

Tolulope A. Agunbiade Ph.D.

Assistant Professor

Department of Agriculture, Agribusiness, and Environmental Sciences

Texas A&M University-Kingsville

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OBJECTIVE

To leverage my expertise in agricultural and medical entomology, and molecular biology to advance the understanding and management of the insect pests and disease vectors impacting citrus crops. My research aims to develop innovative, sustainable, and environmentally friendly solutions to these critical issues. I am committed to extending these research findings to growers, industry professionals, and the broader community through effective outreach and education, ultimately contributing to the long-term health and productivity of the citrus industry. I am also passionate about fostering the next generation of scientists through engaging instruction and research mentorship.

EDUCATION

- Post-doctoral Fellowship (2014 -2018)
Yale University, USA
 - Ph.D., Entomology (2014)
University of Illinois at Urbana-Champaign, USA
 - M.Phil., Entomology (2002)
University of Ghana, Ghana
 - B.Sc. (Hons.), Crop Protection and Environmental Biology (1999)
University of Ibadan, Nigeria
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RESEARCH EXPERIENCE

- ***HHMI Postdoctoral Fellow, Yale University (November 2014 - September 2018)***
 - Pathogenesis of malaria disease transmission
 - Identified potential malaria vaccine candidates in the salivary glands of *Anopheles gambiae* and *A. stephensi* mosquitoes using yeast surface display
 - Tested *Anopheles* salivary gland protein candidates for immunogenicity and *Plasmodium* blocking potential
 - 2 publications including 1 co-first authored publication
- ***Research Assistant/HHMI Predoctoral Fellow, University of Illinois at Urbana-Champaign, USA (Fall 2009 - Spring 2014)***
 - Generated expressed sequences tags (ESTs) for the insect pest complex of cowpea in West Africa

- Developed putative single nucleotide polymorphism (SNPs) markers for the population characterization of four major insect pest complex of cowpea in West Africa
- Identified putative genes involved in insecticide resistance, pathogen defense and immunity in four major insect pests of cowpea in West Africa
- Characterized populations of the legume pod borer, *Maruca vitrata* in West Africa using microsatellite markers
- Assembled and characterized the mitochondrial genome of *M. vitrata* from Puerto Rico
- 15 publications including 5 first-authored publications
- **Research Associate, AfricaRice, Nigeria (February 2007 - August 2009)**
 - Supervised laboratory, on-station and on-farm activities on insect control methods in rice
 - Screened different insect vectors of the rice yellow mottle virus
 - Screened rice varieties for resistance to the African rice gall midge and rice stem borers
 - Assessed the efficacy of botanicals, entomopathogenic fungi and traditional practices against termites
 - 9 publications including 1 first-authored publication and 2 training manuals
- **Principal Research Assistant 1, Noguchi Memorial Institute for Medical Research, Ghana (December 2002 - January 2004)**
 - Identified *A. gambiae* mosquitoes with molecular techniques using Polymerase Chain Reaction (PCR)
 - Conducted insecticide bioassay tests using the World Health Organization (WHO) test kit
 - Characterized Knockdown resistance gene (*kdr*) in *A. gambiae* mosquitoes in the Greater Accra Region of Ghana
 - Administered questionnaires on insecticide usage patterns for agricultural purposes to farmers in the Greater Accra Region and Central Region of Ghana
 - 1 first-authored publication

TEACHING EXPERIENCE

- **Assistant Professor, Department of Agriculture, Agribusiness, and Environmental Sciences, Texas A&M university-Kingsville, USA**
 - Course: PLS 5390/6344 – Crop Protection
Year: from Fall 2024
Responsibilities: teach undergraduate students about the principles and practices of crop protection.
- **Instructional Assistant Professor, Department of Entomology and Nematology, University of Florida, USA**
 - Course: ALS 4162/6935 – Consequences of Biological Invasions
Year: Spring 2021 – Spring 2024
Responsibilities: teach graduate and undergraduate students about non-native species invasions and the environmental effects of these invaders

