# OLATOMIWA BIFARIN

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Last Update: November 2018

## **EDUCATION**

### Doctor of Philosophy in Biochemistry and Molecular Biology, (2015-)

Current GPA – 3.83/4.0 The University of Georgia, Athens, G.A., United States of America

Advisor: Arthur S. Edison PhD

**RESEARCH PROJECTS:** 

- Discovery of Potential Biomarkers for Renal Cell Carcinoma via Urine Nuclear Magnetic Resonance Metabolomics
- UDP-Glycosyl or Glucuronosyl transferases in Caenorhabditis elegans: Insights into Roles in Xenobiotics Detoxification.

#### Master of Science in Biotechnology, (2013-2015)

Final GPA – 3.95/4.0 The Catholic University of America, Washington D.C., United States of America

Advisor: John S. Choy PhD

RESEARCH PROJECT: Investigating the integration of metabolic signals with DNA damage response (DDR) in *Saccharomyces cerevisiae* 

#### Bachelor of Science in Microbiology, (2007-2012)

Final GPA - 3.71/4.0

Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria.

Advisor: Olusuyi Odeyemi PhD, OFR

THESIS: Microbiological examination of air in the neonatal ward of a teaching hospital in Nigeria.

## **TEACHING/WORK EXPERIENCE**

<u>Graduate Teaching Assistant</u>, The University of Georgia, Department of Biochemistry and Molecular Biology

August 2016-May 2018

I assisted professors in grading four undergraduate biochemistry classes.

Graduate Teaching Assistant, The Catholic University of America, Department of Biology

August 2013-December 2013 (Fall 2013)

I assisted professor in teaching a freshmen biology laboratory class: BIOL 105 – Mechanisms of Life. Some of the lab experiments taught include Bradford assay, Ames test, Bacterial transformation, Chromatographic separation of amino acids, Karyotyping, and Polyacrylamide gel electrophoresis. The compendium of my work include preparation for lab sections, teaching, setting quiz questions and grading of lab reports.

### January 2014-May 2014 (Spring 2014)

I assisted professor in teaching a freshmen biology laboratory class: BIOL 106 – mechanisms of life II. The lab course involved the use of basic molecular biology laboratory techniques. Some of the experiments taught include Transfection, PCR, DNA sequencing and Bioinformatics. The compendium of my work include preparation for lab sections, teaching students, setting quiz questions and grading of lab reports.

August 2014-December 2014 (Fall 2014) Taught BIOL 105 as stated above

January 2015-May 2015 (Spring 2015) Taught BIOL 106 as stated above

### <u>Summer Intern, Advanced Biofuel USA</u>. Frederick, Maryland, U.S.A May 2014-July 2014

I updated the online library of the organization on a daily basis for the current news on biofuels. I attended Capitol Hill Hearings, briefings, conferences and meetings on bioenergy as the representative of Advanced Biofuel USA in Washington D.C. I wrote several articles on these hearings, conferences and events which are all published in the organization website. See <u>Articles</u>

**Biology Instructor,** *Queens School Ibadan, Oyo-State, Nigeria.* August 2012-July 2013

After my graduation from college, I worked as a Biology instructor in a senior secondary school (High School). Some of the topics I taught include genetics, cell biology, the nervous system, ecology, microbiology and a host of others. Responsibilities include

preparing lesson notes and homework, coordinating lab sessions, teaching, and grading students' papers.

## SELECT AWARDS AND FELLOWSHIP.

*Second Place Best Oral Presentations*, The University of Georgia Biochemistry and Molecular Biology Biennial Departmental Retreat Unicoi State Park, Helen Georgia. May 2018.

*Travel Award*, Genetic Society of America for the 21st International *Caenorhabditis elegans* Meeting at University of California Los Angeles. Los Angeles, California. June 2017.

*Graduate Fellowship*, Department of Biochemistry and Molecular Biology, The University of Georgia. Athens, Georgia. (August 2015-Present)

*Reimbursement Grant,* The Catholic University of America Graduate Student Association for the William and Mary 14th Annual Graduate Research Symposium. Williamsburg, Virginia. March 2015

*Graduate Fellowship*, Department of Biology, the Catholic University of America, Washington, District of Columbia. (August 2013-May 2015)

Professor Olu Odeyemi Prize for *the best graduating student in the B.Sc Microbiology Degree with the highest cumulative grade point average*, Class of 2011. Obafemi Awolowo University, Nigeria. (2012)

*Final Year Undergraduate Research Grant*, 2011 Egbe Omo Oduduwa Scholarships. Egbe Omo Oduduwa Incorporation of Southern Florida, U.S.A. (2011)

# **TECHINCAL/CONFERENCE PRESENTATIONS**

*UDP-Glycosyltransferases (UGTs) in Caenorhabditis elegans: Insights into the roles of Xenobiotics Detoxification, 2018 Society for Glycobiology Annual Meeting. New Orleans, Louisiana. November 2018. Poster* 

Discovery of Potential Biomarkers for Renal Cell Carcinoma via Urine NMR Metabolomics, 2018 Metabolomics Conference, Metabolomics Society. Seattle, Washington. June 2018. Poster

*UDP-Glycosyltransferases (UGTs) in Caenorhabditis elegans: Insights into the roles of Xenobiotics Detoxification*, The University of Georgia Biochemistry and Molecular Biology Biennial Departmental Retreat. Helen, Georgia. May 2018. <u>Talk</u>

