

Edward U. Maduh, Ph.D.
Personal Information

Citizenship:
Citizen of the USA

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CONTACT INFORMATION

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Curriculum Vitae
Edward U. Maduh, Ph.D.
edwardmaduh@icloud.com

Objective: A Position in which my skills in research and development, education, toxicology, pharmacology and clinical pharmacy, can be best utilized to support governmental, academic and development efforts in a growing pharmaceutical industry-related company.

EXPERIENCE AND SKILLS

RESEARCH, EDUCATIONAL AND PROFESSIONAL DEVELOPMENT

Sojourner-Douglass College

School of Nursing

The Annapolis Campus

Edgewater, Maryland

Adjunct Faculty

November 2012 – May 2014

Duties include:

- Classroom teaching and instruction of nursing, other allied health professions and career training students in human anatomy and physiology.
- Assigning, directing and guiding students through appropriate laboratory exercises and projects illustrative of lecture materials discussed in class, in addition to pertinent human disease states.
- Performing other duties assigned by the Director, or Department Head.

The Community College of Baltimore County, Maryland

Division of Health and Human Services

Department of Continuing Education and Economic Development

Adjunct Faculty

July 2011 – May 2014

Duties include:

- Classroom teaching and instruction of allied health professions and career training students in basic math, medical terminology, anatomy and physiology; performing other duties assigned by the Director, or Department Head.
- Utilized e-learning platform, SoftChalk, and Blackboard technologies to facilitate subject matter presentation and delivery of course materials, contents, and stimulate further discussions that foster achievement and success; using the assessment tools to assign grade earned, and evaluate student progress or individualized needs and development.

United States Patent and Trademark Office (USPTO), Alexandria, Virginia

Office of the Assistant Commissioner for Patents

Student Volunteer, Full-Time Student Trainee

June 2011 – August 2011

- Participated in the Patent Experience Externship Program (PEEP).
- Completed the USPTO Patent Examiner Training Academy.
- Attained working skills, knowledge, and hands-on experience in best art practices of patent prosecution.
- Learned Comprehensive Rules and Controlling Issues guiding Patent Applications, Examinations, Petitions, and Reexaminations.
- Learned and assisted the Office in the development and administration of U.S. patent law, experience the USPTO practices on patent examination policy and formulate new regulations, policies, and procedures regarding patents in fields of engineering, science, and law.
- Learned and applied Basic Patent Law, Statutes, and Case Laws in U.S., and Global patents.
- Gained detailed practical overviews of the *Manual of Patent Examining Procedure*, its revisions, editions and updates.
- Acquired knowledge of The Law and Claims of Intellectual Property Rights in Bio-Science and Biotechnology.
- Observed the Board of Patent Appeals and Interferences (BPAI) Case Reviews, and Applications to the Patent Prosecution Processes, and to the Examiner, Reexaminer, and Board Decision Making.
- Other USPTO duties assigned or coordinated by Program Director.

Prince George's Community College, Largo, Maryland

Department of Biological Sciences

Adjunct Faculty

January 2011 – July 2011

Duties include:

- Classroom teaching and laboratory instruction in medical microbiology for pre-medicine, pre-pharmacy, and Utilizing e-learning platform and Blackboard technologies to facilitate and deliver course materials, contents, and further discussions; using the assessment tools to assign grades earned, and evaluate student progress and individual needs and development.

U.S. Army Medical Research Institute of Chemical Defense, Aberdeen Proving Ground, Maryland*National Research Council/ National Academy of Sciences (USA) Resident Research Associate,**Principal Investigator**July 1992 - December, 1995*

- Developed, executed, coordinated, and managed: *USAMRICD Protocol #I-01-93-000-A-65*
- Implemented independent experimental studies of cyanide toxicity and innovative antidote development.
- Provided the *in vitro* and *in vivo* evidence for protein kinase C (PKC) involvement in cyanide toxicity.
- Identified PKC inhibition as a novel pharmacologic strategy for cyanide antagonism.

National Institutes of Health /National Institute of Neurological Disorders and Stroke, Bethesda, Maryland*Visiting Fellow**April 1990 - June 1992*

- Managed and monitored the modeling of cell cultures for studies of neural and molecular basis of learning and memory storage with the goal in mind of studying, evaluating and identifying pharmacological agents affecting memory processes.
- Performed purification and subcellular fractionation of protein kinase C (PKC).
- Used ³²p radioisotope to study PKC activity in cellular fractions.
- Utilized the Western blot technique in isozymic analysis of PKC.

