The importance of taking a break

Without greater attention being paid to the work-life balance of academic researchers, effects on creativity, productivity, interpersonal relationships and mental health will continue to grow, increasing the risk of burnout.

oliday periods reveal a seemingly irreconcilable set of observations about the nature of our field as viewed from a Nature Microbiology editor's desk. Submissions to the journal increase substantially June to August, as compared to the three-month period before or after, suggesting that collectively microbiologists do not take a summer break. By contrast, the pool of referees available and willing to take on the task of peer reviewing the glut of manuscripts dwindles notably, increasing the number of invitations needed to get a full referee complement for any given manuscript and hinting that actually at least a proportion of the field do indeed take time off. These observations need not be paradoxical; the working patterns of researchers will differ from one individual to the next and while some like to clear their desk and submit that manuscript before heading to the beach, others take the relative quiet of the holiday period to find some time to finish an overdue writing task undisturbed. Furthermore, a declined invitation to review a manuscript does not automatically mean that a potential referee is on vacation, many will already be reviewing manuscripts for other journals or taking a break from reviewing to focus on other tasks. Either way though, our in-trays overflow throughout the summer months as a result.

Of course, it is not just we microbiology editors that experience periods during which a high workload makes it difficult to maintain a sensible work-life balance. A global survey of university staff carried out by the Times Higher Education in late 2017 (https://go.nature.com/2x61A9Y) provided a snapshot of campus life in which many academic staff felt overworked and underpaid, often with serious negative impacts on work-life balance, relationships and mental health. Surveying 2,379 higher education staff (83% of which were academics) from 56 countries across 6 continents (although the majority were from the United Kingdom and United States), the report revealed how most academics work well beyond their contracted hours, including holidays and weekends. Specifically, ~40% of academics work 10 or more hours per day and (not necessarily the same) 40% work 6 or more hours over

the weekend. Furthermore, despite going on substantially fewer vacations than nonacademic counterparts, more than 60% of academics gave up 5-10% of their holiday time to work, with ~10% respondents giving up >20% of their time off. Some of the factors identified by those surveyed as contributing to these working patterns include demands on time for bureaucratic tasks (not necessarily requiring particular academic expertise), growing workloads and an expectation to always be contactable. The impacts of such demands on an academic's interpersonal relationships and family life were frequently noted in responses, whether through limiting the amount of time available to spend with friends and family, through the demands of having children affecting career progression, or in choosing not to start a family altogether. Inevitably, respondents also revealed the impacts on their well-being, with ~30% of academics reporting that work had a lot of negative impact on their mental health.

The overall picture painted by the report is of chronically high and potentially unsustainable levels of work being expected of many academics in higher education institutions and of the consequent negative impacts on home life. Pressures stemming from competing for often scarce research funding, carrying out the research that does get funded, keeping up with the literature, disseminating the results of research through publication of a paper, travelling to conferences, seeking and sustaining long-term employment, teaching and management duties and myriad other tasks mean that many (perhaps most) academics feel the need to sacrifice large parts of their personal life just to keep from being submerged. Technologies that have enabled greater productivity and efficiency by allowing instant communication and sharing of information have also blurred the demarcation between home and work, raising expectations in all of us about how fast to reasonably expect a response from others and further eating in to the important separation between the professional and the personal.

Although robust, data on work–life balance, work-related stress and researcher mental health is in large part lacking — a recent report for the Royal Society and the Wellcome Trust that surveyed the available literature suggested that the well-being of academics is worse than for individuals in many other employment sectors and is comparable with high-risk groups such as those working in healthcare (http:// go.nature.com/2p8fq8R). When faced with the need to earn a living and to develop a career in a field that is intellectually demanding and highly competitive, it is easy to understand why work-life balance often gets side-lined. Indeed, for all of us there will be times during which demands are such that a heavy workload is unavoidable, and such periods can actually bring about a high level of performance as the challenge is risen to. However, if left unchecked by periods in which rest, relaxation and personal life are prioritized, performance will surely deteriorate and over the long-term the likelihood of burnout will increase.

Whether for a full vacation or simply over a weekend, taking a break from the bench or desk and unplugging completely from work and from work-related e-mail and social media will have a measurable positive impact on well-being and productivity upon returning to work. However, when it comes to maintaining a healthy work-life balance, there is no one-size-fits-all approach and importantly the responsibility for doing so does not lay solely with the individual in question. A healthy and happy researcher will in all likelihood be one that is more creative and productive and will contribute more to the team around them, so research group leaders, institutions and funders should also pay attention to the expectations and demands placed on academics and the resources made available to meet them. They should also ensure that systems for monitoring the impact of a chronic high workload are established and where necessary take steps to mitigate any negative impact and restore a better work-life balance for academics they employ or fund.

Burning brightly is to be encouraged, but not at the risk of burning out entirely. We should all take a break, every now and then.

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