- Course: ALS 4161/6166 - Exotic Species and Biosecurity Issues
Year: Fall 2019 – Fall 2023
Responsibilities: teach graduate and undergraduate students about U. S. policies and programs affecting agricultural biosecurity. Emphasis is on the importance of invasive species to U.S. agriculture and natural areas, evaluation of trade issues and their relevance to agricultural biosecurity, and the principles and basic practices of pest exclusion, eradication, and management tactics for invasive species issues
- Course: IPM 4114/ENY 5236 - Insect Pest and Vector Management
Year: Summer 2019 – Summer 2024
Responsibilities: teach graduate and undergraduate students about principles and practices used in insect pest and vector management; and the arthropod pests affecting crops and ornamental plants, humans and livestock
- Course: IDS 2935 - Bite me? Insects as Disease Vectors
Year: Fall 2020 – Spring 2024
Responsibilities: teach undergraduate students about the interactions of arthropods to humans and the environment; present pressing issues relating to the impact of arthropods in public health and also explore challenging questions such as “what are the emerging issues in vector biology and disease epidemiology”? and “what can be done to manage or prevent the occurrence of arthropod-borne diseases”?
- ***Graduate Teaching Assistant, University of Illinois at Urbana-Champaign, USA***
Course: IB 151 - Organismal and Evolutionary Biology
Year: Spring 2012
Responsibilities: Taught 38 students, lectured on the introduction for each lab activity, responded to questions during the introductory lecture and while students perform the lab experiments, and graded the students’ weekly laboratory report using the course grading rubric
- ***Grade 3 Teacher, St Peter’s Nursery and Primary School, Keffi, Nassarawa State, National Youth Service Corps, Nigeria***
Year: 1999 - 2000
Responsibilities: Taught 35 students, taught students in all class subjects including English Language, Mathematics, Social Studies, Physical and Health Education, and graded the students’ class work using the school grading rubric

OUTREACH AND EXTENSION EXPERIENCE

- Scientific Animations Without Borders (SAWBO) (2015 - 2014)
Organization: SAWBO is a public outreach organization that creates educational animation videos targeted at audiences with different literacy learners across the world. Target audiences include farmers, extension agents, non-governmental organizations, and the public. Relevant topics that have been addressed include, but not limited to, the biocontrol of legume pod borer, desert locusts, climate-smart push-pull system for stem borer management in maize, good agricultural practices

for groundnut, improved bean production, and how to identify and scout for Fall Armyworm.

Activities:

- Identified volunteers that can translate scripts for animated videos in their native languages.
- Co-ordinated the translations and recordings with the volunteers.
- Overlaid different voice recordings on animated videos using iMovie.
- Shared the animated videos among the targeted audience using Bluetooth® technology.
- Conducted studies on the prospective use of animated videos for cowpea farmers.

- AfricaRice (December 13 – 14, 2007)

Organization: AfricaRice is a pan-African center of excellence for rice research, development, and capacity building. It contributes to reducing poverty, achieving food and nutrition security, and improving livelihoods of farmers and other rice value-chain actors in Africa by increasing the productivity and profitability of rice-based agri-food systems, while ensuring the sustainability of natural resources. AfricaRice is one of 15 international agricultural research centers of CGIAR, a global research partnership for a food-secure future. It is also an intergovernmental association of African member countries.

Activities:

- Organized a Train-the-trainer course on the major insect pests and diseases of rice and their control for officers of Agricultural Development Projects (ADPs), seed companies, National Seed Service regional officers of the south-east and south-west of Nigeria and extension workers at the Research for Development Days, National Seed Service regional office, Ibadan, Nigeria.

- Noguchi Memorial Institute for Medical Research (NMIMR) (December 2002 – January 2004)

Organization: NMIMR is a semi-autonomous biomedical research center at the University of Ghana.

Activities:

- Interacted with farmers to assess insecticide usage patterns for agricultural purposes in the Greater Accra Region and Central Region of Ghana.

