTATION COMMITTEES (2014 – PRESENT):

2014-present Diana Athonvarangkul, MD/PhD Candidate, Department of Molecular

Pharmacology, Albert Einstein College of Medicine, Bronx, NY.

2014-present Lu Xu, PhD Candidate, Department of Molecular Pharmacology,

Albert Einstein College of Medicine, Bronx, NY.

PHYSICIAN-SCIENTIST TRAINING:

2008-2011 Mentoring Committee, Julia Dunn, MD, Clinical and Research Fellow,

Division of Diabetes, Endocrinology, and Metabolism, Vanderbilt University Medical Center, Nashville, TN, Environmental Health Science Scholars Program, NIEHS (K12), Vanderbilt Physician

Scientist Development (VPSD) Awards Program.

2009-2013 Mentoring Committee, Tracy McGregor, Instructor, Pediatrics Medical

Genetics, Vanderbilt University Medical Center, Nashville, TN, Environmental Health Science Scholars Program, NIEHS (K12),

Vanderbilt Physician Scientist Development (VPSD) Awards Program.

2009-2013 Advisor, Nathalie Maitre, MD, Assistant Professor, Department of

Pediatrics (Neonatology Division), Vanderbilt University Medical Center, Nashville, TN, Environmental Health Science Scholars

Program, NIEHS (K12).

2015- Kecia N. Carroll, MD, MPH, Associate Professor of Pediatrics.

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Teaching Responsibilities

2008-2013 Team Leader, Toxicology section of Targets, Systems, and Drug

Action (PHAR 320).

2012-2013 BIOCHEM 336, Course Director.