COMMENTARY

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LETTERS

edited by Jennifer Sills

NextGen VOICES

Results: Work-Life Balance

What one change would most improve work-life balance for scientists? In July, we asked young scientists to send us their solutions to this pervasive challenge. We heard from more than 200 readers. A sample of the best responses can be found below. To allow for as many voices as possible, in some cases we have printed excerpts of longer submissions (indicated by ellipses) and lightly copyedited original text for clarity. To read the complete versions, as well as many more, go to http://scim.ag/NextGen8Results.

Follow Science’s NextGen VOICES survey on Twitter with the hashtag #NextGenSci.

Submit Now: Enduring Ideas

Add your voice to Science! Our new NextGen VOICES survey is now open:

What recent discovery in your field will still be remembered 200 years from now? Why?

To submit, go to http://scim.ag/NextGen9

Deadline for submissions is 15 November. A selection of the best responses will be published in the 3 January 2014 issue of Science. Submissions should be 250 words or less. Anonymous submissions will not be considered. Please submit only once.

NextGen Speaks

RECESS! DO YOU REMEMBER THE UTTER JOY of running with reckless abandon while grinning unabashedly from ear to ear? As adults, we may not be able to recapture the simple joy and innocence of childhood playtime, but we can at least partake in physical activity to give ourselves a healthy break from daily responsibilities. To improve work-life balance and overall well-being, exercise during working hours should not be merely tolerated, it should be expected. We’ve done the research. Nothing else comes close to bestowing the broad benefits of a solid exercise routine. We can protect ourselves against aging-related cognitive decline, prolong the viability of our immune systems, strengthen our bones, and empower our mitochondria, as well as reduce our risk of cardiovascular diseases, diabetes, neurodegenerative diseases, and certain cancers. We’ve gathered the evidence, now let us set an example. Let us not be the obese nutrition scientist or the oncologist who sneaks a cigarette; let us be the ones who deal with stressful lives by building our physical strength and mental fortitude through fitness. And let us not feel guilty for doing so. No longer should we have to sneak out of lab like thieves in the night to get in an hour’s swim or feel obligated to stay late to make up for time “lost” at a lunchtime yoga class. Principal investigators, I call on you to value healthy lifestyles enough to insist that your employees and trainees make time to exercise during the day!

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“THOSE WHO RESEARCH ATOMIC BOMBS don’t earn as much as those who sell tea eggs.” This Chinese saying originated in the early 1980s, but still prevails nowadays in the Chinese scientific community. It ironically describes the situation of low salaries for Chinese scientists. Almost no real increase in scientists’ salaries is in sharp contrast to the rapid rise in China’s housing prices and cost of living during the past decade. The poor salary system thus is pushing scientists to spend much more time working rather than being with family. To get extra income in China, many scientists are busy attending various meetings, establishing or maintaining close relations (guanxi) with government officials, indiscriminately applying for grants from different government agencies, and anxiously producing more and more papers…. More time on work means less time on life. The work-life imbalance puts Chinese scientists under high pressure. A sharp increase in scientists’ salaries, I think, will most improve work-life balance for scientists, especially for young scientists in China.

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AGE RESTRICTIONS WHEN applying for grants or positions should be eliminated. Each of us has different personal circumstances that result in us taking more or less time to complete a Ph.D./postdoc or to apply for a group leader position. Having to plan each single step of your life is not living.…. 

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TO IMPROVE WORK-LIFE BALANCE IN THE SCIENCES, a cultural shift is necessary that provides more space for creativity and places less emphasis on efficiency for efficiency’s sake…. For early-career scientists, creative intellectual space can be hard to come by. Short-term postdoctoral positions com-
bined with increasingly vast amounts of data and journal articles to keep up with, and expectations to produce many articles oneself leave little room for messing around with truly novel research ideas (or even some false starts that might prove helpful in the future), let alone spending time with family and friends. How can we make a cultural shift toward giving ourselves more space for creativity in the workplace, and consider time spent away from work a critical way to “recharge”? One concrete proposal would be to shift toward longer-term (5-year) postdocs and grant cycles. This would give early-career scientists more flexibility to pursue original ideas and to take time for home life, exercise, even full nights of sleep. These healthy habits could then carry through to later career stages. Author’s note: I am writing this late at night on my daughter’s birthday, with less than 6 hours of sleep ahead of me before I travel tomorrow….

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MAKE “NO” PART OF YOUR VOCABULARY. Especially as a young scientist, I was eager to prove I could handle everything (from publishing my papers to organizing social events) until I realized I could not if I also wanted a life. Then I found out that tasks can be broken down into three categories: Something is either important to me, or to someone else, or no one really cares…. Setting priorities helps to keep a work-life balance….

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CHILD CARE. THE SINGLE BIGGEST LIMITATION on my ability to work late and flex around

subjects’ and colleagues’ schedules is the absolute requirement that I leave the building between 4:00 and 5:00 p.m. to go pick up my daughter from day care…. If I had a childcare solution close to work and matched to my budget, I could put in longer hours and get more done. For reference, I am a male scientist…. This is no longer a female issue; it is a universal issue. My university does have an affiliated childcare center, but it has a waiting list of 2 years or more. That doesn’t work so well for new postdocs and faculty members who move.

