



Malaria transmission work at LSHTM

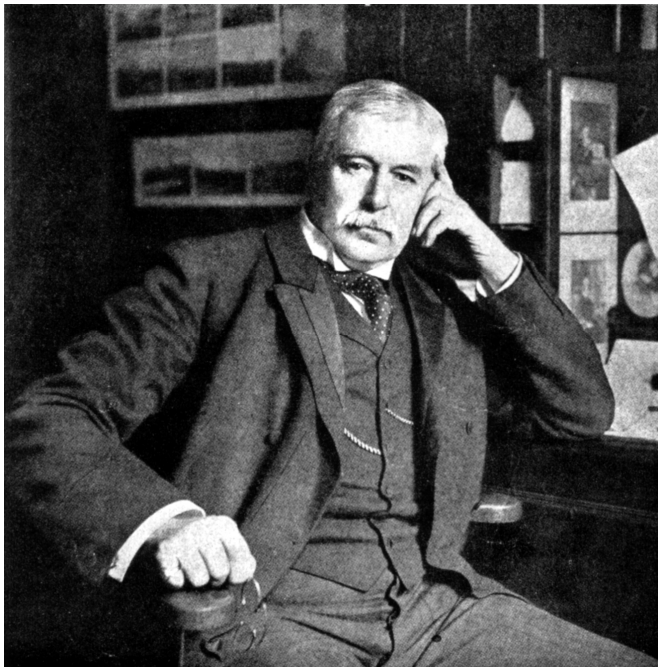
A tale of perseverance

Mojca Kristan, Michael Delves, Christiaan van Ooij

Crick & Partners Malaria Symposium
3rd September 2019



Once upon a time...

