

## Curriculum Vitae: Arshnee Moodley

### Profile

- **Experience in Research:** 20 years of experience, focusing on antimicrobial resistance from a One Health perspective, pathogen transmission dynamics, and treatment options. Significant work in understanding drivers of antimicrobial use in low-resource settings, barriers to adoption of interventions, policy and governance, gender inclusion, and building diagnostic lab capacity.
- **Leadership and Team Management:** Proven leadership in both academia and project management including Associate Professor at University of Copenhagen, AMR Team Leader and CGIAR AMR Hub leader. Experience in leading international collaborative projects, managing diverse teams, and supervising and mentoring graduate fellows.
- **Analytical and Strategic Planning:** Strong analytical skills demonstrated through successful coordination and lead roles in numerous multimillion-dollar international projects. Expertise in strategic planning as evident in successful project management and research contributions.
- **Research and Communication Skills:** Ambitious and result-driven, evidenced by contributions to 92 peer-reviewed articles and leadership in various global initiatives and partnerships. Fluent in English with strong interpersonal skills, adept at engaging with diverse stakeholders and representing institutions and research teams.
- **Project and Grant Management:** Experienced in managing a large portfolio of grants, with a focus on AMR and infectious diseases.
- **Collaboration and Strategic Initiatives:** Actively involved in the development of new initiatives and strategic plans, particularly in infectious diseases, One Health and antimicrobial resistance. A team player capable of working independently and proactively.

### Current position(s)

- Associate Professor at Department of Veterinary and Animal Science, University of Copenhagen, Denmark, October 2013- to date
- Jointly appointment as AMR Team Leader at International Livestock Research Institute, Kenya November 2019 – to date (joint appointment with UCPH since 01 November 2022)
- CGIAR AMR Hub leader hosted by International Livestock Research Institute, Kenya, November 2019- to date (joint appointment with UCPH since 01 November 2022)

### Education

Institution	Degree	Year
University of Copenhagen, DK	PhD in Zoonosis and Antibiotic Resistance	2008
University of the Witwatersrand, RSA	M.Sc (Med) with distinction	2005
University of the Witwatersrand, RSA	B.Sc (Hons)	2003

### Membership of advisory boards, technical groups, evaluation panels

- Chair of the Steering Committee of the AMR Multi-Stakeholder Partnership Platform, 2023-2025 <https://www.fao.org/antimicrobial-resistance/quadripartite/the-platform/en/>
- Member of Quadripartite technical working group on AMR and AMU integrated surveillance, 2023-2025, <https://www.fao.org/antimicrobial-resistance/news-and-events/news/news-details/en/c/1629534/>

- Member of the WOAHP Working Group on Antimicrobial Resistance, 2024-2027  
<https://www.woah.org/en/what-we-do/standards/standard-setting-process/working-groups/working-group-on-antimicrobial-resistance/>
- Member of the Technical Advisory Group for FAO's RENOFARM Initiative, 2024-2027
- Member of the Technical Advisory Forum for International Centre for Antimicrobial Resistance Solutions (ICARS), 2024-2026 <https://icars-global.org/technical-advisory-forum/>
- Expert panel member to support the external evaluation of the scientific and technical soundness of FAO's work on AMR <https://www.fao.org/3/cb3680en/cb3680en.pdf>
- Member of FAO AMR surveillance Technical Advisory Group in Eastern Africa (2021-2022)
- Member of the Advisory Group for the development of the Terms of Reference of the Independent Panel on Evidence for Action Against Antimicrobial Resistance (2020)  
<https://www.who.int/news/item/23-03-2020-advisory-group-independent-panel>
- Research advisory board member for the Wellcome Trust funded AMR Policy Accelerator (2022-2025)  
<https://amrpolicy.org/>
- Member of ReAct Toolbox Advisory Board <https://www.reactgroup.org/>
- Expert panel member of the Global AMR Hub Market Analysis and Dynamic Dashboard  
<https://globalamrhub.org/>

