


# 1 Work–Life Balance in the Pharmaceutical Sciences: More Essential 2 Than Ever Today

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15  
16 **T**here is a fairly well-known saying that no one lies on their  
17 deathbed and wishes that they had spent more time at  
18 work. Additionally, we are approaching two years of disruption  
19 as a result of the COVID-19 pandemic, and the sensation of  
20 “burnout” is prevalent among many in our pharmaceutical  
21 sciences community. It, therefore, seems timely to consider  
22 work–life balance, including what we mean by this term, as well  
23 as why we might all benefit from taking a long hard look at how  
24 we divide and prioritize our time.

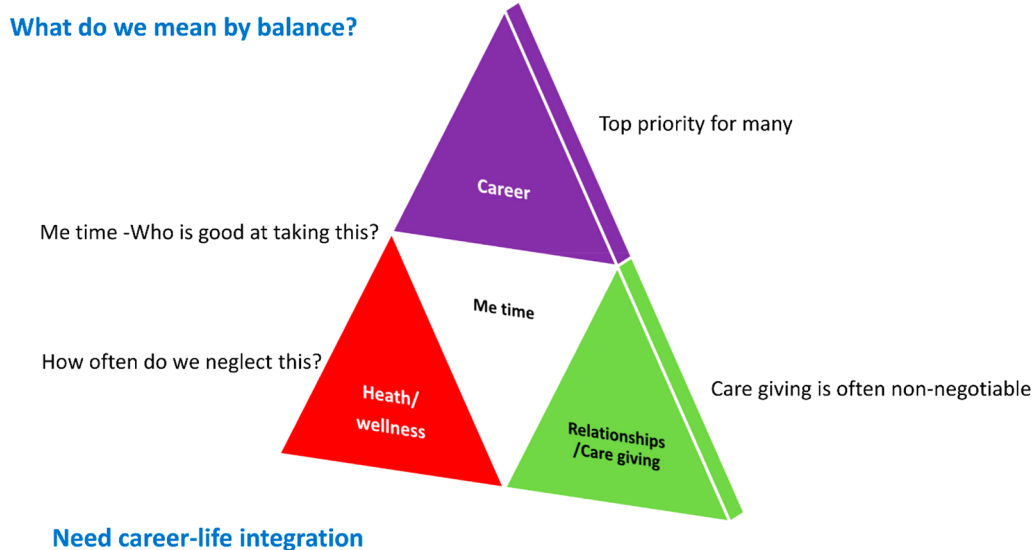
25 Let us first consider what we mean by work–life balance. The  
26 phrase work–life balance does not really capture the complexity  
27 of life today and suggests that there is work, and then there is  
28 “stuff” outside of work that can be lumped together. Instead, it is  
29 helpful to consider four critical areas of life that need to be  
30 balanced to achieve overall well-being, as shown in [Figure 1](#).  
31 These areas are (1) career, (2) relationships and caregiving  
32 responsibilities around, for example, dependent children/aging  
33 parents, (3) activities to support your mental and physical  
34 health, and (4) free time to indulge hobbies/passions and relax.  
35 Caregiving/parenting responsibilities are often fairly rigid and  
36 consume a considerable portion of out-of-work hours, as well as  
37 mental bandwidth. Career activities, i.e., working, typically  
38 require many hours of the day. In combination, these two areas  
39 of life often leave little time for activities critical to mental and  
40 physical well-being, let alone hobbies, and hence, these are  
41 neglected. This situation becomes untenable in the long term, as  
42 we cannot neglect our physical and mental wellbeing! However,  
43 for many reading this article, you have spent years of effort in  
44 higher education, and your career is important to you. So, how  
45 can you prevent your career from being all-consuming?  
46 Hopefully, some of the advice given below might help provide  
47 you with improved balance while still achieving your career  
48 goals. Much of this advice is directed toward being more  
49 productive during your working day so that you can actually  
50 spend less time on work-related activities and more time on the  
51 rest of your life.

52 Ten things to improve work–life integration:

53 (1) **Say no often, and do not feel guilty about it.** This is my  
54 favorite piece of advice, and it really helps in reducing  
55 overcommitment. The reality is that we all get asked to do  
56 more than we can possibly achieve, and so we need to be  
57 selective about what we agree to do. If you are  
58 overcommitted, you may not be able to deliver on your  
59 promises, and no one is happy. Prioritize saying yes to  
60 tasks that you are interested in, are of benefit to your  
61 career development, or that you feel that you absolutely  
62 have an obligation to be involved in. Say no to tasks where

there are plenty of other candidates who could complete  
the work or which do not fall into your high priority list. 64

- (2) **Carve aside part of your day to have uninterrupted  
thinking time.** Scientists need to be creative to progress  
the discipline. To be creative, you need time to think  
about what you are doing. One of the best pieces of advice  
I have ever been given is that “your job is to think, and you  
can think anywhere.” However, your mind needs to be  
free of distractions in order to pursue creative thoughts.  
While it may be hard to find time to gaze into space and  
mull things over, this may be exactly what you need to do  
to problem solve and innovate. Give it a try! It is even  
backed up by research that suggests that mind wandering  
facilitates creative problem solving.<sup>1</sup> Even better, combine  
thinking with a repetitive exercise like swimming or  
jogging as long as you can supply your brain with enough  
oxygen. 79
- (3) **Analyze how you spend your time across your working  
day.** There are multiple studies that show that increasing  
the time spent at work does not increase productivity. In  
fact, it may surprise some of you that there are some  
studies suggesting that you may achieve greater  
productivity by working fewer hours.<sup>2,3</sup> Certainly, it is  
well established that when you work beyond a certain  
number of hours, your productivity declines precipi-  
tiously.<sup>4</sup> So, if you are at work, make that time spent count  
by being focused. It is very revealing to document exactly  
how you spend your time at work each day. Which parts of  
the day are you most creative, and when do your energy  
levels sink? Try and plan your workday based on this  
knowledge by undertaking tasks that require creative  
thinking when you are fresh and leaving routine tasks that  
do not require much intellectual input to times of the day  
when energy levels are sagging. Make sure you take short  
breaks in between tasks. Figure out what your biggest  
distractions are so that these can be minimized and so that  
you are not spending your time at work achieving nothing,  
when you could be spending that time doing something  
else outside of work. 101