PUBLICATIONS

Peer-Reviewed Articles

1. **Agunbiade, T. A.**, Hodges A. C., Quinn N. F., Pinkerton M. G., and L. A. Whilby. 2024. Integrating integrated pest management and sustainability into a biosecurity framework. Florida Entomological Society. Submitted
2. Chang Y-M., **T. A. Agunbiade**, Tang X-D., Freudzon M., Almeras L. and E. Fikrig. 2020. A mosquito salivary protein facilitates sporozoite traversal of host cells. Journal of Infectious Diseases jiaa759, <https://doi.org/10.1093/infdis/jiaa759>
3. Dragovic S. M.*, **T. A. Agunbiade***, Freudzon M., Yang J., Hastings A. K., Schleicher T. R., Zhou X., Craft S., Chuang Y., Gonzalez F., Li Y., Hrebikov G., Tripathi A., Mlambo G., Almeras

L., Ploss A., Dimopoulos G. and E. Fikrig. 2018. Immunization with AgTRIO, a protein in *Anopheles* saliva, contributes to protection against *Plasmodium* infection in mice. *Cell Host & Microbe* 23(4): 523-535.e5

***contributed equally to the paper**

4. **Agunbiade T. A.**, B. S. Coates, W. Sun, M-R. Tsai, M. C. Valero, M. Tamò and B. R. Pittendrigh. 2017. Comparison of the mitochondrial genomes of the Old and New World strains of the legume pod borer, *Maruca vitrata* (Lepidoptera: Crambidae). *International Journal of Tropical Insect Science* 37(3): 125-136
5. **Agunbiade T. A.**, W. Sun, B. S. Coates, F. Traore, J. A. Ojo, A. N. Lutomia, J. Bello-Bravo, S. Miresmailli, J. Huesing, M. Tamò and B. R. Pittendrigh. 2017. Insect pests and integrated pest management techniques for grain legume cultivation in West Africa. In: Sivasankar et al. editors. *Achieving sustainable cultivation of grain legumes*. Burleigh Dodds Science Publishing. pp 432
6. **Agunbiade T. A.**, B. S. Coates, B. Datinon, R. Djouaka, W. Sun, M. Tamò and B. R. Pittendrigh. 2014. Genetic differentiation among *Maruca vitrata* F. (Lepidoptera: Crambidae) populations on cultivated cowpea and wild host plants: Implications for insect resistance management and biological control strategies. *PLoS ONE* 9(3): e92072
7. **Agunbiade T. A.**, W. Sun, B. S. Coates, R. Djouaka, M. Tamò, M. N. Ba, C. Binso-Dabire, I. Baoua, B. P. Olds and B. R. Pittendrigh. 2013. Development of reference transcriptomes for the major field insect pests of cowpea: A toolbox for insect pest management approaches in West Africa. *PLoS ONE* 8(11) e79929
8. Bello-Bravo J., R. Nwakwasi, **T. A. Agunbiade** and B. R. Pittendrigh. 2013. Perceptions of cell phone animations as an educational tool: A case study in southeastern Nigeria. *International Journal of Information and Communication Technology Research* 3(12): 2223-4985
9. Bello-Bravo J., E. Dannon, **T. Agunbiade**, M. Tamò and B. R. Pittendrigh. 2013. The prospect of animated videos in agriculture and health: A case study in Benin. *International Journal of Education and Development using Information and Communication Technology* 9(3): 4-16
10. **Agunbiade T. A.**, B. S. Coates, K. S. Kim, D. Forgacs, V. M. Margam, L. L. Murdock, M. N. Ba, C. L. Binso-Dabire, I. Baoua, M. F. Ishiyaku, M. Tamò and B. R. Pittendrigh. 2012a. The spatial genetic differentiation of the legume pod borer, *Maruca vitrata* F. (Lepidoptera: Crambidae) populations in West Africa. *Bulletin of Entomological Research* 102(5): 589-599
11. **Agunbiade T.**, L. Steele, B. Coates, A. Gassmann, V. Margam, M. Ba, C. Dabire-Binso, I. Baoua, J. Bello-Bravo, F. Seufferheld, W. Sun, M. Tamò and B. Pittendrigh. 2012b. IPM-omics: From Genomics to Extension for Integrated Pest Management of Cowpea. In: Boukar O., Coulibaly O., Fatokun C., Lopez K. Tamò M., editors. *Improving livelihoods in the cowpea value chain through advancements in science*. Proceedings of the 5th World Cowpea Research Conference pp. 231 – 248
12. Bello-Bravo J., F. Seufferheld, **T. Agunbiade**, L. D. Steele, D. Guillot, N. M. Ba, C. L. Binso-Dabire, I. Baoua, M. N'Diaye, M. Tamò and B. Pittendrigh. 2012. Scientific Animations Without Borders™: Cell-phone videos for cowpea farmers. In: Boukar O., Coulibaly O., Fatokun C., Lopez K. Tamò M., editors. *Improving livelihoods in the cowpea value chain through advancements in science*. Proceedings of the 5th World Cowpea Research Conference pp. 369 – 380
13. Olds B.P., B. S. Coates, L. D. Steele, W. Sun, **T. A. Agunbiade**, K. S. Yoon, J. P. Strycharz, S. H. Lee, K. N. Paige, J. M. Clark and B. R. Pittendrigh. 2012. Comparison of the transcriptional profiles of head and body lice. *Insect Molecular Biology* 21(2): 257-268

