NSA DADA

ASSISTANT PROFESSOR . ARIZONA STATE UNIVERSITY . SCHOOL OF LIFE SCIENCES

TEMPE, AZ 85287-4501 WWW.NSADADA.COM • ORCID 0000-0002-5276-2328 • E-MAIL NSA.DADA@ASU.EDU

| EDUCATION | |
|---------------------------|--|
| 2010-2014 | PhD in Microbiology (Emphasis in mosquito-microbe interactions) Norwegian University of Life Sciences (NMBU), Faculty of Science and Technology, Ås, Norway. |
| 2008-2009 | MSc in Biology and Control of Parasites and Disease Vectors with <i>Distinction</i> (Summa cum laude). Liverpool School of Tropical Medicine (LSTM), Faculty of Health and Life Sciences, University of Liverpool, United Kingdom. |
| 2002-2006 | BSc. in Zoology, Magna cum laude. University of Calabar, Calabar, Nigeria. |
| RESEARCH & | LEADERSHIP POSITIONS |
| 2022-present | Assistant Professor. School of Life Sciences (SOLS), Arizona State University (ASU), Tempe, AZ, USA |
| 2017-present | Founder and Lead. Mosquito Microbiome Consortium (<u>www.mosquito-microbiome.org</u>) |
| 2019-2020 2017-2019 | Research Scientist. Faculty of Science and Technology, NMBU Research Fellow. Entomology Branch, Division of Parasitic Diseases and Malaria (DPDM), Center for Global Health, CDC, Atlanta, GA, USA. |
| 2015-2017 | CDC & American Society for Microbiology (ASM) Postdoctoral Fellow. Entomology Branch, CDC, Atlanta, GA, USA |
| 2015 | Postdoctoral Research Associate. Institut de Recherche pour le Dévelopment (IRD), Department of Health, Montpellier, France. |
| 2015 | Postdoctoral Research Associate. University of Oslo, Dept. of Community Medicine, Institute of Health and Society, Oslo, Norway. |
| 2010-2014 | Doctoral Research Fellow. NMBU, Faculty of Science and Technology, Ås, Norway |
| ADVISORY RC | LES, CONSULTANCY & SECONDARY APPOINTMENTS |
| 2021-present | Consultant Research Scientist. Pan-African Mosquito Control Association, Nairobi, Kenya |
| 2020-present | Honorary Research Fellow. Tropical Infectious Diseases Research Center, University of Abomey-Calavi, Abomey-Calavi, Benin |
| 2017-present 2021-2023 | Adjunct Lecturer. Prince of Songkla University (PSU), Hat Yai, Thailand. Expert Assessor. World Health Organization (WHO) Vector Control Product |
| 2021-2022 | Prequalification, Geneva, Switzerland Global Health Consultant. KPMG (Norway) International Development Advisory |
| 2019-2021 | Service Adjunct Research Fellow. Nigerian Institute of Medical Research, Lagos, Nigeria |
| OTHER EXPERIENCE | |
| 2018-2019 | Visiting Researcher. Kenya Medical Research Institute (KEMRI), Center for Global Health Research (CGHR), Entomology Section, Kisumu, Kenya |

| 2016-2017 | Guest Researcher. Universidad del Valle de Guatemala (UVG), Centro de Estudios en Salud, Grupo de Biología y Control de Vectores, Guatemala, Guatemala. |
|-----------|--|
| 2016 | Visiting Researcher. Universidad Autonoma de Yucatan, Departmento de Zoologia, |
| | Campus de Ciencias Biologicas y Agropecuarias, Merida, Mexico. |
| 2013 | Guest Researcher. IRD, Montpellier and University of Montpellier (UM), Bacteriology |
| | unit, Faculty of Pharmacy, Montpellier, France. |
| 2010-2012 | Guest Researcher. Khon Kaen Provincial Health office, Khon Kaen, Thailand |
| 2011 | Visiting Researcher. Salavan Health Department, Salavan, Laos Peoples |
| | Democratic Republic. |
| 2010 | Visiting Researcher. Mukdahan Provincial Health Office, Mukdahan, and Ubon |
| | Ratchathani Provincial Health Office, Ubon Ratchathani, Thailand |
| 2010-2011 | Guest Researcher. Kasetsart University, Entomology Department, Bangkok, |
| | Thailand |
| 2009 | Guest Researcher. Helen Keller International, Freetown, Fourah Bay College, |
| | Freetown, and Njala University, Bo, Sierra Leone. |
| | |