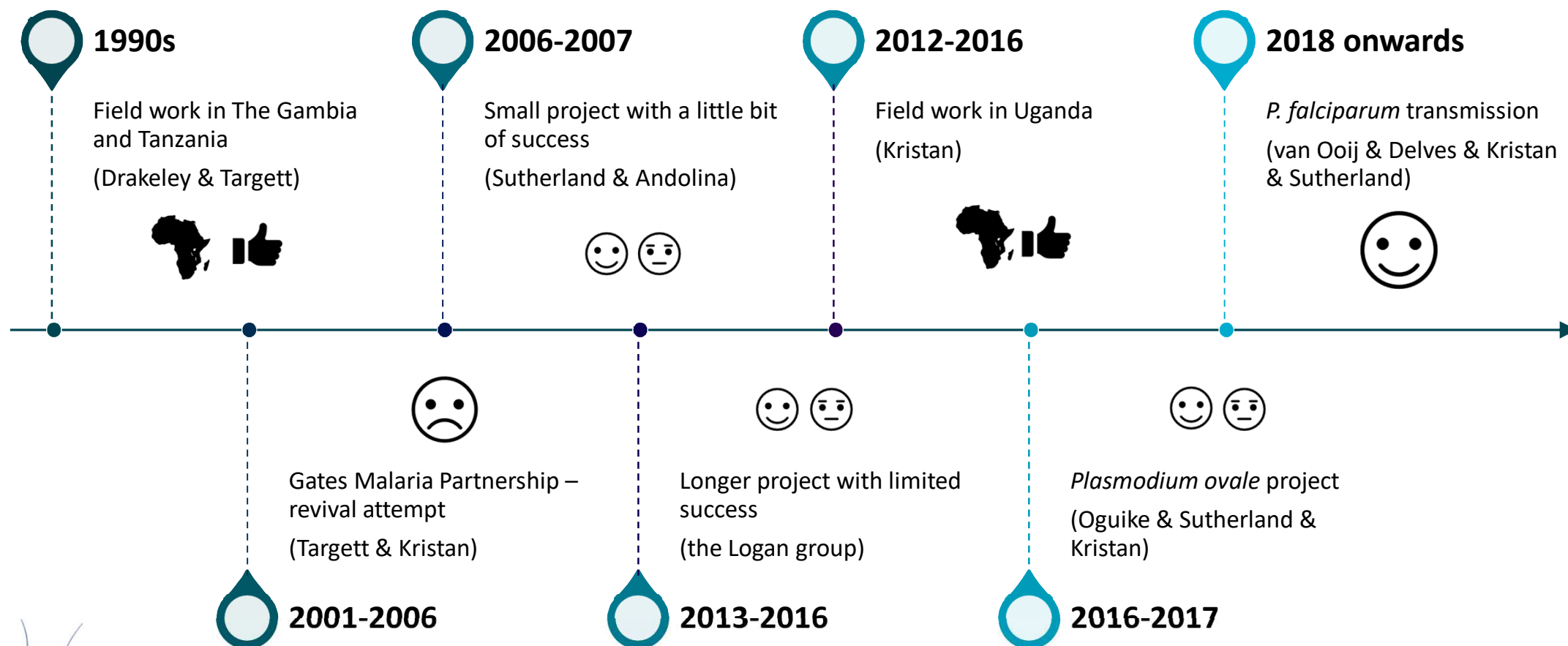


Patrick Manson



Ronald Ross

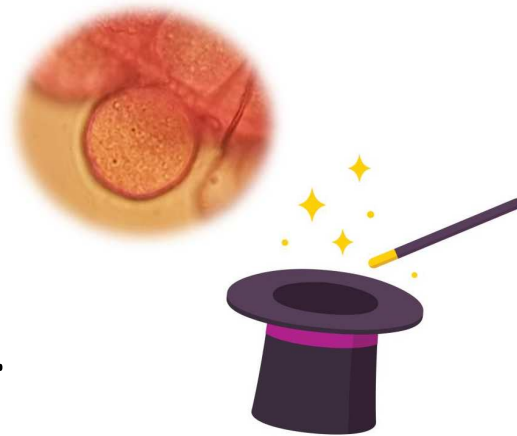
Recent history...



2018 onwards – the four musketeers

The right people join forces and
magic happens...

If only it was that easy...
It's lots of hard work...
...but it seems it has worked!

