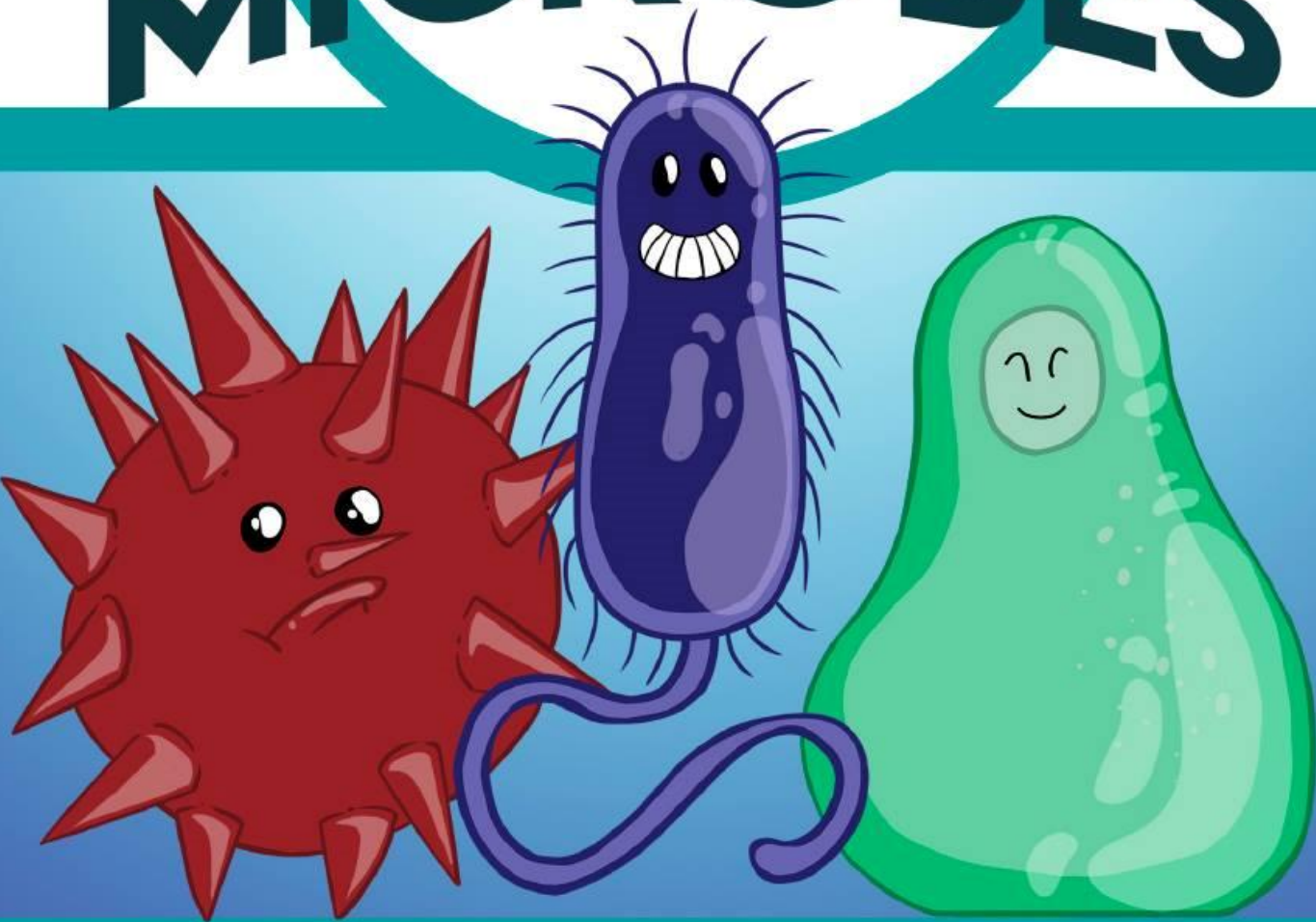


# THE WORLD OF MICROBES



FRÉDÉRIQUE LE ROUX

-

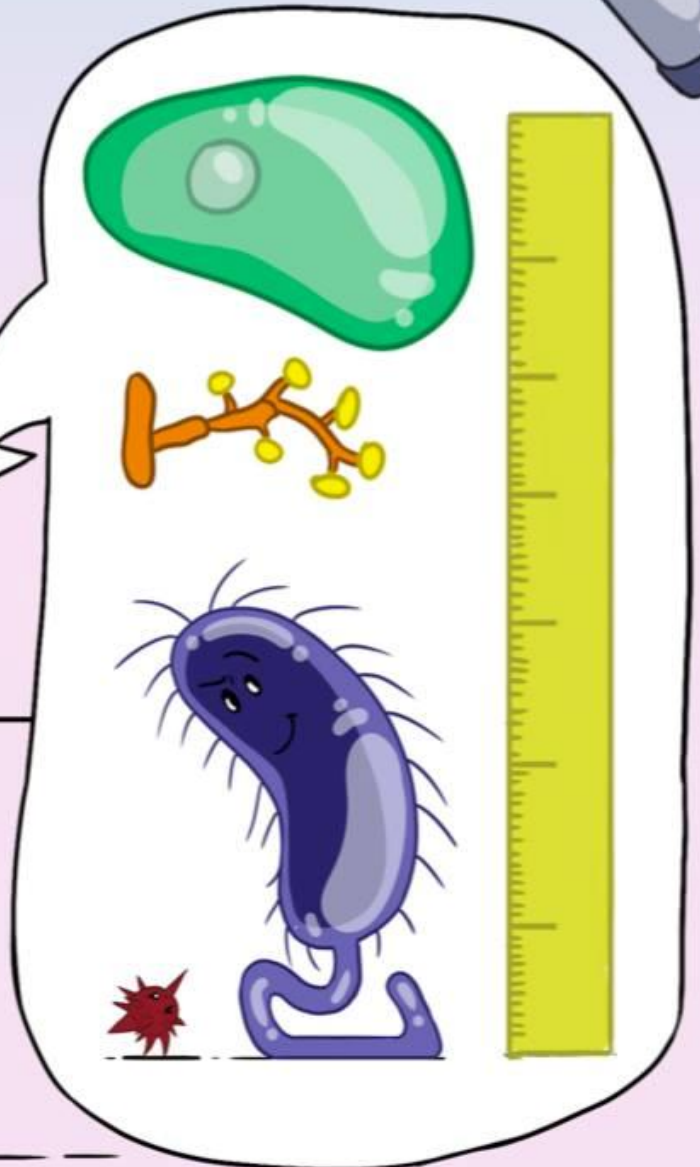
