

# A Celebration of Science— Why not mathematics?

*Ronald J. Stern*

Every November I receive a list of the roughly 200 newly elected American Physical Society Fellows, of which our campus typically has two or three. I routinely notify our communications office to prepare a news release based on the citation given for each fellow. I then contact the science writer for our major local paper, Gary Robbins of the *Orange County Register*. The citations are typically too dense or cryptic for a public audience, so I work with our communications office and Gary to put the research in a general context and they prepare text that best relates to the public about the elected fellows' contributions. Within a day or two the press release is prepared and an article appears in the *Orange County Register* listing the elected fellows and a nice article about each fellow's contributions. The dozens of smaller community papers throughout southern California routinely print the news release. In addition, our weekly faculty/staff newsletter, which is read by our 10,000 employees, does the same. This is not our student rag, but a publication designed for our faculty and staff that keeps them abreast of what is happening at our main and medical campus. Occasionally the local PBS radio or TV station picks up the press release. For very topical or unusual work, the national press picks it up. In summary, the entire professional community and roughly 2 million members of our community are exposed to physics.

This scenario is repeated throughout the year when the American Geophysical Union, American Statistical Society, Association for Psychological Science, and other professional societies announce the election of their fellows. The lack of a fellows program for the American Chemical Society is made up with the myriad of chemistry prizes they award. Again our faculty routinely receive a couple of their prizes each year and the public relations scenario is the same.

Each year most institutions update a master list of faculty that have received awards or election as

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fellow to learned and professional societies. This information appears in a variety of forms in university publications, mailings to alumni, donors, speeches by our chancellor or provost, or other public opportunities to boast about our institutions. Some individual fellows are featured in these publications, but it is usually the body count that is of most use. These counts also play a role in a variety of nationally visible rankings.

These routines and practices are repeated at every research university and institute and at the corporate and national labs. This dissemination is a wonderful celebration of the important science that is undertaken and informs the public of exciting advances in science. The election of fellows has an immense ripple effect that enhances the credibility of the societies and the sciences they represent.

As a dean I attend many social events and speak to many community groups. As a result I have developed close relationships with hundreds of wonderful and often influential community members in Orange and Los Angeles County. These are individuals who do read newspapers. They routinely remark on having seen these articles and are impressed with the scientific contributions made at the research university that resides within their community. It gives them a sense of pride to be associated with such advances. There is a huge appetite for science in our community. Such statements as "Ron, I just read that a couple of your physics faculty were elected as a fellow for what sounds like some real interesting stuff. Can you tell me more?" As a result, scientific accomplishments are discussed over coffee, at lunches, dinners, and dozens of community social events. This scenario has been, and will continue to be, repeated hundreds of times.

My point is now evident. Election as fellow to learned and professional societies results in a broad dissemination of scientific research to the entire academy and public. Also, there is the appearance of a unified voice from within the scientific discipline. Most often the name of the elected faculty member is quickly forgotten. However, the overall picture that exciting scientific research is happening at our university lingers.

The quality of the research, teaching and service as evaluated by our peers outside our institution is most important. In particular, a fellows program at the premiere academic professional societies has pecuniary advantages. Since the scientific research success of our faculty and researchers is acknowledged by a society without political or institutional bias, it makes it easier for me to argue for important dollars that will enhance the research, teaching, and service goals of our excellent science departments. Such judgments from professional and learned societies certainly grease the wheels for

research budgets, enhancing the likelihood of new science initiatives and the overall growth of science at our university.

The success of these fellows programs in celebrating and disseminating advances in the sciences has, unfortunately, come at the expense of mathematics. I squirm when my community friends say “Ron, wow, I am impressed by all I read in the papers about your science faculty. Is your mathematics department weak? I don’t read much about them.” Of course this is a wonderful opportunity to brag about what excellent faculty and research we in fact do have in our mathematics department. However, I am only influencing a handful of individuals, rather than the millions of readers of the press. Of course there are those rare occasions where one of our faculty is elected to the NAS or receives a Sloan and the press release and newspaper routine is implemented. It is these rare opportunities that we do celebrate mathematics and inform, educate, and excite the public about what we do.

As the preeminent mathematical society we now have the opportunity to celebrate mathematics and to provide on an annual basis an effective vehicle to disseminate the essence of our existence, our important and exciting research. If each year we elect no more than one-half of one percent of the then current membership of the Society as fellows, then each year 150 mathematicians will be recognized by their peers for election to the status of Fellow in the American Mathematical Society. Articles will appear in every newspaper in the nation about mathematicians and mathematics. There will be discussions over coffee, at lunch, and at dinner tables about what we create and discover. There will be a positive sense within your broad communities about the mathematical contributions your institution makes to the advancement of knowledge. We will finally broadcast and begin to recognize and reward excellence beyond the easily identifiable extraordinary.

There are some corollaries to an AMS Fellows Program. The old adage that excellence begets excellence is palpable at a research university. Those programs and individuals that are recognized as excellent are the first to be considered for further awards and recognition. Mathematics has had difficulty here largely due to our refusal as a community of scholars to assume a public responsibility to recognize excellence beyond the extraordinary. Regardless of the reasons, the result is that we do not operate on the same playing field as the other sciences. We are always a special case. As we all know, dealing with special cases can require exceptional effort, and they are easily overlooked.

Of course there are less desirable corollaries to an AMS Fellows Program. There is the extra effort involved in the administration of the program as

well as the perception that the AMS membership will be split into first- and second-class citizenship. The first is a fact and the second is a perception. Our research and educational community is, hopefully, sufficiently mature to recognize excellence without being divisive.