Building out vector-borne diseases: Research on innovations and pathways for scaling-up

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Durham University, UK

RBM VCWG work stream 3

Implementing the Global Vector Control Response

22 April 2021

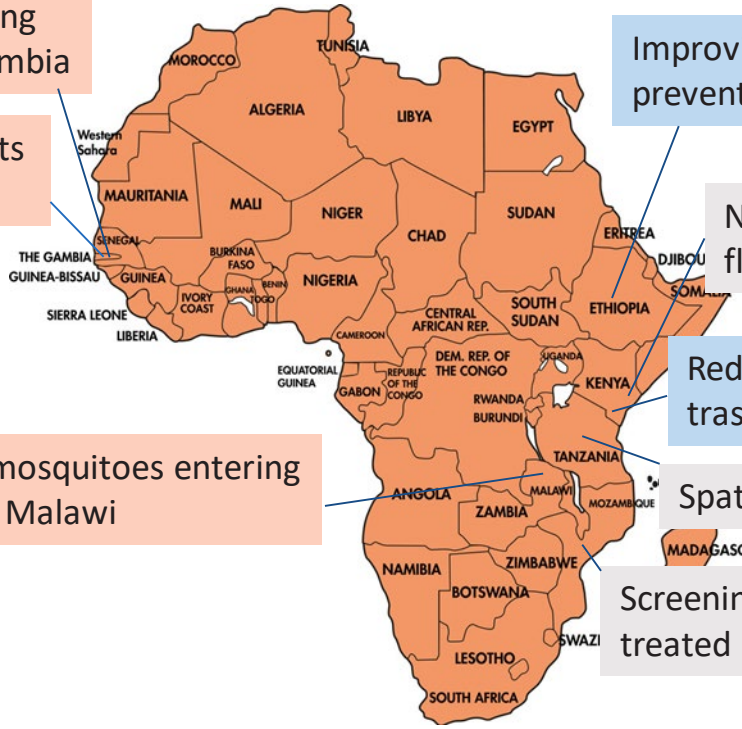
BOVA network

Durham University

Eight pump priming projects

Computer Fluid Dynamic modelling of mosquito attractants - The Gambia

Studying how house height affects mosquito entry - The Gambia



Improving social housing design to prevent malaria - Ethiopia

