



Tanzania field trip

Philip T.L.C. Clausen

Democratic
Republic of
Congo

Rwanda

Burundi

Nairobi

Mwanza

Arusha

Malindi

Mombasa

Kindu

Kigoma

Kongoni

buji-Mayi

ene-Ditu

Manono

Tanzania

Dar es Salaam

Morogoro

Iringa

Kamina

Upemba
National Park

Mbeya

Tunduma

Kasama

Songea

Mtwara


Likasi

Mzuzuo

Malawi

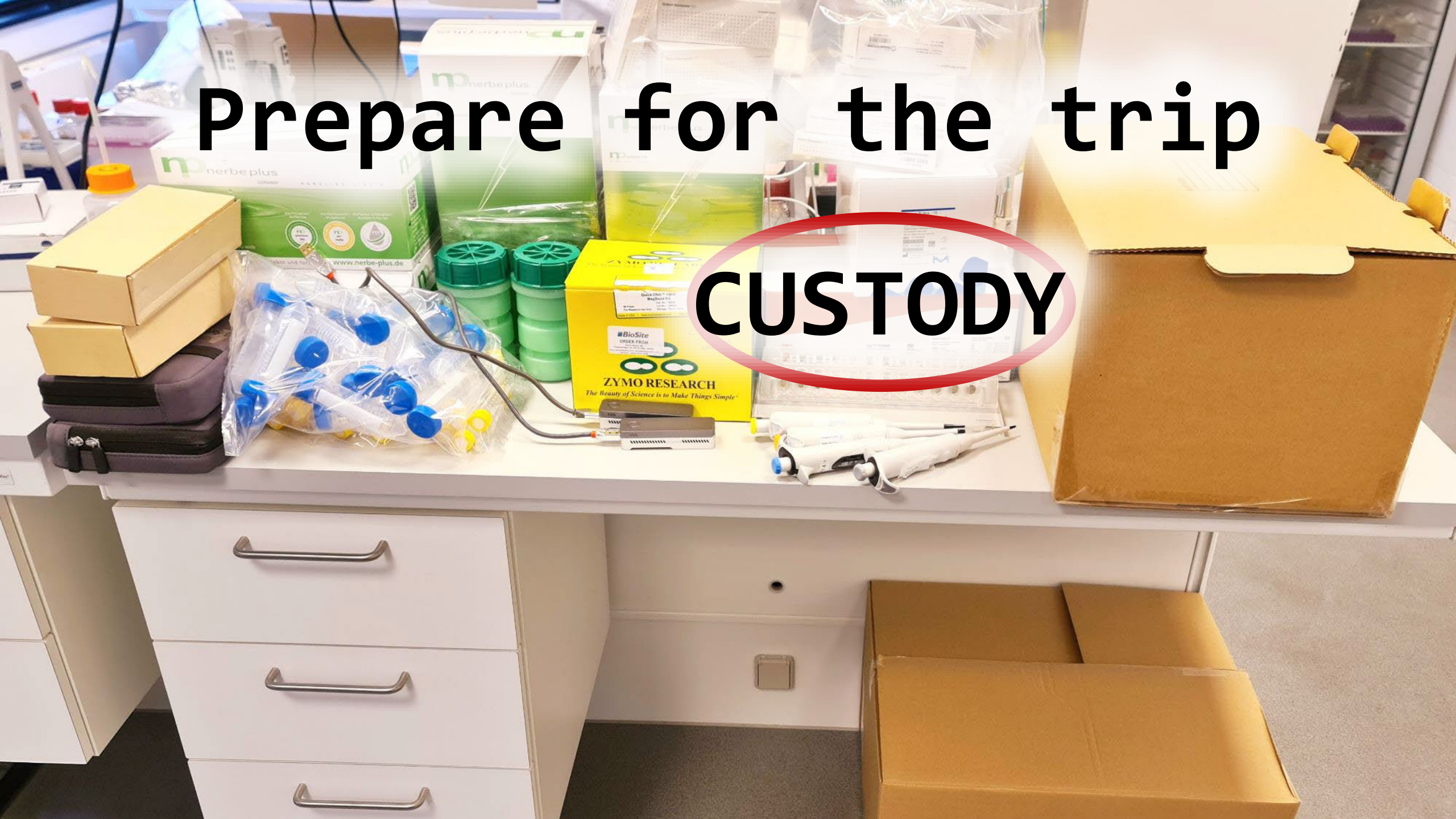
Como

Trip overview (11-26 Feb)