ZOË CHAPLAIN

# ໄລກຂອງຈຸລິນຊີ

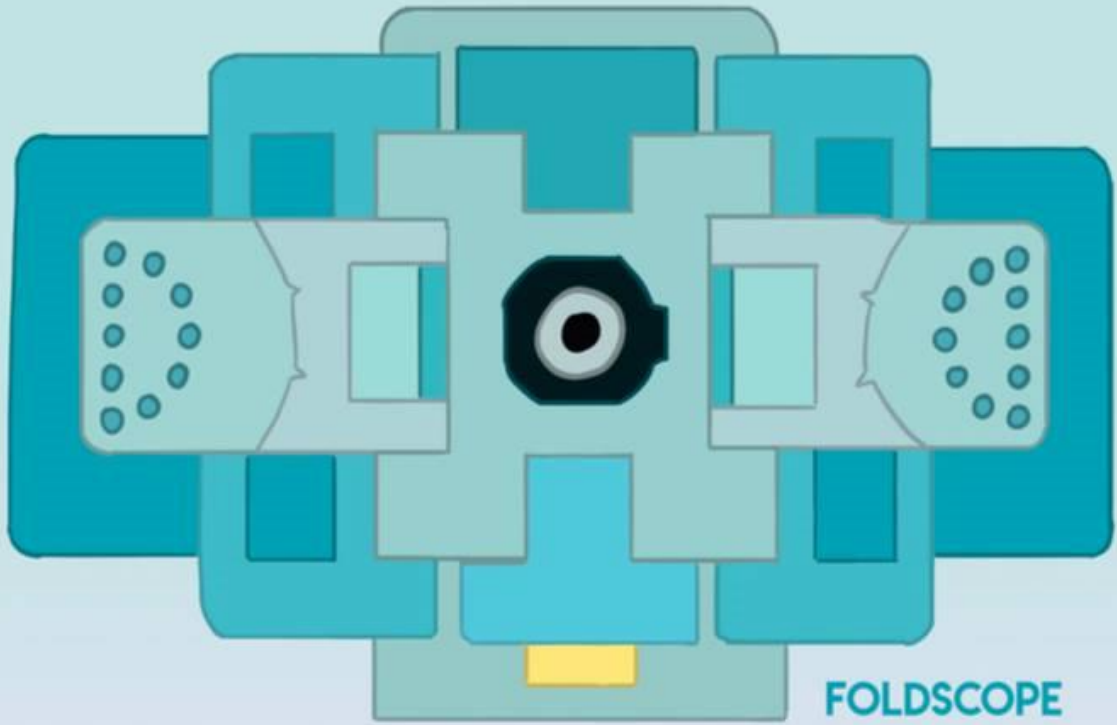
ຂຽນໂດຍ Frédérique Le Roux

