

▶ Science Careers From the journal *Science*

Published on *Science Careers* (<http://sciencecareers.sciencemag.org>)

[Home](#) > Beyond CVs and Impact Factors: An Employer's Manifesto

September 03, 2013



Sandra L. Schmid

More than 9000 individuals and 360 institutions have signed the San Francisco Declaration on Research Assessment (DORA) ^[1], which calls for scientists to reject journal impact factors ^[2] as a criterion for assessing scientific accomplishment. DORA recommends that institutions "be explicit about the criteria used to reach hiring, tenure, and promotion decisions, clearly highlighting, especially for early-stage investigators, that the scientific content of a paper is much more important than publication metrics or the identity of the journal in which it was published."

It's a nice step—but our signatures are meaningless unless we change our hiring practices. As the new chair of the Department of Cell Biology at the University of Texas Southwestern Medical Center ^[3] (UT Southwestern), in Dallas, I have the opportunity, over the next few years, to recruit several assistant professors to join us in our recently completed, state-of-the-art lab space. In response to our first call for candidates last year, we received almost 300 applications. Given time and cost constraints, only a few candidates can be chosen to interview. These choices are often based on generic and frequently inadequate information, or on whether the candidate is already known to, or has been directly referred to, the search committee.

This situation repeats itself every year in institutions across the United States, and it makes me wonder how many talented scientists we miss who might have been a perfect fit for the unique research environment provided by our departments.



Courtesy of Sandra Schmid and UT Southwestern
Sandra Schmid

Let's first look at how applicants for faculty positions are selected currently, at UT Southwestern and elsewhere. Typically, each candidate provides a brief cover letter—but there are few guidelines as to what its content should be. As a result, the utility of the cover letter varies. Statements of past, present, and future research interests, which also vary in length, form, and content, accompany the cover letters.

Often, the only formulaic and succinct document in the application package is the CV. Because CV's can be scanned quickly and compared directly, they frequently become a 'filter' through which an application must pass before the more extensive package is read carefully.

But as a filter the CV is inherently flawed. CVs provide a brief description of past training—including the researcher's pedigree—as well as a list of awards, grants, and publications. A CV provides little insight into attributes that will ensure future success in the right environment. For example, a CV is unlikely to reflect the passion, perseverance, and creativity of individuals who struggled with limited resources and created their own opportunities for compelling research. Nor is a CV likely to identify bold and imaginative risk-takers who might have fallen—for the moment—just short of a major research success. The same is true for those who found, when they realized their goal, that their results exceeded the imaginations of mainstream reviewers and editors, the gatekeepers of high-profile journals. Finally, for junior hires at early stages of their careers, a CV is unlikely to reveal individuals who are adept at recombining knowledge and skills gained from their graduate and postdoctoral studies to carve out new areas of research, or those able to recognize and take advantage of unique opportunities for collaboration in their next position.

Because the information we have access to is limited, we base our decisions on where

and for how long the candidate trained, and—too frequently—on the prestige of the journals they published in.

To do a better job of screening applicants—and to avoid inappropriate criteria such as journal impact factors—we need more efficient and direct means to accurately assess the potential of applicants to succeed in our department. Although each department must recruit to match its own vision and scientific priorities, here's how we plan to do it in cell biology at UT Southwestern.

We will be asking applicants to write succinct cover letters describing, separately and briefly, four elements: (1) their most significant scientific accomplishment as a graduate student; (2) their most significant scientific accomplishment as a postdoc; (3) their overall goals/vision for a research program at our institution; and (4) the experience and qualifications that make them particularly well-suited to achieve those goals. Each of the cover letters will be read by several faculty members—all cell biology faculty members will have access to them—and then we will interview, via video conferencing technologies, EVERY candidate whose research backgrounds and future interests are a potential match to our departmental goals.

This approach tests candidates' ability to communicate the significance of their achievements, as well as to articulate a clear vision for and the potential impact of their goals. It also gives candidates a chance to describe the unique experiences in which they have demonstrated the passion, commitment, perseverance, and confidence needed to execute these goals. Evidence for these elements should emerge from the cover letters, and will be explored (with opportunities for synergy with our department) during the video conferencing interviews. The content of the candidates' published papers, and their letters of recommendation, will provide further essential information to help in our selection of the top candidates to visit the department.

Our goal is to identify future colleagues who might otherwise have failed to pass through the singular artificial CV filter of high-impact journals, awards, and pedigree. For example, we encourage applications from candidates who are ready and eager to launch their independent careers, but might feel sidelined because their paper has yet to be, or perhaps won't be, published in a high-impact journal. We believe we can recognize excellence that has been missed by journal editors. By increasing the number of interviewed candidates (and also by not imposing requirements for consensus on a faculty subcommittee) we will increase our chances of identifying individuals who are likely to be the most synergistic, intellectually and personally, with our current and future faculty.

Let's run this experiment!

10.1126/science.caredit.a1300186

Source URL: http://sciencecareers.sciencemag.org/career_magazine/previous_issues/articles/2013_09_03/caredit.a1300186

Links:

[1] <http://am.ascb.org/dora/>

[2] http://sciencecareers.sciencemag.org/career_magazine/previous_issues/articles/2013_05_17/caredit.a1300105

[3] <http://www.utsouthwestern.edu/>