



President-Elect- Emily Gurley, MPH, PhD, Johns Hopkins Bloomberg School of Public Health, United States

Bio:

I am an epidemiologist and a Distinguished Professor of the Practice in the Departments of Epidemiology and International Health at the Bloomberg School of Public Health, Johns Hopkins University. I earned an MPH in International Health from Emory University in 2002 and a PhD in Epidemiology from Johns Hopkins University in 2012. I worked at the ICDDR,B in Dhaka, Bangladesh for 12 years (2003 – 2009, 2011 – 2017) where I led the Surveillance and Outbreak Research Group, served as Director of the Emerging Infections Programme, and was a member of the Government of Bangladesh's National Rapid Response outbreak team. I have investigated >100 outbreaks and helped establish surveillance systems for respiratory disease, neurological disease, acute hepatitis, hospital acquired infections, acute poisoning, and diarrheal disease, some of which are still functioning today. I have contributed >200 peer-reviewed papers to the published literature and was co-editor of the fourth edition of the Nelson and Williams' Epidemiology of Infectious Diseases: Theory and Practice textbook published in 2026.

My >20-year research career has focused on infectious disease transmission and prevention, including the development of novel methods for surveillance and outbreak investigation, and development of interventions to prevent emerging infections. I have led studies on a variety of global health topics, from spillover, to vector and waterborne infections, design and testing of behavioral interventions, and why children die. My research draws from multiple disciplines – including epidemiology, virology, ecology, immunology, and anthropology – and frequently uses a One Health approach, which takes into account the close relationships between human health and the health of other species and the environment.

I'm an expert on emerging zoonotic infections and I serve on the Lancet Commission for Preventing Viral Spillover. I have served as the Co-Director of the Child Mortality and Prevention Surveillance (CHAMPS) project in Bangladesh since 2016. As part of a nine-country study, we aim to identify the etiology of stillbirths and child deaths to improve programs and policies for prevention. This long-term study brings together epidemiological, medical and social behavioral science teams with demographic and health surveillance sites, experts in pathology, and laboratorians, to identify deaths and explain their causes.

A major focus of my career has been training scientists and public health practitioners. I have mentored dozens of pre-doctoral Bangladeshi researchers and FETP fellows, dozens of students in master's and doctoral degree programs, and launched major online courses accessible to the public including a course on contact tracing for COVID-19 (1.4 million students enrolled), infectious disease transmission models for public health decision-makers (31,000 enrolled), and One Health approaches for outbreak investigation (2,000 enrolled). Each year I lead courses in infectious disease epidemiology, One Health approaches in public health, and outbreak investigation at Johns Hopkins and BRAC University in Bangladesh. I was awarded the 2020 Shikani/El-Hibri Prize for Innovation and Discovery and the 2021 Excellence in the US COVID-19 Public Health Practice Award from Johns Hopkins University for my contributions to pandemic response.

Personal Statement as it Relates to the Priorities for the Society:

My primary motivations for running for President of ASTMH are my deep affection for the Society as my academic home and the real difficulties and opportunities for our organization and its members in the current moment. I am in my fourth and final year serving as a Member of the ASTMH Board and my

experience in this role will be an asset should I be elected as President. I already understand how the Board works and the issues facing the Society and its members.

In addition, I have years of senior level management experience that would also be valuable in this role. During my tenure at ICDDR,B, I served on the senior leadership team, implementing restructuring and leading yearly initiatives to define and monitor strategic research objectives. In addition, I led a team of 500 staff as ICDDR,B's Director of the Emerging Infections Programme, managing a multimillion-dollar yearly budget. I have also served as an elected member of my department's Faculty Executive Committee, advising our Chair on matters related to policies and practices.

The global health landscape has shifted in major ways in the past year and continues to evolve. From the shuttering of USAID programs and funding, to pivots at the Gates Foundation for their final 20 years, to the US withdrawal from WHO, new visa restrictions, and the major reductions in funding awarded by the NIH, we are in turbulent times. Despite this uncertainty, we can be sure of two things: 1) public health problems will not rest, and 2) we are stronger when we face them together. Each new problem we confront is an opportunity to flex our intellectual power, ingenuity, and creativity to find solutions. To meet the demands of this moment, our Society must be a catalyzing force to reshape the future of global health.

In the coming years, our Society should redouble its efforts to serve as a hub of information for members and the global health community, leveraging our vast network to identify new models of success in the shifting global health landscape. We can also provide members with skills needed for the future, including training on optimal use of rapidly evolving AI tools. We have the increasingly unique ability to bring global health leaders together and must use it to tackle the most important debates and conversations of our time. ASTMH extends significant effort to engage members from countries around the globe, and across professional levels – from graduate students to senior scientists. We will have to work harder than ever to mitigate barriers to participation in the Society.

Re-cap of participation in ASTMH Activities:

My participation in ASTMH tracks my global health career. I have been a member since 2008. I fondly remember my very first scientific oral presentation which was at a Nipah virus symposium at the ASTMH annual meeting in New Orleans in 2005. I have served as a peer reviewer for and also published numerous papers at AJTMH. I was elected as a Member of the ASTMH Board in 2022.

The annual meeting is my first choice for presenting the latest results from my studies and I have delivered many scientific presentations over the years, as have my mentees. In addition, I have organized and chaired multiple symposia on topics ranging from Nipah virus, to mitigating pandemic risks, and antimicrobial resistant infections causing child deaths. In each of these symposia, the goal was to bring together diverse scientific perspectives – from multiple disciplines and countries – with policy makers to reach consensus about the state of our knowledge and what some practical next steps for public health policy could be.

Research, Clinical, Policy, Public Health, Global Health, Educational and Partnership-Building Interests, Engagement with Current and Future Members, Including International Outreach:

ASTMH benefits from membership across disciplines and can be an invaluable bridge between the academic and practice divide. We should also be actively seeking partnerships with regional and more technical scientific meetings and societies to maintain our broad appeal, build coalitions, and offer more geographically relevant scientific content.



