

COMFORT A. BOATENG, Ph.D.

Assistant Professor
Department of Basic Pharmaceutical Sciences— Fred Wilson School of Pharmacy
High Point University

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EDUCATION

- 2011-2015 IRTA Post-doctoral Research Fellow. National Institute on Drug Abuse (NIDA)—Intramural Research Program (IRP), NIH • Baltimore, MD
Medicinal Chemistry Section, Molecular Targets and Medications Discovery Branch
• Mentor: Amy H. Newman, Ph.D.
- 2005-2010 Ph.D., Pharmaceutical Sciences specializing in Medicinal Chemistry
Florida Agricultural and Mechanical University • Tallahassee, FL
College of Pharmacy and Pharmaceutical Sciences, Department of Medicinal Chemistry
• Advisor: Seth Y. Ablordeppey, Ph.D.
- 1999-2003 Bachelor of Science: Chemistry
University of Cape Coast • Ghana

RESEARCH EXPERIENCES

- 2015-Present High Point University (HPU) • High Point, NC
Fred Wilson School of Pharmacy, Dept. of Basic Pharmaceutical Sciences, Med. Chemistry Section
• Assistant Professor
- *Design, synthesis and pharmacological evaluation of highly selective novel ligands as pharmacological tools to study or investigate specific roles for the dopamine D₄ receptor (D₄R) and its variants in normal brain function and neuropsychiatric disorders such as Attention Deficit Hyperactivity Disorder, sleep disorders and drug addiction leading to medication discovery*
 - *Design and synthesis of novel fluorescent ligands to study the monoamines transporters*
 - *Design and synthesis of novel agents against AIDS-Related Opportunistic Pathogens*
- 2015-Present National Institute on Drug Abuse (NIDA)—Intramural Research Program (IRP), NIH • Baltimore, MD
Guest Research Volunteer
Medicinal Chemistry Section, Molecular Targets and Medications Discovery Branch
• Principal Investigator: Amy H. Newman, Ph.D.
- *Synthesizing small molecules to elucidate the structure and function of the dopamine D₃ receptor relative to the other D₂ receptor-family members (D₂ and D₄ receptors) using structure-activity relationships and computational modeling*

- 2011-2015 National Institute on Drug Abuse (NIDA)—Intramural Research Program (IRP), NIH • Baltimore, MD
 IRTA Post-doctoral Research Fellow
 Medicinal Chemistry Section, Molecular Targets and Medications Discovery Branch
 • Mentor: Amy H. Newman, Ph.D.
- *Synthesizing novel fluorescent ligands with which to study the dopamine transporter*
 - *Synthesizing small molecules to elucidate the structure and function of the dopamine D3 receptor relative to the other D2 receptor-family members (D2 and D4 receptors) using structure-activity relationships and computational modeling*
- 2005-2010 Florida A & M University (FAMU) • Tallahassee, FL
 College of Pharmacy and Pharmaceutical Sciences, Department of Medicinal Chemistry
 Graduate Research
 • Mentor: Seth Y. Ablordeppey, Ph.D.
- *Designed and synthesized ring-opened Benzothieno[3,2-b]quinolinium salts of Cryptolepine analogues as novel agents against AIDS-Related Opportunistic Pathogens*
 - *3-dimensional quantitative structure-activity relationship (3D-QSAR) studies on synthesized analogues using comparative molecular field analysis (CoMFA) approaches was done to explore the relationship between the substitution on the thiophenyl moiety and its activity*
 - *Designed and synthesized anti-psychotic agents, to study the dopamine and serotonin receptor subtypes*
- 2008 National Institute of Allergy and Infectious Diseases (NIAID), NIH • Bethesda, MD
 Tuberculosis Research Section; Laboratory of Clinical Infectious Diseases
 Summer Research Internship
 • Mentor: Clifton Barry, Ph.D.
- *Designed and synthesized Amiclenomycin precursor and analogues as a potential anti-tuberculosis agent*
 - *Studied the newer technologies in organic synthesis and pharmacological applications*

TEACHING EXPERIENCES

- 2015-Present Assistant Professor, High Point University (HPU) • High Point, NC
 Fred Wilson School of Pharmacy, Department of Basic Pharmaceutical Sciences
- 2014-2015 Teaching Internship, Notre Dame of Maryland University • Baltimore, MD
 School of Pharmacy and Pharmaceutical Sciences, Department of Medicinal Chemistry
 • Mentor: James M. Culhane, Ph.D.
- *Describe the major components of a course syllabus and the importance of each*
 - *Utilize Bloom's revised taxonomy of learning to write lecture and course learning objectives*
 - *Identify key components of effective lecture presentation, small group facilitation and interdisciplinary team teaching*
 - *Identify appropriate active learning strategies to help improve student understanding of material*