ການອອກແບບຮູບພາບ Zoë Chaplain

# The very small



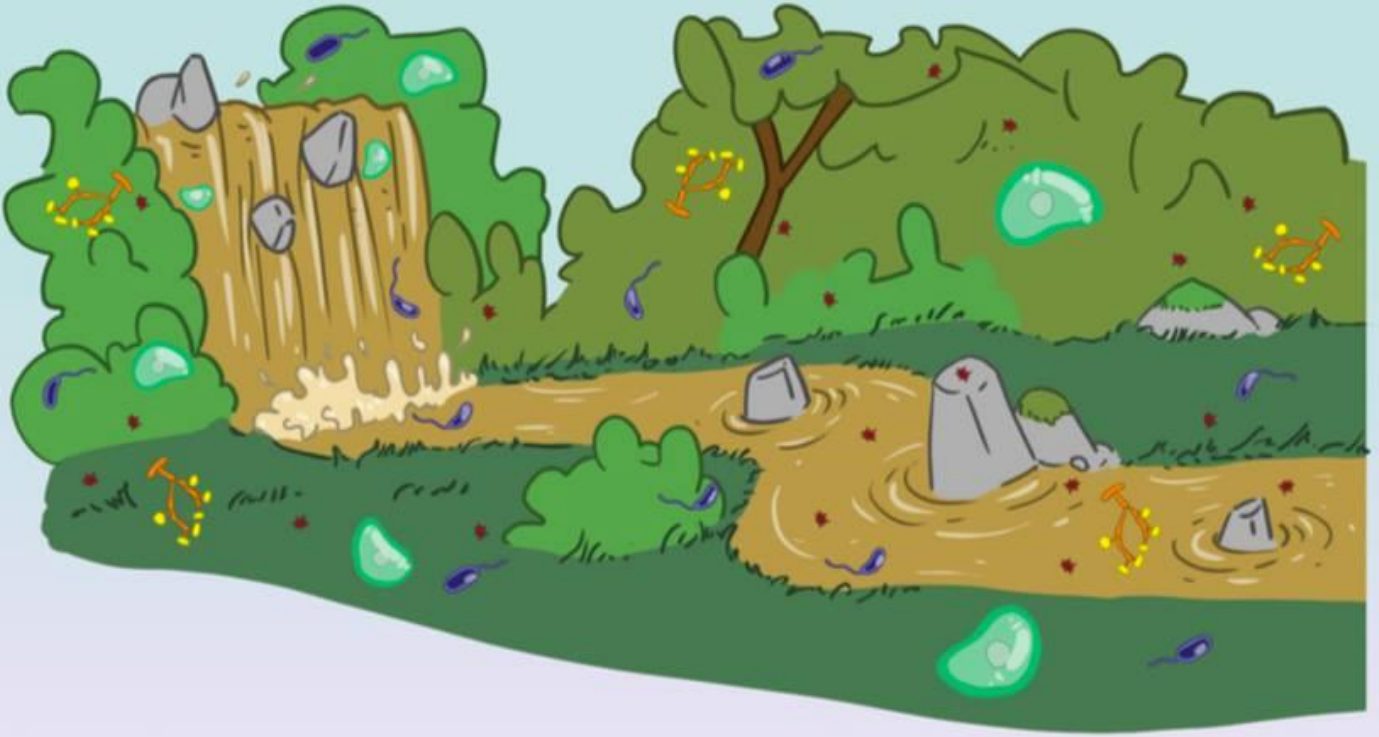
# Exploring the small with the Foldscope