Board member- Amy Kristine Bei, PhD, Yale School of Public Health & Institut Pasteur de Dakar, United States

Bio:

I have been researching malaria for over 25 years and have spent 22 of those years conducting research, leading training initiatives, and engaging with national and international public health programs in African countries (Tanzania, Senegal, Mali, the Gambia, Chad, and Burkina Faso). I am a dual citizen of Senegal and the USA and have lived in Africa for 9 years. I hope that my scientific expertise and lived experiences combining science, training, and policy in Africa will bring a unique perspective to the Board.

I am an Associate Professor at the Yale School of Public Health in the Department of Epidemiology of Microbial Diseases; and I direct a research group on malaria vaccines at the Institut Pasteur de Dakar in Senegal. I received my BA in Biochemistry from Harvard College and my PhD in Biological Sciences in Public Health from Harvard University. I served as a Fulbright Fellow in Tanzania, and I pursued my postdoctoral research through the Harvard Malaria Initiative based at University Cheikh Anta Diop and Hôpital Aristide Le Dantec in Dakar, Senegal. I am serving as a Fulbright Scholar in Senegal this year. My research has been focused on infectious diseases of public health importance, with a strong emphasis on malaria, for more than two decades. My research interests in Plasmodium – the causative agent of malaria - lie at the intersection between genetics, genomics, epidemiology, and immunology. My scientific contributions span malaria transmission, drug resistance, mechanisms of invasion and pathogenesis, and immunity – including understanding the mechanisms by which the malaria parasite evades natural or vaccine-induced immune responses. Throughout my career I have sought to understand the underlying mechanisms of the malaria parasite's virulence while ensuring that such findings translate into knowledge that can influence prevention, diagnosis, and treatment.

My multidisciplinary research program has incorporated epidemiology of malaria in the field, mechanistic studies of host-parasite-vector interactions in the lab, and an innovative combination of genomic and experimental genetic approaches to understand the impact of parasite genetic diversity on vaccine efficacy, enabling the identification and credentialing of novel malaria vaccine candidates. My training in experimental genetics, genomics, and field-based malaria epidemiology place me in the unique position of being able to approach vaccine discovery through the lens of naturally arising parasite diversity.

Throughout my career I have sought to understand the underlying mechanisms of the malaria parasite's virulence while ensuring that such findings translate to knowledge that can influence diagnosis, prevention, and treatment. I have long-standing research collaborations in Senegal, Chad, and Burkina Faso, and this work is done in explicit and equitable partnership with scientists from malaria endemic regions.

I am passionate about training and mentoring the next generation of African scientist leaders – specifically in genomics applied to vaccinology. My dream is for African scientists to lead the way in the discovery, production, testing, and implementation of a highly effective next-generation vaccine for malaria.

Personal Statement as it Relates to the Priorities for the Society:

ASTMH has been my scientific society and home since the beginning of my career, having been a member of ASTMH and the ACMCIP subgroup since 2007. I have served in various leadership capacities

within our society including as a member of the ASTMH Scientific Program Committee: Malaria Subcommittee, as the ACMCIP Trainee Council Member, on the ASTMH Trainee Task Force, the ACMCIP Councilor for Communications, and as a judge for the Young Investigator Awards. Serving on the Board would give me the opportunity to combine my professional interests and experiences with my sincere desire to expand my service, ensuring the direction of the society reflect and highlight the diverse goals and visions of our members. I am excited to work together to thoughtfully address the challenging issues facing our global health community today.

Expanding opportunities for equitable training:

Ensuring equitable access to scientific training, career development opportunities, and pathways to leadership has been important to me for my whole career. Long before the field had articulated in words the importance of democratization and decolonization of public health, we were putting these ideals into practice. Truly equitable partnerships are at the heart of my research program and my team, which is truly one team that spans multiple continents. Equity is also at the heart of our international education and training initiatives, whether ensuring that trainees of all levels are welcome to attend, ensuring that trainings are delivered in the local language of the participants, and offering multiple training formats and options to enhance accessibility to all. I am excited to engage with the Board to continue to ensure that our annual meetings, trainings, and career development opportunities are accessible equitably for our diverse membership around the globe.

Enabling avenues for public health advocacy to impact policy:

I am excited to contribute to the society's mission to link science and society, facilitating engagement in advocacy to enact policy. During the attack on science, international partnerships, and global health this past year, I truly appreciated ASTMH's communications and shared resources that facilitated members' action and advocacy, such as the link for members to contact their elected government officials. I shared this resource widely with my colleagues and used it myself to engage with our representatives and senators. This step by the society removed some of those barriers, making it possible for many members to reach out to elected officials. I personally heard back from my state senators and representatives, and this facilitated additional follow-up meetings which even resulted in some of our concerns being presented as part of hearings on Capitol Hill. I am involved in many advocacy groups, organizing in support of academic freedom, uniting to strengthen the mission of public health, and speaking up for justice. I'm looking forward to engaging with ASTMH leadership on how we can increase our impact and raise our collective voices and advocate for positive change.

Re-cap of participation in ASTMH Activities:

Participation in ASTMH Activities, Leadership & Service
American Society of Tropical Medicine and Hygiene

- 2026-present: ASTMH Scientific Program Committee: Malaria Subcommittee
- 2020-2023: ACMCIP Councilor for Communications
- 2017-2018: ASTMH Trainee Task Force
- 2013-2015: ACMCIP Trainee Council Member
- 2007-present: Member, American Committee of Molecular, Cellular & Immunoparasitology (ACMCIP)

ASTMH Meeting Session Chairing:

- 2022: Chair, Scientific Session 53: ACMCIP: Malaria – Immunology & Vaccines, ASTMH Annual Meeting.
- 2017: Chair, Scientific Session 17: ACMCIP: Malaria and Protozoans – Molecular Biology, ASTMH Annual Meeting.