New floors for Chiggers flea control - Kenya

Reducing mosquito habitats: trash to treasure - Kenya

Spatial-repellent chairs - Tanzania

Screening with novel insecticide-treated netting - Mozambique

Filming mosquitoes entering houses - Malawi

Basic research

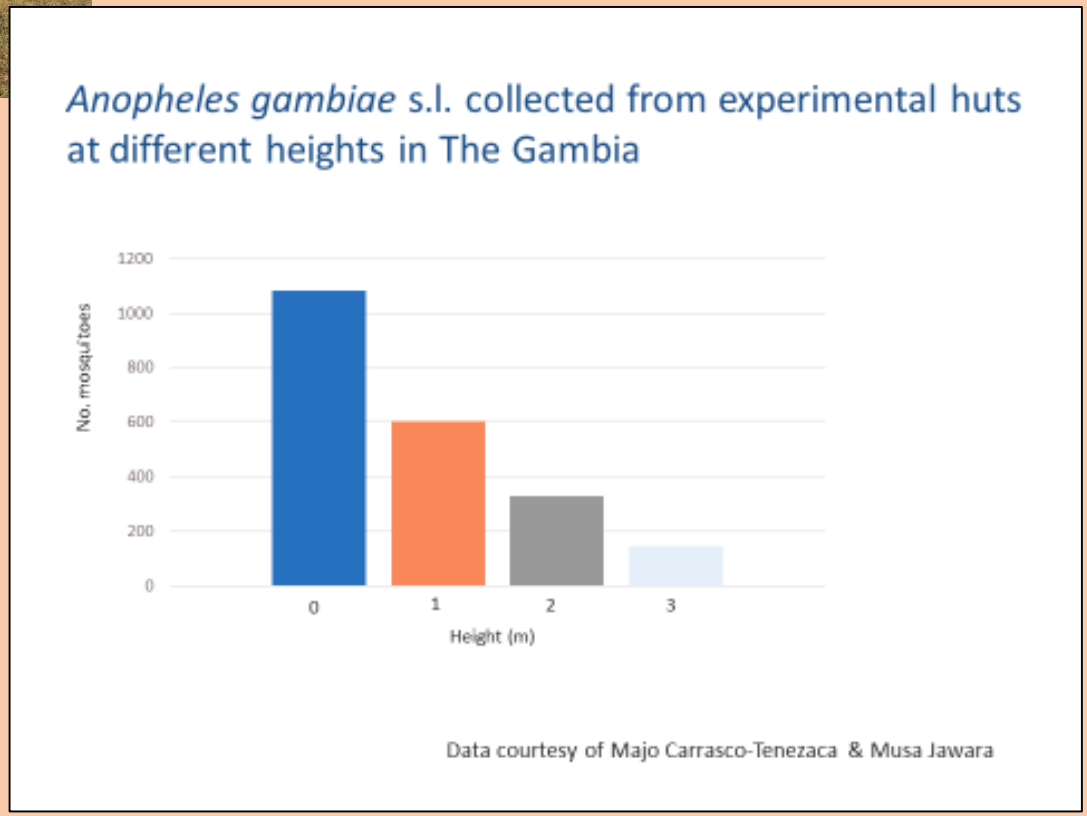
New tools

Multi-sectoral & Scale-up

Basic science

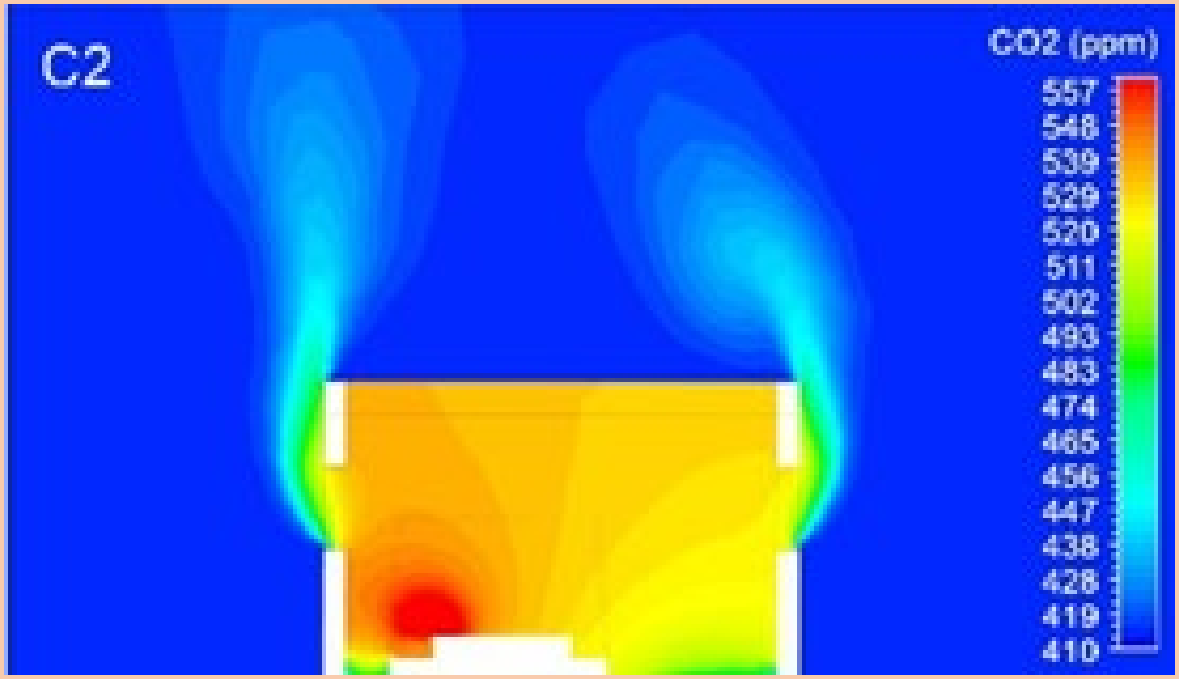
How does house height affect mosquito entry - The Gambia (L.S.H.& T.M. and Royal Danish School of Architecture)