### Notable global engagements and contributions

- Contributor to the United Nations Environment Programme (UNEP) report *Bracing for Superbugs: Strengthening environmental action in the One Health response to antimicrobial resistance*, 2023  
<https://www.unep.org/resources/superbugs/environmental-action>
- Presentation at G20 MACS Workshop on AMR, September 2021 [https://www.macs-g20.org/fileadmin/macs/Annual\\_Meetings/2021\\_Italy/Documents/G20\\_Workshop\\_on\\_AMR\\_Agenda.pdf](https://www.macs-g20.org/fileadmin/macs/Annual_Meetings/2021_Italy/Documents/G20_Workshop_on_AMR_Agenda.pdf)
- Expert consultant for the Development of a One Health Priority Research Agenda for Antimicrobial Resistance led by World Health Organization (2022-2023),  
<https://www.who.int/publications/i/item/9789240075924>
- The Livestock Antimicrobial Partnership within the Global Agenda for Sustainable Livestock, November 2020 <https://www.slu.se/en/collaboration/international/slu-global/projects-and-themes/networks/lamp/>

### Team/Group management and supervision

Current team and leadership: AMR team leader, ILRI, line manager for

- Scientist Dr. Dishon Muloi (Kenya)
- Research Officer and AMR lab manager Linnet Ochieng (Kenya)
- Research Assistant: Eugene Ibaji (Kenya) and Dreck Ayebare (Uganda)
- PhD students with ILRI graduate fellowships, ILRI main supervisor
  - Dickson Ndoboli "AMR in poultry", University of Copenhagen (DK), based in Uganda (2021-2024)
  - Irene Mbatidde "AMU in poultry", Freie University Berlin (DE), based in Uganda (2021-2024)
  - Jane Njaramba "AMR in poultry", Ghent University (BE), based in Kenya (2022-2026)
  - Naomi Peters "Cost benefit analysis of AMU reduction on farm", University of Copenhagen (DK), based in Kenya (2022-2026)
  - Chebet Arusey "Fate of antibiotics in manure and effects on greenhouse gas emissions" University of Eldoret (KE), based in Kenya (2022-2025)
  - Alice Kiare "Impact of hygiene measures in slaughterhouses in Kenya", University of Copenhagen, based in Kenya (2023-2026)
  - Frederick Gudda "Ecotoxicity of antibiotic residues in the environment from livestock farming in Kenya" Nanjing Agricultural University (CN), based in Kenya (2021-2023)
  - Amos Mhone "Governance and policies around Antimicrobial Use in the veterinary sector in selected low- and middle-income countries" University of Copenhagen, based in Kenya (2023-2026)
- MSc fellows with ILRI graduate fellowships, ILRI main supervisor
  - o Shareef Ngunguni "Antimicrobial Stewardship in poultry production in Malawi", Kamuzu University of Health Sciences (MW), 2021-2023

- Alexina M'oranga "Mapping veterinary antibiotic supply chain in Kenya", University of Nairobi (KE), 2022-2023
- Simon Kamau "Mapping AMR policies and regulations in Kenya" University of Nairobi (KE), 2022-2023
- Patricia Koech "Meat Safety and meat handling in butchers in Nairobi", University of Nairobi (KE), 2022-2023
- Lydiah Kisoo "Drivers of AMU in Kenyan dairy herds", University of Liverpool (UK), 2021-2023
- UCPH veterinary speciale students hosted at ILRI in Kenya
  - Hannah Jørgensen "Evaluating the status of veterinary diagnostic capacity to address antimicrobial resistance in the livestock sector in Kenya", Sep-Nov 2022
  - Rikke Louise Jensen and Nanna Schødt Hansen "Qualitative assessment of *Point of cow* assay to detect mastitis in dairy cows in Kenya", Sep-Nov 2023

Previously, University of Copenhagen (2007-2019)

