## **Curriculum Vitae**

### Lynn Wecker, Ph.D., FASPET

### August 2020

#### Education

- 9/65 1/69 B.S. Chemistry, State University of New York College at Cortland, Cortland, New York
- 9/69 12/72 Ph.D. Pharmacology, University of Florida College of Medicine, Gainesville, Florida

#### Administrative/Professional Training

- 1991 Association of American Medical Colleges Management Education Program "Executive Development Seminar for Associate Deans and Department Chairmen" Marathon Key, FL
- 1992 Association of American Medical Colleges Management Education Program "Information Technology in the Academic Medical Center" Snowmass, CO
- 1995 The Ethics Center Workshop "The Impact of Current Ethical Issues and Public Policy Considerations on Research and Teaching in the Physical Sciences, the Social Sciences, and the Humanities" St. Petersburg, FL
- 1997/98 Fellow of the Hedwig van Ameringen Executive Leadership in Academic Medicine (ELAM) Program for Women
- 2001/02 Research Sabbatical in the molecular biology laboratory of Dr. Jahanshah Amin
  - 2013 ASAE University, Focus on Finance: Optimizing your financial leadership team, Washington, D.C.
  - 2014 Conference on Teaching Research Ethics for the 21<sup>st</sup> Century, Annapolis, MD

#### **Faculty Appointments**

- 1/73 6/74 Post-doctoral fellow, Department of Pharmacology, Vanderbilt University School of Medicine, Nashville, Tennessee
- 7/74 6/75 Instructor, Department of Pharmacology, Vanderbilt University School of Medicine, Nashville, Tennessee
- 7/75 6/76 Assistant Professor, Department of Medicinal Chemistry and Pharmacology, Northeastern University College of Pharmacy and Allied Health Professions, Boston, Massachusetts
- 7/76 8/78 Research Assistant Professor, Department of Pharmacology, Vanderbilt University School of Medicine, Nashville, Tennessee
- 9/78 6/80 Assistant Professor, Department of Pharmacology and Experimental Therapeutics, Louisiana State University Medical Center, New Orleans, Louisiana
- 7/80 6/84 Associate Professor, Department of Pharmacology and Experimental Therapeutics, Louisiana State University Medical Center, New Orleans, Louisiana
- 7/84 1/90 Professor, Department of Pharmacology and Experimental Therapeutics and

Department of Psychiatry, Louisiana State University Medical Center, New Orleans, Louisiana

- 2/90 3/06 Professor, Distinguished University Professor (1995), Department of Pharmacology and Molecular Therapeutics, University of South Florida College of Medicine, Tampa, Florida
- 4/06 present Distinguished University Professor, Department of Molecular Pharmacology and Physiology, University of South Florida College of Medicine, Tampa, Florida
- 4/07 6/10 Distinguished University Professor, Department of Psychiatry and Behavioral Medicine, University of South Florida College of Medicine, Tampa, Florida
- 7/10 12/18 Distinguished University Professor, Department of Psychiatry and Behavioral Neurosciences, University of South Florida College of Medicine, Tampa, Florida
- 1/19 present Distinguished University Professor Emeritus, University of South Florida College of Medicine, Tampa, Florida

# Administrative Appointments

- 4/91 3/06 Chair, Department of Pharmacology and Molecular Therapeutics, University of South Florida College of Medicine, Tampa, Florida
- 4/06 3/07 Associate Dean for Research, University of South Florida College of Medicine, Tampa, Florida
- 7/12 12/18 Pre-clinical Research Director, University of South Florida Morsani College of Medicine Ataxia Research Center, Tampa, FL

# National/International Responsibilities

**Editorial Boards** 

Pharmacology and Therapeutics (Executive Editor Neuropharmacology, 8/16 - present) Neurochemical Research (1/01 - 6/19)xPHARM (http://www.sciencedirect.com/science/referenceworks/9780080552323); Neuropharmacology Editor, 8/01 - 6/1/11) Journal of Neuroscience Research (3/94 – 12/02) International Journal of Developmental Neuroscience (11/95 - 12/00) Journal of Neurochemistry (1/88 - 12/95) American Association for the Advancement of Science Chair-elect of the Section on Pharmaceutical Sciences (2/16-2/17) Chair of the Section on Pharmaceutical Sciences (2/17-2/18) Past Chair of the Section on Pharmaceutical Sciences (2/18-2/19) American Society for Neurochemistry (ASN) Treasurer (4/93 - 3/95; reelected 4/95 - 3/97; reelected 4/97 - 6/99) Program Committee for the 1994 Meeting (3/93 - 3/94) Elected to ASN Council (3/89 - 3/93) Co-chair, Marian W. Kies Memorial Award Committee (6/91 - 3/93) Decade of the Brain Committee (3/90 - 3/92) Chair, Committee for Travel Awards (1984 - 1985; 1987 - 1989) Association for Medical School Pharmacology (AMSP) Councilor (5/1/97 - 4/30/99) Councilor (5/1/92 - 4/30/94) Southeastern Pharmacology Society (SEPS) President (1/94 - 12/94) Elected President-Elect (1/93 - 12/93) Elected Councilor (1/92 - 12/92) Judge, Annual Meeting Graduate Student Award (9/92) American Society for Pharmacology and Experimental Therapeutics (ASPET)

President (elect 7/10-6/11: active 7/11-6/12: past 7/12-6/13) Secretary/Treasurer (elect 7/05-6/06; active 7/06-6/07; past 7/07-6/08) Program Committee (7/96 – 6/99; appointed Chair, 7/99 – 6/02; reappointed, 7/02-6/05) ASPET Award for Experimental Therapeutics Selection Committee (1998; 1999) Nominating Committee (1/94 - 4/95; Chair, 1/94-12/94) Educational Affairs Committee (7/92 - 4/94) Otto Krayer Award Selection Committee (1997) Mentoring and Career Development Committee (7/12-12/2018) ASPET Fellows Review Committee (3/2020-present) Federation of American Societies for Experimental Biology (FASEB) Treasurer (elect 7/1/11-6/30/12; active 7/12-6/14) Finance Committee (7/1/08 - 6/14)Experimental Biology Program Committee (7/00 – 7/05; elected Chair, 11/02-1/05) Training and Career Opportunities Subcommittee (7/07 – 10/18) Membership Committee (7/14 - 10/18)Association for the Accreditation of Human Research Protection Programs, Inc. (AAHRPP) Finance Committee (9/11 - 12/13)