14. Oyetunji O. E., C. O. Peluola, F. E. Nwilene, G. Akinwale, A. Togola, **T. A. Agunbiade** and O. A. Claudius-Cole. 2012. Effect of fungi–termite interaction on the chlorophyll content of three rice varieties grown on ultisol soil of Ikenne, southwest Nigeria. *Archives of Phytopathology and Plant Protection* 45(11): 1292-1303
15. Baoua I., N. M. Ba, **T. A. Agunbiade**, V. Margam, C. L. Binso-Dabiré, S. Antoine and B. R. Pittendrigh. 2011. Potential use of *Sesbania pachycarpa* DC (Fabaceae: Papilionoideae) as a refugia for the legume pod borer, *Maruca vitrata* Fabricius (Lepidoptera: Crambidae). *International Journal of Tropical Insect Science* 31(4): 212-218
16. Bello J., F. Seufferheld, L. D. Steele, **T. Agunbiade**, D. Guillot, G. Cutz and B. R. Pittendrigh. 2011. Scientific Animations without Borders: an international collaborative approach for building applicable scientific educational materials for use on cell phones, and the Internet in developing nations. *The International Journal of Science in Society* 2(4): 49-62
17. Bello-Bravo J., F. Seufferheld and **T. A. Agunbiade**. 2011. Gender and farmer field schools in agricultural production systems in West Africa. *The International Journal of Science in Society* 2(4): 13-24
18. Margam V. M., B. S. Coates, D. O. Bayles, R. L. Hellmich, **T. Agunbiade**, M. J. Seufferheld, W. Sun, J. A. Kroemer, M. N. Ba, C. L. Binso-Dabire, I. B. Bokary, M. F. Ishiyaku, F. G. Covas, R. Srinivasan, J. Armstrong, L. L. Murdock and B. R. Pittendrigh. 2011. Transcriptome sequencing, and rapid development and application of SNP markers for the legume pod borer *Maruca vitrata* (Lepidoptera: Crambidae). *PLoS ONE* 6(7): e21388
19. Margam V., B. S. Coates, R. L. Hellmich, **T. Agunbiade**, M. J. Seufferheld, W. Sun, M. N. Ba, A. Sanon, C. L. Binso-Dabire, I. Baoua, M. F. Ishiyaku, F. G. Covas, R. Srinivasan, J. Armstrong, L. L. Murdock, and B. R. Pittendrigh. 2011. Mitochondrial genome sequence and expression profiling for the legume pod borer, *Maruca vitrata* (Lepidoptera: Crambidae). *PLoS ONE* 6(2) e16444
20. Togola A., F. E. Nwilene, A. Agbaka, F. Anato, **T. A. Agunbiade** and D. C. Chougourou. 2010. Connaissance paysanne des insectes foreurs de tiges du riz et leurs dégâts dans différentes zones écologiques du Bénin (Afrique de l’Ouest). *Cahiers Agricultures* 19(4) 262-266
21. Togola A., F. E. Nwilene, D. C. Chougourou and **T. Agunbiade**. 2010. Presence, populations et degats de l’alucite des cereales *Sitotroga cerealella* (Olivier) (Lepidoptera, Gelechiidae) sur les stocks de riz au Benin. *Cahiers Agricultures* 19: 205-209
22. **Agunbiade T. A.**, F. E. Nwilene, A. Togola, A. Onasanya, M. Tamò and O. O. Falola. 2009. Resistance status of upland NERICA rice varieties to termite damage in North-central Nigeria. *Journal of Applied Sciences* 9(21): 3864-3869
23. Nwilene F. E., O. Okhidievbie, **T. A. Agunbiade**, A. K. Traore, L. N. Gaston, A. Togola and O. Youm. 2009. Antixenosis component of rice resistance to African rice gall midge, *Orseolia oryzivora*. *International Rice Research Notes* 34: 1-6
24. Ogah E. O., F. E. Nwilene, M. N. Ukwungwu, A. A. Omoloye and **T. A. Agunbiade**. 2009. Population dynamics of the African rice gall midge, *Orseolia oryzivora* Harris and Gagné and its parasitoids in the forest and Guinea savanna zones of Nigeria. *International Journal of Tropical Insect Science* 29(2): 86-92
25. Joseph A., D. B. Olufolaji, Y. Sere, F. E. Nwilene, A. Onasanya and **T. A. Agunbiade**. 2009. Effect of migration distance on vector-mediated approach of screening rice cultivars for resistance to rice yellow mottle virus. *Nigerian Journal of Plant Protection* 23:176-183
26. **Adeniran T. (Maiden Name)**, C. A. Brown, W. Rogers, M. D. Wilson, M. A. Appawu and D. A. Boakye. (2009) Susceptibility status of *Anopheles gambiae* sensu stricto (Diptera:

