

signal processing and parametric statistical modelling, are key to successful analyses. “It takes quite a bit of skill to look at data and identify what is artefact versus what is real and important,” Cohen says.

Russell Poldrack, director of the Imaging Research Center at the University of Texas at Austin, doesn't even bother to interview applicants who can't write computer code. Data sets are getting so big that trying to analyse them without using automated methods simply takes too long, he says. Off-the-shelf software packages tend not to lend themselves to the most interesting and novel analysis methods, Poldrack notes, so he wants people who can write programs that can do those analyses.

Computational skills have become so important that, in July, Dartmouth College hired Alireza Soltani, a computational neuroscientist with a background in theoretical physics, to model other people's data rather than collect his own. Soltani uses detailed computational modelling at the synaptic, cellular and network levels to look for mechanisms that help to explain behaviour and cognition. This hiring strategy is necessary to ensure that the college has the people “with the skills to advance the field beyond pretty pictures”, says Heatherton.

As universities increase their neuroimaging capacity, they are facing a recruitment challenge. “The applicant pool for neuroimaging posts is diversified and of variable quality,” says Kamil Ugurbil, director of the Center for Magnetic Resonance Research at the University of Minnesota. It can be difficult to find good people with rigorous computational skills in neuroimaging, he notes. At the same time, physicists, engineers and statisticians can have quantitative skills but lack the psychology or life-sciences background for a neuroimaging-related post.

Even those who can offer the right mix of skills should consider gaining expertise in more than one imaging technique. “We all need to specialize to some extent, but it's more advantageous to be well versed in a range of complementary techniques to avoid being labelled as just the PET guy or just the fMRI guy,” says Brian Bacskaï, a neuroscientist at Massachusetts General Hospital in Boston, whose work combines cellular and molecular imaging techniques to study Alzheimer's disease.

Bacskaï reiterates the importance of collaboration for neuroimaging. “Cross-disciplinary studies are the only way to move the field forward,” he says. “I think institutions will look at how good applicants are at working with others as a key factor in a CV or tenure package.” ■

Virginia Gewin is a freelance writer based in Portland, Oregon.

COLUMN

Postdoc's torch song

A love affair with research can be just as heartbreaking as romantic love, says **Christopher Schmitt**.



Maybe it was never meant to be. Such was my resigned perspective when I was dumped by a boyfriend while conducting my doctoral field research. I had been studying the behaviour of wild spider monkeys and woolly monkeys in the Amazon for six months, and as the data had been slowly coming in, my relationship had been slowly deteriorating. Communication had devolved from lengthy nightly video chats — me providing virtual tours of the field station and images of monkeys, him displaying Manhattan skylines — to a slow fade of curt, non-committal missives that bred a terrible uncertainty. When I saw him smiling with an unfamiliar man on my social-network newsfeed, I knew which way the wind was blowing.

But it was OK. I was getting my data. I was working towards a doctorate and an academic career, something bigger than that relationship. And I knew that once I recovered from being dumped by instant message, I could find another man — a better man! — who would be more supportive of my increasingly demanding relationship with my work. My research seemed to offer the affirmation and validation that my personal relationships had stopped providing. After all, I thought, it could never cut me off the way my now ex-boyfriend had.

I did get my doctoral degree. I got grants. I published. I landed a promising postdoc post across the country from my graduate school; I could check out a new dating pool while leaning on my more gratifying love affair with science.

Now I am three years into a postdoc that has been not quite as productive as promised. The wait for overdue data from collaborators has made me miss my funding deadlines. When I do pitch my research to funders and

foundations, they send me curt summary statements wondering about my lack of post-doctoral publications. Letters to tenure-track university job-search committees come back with polite but deflating responses.

It's the slow fade all over again.

Of course, my challenges are not uncommon. Postdocs in the current market, especially in the life sciences, have little chance of landing the tenure-track posts they had in mind when they started out. The dire situation in the US job market was exacerbated by a massive increase in trainees in the early 2000s with no increase in faculty positions, and may well be amplified by sequestration, that package of deep cuts to US federal agencies that took effect in March and has no end in sight.

So it seems that the most important relationship in my life, the one I have put above all others — my love for academic research — is falling apart, owing in no small measure to circumstances beyond my control. As this happens, I think about all the time I have spent away from family and friends, and all the relationships that have fallen by the wayside as I moved from state to state to build my career.

Academia has been a difficult love. It seems to have made some promises it did not intend to keep, and no amount of torch-song singing will make the potential loss feel any less dire. I need to remember the refrain from Joni Mitchell's *A Case of You*: having drunk my fill of academia, I can still be on my feet. If my career comes to an end now, maybe I can keep my heart intact, and move on.

But until it comes to that, I will hold on to this love. Maybe, despite the chilly job climate and data delays, my career can still flourish. Why else would I have given up so much? I continue to submit papers and grant applications. I'm looking for postdoc posts or teaching positions that will keep me in the game until the tenure track comes courting. I'm throwing away my misgivings, refusing to become resigned to a life outside academia, and hoping beyond hope that this love is the one that will not leave me.

And if it does?

Well, I'll defer again to Joni: “If you want me I'll be in the bar...” ■

Christopher Schmitt is a postdoctoral research fellow in the Center for Neurobehavioral Genetics at the University of California, Los Angeles.