- *Identify and utilize appropriate methodologies to assess student understanding of lecture and course objectives*
- 2014 NIDA/NIH Summer Research Intern • Baltimore, MD
Medicinal Chemistry Section, Molecular Targets and Medications Discovery Branch
- *Mentored and Taught Summer Student (Russell N. Burkhardt from Rochester Institute of Technology and a current graduate student at Cornell University Chemistry Department)*
- 2005-2010 Florida A & M University (FAMU) • Tallahassee, FL
College of Pharmacy and Pharmaceutical Sciences, Department of Medicinal Chemistry
Teaching Assistant
- Mentor: Seth Y. Ablordeppey, Ph.D.
 - *Laboratory and teaching assistant for pharmacy students in medicinal chemistry course and served as proctor during examinations in medicinal chemistry and biochemistry courses*
 - *Mentored and Taught Summer ACS Project SEED Student (Eric Johnson from FAMU Developmental and Research School)*

HONORS & AWARDS

- 2015 Fellows Award for Research Excellence (FARE) 2016, NIH • Bethesda, MD
- 2015 Behavior, Biology, and Chemistry: Translational Research in Addiction, Student Travel Award
• San Antonio, TX
- 2014 Behavior, Biology, and Chemistry: Translational Research in Addiction, Student Travel Award
• San Antonio, TX
- 2011-2014 NIDA Scientific Directors Fellowship for Diversity in Research Award, NIDA/NIH • Baltimore, MD
- 2013 Carl Storm Underrepresented Minority (CSURM) Fellowship, Catecholamines Gordon Research Conference (GRC) • West Dover, VT
- 2010 National Biotechnology Conference Travel Award, AAPS Drug Design and Discovery Section
• San Francisco, CA
- 2009-2010 Merck & Company - American Foundation for Pharmaceutical Education Minority Pre-Doctoral Fellowship Award in Pharmaceutical Sciences
- 2009 MBRS Student research Forum Eli Lilly Award, Florida A & M University • Tallahassee, FL
- 2009 Dr. Israel Tribble, Jr. Award, for demonstrating excellent academic knowledge and communication to enhance the American Community, Florida A & M University • Tallahassee, FL
- 2008-2009 Josiah Macy, Jr. Foundation-American Foundation for Pharmaceutical Education Minority

Doctoral Fellowship Award in Pharmaceutical Sciences

- 2008 Intramural NIAID Research Opportunity (INRO) Award for outstanding students, NIH / NIAID
• Bethesda, MD
- 2005-2008 Graduate Assistance in Areas of National Need (GAANN) Fellowship Award, National
Scholarship Award for Outstanding Graduate Students

PROFESSIONAL AFFILIATIONS

- 2014-present Society for Neuroscience
- 2006-present American Association of Pharmaceutical Scientists
- 2005-present American Chemical Society

LEADERSHIP

- Curriculum committee member, Fred Wilson School of Pharmacy, Fred Wilson High Point University, High Point, NC, 2015-Present
- Admissions committee member, Fred Wilson School of Pharmacy, Fred Wilson High Point University, High Point, NC, 2015-Present
- Department of Clinical Sciences faculty search committee member, Fred Wilson School of Pharmacy, High Point University, High Point, NC, 2015-Present
- Department of Basic Pharmaceutical Sciences faculty search committee member, Fred Wilson School of Pharmacy, High Point University, High Point, NC, 2015-Present
- Chief Judge for Fellows Award for Research Excellence (FARE) 2016 HIV and AIDS Research abstract award, NIH, Baltimore, MD, 2015
- NIDA judge- Minority Independent Poster judge for 60th Baltimore Science Fair (High and Middle School students) at Towson University, Baltimore, MD, 2015
- Co-Chair (NIDA Chair) for NIH-Baltimore Fellows Symposium 2014, Baltimore, MD, 2014
- Judge for Fellows Award for Research Excellence (FARE) 2015 HIV and AIDS Research abstract award, NIH, Baltimore, MD, 2014
- Postdoctoral Host: Dr. Sarah Pope Miksinski (FDA) Fellows Lunch NIDA / NIH, 2014
- NIDA judge - Minority Independent Poster for 59th Baltimore Science Fair (High and Middle School students) at Towson University, Baltimore, MD, 2014
- NIDA postdoctoral representative to the NIH Fellows Committee (FELCOM), 2013-2015