### Advisory Committees/Boards

Tyramine Scientific Advisory Board, Somerset Pharmaceuticals, Inc. (2/00 – 2/06) STS Depression Advisory Board, Somerset Pharmaceuticals, Inc. (9/99 – 2/06) Mental Health America of Greater Tampa Bay, Inc. Advisory Board (1/07 – 6/10) Universidad Central del Caribe NIH Research Center in Minority Institutions (RCMI) External Advisory Committee (8/07 – 12/2018)

#### **Review Committees**

- National Institute of Mental Health Behavioral Neurobiology Subcommittee of the Neurosciences Research Review Committee (7/84 - 6/88)
- The Johns Hopkins University Center for Alternatives to Animal Testing, Grant Reviewer (1985 present)
- National Institute of Mental Health Biological and Neurosciences Subcommittee of the Mental Health Small Grant Research Review Committee, *ad hoc* reviewer (7/91 12/91)
- National Institute of Mental Health Molecular, Cellular, and Developmental Neurobiology (MDCN) Review Committee (1/92 - 2/95)
- National Institutes of Health Molecular, Cellular, and Developmental Neuroscience Integrated Review Group (MDCN-5), *ad hoc* reviewer (6/02-2/03)
- National Institute on Drug Abuse Training and Career Development Review Group (NIDA-K), *ad hoc* reviewer (3/03)

American Institute of Biological Sciences (AIBS) Grant Reviewer (4/03 – present)

- National Institutes of Health NIGMS Special Emphasis Panel on Integrative and Organ Systems Pharmacology (ZGM1 BRT-5), *ad hoc* reviewer (12/04)
- National Institutes of Health NINDS Special Emphasis Panel on CounterACT-U54 (ZNS1 SRB-R), ad hoc reviewer (8/06)
- National Institutes of Health NIGMS Special Emphasis Panel on Integrative and Organ Systems Pharmacology (ZGM1 BRT-7), *ad hoc* reviewer (7/08)
- National Institutes of Health National Center for Research Resources, COBRE Special Emphasis Review Panel (ZZR1 RI-3), *ad hoc* reviewer (9/09)
- National Institutes of Health National Center for Research Resources, CTSA Special Emphasis Review Panel (ZRR1 CR-3), *ad hoc* reviewer (2/10)

National Institutes of Health MBRS SCORE Neuroscience and Physiology Review Panel (ZGM1 MBRS-5), *ad hoc* reviewer (4/10)

National Institutes of Health Special Emphasis Review Panel, Brain Disorders and Clinical Neurosciences Fellowships (ZRG1 F01), reviewer (6/07 – 3/12)

National Institutes of Health Special Emphasis Review Panel, Scientific Review Group Program Project: Genomic, Neural, and Preclinical Analysis for Smoking Cessation (2013/10 ZRG1 ETTN-L (40) P), reviewer (6/13)

National Institute of Neurological Disorders and Stroke Initial Review Group (NSD-B), reviewer (2/14)

National Institutes of Health Center for Scientific Review, Fellowships: Biophysical, Physiological, Pharmacological and Bioengineering Neuroscience (ZRG1 F03B-E), reviewer (3/16; 3/18)

- National Institute of Drug Abuse Special Emphasis Panels ZDA1 JXR-D, reviewer (7/15; 10/15; 3/16; 6/16; 11/16; 6/18; 9/18; 10/19; 11/19; 3/20; 7/20; 10/20; 11/20); chair of review panel (7/17); co-chair of review panel (6/18; 9/18)
- National I Institutes of Health Special Emphasis Review Panel, NIGMS SCORE Neuroscience & Physiology (ZGM1 RCB-5), reviewer (10/19)

# Honors and Awards

National Science Foundation Undergraduate Research Award in Chemistry (6/68 - 1/69)

National Institute of Health Pre-doctoral Fellow (9/69 - 12/72)

Andrew W. Mellon Foundation Teacher-Scientist Award (1/75 - 12/75)

State University of New York College at Cortland Distinguished Young Alumnus Award (4/78)

Smith Kline and French Laboratories Outstanding Young Scientist Award (11/79)

National Institute of Environmental Health Sciences Young Environmental Scientist Health Research Grant Award (3/79 - 10/82)

Distinguished Research Professor, University of South Florida (4/95)

State University of New York Alumni Honor Roll (12/95)

Distinguished Teaching Award, USF College of Medicine Class of 1996 (4/96)

Most Outstanding Pre-Clinical Professor Award, USF College of Medicine Class of 1998 (4/97)

Sophomore Class Outstanding Instructor, USF College of Medicine Class of 1999 (4/98)

Most Outstanding Pre-Clinical Professor Award, USF College of Medicine Class of 1999 (4/98)

Invited Member, The Dana Alliance for Brain Initiatives (11/98)

USF Professorial Excellence Program Award (12/98)

USF College of Medicine Faculty Outstanding Teacher Award (4/99)

USF Presidential Faculty Award for Excellence (1/03)

USF Health School of Physical Therapy & Rehabilitation Sciences Interprofessionalism Award (11/11)

Fifth Annual Theodore M. Brody Distinguished Lecturer, Michigan State University Department of Pharmacology (10/12)

Fellow, American Association for the Advancement of Science (12/12)

USF Outstanding Faculty Award (4/13)

State University of New York College at Cortland Distinguished Alumni Award (6/16)

USF Morsani College of Medicine Outstanding Teaching Award (11/15, 11/16, 11/17)

Fellow, American Society for Pharmacology and Experimental Therapeutics (6/19)

# **Professional Societies**

American Association for the Advancement of Science American Society for Pharmacology and Experimental Therapeutics Association of Medical School Pharmacology Chairs International Society for Neurochemistry International Brain Research Organization Society for Neuroscience Southeastern Pharmacology Society The New York Academy of Sciences

#### Meetings/Symposia Organized

Co-Chair, American Society for Neurochemistry 19th Annual Meeting, New Orleans, LA (3/88)

