Last weekend, my older daughter and I assembled the Foldscope and instantly started exploring slides with our own tooth plaque and a flower petal. The entire experience was 99.95% positive, but there are two embarrassing aspects.

Confession #1

I am a scientist and have plenty of experience with microscopes. I spent 6 years of graduate school doing yeast genetics. That means I used powerful microscopes countless times to observe and manipulate single yeast cells. Then as a postdoctoral researcher, I spent 4 years doing single-molecule microscopy: visualizing, imaging, analyzing individual molecules of mRNA inside cells. So, no stranger to microscopes.

However, until the Foldscope, I have never made a slide to explore the world around me. It was always yeast.

Confession #2

I am not great at following instructions. Assembling Ikea furniture is torture for me, and I am disastrously inept at opening food packages without ripping them apart. I had a bit of anxiety about following the Foldscope assembly directions. Remarkably, the design of the Foldscope and the accompanying instructions are so thoughtful and good, that even I managed to easily do this with my daughter. In fact, it was actually fun.

Still, I managed to screw up a little bit and made a few mistakes. In case there are a few other instruction-resistant individuals in this world, I added the Foldscope assembly instructions to protocols.io (a platform I co-founded) and annotated the steps that I got wrong. Hopefully other first-
time users will add their own notes to make the assembly 100% foolproof.

I can’t describe the overwhelming thrill and joy in my daughter as she looked through Foldscope at our slide. She’s not the only one beaming with childish wonder and excitement – I am too. Particularly after the post How to Find Tardigrades (Water Bears) in Your Own Backyard, I cannot wait to explore living and moving creatures.