- Judge for Summer Students Poster NIA and NIDA IRP / NIH Baltimore, MD, 2013
- Postdoctoral Host: Dr. Lori Conlan Fellows Lunch NIDA / NIH, 2013
- Judge for Summer Students Poster NIA and NIDA IRP / NIH Baltimore, MD, 2012
- NIDA-IRP Postdoctoral Fellows Advisory Committee, 2012-2015
- Judge poster for The National Organization for the Professional Advancement of Black Chemists and Chemical Engineers (NOBCChE) Conference, Washington, DC, 2012
- Judge for Fellows Award for Research Excellence (FARE) 2013 Chemistry Section abstract award, NIH, Baltimore, MD 2012
- Vice President for Kids Incorporated Early Head Start Program at Budd Bell Branch, Tallahassee, FL, 2010-2011
- Student Chair and organizing committee member for Minority Biomedical Research Forum, FAMU, Tallahassee, FL, 2009
- Treasurer for AAPS FAMU chapter, Tallahassee, FL, 2006-2008
- Treasurer and organizing committee member for Graduate Research Association of Pharmaceutical Students Conference by National AAPS, Tallahassee, FL, 2008

ADDITIONAL LEADERSHIP & VOLUNTARY

- Interviewing students for HPU Presidential Scholarship Award, High Point University, High Point, NC, 2016
- HPU Fred Wilson School of Pharmacy, Organizing member Unity Festival in High Point Community, High Point, NC, 2015
- NIDA Work Life Group service project Beans and Bread, NIDA, Baltimore, MD, 2015
- NIDA Work Life Group service project Beans and Bread, NIDA, Baltimore, MD, 2013
- Volunteer for brown bag lunch with summer students, NIDA, Baltimore, MD, 2013
- Teacher's aide Kids Incorporated Early Head Start Program at Budd Bell Branch, Tallahassee, FL, 2010
- Organizing committee member for Student Research Forum, Tallahassee, FL, 2010
- Poster Judge for Capital Regional Science and Engineering Fair at Florida State University, Tallahassee, FL, 2009
- Organizing committee member for Science Carnival by AAPS FAMU chapter, Tallahassee, FL, 2007

ADDITIONAL PROFESSIONAL TRAINING

- Management Bootcamp course, NIH Office of Intramural Training & Education, 2015

- Scientists Teaching Science Course, NIH Office of Intramural Training & Education, 2014
- Approaches to Mentoring, NIDA-IRP Office of Education and Career Development, 2014
- Applying for NIH Transition Awards, NIH Office of Intramural Training & Education, 2014
- Workplace Dynamics Boot Camp III-V (III- Conflict & Feedback, IV- Team Skills, and, V- Diversity in a Multicultural Society), NIH Office of Intramural Training & Education, 2014
- Scientists Teaching Science Workshop, NIH Office of Intramural Training & Education, 2014
- Time Management Seminar, NIH Office of Intramural Training & Education, 2013
- Workplace Dynamics I-II (I-Self-Awareness and, II-Communication, Learning and Influencing), NIH Office of Intramural Training & Education, 2013
- NIDA Diversity Supplement Workshop, Neuroscience Center, Rockville, MD, 2012

GRANT WRITING EXPERIENCE

- Experience in grant writing and submitting skills. **Boateng, C. A.** Development of novel high-affinity and selective ligands for the dopamine D4 Receptor (D4R) and its variants. Submitted [PA14-042] - NIH PATHWAY TO INDEPENDENCE AWARD (PARENT K99/R00) grant, **2014**, Baltimore, MD
- **Boateng, C. A.** Design, synthesis and characterization of a novel dopamine D4 receptor subtype-selective ligands for CNS function and disorder. Submitted-AAPS New Investigator Grant, **2016**, High Point, NC