- 2014:Chair, Scientific Session 144: Malaria: Immunology – Molecular & Functional
- Analysis,ASTMH Annual Meeting.

ASTMH Annual Meeting Participation:

My research team, including undergraduate, graduate and full-time post-doctoral students participate in ASTMH every year at the annual meeting.

Training & Mentoring

A major emphasis of my educational mission is mentoring, both domestically and internationally. Mentoring the next generation of leaders in malaria research and public health practice is fundamental to my career and research goals. I strongly feel that as scientists, the measure of our success is not only in our contributions to scientific knowledge, but also our contribution to training and mentoring young scientists through to their own independence. I am extremely committed to mentoring the next generation of research and public health leaders in malaria endemic countries with a focus on trainees from Africa (including Senegal, Burkina Faso, and Chad). I am a member of the African Research Excellence Fund (AREF) College of Experts and I serve as a mentor for AREF funded postdoctoral fellows building their own independent research careers. My trainees in both the USA and Africa have been involved in collaborative partnerships for both research and training, and have experienced the importance of truly integrating into a diverse and dynamic international team and the achievements that are possible as a truly unified team.

I am actively involved in international training, mentoring, technology transfer, and capacity strengthening. At Yale, I currently mentor 1 Clinical Instructor, 1 Associate Research Scientist, 1 postdoctoral fellow, 3 PhD students, 1 MPH student, and 3 undergraduates. In Senegal, I currently mentor 1 Research Associate, 3 postdoctoral fellows, 2 PhD students, and 1 MS Student. In Chad I am currently mentoring 1 PhD student and 1 MPH student, both conducting research in partnership with the National Malaria Control Program (PNLP). Internationally, I have mentored 11 PhD students, 6 MS Students, and 5 postdoctoral fellows. My international trainees have received multiple honors and awards, have received funding and fellowships including through the ASTMH Centennial Travel Award, ACMCIP LMIC Travel Award, ASTMH ACMCIP 3-minute Thesis Prize, ASTMH Young Investigator (Finalist), Fogarty Global Health Equity Scholars, the African Academy of Sciences, the African Research Excellence Fund, and the Crick African Network. International trainees have completed PhD training, have received postdoctoral fellowships, have become professors themselves, and have also gone on to have careers in public health. Building on my academic scholarship mission, I am also applying for linked grants to expand training opportunities for both domestic and international trainees I am currently preparing a D43 Fogarty training grant between Yale and Senegal (as well as multiple African regional sites) on the theme of African Innovation in Malaria Vaccinology.

Leadership & Service in Academic Settings:

Peer Review Groups/Grant Study Sections:

I have demonstrated leadership and service to the scientific community through being actively engaged as a peer-reviewer. I am a current standing member of the NIH Pathogenic Eukaryotes Study Section (PTHE), and I have served on numerous other scientific review boards and study sections in an ad hoc capacity including: EDCTP, Wellcome Trust, Agence Nationale de la Recherche (ANR), ANRS Maladies infectieuses émergentes (ANRS-MIE) Inserm, the African Academy of Sciences (AAS), the African Research Excellence Fund (AREF), the UKRI Medical Research Council (MRC), Peer Review Medical Research Program (PRMRP) for the Department of Defense, Congressionally Directed Medical Research Programs (CDMRP), Swiss State Secretariat for Education, Research and Innovation (SERI), and multiple NIH study sections.

Journal Service:

I am currently an editor at PLOS Global Public Health and have served on the Editorial Advisory Board for the American Journal of Hematology. I have peer-reviewed scientific manuscripts for the following journals: Science Advances, Nature Microbiology, Proceedings of the National Academies of Science, Cell Reports Medicine, Cell Reports Methods, Lancet Microbe, The Lancet Regional Health - Western Pacific, Expert Review of Vaccines, Nature Communications, Clinical Infectious Diseases, PLOS Pathogens, Journal of Infectious Diseases, PLOS Computational Biology, Emerging Infectious Diseases, Frontiers in Cellular and Infection Microbiology, Infection and Immunity, Malaria Journal, Cytometry: Part A, PLOS Neglected Tropical Diseases, Scientific Reports, Molecular Ecology, and our own American Journal of Tropical Medicine & Hygiene.

Yale University Service:

- 2026 Yale Institute for Global Health Case Competition Judge
- 2025-present Yale AAUP Federal Funding Working Group
- 2025 YIGH NIH Foreign Subaward Policy Advocacy working group
- 2025-present Co-Director (Frahm, Bei, & Parikh) of the Malaria Evolution and Environments Laboratory, Department of Archaeology
- 2025-present Member, Yale Council on Archaeological Studies
- 2025-present YIGH Faculty Academic Review Committee
- 2024-present Co-Lead, MalarYale (Yale Against Malaria), Yale Institute of Global Health
- 2024-present Yale Center For Climate Change & Health, Affiliated Faculty
- 2024-2025 Microbiology Seminar Series Committee
- 2023-present EMD PhD Admissions Committee
- 2023-2024 BBS Microbiology Track PhD Admissions Committee
- 2018-present Member, MalarYale (Yale Against Malaria), Yale Institute of Global Health
- 2018-present Yale Institute of Global Health, Affiliated Faculty
- 2018-present Member, Yale Africa Initiative

External University Graduate Program Review:

- 2023-2024 External PhD examiner, Department of Systems Epidemiology of Infection, Deakin University, University of Melbourne, Australia
- 2022-present: External PhD examiner, External MPhil examiner Department of Biochemistry, Cell and Molecular Biology, University of Ghana
- 2022-present: External PhD examiner, Department of Biology, Wake Forrest University

Professional Service for Professional Organizations:

- American Society of Tropical Medicine and Hygiene
- 2026-2029: ASTMH Scientific Program Committee: Malaria Subcommittee
- 2020-2023: ACMCIP Councilor for Communications
- 2017-2018: ASTMH Trainee Task Force
- 2013-2015: ACMCIP Trainee Council Member
- 2007-present: Member, American Committee of Molecular, Cellular & Immunoparasitology (ACMCIP)

