How do I start planning this?

I decided to apply to the Watson in Feb of my Jr year, and COVID hit shortly after so I completely stopped thinking about it. They had an information session around April and I was excited to learn they were still moving forward with it. I went to that, and began planning in May during term. However, it was really hard to balance during term, and I did a bulk of the work right after Jr year ends. This won't be feasible for you since the deadline is earlier. Instead, I would recommend starting now and dedicating at least 2-5 hours per week working on it until the deadline. I know this seems like a lot, but it really is an intensive process.

I started by sitting down (happened to be really late at night when I was feeling existential) and thought about what was really important to me. I realized I knew next to nothing about how the world works (and still don't), but the Watson would give me the ability to chip away at the unknown. I had a few ideas for my project (antibiotic resistance, synthetic biology, and fermented foods). I met with Meghan and proposed all 3 ideas to see what she thought would have the highest chance of catching the attention of the reviewers. She said as I was talking about them, I was most excited about the fermented food project, but recommended I narrow it to yogurt, at least for the application so it seemed a bit more focussed. This did help, because it gave me a clear, directed "umph" in the interview as opposed to being a bit disparate. If you think about the Watson, it truly is an incredible opportunity and unlike anything you have probably ever done (and ever will do) in your life. Your application needs to support the claim that you can travel alone for a year, with little to no guidance, and are excited to do so. I am not suggesting your proposal needs to be completely fleshed out, but you need to have enough plan/contacts that it looks doable.

Once I had my idea, I cold-reached out to professors around the world I could work with to do my project. Talking like 90 cold emails. I was not particularly picky about countries. I read papers about yogurt / fermented microbiomes and would just email the contact person on that paper. Something like: "Hi I liked your paper (link). I'm applying to this fellowship and would love to spend some time in your lab next year. I know it is far away but would you have any availability to discuss this? If not, do you know anyone else". Email them from your Caltech email, you will have a higher chance of getting a response. I would say I got maybe 10 responses this way, and set up Skype calls with people. Had my fair

share of getting ghosted after setting up a meeting, so don't get discouraged. Just keep working at it.

A far better way to get contacts is through connections. Email any professor at Caltech, do not be embarrassed to ask for help. Something like "Hi I am a junior applying to the Watson. Do you have any collaborators in x country who you might be willing to connect me with?" Note that profs usually will ask "which countries" because they know a lot of people. So you could offer a list of countries you are interested in. Email any mentors, family members, linked in connections, etc. The more people who are aware of your planning endeavor, the more possibilities you have of finding someone. I basically did not shut up about the fact I was applying and this helped me get contacts. For example, one of my TA's said "Oh my girlfriend's brother is head chef in Copenhagen would that help?" I would suggest you try to meet with as many people as possible, even if you don't think you can work with them directly. It will give you the "worldly" context that you can bring up in your interview so the committee knows you have done your due diligence about going abroad.

In terms of picking a project: I think if it is important to you, and you think you will grow and learn from pursuing that project around the world, it is feasible. But like I said, Meghan helped me realize what I was most excited about. The more motivation and excitement you have about it, the more likely you are to stick with the thorough planning process, no matter how hard/bleak/discouraging it gets.

How has it been during COVID?

Because of COVID, I started in December. It's been a great experience so far, but COVID has ruined 90% of my planning from 2020. So it's been incredibly difficult to restructure/rethink everything. I wish I had known this when I was planning, I would have tried to manage my expectations. There were so many countries I fell headfirst into getting excited about/found so many things I wanted to do while I was there. And now I can't even enter them. Hopefully COVID is not an issue you have to deal with, but know that there is inherent uncertainty in any Watson project, even if you plan thoroughly.

Other advice?

I would recommend as daunting as the process seems, just start now. Finding open doors will take time, and those will fuel your excitement to keep creating

your project. The application has a personal statement and proposal component. I would recommend going through at least a few rounds of editing on these, and it will help your recommenders immensely if they can at least see a rough copy of these, so they can write better recommendations. So aim to have a draft by beginning of March, meaning you have about a month and a half to create an idea and get at least a few contacts. Also, set up a meeting with them before the application deadline for you to answer their questions about why you want to do the Watson etc.