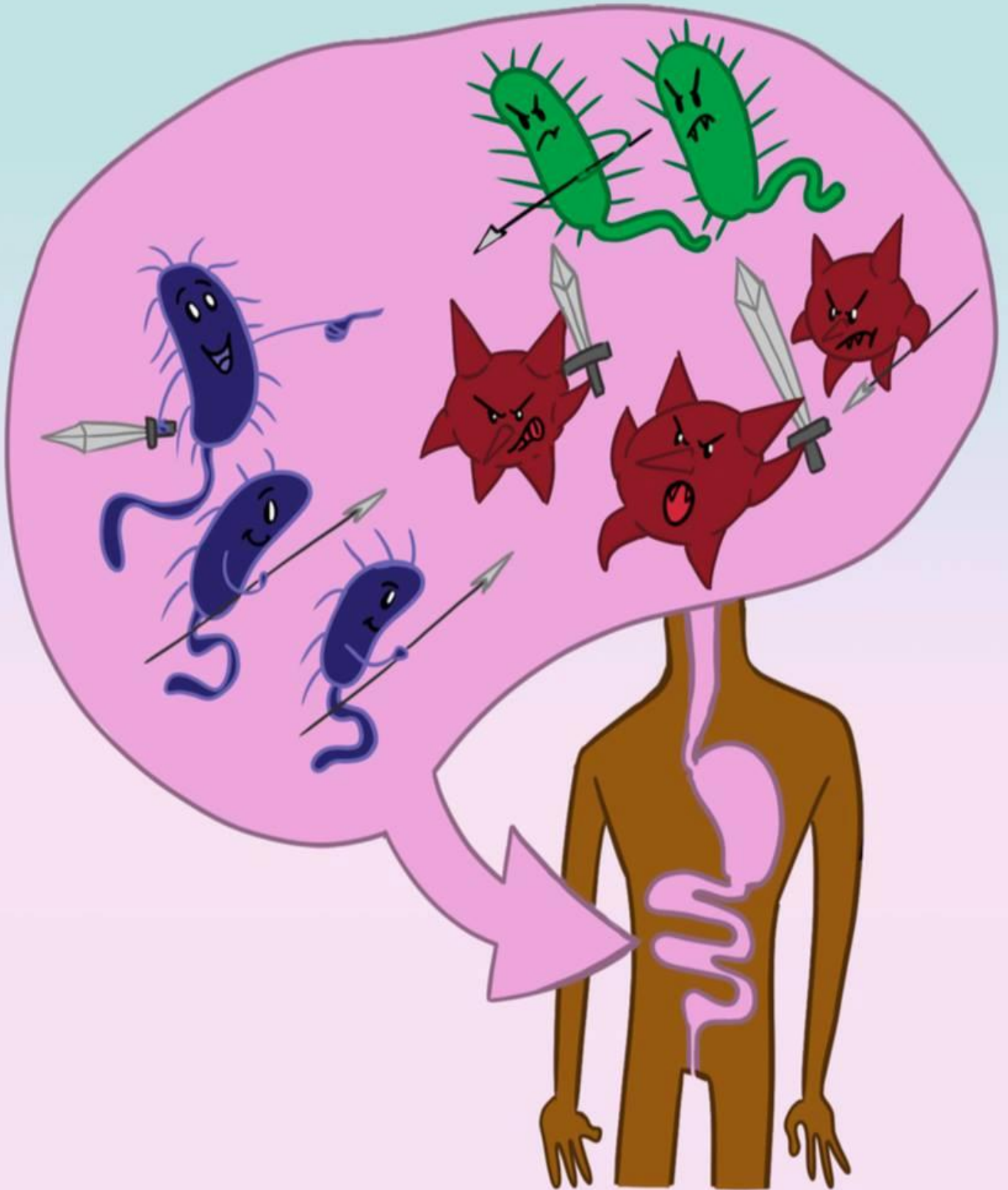
Have a look at whatever you want ...  
... many surprises in perspective



