

CURRICULUM VITAE

CATHY D. GRAHAM, Ph.D.

Educational Background:

Post Doctoral Interprofessional Fellowship in Advanced Clinical Education Post-doctoral training fellowship to advance, implement, teach, and evaluate innovative experiential and simulation-based training strategies to improve medical education and healthcare for Veterans and the Nation. Includes adult education theory and method, curriculum design in accordance with Joint Commission, CDC, AMA and VA directives, high stakes and emergency management training, low and high-fidelity simulation and medical/trauma moulage, task trainers, standardized patient scenarios, virtual patient scenarios, e-learning platforms, team training, outcome measurement, and NMBE and ANA style assessment of clinical, technical, communication and non-technical skills. supported by the federal Office of Academic Affiliations (OAA) and the Simulation Learning, Education, and Research Network (SimLEARN) of the VHA Employee Education System, Orlando Florida. 2015-2016

Ph.D., Biomedical Sciences: Neuroscience and Integrated Physiology *Chemosensitive Neurons of the Locus Coeruleus and the Nucleus Tractus Solitarius: Three Dimensional Morphology and Association with the Vasculature* NIH Grant HL56683 Advisor: Robert W. Putnam, Ph.D., Department of Neuroscience, Cell Biology and Physiology, Boonshoft School of Medicine and College of Science & Mathematics, Wright State University, Dayton, OH, 2014.

M.S. Pharmacology and Toxicology: Boonshoft School of Medicine, Wright State University, Dayton, Ohio, 2015. Renin Angiotensin System, Cardiovascular and Behavioral changes in murine models of Diabetes . Boonshoft School of Medicine, Department of Pharmacology and Toxicology, Wright State University, Dayton, OH, 2015

CBRN Graduate Certification: Chemical, Biological, Radiological, and Nuclear Defense and Medical Readiness Boonshoft School of Medicine, Department of Pharmacology and Toxicology, Wright State University, Dayton, Ohio, 2013.

Biological Sciences: Undergraduate pre-med curriculum, prerequisite for PhD program in Biomedical Sciences, Wright State University, Dayton, Ohio

Diplôme National D'Arts Plastiques: National French Ministry of Culture and Communication, Poitiers, France

Diplôme Approfondi De Langue Francaise C1: National French Ministry of Education, L'Alliance Francaise, Paris, France

Bachelors of Arts: Visual Arts and Education, Graceland University, Lamoni, IA

Research:

Clinical Education: Practice Innovation Through Experiential Learning, Use of multimodality learning platforms to address quality and competency in the clinical healthcare environment. Comparison of nursing and provider self-reported efficacy vs. performance . Improvements in patient safety and safe patient handling in the Dayton VA Medical Center through simulation training. Advisor: Rosalyn P Scott, MD

Neuroscience and Integrated Physiology: Central nervous system ventilatory control mechanisms. Morphological and electrophysiological characterization of chemosensitive neurons in the locus coeruleus and the nucleus tractus solitarius of

CATHY D. GRAHAM, PhD, MS

the rat brainstem, immunohistological and confocal microscopy study, 3D reconstruction of identified chemosensitive neurons, and their association with the vasculature, Kv1.4 channel distribution in the LC. Advisor: Robert W. Putnam, Ph.D., WSU Funding: NIH Grant HL56683

Nutrition and Metabolic Syndrome: Nutritional study of the effects of dietary high fructose on cardiovascular function, circulating Angiotensin, CNS and renal Angiotensin receptors, circulating leptin, ghrelin and cortisol. Spectral analysis of cardiovascular parameters, analysis of glucose tolerance, triglycerides, weight gain, cell volume of white and brown adipose tissue Advisor: Mariana Morris, Ph.D., WSU Funding: R01 HL093567

Behavior and Addiction: Behavioral impact of high fructose diet: Modification of activity, licking and grooming behaviors, diurnal patterns and disruption of circadian rhythms in mice due to availability of water additives indicating addictive qualities of dietary sugars. Advisor: Mariana Morris, Ph.D., WSU Funding: R01 HL093567