PHARMACY PRACTICE**U.S. Department of Veterans Affairs, Medical Center, Washington, D.C.***Inpatient Staff Clinical Pharmacist, Clinical Pharmacy Specialist DC VAMC**January 2013 – Present*

Duties include:

- Processing in-patient medication orders, IV admixtures and nutritional support therapy (TPN) systems.
- Providing drug information services and in-service seminars to nurses, nursing aides, and medical staff.
- Providing appropriate and timely selection of drug therapy based upon the pharmaceutical principles of pharmacokinetics and pharmacodynamics; monitoring for efficacy, side effects and clinical outcome; and advises prescribers as appropriate.
- Performing patient-specific therapeutic drug monitoring and communicates relevant findings and/or recommendations to other health care providers in charge of the patient both orally and in writing. Monitoring will include prospective review and intervention in:
 - (a) Therapeutic appropriateness of a patient's drug regimen.
 - (b) Therapeutic duplication in the patient's drug regimen.
 - (c) Appropriateness of the route and method of administration.
 - (d) Degree of patient compliance with the prescribed drug regimen.
 - (e) Drug-drug, drug-food, drug-laboratory, or drug disease interactions.
 - (f) Clinical and pharmacokinetic laboratory data to evaluate the efficacy of drug therapy and to anticipate side effects, toxicity, or adverse effects.
 - (g) Physical signs and clinical symptoms relevant to the patient's drug therapy.
- Performing continuous evaluation of prescribed medications to assure optimal drug therapy while minimizing toxicological event.
- Providing medication counseling to patients.
- Serving as a drug information resource by providing up-to-date drug information to prescribers, other health care professionals, patients and caregivers.
- Review charts, evaluates pertinent laboratory data, drug-drug and drug-nutrient interactions, monitors for toxic and adverse drug effects, and screens for allergies.
- Assessing drug safety and efficacy, including evaluation of physical symptoms.

- Reporting adverse drug events (ADE), near misses, and medication errors in alignment with VA ADERS reporting program.
- Participating in the medical center medication utilization evaluation (MUE) program.
- Review and Recommend formulary alternatives.
- Participating in emergency preparedness activities.
- Providing pharmacokinetic consultation, criteria-specific dosing vancomycin and aminoglycosides, in accordance with local policy.
- Reviewing all medication orders for appropriateness, drug selection, dosage, route of administration and the amount, prior to dispensing.
- Ensuring all medication orders are entered into the electronic patient medical record.
- Fill all orders in accurate and timely fashion; review of the patient's allergy history, drug-drug, drug-nutrient, drug-laboratory and drug-disease state interactions and assessment for clinical relevance are performed and dealt with appropriately.
- Reviewing medication profiles and monitors for compliance or potential misuse or abuse; resolving problems that may arise.
- Selecting, compounding, dispensing and filling a range of drugs including extemporaneous preparations, special formulations, ophthalmics (subconjunctivals and intravitreal injections), narcotics, investigational drugs, oncolytic agents, etc., in both outpatient and inpatient areas. Adequate quality assurance procedures shall be followed as applicable.
- Maintaining adequate drug stock, inspect drug storage areas, supervises prepacking and the operation of automated dispensing equipment.
- Develop and implement effective daily workflow scheduling on rotating basis.
- Supervising the activities of support personnel.

Clinical Investigational Research Pharmacist, Clinical Research Pharmacist DC VAMC May 2015 – Present

Duties include:

- Providing all aspects of pharmacy care and services of the Research Section of the Medical Center Pharmacy Services on all clinical drug trial protocols in accordance with pertinent policies and procedures.
- Coordinating, collaborating and implementing best practice expertise in support of clinical investigational drug trials.
- Developing and maintaining binders on clinical trial protocols as appropriate.
- Performing cross-specialty duties including those of the Oncology/IV Admixture Pharmacist and the Staff Pharmacist, in-patient as well as out-patient.
- Review all study protocols and contribute clinical pharmaceutical expertise accordingly.
- Providing accurate and timely pharmaceutical consults on interdisciplinary basis as required.

Family Discount Pharmacy

Glen Burnie, Maryland

Consultant Pharmacy and Pharmaceutical care services

August 2012- April 2014

Duties include:

- Providing relief practice coverage in pharmacy departments as arranged and when needed.