- Colloquium Organizer, American Society for Neurochemistry 25th Annual Meeting, "Neural Plasticity in the Aged Brain" Albuquerque, NM (3/94)
- Chair, Southeastern Pharmacology Society Annual Meeting, "Age-Related Disorders: Pharmacology and Etiology" Clearwater, FL (9/94)
- Organizer, Association for Medical School Pharmacology Leadership Development Program, Sea Island, GA (2/00)
- Organizer and Speaker, ASPET/APS Women's Breakfast Program, "Managing a Laboratory" Experimental Biology Annual Meeting, San Diego, CA (4/05)
- Symposium Organizer and Speaker, ASPET Program, "Pharmacology for Healthcare Professionals: A Thirst for Knowledge" Experimental Biology Annual Meeting, Washington, DC (4/11)
- Symposium Organizer and Speaker, ASPET Graduate Student Colloquium "The Individual Development Plan: A Key to Success" Experimental Biology Annual Meeting, Boston, MA (4/13)
- Program Organizer, "ASPET Mentoring Network: Coaching for Career Development" Experimental Biology Annual Meeting, San Diego, CA (4/16)

Program Organizer, "ASPET Mentoring Network: Coaching for Career Development" Experimental Biology Annual Meeting, Chicago, IL (4/17)

## Grant Support

Co-Investigator, NIH #1R21 AT009734 "Increasing Dietary Choline to Prevent Chemotherapy-Related Cognitive Deficits" (2/1/18-1/31/20) \$250,000 (direct costs).

Principal Investigator, NIH #1 R01 NS072114 "Neuronal Nicotinic Receptor Modulation and Cerebellar Ataxias" (1/1/11-11/30/17) \$1,093,750 (direct costs).

Co-Investigator, NIH #1 R25 MH095720-01A1 "Summer Research Institute at Florida Mental Health Institute (SRI@FMHI)" (5/1/12-4/30/17) \$443,269 (direct costs).

Mentor, James and Esther King Biomedical Research Program, Florida Department of Health, New Investigator Research Grant to Jamie W. Fernandez, M.D., "Neuroendocrine Disruption and Nicotine Preference in a Rat Model of Postpartum Depression" (7/1/11-12/31/14) \$347,826 (direct costs).

Co-Principal Investigator, USF-VA Neuroscience Collaborative Program "Neuroprotective Effects of Nicotinic Agonists Involve Anti-apoptotic Actions" (7/1/10-6/30/12) \$50,000 (direct costs).

Sponsor/Mentor, Ruth L. Kirschstein NRSA for Rex Philpot, Ph.D., F32 AA016449 "Adolescent Nicotine Exposure and Subsequent Alcohol Use" (12/1/06-11/31/10) \$208,000 (direct costs).

Principal Investigator, Florida Center of Excellence for Biomolecular Identification and Targeted Therapeutics, Seed Grant, "Novel Neuronal Nicotinic Receptor Modulators for the Treatment of Ataxia" (05/01/09-04/30/10) \$70,000 (direct costs).

Principal Investigator, NIH #1 R01 DA14010-01A1 "Regulation of Neuronal Nicotinic Receptors" (9/30/01-6/30/07) \$1,250,000 (direct costs).

Principal Investigator, James and Esther King Biomedical Research Program, Florida Department of Health, "Nicotine-Induced Phosphorylation of  $\alpha 4\beta 2$  Neuronal Nicotinic Receptors" (6/1/01-7/30/04) \$333,218 (direct costs).

Principal Investigator, Somerset Pharmaceuticals, Inc. Study #S9303-P9816 "Development, Validation and Execution of An Assay to Measure Tyramine in Plasma Samples" (2/17/99 - 12/31/00) \$40,000 (direct costs)

Co-Investigator, Somerset Pharmaceuticals, Inc. Study #Pharm19-Assay "Assay of MAO-A and MAO-B in Rat Brain and Intestine Following Chronic Selegiline Patch Application" (1/6/00 – 12/31/00) \$100,800 (direct costs)

Principal Investigator, Smokeless Tobacco Research Council, Inc. "Nicotine-Induced Inactivation of Neuronal Nicotinic Receptors" (1/1/97-6/30/00) \$246,218 (direct costs)

Principal Investigator, Somerset Pharmaceuticals, Inc. Study # Pharm16-Assay "Assay of MAO-A and MAO-B in Rat Brain, Heart, and Intestine Following Chronic Selegiline Patch Application" (4/22/99 - 4/21/00) \$59,760 (direct costs)

Principal Investigator, NIH #2 R01GM47629 "Cytokine Regulation of P450 in Cultured Rat Hepatocytes" (8/1/93-7/31/97) \$359,464 (direct costs) Note: Dr. Wecker assumed responsibility for this project as P.I. upon the untimely death of Dr. Joseph F. Williams on 4/7/94.

Principal Investigator, Somerset Pharmaceuticals, Inc. Study # STS:APK-011-94B "Studies on the Basic Pharmacology of Selegiline" (2/15/94 - 6/30/97) \$208,280 (direct costs)

Principal Investigator, Smokeless Tobacco Research Council, Inc. "Effects of Aging on Nicotine Binding Sites in Brain" (1/1/93-6/30/96) \$229,352 (direct costs)

Principal Investigator, NIMH #1 R01 MH33443 "Exogenous Choline: Effects on ACh Function in Brain" (1/79 - 4/95); last project period 3/1/90-4/30/95 \$418,232 (direct costs)

Principal Investigator, Smokeless Tobacco Research Council, Inc. "Cellular Mechanisms Mediating Resistance to Nicotine-Induced Seizures" (7/89-12/92) \$97,550 (direct costs)

Principal Investigator, U.S. Army Medical Research and Development Command, Contract # DAMD-17-83-C-3012 "Relationship Between Organophosphate Toxicity and Choline Metabolism" (11/82 - 12/85) \$252,114

Principal Investigator, NIEHS #1 R23 ES02278 "Neuromuscular Effects of Chronic Insecticide Exposure" (3/79 - 10/82) \$69,640