ACADEMIC/PROFESSIONAL AWARDS & HONORS

| 2023 | Scialog Fellow • Mitigating Zoonotic Threats theme. Research Corporation for |
|------|---|
| 2020 | Science and Advancement. |
| 2020 | Nominee • Charles C. Shepard Award for excellence in science. Entomology Branch, CDC. |
| 2019 | Nominee • Charles C. Shepard Award for excellence in science. US Centers for |
| | Disease Control and Prevention and Agency for Toxic Substances and Disease |
| | Registry (CDC/ATSDR). |
| 2017 | Recipient • Future Leader in International Medical Entomology (inaugural) |
| | Award. American Committee of Medical Entomology (ACME), American Society of |
| | Tropical Medicine and Hygiene (ASTMH) |
| 2015 | Recipient • ASM-CDC Postdoctoral Research Fellowship in Infectious Diseases |
| | & Public Health |
| 2010 | Recipient • Doctoral Research Fellowship. NMBU, As, Norway |
| 2006 | Best graduating student. National Association of Zoology & Environmental Biology, |
| | University of Calabar, Nigeria |

FUNDING, RESEARCH SUPPORT & FELLOWSHIPS (> 2.8 million USD awarded)

RESEARCH GRANTS

| 2023-2024 | Principal Investigator (Multi-PI project) "Novel insecticide delivery and formulation for resistance management in zoonotic disease vectors" |
|-----------|---|
| | Funder: Research Corporation for Scientific Advancement (RCSA) & United States |
| | Department of Agriculture (USDA): NOA |
| 2023-2024 | Co-Investigator "International mosquito microbiome research exchange and its application for vector-borne disease control" |
| | <u>Funder:</u> French National Center for Scientific Research (CNRS): 30,000 EUR (~32,000 USD) |
| 2021-2024 | Co-Lead "Establishing genomics and bioinformatics hubs for vector-borne disease research in Africa" A Pan-African Mosquito Control Association (PAMCA) initiative. Funder: Bill and Melinda Gates Foundation (BMGF), USA—1,445,665 USD |
| 2019-2024 | Co-Investigator "Genomics for management of insecticide resistance in African malaria vectors" Funder: BMGF, USA—909,988 USD |

| 2021-2023 | Co-Investigator "Impact of climate change on tropical blood-sucking insect pests: behavior and pesticide susceptibility" |
|-------------|--|
| | <u>Funder</u> : Fundamental Fund, Thailand Science Research and Innovation (TSRI) — 1,000,000 THB (~31,900 USD) |
| 2021-2022 | Co-Principal Investigator "International research exchange on the mosquito microbiome and its application for vector-borne disease control" |
| | Funder: CNRS: 19,500 EUR (~22,500 USD) |
| 2021-2022 | Project partner "Genetic diversity and maternal transmission of Microsporidia MB |
| | strains in field populations of Anopheles gambiae s.l. in Cameroon" |
| | Funder: ANTI-VeC— 39,200 GBP (54,219 USD) |
| 2020-2021 | Principal Investigator "Role of the mosquito microbiota in insecticide resistance. A |
| | seminal study of invasive Aedes populations in Italy" |
| | Funder: European Corporation in Science and Technology (Action CA17108) Short |
| | Term Scientific Mission Grant—1,950 EUR; ~2300 USD [declined due to COVID] |
| 2015-2019 | Fellowship. CDC-ASM Postdoctoral Research Fellowship in Infectious Disease and |
| | Public Health Microbiology (2015-2017) and CDC Associate Service Fellowship |
| | (2017-2019). "Role of mosquito microbiota in insecticide resistance in malaria mosquitoes". |
| | Funder: CDC— >226,500 USD (laboratory space and consumables provided in |
| | addition) |
| 2013-2013 | Doctoral overseas research grant "Microbial composition of Ae. aegypti and water |
| | from their breeding containers". |
| | Funder: Research Council of Norway (RCN)—51,000 NOK; ~6,000 USD |
| 2010-2013 | Doctoral Research Fellowship "Links between Aedes aegypti infestation and fecal |
| | contamination in domestic water containers in Thailand and Laos". |
| | <u>Funder</u> : RCN—948,417 NOK; ~103,621 USD |
| TRAVEL GRAN | TS, OTHER RESEARCH SUPPORT AND MONETARY VALUE OF AWARDS |
| 2019 | Travel grant 1st European workshop on testing procedures for monitoring and |
| | managing insecticide resistance in invasive mosquitoes. Supported by the World |
| | Health Organization (WHO) & The Worldwide Insecticide Resistance Network (WIN). |
| 2019 | Travel grant ANTI-VeC (Application of Novel Transgenic technology & Inherited |
| | symbionts to Vector Control) International Conference Bursary—1,075 GBP; ~1,400 |
| 2017 2010 | USD Co. Investigator "The role of agricultural posticide vegas in the development of |
| 2017-2019 | Co-Investigator "The role of agricultural pesticide usage in the development of resistance to public health insecticides in mosquitoes". Supported by: Thailand |
| | Research Fund and PSU. |
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SCIENTIFIC PUBLICATIONS (*corresponding author; ♦ pre-ASU mentee; ⅓ significant recognition/award; ‡ equal contribution)

