July 2016

Lisa Hernandez-Cuebas Watkins

Education:

2006-2012

Drexel University College of Medicine, Philadelphia, PA
Graduated May 2012
PhD in Biochemistry
GPA 4.0/4.0

2001-2003 Drexel University, Philadelphia, PA
B.S. Chemistry-Secondary Education, Summa Cum Laude

1998-2001 Pennsylvania State University, University Park, PA
Chemistry-Education major

Teaching Experience:

August 2015-current — **Lecturer in Chemistry Bryn Mawr College**

- Teach 4-sections of General Chemistry I Laboratory and General Chemistry II Laboratory
- Develop and design curriculum for General Chemistry Laboratory
- Teach General Chemistry I and II lectures in the summer for the Postbaccalaureate Premedical Program
- Supervise graduate and undergraduate teaching assistants for General Chemistry Laboratory

August 2013-May 2015 — **Adjunct Instructor Holy Family University**

- Fall 2013 and Fall 2014: Chem 120 : General Chemistry I Lab
- Spring 2014 and Spring 2015: Chem 121 General Chemistry II Lab
- Spring 2014 GSCI 106 – Chemistry and the Environment (for non-science majors)
- Spring 2015: GSCI 110 – Science of Physics (for non-science majors)

January 2015-May 2915 — **Adjunct Instructor Delaware Valley College**

Spring 2015 Ch 1203 General Chemistry II Lecture

June 2013 – July 2014 — **Lead Teacher Engineering for Kids**

- Taught Engineering for Kids Curriculum (Environmental Engineering, Mechanical Engineering, Chemical Engineering, Aerospace Engineering, Electrical Engineering, LEGO robotics) to students ages 4-13
- Developed visual demonstrations to reinforce concepts in Engineering for Kids Curriculum
- Created inquiry based supplemental activities

March 2013-current — **Private Tutor (Chemistry)**

- Tutor high school chemistry (academic and honors level, A.P. Chemistry)
- Tutor college level general chemistry I and II (Penn State Abington Students)

September 2011-June 2012		Private Tutor Chemistry
2003-2005 school years		Private Tutor Chemistry/Physical Science
September 2004-June 2005	Upper Dublin High School	Chemistry Teacher
September 2003-June 2004	Cheltenham High School	Chemistry/Physical Science Teacher
Winter-Spring 2003	George Washington High School	Student Teaching (Chemistry)
Fall-Winter 1999	Vaux Middle School	Penn State Educational Partnership
Various summers	Penn State Abington	Penn State Summer Science Camps

(Grades 3-8)

- Designed curriculum for teaching to multiple intelligences
- Created inquiry-based labs and activities
- Taught chemical principles and foundations using Pennsylvania guidelines for chemistry
- Guided students with independent research projects to develop research methods
- Designed after school review sessions to supplement classroom instruction
- Assisted students age 10-13 at Vaux Middle school with homework and science projects

Research Experience:

September 2012-February 2013 Eurofins Lancaster Laboratories Malvern, PA
Scientist III

- Perform cGMP testing of samples for biopharmaceutical clients using analytical techniques (cIEF, SE-HPLC, RP-HPLC)
- Troubleshoot method and instrumentation problems
- Execute qualification and validation protocols
- Write programs and operate Empower software on Agilent HPLC systems

2006-2012 Drexel University College of Medicine Philadelphia, PA
Department of Biochemistry and Molecular biology
Graduate Student Thesis Research
Advisor: Dr. Michael White
PhD thesis project: Interactions of ψ-conotoxin PrIIIE with the nicotinic acetylcholine receptor

September 2005-June 2006 Merck Research Laboratories North Wales, PA
Compound Management Associate

- Programmed, operated and serviced laboratory automation systems (Aurora Biosciences Piezo Sample Distribution Robot) used for ultra-high throughput screening
- Developed and wrote standard operating procedures for calibration and maintenance of laboratory automation systems (Aurora Biosciences Piezo Sample Distribution Robot)
- Created multiple replicates of the compound library in high density formats for miniaturized assays
- Trained new employees how to operate laboratory automation systems

June 2002-September 2002 Jefferson Center for Biomedical Research Doylestown, PA
Summer Intern Biomedical Research

- Designed a 96-well plate format assay to measure total glutathione levels in bovine cell cultures
- Implemented a quantitative statistical analysis to test the validity of the total glutathione assay
- Created a FileMaker Pro software application for keeping track of laboratory reagents

Publications:

1. **Hernandez-Cuebas LM** and White MM. (2012) Expression of biologically-active conotoxin PrIIIE in *Escherichia coli*. *Protein Expression and Purification.* 82:6-10.
2. Weeks SD, Grasty KC, **Hernandez-Cuebas L**, Loll PJ. (2011) Crystal structure of a Josephin-ubiquitin complex: evolutionary restraints on ataxin-3 deubiquitinating. *J Biol Chem.* 286(6):4555-65.
3. Weeks SD, Grasty KC, **Hernandez-Cuebas L**, Loll PJ. (2009) Crystal structures of Lys-63 linked tri- and di-ubiquitin reveal a highly extended chain architecture. *Proteins*. 77(4):753-9.
4. Yu JJ, Robb VA, Morrison TA, Ariazi EA, Karbowniczek M, Astrinidis A, Wang C, **Hernandez-Cuebas L**, Seeholzer LF, Nicolas E, Hensley H, Jordan VC, Walker CL, Henske EP.(2009) Estrogen promotes the survival and pulmonary metastasis of tuberin-null cells. *Proc Natl Acad Sci USA* . 106(8):2635-40.
5. Tallent MK, Varghis N, Skorobogatko Y, **Hernandez-Cuebas L**, Whelan K, Vocadlo DJ, Vosseller K. (2009) *In vivo* modulation of O-GlcNAc levels regulates hippocampal synaptic plasticity through interplay with phosphorylation. *J Biol Chem.* **284 (1):**174-181