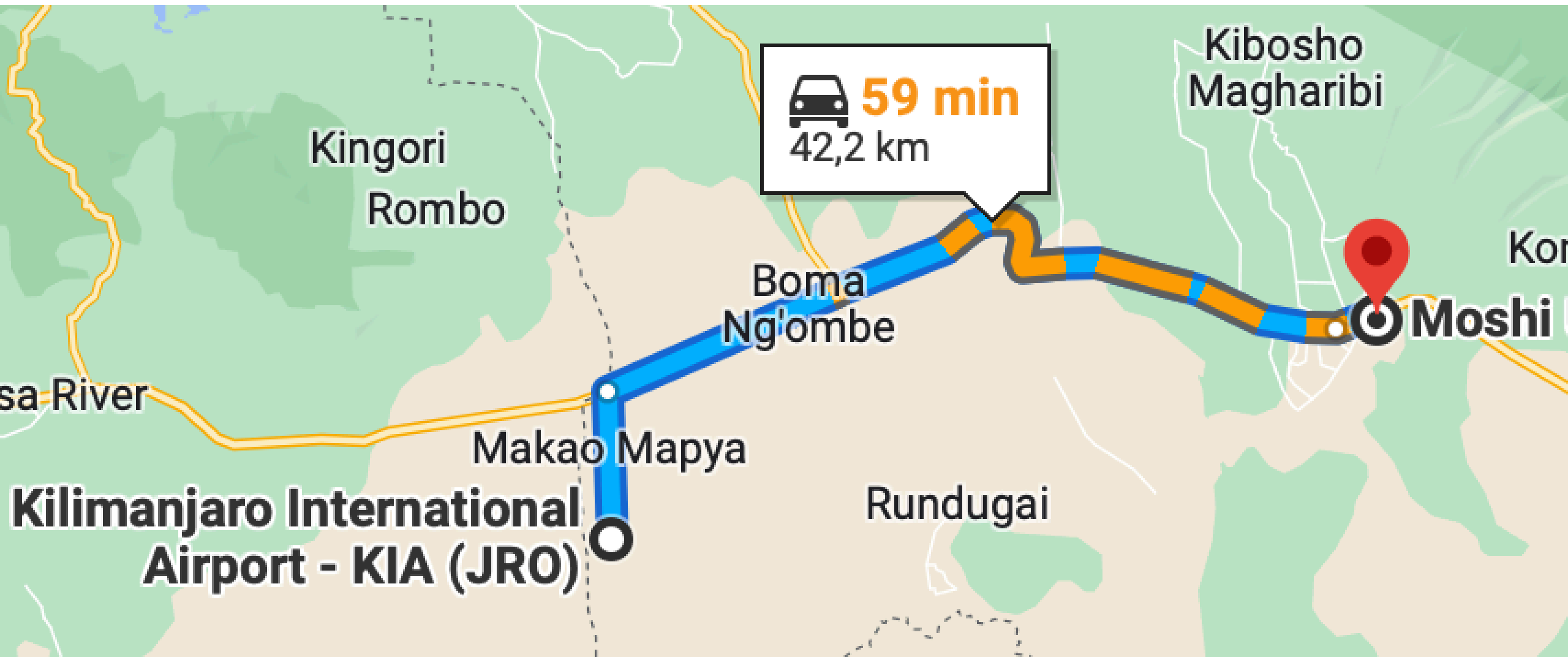
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- 11. Arrive late night Moshi **Extra thorough PCR**
- 12-15. Prepare for trip, start sequencing **Weekend**
- 16. **Total of 2900km**
- 17. **~ = 58h**
- 18-19. Mwanza site **Weekend**
- 20. Off to Tabora **30th birthday**
- 21-22. Tabora site
- 22. Transit to Sigida
- 23. Back to Moshi
- 24-25. Round up **Weekend**
- 26. Back to Denmark **Weekend**