### **Teaching Responsibilities**

Responsible Conduct in Research (Course Director 8/11 - 12/17) Success Skills for Biomedical Science Researchers (Course Director 8/11 - 5/18) Pharmacology for Healthcare Professionals (Course Director, 6/07 - 12/18) Pharmacogenomics for MS IV students (Director 1/13 - 0/18) Graduate Neuroscience (Co-Director 6/07 - 6/10; Director 7/10-7/11) Medical Neuropsychopharmacology Elective for MS IV Students (Director, 1/93 – 12/12) Neurosciences for Residents in Neurology and Psychiatry (9/90 - 6/12) Medical Pharmacology (3/90 – 6/06; Co-director, 1/92 - 6/94) Theoretical Pharmacology (8/90 - 12/92) Cellular and Molecular Pharmacology (8/93 – 6/04) Pharmacology of Physiological Systems (1/93 – 6/04) Neuropharmacology (Course Director, 6/91 – 6/04) Graduate Nursing Pharmacology (8/90 - 8/94) Graduate Seminar (Course Director, 8/90 - 6/91) Clinical Pharmacology (1/91 - 6/05) Current Advances in Aging Research (Director, 5/91 - 8/91) Medical Neurosciences (9/92 – present) USF Natural Science Honors (8/97 – 12/05)

### Service Responsibilities

University USF Graduate Council (8/12 - 5/18) USF Faculty Senate (9/1/11 - 5/18)USF Standing Committee for Research Misconduct (9/09-12/18) USF Office of Research and Innovation Advisory Board (11/10 – 12/18) USF Office of Research Proposal Development Enhancement Task Force (2/10-6/10) USF Recommending Committee for Distinguished University Professor (2/09-1/12) USF Council on Educational Policy and Issues (9/08-6/11) USF Post-Doctoral Advisory Committee (7/07-6/09) Advisory Board, USF Honors College Undergraduate Research Program (7/06 – 6/11) Graduate Studies' Presidential Fellowship Advisory Committee (11/04-6/11) USF Presidential Young Faculty Award Selection Committee (12/95 - 6/11) President's Task Force on University Values, Vision, Mission, and Goals (10/3/01-12/31/01) Vice-President for Research Search Committee (1/01-12/02) USF Status of Women Presidential Advisory Committee (8/00-7/03) Research Advisory Committee to the Provost (9/99-8/01) Provost/Vice-Presidential Research Environment Committee (9/97 -8/99) Aging Studies Council (4/94-6/96) Academic Computing Committee (1/92 -6/94) Institute on Aging Task Force (1/92-9/93) Division of Sponsored Research Board of Directors (elected by faculty, 1/95) Search Committees for: Dean, School of Pharmacy (3/09-9/09) Chair of the Aging Studies Institute (5/94-8/95) Dean, College of Public Health (5/94-12/94) Chair, Department of Gerontology (1/94-2/95) Faculty, Department of Psychology (10/92-2/93) Dean, USF College of Medicine (10/90-10/91) H. Lee Moffitt Cancer Center & Research Institute Information Technology Advisory Committee (7/00 -6/04) Health Sciences Center Long-Range Information Services Committee (1/96-6/99) AHEC Tobacco Advisory Committee (12/07 – 11/2010) College of Medicine Curriculum Committee (10/15-12/18) Appointment, Promotion and Tenure Committee 9/93 -2/95; 9/08-9/11)

Asset Investment Management Systems Council (3/05 – 2/07) M.D./Ph.D. Committee (3/05 – 2/07) Member of the Neuroscience Program Executive Committee (9/96 -9/99) Director, Honors Research Program for Medical Students (8/96-8/98) Coordinator of Academic Computing (4//92-6/96) Faculty Advisor Program for Freshman Medical Students (8/90-8/98) Search Committees for: Chair, Department of Psychiatry and Behavioral Medicine (8/00-9/01)

Pfeiffer Chair in Alzheimer's Disease Research (11/96-5/98)

Chair, Department of Otolaryngology (1/97-5/98)

Ellis Chair in Movement Disorders (10/95-6/96)

Chair, Department of Internal Medicine (1/95-3/96)

Chair, Department of Pathology and Laboratory Medicine (3/92-5/95)

Committee on Research (7/92-6/94)

Dean's Advisory Committee (7/1/92-6/95)

Committee on Graduate Medical Sciences Education (7/90-6/91)

Director of the Graduate Program in Pharmacology (7/90 -6/91)

Member of the Search Committee for the Dean of the College of Medicine (10/90-10/91)

Chair of the College Academic Computing Committee (1/93-12/93)

### **Graduate Students**

Brad A. Trommer (Ph.D. 1982) "Further Studies on the Effects of Choline in the Central Nervous System"

Rick R. Reinhardt (Ph.D. 1985) "Characterization of Choline Kinase and Modulation of Choline Phosphorylation in Rat Brain"

Cheryl J. Flynn (Ph.D. 1986) "The Effects of Organophosphorus Cholinesterase Inhibitors on Choline Metabolism in Brain"

Becky Welsh (M.S. 1990) "Effects of Experimental Diabetes on Cholinergic Neurotransmission in Rat Brain"

James Coutcher (M.S. 1991) "Effects of Chronic Choline Supplementation on Nicotine and GABA<sub>A</sub>/Benzodiazepine Binding Sites in Rat Brain"

Patricia Painer (M.S. 1994) "Role of Cytochromes P450 in Brain"

Robert Newton (M.S. 1995) "Nicotine Induction of Cytochromes P450 in Brain"

Michelle A. Clark (Ph.D. 1996) "Cytokine Regulation of P450 in Cultured Rat Hepatocytes"

Fernando Cardozo (Ph.D. 1996) "Neuropharmacological Studies on MPTP Toxicity"

Yea-Nan Hsu (Ph.D. 1997) "Effects of Sustained Nicotine Exposure on Neuronal Nicotinic Receptors Expressed in *Xenopus Oocytes*"

Raghavendra Siragavarapu (M.S. 2005) "Effects of Phosphorylation on the Function of Human  $\alpha 4\beta 2$  Nicotinic Receptors"

- Chris Rogers (Ph.D. 2005) "Function of Human  $\alpha 4\beta 2$  Neuronal Nicotinic Receptors: Dependence on Phosphorylation State of the  $\alpha 4$  Subunit"
- Jeannie B. Stephenson (Ph.D. 2014) "Longitudinal, Quantitative Analysis of Balance and Gait in Friederich's Ataxia"

Chase Lambert (Ph.D. 2015) "Principal Component Analysis and the Cumulative Gait Index: Translational Tools to Assess Gait Impairments in Rats with Olivocerebellar Ataxia"

## Post-doctorals/Visiting Scientists

Rick R. Reinhardt, M.D., Ph.D. (7/85 - 6/87) current position: Vice-president, Clinical Research and Development, Regenzbio Inc., Rockville, MD.