Staffing Plus, Inc., Philadelphia, Pennsylvania

Pharmacist On Call

July 2009- Present

- Provided relief practice coverage in pharmacy departments as arranged when needed.

CVS/ Pharmacy, Baltimore, Maryland

Pharmacist

September 2007 - June 2009

Duties include:

- Dispensing of drugs and medicines in practice of pharmacy.
- Clinical pharmacotherapy and drug utilization review.
- Inventory control and daily logging of prescription orders and refills.
- Selling of OTC medication and personal health care products; and Self-medication counseling.
- Supervised multiple shifts of pharmacist assistants and technicians.
- Daily implementation of timely pharmaceutical care and quality assurance.
- Efficient time management of pharmacy personnel by using workflow technique.
- Preparing and transmitting third-party claims.
- Preparing and transmitting the store manager's weekly report to corporate headquarters.

Rite Aid Corporation of Maryland, Baltimore, Maryland

Pharmacist, Co-Manager of Pharmacy Department

June 1992 - August 2007

Duties include:

- Dispensing drugs and medicines in practice of pharmacy.
- Drug utilization review.
- Inventory control and daily-logging of prescription orders and refills.
- Selling OTC medication and health care products.
- Performing personal healthcare and self-medication counseling.
- Supervising multiple shifts of pharmacy technicians and clerks.
- Preparing and transmitting third-party claims.

Kaiser Permanente of the Mid-Atlantic, Rockville, Maryland

On Call Clinical Pharmacist

September 1999-2007

Duties include

- Dispensing of drugs and medicines in practice of pharmacy in the Medical Clinic.
- Clinical Drug utilization review.
- Selling OTC medication and health care products.
- Performing self-medication counseling.
- Supervising pharmacy technicians and clerks.

American Pharmaceutical Association, Washington, D.C.

National Pharmacy Week, "DIAL-OGUE ON ULCERS"

October 1995

- Volunteered to help educate the consumers about the emerging concepts on ulcer disease, the role of *Helicobacter pylori* as the leading cause of peptic ulcers, and new treatment options.

American Pharmaceutical Association, Washington, D.C.

National Pharmacy Week, "The DIAL-OGUE" (APhA News Release #94-113)

October 1994

- Volunteered to provide professional information on the management of chronic pain and proper use of pain medications to patients.

Super Save Drugs, Inc., Pocatello, Idaho

Relief Pharmacist

September 1984 - December 1985

Duties include:

- Practicing pharmacy, dispensing of drugs and medicines.
- Selling OTC medication and health care products.
- Supervising practical experience training for pharmacy interns.
- Being involved with the installation of a computer system for prescription filling, patient medication profiles, drug procurement, and comprehensive record keeping.

McCall Drugs, Inc., McCall, Idaho*Intern Pharmacist**May 1984 - August 1984*

- Practiced pharmacy under supervision.

*Pharmacist**August 1984 - September 1984*

- Engaged in community practice of pharmacy.
- Utilized unit dose system to fill medication orders for McCall nursing home and helped provide monthly review of physician orders and medication use by nursing home residents.

Don's Drugs, Casper, Wyoming*Pharmacy Intern**January 1983 - May 1983*

- Practiced pharmacy under supervision.
- Using computer for prescription filling, inventory control, patient medication profiles, and drug interaction surveillance.

Memorial Hospital of Natrona County, Casper, Wyoming*Pharmacy Intern**January 1983 - May 1983*

- Filled in-patient medication orders, IV admixtures and nutritional support therapy systems.
- Provided drug information services and in-service seminars to nurses, nursing aides, and medical staff.

EDUCATION

Ph.D. in Pharmacology and Toxicology (1989), Purdue University, West Lafayette, Indiana
Thesis: Mechanisms of Cyanide Neurotoxicity

M.S. in Pharmacy (Pharmacology 1985), Idaho State University, Pocatello, Idaho
Thesis: The Effects of Verapamil, Diltiazem, and d-Amphetamine on Norepinephrine Content of Rat Hypothalamus and Medulla Oblongata.

B.S. in Pharmacy (1983), University of Wyoming, Laramie, Wyoming

J.D. Law/Jurisprudence 1L eStudent (9/2010 – 8/2011) Taft Law School, Santa Ana, California

CERTIFICATIONS

Neuroscience (1989), Purdue Neuroscience Program, West Lafayette, Indiana
Regulatory Issues in Biotechnology (2010), UMBC Training Centers, Baltimore, Maryland
SEAK Expert Witness Training [SEAK.Com](https://www.seak.com) (2024-2025)

Purdue University, West Lafayette, Indiana

Post-doctoral Fellow

January 1990 - March 1990

- Developed a cell culture system for studying cytoprotective pharmacological strategy against cyanide-induced neuronal injury.

