



# Parasite Street Science

## An Arts and Science Public Engagement project

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KAMUZU  
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MVLS Engagement with  
Research Fund



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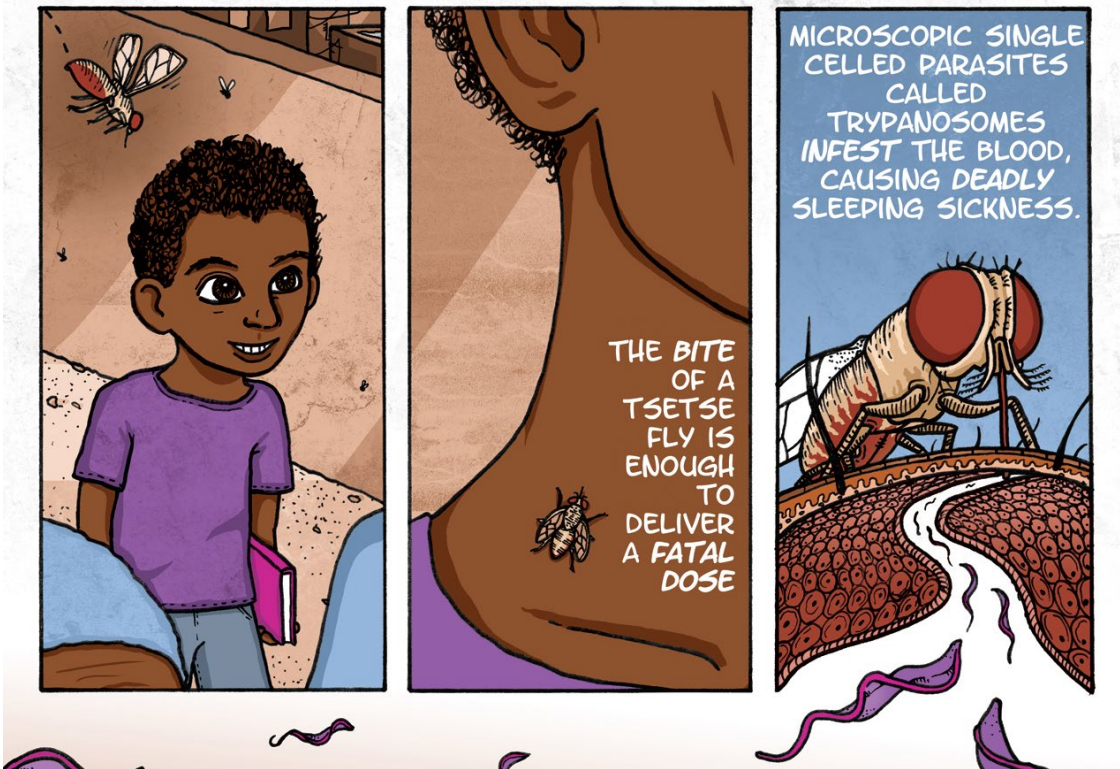
Nicola Veitch, PhD  
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School of Infection and Immunity

# Aim of project

- To engage with local communities in Malawi affected by African Sleeping Sickness using street theatre to boost awareness of the disease.
- Open dialogue to build trust in scientists in these local communities.



