LSTM
LIVERPOOL SCHOOL
OF TROPICAL MEDICINE

# *Little book of*
# INNOVATION

“The Liverpool School of Tropical Medicine’s research is helping provide the kind of innovative tools we need to eradicate ten Neglected Tropical Diseases by 2020. It was inspiring to visit the School last year to see their work first-hand…”

Bill Gates, April 2017


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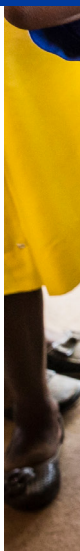
**We have led the development of the first single new drug to treat two of the most devastating tropical diseases, affecting 1.7bn people globally.**

The drug has the potential to revolutionise the way we manage Neglected Tropical Diseases and reduce the timeframes for disease elimination by decades.



## This mother suffers daily pain and has been ostracised by her community.

She relies on her children to care for her and work to feed the family.

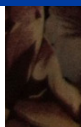
Through our work, the family can access an innovative new drug, which will enable the mother to work, her children attend school, and the whole family to prosper.


THISIDEA
WHEN WE TOOK

Using a unique model we measure levels of bacteria in the nose to better understand susceptibility to pneumonia and related diseases.

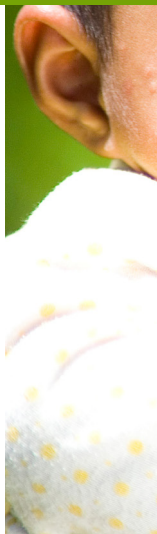
This approach can also test vaccines against pneumonia, the biggest killer of under fives globally.

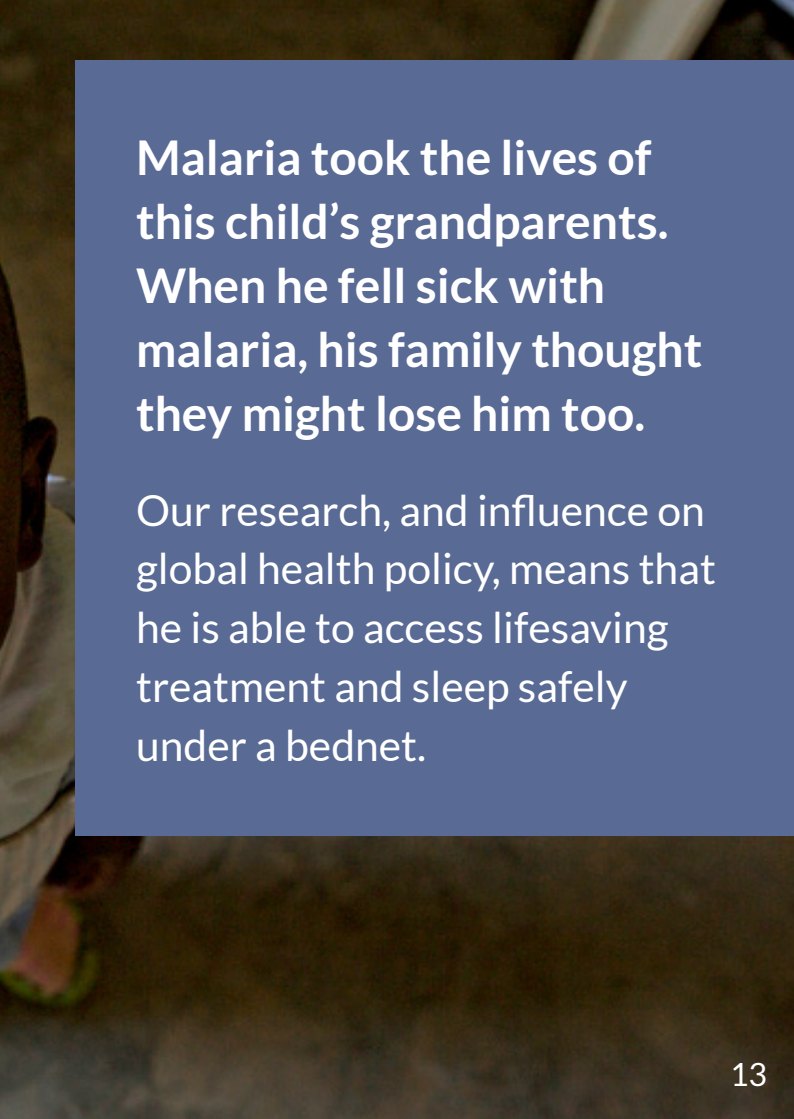
**Vaccines can now be tested on fewer people in a shorter time-frame, significantly reducing costs.**



**We are a major influencer for change through numerous WHO policies and guidelines, including malaria in pregnancy, health systems development and Quality of Care.**

This has a direct impact on the control of diseases and treatment of patients across the world, reducing mortality and disability in vulnerable populations.