# Microbes are everywhere



Some microbes are dangerous many are usefull



# How microbes infect us





# How to prevent microbes infection



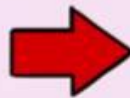
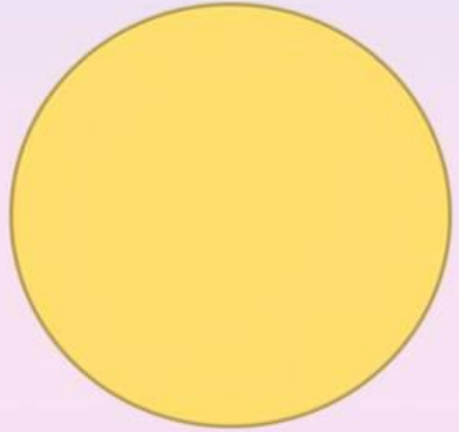
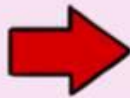
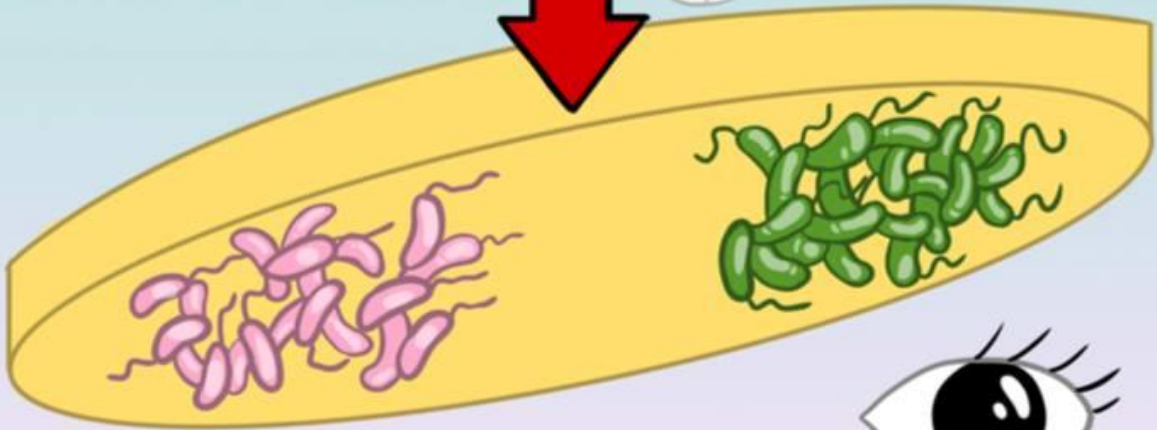
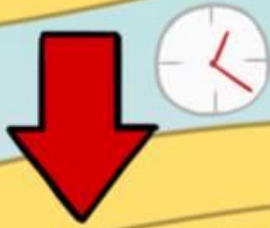
# How to cure infections