Prepare for the trip

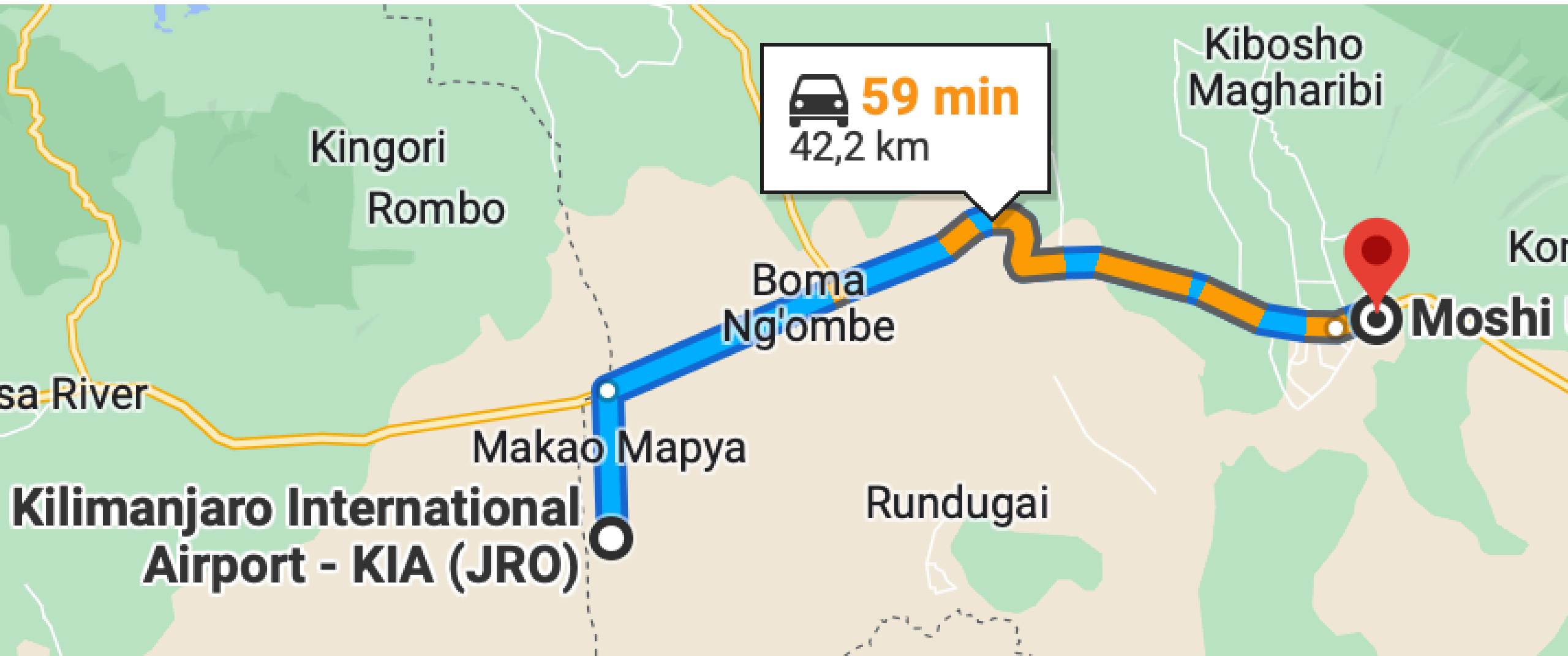
CUSTODY



Back to the airport



Back to the airport, again



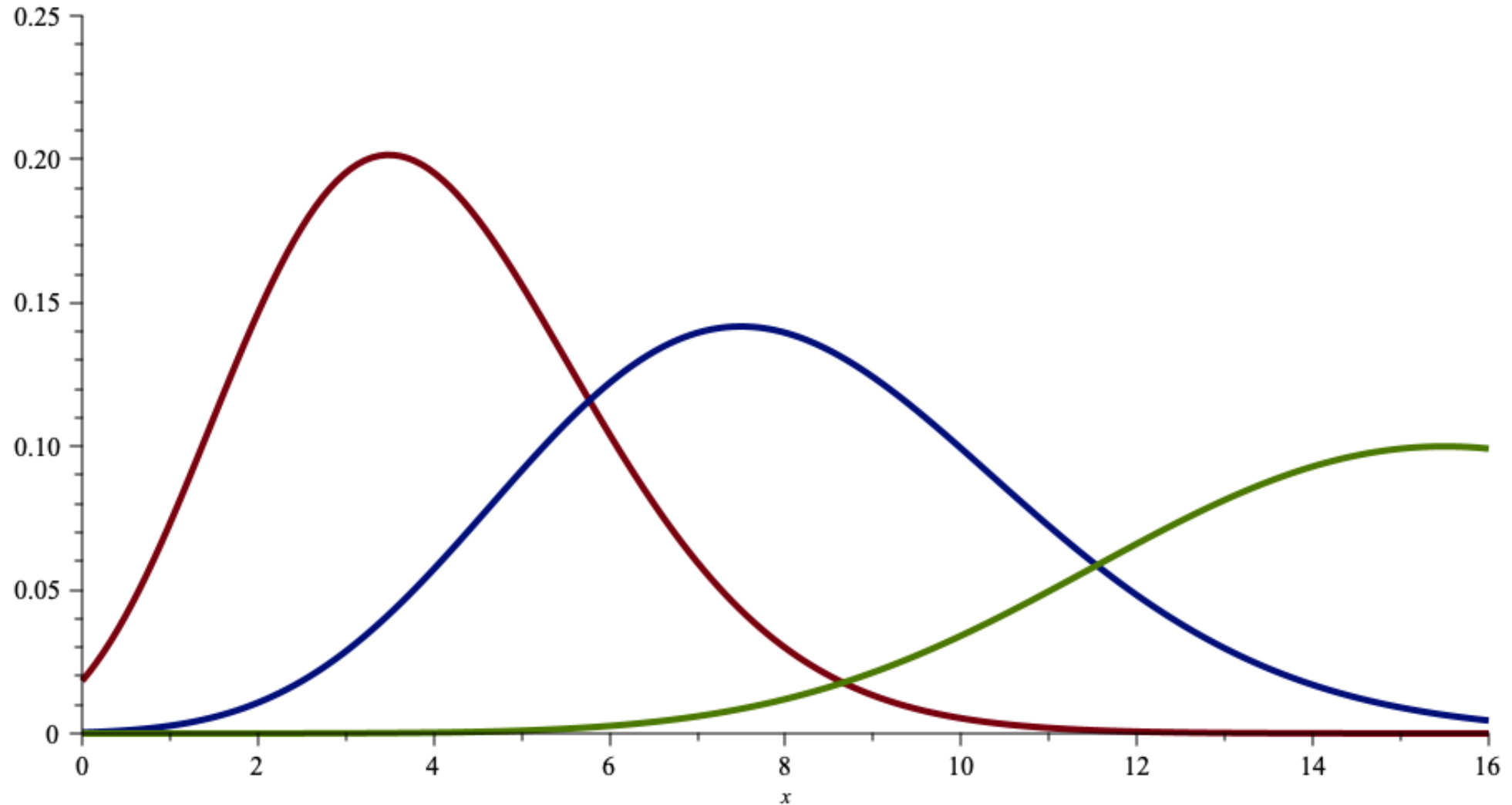
Retrieved Monday



