

An occasional column, in which Mole and other characters share their views on various aspects of life-science research. Messages for Mole and his friends can be sent to mole@biologists.com. Any correspondence may be published in forthcoming issues.



Stuck in the middle with you

With experience comes wisdom, a wise woman once said. But she forgot to mention all the other consequences that tend to tag along.

When you're an experienced postdoc like me, you'll find yourself gaining expertise in a particular technique. After a few years of slogging out different ways of doing something, performing that challenging experiment becomes like cooking your favorite dish: you no longer need to look at the recipe, and you know it will taste great every single time. And if the technique or experimental system is even slightly unusual, you will slowly gain a reputation for having 'The Knack'. Golgi Girl, for example, is a whiz at extracting membrane fractions, exerting an effortless, almost supernatural control over her domain. One evening, I watched her juggle 20

tubes while simultaneously talking her boyfriend through a particularly tricky dinner maneuver, mobile phone squashed between ear and shoulder.

"No," she said, decanting supernatants faster than a fairground shyster shuffling shells. "You add the butter first, and *then* the flour. ... No, it will *not* work the other way around; it's all a question of lipid emulsion dynamics."

My speciality is...well, I don't want to give away the game. Let's just say that my personal *pièce de résistance* involves radioactive isotopes and a lot of complicated biochemistry, and is the sort of assay that fills most scientists with terror, only to be considered when they've been forced into a corner by a particularly sadistic peer reviewer. And even then, their first instinct is *not* to dust off Maniatis and have a go themselves. Instead, they pick up the phone and ring someone like Dr Keen. After disarming him with a bit of strategic flattery about his latest

J. Cell Sci. paper, they casually drop in: “I understand that X-Gal is brilliant at Assay Y. I don’t suppose you’d like to collaborate?” (I hope you noticed the phrasing there: *she* is brilliant, would *you* like to collaborate?)

Now, the first time this happened to me, I was thrilled. Dr Keen sauntered in and perched on a nearby stool, exhibiting his usual spooky ability to choose the one moment in one’s experiment when one most needs to concentrate.

“How would you like to be a co-author on a paper for a week’s work?”

“Where do I sign?” I exclaimed, accidentally pipetting solution A into Tube B. At that point, I only had a few papers under my belt, and it seemed like a no-brainer. So I happily received all the materials from Professor Collaborator and put everything else on hold so that I could give my undivided attention to the experiment that week. And sure enough, it was a beautiful, clean result – unambiguous bands and controls as clean as a whistle.

The only problem was, it didn’t conform to the Prof’s theory.

“We need to repeat this with a slightly different control,” Dr Keen relayed to me, after getting off the phone with the Prof’s hysterical technician. (*We* – did you catch that?) “Shouldn’t take more than another week.”

And so, five days of hard graft later, Dr Keen was squinting in irritation at the second piece of X-ray film with its poetic array of crisp black bands. The evidence against the Prof’s theory was now even more solid.

“We’ve thought of another angle,” Dr Keen told me later that afternoon. “If we can just repeat this with a few more mutants – and maybe beef it up with a couple of immunofluorescence assays in fixed cells, I’m sure we’ll get to the bottom of it in no time.”

To make a long story short, I did end up on the Prof’s paper, somewhere in the middle of a sea of a dozen authors. But it took a month to work out what was going on with his erratic biology, during which my own work lay fallow. Since then, the boss has talked me into being a co-author on two additional manuscripts. And now I’m wondering, was it really worth it? Yes, my CV is now almost twice as long. But how important are those middle authorships to my overall career prospects?

After thrashing over this knotty issue in a few late-night pub sessions, Golgi Girl and I have decided that, like so many other things in life, it’s a question of balance. In some respects, I think it’s important to have a few minor authorships under your belt, especially with other labs. It shows that you’re a team player,

and that you’re willing to help out and to share your expertise with the wider community. Those collaborating lab heads now owe you a favor – and your network is that much wider. But after a certain point, minor authorships work against you: there is no such thing as a quick and easy favor; contributing in a meaningful way to someone else’s story will always take more time and effort than you originally anticipated, and it is your own eventual first-author paper that will suffer. Worse, you might be labeled a dabbler: all side dishes and not enough main courses.

So, back to wisdom. I have learned to say ‘no’, and to my surprise, Dr Keen took it in his stride when, a few days ago, he asked me to help someone out and I politely demurred. When I explained that I had a big talk to give in a few weeks’ time, and certain key people would be in the audience, and that I really wanted the chance to finish up a crucial component of my project to get their feedback, he backed down gracefully.

Oh, and that’s another piece of hard-won wisdom I’ve picked up along the way: lab heads really are quite easy to handle once you have the necessary experience.

X-Gal

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