Raising houses above ground level reduces entry of malaria mosquitoes



Basic science

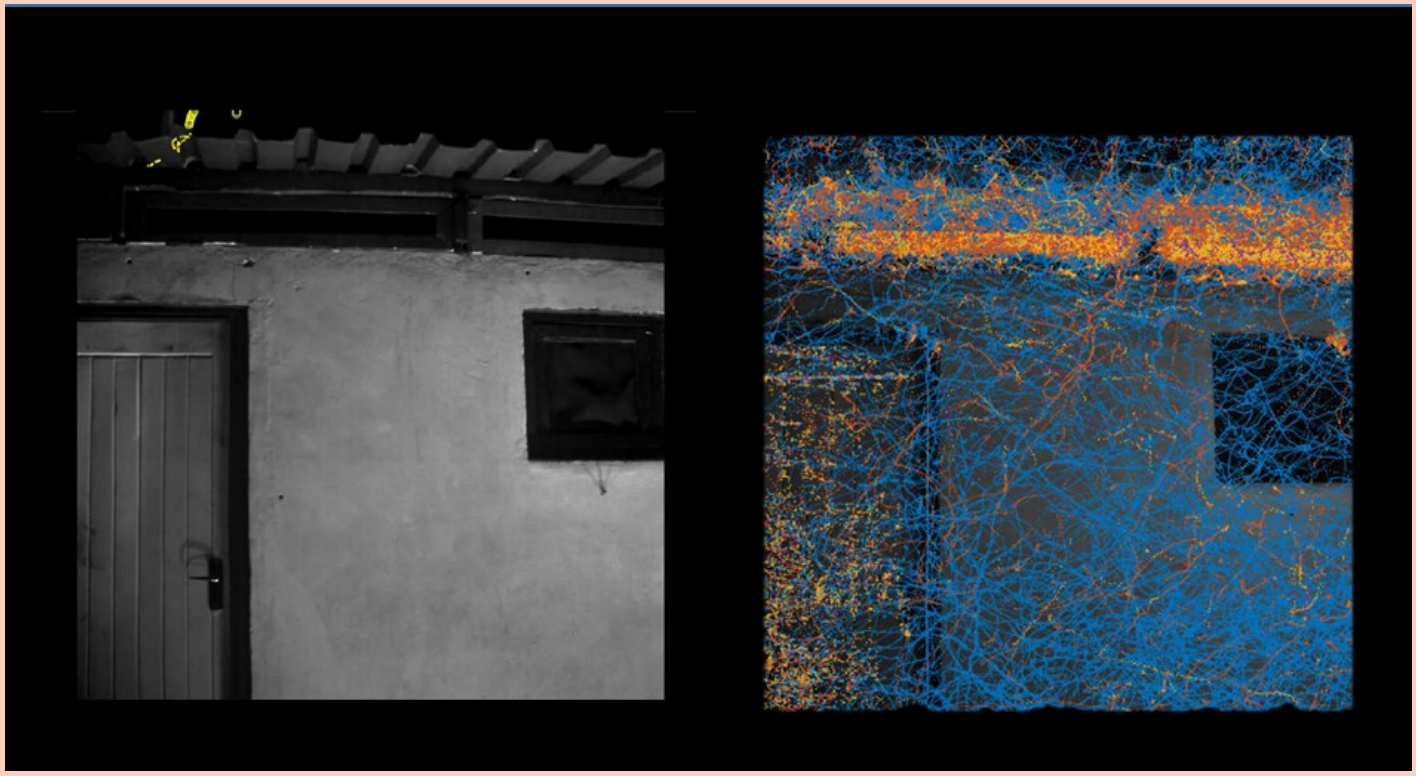
Computer Fluid Dynamic modelling of mosquito attractants – Denmark (Royal Danish Academy of Architecture and L.S.H.& T.M.)



Showing carbon dioxide movement in a Gambia house with screened windows

Basic science

Filming mosquitoes entering houses – Malawi (University of Malawi and Wageningen University)



Showing how mosquitoes are attracted to screened eaves, but not screened windows

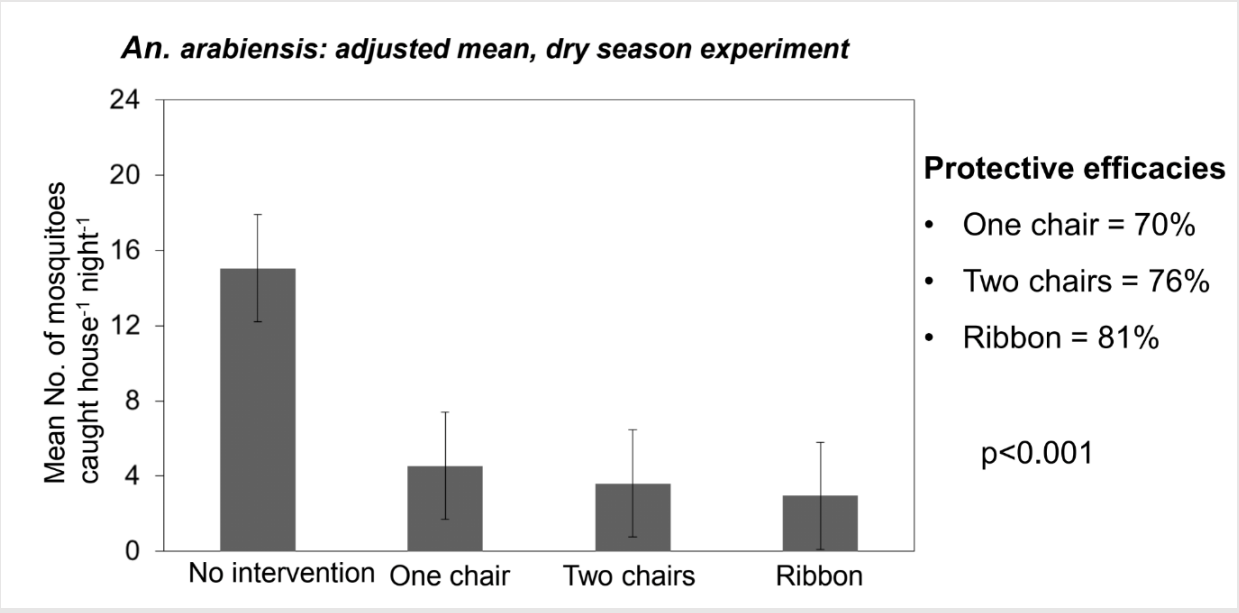
New tools

New floors for Chiggers flea control – Kenya (I.C.I.P.E. and K.E.M.R.I.)

