

# The Reece Lab On Tour

Petra Schneider, Aidan J. O'Donnell, Jacob Holland and Sarah E. Reece.  
Institute of Ecology and Evolution, University of Edinburgh

ScotPEN  
Scottish Public Engagement Network

RAISE

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At the *Reece Lab*, we study malaria parasites , mosquitoes  and body clocks .

In the last 2 years, we turned the idea of going on a science road trip into reality. Public engagement allows us to talk about our work, about the cool job we do every day and we get exposed to different views on the science questions we try to tackle, whilst inspiring a new generation of scientists.

Our *on Tour* project aims to make science more accessible for rural primary schools across Scotland. We designed teaching modules for two themes related to our research, fully integrated with the Scottish Curriculum, and provide in-person teacher training.

We have now taken >1000 primary school pupils and their teachers on an adventure to learn about our research. We learned about designing activities, improving them, and how to make large-scale public engagement sustainable within our research.

Join our workshop on public engagement.

Bring your lunch and your friends!

Thursday 12:40hrs



### The Weird & Wonderful World of Mosquitoes

They are the world's most dangerous animal. The public are depending on you as a scientist to find out all the information you can to keep people safe! What aspects of their bodies and lifestyle help mosquitoes thrive in the world? How do you know which ones bite and which ones don't? How do people protect themselves from bites? What important jobs do these creatures do for nature?

### Tick Tock Goes Nature's Clock

What's that ticking sound?

That's the sound of your body clock. Have you ever wondered why some animals sleep at night and others are awake? They have a body clock too! But why are there many different schedules in nature? Join us in exploring how body clocks work, how animals tell the time, discover whether you're a night owl or an early morning lark, and how your clock keeps you healthy!



## Why?

- Share and inspire
- Improve our science
- Make science accessible

## Aims

- Curiosity & Awareness
- Empower
- STEM careers are fun!

## Impact

- Pupils
- Teachers
- Scientists

Pupils were very surprised



to find out that scientists spend much of their time investigating things they do **not** (yet) understand.

## Maximise your impact - What we learned

Build a network with educational authorities and teachers.

- Assess what goals your audience has.
- Help with planning & logistics.

Integrate activities with the curriculum (Science & beyond)

- More varied activities, and helps teachers.
  - Maths & numeracy: measure, collect data.
  - Literacy: interpret information & ask questions.
  - Expressive arts: use imagination to solve problems.
  - Health & well-being: disease risk, investigate career paths.

Teacher training

- Very popular!
- Increase teachers' knowledge and confidence.
- More likely to engage in activities now and in the future.
- USB microscopes donated.

