People, not papers? A good mentor guides students to publish their work

A nurturing academic mentor prioritizes the growth and development of students, but that shouldn't come at the expense of publishing. And by publishing, I mean all forms of publications.

I recently attended a workshop for PhD supervisors. These gatherings offer a great opportunity to catch up with colleagues, engage in enriching discussions and reflect on our role as mentors. One of the highlights of the workshop was our reading assignment: "Cultivating the Research Group Garden." Although published in the specialist journal Chemistry World, this opinion piece carried a universal message about the significance and value of mentorship in our roles as supervisors. It's inspired by the writings of Uri Alon, a professor at the Weizmann Institute of Science who, among other things, has curated an exceptional collection of resources for nurturing scientific mentors.

Cultivating the Research Group Garden. Trevor Janes, Chemistry World 2021.

People, not papers?

The piece resonates because mentoring is, at its core, the art of nurturing our students and equipping them with the guidance and training they require to excel in their future pursuits. However, as I delved further into the article, I encountered a message that, I must admit, left me somewhat uneasy. It's a message that appears to be prevalent in the UK postgraduate (PhD level) community: "People, not papers, are the most important outcomes." In essence,

the idea that you don't need publications to graduate or that publishing is not a significant consideration throughout your doctoral journey.

This message rubs me the wrong way. I understand the intention behind it, but I can't help but disagree. In my experience, publications are not just a box to check on the path to a PhD; they are an integral part of the learning process and a vital currency in academia.

Cooks skillfully prepare and serve delicious (and ideally, nutritious) meals, musicians share their art through performances, mechanics repair other people's cars and academic scientists engage in scientific inquiry and communicate their findings through publications.

Do we ever advise cooks not to concern themselves with serving their dishes for others to eat? The idea that mentoring individuals should solely revolve around the people—whatever that means—while neglecting their core tasks, is puzzling. Why should student growth and development exclude the tasks of writing up their work and publishing it?

In the same vein, should we advise academic scientists that they need not worry about publishing their research, as long as they focus on mentoring others? Is that a good advice? Let's consider a mentor who fails to effectively guide their students in publishing their research promptly. Can we truly say they have fulfilled their role as mentors to their students effectively? And would this be serving them well in their own academic development?

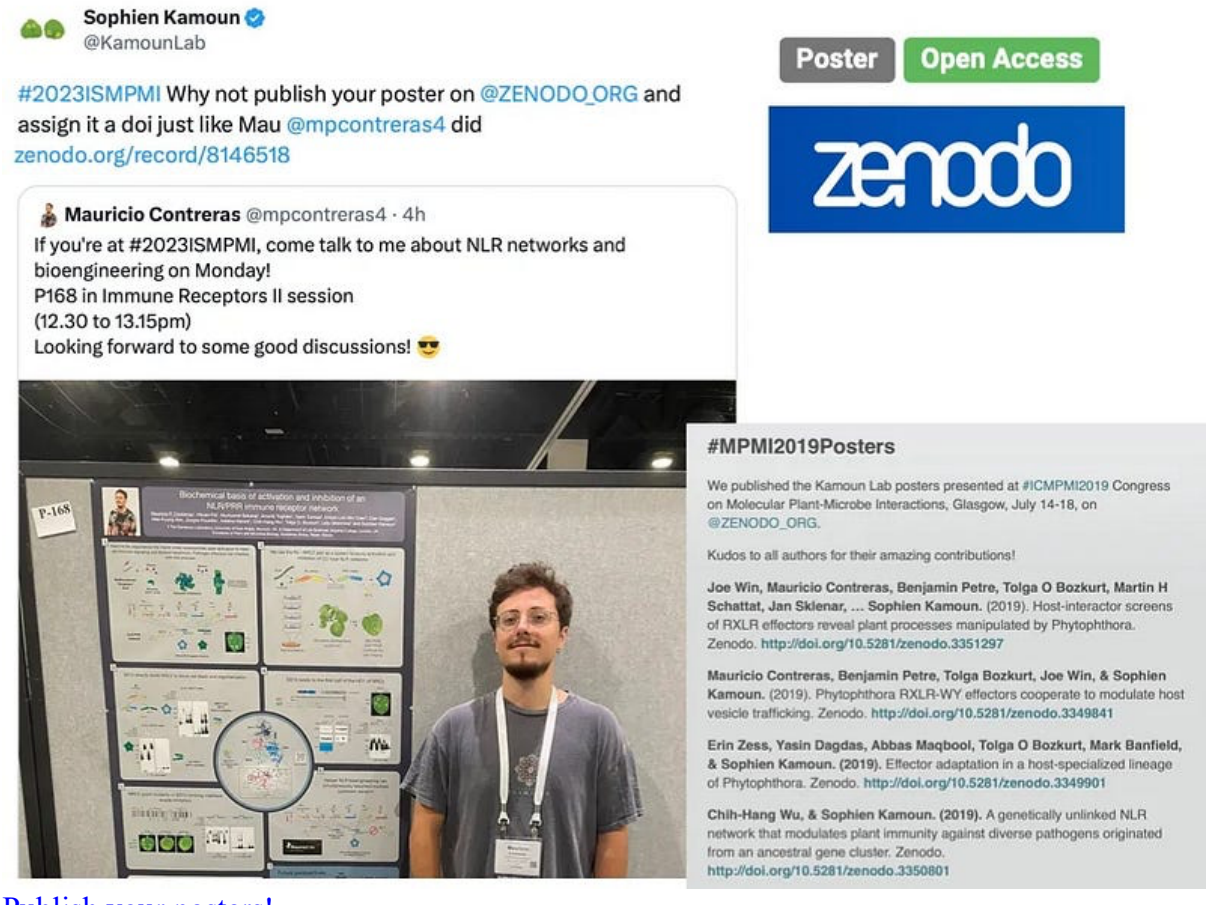
xkcd: False dichotomy.

