Elias Oziolor

Email: Elias_Oziolor@baylor.edu

Education:

Ph.D. in Biomedical Sciences, May 2017 (expected) – Baylor University, Waco, TX
Bachelor of Arts, May 2012 (*summa cum laude)* - DePauw University, Greencastle, IN
Majors: Biology and Biochemistry
Undergraduate GPA: 3.94/4.0 Graduate GPA: 4.0/4.0

Research Experience:

Baylor University Department of Environmental Science, Institute for Biomedical Studies…….August 2012-Present

- I am using populations of *Fundulus grandis* from the Houston Ship Channel to investigate the effects of legacy and current pollutants on the evolution of resistance in estuarine environments

Harvard Medical School Department of Mucosal Immunology – Dr. Allan Walker……....Feb-July 2011

- Investigated Interleukin-1ß developmental activation cascade in fetal enterocytes
- Used tissue culture, cell stimulation, pharmacological inhibition, ELISA assays, transformation assays, nuclear and cytoplasmic extractions and xenograft testing in order to unveil a developmental difference between the transduction pathways of inflammation in mature and immature fetal enterocytes

DePauw University Department of Biology:

Dr. Bruce Serlin (8-10 hrs/wk. Ac. Yr. 2009-10; 40+ hrs/wk. Summer 2010)

- Investigated the consequences of aquatic runoff from approved, but untested fungicides Folicur and Quilt.
- Independently designed a project using variable concentrations to test the fungicide runoff effect on a planarian model system, which allowed me to test conditions with genetically identical halves of this regenerating animal.

Dr. L. Bedard (4-5 hrs/wk. Fall, 2009)

- Investigated the chromatin assembly in yeast (*Saccharomyces cerevisiae*), attempting to map a gene mutation that causes temperature sensitivity in yeast due to improper signal for chromatin assembly.
- Used PCR and DNA extraction and purification to express DNA sequences in yeast. The piece that would remove the temperature sensitivity would allow us to map the gene, which causes it.

Dr. K. Kinney (**2-3 hrs/wk. Ac.Yr. 2008-2009)**

- Investigated Lymphocyte proliferation in *Xenopus laevis* (African clawed frog) through a Calorimetric Assay
- Extracted spleens from stressed and unstressed frogs in order to test for T cell proliferation differences through staining with a calorimetric assay

Presentations and Conferences:

Society of Environmental Toxicology and Chemistry (North America) – Poster Presentation……..November 2013

- **1st place SETAC Foster (Sonny) Mayer PhD Best Student Poster Presentation Award -** Evolved resistance to PCB- and PAH-induced cardiac teratogenesis, and reduced CYP1A activity in Gulf killifish (Fundulus grandis) populations from the Houston Ship Channel, Texas

Society of Environmental Toxicology and Chemistry (South-Central) – Platform presentation…….June 2013

- **1st place platform award**; Evolved resistance to PCB 126 and PAH induced cardiac teratogenesis and DNA damage in Gulf killifish (*Fundulus grandis)* populations from the Houston Ship Channel

Society of Environmental Toxicology and Chemistry (Europe); Glasgow, GB – Poster presentation……May 2013

- Evolved resistance to PCB126 and coal tar induced cardiac teratogenesis in Gulf killifish (*Fundulus grandis*) populations from the Houston Ship Channel

Pollutant Responses In Marine Organisms, Faro, Portugal – Poster presentation……....May 2013

- CYP1A mediates the evolved resistance to PCB126 and PAH induced cardiac teratogenesis in Gulf Killifish (*Fundulus grandis)* populations from the Houston Ship Channel

Enhancing research through collaboration, Baylor University – Poster presentation…..……...…March 2013

- Evolved resistance to contaminant-induced cardiac teratogenesis in Gulf killifish (*Fundulus grandis*) populations from the Houston Ship Channel

Annual summer research poster session, DePauw University **–** Poster presentation...…….……..….November 2011

- Interleukin 1β induction of Interleukin 6 in the Human Gut

Science Research Fellows capstone presentation, DePauw University **–** Oral presentation.…….....September 2011

Annual summer research poster session, DePauw University – Poster presentation.....November 2010

o Addition of Asian Soybean Fungicides to our Water: What are possible consequences?