*Systems Biology of Glycosyltransferases in Caenorhabditis elegans*, PhD Third Year Seminar Biochemistry and Molecular Biology, The University of Georgia. Athens, Georgia. September 2017. <u>Talk</u>

Systems Biology of Glycosyltransferases in Caenorhabditis elegans, Genetic Society of America 21st International Caenorhabditis elegans Meeting. Los Angeles, California. June 2017. Poster

*Systems Biology of Caenorhabditis elegans Glycosyltransferases*, 2016 Society for Glycobiology Annual Meeting. New Orleans, Louisiana. November 2016. <u>Poster</u>

Metabolomics of Recombinant Inbred Strains and Glycosyltransferase Mutants in Caenorhabditis elegans, Genetic Society of America – The Allied Genetics Conference (TAGC). Orlando, Florida. July 2016. <u>Poster</u>

*Systems Biology of Caenorhabditis elegans Glycosyltransferases*, The University of Georgia Biochemistry and Molecular Biology Biennial Departmental Retreat. Helen, Georgia. May 2016. <u>Poster</u>

*Integration of Metabolic Signals with DNA Damage Response in Saccharomyces cerevisiae*, William and Mary 14th Annual Graduate Research Symposium. Williamsburg, Virginia. March 2015. <u>Talk</u>

# JOURNAL PUBLICATIONS

John S. Choy,1 Bayan Qadri, Leah Henry, Kunal Shroff, <u>Olatomiwa Bifarin</u>, and Munira A. Basrai. (**2016**) <u>A Genome-Wide Screen with Nicotinamide to Identify Sirtuin-Dependent</u> Pathways in Saccharomyces cerevisiae. *G3 (Bethesda).*, 6(2): 485–494.

Awoniyi A.O., Komolafe O.I., <u>Bifarin O.</u>, and Olaniran Olarinde. (2015) <u>Bacterial vaginosis</u> <u>among pregnant women attending a primary health care center in Ile-Ife, Nigeria</u>. *Glo. Adv. Res. J. Med. Med. Sci. Vol.* 4(1) pp. 057-060.

# **PROFESSIONAL MEMBERSHIPS**

Member, Metabolomics Society

Member, Metabolomics Association of North America (MANA)

Member, Genetics Society of America (GSA)

# SELECT NON-TECHNICAL CONFERENCES PARTICIPATION

April 2018. *Georgia International Leadership Conference 2018*. Rock Eagle, 4-H Center. Eatonton, Georgia.

July 2014. *Biomass 2014: Growing the Future Bioeconomy*. United States Department of Energy Bioenergy Technologies Office (BETO), Washington Convention Center. Washington, District of Columbia

June 2014. *Energy path convergence*. Sustainable Energy Fund (SEF) 2014, Albright College, Reading, Pennsylvania.

## NON-TECHNICAL WORKS

The bulk of my non-technical works can be found on my personal blog, <u>bifarinthefifth.com</u>; where I present opinions on big picture ideas, harnessing philosophy, science, psychology, history, and other fields of study. Others non-technical works include the following:

### **Fiction**

*In Submission,* A short story: "Minus the Poor Dead Kids" The Halifax Ranch Fiction Prize, American Short Fiction. June 2018

*Semifinalist*, for two short stories "The Parable of the Lady who does not Fart", and "Of Love, Belief and Emotions" The American Short(er) Fiction Contest, American Short Fiction. April 2018.

### **Bioenergy Related Articles**

*The Case for Biofuels: The Magic Bullet for Energy Security and Rural Development in Africa,* Advanced Biofuel USA. July 2015.

Building a Long Term, Sustainable Supply Chain for Cellulosic Biofuels Industry, Advanced Biofuel USA. July 2014

Platts Webinar - European Road Fuels, Advanced Biofuel USA. July 2014

Energy Path 2014 - Path towards Sustainability, Advanced Biofuel USA. June 2014

Pyrolysis of Biomass for Fuels and Chemicals: NEWBio Webinar Report, Advanced Biofuel USA. June 2014

Managing Climate Risks in the Southeast, Advanced Biofuel USA. May 2014

*EPA Funds Cook Stoves Research to Ameliorate Air Quality and Mitigate Climate Change*, Advanced Biofuel USA. May 2014.

Climate Panel and Years of Living Dangerously, Advanced Biofuel USA. May 2014

Aftermath of Climate Change: National Landmarks at Risk. Advanced Biofuel USA. May 2014.

Where is Blue Carbon going? Advanced Biofuel USA. May 2014.

## **OTHER SELECT ACTIVITIES**

## Obafemi Awolowo University, Nigeria

Member, Debate and Quiz Club, Department of Microbiology (2010-2011)

I engaged in several debate and quiz competitions during this timeline, most competitions – ranging from general knowledge to biology competitions – are usually inter-varsity competitions in Nigeria.

Member, Soccer team, Department of Microbiology and Faculty of Science (2007-2011)

I actively participated in soccer competitions throughout my stint in the university. My highest accolade was a silver medal in the 2010 Vice-Chancellor's cup and one of the best goalkeepers in the tournament.

## **COMPUTER SKILLS**

Programming Languages: Python (Intermediate) MATLAB (Intermediate)

Operating Systems: Mac, Windows

## LANGUAGES

English and Yoruba