Africa Research Excellence Fund

2025-present: Member College of Experts AREF Research Development Fellow Mentor

Federation of African Immunological Societies

2018-present: Federation of African Immunological Societies (FAIS) Legacy Project Mentor

American Public Health Association
2025-present Member

Réseau Africain de Recherche sur le SIDA (African AIDS Research Network)
2012-2019: Réseau Africain de Recherche sur le SIDA (RARS), Sponsored Member

Research, Clinical, Policy, Public Health, Global Health, Educational and Partnership-Building Interests, Engagement with Current and Future Members, Including International Outreach:

Research & Global Health:

My multidisciplinary research program has incorporated epidemiology of malaria in the field, mechanistic studies of host-parasite-vector interactions in the lab, and an innovative combination of genomic and experimental genetic approaches to understand the impact of parasite genetic diversity on vaccine efficacy. My early work identified an essential ligand-receptor interaction in malaria (PfRh5-Basigin) and resulted in PfRh5 becoming a leading blood-stage vaccine candidate antigen, currently in Phase 2b clinical trials. My group has been at the forefront of evaluating the impact of genetic diversity in PfRh5 and its essential complex members on erythrocyte invasion and vaccine efficacy.

My research program has further enabled me to train and mentor the next generation of leaders in malaria biology and vaccinology, in the USA and in Africa. My strong ties to malaria endemic countries, having lived in Senegal for much of my career, places me in a unique position to address questions of genotype-phenotype associations both directly ex vivo in the field with longstanding cohorts, as well as using cutting-edge genomics and genome-editing approaches in the lab, in explicit and equitable partnership with scientists in malaria endemic regions. This combination of multi-disciplinary translational lab and field-based approaches is what makes my program unique. I have long-standing research collaborations in Senegal, and most recently in Chad and Burkina Faso, all of which have grown, expanded, and deepened over the course of my academic career. Further, the research that we do and the genomic surveillance that we perform is shared with public health policy makers, specifically the National Malaria Control Programs (PNLPs), enabling the linking of science and society.

Throughout my career I have sought to understand the underlying mechanisms of the malaria parasite's virulence while ensuring that such findings translate to knowledge that can influence diagnosis, prevention, and treatment of malaria, especially as we as a community tackle the bold goal of malaria elimination by 2050. I am confident that malaria elimination is possible through equitable global health partnerships that empower African scientists to lead the way. International Educational & Partnership Building

As part of strengthening international collaborative partnerships in research and training, together with partners in endemic countries, I organize multiple trainings yearly to help implement innovative research methodologies in country. The topics of these trainings are identified as priorities by our partners and together we bring new lab-based techniques and analytical approaches, providing training for students, fellows, laboratory staff, community health workers, and public health policy makers. Importantly, these workshops are organized and delivered in the local language in an effort to increase access to training resources for all, striving towards equity and democratization.

Workshop Planning/Participation:

2026: Workshop Organizer, Vigilancia molecular y genómica para la eliminación de La malaria. [Molecular & Genomic Surveillance Approaches for Malaria Elimination] (Instruction in Spanish). Cali, Colombia.

2026: Workshop Organizer, Surveillance génomique multiplexée et modulaire du paludisme pour un impact sur la santé publique: Bioinformatique de base et analyse de séquences avancée. [Multiplexed and Modular Malaria Genomic Surveillance for Public Health Impact: Basic Bioinformatics and Advanced

Sequence Analysis] (Instruction in French). N'Djamena, Chad. [virtual]

2025: Workshop Organizer, Surveillance génomique multiplexée et modulaire du paludisme pour un impact sur la santé publique: From Parasites to Policy. [Multiplexed and Modular Malaria Genomic Surveillance for Public Health Impact: From Parasites to Policy.] (Instruction in French). N'Djamena, Chad.

2025: Workshop Organizer, Résistance aux Antimicrobiens: Surveillance Génomique Intégrée au Service de la Santé Publique au Tchad. [Antimicrobial Resistance: Integrated Genomic Surveillance to serve Public Health in Chad.] (Instruction in French). N'Djamena, Chad. [virtual]

2025: Workshop Organizer, Approches de surveillance moléculaire : vecteur et parasite [Molecular Surveillance Approaches: vector and parasite].(Instruction in French). Bobo-Dioulasso, Burkina Faso.

2024: Workshop Organizer, Atelier de formation de techniciens de laboratoire et prestataires de soins sur la collecte des échantillons pour le projet d'évaluation de l'impact fonctionnel de la diversité génétique de candidats vaccins contre le paludisme [Workshop for laboratory technicians and healthcare workers on sample collection for evaluation of the functional impact of genetic diversity on malaria vaccines.] (Instruction in French). N'Djamena, Chad.

2024: Workshop Organizer, Résistance aux Antimicrobiens: Surveillance Intégrée au Service de la Santé Publique au Tchad. [Antimicrobial Resistance: Integrated Surveillance to serve Public Health in Chad.] (Instruction in French). N'Djamena, Chad.

2023: Workshop Organizer, Surveillance moléculaire, sérologique, et génomique pour la recherche et la pratique en santé publique et vétérinaire dans un contexte "OneHealth" au Tchad. [Molecular, serological, and genomic surveillance for public health and veterinary medicine in a OneHealth context.] (Instruction in French). N'Djamena, Chad.

2023: Workshop Organizer, Techniques moléculaires pour le diagnostic, la surveillance et la recherche en santé publique. [Molecular techniques for diagnosis, surveillance, and public health research]. (Instruction in French). N'Djamena, Chad. [virtual]

2021: Workshop Organizer, Techniques moléculaires pour le diagnostic, la surveillance et la recherche en santé publique. [Molecular techniques for diagnosis, surveillance, and public health research]. N'Djamena, Chad.

2018: Workshop Organizer, Multiplex Serology: Applications for Surveillance and Elimination.CDC Training, Dakar, Senegal.