# African Sleeping Sickness

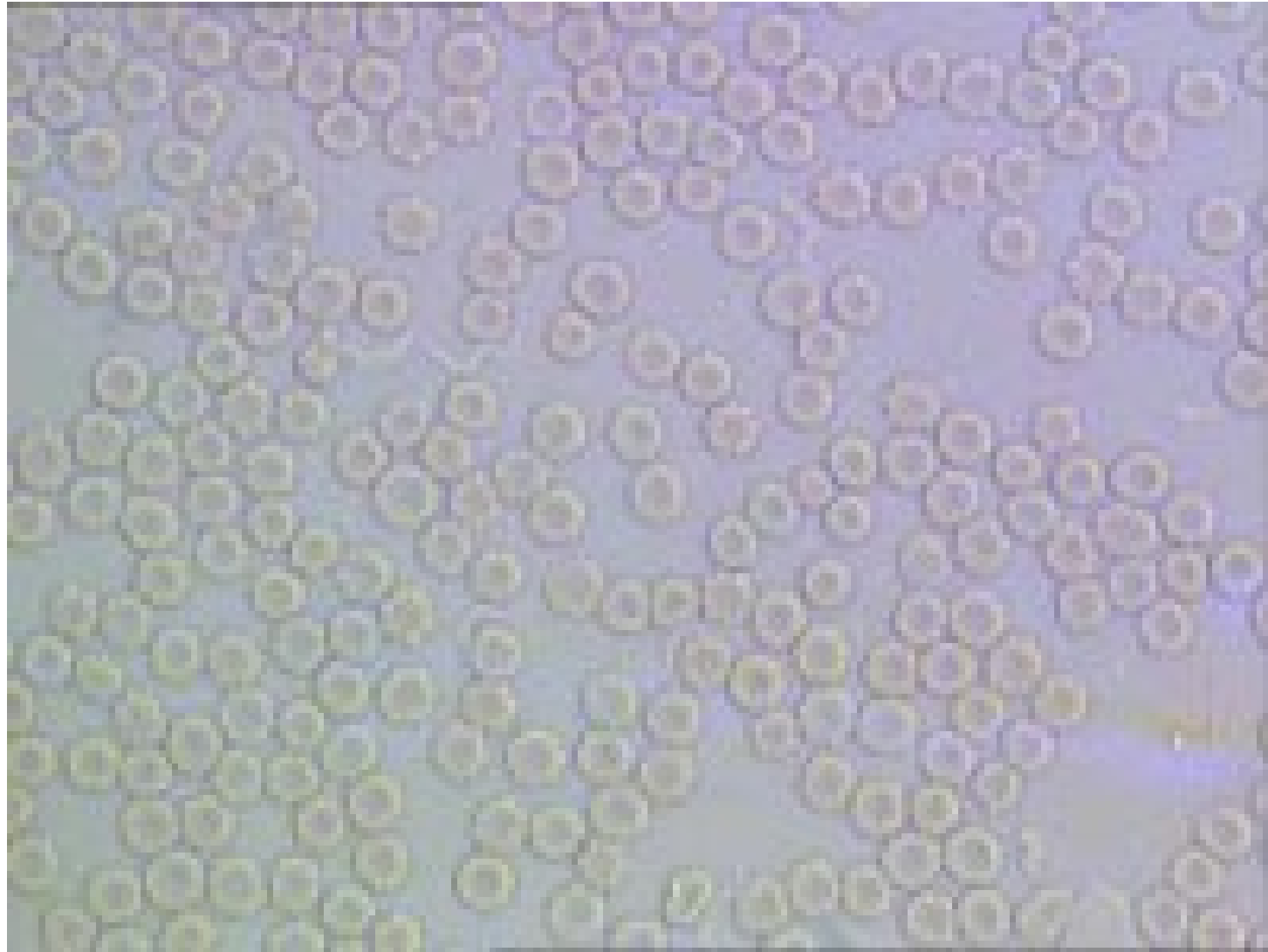


- At end of 20<sup>th</sup> century, 40,000 reported infections (estimated 300,000 undiagnosed cases)
- Unpredictable nature of occurrence
- Increased surveillance and diagnosis, leading to treatment, meant reported infections dropped below 10,000 in 2009 for first time in 50 years