PREPRINTS OR MANUSCRIPTS UNDER JOURNAL CONSIDERATION

ACME-ASTMH-2,000 USD

1,800 GBP; ~2,300 USD

2017

2009-2009

1. Maxime Girard, Edwige Martin, Laurent Vallon, Van Tran Van, Camille Da Silva Carvalho, Justine Sacks, Zélia Bontemps, Julie Balteneck, Florence Colin, Pénélope Duval, Simon Malassigné, James Swanson, lan Hennessee, Stephanie Jiang, Lucrecia Vizcaino, Yamila Romer, **Nsa Dada**,

Award monetary value (Future Leader in International Medical Entomology).

Helminths (STHs) in Sierra Leone: A survey of school children aged 9-14 years in six districts". Funded by: LSTM & UK Department for International Development (DFID)—

Postgraduate (MSc) thesis project support "Prevalence of Soil-transmitted

- et. al. Human-aided dispersal facilitates parasitism escape in the most invasive mosquito species. BioRxiv [Link]
- 2. Diana Omoke*, Lucy Impoinvil, Dieunel Derilus, Stephen Okeyo, Helga Saizonou, Nicola Mulder, Nsa Dada, Audrey Lenhart, Luc Djogbénou, Eric Ochomo*. Whole transcriptomic analysis reveals overexpression of salivary gland and cuticular proteins genes in insecticide-resistant Anopheles arabiensis from Western Kenya. [Link]
- 3. Helga Saizonou*, Lucy Mackenzie Impoinvil, Dieunel Derilus, Diana Omoke, Stephen Okeyo, <u>Nsa Dada</u>, Filémon Tokponon, Nicola Mulder, Audrey Lenhart, Eric Ochomo, Luc S. Djogbénou*. Transcriptomic analysis of *Anopheles gambiae* from Benin reveals overexpression of salivary and cuticular proteins associated with cross-resistance to pyrethroids and organophosphates. [<u>Link</u>]