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…WORKING IN SCIENCE MEANS MORE THAN just research: For many motivated scientists, it also involves organizing meetings (e.g., Ph.D. conferences organized by Ph.D. students), participating in science outreach (school visits and teaching in courses), and communication (blogging and tweeting). Yet, these activities are generally not reflected in science metrics, and for early-career scientists are not always assessed in fellowship or grant applications either. Thus, many of us consider nonresearch activities to be more like “hobbies.” Accordingly, such “extracurricular” projects are conducted in our free time, following already strenuous working hours. Therefore, a more nuanced evaluation of what we do, and a greater appreciation (academic and monetary) of nonresearch activities would encourage scientists to consider them as part of their work and thus allocate their time accordingly, which would ultimately result in an improved work-life balance.

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INTRODUCING INSTITUTIONS for medical specialization (and other essential specializations) in the developing world. In developing countries, such as most countries in Africa, scientists have to spend many years abroad and away from their families just to specialize. Some crucial specializations (such as in surgery) are very extensive and require several years…. Most scientists achieve further education at the expense of their wives and kids. This has given a bad name to such scientists; they are now seen as irresponsible husbands who hide behind books….

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IT IS MY FIRM BELIEF THAT THE THING THAT will most improve work-life balance for all scientists is ethical treatment in laboratories. Too often, we hear stories in our respective universities and companies of unethical treatment of students, professors, scientists, and researchers…. These ugly monsters raise their heads in the form of low salaries that require inhumane work hours as well as looking the other way when research integrity requires you to stand up and say
“this is unacceptable.” Unfortunately, many scientists are too scared to be whistleblowers in these situations, as it will affect their future career prospects… With an improved ethical set of values in laboratories, we will surely see an increase in productivity and happiness among scientists.

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…KEEPING A BALANCE BETWEEN WORK AND private life is all about managing your time. We all have exactly the same 24 hours a day, so scientists should be able to just work efficiently and go home early, right? Wrong. Nature knows neither schedules nor the concept of normal working hours. Cells keep growing, animals need their daily treatment, and the protein purification column is simply not running as it should. The solution is increasing efficiency through teamwork. Life in the lab can be lonely when you are the only one responsible for a project. However, when scientists, usually with different backgrounds, come together, a synergistic process starts and new ideas come up…. The biggest hindrance is unclear authorships and responsibilities…. However, I think that the increased efficiency in the lab and therefore more work-life balance would be worth the effort of trying to work more as the team we already are.

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IN MY EXPERIENCE, MOST SENIOR RESEARCHERS still firmly believe that in order to be successful, you have to spend all your time doing research. As a consequence, younger researchers are spending inordinate hours in the office, trying to live up to this view. More hours do not, however, mean a higher output, as tired researchers are less productive and less creative. Moreover, many people are more productive at home than in the office. I think academic institutions should focus more on providing researchers with the skill set to increase their productivity, instead of just (implicitly) demanding more and more hours. That way you can have a healthy work-life balance while still producing good quality research.

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…ONE OBSTACLE I’VE NOTICED LIVING IN a foreign country—and looking to move to another foreign country for a different position—is how unaccommodating some positions are for people with families…. Postdoctoral positions are sometimes set up with very little to offer in terms of healthcare benefits and financial aid going toward childcare costs (which would be a given for citizens). A lot of postdoctoral positions given to foreigners appear to be offered with the “get in, get out” attitude and are simply not (socially) designed for people who have extra, maybe complicated needs (like kids)!…

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FOR MANY SCIENTISTS, A HUGE PROPORTION of available time is spent on administrative and regulatory tasks that do not increase the quality or safety of research. Furthermore, grant funding generally does not cover salary for administrative personnel to handle these non-study-specific tasks. Reducing administrative and regulatory burden to a more reasonable level—for example, in the oversight of human and animal studies—would be a huge step in making scientists’ workloads more manageable.

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QUITE SIMPLY: MORE SUPPORT IN DAILY household chores. Let the scientists spend the little free time they have with their family, instead of constantly having to clean, cook, do laundry, and drive kids around. Having a family should not come as an extra burden for the scientist, nor should it unequivocally mean that the scientist in question will have to reduce his/her amount of time spent in the lab. They should either be paid more to afford this kind of help, or there should be a network of nannies and cleaners available to scientists to help them around the house. The German Christine Nüsslein-Volhard foundation, for example, gives promising young female scientists monthly financial grants to pay for assistance in household chores and additional childcare—this type of initiative should become the norm, not an exception.

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ONE OF MANY CHANGES THAT COULD BE made to improve work-life balance for scientists, especially the ones working as academics, is by reforming the way in which the academic reward system is carried out. It is time to reevaluate the real effectiveness of current practices, such as publication impact factor metrics, in achieving scholarly goals such as excellence. The pressure to publish is immense, but the quality of output does not often reflect the extent of reflexivity, self-critique, and insight that could be achieved through careful and diligent scholarly thinking. Output “quantity” in itself is no measure of quality or excellence—real impact entails so much more. Genuinely acknowledging and rewarding these other key impact factors, such as societal engagement, teaching excellence, and input and deliberation at key meetings and conference participation could go a long way toward balancing the demands of academic output to publish alone, thus lessening the pressure to spend endless weekends and vacation time writing for quantity rather than quality.

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