CONFERENCE ABSTRACTS & PRESENTATIONS

1. **Boateng, C. A.**; Michino, M.; Donthamsetti, P.; Bakare, O. M.; Bonifazi, A.; Ellenberger, M.; Keck, T. M.; Kumar, V.; Zhu, C.; Deschamps, J. R.; Javitch, J. A.; Lei, S. and Newman, A. H. Selective D3R Partial Agonists as Molecular Tools to Investigate the Role of the Orthosteric Binding Site in Affinity and Efficacy. Presenting in the *Gordon Research Conference on Bioorganic Chemistry*, **2016**, Andover, NH
2. Michino, M.; **Boateng, C. A.**; Donthamsetti, P.; Bakare, O. M.; Bonifazi, A.; Ellenberger, M.; Keck, T. M.; Kumar, V.; Zhu, C.; Deschamps, J. R.; Javitch, J. A.; Newman, A. H. and Lei, S. Structural basis of partial agonism at dopamine D3 receptor. *251st ACS National Meeting, Div. of Computers in Chem.*, 2016, San Diego, CA
3. Keck, T. M.; Wu, C.; Fountain, G. M.; Tkaczynski, J. A.; Freund, J. R.; Bonifazi, A.; Ellenberger, M.; Newman, A. H. and **Boateng, C. A.** A rational drug design strategy for novel dopamine D4 receptor agonists. *Behavior, Biology, and Chemistry: Translational Research in Addiction*, **2016**, San Antonio, TX
4. You, Z-B.; Bi, G-H, **Boateng, C.**; Banala, A.; Gardner, E. L.; Xi, Z-X.; and Newman, A. H. The Novel Dopamine D3 antagonists CAB 02-015 and BAK 4-54 inhibit oxycodone self-administration and reinstatement of drug-seeking behavior in rats. *Society for Neuroscience*, **2015**, Chicago, IL

5. **Boateng, C. A.**; Bakare, O. M.; Banala, A.; Zhan, J.; Keck, T. M.; Burzynski, C.; Pommier, E.; Schweppe, C.; Rais, R.; Slusher, B.; Xi, Z-X.; and Newman, A. H. High Affinity and Dopamine D3 Receptor Subtype-selective Ligands as Molecular Tools to Study Addiction. Presented in the *Gordon Research Conference on Medicinal Chemistry*, **2015**, New London, NH
6. **Boateng, C. A.**; Bakare, O. M.; Banala, A.; Zhan, J.; Keck, T. M.; Burzynski, C.; Pommier, E.; Schweppe, C.; Rais, R.; Slusher, B.; Xi, Z-X.; and Newman, A. H. High Affinity and Dopamine D3 Receptor Subtype-selective Ligands as Molecular Tools to Study Addiction. Presented in the *Gordon Research Seminars on Medicinal Chemistry*, **2015**, New London, NH
7. Travel award; oral presentation: **Boateng, C. A.**; Bakare, O. M.; Banala, A.; Zhan, J.; Keck, T. M.; Burzynski, C.; Pommier, E.; Schweppe, C.; Rais, R.; Slusher, B.; Xi, Z-X.; and Newman, A. H. Novel and high affinity D3 receptor-selective ligands as in vivo tools to study addiction. Presented in the *Behavior, Biology, and Chemistry: Translational Research in Addiction*, **2015**, San Antonio, TX
8. **Boateng, C. A.**; Okunola-Bakare, O. M.; Banala, A. K.; Keck, T. M.; Burzynski, C.; Schweppe, C.; Rais, R.; Slusher, B.; Donthamsetti, P.; Javitch, J. A.; John, W.; Czoty, P.; Nader, M. A.; Newman, A. H. The development of novel dopamine D3 receptor-selective partial agonists as potential medications to treat psychostimulant abuse. Presented in the Society for Neuroscience Baltimore Chapter, **2014**, Baltimore, MD
9. **Boateng, C. A.**; Okunola-Bakare, O. M.; Banala, A. K.; Keck, T. M.; Burzynski, C.; Schweppe, C.; Rais, R.; Slusher, B.; Donthamsetti, P.; Javitch, J. A.; John, W.; Czoty, P.; Nader, M. A.; Newman, A. H. The development of novel dopamine D3 receptor-selective partial agonists as potential medications to treat psychostimulant abuse. Presented in the *Society for Neuroscience*, **2014**, Washington, DC
10. **Boateng, C. A.**; Okunola-Bakare, O. M.; Banala, A. K.; Keck, T. M.; Burzynski, C.; Schweppe, C.; Rais, R.; Slusher, B.; Donthamsetti, P.; Javitch, J. A.; John, W.; Czoty, P.; Nader, M. A.; Newman, A. H. The development of novel dopamine D3 receptor-selective partial agonists as potential medications to treat psychostimulant abuse. Presented in the *Frontiers in Addiction Research (NIDA Mini-Convention) by Society for Neuroscience*, **2014**, Bethesda, MD
11. Burkhardt, R. N.; **Boateng, C. A.**; Newman, A. H. Design and Synthesis of Novel High-Affinity and Selective Ligands for the Dopamine D4 Receptor. Presented in the *NIH Summer Research Program Poster Day*, Abstract # 150-LCH, Bethesda, MD
12. Dahal, R. A.; Akula-Bala, P.; Sharma, B.; Cha, J. H.; Cao, J.; **Boateng, C.**; Lever, J. R.; Newman, A. H.; Foster, J. D.; Henry, L. K.; Vaughan, R. A. Identification of the attachment site for the cocaine analog [125I]JHC 2-48 on the dopamine transporter. Presented in the *Experimental Biology (ASBMB)*, **2014**, San Diego, CA
13. Okunola-Bakare, O. M.; **Boateng, C. A.**; Banala, A. K.; Keck, T. M.; Donthamsetti, P.; Javitch, J. A.; Lei, S.; Newman, A. H. Development of highly selective and potent D3 receptor antagonists and partial agonists using a synthon approach. *Keystone Symposia G Protein-Coupled Receptors: Structural Dynamics and Functional Implications*, **2014**, Snowbird, UT
14. Travel award; oral presentation: **Boateng, C. A.**; Okunola-Bakare, O. M.; Banala, A. K.; Keck, T. M.; Donthamsetti, P.; Javitch, J. A.; Lei, S.; Newman, A. H. Developing highly selective and potent D3 receptor antagonists and partial agonists using a synthon approach. Presented in the *Behavior, Biology, and Chemistry: Translational Research in Addiction*, **2014**, San Antonio, TX

