

# Burnout

We all have those days when we are not at our best and our wits are less sharp when analysing data or reading manuscripts. Of course, feeling tired is a familiar experience for everybody who is working hard, but sometimes we enter a stale period that does not seem to end. And if we push too hard for too long, we might find ourselves becoming burnt out. In the end, we have to accept that the old adage, 'all work and no play makes Jack a dull boy', is perhaps even more true for adults.

There are many reasons why we forget to 'play' and find ourselves dull with our energy completely drained. Scientists are generally highly motivated, but they also face many challenges that can weigh heavily on even the most eager and hard working of researchers. There is the constant competition to be first to publish a new insight, or the frustration when experiments do not work or an organism reacts in a completely unexpected way. We have a plethora of duties beyond conducting research: writing, revising and reviewing manuscripts, preparing talks or posters, teaching, supervising, keeping up with the relevant literature, committee meetings, and, of course, the constant worry about where the money is going to come from; put simply, it is not enough to be a good 'pipetter'. Is it any wonder then that we have little time for the breaks in our working week that might allow our batteries to recharge?

Even when we do step out of our professional world, we do not always allow our minds to follow. As we sit in the theatre, are we secretly churning over a work-related problem at the back of our heads? Similarly, are we fully taking part in family activities or are we thinking in parallel about the next grant proposal or presentation? An honest answer would be that sometimes we fail to

close our minds to work when we leave the building. Conversely, some of our brightest insights can come while stuck in traffic, walking the dog or sitting through a boring theatrical performance. But it does mean that we risk our work consuming our lives.

The downside of having a brain that is constantly on call is that our energy is sapped continuously. The resulting burn-out can happen at any stage of a career. Graduate students have more intrinsic energy, but they also experience massive pressures that they do not have the experience to deal with. They have to be at the bench day in, day out, to obtain their first publishable results and launch their careers. The ensuing postdoctoral phase is potentially worse: a one-time opportunity to reach 'orbit' that will define the rest of their lives. Good papers are needed, difficult choices have to be made about where to work and down-time is a luxury; all at a time when young people are trying to settle into a family life that requires additional time and commitment.

It does not get better. A position as an assistant professor or group leader comes with more income and job security, but these go hand-in-hand with the higher workload needed to fulfil the expectations of funding agencies, superiors and students. Those demands combine to create a frame of mind that makes long working hours the norm in scientific research, which, inevitably, has social consequences (Gannon F (2005) Family matters. *EMBO Rep* 6: 999). It is also the time when the stale phase can hit first and, perhaps, hardest.

Once you move from tired to stale to burnt-out it is hard to recover. The time needed to get things done increases while the constant underperformance drains your enthusiasm. Even those who can keep the intellectual and social candles glowing at both ends might eventually experience

*déjà vu*. It is draining to face yet another academic year with the same dull and predictable tasks, mindless skirmishes at committees or endless discussions about students' grades. Most jobs have such intrinsic cycles, but for those whose juices of enthusiasm have been drained by tiredness, the effort to start again after the summer pause and to face the dulling predictability of the college year can get increasingly harder.

Thankfully, it can be relatively easy to both prevent and cure burnout. It is important to establish a work-life balance that allows us to pursue other interests and activities, and to spend time with our families. If nothing else helps, we might seriously consider changing jobs—a new start can be truly reinvigorating as it removes one from the inevitability of tomorrow, colleagues who have only predictable advice to offer, the chaos of unread papers, un-filed documents and un-done tasks that have been piling up. Of course, changing jobs is a rather drastic solution and not always possible or desired. But, a sabbatical can often achieve the same goal and allow us to return fresh to a job we still want to love. What we should avoid, however, is analysing our situation and continuing down the same track, even if we recognize ourselves to be burnt out.

We would like to congratulate all Nobel laureates this year, in particular EMBO members Harald zur Hausen, Luc Montagnier and Roger Tsien.

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*This Editorial represents the personal views of Frank Gannon and not those of Science Foundation Ireland or the European Molecular Biology Organization.*

doi:10.1038/embor.2008.210