Cardiovascular: Direct Mechanical Ventricular Actuation (DMVA): A pre-clinical in-vivo study of non-blood contacting circulatory support to define the requirements and characteristics for a drive system designed for a clinically relevant range of pediatric DMVA heart cups. Advisor: Mark Anstadt, M.D., WSU Funding: MyoTech Cardiovascular and NIH/NHL 007805-13

Environmental Science: Wetlands restoration. Identified and removed invasive plant life from Beaver creek wetland ecosystem in the watershed. Purple Loosestrife, Reed Canary Grass, Amur and Tartarian Honeysuckle and introduced wetlands species to combat the invasives: Burreed (*Sparganium eurycarpum*), Spikerush (*Eleocharis erythropoda*), and Bottle-Brush sedge (*Carex comosa*). Beaver creek Wetlands, OH, Advisor: James Amon, Ph.D., Wright State University, Dayton, Ohio

Molecular Genetics: Studied various molecular techniques and computer platforms to analyze DNA sequences. Edited 2nd edition of *Fundamental Concepts of Bioinformatics*. Advisor: Dan Krane, Ph.D., Wright State University, Dayton, Ohio

Experience:

Corporate Director of Clinical Education, Research and Work Force Development Present. Full-Time. Truman Medical Centers, Kansas City, Missouri. As director of clinical education and research, I lead and support nursing practice through professional development, ensuring all regulatory, accreditation, and clinical competency standards are met; and identifying, measuring, and evaluating clinical and departmental outcomes. Efforts are underway to integrate nursing education and research at Truman with the broader healthcare education and research community on Hospital Hill and in the greater Kansas City area. One of my goals is to align ongoing nursing education initiatives with the business objectives of the organization and improve organizational performance.

National Work Group Federal Selection 2016--Ongoing, ~16hrs/week Federal Selection for Workgroup team. Focus: To enhance the educational programming and impact of the entire Veteran Administration Office of Academic Affiliations (OAA) Advanced Clinical Fellowship portfolio, encompassing 20 fellowship programs, 40 VHA facilities and approximately 350-400 individual fellows. Creation of a national professional development curriculum to train advanced fellows to become inter-professional leaders poised to improve clinical education and health care for Veterans.

Workforce Development/Medical Education Federal Appointment May 2015-2016, Full-time, Veterans Administration, VISN 10 region (Ohio, Indiana, and Michigan), Dayton VA Medical Center, Dayton, OH. Develop educational programs in accordance with VHA directive from Assistant Deputy Under Secretary for Health for Quality, Safety, and Value, national scope of practice and standards, in order to effect change via practice innovation to advance the quality and safety of patient care within VHA. Responsible for educational research, design, extraction, evaluation and analysis of data. Collaboration with local, regional and national V.A. Medical centers and simulation laboratories to

CATHY D. GRAHAM, PhD, MS

develop patient-centered and evidence-based training modules for providers, nurses, residents and medical students. Develop and present written and oral reports at local and national levels. Collaborate with subject matter experts (nurses and physicians) to design primary care team and resident education programs for implementation in the regional and national VA training programs. Develop training scenarios, data collection systems and facilitate resident clinical skills training (central line placement, thoracentesis, paracentesis, lumbar puncture, out of OR airway management, arterial lines and mock codes). Project leader addressing quality, and continuing education needs for nursing staff and providers including pain management, palliative care, team communication, women's health, diabetes management and wound care, using multiple learning modalities and evaluation tools. Team member tasked with development and implementation of MCI (Mass Casualty Incident) training events and Active Threat response trainings for the Dayton VAMC. Designed and created advanced interactive moulage for wound care training and trauma scenarios. Experience with simulator/mannequin programming and troubleshooting, B-line Medical Sim Capture, Kynectiv Decision Simulator, and development of training modules for the VA Virtual Medical Center, an online clinical training and patient education virtual environment.

Faculty Anatomy and Physiology Nov 2014-Present, 16 contact hours/week, Dayton School of Manual Therapies, Dayton OH. Develop curriculum and course materials, and instruct college-level lecture and laboratory courses in human anatomy and physiology, basic biochemistry, cellular anatomy and physiology, systems physiology, development, metabolism, homeostasis and fluid balance. Maintain student grade and attendance records, develop course instructional materials and evaluate student mastery of content.