Laura Wuarin-Bierman, M.D. (1/87 - 6/88) current position: Psychiatrist, Fort Collins and Denver, CO

Vladimir Dolezal, M.D. (6/88 - 6/89) current position: Scientific Researcher, Institute of Physiology, Czechoslovakia Academy of Science, Prague, Czechoslovakia

Nasser Zawia, Ph.D. (8/90 - 6/91) current position: Professor of Pharmacology and Toxicology, Department of Biomedical and Pharmaceutical Sciences, Dean of the Graduate School, University of Rhode Island, Kingston, RI

- H.K. Anandatheerthavarada, Ph.D. (3/92 3/94) current position: Associate Professor, Department of Animal Biology, University of Pennsylvania School of Veterinary Medicine, Philadelphia, PA
- Jian Yu, M.D., Ph.D. (7/91 6/96) current position: Family Medicine Practitioner, Mayo Clinic, Jacksonville, FL
- Yolanda Torres, Ph.D. (7/96 8/97) current position: Professor, Universidad de los Andes, Venezuela
- Anthony Rycerz, Ph.D. (8/97 8/98) current position: Regional Medical Science Liaison, Sandoz Pharmaceuticals, B, FL
- Xiang Guo, Ph.D. (8/98 8/01) current position: Scientist, The Institute for Genomic Research, Bethesda, MD

Veronica Pollock, Ph.D. (11/02 – 6/08) current position: Scientific Consultant

- Rex Philpot, Ph.D. (8/05 11/10) current position: Assistant Professor, Department of Psychiatry and Neurosciences, USF College of Medicine, Tampa, FL
- Peter Rowell, Ph.D. (2/12 7/12) current position: Professor and Associate Dean for Research, University of Louisville Medical School, Louisville, KY
- Brenda Marrero-Rosado, Ph.D. (5/13 10/15) current position: Research Scientist, Edmond Scientific Company, Aberdeen Proving Grounds, MD

# **Community Activities/Presentations**

Land O'Lakes High School, Pasco County, Mentor for Career Shadowing Program (4/91; 4/92)

- State of Florida Teacher QUEST Program, Preceptor for Mr. Craig Dumais, a teacher from Hudson Middle School in Pasco County (6/92 8/92)
- King High School, Tampa, FL, presentation on "Neurodegenerative Diseases" to Honors Anatomy and Physiology Class (2/93)

The American Society for Pharmacology and Experimental Therapeutics Teaching Workshop for San Francisco Bay Area Middle and High School Science Teachers (workshop co-chair, 7/93)

- Alpha Epsilon Delta Preprofessional Honor Society 30th National Convention, Tampa, FL "Medical Research: M.D. vs Ph.D. vs M.D./Ph.D." (3/94)
- Preceptor for Undergraduate Minority High School Students Summer Research Experience (6/95 8/95)
- USF College of Medicine Mini-Medical School, Tampa, FL "Diet, Drugs, The Brain & Behavior: Better Living Through Chemistry" (10/96)
- Northeast Tampa Business and Professional Women's Association "Diet, Drugs, The Brain and Behavior: Better Living Through Chemistry" (4/01)
- Wesley Chapel Lion's Club "Diet, Drugs, The Brain and Behavior" (5/01)
- Keynote Speaker, Academy at the Lakes Strategic Planning Meeting, Land O'Lakes, FL (1/02)
- Participant, Great American Teach-in, Lawton Chiles Elementary School, Tampa, FL (11/05)

Participant, Great American Teach-in, Lawton Chiles Elementary School, Tampa, FL (11/06)

Participant, Mental Health American of Greater Tampa Bay Brainstorming Council, St. Petersburg, FL (7/07)

Participant, Great American Teach-in, Liberty Middle School, Tampa, FL (11/08)

Leader, Brain Awareness Week Program at Dunbar Elementary School, Tampa, FL (4/11) Brain Bee Advisor, USF Honors College (2/16)

Manatee County Health Department Brain Health Program, Bradenton, FL "Brain Basics" (4/16)

#### **Invited Presentations**

- Massachusetts Institute of Technology, Department of Food Science and Nutrition, Cambridge, MA "Effects of Choline on Central Cholinergic Function" (1/78)
- Greater New Orleans Chapter of the Society for Neuroscience, New Orleans, LA "Parameters Regulating Central Cholinergic Function" (2/79)
- University of Arizona Health Sciences Center, Department of Pharmacology, Tucson, AZ "Acetylcholine Synthesis in the Central Nervous System" (4/79)
- New Orleans Chapter of Brandeis University National Women's Committee, New Orleans, LA "Exercise, Drugs and Nutrition" (9/79)
- Tulane University School of Medicine, Department of Pharmacology, New Orleans, LA "Neuropharmacological Consequences of Choline Administration" (10/79)
- Georgetown University School of Medicine, Department of Pharmacology, Washington, D.C. "Neuropharmacological Implications of Choline Administration" (10/79)
- The Fifth FDA Science Symposium on the Effects of Foods and Drugs on the Development and Function of the Nervous System, Arlington, VA "Drug-Diet Interactions: Neuropharmacological Effects of Exogenous Choline" (10/79)
- Medical College of Virginia, Department of Pharmacology, Richmond, VA "Neuropharmacological Consequences of Choline Administration" (12/79)
- International Symposium on Cholinergic Mechanisms, Florence, Italy "Regulation of Acetylcholine Release during Increased Neuronal Activity" (3/80)
- Northeast Louisiana University College of Pharmacy and Health Sciences, Monroe, LA "The Role of Choline Availability in Central Cholinergic Function" (5/80)
- Mount Sinai School of Medicine, Department of Pharmacology, New York, NY "Choline and Brain Function: A Problem in Neurochemistry or Neuropharmacology" (1/81)
- Cancer Association of Houma-Terrebonne Parish Second Annual Symposium on Current Trends in Cancer Management, Houma, LA "Principles of Nutrition" (2/81)
- Southern Baptist Hospital Workshop on Stress Management for Health Professionals, New Orleans, LA "Nutrition and Stress" (5/81)
- Tulane University School of Public Health, Department of Nutrition, New Orleans, LA "Dietary Neurotransmitter Precursors and Brain Function" (11/81)
- The Johns Hopkins University School of Hygiene and Public Health, Department of Environmental Health Sciences, Baltimore, MD "Paraoxon Toxicity: From Head to Toe" (1/82)
- Association of Food and Drug Officials Workshop on Food Toxicology, New Orleans, LA "Food Additives, Preservatives and Pesticides: Nervous System Effects" (4/82)
- United States Army Research Institute of Chemical Defense, Edgewood, MD "Nervous System Effects of Paraoxon" (7/82)
- Tulane University School of Public Health, Department of Nutrition, Nestle Nutrition Seminar Series, New Orleans, LA "Diet and Neurotransmitters" (11/82)
- Athenean Chapter of the American Business Women's Association, Metairie, LA "Nutrition, The Brain and Behavior" (1/83)
- Greater New Orleans Chapter of the Society for Neuroscience, New Orleans, LA "Does Choline Affect the Brain" (1/83)
- FASEB Summer Research Conference on Neurotransmitters, Vermont Academy, Saxtons River, VT "Effects of Choline on the Metabolism of Acetylcholine" (6/83)
- Louisiana Dietetic Association's Annual Meeting, New Orleans, LA "Nutrition, The Brain and Behavior" (8/83)
- Louisiana State University School of Home Economics, Department of Nutrition, Baton Rouge, LA "The Effects of Supplemental Choline on Brain" (9/83)
- Fifth International Conference on Cholinergic Mechanisms, Oglebay, WVA "The Utilization of Supplemental Choline by Brain" (10/83)