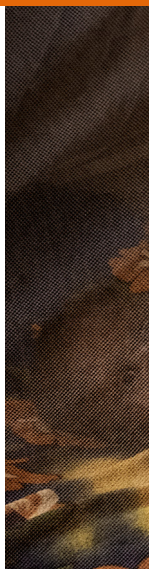


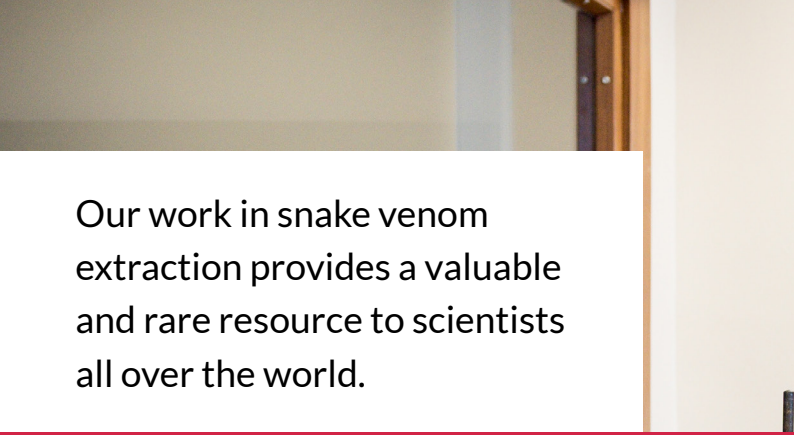
**Malaria took the lives of this child's grandparents. When he fell sick with malaria, his family thought they might lose him too.**

Our research, and influence on global health policy, means that he is able to access lifesaving treatment and sleep safely under a bednet.

**Our work has led to the creation of a world-leading product development partnership dedicated to bringing new insecticides to market within the next five years.**

This major breakthrough will help to tackle the spread of diseases by mosquitoes. It represents one of the most significant global health initiatives in decades.



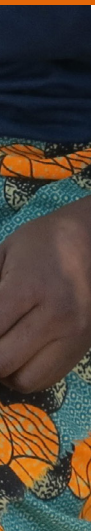


Our work in snake venom extraction provides a valuable and rare resource to scientists all over the world.

**Our researchers are working on the discovery of a universal antivenom, which could deliver lifesaving treatment to hundreds of thousands of snakebite victims.**


COOKING AND PNEUMO
CAPS
MASIMO

**We were instrumental in establishing the College of Medicine in Malawi: the first of its kind in the country, enabling the training of more than 700 medical doctors across Malawi.**



The Malawi-Liverpool Welcome Trust research programme (MLW) conducts locally-led quality research relevant to Malawi, including malaria, HIV/AIDS, TB, pneumonia and bacterial infections.

In partnership with WHO, we have developed a smartphone app to help health workers understand why circa 5.3 million babies each year are stillborn or die in the first month of life. The majority of these deaths are in low and middle income countries.

**The app will help frontline health workers understand how the quality of care could be improved to prevent future deaths.**

**Our work with Far East Prisoners of War (FEPOW) has spanned seven decades, leading to pioneering treatment of their medical conditions.**

Our identification of 'FEPOW Syndrome' (post-traumatic stress disorder) was the first to look at the psychological effects of conflict and has influenced how these conditions are treated today.

**LSTM has been at the forefront of innovation ever since its foundation in 1898.**

From discovery of the malaria transmission from mosquito to man; to development of new drugs, insecticides, vaccines and diagnostics;  pioneering resistance research and building capacity in health systems...


LSTM
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VISITOR

## ...by training generations of leaders and innovators in global health.

Alumna Dr Letitia Obeng was the first Ghanaian female to achieve bachelor's and doctoral degrees in science, and was the first female president of Ghana Academy of Arts and Sciences.

She spearheaded the foundation of Ghana's national water research institute and was twice awarded the Order of the Star of Ghana.

# BREAKING THE CYCLE

## of poor health and poverty

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Charity number: 222655