Adjunct Faculty Pathophysiology Jan 2014; Aug 2014 Blended Online and Live Internet Lecture Course for Nursing students. Online Instruction, 3 contact hours/week Missouri Valley College, Marshall, MO. Conducted online lecture pathophysiology classes in accordance with established syllabi and lesson plans. Prepared and loaded course materials into online learning management system, Moodle (Modular Object-Oriented Dynamic Learning Environment). Created, administered and graded assignments, quizzes and tests. Provided objective and subjective feedback regarding student performance. Maintained records of student attendance, grades, and homework assignments.

Adjunct Faculty Biology, Botany, Anatomy and Physiology, Microbiology Aug 2012-May 2014, 16 contact hours/week Clark State Community College, Springfield, OH. Taught lecture and laboratory sections in Biology, Botany, Anatomy and Physiology and Microbiology. Prepared course curricula, created course materials, delivered lectures and proctored exams. Guided laboratory experiments to successful competency outcomes, graded assignments, evaluated student performance, prepared final grade reports.

Laboratory Manager/Research Assistant : Full-time Jan 2006-May 2012, Full-time Wright State University, Boonshoft School of Medicine, Dayton, Ohio. Conducted in vivo and in vitro experiments evaluating systemic, cellular and pmolecular level changes in multiple murine models of diabetes. Developed unique mouse model of nutritionally induced metabolic syndrome. Assisted in maintaining colony of AT1a and ACE overexpressing mice for cardiovascular research. Trained in microsurgery (radiotelemetry implant), stereotaxic microinjection for retrograde neuronal labeling. Also trained in sternotomy and thoracotomy for cardiovascular studies and laminectomy for motor neuron electrophysiology studies. RT-PCR, immunohistochemistry, Mass Spectroscopy, atomic force microscopy (Purdue University), confocal microscopy, cell and tissue culture, software programs for autoregressive spectral analysis, neuronal reconstruction, 3D modeling, data analysis, in situ hybridization, radioisotope labeling, electrophysiology and many other cell and molecular bench techniques. Wrote experimental animal protocols approved by WSU IACUC. Ordered laboratory equipment and chemicals, prepared solutions appropriate for ongoing projects. Maintained lab instruments and reagents; animal care and handling; complying with universal precautions and laboratory safety policies (such as annual Personal Protection Devices testing and OSHA requirements); Training and mentoring undergraduate and graduate students; ordering lab supplies; and organizing lab records, assisted in grant and manuscript preparation, helped prepare grant application for

CATHY D. GRAHAM, PhD, MS

successful R01 HL093567 Prepared and presented several posters for local, regional, national and international conferences.

Mentor: STREAMS (Short-Term Training Program to Increase Diversity in Health-Related Research) Jun 2007-May 2008, approx 15% of my full-time R.A. duties Wright State University, Boonshoft School of Medicine, Dayton, Ohio. Mentored undergraduate student in cardiovascular and diabetes research. Provided training in bench techniques, tissue collection and processing, research protocols, animal use and care, surgical techniques, data collection and analysis, poster preparation and presentation. Funding: National Heart, Lung, and Blood Institute of the National Institutes of Health

Graduate Teaching Assistant: Aug 2005-May 2007, 20 hours/week Wright State University, Day, OH. Concepts in Biology II, Bio 346, Clinical Biology, Bio 311, Comparative Vertebrate Anatomy. Independently guided laboratory experiments according to established curriculum, responsible for laboratory safety, setup, specimens, cadavers, cultures, equipment and supplies. Assisted students with concepts and competencies in biology and anatomy, trained students in laboratory techniques and procedures, proctored and graded exams, maintained student performance records.

Lab Technician/Manager Microbiology, Wright State University, June 1998-Aug 1998, Organized laboratory space, inventoried and maintained equipment, ordered supplies, prepared and maintained bacterial cell cultures. Advisor: James Amon, Ph.D.

Adjunct Faculty Microbiology, Aug 1997-Dec 1997, Wright State University, Dayton, OH. Instructed undergraduate laboratory coursework according to established curriculum, responsible for laboratory safety, setup, cultures, equipment and supplies. Assisted students with concepts and competencies in microbiology, trained students in laboratory techniques and procedures. Created, proctored and graded practical examinations. Assisted with ongoing wetland restoration project combating invasive plants in the Beavercreek wetlands and watershed areas.