- Tulane University School of Medicine, Department of Physiology, New Orleans, LA "Choline and Brain Function" (4/84)
- University of Florida College of Medicine, Department of Pharmacology, Gainesville, FL "Does Choline Alter Cholinergic Mechanisms in Brain" (4/84)
- Athenean Chapter of the American Business Women's Association, New Orleans, LA "Nutrition and The Brain" (7/94)
- UCLA School of Medicine, Department of Pharmacology, Los Angeles, CA "Effects of Choline on Central Cholinergic Systems" (10/84)
- Tulane University School of Medicine, Department of Psychiatry and Neurology, New Orleans, LA "Effects of Choline on Brain" (12/84)
- The Lady Davis Research Institute, Jewish General Hospital, Montreal, Quebec, Canada "Effects of Choline Supplementation on Central Cholinergic Mechanisms" (1/85)
- DePaul Psychiatric Center, New Orleans, LA "Nutrition, The Brain and Behavior" (4/85)
- Symposium on the Neurobiology of Acetylcholine, Loyola University Medical Center, Chicago, IL "Choline Phosphorylation" (6/85)
- Canadian Federation of Biological Societies, Toronto, Ontario, Canada "Neurochemical Effects of Choline Supplementation" (6/85)
- Sanders-Brown Research Center on Aging, University of Kentucky, Lexington, KY "Choline Supplementation and Brain Function" (11/85)
- Louisiana Mental Health Association Annual Meeting, New Orleans, LA "Nutrition, The Brain and Behavior" (5/86)
- Sixth International Conference on Acetylcholine, Buxton, England "Central Nervous System Effects of Choline Supplementation" (5/86)
- Duke University Medical Center, Department of Pharmacology, Durham, NC "Neurochemical Effects of Choline" (10/86)
- Nathan S. Kline Institute for Psychiatric Research, Orangeburg, NY "Does Choline Supplementation Increase Acetylcholine Synthesis in Brain" (9/87)
- Symposium on The Role of Nutrition in the Development, Differentiation and Function of the Central Nervous System, LSU Medical Center, New Orleans, LA "The Utilization of Supplemental Choline for Acetylcholine Synthesis" (11/87)
- Fifth Meeting of the International Study Group on the Pharmacology of Memory Disorders Associated with Aging, Zurich, Switzerland "Dietary Choline: A Limiting Factor for the Synthesis of Acetylcholine by the Brain" (1/89)
- Cajal Club Program of the Annual Meeting of the American Association of Anatomists, New Orleans, LA "Presynaptic Regulation of Neurotransmitter Synthesis" (4/89)
- Tulane University School of Medicine, Department of Pharmacology, New Orleans, LA "Effects of Supplemental Choline on Acetylcholine Synthesis by Brain" (9/89)
- West Virginia University College of Medicine, Department of Pharmacology, Morgantown, WVA "Regulation of Acetylcholine Synthesis in Brain" (10/89)
- University of Florida College of Medicine, Department of Pharmacology, Gainesville, FL "Regulation of Acetylcholine Synthesis in Brain" (3/91)
- American Society for Neurochemistry 23rd Annual Meeting, Houston, TX Minisymposium on the Modulation of CNS Function by Neutral Amino Acids "ACh Synthesis and Release: Role of Choline Availability" (3/92)
- American Association of University Women, Tampa Chapter, Tampa, FL "Women in Science: Pursuing Leadership Roles" (9/93)
- Athena Society, Tampa Florida "Nutrition and the Brain: You Are What You Eat" (9/94)
- ASPET Graduate Student Convocation, Experimental Biology Meeting, Atlanta, GA "Preparation of a Research Grant Application" (4/95)
- Third Suncoast Workshop on the Neurobiology of Aging, Amelia Island, FL "Choline Utilization: A Matter of Supply and Demand" (4/95)

Joint Meeting of the Southeastern Pharmacology Society and the South Central Chapter of the Society of Toxicology, Oxford, MS "α4β2 Neuronal Nicotinic Receptors in Brain" (9/96)