2017: Workshop Laboratory Practical Session Leader, Wellcome Genome Campus (WGC) Advanced Course in Malaria Experimental Genetics, Accra, Ghana.

2017: Workshop Organizer, Ring Stage Survival Assay (RSA): Theory and Applications. Dakar, Senegal.

2017: Workshop Practical Instructor, Bio-informatique appliquée à la Génétique (Bioinformatics Applied to Genetics) Dakar, Senegal.

2015: Workshop Organizer, Targeting Malaria: Plasmodium falciparum Invasion Assay Workshop. Funded by a grant from the Cambridge-Africa Alborada Research Fund. Dakar, Senegal.

2013-2018: Workshop Organizer, Scientific English Club (Grant Writing, Journal Writing, English Presentation & Communication). Dakar, Senegal.

2013: Workshop Organizer, High Resolution Melting (HRM) Theory and Applications: Molecular Barcode Genotyping. Dakar, Senegal.

2013: Workshop Laboratory Practical Session Leader, Genomic Approaches toward Malaria Control, Surveillance and Elimination, Lusaka, Zambia.

2012: Workshop Organizer, High Resolution Melting (HRM) Theory and Applications Dakar, Senegal.

2012: Fogarty Symposium Organizer, Research and Training Needs for Malaria Elimination and Eradication in the Senegal-Gambia Region. Dakar, Senegal.

2010: Workshop Laboratory Practical Session Leader, "Invasion and Pathogenesis", Connecting Genotypes to Phenotypes in Malaria. Dakar, Senegal.



Board member- Deusedith Ishengoma, BVM, MVM, PhD, FASTMH, Ifakara Health Institute, Tanzania

Bio:

I am a Tanzanian researcher and global health leader with over 28 years of experience in malaria research, infectious diseases, and scientific leadership. My work focuses on malaria genomic epidemiology, antimalarial drug resistance, parasite population dynamics, and genomic surveillance of malaria and other

pathogens. I am a member of international research networks, including [MalariaGEN](#), and a co-founder of the Pathogen Diversity Network Africa ([PDNA](#)). I established Tanzania's first genomics laboratory and nationwide malaria genomic surveillance platforms and led the strengthening of national and regional capacity for pathogen genomic surveillance. Through my research, we detected and confirmed artemisinin partial resistance in Tanzania, and informed national treatment policies and regional antimalarial drug resistance mitigation strategies. I have authored over 130 publications, and I collaborate extensively with researchers and institutions across Africa and globally. As a committed mentor, I have supervised 12 PhD and 10 MSc students, more than 20 interns, and six postdoctoral fellows. I have been an active member of ASTMH since 2013, the 2019 Allan J. Magill Fellow, a 2025 ASTMH Fellow, and have served on the Society's Membership Committee and different task forces. I am strongly committed to advancing tropical medicine and global health through research, capacity strengthening, and evidence-based policymaking.

Personal Statement as it Relates to the Priorities for the Society:

My professional career has been guided by a clear vision and strong commitment to advancing scientific excellence in tropical medicine while strengthening research capacity and scientific leadership in disease-endemic countries. For over 27 years, I have conducted malaria and infectious disease research, focusing on Malaria molecular surveillance (MMS) to inform national and global health policy. Through my research, I have ensured that the evidence generated by research translates into practical solutions that strengthen health systems and improve disease control strategies in communities most affected by tropical diseases.

My experience closely aligns with the strategic priorities of the American Society of Tropical Medicine and Hygiene (ASTMH), including advancing scientific excellence, strengthening global engagement, fostering education and mentorship, and promoting inclusive leadership in global health. In my current positions as Principal Research Scientist at Ifakara Health Institute and the National Institute for Medical Research in Tanzania, I lead national programs focused on MMS and emerging antimalarial drug resistance. Through these initiatives, I have contributed to establishing Tanzania's first national MMS platform and to integrating genomic data into national malaria control decision-making.

A central focus of my work has been ensuring that scientific innovation informs public health policy and practice. As a principal investigator and collaborator on several international research projects supported by organizations such as the Gates Foundation and the U.S. National Institutes of Health, I have contributed to studies that monitor parasite populations and detect early signals of antimalarial drug resistance. These findings have supported national malaria treatment policies and informed global discussions on emerging resistance threats.

I have played an important role in mentorship and capacity building through mentoring early-career scientists, training of PhD and MSc students, and postdoctoral fellows from Africa and beyond. My mentorship philosophy emphasizes scientific rigor, leadership development, and equitable participation

of researchers from endemic regions. As a long-standing member of ASTMH, a former Allan J. Magill Fellow, and a recent ASTMH Fellow, I have experienced firsthand the value of the Society's leadership development and training programs. I have also contributed to ASTMH through service on committees and task forces that support the Society's mission and global engagement. I have also contributed to global health policy through the national technical working groups and WHO advisory groups addressing antimalarial drug resistance and diagnostic challenges. These experiences have reinforced my belief that organizations such as ASTMH play a critical role in connecting science, policy, and advocacy to address emerging global health challenges.

Looking ahead, I believe ASTMH will continue to play a vital leadership role in addressing emerging threats such as antimalarial and antimicrobial resistance, climate-driven changes in disease transmission, and evolving global health financing landscapes. I remain committed to supporting the Society's efforts to strengthen scientific collaboration, expand diversity and equitable global representation, and mentoring the next generation of leaders in tropical medicine. Through collaborative leadership and strategic vision, ASTMH can continue to advance science, inform policy, and improve global health outcomes.