PEER-REVIEWED

- **4.** Delelegn Woyessa, Evangelia Morou, Nadja Wipf, <u>Nsa Dada</u>, Konstantinos Mavridis, John Vontas, Delenasaw Yewhalaw. **2023**. Species composition, infection rate and detection of resistant alleles in *Anopheles funestus* (Diptera: Culicidae) from malaria hotspot areas of Ethiopia. *Malaria Journal*, *22:233* [Link]
- **5.** Invited editorial: Diana M Proctor, <u>Nsa Dada</u>, Anna K Serquiña, Julia Willett. **2023** Problems with peer review shine a light on gaps in scientific training. *mBio*; e03183-22 [Link]
- 6. Warin Klakankhai, Sunaiyana Sathantriphop, Ratchadawan Ngoenklan, <u>Nsa Dada</u>, Vithee Muenworn, Tassanee Khawniam, Krajana Tainchum. 2023 Chemical Profiles and Lethal Toxicities of Native Botanical Insecticides for the Control of Musca domestica Linnaeus and Stomoxys indicus Picard (Diptera: Muscidae) in Songkhla Province, Thailand. *Journal of Economic Entomology*; toac202, [Link]
- 7. Maurice Marcel Sandeu ♦, Claudine Grâce Tatsinkou Maffo, Nsa Dada, Flobert Njiokou, Grant L. Hughes, Charles S. Wondji. 2022 Seasonal variation of microbiota composition in *Anopheles gambiae* and *Anopheles coluzzii* in two different eco-geographical localities in Cameroon. *Medical and veterinary entomology, 36 (3), 269-282* Link
- 8. <u>Dada, N</u>.*, Benedict, A.C. ♦, López, F.J. ♦, Lol, J.C. ♦, Sheth, M., Padilla, N. and Lenhart, A. **2021** Comparative characterization of internal and cuticle surface microbiota of laboratory-reared F₁ *Anopheles albimanus* originating from different sites. *Malaria Journal*, 20:414 [Link]
- Pelloquin, B. ◆, Kristan, M., Edi, C., Meiwald, A., Clark, E., Jeffries, C. L., Walker, T., <u>Dada, N.</u>[‡], Messenger, L. A.‡. 2021 Overabundance of *Asaia* and *Serratia* bacteria is associated with deltamethrin insecticide susceptibility in *Anopheles coluzzii* from Agboville, Côte d'Ivoire. *Microbiology Spectrum*, 9(2): e00157-21 [<u>Link</u>]
- **10.** Overgaard, H. J., <u>Dada, N.,</u> Lenhart, A., Stenstrom, T-A, & Alexander, N., **2021** Integrated management of Aedes-borne arboviral diseases and diarrheal diseases. *Bulletin of the World Health Organization*, *99:583-592* [Link]
- **11.** Omoke, D. ♦, Kipsum, M., Otieno, S., Esalimba, E., Sheth, M., Lenhart, A., Njeru, EM., Ochomo, E., **Dada, N.***, **2021**. Western Kenyan *Anopheles gambiae s.s.* showing intense permethrin resistance harbor distinct microbiota. *Malaria Journal*, 20:77 [Link]
- **12.** <u>Dada N*</u>, Jupatanakul N, Minard G, Short SM, Akorli J, and Villegas LM, **2021**. Considerations for mosquito microbiome research from the Mosquito Microbiome Consortium. *Microbiome*, 9:36 [Link]
- **13.** Ratisupakorn, S. ♦, Lorn, S., <u>Dada, N</u>., Ngampongsai, A., Chaivisit, P., Ritthison, W., & Tainchum, K., **2021**. *Aedes albopictus* (Skuse) susceptibility status to agrochemical-insecticides used in durian plantating systems in southern Thailand. *Journal of Medical Entomology*, 58:3 [<u>Link</u>]
- **14.** <u>Dada, N.*</u>, Lol, J. C. ♦, Benedict, A. C. ♦, López, F. ♦, Sheth, M., Dzuris, N., Padilla, N., & Lenhart, A. **2019** Pyrethroid exposure alters internal and cuticle surface bacterial communities in *Anopheles albimanus. The ISME Journal,* 13:2447-2464 [<u>Link</u>]
 - **8** 2020 Charles C. Shepard Award for excellence in science (nominated)
- **15.** Nanthasane Vannavong I, Razak Seidu, Thor-Axel Stenström, **Nsa Dada**, & Hans Jorgen Overgaard (**2019**) Dengue-like illness surveillance: a two-year longitudinal survey in suburban

- and rural communities in Laos and Thailand. WHO Western Pacific Surveillance and Response Journal, 10 (1) [Link]
- **16.** <u>Nsa Dada</u>, Mili Sheth, Kelly Liebman, Jesus Pinto & Audrey Lenhart (**2018**) Whole metagenome sequencing reveals links between mosquito microbiota and insecticide resistance in malaria vectors. *Scientific Reports*, 8 (2084) [Link]
 - **8** 2020 Scientific Reports Editor's choice: vector-borne diseases [Link]
 - **8** 2019 Charles C. Shepard Award for excellence in science (nominated) [Link]
 - **8** 2018 Scientific Reports top 100 (#27) Microbiology articles [Link]
- **17.** Nanthasane Vannavong ♦, Hans Jorgen Overgaard, Chareyonviriyaphap Theeraphap, <u>Nsa Dada</u>, Ram Rangsin, Archawongs Sibounhom, Thor-Axel Stenström, & Razak Seidu (**2017**) Assessing factors associated with *E. coli* contamination of household drinking water in suburban and rural Thailand and Laos. *Journal of Water Science & Technology: Water Supply*, **18**(3) [Link]
- **18.** Nanthasane Vannavong ♦, Razak Seidu, Thor-Axel Stenstrom, <u>Nsa Dada</u>, Hans J. Overgaard (**2017**) Effects of socio-demographic characteristics and household water management on dengue vector production in suburban and rural villages in Thailand and Laos. *Parasites & Vectors*, 10 (170) [Link]
- 19. <u>Nsa Dada*</u>, Estelle Jumas-Bilak, Sylvie Manguin, Razak Seidu, Thor-Axel Stenström, & Hans Jorgen Overgaard (2014) Comparative assessment of the bacterial communities associated with *Aedes aegypti* larvae and water from domestic water storage containers. *Parasites & Vectors*, 7(391) [Link]
- 20. Nsa Dada*, Nanthasane Vannavong, Razak Seidu, Audrey Lenhart, Thor-Axel Stenström, Theeraphap Chareonviriyaphap, & Hans J. Overgaard (2013) Relationship between Aedes aegypti production and occurrence of Escherichia coli in domestic water storage containers in rural and sub-urban villages in Thailand and Laos. Acta Tropica, 126(3):177-185 [Link]
- **21.** Hodges, M., <u>Dada, N.</u>, Wamsley, A., Paye, J., Bangura, M., Nyorkor, E., Sonnie, M. & Zhang, Y. **2012**. Mass drug administration significantly reduces infection of Schistosoma mansoni and hookworm in school children in the national control program in Sierra Leone. *BMC Infectious Diseases*, 12, 16. [Link]
- **22.** Hodges, M., <u>Dada, N.</u>, Wamsley, A., Paye, J., Nyorkor, E., Sonnie, M., Barnish, G., Bockarie, M. & Zhang, Y. **2011**. Improved mapping strategy to better inform policy on the control of schistosomiasis and soil-transmitted helminthiasis in Sierra Leone. *Parasites & Vectors*, 4, 97. [Link]
- **23.** Ene E. Oku, Donald A. Ukeh and <u>Nsa Dada</u>, **2011**. Prevalence and Seasonal Distribution of Daytime Biting Diptera in Rhoko Forest in Akamkpa, Cross River State, Nigeria. *International Journal of Zoological Research*, 7: 279-285. [<u>Link</u>]

