Global Development Hub

Global Development Hub

Working in partnership across all Faculties, Institutes and facets of Imperial towards the common goal of sustainable development

•Co-create ambitious new partnerships and research consortia to develop, amplify and support research impact in Least Developed Countries (LDCs) and Lower Middle-Income Countries (LMICs) (as defined by the OECD)

Increase the synergy and impact of development-focused research and innovations flowing from groups across the College by **creating community-building fora**

Position the College as a thought leader in the international development sphere and provide STEM expertise to aid evidencebased policymaking in a development context

Provide formative placement opportunities for our students in partner organisations and international development agencies



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Global Development Hub Programmes



An accelerator fund and strategic research development team to scale-up the best science and technology for development impact.

- ->ODA accelerator fund
- ->£1m+ ODA research development team



A global network of Imperial academics, alumni and partners committed to working with communities, practitioners and policymakers to support development impact.

- ->STEM Development Impact Memos
- -> Annual Lecture
- -> Global Development Alumni network



Funded PhD placements and post doc Fellowships for researchers from least developed and low- or middle-income countries to work on research and innovation for development impact.

- ->Global Development Hub Fellows
- -> Schmidt Sciences AI Fellows



Collaborative training and mentorship programmes to empower STEMB entrepreneurs with the skills to develop new industries, technologies and

- ->Venture Treks
- -> Start-up Fellowships

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STEM Impact Memos Series

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STEM Development Impact Memos

Digital Diagnostics for Africa

Bringing Cutting-Edge Digital Diagnostics to Africa

Authors

Aubrey Cunnington

Professor of Paediatric Infectious Disease at Imperial College London, UK

Gordon Awandare

Director of West African Centre for Cell Biology of Infectious Pathogens, Ghana

Haliday Tinta

Regional Director of the Institut de Recherche en Sciences de la Santé, Burkina Faso

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STEM Development Impact Memos

Transmission Zero

Using Modified Gene Drive Mosquitoes to Eliminate Malaria

Authors

George K. Christophides

Professor of Infectious Diseases and Immunity, Imperial College London, UK

Nikolai Windhichle

Reader in Genetics, Imperial College London, UK

Dickson Wilson Lwetoijera

Principal Research Scientist

Ifakara Health institute, Tanzania

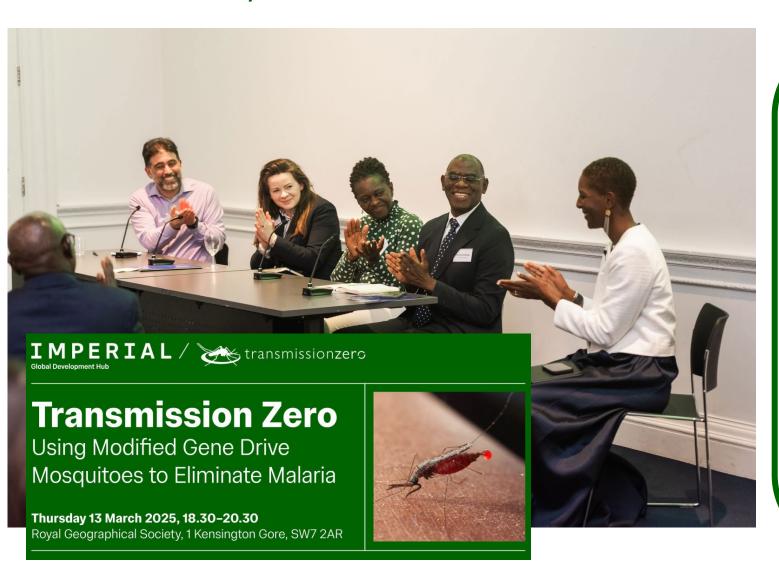
A set of **Global Development Hub papers** that offer Imperial College
London academics and overseas
partners a platform to profile— in
lay accessible form — emerging
areas of science and tech that can
impact on development
challenges

Additional memos:

- <u>Plant-based vaccine</u>
 manufacturing in Africa
- <u>Low-cost prosthetics for</u> children in conflict zones
- Adapting to Melting Glaciers,
- <u>Invisible Zombie Wildfires</u>,

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Memo case-study - Transmission Zero



Transmission Zero is a collaboration between Imperial researchers and partners in Tanzania, including the Ifakara Health Institute and the National Institute of Medical Research.

- Event with 150 leading scientists, policymakers, funders and global health advocates
- Coverage in the Telegraph, BBC, Reuters, Sky News, and Le Monde.
- Voices of the Global Development Hub <u>podcast</u>.

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Global Development Hub Fellows Fund



A scheme to support **PhD students** already enrolled in LDCs and LMICs countries to spend up to four months at Imperial, fully funded in high-impact placements.

52 Fellows from 24 countries to date.

- Hypertension in adults in South Asia
- Effects of urbanisation on flooding in Ghana
- Entomopathogens of the oil palm leaf miner beetle
- Low-cost diagnostics for typhoid

[Funded through ISPF ODA funding]

Global Development Hub Annual Lecture Series



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Strategic Research Development

Support for ODA funding applications worth over £40 million, from funders including Horizon Europe, NIHR and STFC

Support includes:

- Highlighting relevant calls
- Suggesting ODA partners
- Drafting parts of the application
- liaising with finance teams
- Writing letters of support



Plant-Based Vaccines and Biologics Offer Continue Low-Cost Health Security









Integrated Means to Power Agriculture, Clean Cooking and Transportation





Moving IMPACT

Project Overview

Adria Junyent-Ferre

Deptartment of Electrical and Electronic Engineering

September 2025









Vision

Solar mini-grids can support agriculture and transportation.

These mini-grids will supply electricity to small businesses, health centres and individuals.

This creates a path for clean cooking.





Scope

- Agrivoltaics: how can PV support agriculture.
- Best options for household electricity access and clean cooking.
- Building the national grid with the help of solar mini-grids.
- Infrastructure to support small-scale electric mobility.



Facts and figures

- 3 years long (Jan 2025-Dec 2027)
- £3.6M budget supported by the Ayrton Fund
- 7 Research institutions
 - 3 Rwanda,
 - 2 UK,
 - 1 Kenya,
 - 1 Ghana
- 7 Industry partners
 - Electric utilities (traditional and private solar developers)
 - Regulators
 - Service providers
- 3 Departments at Imperial: EEE, CEP, Physics



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How the Global Development Hub has helped us

- Identifying funding opportunities and preparing in advance
 - Mike Reilly from GDH reached out to us in late 2022 to learn more about our research.
 - Workshops at Imperial about upcoming funding (eg Ayrton, Mastercard Foundation).
- Identifying potential academic and industry partners
 - Networking events at Imperial to meet other researchers at Imperial.
 - Introductory meetings with national and international entities between 2022-2024.
- Traveling to meet stakeholders in the target countries
 - Trip to Rwanda in 2023 (3 academic institutions and 3 of the industry partners we
 visited became partners of the current project).
- Support in the preparation of the proposal
 - Advice on best practices to consider for managing the project (eg hiring a project manager, etc), dissemination, etc.