Science/Math Instructor: Mar 1999-June 2003, Algebra, Biology, Physical Science, grades 5-8, Hillel Academy, Dayton, OH.

Visual Arts Teacher: Aug 1988- June 1993, Studio Arts, Art History and Art Appreciation, grades 9-12, St. Henry High School, Erlanger, KY, Dave Otte, Ph.D., Principal.

Artist/Photographer: 1986-present Commissioned paintings/murals/faux painting and photography

Volunteer Activities:

Beavercreek Wetlands Association: Supporting Member. Volunteer since 1997: Combating invasive plant life: Purple Loosestrife, Reed Canary Grass, Amur and Tartarian Honeysuckle and introducing wetlands species to combat the invasives: Burreed (*Sparganium eurycarpum*), Spikerush (*Eleocharis erythropoda*), and Bottle-Brush sedge (*Carex comosa*).

Moulage Concepts: Corresponding Author and Consultant-Clinical Simulation, 2015-present (see Publications)

RUFF Comforts Animal Sanctuary: Founder, Committed to the rescue, rehabilitation, training and re-homing of homeless animals, 2015-Present.

The Adaptive Adventure Sports Coalition (TAASC) Alpine Ski Volunteer –trained in Mono-ski, Two-track and Three-track ski techniques to assist individuals with disabilities including cognitive and physical challenges such as autism, developmental delays, cerebral palsy, and amputations. 2008-2012

Volunteer Instructor: Minority Outreach Program Horizons in Medicine Jun 2006-Jul 2006, 6 contact hrs/week, Wright State University, Boonshoft School of Medicine, Dayton, Ohio. Developed and taught neurobiology and pharmacology

CATHY D. GRAHAM, PhD, MS

lecture and laboratory for summer outreach program for minority high school students interested in careers in science and medicine.

Beavercreek Christian Church: Afterschool Child Enrichment Program Teacher 2011-2012

St. Vincent de Paul Gateway Homeless Shelter: After-school program tutor 2006-2010

Cleveland Clinic/Hope Hotel: Full-time Caregiver/Patient Advocate for patient with metastatic head and neck cancer. NG tube/nutrition management, tracheostomy management, chronic wound dressing changes, IV fluid management, medication administration, patient transportation, POA Oct-Dec 2005

Beavercreek City School: Science Fair Judge 2006-2010

Fencing Point Judge: USA Fencing 2006-2008

Football Coach Eager Beavers Football 1999-2000

Theater Set Design and Construction: Oakdale School, Cinti, OH 1999, Hillel Academy, Loft Theater, Day, OH 2003

Certifications:

AHA BLS Instructor 2015-present # IMP16HFBHFEF

Safe Patient Handling and Mobility Training 2015-present

NIH Protecting Human Research Participants: 2014-present Certification # 156097

CITI Training: 2013-present

CPR Provider current

Laser Safety: 2009

Sarin Training: 2008

Blood Bourne Pathogens: 2006

Biological Safety: 1998

Animal Occupational Health and Safety: 2004

Radiation Safety: 2004

Hazardous Waste: 2004

Publications:

CATHY D. GRAHAM, PhD, MS

Use of Multimodality Simulations to Improve Self-Reported Competence in Palliative Care Skills Among Veterans Administration Healthcare System of Ohio (VISN 10) Primary Care Providers and Nurses, Rosalyn Scott, Cathy D. Graham, Mary Davidson, Kira King, Terri Benjamin, The MedBiquitous Annual Conference, May 2016

Provider and patient facing interventions in a virtual environment, Rosalyn P Scott, Manny Dominguez, Debra Burgess, Cathy D Graham, Terry L. Oroszi, Jenny Gallimore, The MedBiquitous Annual Conference, Johns Hopkins School of Medicine in Baltimore, MD, May 2016

Anatomical and Functional Connections Between the Locus Coeruleus and the Nucleus Tractus Solitarius in Neonatal Rats, Neuroscience, 2016. L. T. Lopes, L. G. A. Patrone, K.Y. Li, A. N. Imber, C. D. Graham, L. H. Gargaglioni and R. W. Putnam