The tsetse belt

# Trypanosomiasis



*Moving Trypanosoma brucei*

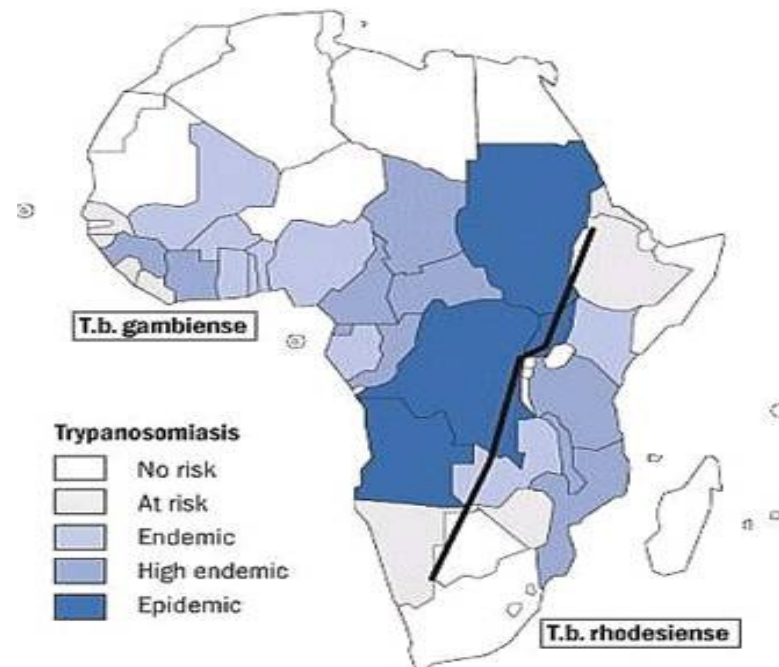


# African Trypanosomiasis

- Fatal if not treated
- No vaccine
- Treatment can be very toxic
- Tsetse traps effective at reducing vector
- Diagnosis and swift treatment important



Fredrick Jumah, Malawi 2022



Tsetse Target



Tsetse Trap

# Malawi

- 20 million people
- Capital Lilongwe
- Biggest city Blantyre
- Research collaborations with Kamuzu University
- Main areas with sleeping sickness affected in Northern Malawi



**Southern Africa**

# Collaborating with Outdoor Arts Org Surge/Voices Malawi

- Outdoor Arts attracts audiences from diverse backgrounds and social groups and enhances sense of community\*
- Started with family connections...
- Together, built team of international collaborators; arts-science project
- Malawi-common use of outdoor arts for health messaging



\* Outdoor Arts Audience Report 2018: [1637 \(theaudienceagency.org\)](https://theaudienceagency.org/1637)



