Congratulations to our partner, Liverpool School of Tropical Medicine, for being awarded the Queen's Anniversary Prize for UK Higher and Further Education for Tiny Targets. The revolutionary vector control product has radically reduced the incidence of Human African trypanosomiasis (a.k.a. "sleeping sickness") across sub-Saharan Africa. The Prizes were presented at Buckingham Palace on 22 February.

In 1998, more than 35,000 cases of human African trypanosomiasis, a neglected tropical disease transmitted by tsese flies, were reported; in 2022, just 799 were reported (WHO, 2022)—a 97% decrease.

The decline is the result of a multifaceted approach involving mass screening, treatment of individual cases, and vector control measures. Treatment options over the years improved from non-existent to potentially fatal, then merely difficult to implement. In the 2000s, the Liverpool School of Tropical Medicine and partners in Africa and Europe began researching ways to prevent people from getting infected in the first place. In other words, to discover a way to control transmission of the parasite and thereby disrupt the disease's vector.

Revolutionising vector control with the right shade of blue

Early research by the LSTM team revealed the tsetse's attraction to a specific shade of blue, the initial breakthrough in the fight against sleeping sickness. Leveraging the expertise gained from manufacturing long-lasting insecticidal nets for malaria control, Vestergaard introduced an innovative solution known as 'Tiny Targets'. This evolution was a collaborative effort, with designs shaped, tested, and validated in consultation with researchers and stakeholders.

Tiny Targets are small panels of blue cloth and black netting infused with insecticide suspended between two stakes. They have proven to be a game-changer in the battle against g-HAT, leading to an 80% reduction in the abundance of tsetse flies in areas where it had been prevalent (Bessell *et al*., 2021). Inexpensive to produce at scale, Tiny Targets overcame the historical obstacle of cost-effectiveness in vector control. These innovations fundamentally altered the landscape, marking a pivotal shift in the effectiveness of vector control strategies. The success of this venture represents an

inspiring testament to the potential of academia and industry working together to address global health challenges.

Vestergaard is committed to continuing to provide these revolutionary solutions free of charge. The ultimate goal remains to achieve zero transmissions by 2030.

Queen’s Anniversary Prize

The Queen’s Anniversary Prize, the highest national honour in the UK for contributions to higher and further education, recognises work that “delivers real benefit to the wider world.” The Royal Anniversary Trust, which manages the Prizes, acknowledges the vital contributions of LSTM and its partners to eliminating sleeping sickness, reinforcing the importance of innovative solutions in public health. This recognition is a well-deserved honour for LSTM, affirming itsimpact in helping to safeguard lives and livelihoods in vulnerable communities.

In appreciation of Vestergaard’s contribution, Melinda Hadi, Director of Market Development & Access, Public Health, was invited to join the LSTM team at the Guildhall in London to attend the celebrations.

Melinda said, “Vestergaard congratulates the Liverpool School of Tropical Medicine on the Queen’s Anniversary Prize for Tiny Targets, a life-saving vector control tool against a neglected tropical disease known as sleeping sickness. The development of Tiny Targets is a testament to a long-standing commitment to scientific research, innovation, and collaboration. We are thrilled to be LSTM’s industry partner for Tiny Targets and remain committed to manufacturing and donating this cost-effective tool for sleeping sickness elimination programmes in Africa. Thank you for inviting us to celebrate with you, and congratulations again!”

We celebrate our partnership with LSTM and congratulate them on this remarkable achievement and prestigious award.

For more information, visit: https://www.tsetse.org/

References

Bessell, P.R., Esterhuizen, J., Lehane, M.J. Longbottom, J., Mugenyi, A., Selby, R., Tirados, In., Torr, S.J., Waiswa, C., Wamboga, C., Hope, A. (2021) Estimating the impact of Tiny Targets in reducing the incidence of Gambian sleeping sickness in the North-west Uganda focus. *Parasites Vectors.* **14** (410). Available from: doi: 10.1186/s13071-021-04889-x For more information, visit: https://www.tsetse.org/

WHO. (2022) *Human African trypanosomiasis (sleeping sickness)*. Available from: https://www.who.int/data/gho/data/themes/topics/human-african-trypanosomiasis [Accessed 27 February 2024].