- PhD Graduate Programme Leader "Molecular Bacteriology and Infection" at the Faculty of Health and Medical Sciences, UCPH (2018 – 2019)
- PhD Co-ordinator at the Graduate School of Health and Medical Sciences, (2014 - 2018)
- Post-Doctoral Supervision of one fellow, main Supervisor of one PhD students and co-supervisor of six PhD students
- Responsible for the NGS Facility at Veterinary Clinical Microbiology (UCPH) until 2019
- Antimicrobial Research and Antibiosis Research Group Leader, 2015-2016
- Assistant administrator of TRAINAU-ASAP, EU-FP7 Marie Curie Initial Training Network (2012-2016)
- Leading Research Course (Modules 1-3) part of Leadership Development at UCPH (LUKU)

## Teaching

- Organization, lecturing and laboratory practical:
  - Organizer and teacher, PhD course Infection Microbiology course, Module B-Antimicrobial resistance and Bacterial typing, 2007-2014, 2016-2019, 2022-2023 (teacher only), UCPH-DK
  - Teacher on Veterinary Paraclinics- Antimicrobial Resistance, quarterly course, 2015-2019, UCPH-DK
  - Organizer Biomedicine course for 5<sup>th</sup> year Veterinary Differentiation, Antimicrobial Resistance and non-antibiotic alternatives, 2007-2011, 2017, UCPH-DK
  - Teacher on InfektionsMikrobiologi-Bakteriologi, 2014, 2016, 2018, UCPH-DK
  - Teacher on Danida's Fellowship Centre Course "One Health specialization", 2021, 2022, 2023, UCPH-DK
  - Teacher on Danida's Fellowship Centre Course "Sustainable and Safe Livestock Production" 2021-2022, UCPH-DK
  - Teacher on Innovate4Health John Hopkins, Bloomberg school of Public health (USA)
    - <https://www.ignitetheidea.org/about-innovate4health>
    - Lecture "AMR: Wicked challenge for LMICs" October 2021
    - Member of international panel of expert judges to support student innovations to tackle emerging infectious diseases.
  - HORN One Health Masterclass, November 2019, Nairobi Kenya <https://onehealthhorn.net/>
    - LST 103: Antimicrobial Resistance, including diagnostics, teacher (2 days)
    - Lecture and lab practical
  - HORN One Health Masterclass, September 2021, Nairobi Kenya <https://onehealthhorn.net/>
    - LST 101: Infectious pathogen diagnostics, Organizer and teacher (4 days).
    - Mixture of lectures, virtual lab simulations using Labster and group assignments
  - One Health International Summer Course, 2022- 2023 (*upcoming*)
    - <https://healthsciences.ku.dk/education/summercourses/one-health/>
    - Prepared short e-lecture on antimicrobial resistance
    - In person teaching and classroom exercises on
      - One Health challenges of Transboundary Animal Diseases
      - Understanding *Theory of Change* and utilization of the framework to develop a disease control strategies.

## Peer-reviewed Publications

100 peer reviewed articles and 3 book chapters (2006-2024), H-index =38, i10-index = 73