# Discussion Point 1

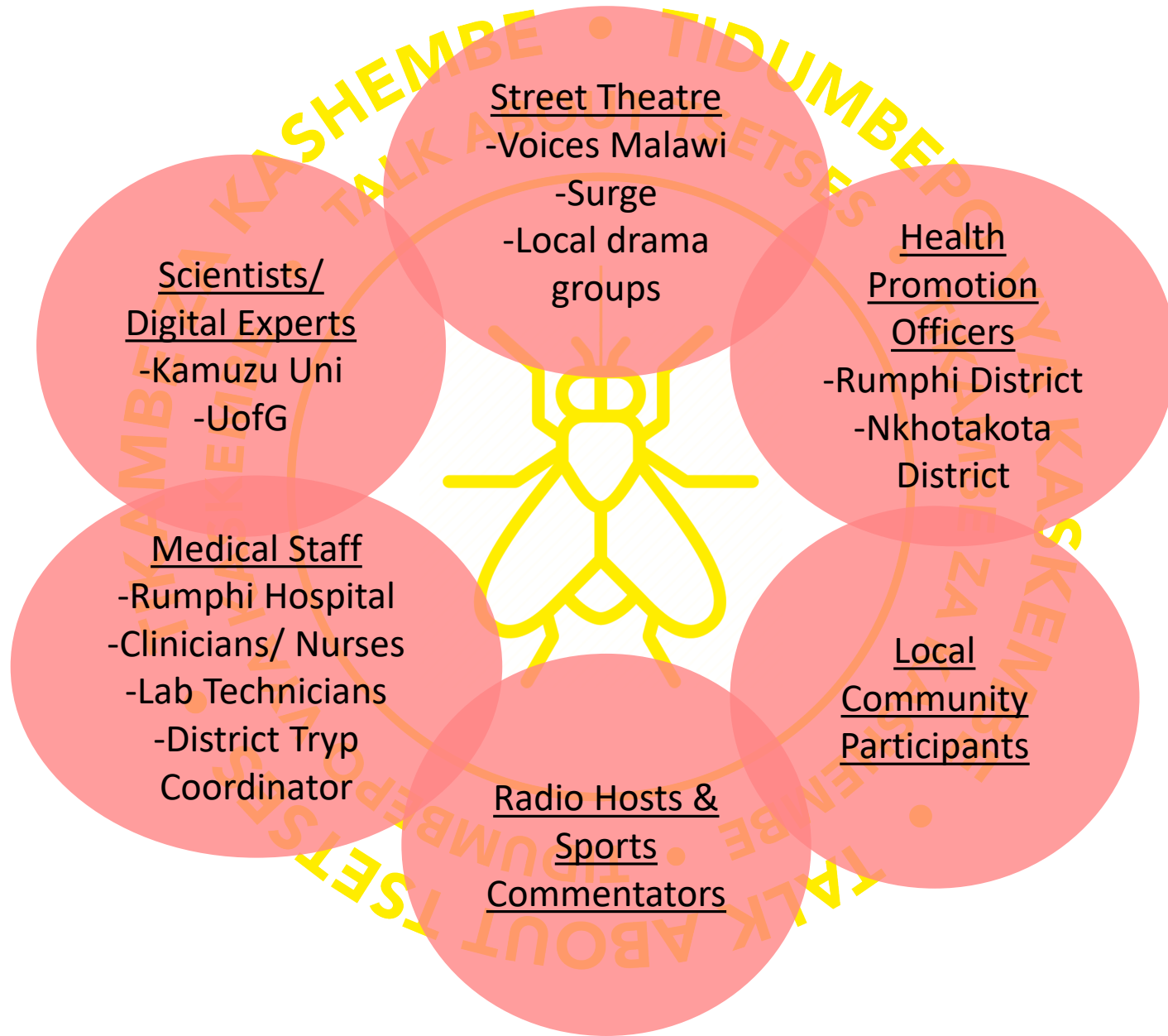
1

What ways have you seen street theatre or public performance used for PE?

2

What are considerations when using street theatre? What are the boundaries/barriers?

# Parasite Street Science Team



# Project Timeline

Developed an outdoor theatre performance in Scotland, with project partners from Malawi and performed at Partick Thistle Football Grounds



Multiple partners worked together in Rumphi, Malawi to create a new Talk About Tsetse Performance in October 2022



Performance toured 6 different rural communities in Rumphi and Nkhotakota Districts



Public engagement further developed through radio shows, with Q&A sessions with experts



Digital Resources created, including web pages, stop motion video, interviews, documentary





Talk About Tsetses Malawi - October 2022.



- We visited 2 districts and performed 4 shows
- We were warmly welcomed in Nkhotakota by the local community



[MALAWI PERFORMANCE VIDEO – YouTube](#) (2 mins)

# Evaluation Methodology

- Assess learning outcomes from participants at event in local language
- Assess impact of participating in project via questionnaires and interviews
- Long-term impacts difficult to assess: maintenance of tsetse targets & increase in diagnosis of sleeping sickness patients



# Discussion Point 2

1

What are challenges you have faced in public engagement?

2

What challenges do you think we faced?



## Challenges:

- Cholera Outbreak!
- Power unstable
- Water access challenging
- Petrol/Diesel shortages
- Few people have access to smartphones
- Working in 3 languages!
- T-shirts
- Naming of the project

# What's Next?

- Developing project 'Parasite Street Science goes to the Movies' using mobile cinema.
- University of Glasgow invested in new scientific labs in Zambia and Malawi to enhance research collaborations.
- Sleeping Sickness numbers are gradually coming down, however localised outbreaks are common, so disease unpredictable.
- New drug on the horizon that is less toxic than current treatment.

# Reflections & Considerations

- Importance of co-creation and use of local community participants
- Respect and understanding of different cultures and approaches to PE
- Equality of experience
- Balance of spending power



# Discussion Point 3

1

Has anyone else had similar experiences?

2

How can you see this approach used in your field?

# Acknowledgements & Project Updates

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Janelisa Musaya

Lumbani Pete

### Rumphi District Hospital

Bwanalori Mwamlima

Fredrick Jumah

### Nkotakota District Hospital

Garry Chilinga

### Voices Malawi

John Alufandika

### Performers

Maxwell Chilombo

John Alufandika

Astrida Vwemu

Mavuto Nyasulu

James Chirwa

Zainabu Asedi

Christina Mkandawire

Rabecca Becky Mwase

Maganizo Zimba

Shedrick

Shatiell Tweya

Lugo Cultural Team

Chiusi Kanada Dance Group

Gule Wamkulu dancers



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