

PROFILES OF SCIENTISTS IN EDUCATION AND PUBLIC OUTREACH

*This profile is based on excerpts of an interview with **Dr. Heidi Hammel** regarding her involvement in Education and Public Outreach (E/PO). Heidi was awarded the prestigious Carl Sagan Medal for 2002 by the Division for Planetary Sciences of the American Astronomical Society. The interview questionnaire was created by Dr. Cherilynn Morrow (Space Science Institute – SSI) and edited by Christy Edwards and Preston Dyches (also of SSI in Boulder, CO), October 2002.*



Current professional position:

I'm a Senior Research Scientist with the Space Science Institute (SSI) in Boulder, CO. I live in Ridgefield, CT, and I telecommute to Boulder. My work is studying the outer planets in our solar system. My background is in earth and planetary science, and I consider myself a planetary astronomer.

Why Heidi contributes to Education and Public Outreach (E/PO):

When I do E/PO and I'm working in the classroom, or in front of cameras or giving public lectures, I have a great time. It is a lot of fun to do! I also believe that it's important to make a positive impact on kids. I've had many opportunities to be a role model, and to me that's really important -- to be demonstrating for students what scientists really look like and who they are. There are far too many misconceptions in the media about what a scientist is and what scientists do. We can really set some good examples, showing that scientists are not people with white lab coats and thick glasses who can't speak in languages that most people understand. We're really down-to-earth people, and I think that's a great message to communicate. I try to reach out to kids, especially girls, who may not have realized that science and engineering are careers they might pursue.

How Heidi balances research and E/PO:

It's always a tough game balancing research and E/PO because I'm a "soft-money" researcher. I'm only paid to do research; I'm not paid to do anything else. You really have

to want to put in a few extra hours. It's part of our responsibility as scientists -- to give back to people, to kids, and to the public. Through their tax dollars they support this work, so I make the time and create the balance. I also try not to let the E/PO get out of hand. I'm first and foremost a scientific researcher and this E/PO work is completely voluntary. I do it when I can, and I try to do as much as possible. At the same time, I find if I'm not careful, I can be completely overwhelmed. I'm very selective about what I do, and I try to find E/PO activities that have leverage. I look for things that are big ticket, because you reach a lot more people that way.

The biggest challenges to her E/PO involvement:

The biggest hurdle is that it's not often perceived well in the research community. If you do a lot of this kind of work, people will think you're not taking your research seriously -- you're more interested in doing Education and Public Outreach, and you're not a "serious" scientist. That can be a problem when you've put in proposals for grants, and they say, well, how much is she going to do on this research, and how much is she going to go off talking to TV cameras and school kids. It is fortunate, however, that professional organizations like NASA and NSF are placing more importance on E/PO. There is a need for more scientist participation in education and public outreach, and I'm not fully sure that these ideas have percolated down into the rank and file yet - there's still a lot of education that needs to go on.

Heidi's words of wisdom to other scientists:

Not everybody has to do exactly what I do. That's an important point to understand. Not everybody likes to be in front of a camera, or talking to kids, or giving public lectures. I happen to like doing those things, but there are a lot of other roles that are just as important.

Don't be limited in your thinking of what E/PO is by just a few examples. E/PO programs have many different facets and there is a whole spectrum of things that you can be involved in. A big part of doing successful E/PO is just to get out there and find the things you like to do, and do them well. Getting science out of the ivory tower and into the public realm is one of the most important and exciting things a scientist can do, but not everybody has to do it the same way.