Re-cap of participation in ASTMH Activities:

I have been an active member of the American Society of Tropical Medicine and Hygiene (ASTMH) since 2012, and I have taken part in different scientific meetings, leadership programs, committee service, mentorship activities, and contributed to the broader tropical medicine research community. My involvement with ASTMH reflects both my commitment to advancing tropical medicine and my dedication to strengthening scientific leadership and capacity in disease-endemic countries. One of the most impactful milestones in my engagement with ASTMH was being selected as an Allan J. Magill Fellow in 2019. Through this fellowship, I received career broadening and leadership training, and mentorship designed to strengthen the translation of scientific research into operational policy and decision-making for malaria control/elimination. The fellowship allowed me to work closely with national malaria control stakeholders and apply molecular epidemiology and surveillance evidence to support programmatic decision-making in Tanzania. This experience significantly shaped my perspective on leadership, policy engagement, and the role of science in public health impact. Ultimately, the fellowship embodied the vision of Allan J. Magill of fighting tropical diseases through empowerment of the key leaders within the affected communities.

I have also contributed to the Society's governance and community engagement efforts services as a member of the ASTMH Membership Committee. Through this position, I have participated in discussions and initiatives aimed at strengthening Society membership, expanding global participation, and enhancing the value of ASTMH for scientists and practitioners working in tropical medicine worldwide. In addition, I have contributed to efforts to promote diversity and representation within ASTMH through participation in initiatives associated with the American Journal of Tropical Medicine and Hygiene (AJTMH) that aim to improve diversity within the journal and its editorial structures. Participation in the ASTMH Annual Meeting has been an important component of my scientific engagement with the Society. Over the years, I have organized scientific symposia and presented research findings through both oral and poster presentations at the ASTMH's annual meetings, held in 2008, and from 2012 to 2025. In 2022, I co-organized a symposium on "Malaria Molecular Surveillance in Africa: Experience and Lessons Learned with a Focus on Establishing Genomics Capacity in Tanzania," presented at the ASTMH Annual Meeting in Seattle. These meetings have provided valuable opportunities to share findings from our research on malaria genomics, drug resistance, diagnostic challenges, and molecular surveillance. They have also allowed me to engage in scientific

dialogue and build collaborations with researchers from across the world. Beyond formal participation, ASTMH has played an important role in my professional development and scientific collaborations. In 2025, I was selected the ASTMH Fellow and through the Society, I have built long-term collaborations with researchers working on malaria genomics, drug resistance monitoring, and implementation science. These collaborations have contributed to advancing evidence-based strategies for malaria control and elimination in Africa and globally.

Through continued engagement with ASTMH's meetings, committees, mentorship programs, and scientific activities and a new Board Member, I remain committed to contributing to the Society's mission of advancing tropical medicine research, strengthening global scientific collaboration, and supporting the next generation of researchers and practitioners in the field.

Research, Clinical, Policy, Public Health, Global Health, Educational and Partnership-Building Interests, Engagement with Current and Future Members, Including International Outreach:

My professional career has been dedicated to advancing tropical medicine and global health through interdisciplinary research, policy engagement, capacity strengthening, and international collaboration. For more than 27 years, my work has focused on malaria and other infectious diseases, with particular emphasis on integrating genomic epidemiology, genomics, and surveillance science into public health decision-making in endemic countries.

Research Interests: My research focuses primarily on genomic epidemiology of malaria, genomics of infectious diseases, and surveillance of antimalarial drug resistance. I have led and collaborated with local and international researchers on studies focusing parasite populations, antimalarial drug resistance, diagnostic resistance, and therapeutic efficacy of antimalarial drugs. A central component of my research has been the development of genomics and bioinformatics research capacity to support utilization of research evidence to guide malaria elimination strategies and strengthen national disease surveillance systems. I have published over 120 peer-reviewed scientific publications, policy briefs and technical reports that contribute to global knowledge on malaria control and emerging resistance threats.

Clinical and Public Health Engagement: My work bridges field studies and laboratory science with operational public health. I have been actively involved in therapeutic efficacy studies, clinical trials, and field epidemiology aimed at evaluating antimalarial drugs and diagnostic tools. Through long-standing collaboration with the Tanzanian National Malaria Control Programme, I have established field sites, conducted different studies and supported implementation of surveillance systems and evidence-based strategies for malaria case management and intervention planning. These efforts ensure that research findings directly inform public health policies and improve malaria control programs and the ongoing elimination strategies in endemic settings.

Policy and Global Health Engagement: I have contributed to national global health policy through participation in national technical working groups, the World Health Organization (WHO) advisory groups and international technical committees, including task forces addressing antimalarial drug resistance and diagnostic challenges. My work emphasizes the translation of scientific evidence into policy recommendations and programmatic decision-making at national and international levels. Through these engagements, I contribute to shaping strategies aimed at controlling malaria and strengthening global preparedness for emerging infectious diseases.

Educational and Capacity-Building Interests: Education and mentorship are central to my professional mission. I have supervised 12 PhD students, six postdoctoral fellows, 10 MSc students, and early-career researchers, helping to build the next generation of scientists in Africa and beyond. Within ASTMH, I have been a mentor of different colleagues including Dr. Punam Amratia (the 2024 Allan J. Magill Fellow) and Ms. Catherine Bakari (the 2025 Prof. Domnic Kwiatkowski Fellow). I have also contributed to

international training initiatives in genomics, bioinformatics, and infectious disease surveillance, including programs aimed at strengthening research leadership in endemic regions. These activities support sustainable scientific capacity and foster innovation in tropical medicine research.

Partnership-Building and Collaborative Research: Throughout my career, I have worked extensively to build multi-institutional partnerships involving academic institutions, national research organizations, public health programs, and global funding agencies. I have led or contributed to collaborative research programs supported by organizations such as the US. National Institute of Health, the Wellcome Trust, the Gates Foundation, WHO, and the US Government (formerly USAID-PMI), and attracted over \$20 million in funding. These partnerships have enabled the development of laboratory infrastructure, genomic surveillance platforms, and regional research networks supporting infectious disease research in Africa.