- Culicidae) to pyrethroid and carbamate insecticides in the Greater Accra region of Ghana, West Africa. *International Journal of Tropical Insect Science* 29(03): 124-129
27. Nwilene F. E., **T. A. Agunbiade**, A. Togola, O. Youm, O. Ajayi, S. O. Oikeh, S. Ofodile and O.O. Falola. 2008. Efficacy of traditional practices and botanicals for the control of termites on rice at Ikenne, Nigeria. *International Journal of Tropical Insect Science* 28(1): 37-44
28. Nwilene F. E., A. Togola, **T. A. Agunbiade**, E. O. Ogah, M. N. Ukwungwu, A. Hamadoun, S. I. Kamara and D. Dakouo. 2008. Parasitoid biodiversity conservation for sustainable management of the African rice gall midge, *Orseolia oryzivora* (Diptera: Cecidomyiidae) in lowland rice. *Biocontrol Science and Technology* 18(10): 1075-1081

Editorial Role

29. Raman C., M. R. Goldsmith and **T. A. Agunbiade** (Eds.). 2015. Short views on insect genomics and proteomics. *Insect genomics*, Volume 1. Springer International Publishing 202 pp.
30. Raman C., M. R. Goldsmith and **T. A. Agunbiade** (Eds.). 2015. Short views on insect genomics and proteomics. *Insect proteomics*, Volume 2. Springer International Publishing 251 pp.

Training manuals

31. Nwilene F. E., S. O. Oikeh, **T. A. Agunbiade**, O. Oladimeji, O. Ajayi, M. Sie, G. Gregorio, A. Togola and A. D. Touré. 2008. Growing lowland rice: a production handbook. Africa Rice Center, Benin. 40 pp
32. Oikeh S. O., F. E. Nwilene, **T. A. Agunbiade**, O. Oladimeji, O. Ajayi, S. Mande, H. Tsunematsu and H. Samejima. 2008. Growing upland rice: a production handbook. Africa Rice Center, Benin. 40 pp

FUNDING

- Howard Hughes Medical Institute (HHMI) Predoctoral Fellowship, University of Illinois at Urbana-Champaign
Amount: \$129,000
Year: Fall 2012 - Spring 2014