15. **Boateng, C. A.**; Okunola-Bakare, O. M.; Banala, A. K.; Keck, T. M.; Newman, A. H. A synthon approach to development of highly selective and potent D3 receptor antagonists and partial agonists. Presented in the *NIH-Baltimore Fellows Symposium, 2013*, Baltimore, MD
16. Travel award: **Boateng, C. A.**; Okunola-Bakare, O. M.; Banala, A. K.; Keck, T. M.; Newman, A. H. A synthon approach to development of highly selective and potent D3 receptor antagonists and partial agonists. Presented in the *Gordon Research Conference on Catecholamines, 2013*, West Dover, VT
17. **Boateng, C. A.**; Newman, A. H. Novel Nanoprobes for the Dopamine Transporter. Presented in the *NIH-Baltimore Fellows Symposium, 2012*, Baltimore, MD
18. Bolden, S.; **Boateng, C. A.**; Jacob, M. R.; Ablordeppey, S. Y. Design, synthesis, and evaluation of Cryptolepine analogs. Presented in the 13th *Research Centers in Minority Institutions (RCMI) International Symposium on Health Disparities, 2012*, San Juan, Puerto Rico
19. Ofori, E.; **Boateng, C. A.**; Etukala, J. R.; Jacob, M. R.; Walker, L. A.; Ablordeppey, S. Y. Benzothieno- and phenylthio-quinolonium salts: New lead compounds against opportunistic infections. Presented in the *USF 10th Raymond N. Castle Student Research Conference, 2012*, Abstract # GP19, Tampa, FL
20. Bolden, S.; **Boateng, C. A.**; Jacob, M. R.; Ablordeppey, S. Y. Design, synthesis, and evaluation of Cryptolepine derivatives as antifungal agents. Presented in the *USF 10th Raymond N. Castle Student Research Conference 2012*, Abstract # GP21, Tampa, FL
21. Bolden, S.; **Boateng, C. A.**; Jacob, M. R.; Ablordeppey, S. Y. Anti-infective agents structure activity relationship studies of analogs of the natural product Cryptolepine. Presented in the *AAPS National Meeting FAMU, 2012*, Abstract # D2, Tallahassee, FL
22. Bolden, S.; **Boateng, C. A.**; Jacob, M. R.; Ablordeppey, S. Y. CoMFA studies of novel anti-infective agents. Presented in the *FAMU Graduate Feeder Conference, 2012*, Tallahassee, FL
23. Travel award: **Boateng, C. A.**; Jacob, M. R.; Ablordeppey, S. Y. Design and QSAR Studies of 3-Phenylthio-quinolinium salts and their in vitro Evaluation against AIDS-related Opportunistic Pathogens. Presented in the *AAPS National Biotechnology Conf. 2010*. Abstract # M1062, San Francisco, CA
24. **Boateng, C. A.**; Jacob, M. R.; Ablordeppey, S. Y. Development of new agents against AIDS-related opportunistic pathogens. Presented in the *ACS 239th Annual National Meeting Med. Chem. Div. 2010*, Abstract # 136, San Francisco, CA
25. **Boateng, C. A.**; Jacob, M. R.; Ablordeppey, S. Y. Development of new agents against AIDs-related opportunistic pathogens. Presented in the *FAMU Minority Biomedical Research Support Program 2009*, Abstract # 35, Tallahassee, FL
26. **Agyemang, C. A.**; Zhu, X. Y.; Ablordeppey, S. Y. Development of new Anti-opportunistic agents: 3-Substituted-quinolinium salt. Presented in the *FAMU Minority Biomedical Research Support Program 2007*, Abstract # 29, Tallahassee, FL