Halving the incidence of Tungiasis with tough, low cost flooring

New tools

Spatial-repellent chairs – Tanzania (Ifakara Health Centre)

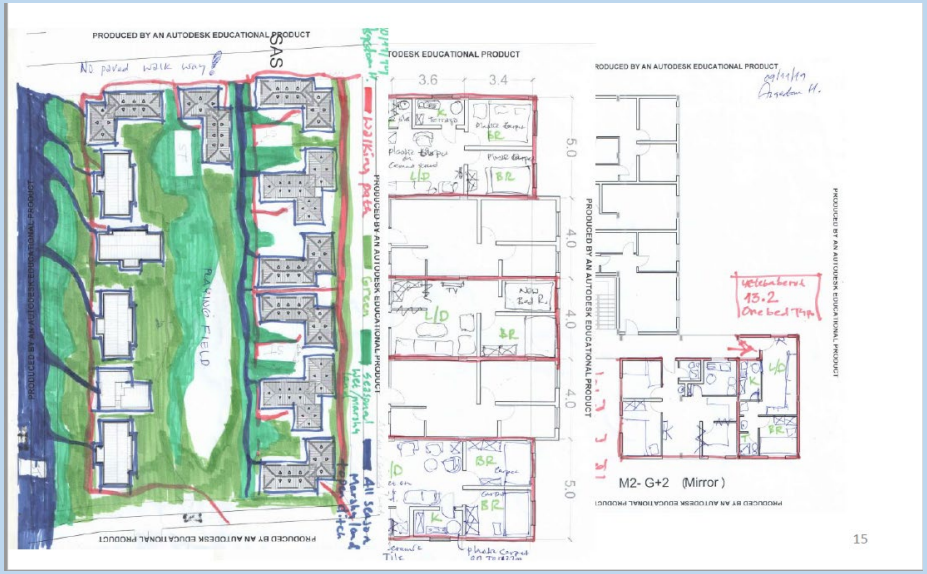


Masalu J *et al* (2020) *Malaria journal* **19**(1) http://dx.doi.org/10.1186/s12936-020-03180-1

Multi-sectoral and scale-up

Improving social housing design to prevent malaria – Ethiopia (Addis Ababa and Jimma Universities

Architecture



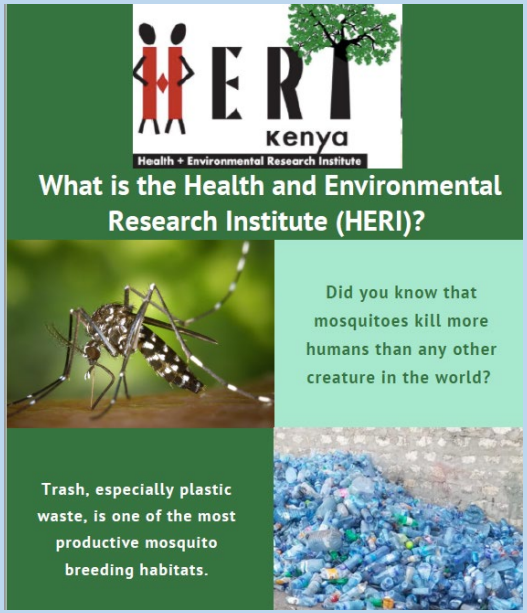
Social science

Entomology

Combining all three disciplines to propose a vector-preventive design for condominium housing to the Ministry of Health and the Ministry of Work and Urban Development

Multi-sectoral and scale-up

Reducing mosquito habitats: trash to treasure – Kenya (T.U.M. and Stanford University)



https://www.heri-kenya.org/

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PAN-AFRICA MOSQUITO CONTROL ASSOCIATION
PAMCA

RBM Partnership
To End Malaria

Commonwealth
Local Government
Forum
clgf

World Health
Organization

Global Vector Hub
The global open access community
for vector control information and research.

Find out more about the pump prime projects and our network!

Recording of our open network meeting October 2020 - https://globalvectorhub.tghn.org/online-workshops/bova-network/

www.bovanetwork.org

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BOVA network

GCRF Global Challenges Research Fund

BBSRC bioscience for the future

MRC Medical Research Council

NERC SCIENCE OF THE ENVIRONMENT