Graduate Teaching Assistant

January 1986 - December 1989

- Assisted in laboratory instruction of undergraduate pharmacy students;
- Studied the mechanisms underlying cyanide toxicity in the central nervous system;
- Used high performance liquid chromatography (HPLC) for measurement of neurochemicals, and cell energy nucleotides;
- Utilized fluorometric methods for assessment of cytosolic free Ca²⁺, intracellular pH, and membrane potentials;
- Shared responsibility for establishing a cell culture facility in the department of pharmacology and toxicology;
- Completed the Beckman's Liquid Chromatography Course, September 1987.

Idaho State University, Pocatello, Idaho

Graduate Teaching Assistant

August 1983 - December 1985

- Taught biopharmaceutics and pharmacokinetics laboratory to 4th-year pharmacy students and assisted in teaching pharmaceutical dispensing.

University of Wyoming, Laramie, Wyoming

Research Assistant

May 1980 - August 1982

- Investigated the effect of urinary acidification on excretion of aspirin.

Continuing Education and Skill Diversification Courses

- Completed the Life Technology, Inc./GIBCO Bethesda Research Laboratories 1991 Molecular Biology

Techniques Training Workshops on:

- 1) Recombinant DNA Technology,
- 2) cDNA Libraries, and
- 3) Cell Transfection Techniques:-

- Preparation of genomic DNA;
- Synthesis and cloning of cDNA molecules;
- Screening and uses of cDNA libraries;
- Isolation of RNA;
- Usage of restriction enzymes to study RNA and DNA molecules;
- Generation of Hybridization Blots for nucleic acid analysis;
- Introduction of genes into eukaryotic cells using Ca²⁺ phosphate, Lipofection, and Electroporation techniques;
- Gene product analysis using reporter genes.

AWARDS AND SCHOLARSHIPS

- Commander's Commendation Letter U S Army Medical Research Institute of Chemical Defense (1994).
- NRC Research Associate (1992), National Research Council/ National Academy of Sciences, USA
- NIH Visiting Fellow (1990) National Institutes of Health, Bethesda, MD.
- Jenkins/Knevel Qualifying Award for Excellence in Research, Purdue University (1988)
- Student Travel Award, American Society for Pharmacology and Experimental Therapeutics (1988), Funded by the Procter and Gamble Company
- David Ross Fellow, Purdue University (1987 - 1988)
- Roche Laboratories Award for Scholastic Improvement, School of Pharmacy, University of Wyoming (1983)

MEMBERSHIPS IN PROFESSIONAL SOCIETIES

Rho Chi Pharmacy Honor Society
 American Pharmaceutical Association
 American Academy for Pharmaceutical Research and Science
 Society for Neuroscience
 International Brain Research Organization/World Federation of Neuroscientists
 Society of Toxicology
 The New York Academy of Sciences

EDITORIAL POSITIONS

Ad Hoc Reviewer for:
 Journal of Pharmaceutical Sciences
 Journal of Applied Toxicology
 Member of the Editorial Board and Managing Editor, Institute on African Affairs

BOARD LICENSES

Wyoming Pharmacy Intern (1981 - 1984).
 Pharmacist (licensed in Idaho, Indiana, Maryland, and The District of Columbia)

SEARCHABLE WORK SAMPLES

Top Authors in Toxicology – Microsoft Academic Search (February 2012)
<http://academic.research.microsoft.com/Author/25719884/edward-u-maduh>
academic.research.microsoft.com/RankList?entitytype... [Cached](#)

Results 7001 - 7100 of 230833 - Author | Conference | Journal | Organization ...

700	Edward U.	US Army Research	Publications:
1	Maduh	Laboratory	8

References are available upon request.