Engagement with Current and Future Members: I actively engage with the global scientific community through professional societies, including the ASTMH, the Malaria Genomic epidemiology network (MalariaGEN), the Pathogen diversity network Africa (PDNA) and others. Specifically to ASTMH, I participant in presenting research findings and discussions at annual meetings, contributing to committees, mentoring early-career scientists, and supporting initiatives that expand participation of researchers from endemic countries. I strongly believe that ASTMH and other professional societies play a critical role in fostering scientific collaboration, leadership development, and knowledge exchange across disciplines and regions.

International Outreach and Global Collaboration: My work involves extensive collaboration with researchers, policymakers, and public health practitioners across Africa, Asia, Australia, Europe, and North America. I have contributed to international networks focused on malaria genomics, antimalarial drug resistance monitoring, and infectious disease surveillance. Through these partnerships, I promote equitable scientific collaboration, strengthen research capacity in endemic regions, and support the integration of local expertise into global health initiatives.



Board member representing students/trainees- Ozioma Esther Onuselogu, MSc BSc, Eastern Illinois University, United States

Bio:

I am a molecular biologist and infectious disease researcher whose work focuses on zoonotic pathogens and disease transmission within a One Health framework. Growing up in a tropical region where malaria was part of everyday life taught me early: infectious diseases do not respect the boundaries between humans, animals, and ecosystems. Science that

stays siloed within institutions cannot protect the communities it studies.

With undergraduate training in human physiology and a Master of Science in Biological Sciences from Eastern Illinois University, I specialize in molecular parasitology and wildlife disease ecology. My graduate research documented a 69.2% *Trypanosoma cruzi* prevalence in raccoon populations across Central Illinois (n=78), with cardiac pathology in 64.3% of infected animals, considerably higher than previously reported in the region.

My science narrative about this journey was published in the *American Journal of Tropical Medicine and Hygiene* through its "Stories from the Field" series, with ASTMH sponsoring publication expenses. Through event support and publication in AJTMH, this Society became my professional

home. I authored an op-ed in *STAT News* calling attention to the underrecognized domestic presence of Chagas disease in U.S. wildlife.

Beyond the laboratory, I founded *From Silos to Action* (silostoaction.com), a science engagement initiative now active in 19 countries. Through it, I developed the Climate-Health Action Mapping Engine (CHAME), a bilingual participatory framework that moves communities from passive awareness to committed action within 30 days. At follow-up, 54% of participants reported sustained behavioral influence. I coordinated "One Health Action Against Chagas Disease," drawing 94 registrants from 17 countries, including professionals from CDC, FDA, and the Oswaldo Cruz Foundation.

I use visual art, oil paintings drawn from my research findings, as science communication, exhibiting at community galleries and on One Health Day. At the invitation of the One Health Commission's Executive Director, I now lead a Working Group on One Health and Art Communication.

I serve as a peer reviewer for *PLOS Neglected Tropical Diseases* and *Cureus Journal of Medical Science*, and as a research judge and mentor for the Sigma Xi Student Research Showcase, Drexel University College of Medicine, Ohio STEP program, and UC Irvine. I mentor early-career scientists through the Women for One Health Network, administered across partner institutions in Kenya, Rwanda, and Germany. I was elected to Sigma Xi, competitively selected for Falling Walls Lab Illinois, and recognized with the Award for Excellence in Research and Creative Activity at Eastern Illinois University.

I have built this body of work through independent initiative, cross-sector collaboration, and the credibility that ASTMH's early support made possible.

I am exploring doctoral training in vector-borne disease ecology. My long-term goal: a research program integrating molecular surveillance, community-engaged science communication, and predictive diagnostics to detect zoonotic threats before they become public health crises, connecting scientists, communities, and decision-makers across the silos that too often separate them.

Building programs from scratch, mobilizing cross-sector partnerships, and translating research into community action: these are the skills I will bring to serving ASTMH's student and trainee community as Board Member.

Personal Statement as it Relates to the Priorities for the Society:

I am running for this Board because ASTMH gave my work a home when it mattered most, and I want to ensure the next generation of students and trainees finds the same belonging within this Society.

It began with a question about raccoons.

As a master's student in Central Illinois, far from any tropical region, I wanted to know whether *Trypanosoma cruzi* was circulating in local wildlife. The answer: 69.2% prevalence with cardiac pathology in nearly two-thirds of infected animals. No one expected that from Central Illinois.

But ASTMH published my narrative about that journey in the *American Journal of Tropical Medicine and Hygiene* at the Society's expense. That is what this Society looks like when it lives its values: it finds science that matters, wherever it originates, and gives it a platform.

And it brought me here, asking to serve the Society that served me first.

I remember what it felt like before that moment. I know what it is to submit an abstract and wonder whether your name will read as unfamiliar. I know what it is to build something meaningful without

institutional backing and wonder whether it counts. I know there are students and trainees doing extraordinary work from unexpected places who need to know ASTMH sees them.

That is why I want to serve on this Board.

If elected, I will focus on three priorities:

1. Championing Students and Trainees as First Voices in Global Health: When disease events make headlines, misinformation fills the vacuum before credible science reaches the public. I will propose an ASTMH Trainee Rapid Response Network: a volunteer cohort of students and trainees trained to translate existing scientific consensus into accessible, multilingual communication within 48 hours. Through *From Silos to Action* and CHAME, I have built this model independently across countries. I will also establish an official ASTMH student and trainee Instagram presence, creating year-round visibility and attracting new members where the next generation already engages.

2. Advancing Science Translation Through Creative Media: Research that stays in journals cannot change outcomes in communities. I will propose an **ASTMH ArtTropMed Initiative**: a showcase at the Annual Meeting giving students and trainees a platform to translate tropical medicine research through creative media: visual art, documentary films, health songs in local languages, and illustrated prevention guides.

3. Building Lateral Trainee Connections Across Borders: I will propose a Trainee Research Exchange Network pairing endemic-region students and trainees with non-endemic-region peers to co-develop a joint research question over 12 months, culminating in a co-authored Annual Meeting presentation. This is not top-down mentorship. It is peer-to-peer collaboration that produces research output while building the cross-border relationships this field depends on.

