

Faking It: Impostor Syndrome in the Pharmaceutical Sciences



Cite This: <https://doi.org/10.1021/acs.molpharmaceut.2c00625>



Read Online

ACCESS |

Metrics & More

Article Recommendations

Have you ever felt like a fraud? Do you feel like you know less than other scientists and that it is only a matter of time before you get found out? Or that you should not have been accepted into graduate school, or invited to give that talk at a conference because you are not good enough? If the answer is yes, then you, like many pharmaceutical scientists, have probably encountered impostor syndrome. Impostor syndrome is a sense of professional inadequacy, where there is a persistent fear of being discovered as a fraud.¹ Impostor syndrome is more common in high achievers, women, and under-represented minorities.² It is especially prevalent among scientists, where the highly competitive environment, populated with high achievers, leads to constant feelings of self-doubt as comparisons are made to peers.³ Graduate students, professors, and industrial scientists at all levels suffer from impostor syndrome. Personally, I experience bouts of impostor syndrome. For example, I gave a talk at a conference slightly outside of my core research area just a few weeks ago. Listening to the other speakers, I felt like I should not have been invited because my research was not good enough compared to theirs and that when I gave my talk everyone would be wondering why I had been invited.

Impostor syndrome potentially elicits some very negative career impacts. The self-doubt can make people change careers, depriving the pharmaceutical sciences of highly talented scientists. Impostor syndrome may also lead to people under-performing, in spite of their aptitude, because they are holding back, insisting that everything has to be perfect first, or generally procrastinating.²

So how can we combat impostor syndrome in the pharmaceutical sciences? How can we overcome our personal impostor syndrome demons or help support colleagues and mentees as they deal with this phenomenon? Here are some suggestions:

(1) Discuss it with friends/colleagues. You will probably find that a lot of other people you know have experienced impostor syndrome. Up to 75% of successful leaders and entrepreneurs have admitted to experiencing impostor syndrome.²

(2) Realize that impostor syndrome stems directly from your thoughts and that it is not coming from other people.

(3) Remind yourself of the facts. For example, if you are questioning whether you are good enough to succeed in graduate school, then remember that you went through a highly competitive admissions process and that you have the qualifications and experience to do well.

(4) Understand that failure is an integral part of success and moving forward. As scientists, we should realize that failed lab experiments are to be expected along the way to good scientific achievements. The same is also true in our professional

development. Do not demand perfection from yourself, rather know you can set clear, achievable, and measurable personal goals.

(5) Own your successes. Reflect on your past achievements and how they have led to where you are today. You are not in your current position by luck or accident but most likely because of your past accomplishments.

(6) Be kind to yourself. Rather than being self-critical, engage in positive self-talk.

(7) If you are an advisor for students, a manager, or have mentees, then develop an awareness of impostor syndrome and openly discuss its potential impact with your group members. Try and help people to avoid overworking as a fix for their perceived inadequacy with their performance.

Hopefully, some of these thoughts can help you break out of your impostor syndrome. From the perspective of publishing and reviewing articles, do not let feelings of self-doubt hinder your activities. Do not amplify negative reviewer comments and take them personally or let them lead to greater self-doubt. Remember that criticism and feedback are ingrained in science regardless! Do not second guess why you were asked to review a manuscript; just do the best that you can (as long as it is in your research area) and give the authors balanced feedback on their work. Finally, keep in mind that comparisons with other scientists will not make you happy, so just do not do it. Instead, set your own goals and do your best to achieve them. I hope that by increasing the visibility of impostor syndrome, pharmaceutical scientists will become more confident in their own abilities.

Lynne S. Taylor, Editor-in-Chief orcid.org/0000-0002-4568-6021

AUTHOR INFORMATION

Complete contact information is available at:

<https://pubs.acs.org/10.1021/acs.molpharmaceut.2c00625>

Notes

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



ACS Publications

© XXXX American Chemical Society

■ REFERENCES

- (1) Clance, P. R.; Imes, S. A. The imposter phenomenon in high achieving women: Dynamics and therapeutic intervention. *Psychotherapy: Theory, Res. Pract.* **1978**, *15* (3), 241.
- (2) Paterson, R.; Vincent-Akpui, I. F. Impostor Syndrome with Women in Science. In *Science by Women*; Springer, 2022; pp 83–98.
- (3) Woolston, C. Faking it. *Nature* **2016**, *529* (7587), 555–557.