TEACHING EXPERIENCE

2023

| | with an authentic host-microbe research experience. Covers basics of symbiosis and hands-on molecular and bioinformatics analysis (16S rRNA seq – QIIME 2). ASU School of Life Sciences, Tempe, AZ, USA [News article] |
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| 2022 | Mosquito Microbiome Consortium Summer Program (MSc/PhD level). Hands-on training on the design and implementation of research on mosquito-microbe |
| | interactions including; mosquito collections, dissections, nucleic acid extraction, sequencing, and bioinformatics analysis of generated data. Claude Bernard |
| | University Lyon 1, Lyon, France |
| 2020 | Analysis of mosquito-derived 16S rRNA seg data using QIIMF2 Online course |

Host-microbe interactions (BIO 498/598). CURE focused on providing students

- 2020 Analysis of mosquito-derived 16S rRNA seq data using QIIME2. Online course (MSc/PhD level).
- 2019 **Mosquito Biology in** *Malaria Prevention, Control and Treatment Course.* Class lecture and hands-on lab (PhD level) for CDC's Epidemic Intelligence Officers and Resident Advisors, CDC, Atlanta, USA

| 2018 | General insect classification, sampling and curation. Class lecture and hands-on lab and field (BSc and MSc level). KEMRI, CGHR, Entomology Branch, Kisumu, Kenya |
|------|---|
| 2018 | Malaria Prevention, Control and Treatment Course 2018 (GH574). Class lecture and hands-on lab (MSc level). Rollins School of Public Health Global Health Program. Emory University, Atlanta, USA |
| 2017 | Hands-on workshop on <i>Insecticide Resistance</i> . Organizer and Instructor (MSc/PhD level). Entomology branch, DPDM, Center for Global Health, CDC |
| 2016 | Hands-on laboratory training. Organizer and Instructor (BSc/MSc level). Universidad del Valle de Guatemala (UVG), Guatemala Larval and adult assays for insecticide resistance in mosquito populations Mosquito oviposition and mass rearing techniques Sex differentiation of mosquito pupae |
| 2012 | Hands-on field training on Water and Mosquito Sampling. Organizer and Instructor. Salavan Health Department, Salavan, Laos PDR |
| 2011 | Hands-on field & Laboratory training. Organizer and Instructor. Khon Kaen Provincial Health office, Khon Kaen, Thailand Water sampling and testing Mosquito sampling and identification |
| 2009 | Class lecture (BSc level). Short course. HKI, Freetown, Sierra Leone Characteristics of soil transmitted helminths Collection and storage of stool samples for the identification of soil transmitted helminth eggs |
| 2009 | Hands-on laboratory training (BSc level). Microscopic identification of helminth eggs using WHO Kato-Katz technique. Fourah Bay College, Freetown, and Njala University, Bo, Sierra Leone |