Academic Awards and Honors:

• Baylor University
  • Dean's Graduate School Fellowship ($5000/yr) – M*erit-based 5 year stipend supplement*……..…2012-2017
  • Society of Toxicology and Aquatic Chemistry North America 1st place PhD poster award – ($300)…….2013
  • Gus Glasscock Endowed Research Fellowship – ($8270) *Funding research proposal*……..……..2012-2013
  • Gus Glasscock Departmental Scholarship – ($1300) *Merit-based Environmental science scholarship*...…2012-2013
  • Doris Kayser Stark Scholarship – ($2700) *Merit based scholarship, Environmental science*……2012-2013
  • Society of Toxicology and Aquatic Chemistry North America Travel Award – ($400)…….…….2013
  • Society of Toxicology and Aquatic Chemistry South-Central 1st place Platform award – ($600)……...2013
• DePauw University
  • President's Award for Excellence – ($16,000/yr) *Half-tuition coverage.*……...……..……..2008-2012
  • Deans List – 8 out of 8 semesters
  • Martha Fletcher Memorial Award – ($800) *to the Outstanding Biology Senior* ……..2011-2012
  • Awesome Dawson Award *for Biochemistry Major for impressive attendance of Departmental seminars*…2011-2012
  • Truman G. Yuncker Endowed Merit Scholarship – ($1300) *for the Outstanding Junior Biology Major*.....2010-2011
  • Wyley-Condit Science Scholarship – ($1000) *for Promising Sophomore or Junior Chemist* ……..…….2009-2010

Honorary Societies:

• Phi Beta Kappa (Initiated as a Junior)
• Phi Lambda Upsilon – *National Chemistry Honorary Society* (Initiated as a Junior)
• Phi Eta Sigma and Alpha Lambda Delta – *Honors Societies for First-Year Students*
• The National Society of Collegiate Scholars

Honors Programs:

• Science Research Fellow – Honors program for Scientific Research…….…2009-2012
• Information Technologies Associates Program Training - Honors Computer Science Program.....2008-2009

Training/Work Experience:

• Teaching Assistant (Biology 1105, Environmental Science 1101), Baylor University……..…...Fall, 2012-Present
  o Introduction to Biology lab (BIO 1105); Intro to Environmental Science lab (ENV 1101); Marine Environments lab (ENV 3104)
  o Guest lecturer: Intro to Environmental Science (1301)
• Killifish Genome Annotation Project, Mount Desert Island Biological Laboratories……..September 2012
  o Practical gene annotation work with newly sequenced Fundulus heteroclitus genome
• Student Interviewer – Science Research Fellows Honors Program……..……..…Spring 2012
• Science Fair Judge – Greencastle High School……Spring 2012
• Teaching Assistant/Tutor – Immunology, DePauw University…..……....…….……..…..Fall 2011
• First-Year Residence Assistant at DePauw University.....Ac. Yr. 2011-12; Fall 2010
  o Assisted First-Year students in acclimating to the DePauw University environment and was responsible for tracking their progress and well-being through their first experiences in college.
• Prindle Institute for Ethics Intern..... Fall 2010
  o Organized and participated in events that would raise awareness of major current ethical issues
• National Conference on Ethics in America, West Point Military Academy – representative……..…..October 2010
• Community Assistant at DePauw University (Upperclass Dormitories).....Ac.Yr. 2009-10

Extracurricular:

• EVOGENERATE North America student representative…….November 2013-present
• Society of Environmental Toxicology And Chemistry; Baylor student chapter– Vice President....April, 2012-present
• Delta Chi Fraternity (social): Sustainability Chair, Secretary, Scholarship Chair……..2009-2011

Skills:

Flow cytometry; COMET assay; qPCR; Adobe Dreamweaver; MiniTab statistical software; Spartan; Chimera; NMR and IR Spectroscopy, Tissue culture; Microarray; PCR; Cryostat sectioning; tissue/cell staining; Western blot

Relevant coursework:

Baylor University: Fundamentals of Toxicology; Advanced Environmental Chemistry; Evolutionary Toxicology Seminar; Environmental Risk Assessment; Nucleic Acids; Ecological Speciation; Statistical Bioinformatics; Evolution and Coalescent Theory; Advanced Ecological Data Analysis; Advanced Environmental Toxicology and Chemistry; Population Genetics; Intro to Bioinformatics and Systems Biology;

DePauw University: Organismal Biology; Ecology and Evolution; Cells and Genes; Biostatistics; Molecular Biology; Genetics; Molecular Neurobiology; Immunology Readings; Organic Molecules; Inorganic Compounds; Biomolecules; Thermodynamics, Kinetics and Equilibrium, Enzyme Mechanisms; Advanced Biochemistry; Biophysical Chemistry;