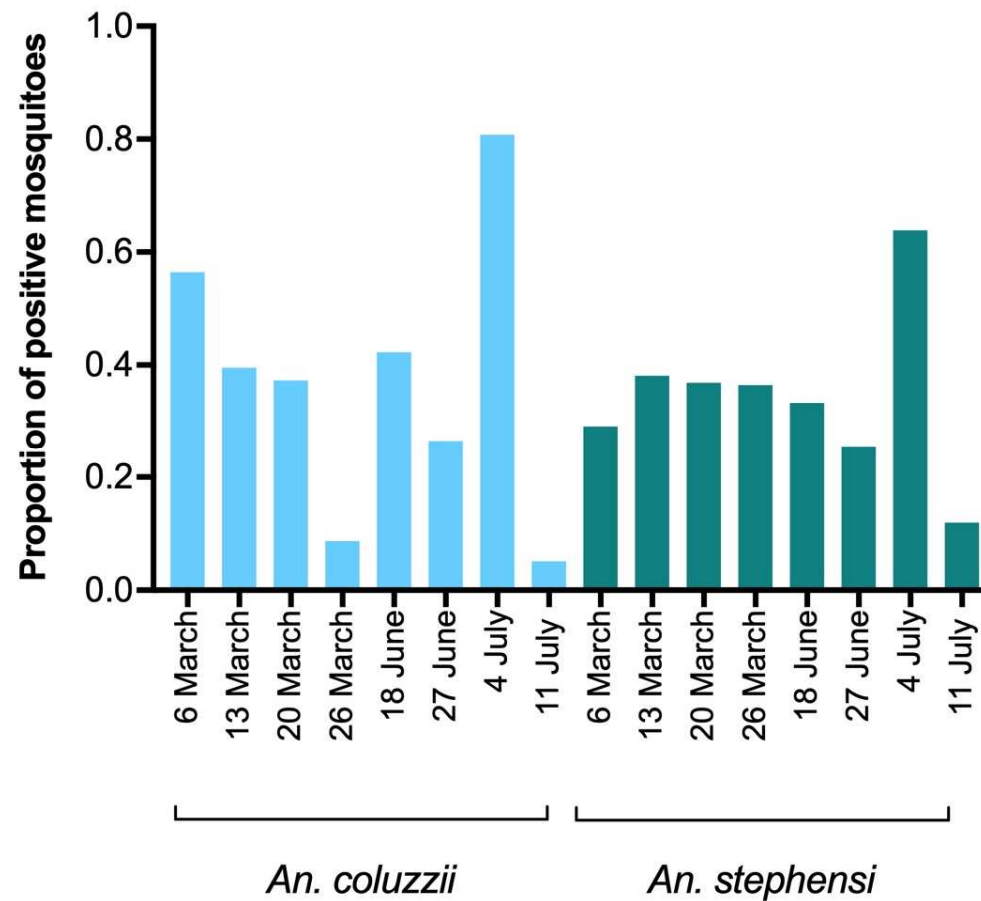


Ten feeds between September 2018 and July 2019

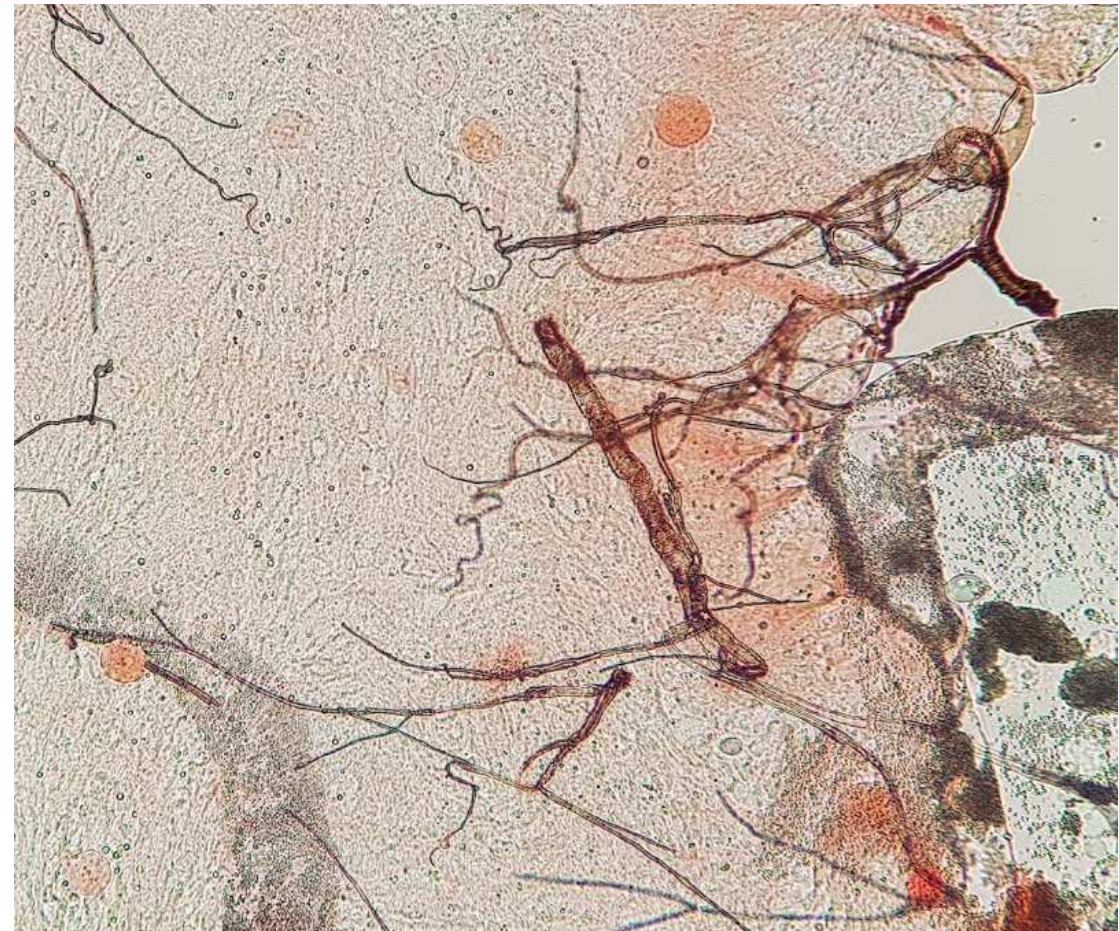
- *P. falciparum* NF54
- *An. coluzzii* (N'gousso strain)
- *An. stephensi* (SK strain)