MENTORING & STUDENT COMMITTEES

| 2023-present | Honors Science Research Program mentor. Shantia Ghaninia. Perry High School Advisor: Arizona Science and Engineering Fair (AZSEF) research project |
|---------------------|---|
| 2023-present | PhD Primary Advisor. Sonja Savic. SOLS Environmental Life Science PhD Program, ASU |
| 2023-present | Accelerated BS & MS Program (4+1) Thesis Advisor. Cindy Woo. SOLS Microbiology BS Program and SOLS Biology MS Program, ASU Advisor: Research Paper. ASU SOLS Microbiology BS Program |
| 2023-present | Accelerated BS & MS Program (4+1) Capstone Advisor. Serenity Jones. SOLS B.S. Genetics, Cell, & Developmental Biology BS Program and SOLS Biology MS Program, ASU |
| 2023-present | MS Thesis Committee. LeAnn Nguyen. SOLS Microbiology MS Program, ASU |
| PRIOR TO ASU | |
| 2022-present | Mentor. PAMCA Women in Vector Control Mentorship Program, LiftHer2Jaelsa Moreira |
| 2021 | MSc Thesis Committee. Ms. Warin Klakankhai. Prince of Songkla University (PSU), Hat Yai, Thailand |
| 2019 | Published one lead author peer-reviewed paper MSc Co-Supervisor. Bethanie Pelloquin. London School of Hygiene and Tropical Medicine, London (LSTMH), United Kingdom Published one lead author peer-reviewed paper |
| 2017-2019 | MSc Primary Advisor. Diana Omoke. Kenyatta University, Nairobi, Kenya Inaugural Black In Entomology Research Prize |

- Published one lead author peer-reviewed paper & finalizing second lead author manuscript
- ASTMH/American Committee of Medical Entomology 2019 Young Investigator Award
- East Africa Consortium for Clinical Research/European and Developing Countries Clinical Trials Partnership Fellowship for Genomics training
- Committee on Data of the International Council for Science-Research Data Alliance (CODATA-RDA) Scholarship for the 2018 CODATA-RDA Research Data Science Advanced Bioinformatics Workshop
- Biosciences eastern and central Africa-International Livestock research Institute (BecA-ILRI) Scholarship for the 2017 BecA-ILRI advanced bioinformatics training
- 2017-2019 **MSc Co-Advisor.** Sakda Ratisupakorn. PSU, Hat Yai, Thailand

Published one lead author peer-reviewed paper

- 2018-2019 Pre-doctoral Fellow co-supervisor. Jonathan Gerhart. CDC
 - Accepted into Bioinformatics PhD program at Georgia Institute of Technology, Atlanta. USA
 - Awarded the Association of Public Health Laboratories and CDC Bioinformatics Fellowship
- 2016 Undergraduate Research Assistants. Universidad del Valle de Guatemala
 - 1. Juan C. Lol
 - 2. Ana Cristina Benedict
 - 3. Francisco Lopez
 - They are all co-authors on my research outputs, including two publications
- 2015-2017 **PhD Co-Supervisor.** Nanthasane Vannavong. NMBU, Aas, Norway
 - Published three lead author peer-reviewed papers

KEYNOTES & SELECTED INVITED PRESENTATIONS

UPCOMING

- 1. BioMalPar XX conference, EMBL Heidelberg, Germany
- 2. World Malaria Day Symposium, Johns Hopkins Malaria Research Institute, Baltimore, MD, USA
- 3. Pathogen and Microbiome Institute, Northern Arizona University, Flagstaff, AZ, USA
- 4. Liverpool School of Tropical Medicine (LSTM) Giants Seminar Series, Liverpool, UK.
- 5. Department of Immunobiology, University of Arizona, Tucson, AZ, USA

PREVIOUS

- **6.** American Society of Tropical Medicine and Hygiene Annual meeting symposium, Chicago, USA. October 2023
- **7.** Biodesign Center for Fundamental and Applied Microbiomics, Arizona State University, Tempe, Arizona, USA. March 2023
- 8. Laboratoire d'Écologie Microbienne, Claude Bernard University Lyon 1, Lyon, France. July 2022
- **9.** Institute of biodiversity, animal health & comparative medicine, University of Glasgow, UK (Remote). Fall 2021
- 10. BIPOC in Parasitology (Remote). Fall 2021
- 11. Microbiome Centers Consortium Seminar series (Remote). Fall 2021
- 12. Biology Department, Rutgers University-Camden, New Jerey, USA (Remote). Fall 2021
- **13.** Department of Biochemistry and Molecular Biology, University of Nevada, Reno, Nevada, USA (Remote) September 2021
- **14.** Foundation for the National Institutes of Health: GeneConvene Global collaborative seminar series, USA (Remote). May 2021
- 15. Entomology Department, The Ohio State University, Columbus, Ohio, USA (Remote). April 2021
- 16. Keynote. Inaugural Women in Malaria Conference (Remote). March 2021