LIST OF PUBLICATIONS AND PRESENTATIONS:

BOOK CHAPTERS AND REVIEWS

- Maduh, E.U.: Molecular and Cellular Mechanisms of Cyanide Neurotoxicity, In: Preparation.
- Baskin, S.I., and Maduh, E.U.: Fundamentals of cardiotoxicology, In: General and Applied Toxicology. (B. Ballantyne, T. Marrs, & P. Turner, Eds) Macmillan Press, 1993.
- [Maduh, E.U., Porter, D.W., and Baskin, S.I.: Calcium antagonists: A role in the management of Cyanide poisoning? *Drug Safety* 9 \(4\):237-248, 1993. \(Invited Lead Article\).](#)
- Maduh, E.U., Baskin, S.I., and Salem H: Attaining a rational refinement and reduction in the use of live animals Studies on cyanide toxicity, In: Advances in Animal Alternatives for Safety and Efficacy Testing. (H. Salem & S. Katz, Eds) Taylor & Francis, 1998.
- Maduh, E.U., and Omandan, M.S.: Coronavirus Disease (COVID-19): Can SMZ/TMP Prophylactic Treatment of Pneumonia Enhance Patient Outcomes? Submitted, 2020.

RESEARCH ARTICLES

- [Maduh, E.U., Johnson, J.D., Ardelt, B.K., Borowitz, J.L., and Isom, G.E.: Cyanide-induced neurotoxicity: Mechanisms of attenuation by chlorpromazine. *Toxicol. Appl. Pharmacol.* 96 \(1\):60, 1988.](#)
- [Maduh, E.U., Turek, J.J., Borowitz, J.L., Rebar, A., and Isom, G.E.: Cyanide-induced neurotoxicity: Calcium mediation of Morphological changes in neuronal cells. *Toxicol. Appl. Pharmacol.* 103 \(2\):214,1990.](#)
- Maduh, E.U., and Huff, M.R.: Calcium channel blockers increase norepinephrine concentrations in rat hypothalamus. *Proc. West. Pharmacol. Soc.*, 33:243, 1990.
- [Maduh, E.U., Borowitz, J.L., and Isom, G.E.: Cyanide-induced alteration of cytosolic pH: Involvement of cellular hydrogen ion handling processes. *Toxicol. Appl. Pharmacol.* 106 \(2\):201, 1990.](#)
- [Maduh, E.U., Borowitz, J.L., and Isom, G.E.: Cyanide-induced alteration of the adenylate energy pool in a rat neurosecretory cell line. *J. Appl. Toxicol.* 11 \(2\):97,1991.](#)
- [Kanthasamy, A.G., Maduh, E.U., Peoples, R.W., Borowitz, J.L., and Isom, G.E.: Calcium mediation of cyanide-induced catecholamine release: Implications for neurotoxicity. *Toxicol. Appl. Pharmacol.* 110 \(2\):275, 1991.](#)
- Ardelt, B.K., Borowitz, J.L., Maduh, E.U., Swain, S.L., and Isom, G.E.: Cyanide-induced lipid peroxidation: subcellular distribution and hydroperoxide generation in neuronal cells. [Toxicology 89: 127, 1994.](#)
- [Maduh, E.U., and Baskin, S.I.: Protein kinase C modulation of rhodanese-catalyzed conversion of cyanide to thiocyanate. *Res. Commun. Mol. Pathol. Pharmacol.* 86 \(2\):153,1994.](#)
- [Maduh, E.U., Nealley, E.W., Song, H., Wang, P.C., and Baskin, S.I.: A Protein kinase C inhibitor attenuates cyanide toxicity, *in vivo*. *Toxicology* 100:129, 1995.](#)
- Maduh, E.U., Nealley, E.W., Wang, P.C., and Baskin, S.I.: Sodium cyanide alterations in phosphorous energy profile of swine brain. In preparation.
- Maduh, E.U., Nealley, E.W., and Baskin, S.I.: Methemoglobin and blood oxygen metabolism during acute cyanide toxicity of miniature swine. In preparation.