PEER-REVIEWED PUBLICATIONS

1. Michino, M.; **Boateng, C. A.**; Donthamsetti, P.; Bakare, O. M.; Bonifazi, A.; Ellenberger, M.; Keck, T. M.; Kumar, V.; Zhu, C.; Deschamps, J. R.; Javitch, J. A.; Newman, A. H. and Lei, S. High-Affinity

Dopamine D3 Receptor-Selective Bivalent Ligands: Further Investigating the Role of the Orthosteric Binding Site in Affinity and Efficacy. **2015** (*Manuscript in Preparation*)

Equally Contributing Authors with MM and DP: designed & synthesized compounds, analyzed data, writing paper

2. **Boateng, C. A.**; Bakare, O. M.; Zhan, J.; Banala, A.; Burzynski, C.; Pommier, E.; Keck, T. M.; Donthamsetti, P.; Javitch, J. A.; Rais, R.; Slusher, B.; Xi, Z-X.; and Newman, A. H. High Affinity Dopamine D₃ Receptor (D₃R)-Selective Antagonists Attenuate Heroin Self Administration in Wild-Type but not D₃R Knockout Mice. *J. Med. Chem.* **2015**, 58, 6195–6213. Selected as NIDA-IRP featured paper of the month (January 2016). <http://irp.drugabuse.gov/>

Equally Contributing Authors with OMB: designed & synthesized compounds, analyzed data, wrote paper

3. **Boateng C. A.**; Schweppe C. A. and Newman A. H. (2013) Addiction. In: Reedijk, J. (Ed.) *Elsevier Reference Module in Chemistry, Molecular Sciences and Chemical Engineering*. Waltham, MA: Elsevier. 02-Apr-2014 doi:10.1016/B978-0-12-409547-2.10979-5.

Contributions: Invited Chapter review on Addiction, rewrote large sections of the review

4. Bolden, S.; **Boateng, C. A.**; Zhu, X. Y.; Etukala, J. R.; Eyunni, S.K.; Jacob, M. R.; Khan, S. I.; Walker, L. A.; Ablordeppey, S. Y. CoMFA studies and in vitro evaluation of some 3-substituted benzylthio quinolinium salts as anticryptococcal agents. *Bioorg. Med. Chem.* **2013**, 21, 7194-7201

Contributions: designed & synthesized compounds, analyzed data

5. Bolden, S.; Zhu, X. Y.; Etukala, J. R.; **Boateng, C. A.**; Mazu, T.; Flores-Rozas, H.; Jacob, M. R.; Khan, S. I.; Walker, L. A.; Ablordeppey, S. Y. Structure-Activity Relationship (SAR) and Preliminary Mode of Action Studies of 3-Substituted Benzylthioquinolinium Iodide as Anti-opportunistic Infection Agents. *European J. Med. Chem.* **2013**, 70, 130-142

Contributions: designed & synthesized compounds

6. **Boateng, C. A.**; Zhu, X. Y.; Jacob, M. R.; Khan, S. I.; Walker, L. A.; Ablordeppey, S. Y. Optimization of 3-(Phenylthio)quinolinium Compounds against Opportunistic Fungal Pathogens. *European J. Med. Chem.* **2011**, 46, 1789-1797

Contributions: designed & synthesized compounds, analyzed data, wrote paper

7. **Boateng, C. A.**; Eyunni, S. V. K.; Zhu, X. Y.; Etukala, J. R.; Bricker, B. A.; Ashfaq, M. K.; Jacob, M. R.; Khan, S. I.; Walker, L. A.; Ablordeppey, S. Y. Benzothieno[3,2-b] quinolinium and 3-(Phenylthio)quinolinium Compounds: Synthesis and Evaluation against Opportunistic Fungal Pathogens. *Bioorg. Med. Chem.* **2011**, 19, 458-470

Contributions: designed & synthesized compounds, analyzed data, wrote paper