People, not papers. Why the false dichotomy? Why is it often framed as an "either-or" scenario? I suspect one reason is that it aligns with the lazy narrative that productive labs are *always* toxic environments, pushing their students relentlessly without regard for their development. On the contrary, caring mentors are portrayed as those who spare their students the stress of publishing. This simplistic view—which seems to dominate academic chatter—fails to capture the complexity of mentorship and the potential for a harmonious blend of productivity and support for students' growth and development.

People and papers, any papers

I believe one source of confusion arises from equating publishing to the unhealthy fixation on a subset of journals, notably the renowned "glam-mag" publications. The traditional narrative is that these high-impact papers are the sole currency of academic success. While this might have held true for earlier generations, the landscape has evolved significantly, allowing us to broaden our perspective on publishing and the rewards associated with it.

Publishing now encompasses a more comprehensive concept than in the pre-digital era. It's not limited solely to traditional journals but includes diverse forms of scholarly outputs such as datasets, posters, and concise papers, often referred to as mini- or micro-papers. Moreover, the advent of preprints has empowered authors to share their work promptly and on their own terms. Preprints enable researchers to disseminate their findings swiftly, breaking free from the confines of traditional publishing schedules. And let's not forget, preprints are papers too.



Publish your posters!

The bar for publishing various forms of scientific content, whether it's a poster, dataset, or a full paper on platforms like Zenodo and bioRxiv, is considerably lower than the outdated model of publishing. This accessibility allows students to share their contributions and communicate their work to peers and stakeholders on their own terms and with far less restrictions compared to previous generations. This is how I think of publishing, in a broader sense. Let's call it publishing *sensu lato*.

Neither people, nor papers?

I urge mentors to embrace these modern publishing platforms and help diversify the narrow and, indeed, toxic perspective on scientific publishing. The mentors who fail to support these contemporary channels and prevent their students from publishing their posters and other preprints are the ones who fail to create a nurturing environment and hinder the professional growth and development of students. Do these mentors genuinely care about students? Do they truly prioritize the well-being and development of "people"? In such cases, it's neither people, nor papers.

Publishing has never been easier

I guess what also irks me is this failure to recognize that publishing has become considerably more accessible in recent times. Beyond the myriad of formats and platforms available, there is also a wealth of tools at our disposal for assisting students in crafting papers and other forms of publications. One of the highlights of my summer was when a PhD student approached me at a conference, telling me how my workshop on scientific paper writing had played a pivotal role in helping them finalize their thesis and successfully publish their work. I teared up. It was a poignant moment because the student's supervisor, a well-known and highly regarded Professor, had sadly passed away midway through the student's PhD. The student then found support and guidance on scientific writing through open online resources that I and others have widely shared. I suppose we all collectively contributed to this student's growth and development. People, and papers.

Don't perish! A step by step guide to writing a scientific paper.

A caring supervisor not only nurtures their students' development but also provides guidance and mentorship to help them effectively communicate their work with their intended audience. Publishing our work is not just a choice; it is our responsibility as scientists. When we receive funding from taxpayers, it is incumbent upon us to ensure that the data we generate does not languish in obscurity within our drawers and hard drives. It's about both "people" and "papers"—serving both our communities and our professional duty as researchers.

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Suggested resources

Why you should publish your posters

ECRs, publish your datasets and methods as mini-papers

Don't perish! A step by step guide to writing a scientific paper

More posts on related topics can be found in this Medium List: Science—a user guide