## Relevant external funding and project management

Project title	Funder	Total Amount (USD)	Project period	Project Role	Website
Fleming Fund Regional Grant–Antimicrobial Resistance and One Health, including Animal Health, the Environment and Practitioner Engagement (AMROH)	UKAID	2.2 M	2024-2025	Project coordinator, Lead PI	Project granted in Jan 2024
Climate influence on zoonoses at human-livestock-wildlife interfaces in the transboundary region between Kenya and Tanzania (ENHANCE)	Danish International Development Agency	1.6 M	2023-2028	Project coordinator, Lead PI	<a href="https://ivh.ku.dk/english/research/veterinary-clinical-microbiology/mol-vet-microgroup/enhance/">https://ivh.ku.dk/english/research/veterinary-clinical-microbiology/mol-vet-microgroup/enhance/</a>
CGIAR One Health Initiative: Protecting Human Health through a One Health Approach	CGIAR Trust Fund	19.6 M	2022-2024	Work-package lead (AMR)	<a href="https://www.cgiar.org/initiative/one-health/">https://www.cgiar.org/initiative/one-health/</a>
Fleming Fund Fellowship Zambia: AMR Policy within Human Health and Animal Health	UK AID	0.1 1M	2022-2023	Co-ordinator and Mentor	<a href="https://www.flemingfund.org/grants/zambia-policy-fellowship/">https://www.flemingfund.org/grants/zambia-policy-fellowship/</a>
Fleming Fund Fellowships in Ghana: AMR Policy within Human Health and Animal Health	UK AID	0.11 M	2022-2023	Co-ordinator and Mentor	
Establishing a Center of Excellence for Antimicrobial Susceptibility Testing	ICARS	0.26 M	2021-2024	Lead project investigator	<a href="https://icars-global.org/projects/kenya-ast/">https://icars-global.org/projects/kenya-ast/</a>
Fleming Fund Fellowships in Bangladesh: AMR Policy within Human Health and One Health	UK AID	0.11 M	2021-2022	Co-ordinator and Mentor	<a href="https://www.flemingfund.org/grants/bangladesh-policy-fellowship/">https://www.flemingfund.org/grants/bangladesh-policy-fellowship/</a>
Fleming Fund Fellowships in Bangladesh: AMR lab diagnostics, AMR and AMU surveillance within Human Health, Animal Health and Aquaculture	UK AID	1.1 M	2020-2022	Co-ordinator and Mentor	<a href="https://www.flemingfund.org/grants/bangladesh-professional-fellowship/">https://www.flemingfund.org/grants/bangladesh-professional-fellowship/</a>
One Health Research, Education and Outreach Centre in Africa (OHRECA)	Federal Ministry for Economic Cooperation and Development	17.3 M	2020-2025	Work-package lead (AMR)	<a href="https://www.ilri.org/research/facilities/one-health-centre-africa">https://www.ilri.org/research/facilities/one-health-centre-africa</a>
Action Against Stunting Hub	UKRI GCRF	26.1 M	2019-2024	Collaborator (Microbial hazards)	<a href="https://actionagainststunting.org/what-we-do/">https://actionagainststunting.org/what-we-do/</a>

Fleming Fund Kenya Country Grant: sub-grantee to lead design and implementation of AMR surveillance in animal health	UK AID	8.0 M	2019-2023	Collaborator (AMR lab expertise)	<a href="https://www.flemingfund.org/grants/kenya-country-grant/">https://www.flemingfund.org/grants/kenya-country-grant/</a>
Boosting Uganda's Investments in Livestock Development	Federal Ministry for Economic Cooperation and Development	8.0M	2019-2023	Work-package lead (AMR)	<a href="http://ilri.org/BUILD">http://ilri.org/BUILD</a>
Fleming Fund Fellowships in Zambia: AMR lab diagnostics, AMR and AMU surveillance within Animal Health	UK AID	0-46 M	2019-2021	Co-ordinator and Mentor	<a href="https://www.flemingfund.org/grants/zambia-professional-fellowship/">https://www.flemingfund.org/grants/zambia-professional-fellowship/</a>
CGIAR Research Program Agriculture for Nutrition-Flagship on <i>Improving Human Health</i>	CGIAR Trust Fund	16.1M (only Flagship 5)	2019-2021 (project started in 2012)	Flagship 5 cluster III leader (WP leader)	<a href="https://a4nh.cgiar.org/">https://a4nh.cgiar.org/</a>
A bacteriophage-based approach to reducing infections caused by antibiotic resistant E. coli (UCPH)	EU Animal Health and Welfare ERA-NET	1.6M	2015-2019	Collaborator (Phage isolation & characterization)	
Phage induction and phage lysins (Post Doc Research Project and Sapere Aude Young Elite Researcher awardee), (UCPH)	Danish Council for Independent Research, Technology and Production Sciences	0-5 M	2012-2017	Lead project investigator	