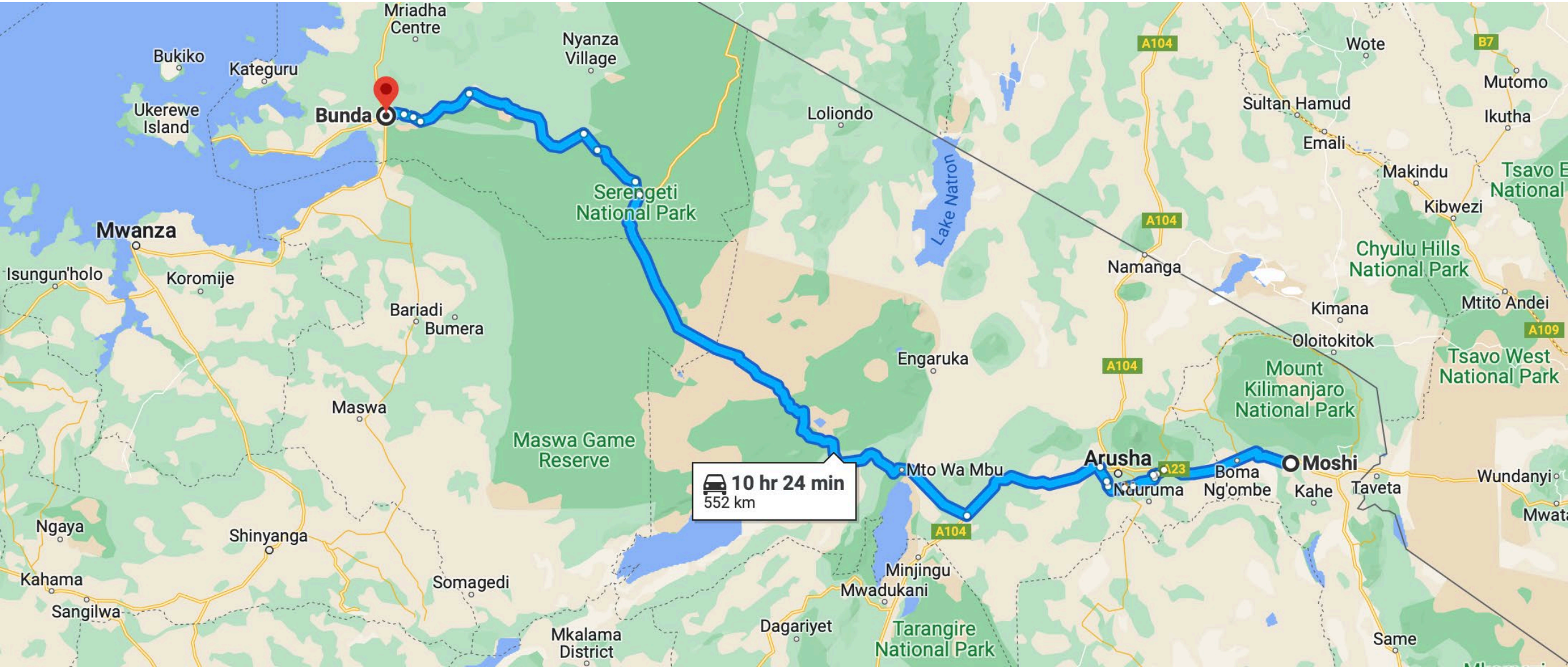
Murphy's law

- As strong as the law of Jante
- The wrong isolates were sequenced
- The field laptop was not ready
- Malte fell sick