MEETING ABSTRACTS AND PRESENTATIONS

- Maduh, E.U., Ardelt, B.K., Johnson, J.D., Borowitz, J.L., and Isom, G.E.: Cyanide-induced neurotoxicity: Attenuation by chlorpromazine. *Soc. Neurosci. Abstr.* 13 (2):930, 1987.
- Patel, M.N., Ardelt, B.K., Maduh, E.U., Yim, G.K.W., Borowitz, J.L., and Isom, G.E.: Changes in Glutamate neurotransmitter system following potassium cyanide treatment. *The Pharmacologist*, 30 (3):A46, 1988.
- Borowitz, J.L., Maduh, E.U., Turek, J., Rebar, A., and Isom, G.E.: Cyanide-induced morphological changes in neuronal cells. *FASEB J.* 2 (4):A417, 1988.
- Maduh, E.U., Peoples, R.W., Borowitz, J.L. and Isom, G.E.: Potassium cyanide-induced release of neurotransmitters in neural models. *The Pharmacologist*, 30 (3):A46, 1988.
- Isom, G.E. Borowitz, J.L., and Maduh, E.U.: Cyanide-induced alteration of cytosolic proton homeostasis. *The Toxicologist*, 1:443, 1990.
- Kanthasamy, A., Maduh, E.U., Borowitz, J.L., and Isom, G.E.: Cyanide-evoked catecholamine release: Implications for toxicity. *The Pharmacologist*, 32 (1):159,1990.
- Maduh, E.U., Moshiach, S., Lester, D.S., and Alkon, D.L.: Differential distribution of protein kinase

- C (PKC) isozymes in cultured Hermissenda neurons. Third IBRO World Congress of Neuroscience, Montreal, Canada, 1991.
- Baskin, S.I., Maduh, E.U., Nealley, E.W., and Porter, D.W.: Cyanide (CN) analogues modify rhodanese activity. *The Toxicologist* 13 (1): 326, 1993.
- Maduh, E.U., and Baskin, S.I.: Protein kinase C (PKC) modulates rhodanese activity. *Soc. Neurosci. Abstr.* 19 (3):1889, 1993.
- Porter, D.W., Maduh, E.U., Nealley, E.W., and Baskin, S.I.: The effectiveness of three α -keto acids as Cyanide pretreatments. *USAMRDC Medical Defense Bioscience Review*, 163, 1993.
- Porter, D.W., Maduh, E.U., Nealley, E.W., and Baskin, S.I.: Inhibition of 3-mercaptopyruvate Sulfurtransferase by three α -keto acids. *Government Reports, Announcements and Index (GRA&I)*, Issue 14, 1994.
- Maduh, E.U., Nealley, E.W., Wang, P.C., Song, H., and Baskin, S.I.: Cyanide stimulates cell energy transients in the brain of miniature swine. *The Toxicologist* 14 (1): 343, 1994.
- Maduh, E.U., Nealley, E.W., Wang, P.C., Song, H., and Baskin, S.I.: Protein kinase C (PKC) inhibition ameliorates cyanide-stimulated cell energy transients in brain of miniature swine. *FASEB J.*, 8 (5):A647, 1994.
- Baskin, S.I., Maduh, E.U., and Nealley, E.W.: Sublethal sodium cyanide stimulates reversible alterations of high energy phosphates in brain of miniature swine, *in vivo*. NATO UNCLASSIFIED Research Study Group Panel VIII / RSG-3 and Federal Armed Forces Medical Academy, Munich, Austria, April, 1994.
- Baskin, S.I., Maduh, E.U., McCreery, M.J., and Nealley, E.W.: Sublethal sodium cyanide stimulates Reversible alterations of high energy phosphates in brain of miniature swine, *in vivo*. The 19th Army Science Conference, Orlando, FL., June, 1994.
- Maduh, E.U., Nealley, E.W., and Baskin, S.I.: Hemoglobin and blood oxygen metabolism during acute Cyanide toxicity of miniature swine. *Soc. Neurosci. Abstr.* 20 (2):1761, 1994.
- Maduh, E.U., Nealley, E.W., and Baskin, S.I.: Prophylactic administration of H-7, a protein kinase C inhibitor, improves the survivability of cyanide intoxication. *The Toxicologist* 15 (1): 168, 1995.
- Baskin, S.I., Maduh, E.U., and Nealley, E.W. Intracellular pH reduction in the brain of swine by Intravenous cyanide (CN) administration. The Fifth International Symposium on Protection Against Chemical and Biological Warfare Agents, Stockholm, Sweden, June 11-16, 1995.

SPECIALIZED AUDIENCE PRESENTATIONS:

Maduh, E.U. Cellular and Molecular Mechanisms of Cyanide Neurotoxicity Brief Review US Environmental Protection Agency, Integrated Risk Information System (IRIS), National Center for Environmental Assessment, Office of Research and Development, Arlington, Va., Seminar February 2, 2010.

Maduh, E.U.; Youngkin, D.: In *Re: Kao*: Patentability Process BPAI Board Decision, Secondary Considerations for Overcoming a 103 Rejection, United States Patent and Trademark Office, Technology Center 1600, Alexandria, Va., Brown Bag Seminar July 19, 2011.