FELLOWSHIPS/SCHOLARSHIPS/AWARDS/TRAINING SPONSORSHIPS

- Predoctoral Fellowship (Fall 2012 - Spring 2014)
International Student Research Fellowship, HHMI
- M. Phil. Scholarship (2000 - 2002)
Deutscher Akademischer Austausch Dienst (DAAD), German Academic Exchange Service
- Integrated Pest Management Training Course (May - August 2008)
Japan International Co-operation Agency (JICA)
Kobe University and Hyogo Prefectural Institute for Agriculture, Forestry and Fisheries, Japan
- Travel Award (November 17 - 22, 2002)
3rd MIM Pan-African Conference on Malaria, Arusha, Tanzania
- Best student (1999)
Department of Crop Protection and Environmental Biology
University of Ibadan, Nigeria

MEETINGS ATTENDED/PRESENTATIONS

Invited Oral Presentation

- Open Forum on Science in Grain Legumes, Joint conference of the 6th International Food Legumes Research Conference (IFLRC VI) and 7th International Conference on Legume Genetics and Genomics (ICLGG VII), Saskatoon, Canada
A population genetics study of the legume pod borer, M. vitrata, in West Africa (July 7- 11, 2014)
- International Institute of Tropical Agriculture (IITA) Ibadan, Nigeria, Research for Development Days
Uncovering the population genetics of M. vitrata (November 26, 2013)
- Train-the-trainer course for officers of ADPs, seed companies, National Seed Service regional officers of the south-east and south-west of Nigeria and extension workers, Research for Development Days, National Seed Service regional office, Ibadan, Nigeria
Major pests and diseases of rice and their control (December 13 - 14 2007)

Poster Presentation

- Entomological Society of America 2014 Annual Meeting, Portland, Oregon, USA
Defining the species complex of the legume pod borer, Maruca vitrata (Lepidoptera: Crambidae), by comparative mitochondrial phylogenomics (November 17 – 19, 2014)
- Joint conference of the 6th International Food Legumes Research Conference (IFLRC VI) and 7th International Conference on Legume Genetics and Genomics (ICLGG VII), Saskatoon, Canada
Development of reference transcriptomes for the major field insect pests of cowpea: A toolbox for insect pest management approaches in West Africa (July 10, 2014)
- HHMI Science Meeting
Genetic differentiation among M. vitrata F. (Lepidoptera: Crambidae) populations on cultivated cowpea and wild host plants (April 23 - 25, 2014)
- 3rd Multilateral Initiative on Malaria (MIM), Arusha, Tanzania
Studies on the susceptibility status of A. gambiae sensu lato (Diptera: Culicidae) to Permethrin (Pyrethroid) and Propoxur (Carbamate) insecticides in the Greater Accra region of Ghana, (November 17 – 22, 2002)

Attended

- 8th Arthropod Genomics Symposium, University of Illinois at Urbana-Champaign (June 12 - 14, 2014)
- ESA Southeastern Branch Meeting, Mobile, Alabama (March 3 – 6, 2019)

Internal Oral Presentations

- Infectious Disease-Rheumatology Research Conference Meeting, Yale University
Malaria vaccines: targeting Anopheles salivary gland proteins (March 15, 2016)
- Infectious Disease-Rheumatology Research Conference Meeting, Yale University
Mosquito salivary gland extract antiserum alters Plasmodium infection in mice (March 7, 2017)

MEDIA INTERACTIONS AND INTERVIEWS

- <https://yaledailynews.com/blog/2018/04/17/yale-study-raises-hope-of-malaria-vaccine/>
 - <http://bintroo.com/scientists-develop-new-strategy-for-malaria-vaccine/>
 - <https://www.everydayhealth.com/malaria/vaccine-progress-challenges/>
 - America's Heartlands on PBS – January 2012 - http://www.americasheartland.org/episodes/episode_721/smart_phone_farming.html
 - Team delivers development aid via cell phone animations - http://news.illinois.edu/news/11/0228phone_ed_bello-bravo_pittendrigh.html
 - http://www.eurekalert.org/pub_releases/2011-02/uoiatdd022811.php
 - Farming tips reach developing world via cell phone - <http://www.voanews.com/content/developing-world-farmers-find-answers-on-cell-phones-121895389/158130.html>
 - http://news.cnet.com/8301-27083_3-20037383-247.html
 - http://www.sciencecodex.com/team_delivers_development_aid_via_cell_phone_animations
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MENTORING EXPERIENCE

