In praise of early independence

Many factors influence success in a science career. Hard work, ambition, flair, and luck played a role in the success of Tim Hunt, who won a share of the 2001 Nobel Prize in physiology or medicine (along with Leland Hartwell and Paul Nurse) for his discovery of cyclins, key regulators of the cell cycle. We caught up with Hunt—now a group leader emeritus at the Clare Hall Laboratories of Cancer Research UK’s London Research Institute—during Postdoc Day at the Institute for Research in Biomedicine. Hunt’s career demonstrates the importance of two additional success factors: playfulness and early independence. This interview was edited for brevity and clarity.

Q: After a Ph.D. at the University of Cambridge, you did a postdoc at the Albert Einstein College of Medicine. How did it go from there?
A: After a year, the boss went to MIT [Massachusetts Institute of Technology] to set up a new medical school, so it was just me and a technician—Grace Vanderhoff—and we made things up as we went. I usually had two projects going, one with Grace during the day and my own projects, which I did at night. Gradually, the night projects started to go better than the day projects. They allowed me to discover two very important things, which both came through collaborations.

After that, I returned to Cambridge to work in the Department of Biochemistry. And this is another thing that I think was very lucky: I had an independent fellowship from Clare College. I took a fivefold cut in pay, but I found myself among friends, namely Richard Jackson and Tony Hunter. It was a loose federation of graduate students and postdocs, and we could just do whatever we liked. This was terribly satisfactory, and we had a really lovely time.

We were a bit anarchic and bumbling in a way, and I sometimes regretted that I never had any proper, formal biochemical education. We had to work everything out for ourselves. I find myself reacting badly to this idea that there are skill sets you need to have, and you must pass exams to get them. I would rather emphasize the importance of playfulness and of making your own mistakes.

Q: You stood by your results when they were controversial. This takes a lot of self-confidence.
A: You have to be very sure of yourself, it’s true, but you’re sure of yourself because you know the experiments are robust. I always tell people, “Be your own harshest critic because then nobody can hurt you.”

Q: Can young scientists nowadays work as independent postdocs?
A: I think so. There are still lots of fellowships around, so it depends on the environment you find yourself in. You must somehow get independent when you are really young, and take responsibility. In general, however, a conventional principal investigator position takes people out of the lab just when they get really good at doing and designing experiments, and that’s a shame.

Q: What was the key to your success?
A: Identifying a good problem to work on. That’s the most difficult thing. I also think that, in my case, behind it all was a fairly steely ambition. It’s perfectly healthy to want to win a Nobel Prize. I didn’t have this ambition exactly, but I thought, “Why wouldn’t you want to find out the most important thing you possibly could?” In Cambridge, we were surrounded by Nobel laureates. We never felt that we were in the same league as these Sangers, Cricks, and Brenners, but you realized that even if they were Nobel laureates, you knew stuff they didn’t, and you also realized what an amazingly heterogeneous bunch they are.

When people ask me, “What is the secret to success?” I always say, “Keep your eyes on the horizon but your feet on the ground, and preferably your nose to the grindstone.” In other words, you have to work.