- 17. Biology Department, Emory University, Atlanta, GA, USA (Remote). January 2021
- 18. 12th Annual Arthropod Genomics Symposium. Manhattan, Kansas. June 2019
- 19. Division of Parasitic Diseases and Malaria Seminar, CGH, CDC, Atlanta, GA. May 2019
- 20. KEMRI, CGHR, Kisumu, Kenya. May 2018.
- **21.** Advanced Molecular Detection Group, Division of Parasitic Diseases and Malaria, US Centers for Disease Control and Prevention, Atlanta, GA, USA. January 2017.
- 22. Universidad del Valle de Guatemala (UVG), Guatemala. November 2016
- 23. Department of Environmental Sciences, Emory University, Atlanta GA, USA. November 2016
- **24.** Advanced Molecular Detection Group, Division of Parasitic Diseases and Malaria, US Centers for Disease Control and Prevention, Atlanta, GA, USA. February 2016.
- 25. Norwegian University of Life Sciences, As, Norway. December 2014
- 26. International Seminar on Integrated Water-Related Disease Control, Ås, Norway. May 2014
- **27.** Institut de Recherche pour le Dévelopment (IRD) & University of Montpellier, Faculty of Pharmacy, Montpellier, France. June 2013.
- **28.** Annual meeting of the District Health Center, Manchakhiri District, Khon Kaen, Thailand. December 2011.

CONTRIBUTED CONFERENCE PODIUM PRESENTATIONS (selected)

- 1. <u>Nsa Dada</u>, Diana Omoke Nyanting'a, Ezekiel Mugendi, Eric Ochomo, Mathew Kipsum, Samson Otieno, Edward Esalimba, Juan C. Lol, Ana Cristina Benedict, Francisco López, Kelly Liebman, Jesus Pinto, Mili Sheth, Nicole Dzuris, Norma Padilla and Audrey Lenhart. The mosquito microbiota and insecticide resistance. 6th Annual Conference of the Pan-African Mosquito Control Association. Yaoundé, Cameroun. September 2019
- 2. <u>Nsa Dada</u>, Juan Carlos Lol, Ana Cristina Benedict, Francisco López, Mili Sheth, Nicole Dzuris, Norma Padilla and Audrey Lenhart. Location-driven microbial composition in lab reared progeny of wild-caught mosquitoes and its implications for mosquito-microbe translational research. *Joint Annual Meeting of the Entomological Societies of America, Canada and British Columbia*. Vancouver, British Columbia Canada. November 2018
- 3. Nsa Dada, Juan Carlos Lol, Ana Cristina Benedict, Francisco López, Mili Sheth, Nicole Dzuris, Norma Padilla and Audrey Lenhart. Novel microbial candidate markers of pyrethroid resistance in *Anopheles albimanus*, a major Latin American malaria vector. 67th Annual Meeting of the American Society of Tropical Medicine and Hygiene. New Orleans, Louisiana USA. October 2018.
- **4.** <u>Nsa Dada</u>, Mili Sheth, Kelly Liebman, Jesus Pinto & Audrey Lenhart. Functional diversity of the microbiota in *Anopheles albimanus* provides new insights into insecticide resistance mechanisms. *66th Annual Meeting of the American Society of Tropical Medicine and Hygiene*. Baltimore, Maryland USA. November 2017.
- 5. <u>Nsa Dada</u>, & Audrey Lenhart. *Anopheles albimanus* microbiota and links to insecticide resistance: A whole metagenome sequencing approach. *American Society for Microbiology, Research in Progress Meeting.* Atlanta GA, USA. April 2017.
- 6. <u>Nsa Dada</u> & Audrey Lenhart. The role of mosquito microbiota in insecticide resistance: Studies on *Anopheles albimanus* in South and Central America. *American Society for Microbiology Research in Progress Meeting.* Atlanta GA, USA. May 2016.
- 7. <u>Nsa Dada</u>. Dengue mosquito production and fecal contamination in domestic water containers and Thailand and Laos. *International Seminar on Integrated Water-Related Disease Control*. Ås, Norway. May 2014
- **8.** <u>Nsa Dada</u>, Nanthasanne Vannavong, Razak Seidu, Audrey Lenhart, Thor-Axel Stenström, Theeraphap Chareonviriyaphap & Hans J. Overgaard. *Aedes aegypti* productivity and fecal contamination in domestic water storage containers in two villages in Northeastern Thailand. *XXIV International congress of Entomology.* Daegu, Korea. August 2012

 Nsa Dada. Stored household water in Thailand and Laos: A possible link between dengue and diarrhea? First annual meeting for the Thailand Research Fund (senior research scholar). Bangkok, Thailand. August 2010

FORMAL SCIENCE ADVOCACY & OUTREACH

| 2021-present | American Committee of Medical Entomology (ACME). Visibility taskforce member |
|--------------|---|
| | tasked to create awareness about ACME, its opportunities and resources as well as |
| | medical entomology in general |

2019-2020 eLife Community Ambassador for responsible science

Worked closely with eLife's Early-Career Advisory Group to promote responsible behavior in science. I focused on rigor and reproducibility; openness; equitable *Global North-South* collaborations; and diversity/increased representation of minoritized groups in science.