PFP: Problems Follows Poisson



Off to Bunda



At the edge of Ngorongoro



Meanwhile in Moshi



Serengeti roadblock



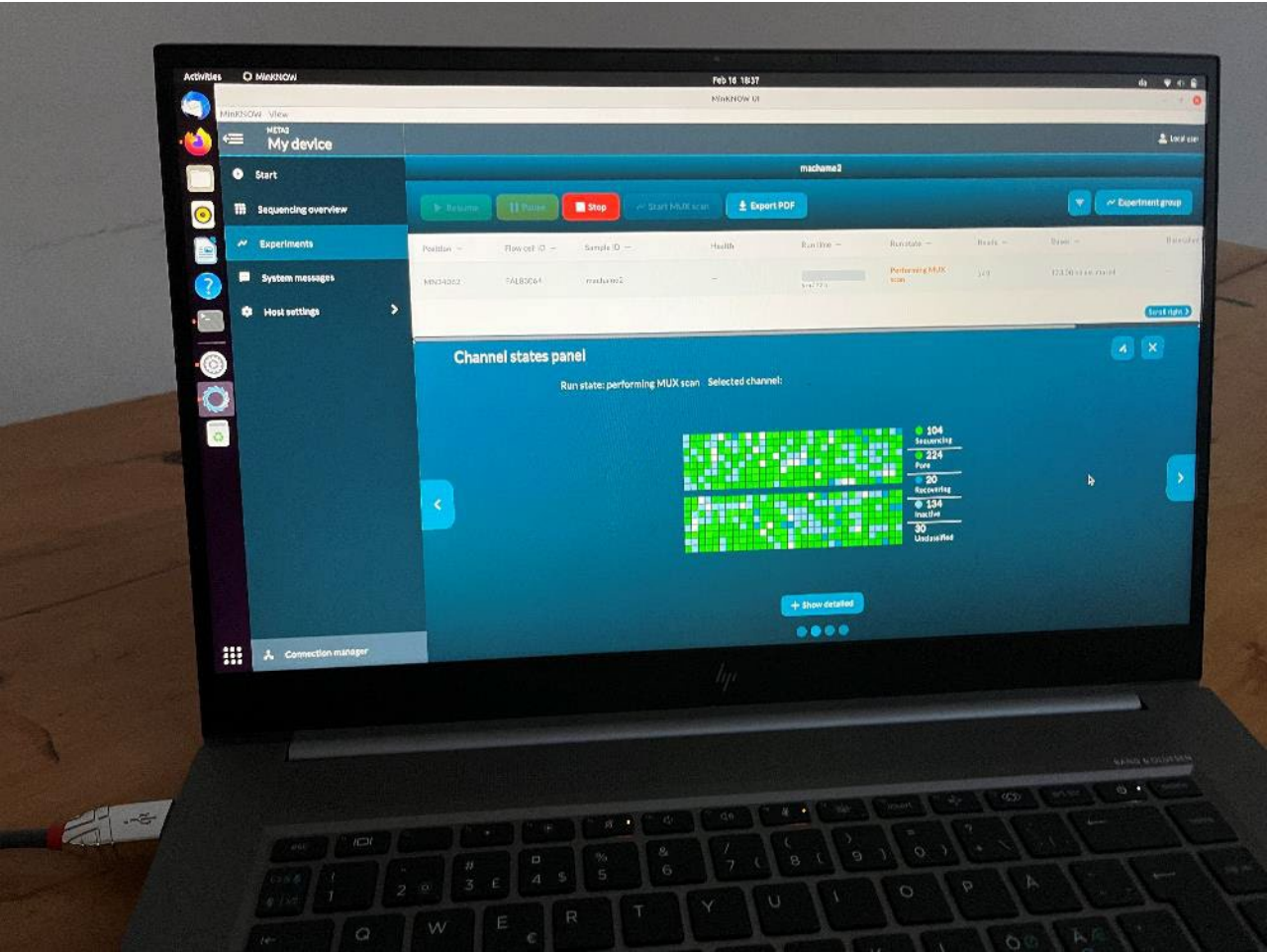
Meanwhile in Machame



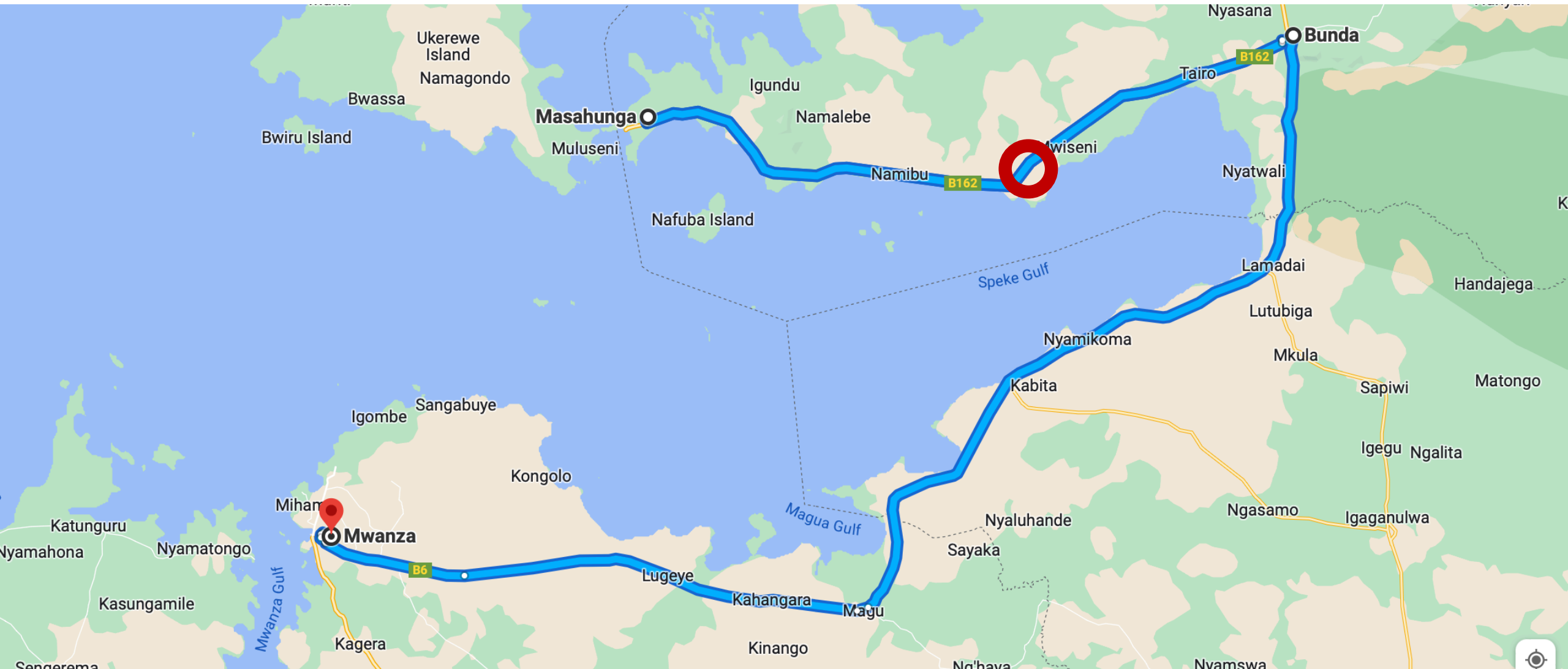
Road rage in Serengeti



Meanwhile in Machame

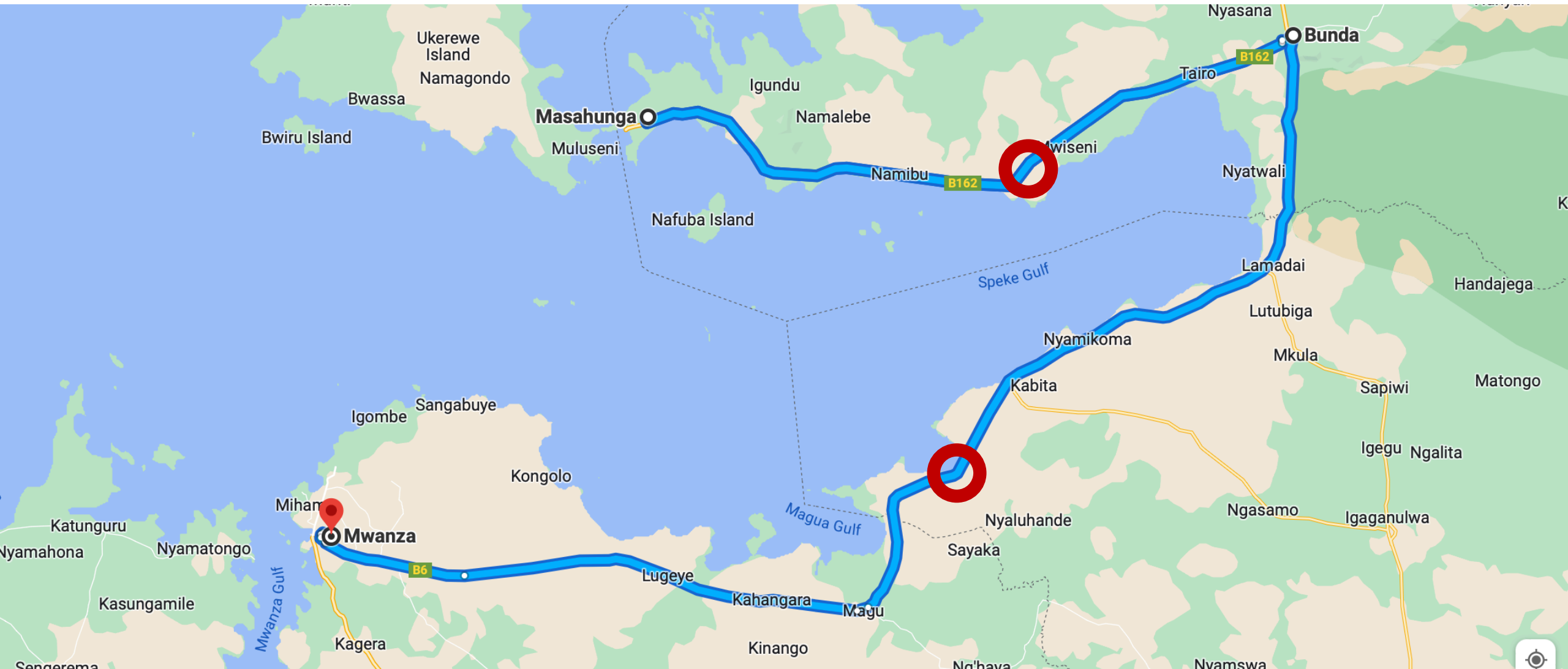


Field Sequencing to Mwanza





Field Sequencing to Mwanza





Small Sukuma village near Victoria

- Household usage
- Washing cooking utensils
- Washing clothes
- Bathing
- Domestic animals
- Wild birds, dragons and crocodiles
- Defecation at hidden spots



Setting up the lab









**Getting close,
but remember Murphy's law**





A bit boring, but as expected

- A bunch of algae and plankton specific bacteria
- Some Corynebacterium
- Low levels of more or less all fecal matter associated bacteria

Visit Mwanza site



Prepared and engaging

- Had samples ready
- Already isolated DNA
- A vaginal swab of particular interest
- Expected to be *Neisseria gonorrhoeae*