- Association for Medical School Pharmacology Annual Winter Meeting, Cancun, Mexico "Effects of Sustained Nicotine Exposure on Neuronal Nicotinic Receptors" (1/97)
- Keynote Speaker, State University of New York College at Cortland Scholars' Day: A Day of Research and Inquiry, Cortland, NY "From Test Tube Chemistry to Understanding the Regulation and Function of Nicotine Receptors in the Brain" (4/97)
- University of Texas Health Science Center at Houston "Neuronal Nicotinic Receptors: Neurotransmitter Release, Consensus Sequences and Phosphorylation Sites" (10/98)
- Fourth Annual Duke Nicotine Research Conference: Nicotinic Actions on Interacting Neural Systems "Differential Effects of Sustained Nicotine Exposure on α4 versus α3 Containing Neuronal Nicotinic Receptors" (11/98)
- Fifth Annual Meeting of the Society for Research on Nicotine and Tobacco, San Diego, CA, Glaxo
  Wellcome, Inc. Symposium on Receptor and Cellular Mechanisms of Nicotine Dependence
  "Function of α4β2 Neuronal Nicotinic Receptors: Regulation by Nicotine" (3/99)
- University of Tennessee Health Science Center at Memphis "Neuronal Nicotinic Receptors: Neurotransmitter Release, Consensus Sequences and Phosphorylation Sites" (5/00)
- Lovelace Respiratory Research Institute, Albuquerque, New Mexico "Neuronal Nicotinic Receptors: Neurotransmitter Release, Consensus Sequences and Phosphorylation Sites" (7/00)
- The American College of Neuropsychopharmacology 2000 Annual Meeting, San Juan, Puerto Rico "The Selegiline Transdermal System (STS): Targeted Effects on Monoamine Oxidases in the Brain" (12/00)
- Grand Rounds in Neurology, Tampa General Hospital, Tampa, FL "Current Advances in Our Knowledge of and the Treatment for Psychotic Disorders" (2/01)
- American Psychiatric Association 2001 Annual Meeting, New Orleans, Louisiana "An Update on Monoamine Oxidases and Behavior" (5/01)
- Department of Pharmacology, University of Florida College of Medicine, Gainesville, FL "Regulation of Neuronal Nicotinic Receptors: To Phosphorylate or Not Phosphorylate, That is the Question" (5/02)
- Keynote Speaker, The Fifteenth Annual Graduate Student Research Forum, Pennsylvania State Hershey Medical Center, Hershey, PA "Regulation of α4β2 Nicotinic Receptors: To Phosphorylate or Not Phosphorylate, That is the Question" (3/03)
- The 65<sup>th</sup> Annual Meeting of the College on Problems of Drug Dependence, Bal Harbour, FL "Regulation of Neuronal Nicotinic Receptors" (6/03)
- ASPET/APS Workshop, Experimental Biology Annual Meeting, San Diego, CA "Managing a Laboratory" (4/05)
- Annual Meeting of the Southeastern Pharmacology Society and Southeastern Society of Toxicology, Nashville, TN "Regulation of α4β2 Neuronal Nicotinic Receptors" (10/05)
- Department of Pharmacology, Howard University College of Medicine, Washington, D.C. "α4β2 Nicotinic Receptors: To Phosphorylate or Not Phosphorylate, That is the Question" (11/05)
- ASPET/APS Workshop, Experimental Biology Annual Meeting, San Francisco, CA "Juggling Research with Service and Teaching Duties: How Much, What Kind and When?" (4/06)
- NCI/NIDA Translational Medication Development for Nicotine Dependence Workshop, Washington, D.C. "Selegiline: A Potential Pharmacotherapy for Smoking Cessation" (1/07)
- Department of Pharmacology, Southern Illinois University School of Medicine, Springfield, IL "Phosphorylation of α4β2 Neuronal Nicotinic Receptors" (6/07)
- State of Florida Physical Therapy Student Enclave, Tampa, FL "Drug Therapy and Exercise: Potential Interactions" (2/08)
- USF Department of Psychiatry & Behavioral Medicine Grand Rounds, Tampa FL "Pharmacogenomics, Pharmacogenetics and Psychiatry" (3/08)

- ASPET/APS Workshop, Experimental Biology Annual Meeting, San Diego, CA "The Art of Interviewing: Winning the Job (You Want)" (4/08)
- Florida Physical Therapy Association Spring Conference, Orlando, FL "Pharmacology Update" (3/09)
- Geriatric Psychiatry for the Primary Care Provider 2009, Clearwater, FL "A Genomics Primer for Geriatric Psychiatry" (7/09)
- Florida Physical Therapy Association Webinar, Ft. Lauderdale, FL "Pharmacology Update 2009" (11/09)
- University of South Florida Oscher Lifelong Learning Institute, Tampa, FL "Your Brain: Use It or Lose It" (2/10)
- Friedreich's Ataxia Research Alliance Symposium: Cultivating a Cure, Tampa, FL "Effects of Nicotinic Agonists on Ataxia in an Animal Model" (8/10)
- Department of Pharmacology and Toxicology, East Carolina University Brody School of Medicine, Greenville, NC "Role of PKA and PKC in the Nicotine-Induced Up Regulation of α4β2 Nicotinic Receptors" (9/10)
- USF Department of Psychiatry & Neuroscience Grand Rounds, Tampa FL "Nicotinic Receptors: What, How, Why and Where?" (9/10)
- Friedreich's Ataxia Research Alliance Symposium: Cultivating a Cure, Tampa, FL "Nicotinic Receptor Modulation and Spinocerebellar Ataxia" (8/11)
- Universidad Central del Caribe, Bayamon, Puerto Rico "Writing Successful F31 and F32 Grant Applications" (8/11)
- Fifth Annual Theodore M. Brody Distinguished Lecture, Michigan State University, East Lansing, MI "My Journey as a Pharmacologist: Regulation of Neuronal Nicotinic Receptors and Beyond" (10/12)
- Upstate New York Pharmacology Society Meeting, Buffalo, NY "Regulation of Neuronal Nicotinic Receptors and their Role in Neurological Disorders" (5/13)
- Pharmaceutical and Pharmacological Sciences Graduate Program, West Virginia University Robert C. Byrd Health Sciences Center, Morgantown, WVA "The IDP: A Personal Strategic Career Plan" (9/13)
- Eckerd College, St. Petersburg, FL "Regulation of Neuronal Nicotinic Receptors and Their Role in Neurological and Psychiatric Disorders" (11/13)
- ASPET Workshop, Establishing Individual Development Plans (IDP) in your Graduate and Postdoctoral Training Programs: The Ins and Outs of Successful IDPs for Career Development, Experimental Biology Annual Meeting, San Diego, CA "The IDP: A Strategic Career Plan" (4/14)
- ASPET Symposium, Collaborative Role of Pharmacology in Education of Healthcare Professions, Experimental Biology Annual Meeting, San Diego, CA "Creating Successful Interprofessional Pharmacology Education for Healthcare Students by Avoiding the Pitfalls" (4/14)
- ASPET Graduate Student Postdoctoral Colloquium: How to Get Started, Experimental Biology Annual Meeting, Boston, MA "Who owns the data I generated and how do I transition from graduate school/postdoctoral to an independent career?" (4/15)
- ASPET Mentoring Network: Coaching for Career Development, Experimental Biology Annual Meeting, San Diego, CA "Constructing a Career Plan" (4/16)
- ASPET Mentoring Network: Coaching for Career Development, Experimental Biology Annual Meeting, Chicago, IL "Constructing a Career Plan" (4/17)
- ASPET Young Scientist Committee Outreach Event, University of Illinois-Chicago, Chicago, IL "Explore Pharmacology Careers with ASPET" (4/17)
- University of Illinois at Chicago, Department of Biopharmaceutical Sciences, College of Pharmacy, Chicago, IL "Neuronal Nicotinic α4β2 Receptors: Regulation and Function" (5/18)
- University of Florida, Department of Pharmacology and Therapeutics Annual Retreat Distinguished Speaker, Gainesville, FL "Nicotinic Receptors and Beyond" (8/17)

