

# Are you failing at scientific social media?

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Not so long ago, I'd celebrate a journal publication with a glass of wine, dark chocolate, and some quiet contemplation—what went right, what went wrong, what next? Now, my new publications are marked by a series of self-promotional chores: Update my departmental and personal websites; add the paper to my ResearchGate, Google Scholar, ImpactStory, ORCID, ResearcherID, and Loop profiles; send out flashy tweets as well as Facebook and blog posts highlighting the article; search for and collect media coverage about the publication; and then retweet, reblog, and repost. What's worse, I repeat these same tedious tasks for everything from invited seminars to conference presentations to teaching assignments.

All of this has me wondering if I'm replacing creative thought with passive online engagement—or as one friend put it: “swapping action for distraction”. It's gotten so bad that the other day in the hallway outside my office I walked head-on into an unsuspecting undergraduate student, sending her notebook and bag flying into the air. I apologized profusely, but when her eyes caught the words “LinkedIn” beaming from my iPhone, she shook her head and said, “I think you have a social media problem”. Indeed.

On top of being distracted and bogged down, I feel that I'm not even using these online resources effectively. I cannot name a single collaboration that has resulted from my incessant social media postings. As far as I'm aware, no student has asked to work in my laboratory after reading my Google Scholar or ImpactStory statistics; no conference or award invitations have come from my ImpactStory profile; and no novel research ideas have sparked from my LinkedIn or ResearchGate networks. In fact, I can attribute almost all of my new projects and collaborations with colleagues or students to old-fashioned face-to-face

communication—albeit some of it on Skype—and traditional peer-reviewed publications.

In our Internet-obsessed society, we are constantly told to stop chatting to the person next to us and start tweeting. As a graduate student, mentors advised me to cultivate my online presence. When I became a postdoc, one of my peers asked: “What will a potential employer find when they Google you? A polished website or a goofy Facebook shot?” (At the time, the answer was neither). As a junior faculty member, I have received similar advice: “Dave, if you want to attract good students, you need to engage them online”. At a recent departmental meeting, my colleagues and I were encouraged to join ResearchGate, with the goal that it would increase our citation numbers. As the Biology communication liaison officer, I have taken workshops on how to promote the department and the university using Twitter and other social media outlets and have been told to get my coworkers to do the same. After teaching a senior scientist in my building how to use hashtags, he frowned at me and said, “I'm starting to get the point of all this: less tinkering, more twittering”.

When they are used correctly, online social media tools can provide unparalleled platforms for communicating and connecting with fellow researchers, teachers, students, and the public as a whole. I was reminded of this at a genomics conference in Spain this October. One of the speakers was Dr. Holly Bik, a computational biologist at New York University. After listening to Holly's seminar on measuring biodiversity, I searched for her work online and discovered that in addition to being a stellar scientist, she's also a social media aficionado. She has more than 6,000 Twitter followers, regularly contributes to high-profile blogs, including *Deep-Sea News*, and maintains an up-to-date interactive website, an open-access digital laboratory book, and a slew of other impressive online profiles. She also writes advice

articles teaching scientists how to use social media.

In a perspectives piece, *An Introduction to Social Media for Scientists*, Holly and her collaborators [1] admit that in academia there is often a stigma attached to online activities, with many seeing it as a distraction from research and teaching duties. But they argue, “When used in a targeted and streamlined manner, social media tools can complement and enhance a researcher's career” [1]. The article, which has been viewed more than 160,000 times, goes on to list the many benefits of academic social media, including professional networking and having a broad impact, and provides tips for maximizing these benefits, such as leveraging multiple tools to disseminate content, building a large following, and avoiding undesirable Google search results.

Reading these tips, I found many things that I can improve upon. For example, I'm currently using social media platforms as pinboards for my achievements—“Hey everyone, look at what I've done”—but I'm failing to engage with other online participants—“Hey there, please tell me more about your new study”. Just like with excellent public speaking, effective social media practices require the user to connect and interact with the audience. For me, this means less self-promotion and more genuine contributions to pertinent online conversations, such as providing constructive feedback on other user's posts or blogging about broader issues in my field rather than just my own work. Another powerful feature of social media that I'm underutilizing is public outreach.

In the article *Ten Simple Rules for Effective Online Outreach*, Holly *et al* [2] describe how social media platforms can be employed for informing and actually involving the public in the scientific process. Using the highly visited blog *Deep-Sea News* as a case study, they highlight successful online

outreach practices, such as integrating your own research into educational initiatives, proper branding, and incorporating narrative. “Producing something popular on the Internet is as much about passion and storytelling as it is about good content” [2]. They also stress that before embarking on any online outreach, the first step is to define the short-term and long-term goals.

All of these ideas about online impact and education were running through my mind when I attended a recent promotion and tenure workshop at my university. As the panel of experts described the tenure process and what a successful application looks like, I listened closely for anything about a social media portfolio. Hearing no mention, I asked: “Would it be useful to include statistics on online activities and impact in a tenure package, such as alternative publication metrics, links to blog posts, number of Twitter followers or retweets, or Google Scholar and ResearchGate statistics?” The workshop leaders and many in the

audience looked at me as though I had suggested something as silly as including family photographs in my tenure package. The answer I received from the panel was essentially: “Best to avoid any mention of social media”. This seemed to run counter to the advice I had received earlier in my career.

The academic landscape is changing slowly, and I have little doubt that in the years to come, online social media tools will play an increasingly central role in research, education, and outreach. But it is important to remember that for most of us, tweeting, blogging, and maintaining online profiles are not yet part of our job profile, and that we will likely not get much credit for the massive effort required to carry out these activities, as laudable and important as they may be. Moreover, any online activity exposes the user to a wide range of hazards—just think of all the celebrities, athletes, and politicians who have had to go on the defensive or who have lost their jobs because of an inappropriate tweet. However,

as underscored by Holly Bik, the rewards of social media can greatly outweigh the drawbacks. Knowing all of this, I will charge forward, regularly updating my many online accounts and profiles. I’m confident that in time I will improve at and take more enjoyment in these online endeavors, and start to reap their benefits. But for now, I cannot seem to shake the nagging thought that it might all be a big waste of time.

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