The VA Virtual Medical Center: Implementing a Vision for a Virtual Healthcare Campus for our Veterans, Inter-service/Industry Training, Simulation and Education Journal, 2015. Rosalyn P. Scott, Brian V. Burke, Cathy D. Graham, Terry L. Oroszi, Nancy Benton, Jennie Gallimore, Helga Carabello, Mary E Davidson, Paul T. Ingmundson, Sean C. McCoy, Manny Dominguez

Bridging the Gap in Simulation: A Collaboration of Experts; Pediatric Cystic Fibrosis: What the experts have to say: Catriona Graham, PhD, October 7, 2015. <http://www.moulageconcepts.com/#!/Moulage-Pediatric-Cystic-Fibrosis-Thick-Sticky-Secretions/cmbz/55f46d170cf2de902a84bb53>

Bridging the Gap in Simulation: A Collaboration of Experts: What the experts have to say: Mimicry Among Melanocytes, Catriona Graham, PhD, July 25, 2015. <http://www.moulageconcepts.com/#!/Mimicry-Among-Melanocytes-Mongolian-Spot/cmbz/558f10f70cf298ff2bcccb58>

Bridging the Gap in Simulation: A Collaboration of Experts: Pitfall for Practitioners: Failure to recognize carbon monoxide poisoning, What the experts have to say: Sobering Statistics, Catriona Graham, PhD, April 22, 2015. <http://www.moulageconcepts.com/#!/blogger-feed/c1tov/post/6719769214592989677>

Bridging the Gap in Simulation: A Collaboration of Experts: MRSA: Unmasking the Malady, What the experts have to say: Catriona Graham, PhD, March 26, 2015. <http://www.moulageconcepts.com/#!/MRSA-Thick-Odorless-Wound-Exudate/cmbz/55148d2a0cf21933cd17012f>

Chemosensitive Neurons of the Locus Coeruleus and the Nucleus Tractus Solitarius: Three Dimensional Morphology and Association with the Vasculature, Cathy D. Graham. Doctoral Dissertation: OhioLink.gov, Aug 2014

A HCO³(-)-dependent mechanism involving soluble adenylyl cyclase for the activation of Ca(2+) currents in locus coeruleus neurons. Ann N. Imber, Joseph M. Santin, Cathy D. Graham, Robert W. Putnam. Biochim Biophys Acta 2014 Dec 1; 1842:2569-78. Epub 2014 Aug 1. Funding: NIH R01 HL56683, AHA Great Rivers Affiliate Predoctoral Fellowship

Anatomical and functional connections between the locus coeruleus (LC) and the nucleus of the solitary tract (NTS) in neonatal rats. Luana T. Lopes, Luis Gustavo Patrone, Ke-Yong Li, Cathy D. Graham, Ann N. Imber, Luciane H. Gargaglioni, Robert W. Putnam, **In Review**; American Journal of Physiology, Regulatory Integrative and Comparative Physiology.

Three-dimensional structure and association with blood vessels of chemosensitive and nonchemosensitive locus coeruleus (LC) neurons from neonatal rats. Cathy D Graham, Ke-Yong Li and Robert Putnam, Manuscript in Preparation for submission to Journal of Comparative Neurology.

CATHY D. GRAHAM, PhD, MS

Abstracts

Implementation strategies for integrating a Virtual Medical Center into education and care algorithms for United States Veterans . Rosalyn Scott, Cathy D Graham, Manny Dominguez , Short Communication, AMEE, Glasgow, Scotland.,Sept 2016.

Use of Multimodality Simulations to Improve Self-Reported Competence in Palliative Care Skills Among Veterans Administration Healthcare System of Ohio (VISN 10) Primary Care Providers and Nurses, Rosalyn Scott, Cathy D. Graham, Mary Davidson, Kira King , Terri Benjamin, Medbiquitous, May 2016.