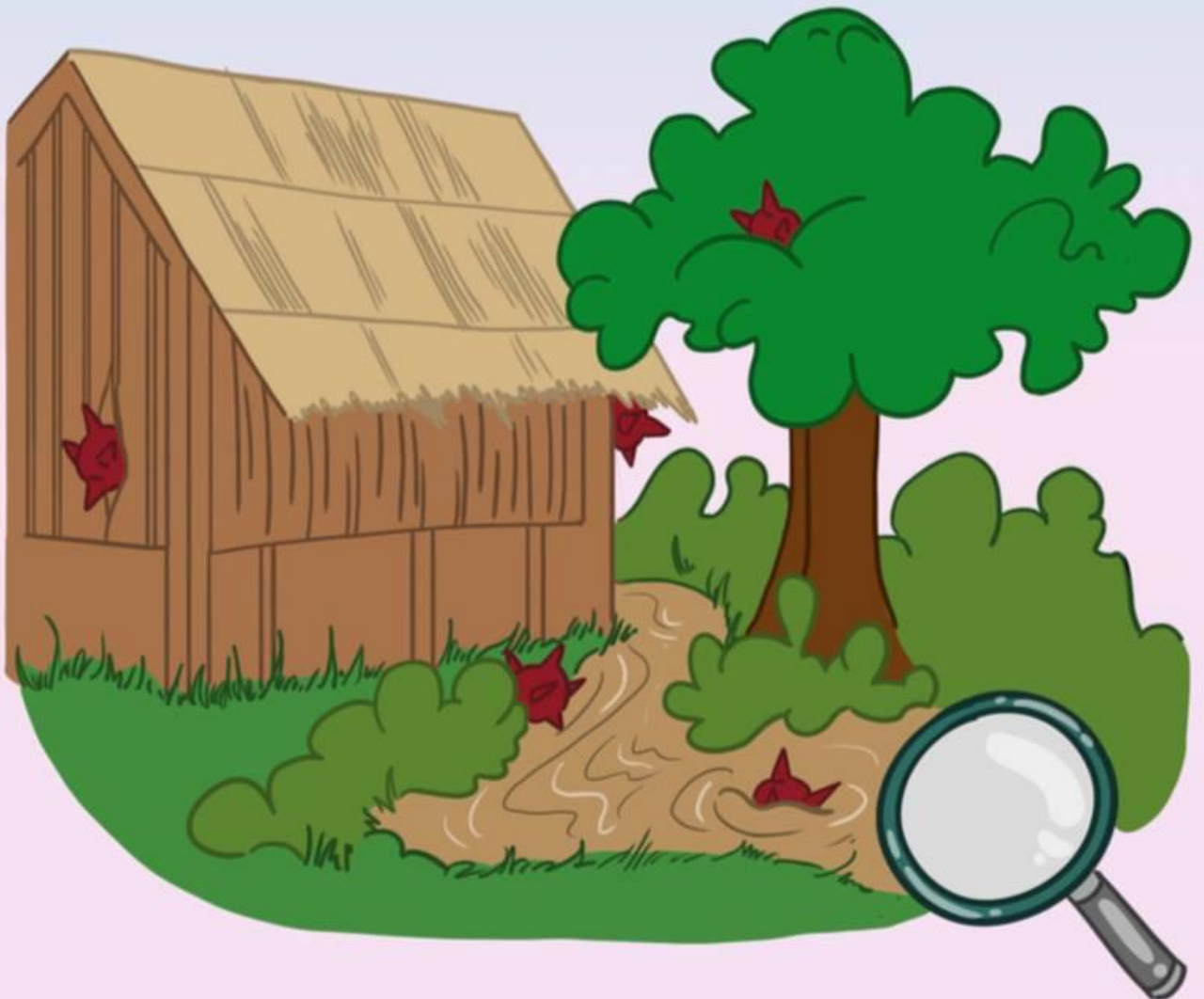
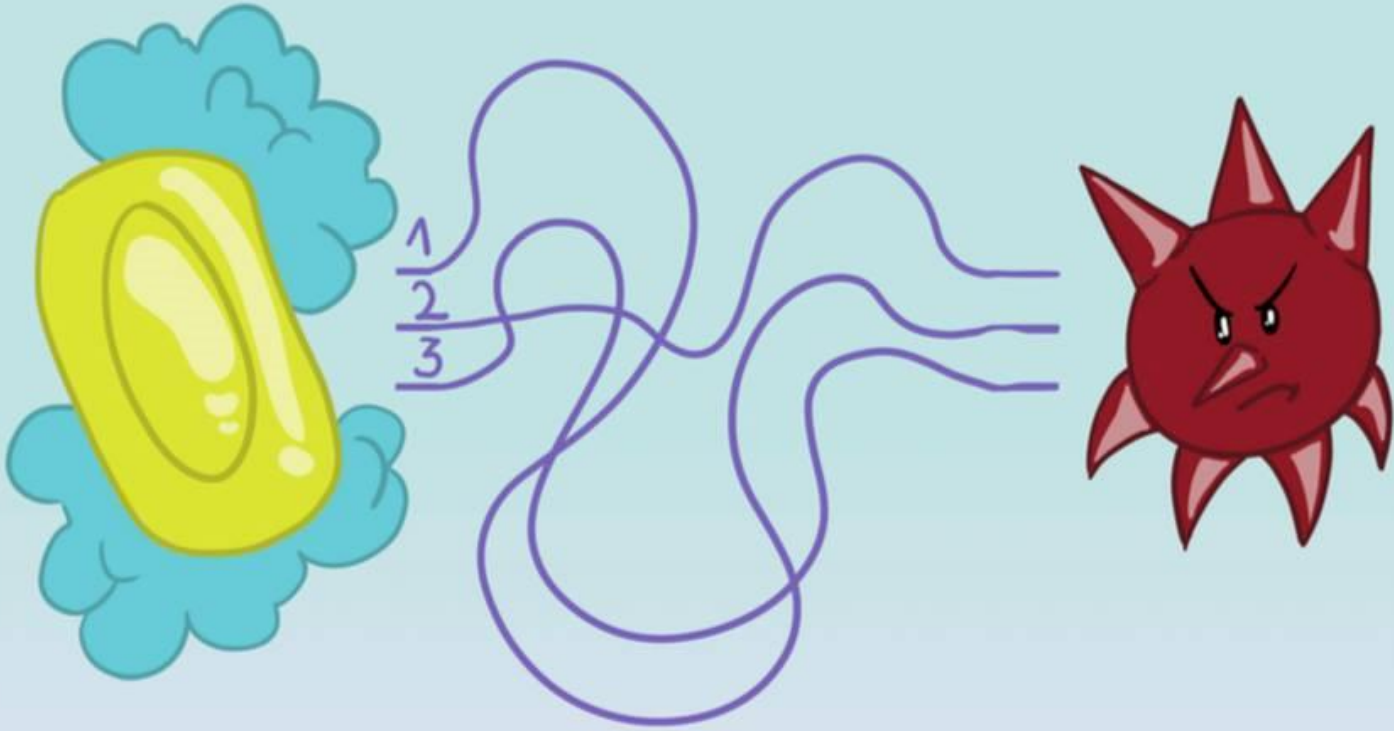
# Training: is it useful to wash your hands?



