Curriculum Vitae Segun Dele Olubanwo, Ph.D.

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1.	Higher	Education
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Ph.D., Organic Chemistry, University of Massachusetts, Lowell, MA	2010
M.S., Organic Chemistry, University of Massachusetts, Dartmouth, MA	2006
M.Sc. , Chemical Technology of High Molecular Compounds, Moscow Institute of Fine Chemical Technology, MITHT, (Now Moscow State University of Fine Chemical Technology), Moscow, Russia	1998
B.Sc. , Chemical Technology of High Molecular Compounds, Moscow Institute of Fine Chemical Technology, MITHT, (Now Moscow State University of Fine Chemical Technology), Moscow, Russia	1996

Post-Doctoral Experience

Visiting Scientist, Brown University, Providence, RI

2012 - 2014

2. Teaching Experience

Full-Time Lecturer, University of Massachusetts (UMass),

Dartmouth, MA	2008 - Present
Part-Time Lecturer (PTL), UMass Dartmouth, MA	2007-2008
Graduate Teaching Assistant, UMass Dartmouth, MA	2003-2007
Lecturer, Lagos State University, Epe, Lagos State, Nigeria	2000-2002

3. Other Experiences

Organic laboratory Coordinator, UMass Dartmouth, MA	2017 – Present
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Manage all organic labs. Coordinate experiment schedules, syllabi, lab manuals, lab and safety training for teaching assistants and instructors. Coordinate procurement of experimental needs.

Academic Advisor, College of Arts and Science Students

Transition and Achievement Resources (CAS STAR) Center.

Help in advising students on all academic matters within CAS:

Course selection; major declaration/switching; directing students to available resources for students' success.

Chemistry Academic Transfer Advising Liaison,

Registrar's office, UMass Dartmouth, MA.

Evaluate incoming chemistry transfer courses from other universities for equivalencies at UMass Dartmouth.

Academic Advisor/Transfer Advisor

2008 - Present

2012 - Present

Chemistry and Biochemistry Dept., UMass Dartmouth, MA. Advise chemistry major freshmen and transfer students on chemistry-specific curriculum requirements. Help with courses selection and enrolment.

Committee Member

2013 - Present

Honors and Awards Committee; Seminar Committee; Undergraduate Recruitment and Retention Committee; CAS Undergraduate Strategic Planning Committee;

Production chemist, Shell Petroleum Company, Warri, Delta State, Nigeria.
Analysis of crude oil

1999 - 2000

4. Academic and Professional Honors and Fellowship

24th Annual Sigma Xi Research Exhibit (UMass Dartmouth Chapter). 2nd Place Prize awarded to Emike Okhipo (my undergraduate researcher) – "Enantioselective Amination of Chiral Amines and Ketones"

2018

Graduate Teaching Award (UMASS Dartmouth, MA, USA)

2006

Top two best international students award (B.Sc., Moscow, Russia)

1996

Best student award in Mathematics, Physics and Chemistry (D. Mendeleev University of Chemical Technology, Novomoskovsk, Russia)

1992

5. Scholarship

Publications:

 Olubanwo, O., Kazez, A., Carney, D. and Sello, J. (2019) Trisubstituted Aryl Cyclohexanecarboxylates (TACC): A Simple, New Molecular Scaffold for Antibiotics Design. *International Journal of Organic Chemistry*, 9, 142-162. doi: 10.4236/ijoc.2019.93013.

Contributors:

Olubanwo, O.B. – Visiting Scientist at Brown. 1st Author. Did all synthesis and bioassay. Wrote and submitted manuscript for publication. Is also the corresponding author.

- **Kazez, A.** Undergraduate researcher. Did some synthesis, purification and collection of some spectroscopic data, and bioassay.
- **Carney, D.** Ph.D. Student. Helped with initial bioassay. Did some synthesis. **Sello, J.** Principal Investigator.
- II. Olubanwo, O., Golen, J., Rheingold, A. and Nevalainen, V. (2018) Chiral Camphor-Based 1,3- and 1,4-Amino Alcohols and Aminodiols as Ligands for Diethylzinc Addition to Aldehydes. *International Journal of Organic Chemistry*, 8, 240-263. doi: 10.4236/ijoc.2018.82018.

Contributors:

Olubanwo, O. B. – 1st Author. Performed all experiments, including purification and collection of spectroscopic data. Wrote and submitted manuscript. Also, the corresponding author.

Golen, J. and Rheingold, A. – Responsible for the X-ray data. **Nevalainen, V.** – Principal Investigator.

Oral Presentation

- 240th ACS National Meeting, Boston, MA (August 23rd, 2010). <u>Olubanwo, O. B.</u>, Golen, J. A., Nevalainen, V. "Novel camphor-based amino alcohols and diols for selected asymmetric synthesis". Abstracts of Papers, 240th ACS National Meeting, Boston, MA, United States, August 22-26, 2010, ORGN-345.
- II. 240th ACS National Meeting, Boston, MA (August 25th, 2010). <u>Olubanwo, O. B.</u>, Rasapalli, S. "Studies toward concise synthesis of calothrixin and its structural analogs". Abstracts of Papers, 240th ACS National Meeting, Boston, MA, United States, August 22-26, 2010 (2010), ORGN-875.