ASTMH invested in me before I had a track record or a platform. I have spent every day since extending that investment forward. I would be honored to serve and ensure this Society remains a home for every scientist bold enough to ask an unexpected question, no matter where they ask it from.

Re-cap of participation in ASTMH Activities:

My engagement with ASTMH includes publication, institutional support, event coordination, research dissemination, committee membership, and professional service:

- **Publication:** "Far from the Familiar," AJTMH Stories from the Field (2025). Publication expenses sponsored by ASTMH.
- **Op-ed (related dissemination):** "Chagas transmission to humans in the U.S. is rare, but climate change could make it worse," STAT News (2025).
- **Event coordination:**
 - **"One Health Action Against Chagas Disease" (January 2025),** 94 registrants from 17 countries, including professionals affiliated with federal agencies and major research universities. ASTMH listed the event on its platform, drawing registrants from the Society's membership.
 - **World NTD Day (2025):** Coordinated multilingual video campaign featuring participants from multiple countries in traditional attire promoting NTD awareness in their native languages.
 - **LA Climate Week (2026):** "From Silos to Action: Discover Your Climate-Health Role," virtual public engagement event listed on the LA Climate Week platform.
 - **One Health Day (2025):** "Circle of Life: One Health Interconnected" artwork and initiative featured.

- **Sub-Committee Involvement:** American Committee of Medical Entomology (ACME), American Committee of Molecular, Cellular and Immunoparasitology (ACMCIP), American Committee on Arthropod-Borne Viruses and Zoonotic Viruses (ACAV), ASTMH Committee on Global Health (ACGH), American Committee on Clinical Tropical Medicine and Travelers' Health (ACCTMTH), with active engagement within ACGH.
- **Peer review:** 19 assignments across PLOS NTD and Cureus Journal.
- **Research judge:** Sigma Xi Student Research Showcase, Drexel University College of Medicine, UC Irvine, Ohio STEP.
- **Conference dissemination (external):** AAVP, AMCOP, ASP, HSW/SSP, Falling Walls, WfOH, Hazleton Art League.
- **Awards/Recognition:** Sigma Xi Election (2025), Falling Walls Illinois Lab (2025), EIU Award for Excellence in Research and Creative Activity (2025), Williams Travel Grant (2024).
- **Upcoming:** Abstract submitted for ASTMH 2026 Annual Meeting. Science Summit at UNGA 81, New York (2026), session approved.
- **Mentorship:** WfOH Network. Promoted ASTMH membership across international network.
- **Proposed initiative:** Launching a dedicated social media platform for **ASTMH trainees and students** to promote society engagement, share research highlights, and strengthen peer connection across the membership.

Research, Clinical, Policy, Public Health, Global Health, Educational and Partnership-Building Interests, Engagement with Current and Future Members, Including International Outreach:

- **Research:** My work focuses on the molecular epidemiology of *Trypanosoma cruzi* in sylvatic reservoir hosts and the development of surveillance approaches for Chagas disease in non-endemic regions of the United States. At Eastern Illinois University, I designed and executed a molecular and histopathological survey of raccoon populations across Central Illinois, documenting parasite prevalence considerably higher than previously reported with cardiac tissue pathology in the majority of infected animals. My next-stage research extends surveillance to additional reservoir species and triatomine vector populations, integrates climate-driven spatial modeling, and advances a proposed low-cost wearable biosensor for real-time detection of triatomine vector exposure, a concept I presented at Falling Walls Lab Illinois. The long-term objective is predictive zoonotic surveillance that identifies transmission risk upstream of clinical presentation.
- **Policy:** I published an op-ed in *STAT News* framing *T. cruzi* in U.S. wildlife as a surveillance policy gap, drawing independent amplification from the American Board of Veterinary Practitioners. My approved 2026 Science Summit session at UNGA 81 will present the CHAME framework to international policymakers. At LA Climate Week 2026, I hosted "From Silos to Action: Discover Your Climate-Health Role," extending climate-health engagement beyond academic audiences.
- **Public Health and Global Health:** The Climate-Health Action Mapping Engine (CHAME) is bilingual, assigns four defined roles, and produces documented 30-day behavioral outcomes; 54% of participants reported sustained influence at follow-up. I coordinated "One Health Action Against Chagas Disease" drawing 94 registrants from 17 countries, with professionals from CDC, FDA, and the Oswaldo Cruz Foundation. For World NTD Day 2025, I produced a multilingual video campaign featuring participants promoting NTD awareness in their native languages. I create original oil paintings from my research findings as science communication for neglected tropical diseases. "Circle of Life: One Health Interconnected" was exhibited at the Hazleton Art League's *Signals Not Lost* exhibition (October 2025) and featured on One Health Day (November

2025); "Heart in the Shadows" depicts the cardiac consequences of Chagas disease for public audiences.

- **Educational and Partnership-Building Interests:** I have completed 19 peer review assignments across *PLOS Neglected Tropical Diseases* and *Cureus*. I have served as a research judge for Sigma Xi, Drexel, UC Irvine, and Ohio STEP. I mentor early-career scientists through the Women for One Health Network across institutions in Kenya, Rwanda, and Germany, and lead the One Health Commission's Working Group on Art Communication at the Executive Director's invitation.
- **Engagement with Current and Future Members, Including International Outreach:** My committee involvement includes ACME, ACMCIP, ACAV, ACGH, and ACCTMTH, with active engagement within ACGH. I am in communication with Dr. Sarah Hamer regarding potential collaboration on Chagas disease research. I promote ASTMH across my international network: participants in my events span 19 countries, and many encountered this Society for the first time through *From Silos to Action*. My *AJTMH* publication with ASTMH-sponsored expenses demonstrated what this Society looks like when it invests in emerging voices.

I bring to this Board something different: I am not only a researcher who generates scientific data, but someone who has independently built the translational systems to move that data into community practice. I believe that distinction is what ASTMH needs at the governance level, and I am ready to serve.