Three-dimensional structure and association with blood vessels of chemosensitive and nonchemosensitive locus coeruleus neurons from neonatal rats. Cathy D Graham, Ke-Yong Li and Robert Putnam FASEB J April 2014 28 1092.15

The role of Ca²⁺ and BK channels in the firing rate response of locus coeruleus (LC) neurons to CO₂: controlling the chemosensitive gain. Ann N. Imber, Cathy D. Graham and Robert W. Putnam FASEB J. April 2012 26 894.8

Anatomical and functional connections between the locus coeruleus (LC) and the nucleus of the solitary tract (NTS) in neonatal rats Luana T. Lopes, Luis Gustavo Patrone, Ke-Yong Li, Cathy D. Graham, Ann N. Imber, Luciane H. Gargaglioni, Robert W. Putnam: FASEB J. April 2012 26 1088.3

The Three Dimensional Morphology of Chemosensitive and Nonchemosensitive neurons in the Locus Coeruleus. Cathy D. Graham and Robert Putnam FASEB J. April 2012 26

Ca²⁺-activated K⁺ channels limit the chemosensitive response of locus coeruleus (LC) neurons. Ann N. Imber, Cathy D. Graham and Robert W. Putnam FASEB J March 17, 2011 25 847.12

New animal model for metabolic syndrome: Nocturnal binge drinking of fructose. Cathy D Graham and Mariana Morris FASEB J. April 2009 23 1022.8

Nocturnal fructose feeding increases renal ACE2 activity in mice. Nathan Weir, Cathy Graham, Mary Key, Paul Koles, Mariana Morris FASEB J. April 2009 23 606.10

Fructose increases blood pressure and activates the brain angiotensin AT1 system Cathy D Graham and Mariana Morris FASEB J. March 2008 22.950.9

Circadian Rhythms in Autonomic Cardiac Function in Mice. Cathy D Graham and Mariana Morris FASEB J. April 2007 21A1262

Presentations:

“Use of Multimodality Simulations to Improve Self-Reported Competence in Palliative Care Skills Among Veterans Administration Healthcare System of Ohio (VISN 10) Primary Care Providers and Nurses” Medbiquitous Annual Conference, John Hopkins University, May 2016

“Preparing for a Nontraditional Science Career” Invited Panelist , Ohio Miami Valley Society for Neuroscience Professional Development Workshop, Jan 2015

CATHY D. GRAHAM, PhD, MS

“Chemosensitive Neurons of the Locus Coeruleus and the Nucleus Tractus Solitarius: Three Dimensional Morphology and Association with the Vasculature” Ph.D. Public Defense Seminar, White Hall, Wright State University, August 25, 2014

“Three-dimensional structure and association with blood vessels of chemosensitive and nonchemosensitive locus coeruleus (LC) neurons from neonatal rats” Cathy D. Graham, Ke-yong Li, Robert W. Putnam, Ohio Miami Valley Chapter of the Society for Neuroscience, Neuroscience Day, May, 2014

“Unique Structure and Ion Channels of Chemosensitive Neurons from the Locus Coeruleus” Cathy Graham and Robert W. Putnam, Ohio Miami Valley Chapter of the Society for Neuroscience, Neuroscience Day, May, 2010

“Morphological Characteristics and Kv1.4 Potassium Channel expression in Chemosensitive Neurons of the Locus Coeruleus” Biomedical Sciences PhD Program Student Seminar Series, Wright State University, April 2010

“Structure of and Unique Ion Channels in Chemosensitive Neurons from the Locus Coeruleus and the Nucleus Tractus Solitarius” Biomedical Sciences PhD Program Student Seminar Series, Wright State University, March 2009

“Nocturnal binge drinking of fructose disrupts diurnal behavior in mice” Boonshoft School of Medicine Medical Student Research Symposium, Invited Poster Presenter 2009

“The Impact of Fructose Diet on Blood Pressure Angiotensin AT1 System” Wright State University, March 2008

“The Non-traditional Student in Graduate Education”, Invited Speaker, STREAMS, Wright State University, Summer 2008

“International Education and The Global Scientific Community”, Invited Speaker, STREAMS, Wright State University, Summer 2007

“Genetics, Genomics and Biomedical Research” Horizons In Medicine, Wright State University, June 2006

“The Pharmacology of Addiction” Horizons In Medicine, Wright State University, June 2006