- Exflagellation detected (10/10)
- Oocysts detected (9/10)
- Sporozoites detected (2/2)

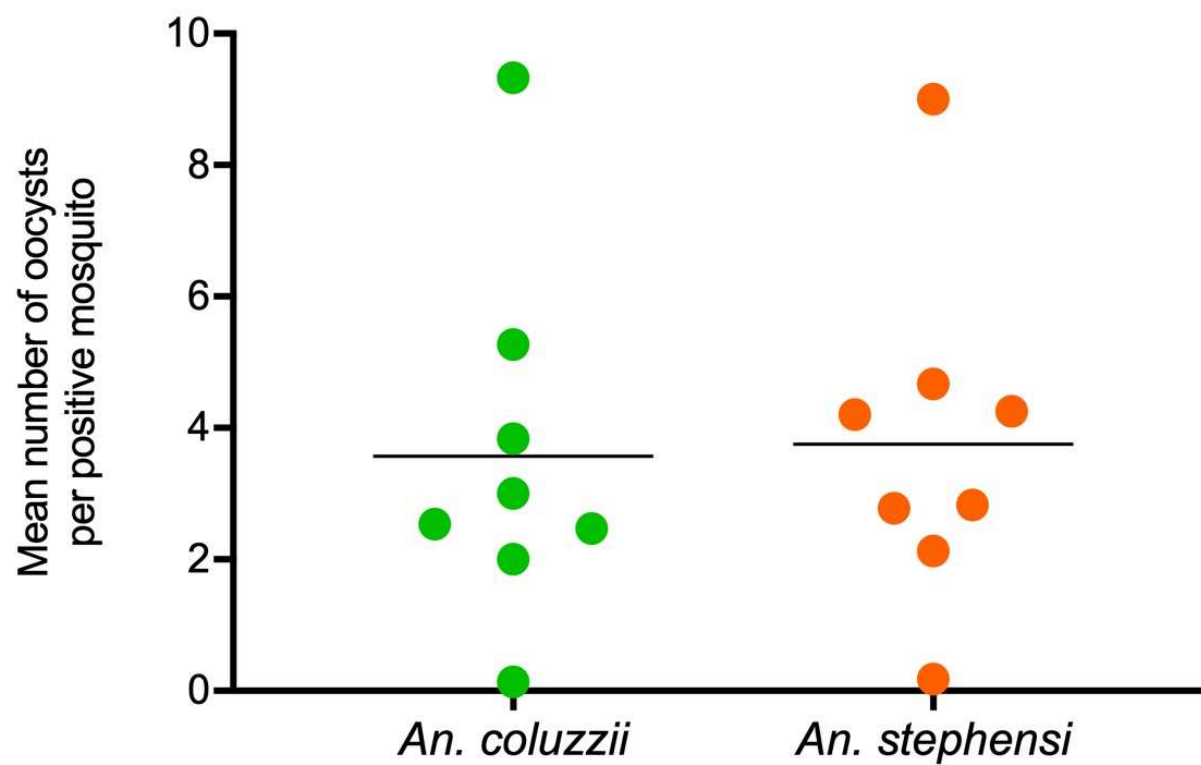
Oocyst prevalence



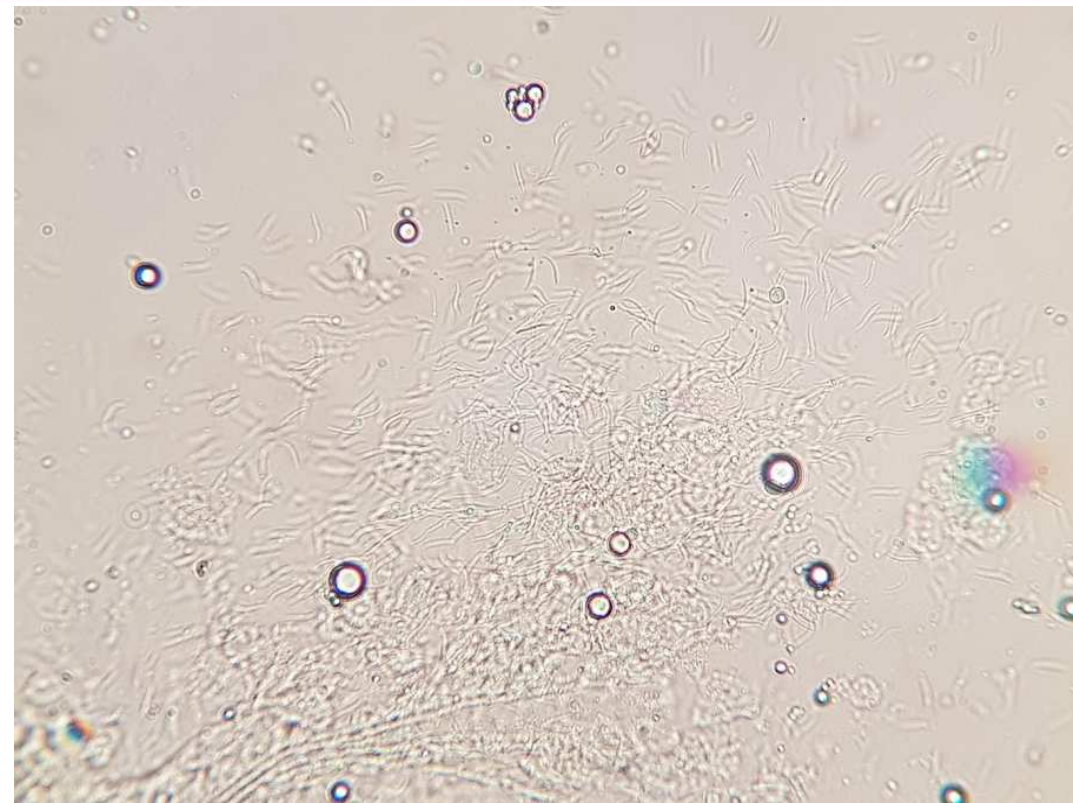
Oocysts



Oocyst intensity



Sporozoites



Sporozoites in *An. coluzzii*: 40% positive

Next steps...

- Further testing and improvements of the system in progress
- A number of research questions can be addressed:
 - Infection with different parasite strains and patient isolates
 - Infection of different mosquito strains
 - Compound assays to test for transmission blocking
 - ...
 - Let us know?

Future considerations

How inter-institutional/interdisciplinary collaboration could contribute to further success of our research?

- Provision of service to LSHTM and external users
- Funding and cost recovery (staff costs, reagents/consumables)
 - Written into grants → collaboration
 - Service → charges agreed on case by case basis
- We're open for business – come talk to us!

Work with us

Contact us by email:

- Mojca: Mojca.Kristan@lshtm.ac.uk
- Michael: Michael.Delves@lshtm.ac.uk
- Christiaan: Christiaan.vanOoij@lshtm.ac.uk

Acknowledgements

To all those doing malaria transmission work – at LSHTM and elsewhere -
who keep going and refuse to give up...