Engage: Global Health. ASTMH 67th Annual Meeting, New Orleans, USA

- ASTMH's inaugural public health outreach event comprising fifteen stations showcasing different elements of the work we do as scientists and healthcare professionals in the field of tropical medicine.
- I co-led the 'There's DNA everywhere' station, where I demonstrated DNA extraction from strawberries to over 200 visiting high school students, their teachers/chaperones

MEDIA APPEARANCE

2018

| 2023 | 1. Mosquito research course gives students cutting-edge experience, skills |
|------|--|
| | [link] |

- 2. Malaria Genomic Epidemiology Network (MalariaGEN) Twitter Spaces. World Malaria Day 2023: Investing, innovating, and implementing genomic surveillance. [Link]
- **3.** Cohort Sistas podcast. Ep. 206. On pursuing postgraduate studies and building a career around the world. [Link]
- **4. ScienceWorld Scholastic.** No more mosquitoes? Biology article for students. [Link]
- 5. The Atlantic. A new way to keep mosquitoes from biting. [Link]
 - **6. Science News.** A fungus weaponized with a spider toxin can kill malaria mosquitoes. [Link]
 - 7. Science News Explores. A fungus plus a spider toxin equals a weapon to kill mosquitoes. [Link]
 - 8. CDC Bulletin. Cutting-Edge Malaria Intervention Research. [Link]
 - **9.** Chemical & Engineering News. Computationally designed enzyme inhibitors overcome pesticide resistance. [Link]

2016 **10. CNN.** Zika: Is the US ready for the fight? [Link]

PROFESSIONAL SERVICE, LEADERSHIP & MEMBERSHIP

ASU

2022

2019

2023-present
 2022-present
 2022-present
 2022-2023
 Working group member. Reimagining SOLS: Promoting research interactions
 Advisory board. Ask a Biologist
 Search committee, ASU SOLS & Biodesign Center for Fundamental and Applied

Microbiomics. Open rank faculty search and recruitment

EDITORIAL BOARD

2023-present Academic Editor. PLOS Global Public Health

2022-present mBio Editorial Board Jr.

GRANTS REVIEWER

2021, 2022 The African Academy of Sciences (AAS)

South African National Research Foundation (NRF) 2021

UK Research and Innovation (UKRI) 2021 2021, 2022 French National Research Agency

2019-2021 Royal Society of Tropical Medicine and Hygiene (RSTMH) Global Assessor

CONFERENCE ABSTRACT/AWARDS REVIEWER

2021-present ACME Travel Awards

2019-present ASTMH Annual Meeting Travel Awards **ASM Microbe Conference abstracts** 2019

AD HOC PEER REVIEWER FOR SCIENTIFIC JOURNALS, 2015-PRESENT

1. Microbiome 9. Parasites and Vectors **17.** Journal of Vector Ecology

2. mBio 10. Scientific Reports 18. Int. J. Mol. Sci. 3. The ISME Journal 11. PeerJ

19. Afr. J. Bacteriol. Res.

12. Malaria Journal 4. ISME Communications 20. Cellular & Molecular Biology

5. Microbial Ecology **13.** Epidemiology & Infection

6. FEMS Microbiology Ecology 14. Acta Tropica

7. Frontiers in Microbiology 15. Journal of Insect Science 8. PLOS Neglected Tropical 16. Int. J. Environ. Res. Public

Disease Health

PROFESSIONAL MEMBERSHIPS & LEADERSHIP ROLES

2023-present Secretary-Treasurer elect, ACME 2022-present Chair, ACME Travel Awards Committee

2021-present **Executive Council Member**, ACME

2020-present Member, International Society for Viruses of Microbes Member, Pan-African Mosquito Control Association 2019-present Associate Member, Microbiology Society, London, UK 2019-present

Affiliate Member, Federation of European Microbiological Societies 2017-present 2015-present Member, American Committee of Medical Entomology (ACME)

2015-present Member, American Society of Tropical Medicine and Hygiene (ASTMH)

2020-2021 Member, Norwegian Entomological Association 2018-2019 Member, Entomological Society of America

2015-2020 Member, American Society for Microbiology (ASM)

Member, American Committee of Molecular, Cellular and Immunoparasitology 2015-2020

Member, American Committee on Global Health 2015-2020