Dear Lulu,

Labby congratulates you on nearing your PhD completion. This is an excellent time to evaluate your personal goals. Your question revolves around what environment would best work for you in using the skills you have acquired.

Should you do a postdoc? Yes, if you want to run your own show in a research-intensive venue. A postdoc may not be necessary if you are happy to work within a group led by another scientist or run a shared research facility, each rewarding in its own right. You can still be a strong partner and contributor in the research, and often you can lead a group of less experienced technical scientists even if you do not direct the whole project.

In thinking about a good next step, remember what excites you about science. Does this include teaching the next generation? In academia, you could work with students who look to you for their learning about the entire process of doing science. You want to take on this profession only if you care deeply about the success of these “junior colleagues,” as you will be guiding them into the next phases of their careers and helping them decide, as you are, “What next?” You will also be an entrepreneur in this position, running your own show in the lab and the classroom. If research is an important part of the job, you will be responsible for funding your own show, too.

Is research in industry a match for you? In industry the company typically provides state-of-the-art equipment to help you do your job, and the company is vested in your success because you are the foundation of the company’s success. It can be very satisfying to see how research and development can lead directly to a marketable product. You will still be a mentor if you are hired to direct a team on a particular project goal. Here, however, project management involves both scientific and business decisions under timelines that you may not dictate, and projects can be started or terminated abruptly depending upon decisions in the organizational management above your level.

Then there are research institutes, which are a hybrid of academia and industry in terms of a research career. They usually are much closer to academia in the research independence and selection of projects afforded their researchers, and they often allow basic research to move “off topic” of the particular institute’s overarching vision statement. Depending on an institute’s funding sources, some require extensive grant writing and others do not. Usually they do not have students, but they do have postdoctoral fellows. And if you haven’t done a postdoc you can be a research scientist in the lab of a PI in a research institute.

After you consider these traditional paths, Labby suggests that you explore other options for employment with your new PhD. Your training in the process of science, how to interpret data, how to be critical about data and information, and how to write and speak about science are in demand in many venues. Among these are government (working in the offices of elected officials or administering scientific funding), journalism (informing the non-science public about science and about issues arising from science), education (K–12 teaching, curriculum development, museum curation), quality control (around environmental issues such as water quality, or reviewing pharmaceutical and medical procedures), and many other areas. It might be useful for you to do informational interviews. Contact people in some of these positions, have coffee and pick their brains about how they got there, what they do, and what they like and don’t like. You might be surprised how receptive these folks are to talking with someone just competing a PhD.

Labby urges you to enjoy your last several months as you approach the awarding of your PhD. Let your head explode with the possibilities for things to do with the rest of your professional life, and then settle back and try one of those possibilities. Remember that no choice is irrevocable; we all learn as we go and then change when we find a new area or venue where we can contribute.

—Labby