PROFILES OF SCIENTISTS IN EDUCATION AND PUBLIC OUTREACH

*This profile is based on excerpts of an interview with **Dr. Rosaly Lopes-Gautier** about her involvement in Education and Public Outreach (E/PO), specifically her participation in the creation of an educational video about Io, one of Jupiter's moons. Dr. Cherilynn Morrow (Space Science Institute – SSI) designed the interview questionnaire. Christy Edwards (also of SSI in Boulder, CO) conducted and edited the interview in June 2002.*

Current Professional position:
I'm a research scientist at the Jet Propulsion Laboratory (JPL). My research has been on terrestrial and planetary volcanism, particularly Io and Mars. I am a member of the science team for the Near-infrared Mapping Spectrometer on Galileo. I use data from NIMS to detect active volcanism on Io and to study its character, global distribution, and variations with time. Io is the only place outside Earth where we see large-scale, active volcanism, and it has been a fascinating moon to observe and study.

Description of Rosaly's featured E/PO role:
I do a wide variety of E/PO activities, including teachers' workshops, public talks, and media. The one activity I will highlight here is being the science advisor for an educational video about Io prepared by students and staff at the College of the Sequoias in California. The students, helped by staff, wrote the script and did the filming and graphics. My role was to provide initial ideas and to critique the material they prepared. It was a very enjoyable experience and I was impressed by how much effort the students and staff put into making the video.

How she got involved in the Io video:
I am a strong supporter of E/PO. It is both good business practice (we need public support for our missions and our science) and a duty as a scientist supported by public funds. I consider myself extremely fortunate to be able to do work that I love, and I believe I have an obligation to share my work and the exciting results it brings with the people who pay for it Most of the E/PO activities I get involved in are in response to requests. However, in the case of the Io video, I proposed to NASA for funds under the Jupiter System Data Analysis Program.

Comments on her time commitment:
As a science advisor, my involvement totaled about 4 weeks over 2 years, on a sporadic basis. A lot of the work was done remotely, for example, critiquing various versions of the script. I was helped by my Galileo colleague Bill Smythe, who was a Co-Investigator on the science proposal. Some of the work on the video was combined with other E/PO activities. We did some filming while I was lecturing at a teachers' workshop in Yellowstone National Park, which is an ideal place to discuss Io's volcanic activity. I did some critiquing of the video while giving talks at the College of the Sequoias. This activity was never a burden to my research, though I admit that some of the work was done at home in my "spare" time.

Challenges to her E/PO involvement:
In general, the biggest challenge is money. As a JPL scientist I have to bring in money for my salary plus burden money to be able to pay for my time. A $10K grant (that also has to cover the costs of the E/PO project) hardly allows me to spend any time on a project. I do some work for the SSE Forum and I get some support from that. However, most of my efforts in E/PO – particularly in the "public relations" area (giving lectures, interviews, and so on) - is done on a volunteer basis, though I do consider E/PO to be part of my duties as a scientist.

What she gets out of her participation in E/PO:
I have participated in E/PO since my graduate student days and have found great personal satisfaction out of my involvement. The most rewarding aspect is to be able to inspire others, particularly young people. Outreach has always been an integral part of my science career and will continue to be so. I welcome new opportunities for involvement and am very happy that more scientists are recognizing the importance of E/PO.

Rosaly's words of wisdom about E/PO:
Find something you love and do it well. There are many different ways to become involved in E/PO and all can be personally rewarding. Look for opportunities that suit your personality and your talents. Every impact, small or large, is important. It's hard to measure the impact one has while doing E/PO. I have done many high-profile activities (press conferences, media interviews, TV documentaries) but sometimes it is the low-key activities that can bring us the largest rewards. Today's news may be forgotten tomorrow but the impact of inspiring a young person to pursue science as a career can be enormous and long-lasting.