Meanwhile at lake Eyasi



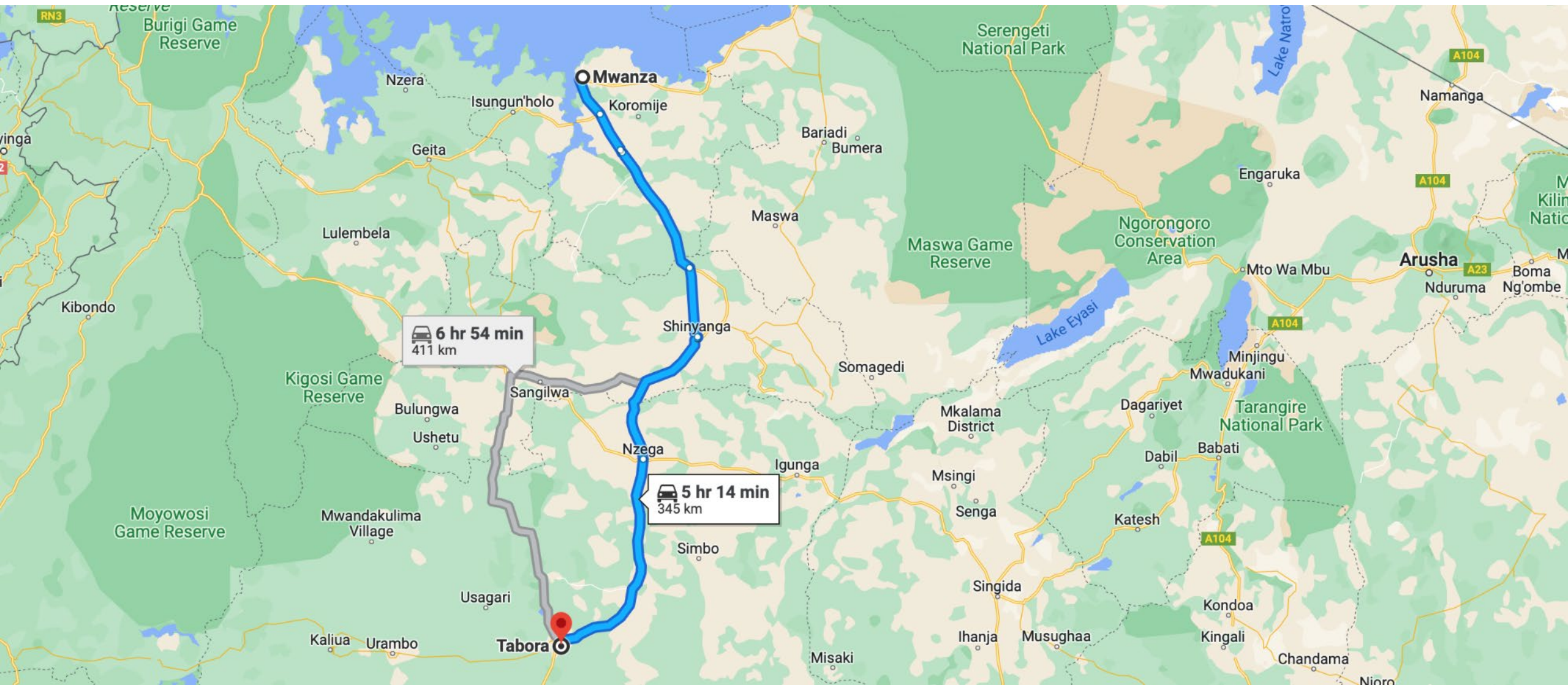
You can't cheat Murphy



Back to Mwanza

- No *N. gonorrhoeae*
- No Y chromosome
- Two strains of *Lactobacillus* and one *Gardnerella*
- *Chlamydia trachomatis*

Off to Tabora



Meningitis cases

- 16 (large) meningitis samples
- Putative outbreak
- One culture positive with *Streptococcus pneumoniae*



STATION

STATION

STATION



Update from the lab

- Very little DNA
- Remember Murphy
- Group 2 left the AMPure beads in Moshi
- The very same AMPure beads we were not rationed