Memberships:

Association for Medical Education in Europe (AMEE)

Society for Simulation in Healthcare (SSH)

MENSA

Supporting Member: Beaver creek Wetlands Association

American Heart Association (AHA)

American Physiology Society (APS)

Ohio Miami Valley Chapter of the Society for Neuroscience (SfN-OMV)

Society for Neuroscience (SfN)

CATHY D. GRAHAM, PhD, MS

Association for Women in Science

Sigma Delta Epsilon $\Delta E\Sigma$

American Association for the Advancement of Science

International Society for Neurochemistry (ISN)

Sustainable Agriculture Education Association(SAEA)

Ohio Ecological Farm and Food Association (OEFFA)

Ohio Wildlife Rehabilitator's Association (OWRA)

National Association of Environmental Professionals

Golden Key International Honor Society

Workshops and Experiential Learning:

Centers for Medicare and Medicaid Services: Clarifying the Myths about HCAHPS, Pain Management and Opioid Misuse. Jan 2016

Air Force Medical Modeling and Simulation Training Basic and intermediate simulation operator courses, 2016.

Society for Simulation in Healthcare IMSH International Conference 2016 Advanced Fellowship Training: Mastery Learning and Deliberate Practice, Expert Debriefing, Data Driven Debriefing , Emergency Preparedness, Needs Assessment.

Patient Safety and Human Factors Summit August 2015 VA thinktank to advance the use of simulation in addressing patient safety and human factors concerns with in the VA healthcare system.

Ohio Miami Valley Society for Neuroscience Professional Development Workshop Jan 2015 Invited Panelist-Preparing for a Nontraditional Science Career.

Ohio Miami Valley Society for Neuroscience Meeting 2009, 2010, 2011, 2012

Society for Neuroscience Meeting 2009,2012,2013

Experimental Biology Meeting 2007,2008,2009

Institutional Environmental Health and Safety Round Table: December 2014 Wright State University Dept of Environmental Health and Safety: Laboratory safety, deficiencies, audit, inspection and code requirements, insurance, and Incident Command.

FBI Academic Biosecurity Workshop: September 2013 International and domestic terrorism, cyber security, protection of intellectual property and proprietary information, dual-use research, workplace violence, security challenges and insider-threat mitigation.

Professional Development: 1987-2004 Annual Educator CEU's, Curriculum and assessment development, methods of student observation and evaluation, distance learning and technology-based curriculum, rubrics, assessments and student data, and alternative methods of instruction, identification and intervention of at-risk students.

CATHY D. GRAHAM, PhD, MS

Sustainable Architecture: May 2013 Building the Complete Cob and Timber Cottage, Woodbury, Tennessee
Construction experience in the fundamentals of natural building techniques including stone foundation, strawbale and cob walls, plasters, floors, living roofs, plumbing, and electrical. Onsite and local sourcing of materials: timber, clay, stone, straw.

Animal Husbandry: April 2012-Present Comprehensive, participatory online course for small family flocks of primarily egg laying hens. Workshop covered poultry health, behavior, handling, nutrition, egg management, predators and housing. Independent application of techniques and practices has led to personal maintenance of a small “backyard” flock of free range chickens and ducks.

Defense Threat Reduction Agency Consequence Management: November 2009, Wright Patterson AFB, Overview of Nuclear, Biological and Chemical national threats.

Organic and Sustainable Gardening 2005-Present, Practicing sustainable and organic suburban gardening and landscaping to create a new paradigm for the desirable suburban “yard”. I am personally committed to a sustainable way of life and modelling healthy alternatives to redefine suburban normalcy.

Academic and Professional Honors:

2016 Federal Selection, National Work Group for development of OAA fellowship programs

2009 Caroline tum Suden Award, American Physiological Society

2009 Golden Key International Graduate Honor Society

2006 American Physiological Society Award for Writing in the Sciences

2006 National Graduate Honor Society

1995 Non-Traditional Student Achievement Award, KCKCC

1993 Excellence in Teaching Award, St. Henry Schools

1986 Honors Graduate, Graceland University

1982 National Gold Key Awards-Visual Arts

CATHY D. GRAHAM, PhD, MS