- William Wilson, high school student, Yale University (June – August 2018)
 - Pathogenesis of malaria disease transmission
 - Zhangnv Yang, Visiting Scholar from China, Yale University (August 2016 - February 2017)
 - Pathogenesis of malaria disease transmission
 - Sequoia Leuba, Molecular, Cellular and Developmental Biology major, Yale University (September 2015 - May 2016)
 - Pathogenesis of malaria disease transmission
 - Chang Li, Visiting Scholar from China, Yale University (September 2015 - January 2016)
 - Pathogenesis of malaria disease transmission
 - Youquan Li, Visiting Scholar from China, Yale University (June - October 2015)
 - Pathogenesis of malaria disease transmission
 - Floricel Gonzalez, HHMI/Exceptional Research Opportunities Program (EXROP) student, Yale University (June - August 2015)
 - Pathogenesis of malaria disease transmission
 - Mu-Rou Tsai, international exchange student from Taiwan, University of Illinois at Urbana-Champaign (2013)
 - Genomic analysis of cowpea insect pests
 - Ron Vidri, student, University of Illinois at Urbana-Champaign (2013)
 - Genomic analysis of cowpea insect pests
 - David Forgacs, international student from Hungary, University of Illinois at Urbana-Champaign (2011 - 2012)
 - Genomic analysis of cowpea insect pests
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REVIEWER SERVICE

- Reviewer, International Journal of Tropical Insect Science (2020)
- Reviewer, Journal of Asia-Pacific Entomology (2018)
- Reviewer, PLOS ONE (2013 - 2017)
- Reviewer, Bulletin of Entomological Research (2017)

- Reviewer, Pest Management Science (2017)
 - Reviewer, PLOS Neglected Tropical Diseases (2014)
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ACADEMIC AND UNIVERSITY SERVICE

- Committee Member, Plant Science Committee, University of Florida (2022 – 2024)
 - Program Committee Chair, Entomological Society of America, Southeastern Branch (2023 – 2024)
 - Topics Editor, Insects (March 2021 – Present)
 - Member, Editorial Board, Journal of Entomology and Nematology (2019 – Present)
 - Judge, student oral presentation, Entomological Society of America (ESA), Portland, Oregon (November 17, 2014)
 - Managed USAID-funded cowpea IPM-omics project, Pittendrigh laboratory, Department of Entomology, University of Illinois at Urbana-Champaign (September 2009 - May 2014)
 - Invited participant, Campus Conversation on Undergraduate Education, Office of the Vice Chancellor for Academic Affairs and Provost, University of Illinois at Urbana-Champaign (November 14, 2013)
 - Social and Organizing Secretary, African Student Organization, University of Illinois at Urbana-Champaign (2010 - 2011)
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TRAININGS AND PROFESSIONAL DEVELOPMENT

- Teacher's College, University of Florida (Fall 2019)
College of Agricultural and Life Sciences, University of Florida, USA
 - New Faculty Passport to Great Teaching (Spring 2019)
Office of Teaching Excellence, University of Florida
 - Certificate in Foundations of Teaching (Spring 2013)
Center for Teaching Excellence, University of Illinois at Urbana-Champaign, USA
Integrated Pest Management for Plant Protection (May - September 2008)
Kobe University and Hyogo Prefectural Institute for Agriculture, Forestry and Fisheries, Japan
 - DELF A2 (December 2007)
Nationale Diplôme D'études En Langue Française (National Diploma in French Language Studies), Nigeria
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MEMBERSHIPS OF PROFESSIONAL ORGANIZATIONS

- Southwestern Branch, Entomological Society of America (2024 – Present)
 - International Association of Black Entomologists (March 2023 – Present)
 - North American Colleges and Teachers of Agriculture (2020 – Present)
 - Southeastern Branch, Entomological Society of America (2019 – 2024)
 - Entomological Society of America (2012 – Present)
-