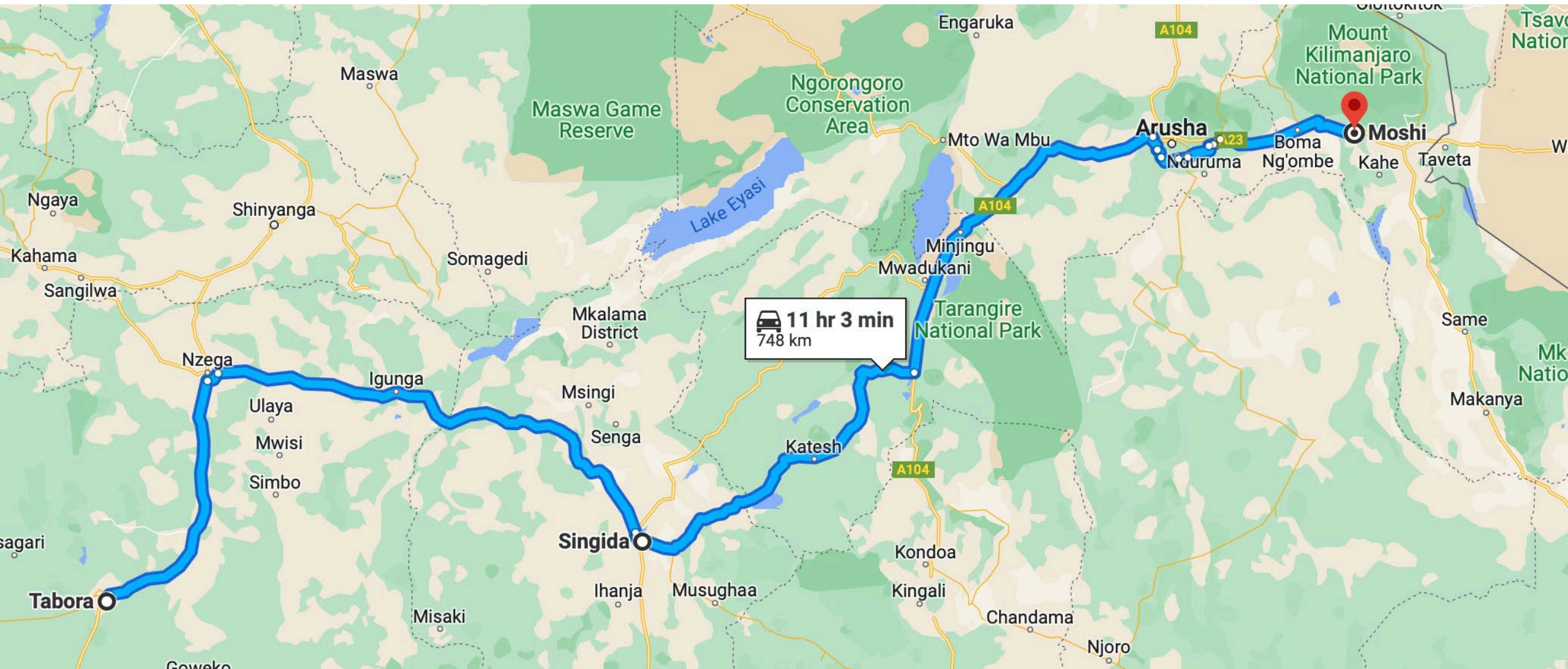


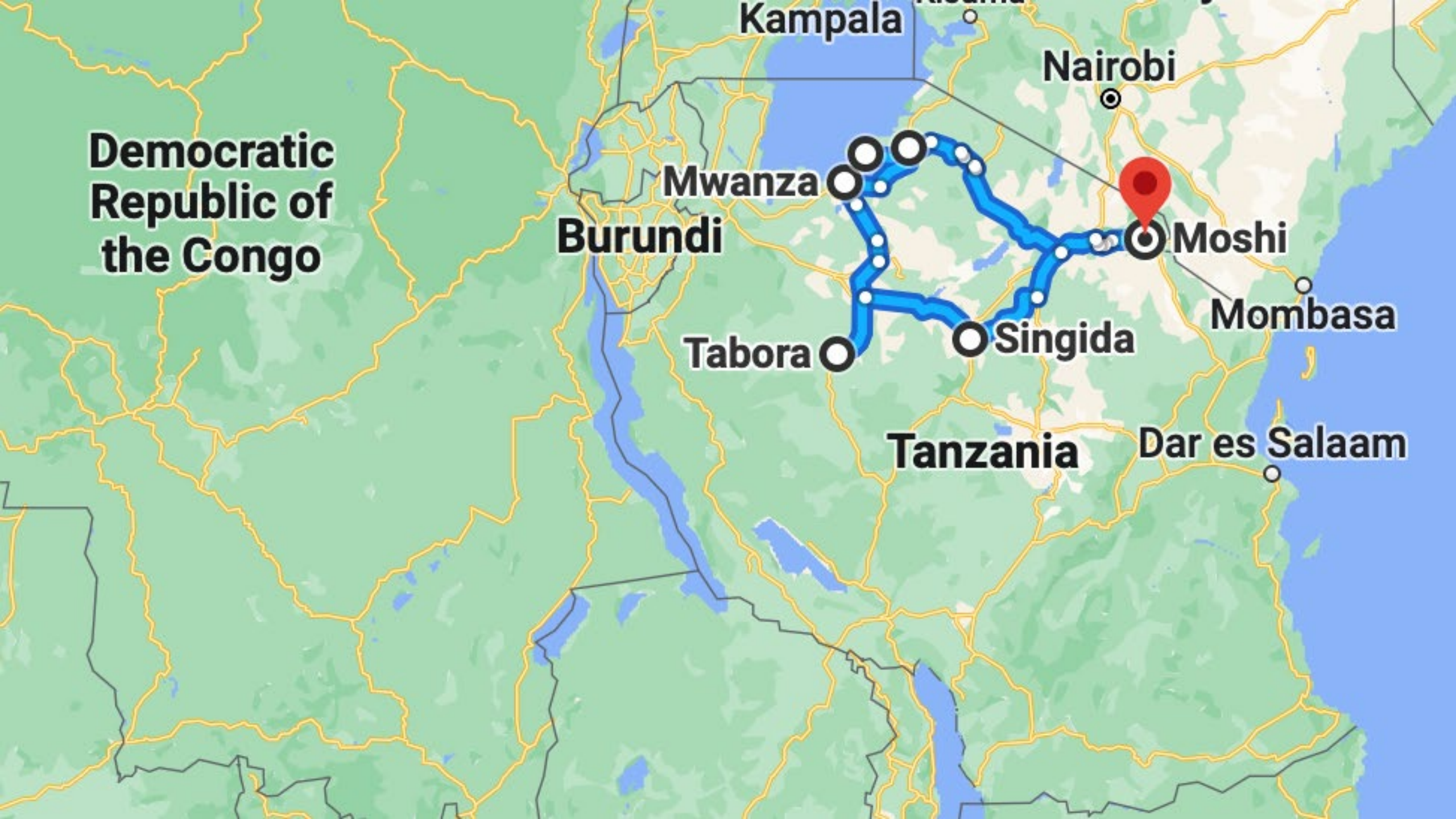
Short reads and humans

- *Lots of human DNA*
- *Streptococcus pneumoniae*
- (*Neisseria sicca*)



Back to Moshi through Singida





Kampala

Nairobi

**Democratic
Republic of
the Congo**

Mwanza

Burundi



Moshi

Mombasa

Tabora

Singida

Tanzania

Dar es Salaam