State University of New York College at Cortland Undergraduate Research Science Symposium, Cortland, NY "An Academic Journey: From Chemistry to Neuropharmacology and Beyond" (10/18)

## **PUBLICATIONS**

### Dissertation

The Effects of 3,3-Dimethyl-1-Butanol Carbamate on Cholinergic Neurotransmission (12/72).

### **Refereed Articles**

- Wecker, L. and Chiou, C.Y. (1973) Inhibition of Nicotinic Responses at Neuromuscular Junctions by 3,3-Dimethyl-1-Butanol Carbamate (DBC). *Eur. J. Pharmacol.* **22**: 332-338. PMID: 4542458
- Wecker, L. and Chiou, C.Y. (1973) Central Cholinomimetic Actions of 3,3-Dimethyl-1-Butanol Carbamate. *J. Pharm. Sci.* **62**: 1569-1571. PMID: 4743120
- Wecker, L. and Dettbarn, W-D. (1975) Effects of Atropine and Neostigmine on Receptor Interactions at the Neuromuscular Junction. Arch. int. Pharmacodyn. Therap. 217: 236-245. PMID: 1190918
- Wecker, L. and Dettbarn, W-D. (1976) Paraoxon-Induced Myopathy: Muscle Specificity and Acetylcholine Involvement. *Exp. Neurol.* **51**: 281-291. PMID: 1269562
- Binder, N., Landon, E.J., Wecker, L., and Dettbarn, W-D. (1976) Effect of Parathion and its Metabolites on Calcium Uptake Activity of Rat Skeletal Muscle Sarcoplasmic Reticulum *in vitro*. *Biochem. Pharmacol.* 25: 835-839. PMID: 132934
- Wecker, L., Mobley, P.L., and Dettbarn, W-D. (1977) Central Cholinergic Mechanisms Underlying Adaptation to Reduced Cholinesterase Activity. *Biochem. Pharmacol.* **26**: 633-637. PMID: 856193
- Wecker, L., Mobley, P.L., and Dettbarn, W-D. (1977) Effects of Atropine on Paraoxon-Induced Alterations in Brain Acetylcholine. *Arch. int. Pharmacodyn. Therap.* **227**: 69-75. PMID: 901075
- Wecker, L. and Dettbarn, W-D. (1977) Effects of Denervation on the Production of an Experimental Myopathy. *Exp. Neurol.* **57**: 94-101. PMID: 1269562
- Wecker, L., Dettbarn, W-D., and Schmidt, D.E. (1978) Choline Administration: Modification of the Central Actions of Atropine. *Science* **199**: 86-87. PMID: 17569493
- Wecker, L., Kiauta, T., and Dettbarn, W-D. (1978) Relationship Between Acetylcholinesterase Inhibition and the Development of a Myopathy. *J. Pharmacol. Exp. Ther.* **206**: 97-104. PMID: 660561
- Wecker, L., Laskowski, M.B., and Dettbarn, W-D. (1978) Neuromuscular Dysfunction Induced by Acetylcholinesterase Inhibition. *Fed. Proc.* **37**: 2818-2822.
- Wecker, L. and Dettbarn, W-D. (1979) Relationship Between Choline Availability and Acetylcholine Synthesis in Discrete Regions of Rat Brain. *J. Neurochem.* **32**: 961-967. PMID: 430073
- Wecker, L. and Schmidt, D.E. (1979) Central Cholinergic Function: Relationship to Choline Administration. *Life Sci.* **25**: 375-384. PMID: 470558
- Wecker, L. and Schmidt, D.E. (1980) Neuropharmacological Consequences of Choline Administration. *Brain Res.* **184**: 234-238. PMID: 7357423
- Ranish, N.A., Dettbarn, W-D., and Wecker, L. (1980) Nerve Stump Length-Dependent Loss of Acetylcholinesterase Activity in Endplate Regions of Rat Diaphragm. *Brain Res.* **191**: 379-386. PMID: 6155170
- Wecker, L. (1980) Drug-Diet Interactions: Neuropharmacological Effects of Exogenous Choline. In: Proc. Fifth FDA Science Symp. Effects of Foods and Drugs on the Development and Function of the Nervous System: Methods for Predicting Toxicity (R.M. Gryder and V.H. Frankos, Eds.), U.S. Office of Health Affairs (FDA) Publication No. 80-1076, pp. 212-217.

- Schmidt, D.E. and Wecker, L. (1981) CNS Effects of Choline Administration: Evidence for Temporal Dependence. *Neuropharmacol.* **20**: 535-539. PMID: 7242873
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- Goldberg, A.M. and Wecker, L. (1981) Regulation of Acetylcholine Release During Increased Neuronal Activity: The Effect of Choline. In: *Nutritional Factors: Modulating Effects on Metabolic Processes* (R.F. Beers, Jr. and E.G. Bassett, Eds.), Raven Press, New York, pp. 207-215.
- Wecker, L., Flynn, C.J., Stouse, M.R., and Trommer, B.A. (1982) Choline Availability: Effects on the Toxicity of Centrally Active Drugs. *Drug-Nutrient Interactions* **1**: 125-130. PMID: 6926821
- Trommer, B.A., Schmidt, D.E., and Wecker, L. (1982) Exogenous Choline Enhances the Synthesis of Acetylcholine Only Under Conditions of Increased Cholinergic Neuronal Activity. *J. Neurochem.* **39**: 1704-1709. PMID: 7142996
- Reinhardt, R.R. and Wecker, L. (1983) Evidence for Membrane-Associated Choline Kinase Activity in Rat Striatum. *J. Neurochem.* **41**: 623-629. PMID: 6308165
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