

research grants and postdoctoral fellowships, and it is far from certain that a lab will keep postdocs on board to give them time to complete and publish their projects. (I still have the data from that last project and hope to publish them eventually.)

**Outline your goals.** In line with this, other PIs told me that they always had a plan for the next step in their career. When they started their PhDs, they were already thinking about where they would do their postdocs. When they started their postdocs, they already knew where they would apply for assistant professorships. Of course, their plans changed over the years — but they always had a plan to work towards.

**Trust your intuition.** Most of the PIs I interviewed told me that they had made quick decisions with their ‘gut’. I had been doing quite the opposite. I always felt that being a scientist meant making well-informed decisions and, if you couldn’t come to a

**“You must generate your own motivation in science and work out how to pick yourself up, because nobody else will.”**

decision, collecting more information. But most PIs acknowledged that they made decisions — from everyday minor choices to more major decisions involving the direction of a study — knowing

that they would find out only later if they had made the right choices. Instead of working on one or two well-thought-out projects, some PIs start ten half-baked ones. Even the most carefully planned projects can fail, and the chances are that you will learn more from an experiment that you conducted in one day than you would from three days of only thinking about it.

**Finish.** There is lot of truth to the maxim “finished is better than perfect”. If you do not publish something that you have worked on, you have wasted your time and your supervisor’s time and money (guilty there, too). It is as if you had never done the work, as far as everybody else is concerned. If you can’t prove your hypothesis because there is not enough time to do all the required experiments, it is better to prove and publish only part of it, rather than trying to go for the complete story and ending up with an unfinished, unsubmitted manuscript (I have a couple of those).

These few pieces of advice stuck with me — I hope they will be useful to you. ■

**Bela Z. Schmidt** is a former innovation manager at KU Leuven in Belgium, and is aiming for a fellowship to complete his book or for opportunities in data science or biotechnology.

## TURNING POINT Coalition builder

*Zehra Sayers, former president of Sabanci University in Istanbul, Turkey, where she is a structural biologist, spent 15 years chairing a scientific advisory committee on the Synchrotron-Light for Experimental Science and Applications in the Middle East (SESAME). The laboratory, the region’s first of its kind, opened in Allan, Jordan, in May 2017. Last month, Sayers and four colleagues received the American Association for the Advancement of Science’s award for science diplomacy for their work on the project.*



### What studies are under way at SESAME?

Some scientists from the Cyprus Institute in Nicosia have been analysing human remains such as teeth and bones. Other scientists are measuring the quality of soil and air in the region, looking at toxic heavy metals such as lead and arsenic.

### How did you learn about SESAME?

I remember reading in 1999 about efforts to build a light source in the area. I knew that the DESY synchrotron facility in Hamburg, Germany, was having power problems, and here, there are always power failures. I also heard they were going to dismantle and rebuild a secondhand machine. I thought, “Nobody will use it.” But I was one of the few people in Turkey who knew the meaning of the word synchrotron and had worked at one.

### What made you get involved?

Herman Winick, a high-energy physicist at Stanford University in California, and Ercan Alp, a Turkish American synchrotron researcher at Argonne National Laboratory in Illinois, were sending me e-mails and pleaded with my German collaborator, “Tell her to talk to us just once!” Both had co-chaired the first SESAME scientific advisory committee. They happened to come to Hamburg while I was there, and I agreed to meet them. They answered all my doubts.

### Why did the region need its own light source?

A synchrotron is a special environment, where people from different disciplines come together. You might have an experimental station for molecular biology, with archaeologists working next to you. You start talking to them, and that opens up a new line of communication among scientists. This is important in the Middle East. We noticed in our SESAME user meetings, which have been held since 2000, that people from different countries, cultural backgrounds, beliefs and political views were talking to each other.

### Why did SESAME have to be newly built?

If we hadn’t had the highest scientific goals, people would not have respected this laboratory or the work that comes out of it.

### Did you ever fear the project would collapse?

There were big roadblocks to getting the construction money for the beamlines and experimental stations. Eliezer Rabinovici at the Hebrew University in Jerusalem, and some Israeli colleagues, had the idea of a one-time voluntary contribution from the project’s member countries, apart from their yearly payments. This meant that at least five countries would pay US\$1 million each for five years. Jordan, Turkey, Israel, Iran and Egypt all agreed. But then we had the Arab Spring in 2011, and the agreement didn’t get signed in Egypt. Then Iran couldn’t pay, because of sanctions. But the other three countries stuck to the deal.

### Are people using SESAME as you imagined?

We started having user meetings early on, and word spread. A pharmacology professor in Jordan heard about SESAME, and even though she didn’t know anything about synchrotrons, she sought out training and is now directing her students towards it. We’ve trained more than 100 people from the region and sent them to synchrotrons around the world, where they’ve done great science. Now a new generation is taking over at SESAME.

### Have you advice for early-career scientists in Turkey?

Keep calm, keep trying and keep your work standards high. If you have a goal in mind, you don’t always get there on a straight path. Ask yourself, would you run a marathon if no one was watching? ■

### INTERVIEW BY KENDALL POWELL

This interview has been edited for length and clarity.