Poster Presentation

- I. Desalem, F., Olubanwo, O. B. (PI) (UMD Chapter Sigma Xi 2019) "Enantioselective Reductive Amination of Chiral Amine and Aromatic Ketones".
- II. Nguyen, N., Olubanwo, O. B. (PI) (UMD Chapter Sigma Xi 2019) "Asymmetric Synthesis of Chiral Secondary Amines via Reductive Amination Reaction of Amine with aromatic aldehydes".
- III. Okhipo, E., **Olubanwo, O. B. (PI)** (UMD Chapter Sigma XI 2018) "Enantioselective Reductive Amination of Chiral Amine and Ketones" (**Won 2**nd **Place Award**)

- IV. Martinez, G., Olubanwo, O. B. (PI) (UMD Chapter Sigma XI 2017) "Synthesis of New Class of ClpP Activators Potential Antibiotics"
- V. Kimba, R., Olubanwo, O. B. (PI) (UMD Chapter Sigma XI 2017 "Synthesis of Potential Multi-Strain Resistant Antibiotics with Novel Mode/Mechanism of Action"
- VI. Rasapalli, S., Olubanwo, O. B., Igwe, M. (2009) "Synthetic studies toward the total synthesis of ageladine", Abstracts of Papers, 237th ACS National Meeting, Salt Lake City, UT, United States, March 22-26, 2009, ORGN-078.
- VII. Nevalainen, V., Olubanwo, O. B. (2007) "New chiral piperidine derivatives for catalytic enantioselective synthesis", Abstracts of Papers, 234th ACS National Meeting, Boston, MA, United States, August 19-23, 2007, ORGN-617
- VIII. Olubanwo, O. B., Nevalainen, V. (UMD Chapter Sigma XI 2007) "Piperidine derivatives of borneol as ligand for catalytic enantioselective syntheses"
 - IX. Olubanwo, O. B., Nevalainen, V. (2006) "New chiral piperidine-based 1,3- and 1,4amino alcohols as ligands for asymmetric synthesis", Abstracts of Papers, 232nd ACS National Meeting, San Francisco, CA, United States, Sept. 10-14, 2006, ORGN-150.
 - X. Olubanwo, O. B., Nevalainen, V. (UMD Chapter Sigma XI 2006) "Synthesis of camphor-based amino-alcohols and their utility for catalytic enantioselective synthesis"
 - XI. Olubanwo, O. B., Nevalainen, V. (UMD Chapter Sigma XI 2005) "Novel chiral 3-amino-alcohols and their use as ligands for catalytic enantioselective addition of diethyl zinc to benzaldehyde"

Work In Progress:

- I. Asymmetric synthesis of trisubstituted cyclohexanecarboxylate as potential antibiotics.
- II. Serendipitous discovery of a novel fused indolizidine-isoborneol system.

6. **Curricula Materials**

Developed materials for, and taught the following courses:

- Capstone Research in Chemistry (CHM 499)
- Introduction to Research I (CHM 491)
- Organic chemistry lecture I and II (CHM 251 and CHM 252)
- Introduction to College of Arts and Sciences (CAS 101) Major-only section.
- Organic chemistry lab I and II (CHM 265 and CHM 266)
- Bio-organic chemistry lab I and II (CHM 263 and CHM 264)
- Introduction to Applied Chemistry II (CHM 162)
 Developed capstone research project for, supervised and graduated five undergraduate students (2017, 2018 and 2019).
 Co-supervised four capstone research projects (2009, 2011, 2012).

Service to the Department:

- Freshman and Transfer students Academic Advisor
- Undergraduate Recruitment and Retention Committee Member
- Seminar Committee Member
- Honors and Award Committee Member
- MS Thesis Committee Member
- Undergraduate Capstone Research Supervisor (Directly supervised and graduated 5 undergraduate students, co-supervised and graduate 4 undergraduate students)

Service to the College/University

- Coordinator, Bioorganic and Organic Chemistry Laboratories (Compensated, 2017 – Present)
- CAS Undergraduate Strategic Planning Committee Member (2013-2014)
- Faculty Advisor at the College of Arts and Sciences Student Transition and Achievement Resource Center (CAS STAR Center)
- Undergraduate Recruitment and Retention Committee Member: Volunteer at open houses
- Undergraduate Marshal during commencement (2017).
- Undergraduate Reader during commencement (2018, 2019)

- UMass Dartmouth Chemistry faculty liaison with Massachusetts Department of Higher Education (2014, 2015 and 2018). Represented UMass Dartmouth, Chemistry and Biochemistry Department at the Massachusetts Board of Higher Education (BHE) Academic Transfer Pathways Convening.
- Academic Transfer Advisor

7. Other Professional Activities

Workshop Attended

- Massachusetts DHE MassTransfer Pathways Convening Biology and Chemistry. Fitchburg State University, Fitchburg, MA (February 23, 2018)
- Massachusetts DHE Academic Transfer Pathways Convening: Chemistry.
 Wellesley Hills, MA (April 3, 2015)
- Massachusetts DHE Academic Transfer Pathways Convening. Westborough, MA (Oct. 17, 2014)
- NERCE/BEID Medicinal Chemistry and Preclinical Development Workshop (Broad Institute, Cambridge, MA, Sept. 21, 2012)
- Green Chemistry in the Pharmaceutical Industry organized by Pfizer and Northeastern University, Boston, MA (Nov. 2010)

Professional Organization Membership

American Chemical Society (Member since 2002)