**Figure 1.** Critical areas of life to be balanced to achieve well-being.

- 102 (4) **Compare your target time commitments against your**  
 103 **actual time commitments.** Everyone has different  
 104 categories of work. For a research scientist, this might  
 105 look something like research activities, administration,  
 106 meetings, professional development, and service to the  
 107 profession (e.g., reviewing manuscripts). Everyone can  
 108 come up with their own breakdown to match their  
 109 professional role. The probing question to be addressed  
 110 here is what is your ideal balance (ideal balance may be  
 111 some combination of how you want to split your time  
 112 and/or a balance that meets the stated goals of a particular  
 113 role) of time breakdown for each of these categories  
 114 relative to how you actually divide your time. This is a very  
 115 useful exercise to go through since it can help you to  
 116 rebalance your portfolio of activities and to justify saying  
 117 no to requests that fall into a category where you are  
 118 already maxed out. For example, if you decide that serving  
 119 on two committees is reasonable, and you get asked to  
 120 serve on an additional committee, you can respond that  
 121 you already have existing commitments of this type and  
 122 are unable to take on this role. An important part of this  
 123 assessment is to accurately estimate how long it takes to  
 124 do different tasks. You may be surprised at the  
 125 discrepancy between how long a task actually takes versus  
 126 your mental viewpoint of how long it takes. This  
 127 difference can contribute to overcommitment.
- 128 (5) **Practice mindfulness by meditating every day.** This  
 129 piece of advice may surprise some readers, but let us look  
 130 at the scientific evidence. Research has shown that, among  
 131 other benefits, meditation can reduce stress<sup>5</sup> and increase  
 132 attention span.<sup>6</sup> Also, it only requires a few minutes a day  
 133 with a recent study documenting changes in brain resting-  
 134 state functional connectivity in novice meditators after 2  
 135 months of meditating 5 times per week.<sup>7</sup> Simple breathing  
 136 exercises that take only a minute or two can also help you  
 137 refocus and decrease your stress.
- 138 (6) **Spend as much of your working time as possible**  
 139 **pursuing the activities that you do best and are the most**  
 140 **“valuable”.** Your most valuable activities are those that  
 141 mean the most to you. Further, work is much more  
 142 satisfying when you spend your time on activities that you

are good at, rather than on activities that do not come  
 naturally. Focusing on your most valuable activities and  
 those that you are best at will make you more productive.<sup>8</sup>  
 So re-evaluate your areas of professional competence and  
 make sure your role is well aligned with your strengths and  
 personal goals.

- (7) **Plan out your week ahead of time and make a strategic**  
**plan.** Develop a strategic plan for a defined period of time,  
 and outline your goals for this time period. At the  
 beginning of the week, review your tasks, goals, and  
 deadlines and allocate time on your calendar to different  
 tasks, starting with allocating time to your highest priority  
 activities, which should be aligned with your strategic  
 plan. Try and leave in some flexible time for last-minute  
 meetings that crop up. This will help you avoid  
 overbooking, meet deadlines, and provides justification  
 for declining unnecessary meetings.
- (8) **Prioritize: do what is important and not necessarily**  
**what is immediate.** Spend most of your time on high-  
 value tasks, i.e., the ones that have the highest impact.  
 When deciding on how to prioritize, make use of the  
 Eisenhower matrix (Figure 2), a management approach  
 attributed to US President Dwight Eisenhower.<sup>9</sup>
- (9) **Pacing: life/career is a marathon, not a sprint.** We’ve all  
 experienced the deadlines and the frantic push to make  
 them. This might be getting your thesis written, making a

	Urgent	Not urgent
Important	Do now	Decide
Not important	Delegate	Delete

**Figure 2.** Eisenhower matrix to help prioritize tasks.

169 grant deadline, or a project deadline. We work long hours,  
170 the adrenaline flows, and the fear of failure drives our  
171 focus to finish what needs to be done. However, these  
172 work “sprints” are not sustainable long-term and lead to  
173 burnout. Instead, we need to pace our work and our  
174 career, considering a longer-term vision, rather than the  
175 short-term.

176 (10) **Do something you are passionate about outside of**  
177 **work.** Set aside time for a hobby, maybe something you  
178 can share with a partner, friends, or kids. Hobbies allow  
179 your mind to take a break from research, expand your  
180 network, and destress. In fact, the first Nobel Prize winner  
181 in chemistry, van’t Hoff, suggested that scientific  
182 imagination is correlated with creative activities outside  
183 of science.<sup>10</sup> And even if it is not, there are lots of benefits  
184 to hobbies, especially if some of them involve exercise.

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## 191 Notes

192 Views expressed in this editorial are those of the author and not  
193 necessarily the views of the ACS.

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