What do you see after few days?  
Is it useful to boil water?



# Two games, looking for the microbes



# WORD FROM THE AUTHOR

## So, What is our Lao project?

During my last trip to Southeast Asia, I met fantastic people doing things to help others, both adults, children, and their environment. They all inspired me and in my turn I want to do something. It is not a question of going to enquire, or motivate future researchers (even if ...). It's about giving them access to what many children in France can discover, through participatory science activities at school, at museums etc. It is a matter of speaking to them of another world, that of the very small, of the nice or bad microbes those who cause diseases. It is especially a matter of awakening their curiosity, of inciting them to go on to discover this world, to ask questions, hypotheses, to deduce, to interpret, to imagine, and to create.

The story begins with my discovery of the Foldscope, an origami microscope created by Manu Prakash and his team (Stanford, USA, see also: [https://www.youtube.com/watch?v=ky-cqSI5mwE&feature=player\\_embedded](https://www.youtube.com/watch?v=ky-cqSI5mwE&feature=player_embedded)). This microscope will allow each child to become aware of the very small and beyond. After our visit they will keep their microscope to explore by themselves the samples of their choice. I hope they will persevere, and continue to tell me by mail their experiences and discoveries, drawings or English.

As for the even smaller ones, the bacteria or the fungi, will be explored by culture on petri dish (in glass! No question of bringing plastic). For example, children will be able to compare microbes in their skin, before and after cleaning their hands, river water concentrated on fine mesh or porridge, raw or cooked meat. This will allow us to address the issue of diseases and their prevention.

As part of her research project, Zoë is in charge of creating a manual for discovering the microbial world, which must explain everything in drawings, because some children can not read or write or speak a foreign language.

Recently, an FNAC employee who told me about the project gave me 200 booklets for the children to use as an exercise book. Thanks to him.

Cecile is accompanying us, I do not doubt that her help will be precious to supervise the children and to film the experiment.

And of course Loïc (<https://fandee-island.webs.com/>) is waiting for a pilot test, which will improve this project and its educational media and then renew the experience in Laos, Cambodia (Cham! ) or in Indonesia (Nadège at: <https://rimba-ecoproject.com/l-association-rimba/>).