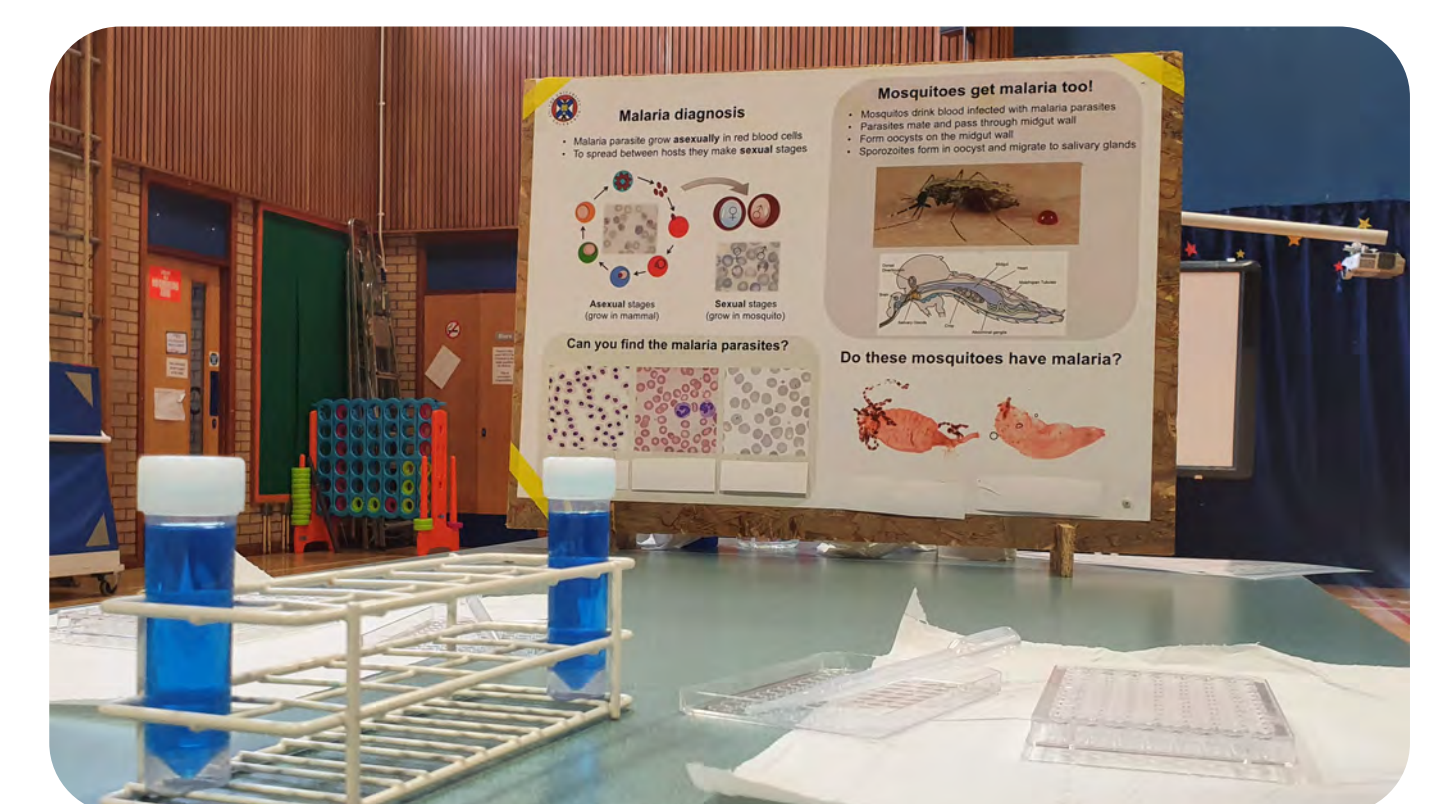
Evaluation & improvement

- Pre- and post activity surveys.

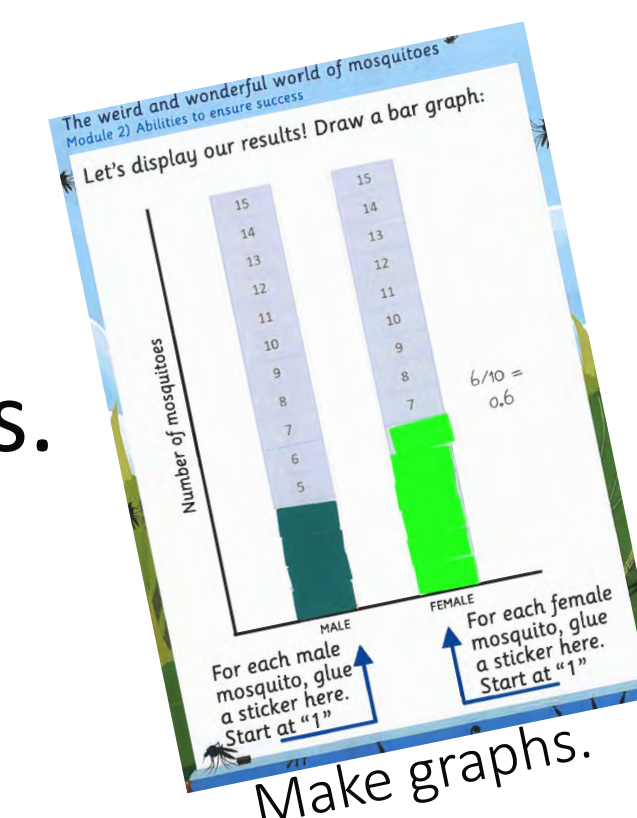
Scientist: *a reminder that my daily job is pretty cool (we tend to forget sometimes)*

*100% of teachers felt the training increased their knowledge, or confidence in teaching about this subject.*

*Pupil's comment to his mum: "totally cool!"*



Practice laboratory skills.



Impression of Sarah with mosquitoes.



Finding alternative use for the donated microscopes.

## Want to know more?

[therecelab.com/on-tour](http://therecelab.com/on-tour)



Our introduction video:  
[vimeo.com/559025235](http://vimeo.com/559025235)

## Overcome challenges and have fun

- Logistical challenges:
  - Week-long trips with live tropical mosquitoes, in winter.
  - COVID (and the importance of science friends!).
- Immediate feedback and appreciation.
- Unusual questions, and a lot of them!
- Sustainability and future proofing.
  - More in-class visits, but we focus on teacher-led activities, supported by teacher training and locally available borrow-boxes.

