

MOVERS

Faith Vilas, director, MMT Observatory, Mount Hopkins, Arizona



2001-02: Researcher, Solar System exploration division, NASA, Washington DC

1985-2005: Researcher turned chief, planetary astronomy group, Astromaterials Research & Exploration Science, Johnson Space Center, Houston, Texas

1984-85: Research associate, Solar System exploration division, Johnson Space Center, Houston, Texas

A copy of *The Golden Book of Astronomy* stoked Faith Vilas's career aspirations at the tender age of six. Following the path of other female space pioneers, she pursued her growing interest at Wellesley College in Massachusetts, a women's college known for its astronomy programme.

As a graduate studying astronomy at the Massachusetts Institute of Technology in Cambridge, she jumped at an opportunity to conduct research at the Cerro Tololo Inter-American Observatory near La Serena, Chile. She was so taken with Chile's facilities that she took herself off the PhD fast-track and spent two years there working — and backpacking. "I learned I always wanted to keep a hand in observational astronomy," says Vilas of that pivotal decision.

Back in Chile later in her career, her observations helped to prove the existence of Neptune's rings five years before they were confirmed by a 1989 Voyager mission. Although her travels have not yet taken her into space, she has done research all over this planet, from Guam to Antarctica.

Her greatest achievement, she says, was straddling the worlds of observational astronomy and manned space-exploration work during 20 years at NASA — a period of challenges. "It was a man's world when I showed up," she says, adding that the culture has changed since then.

Eager for a chance to flex her managerial muscles — and get back to observational astronomy — Vilas is excited by her prospects as director of the MMT Observatory in Arizona. A joint venture of the Smithsonian Institution and the University of Arizona, the observatory is home to a 6.5-metre mirror that can view faint objects in the cosmos.

"It's somewhere between being professionally very pleased and being a kid in a candy shop," she says, about being in charge of this state-of-the-art facility.

Her advice for young scientists eager to specialize in space is be confident, stay focused and remain in it for the long haul. "Persistence will take you farther than brilliance or connections," says Vilas. She also suggests remaining opportunistic. Landing a job that isn't exactly what you want may be a route to something better, she says, adding that acquiring new skills is a staple of excellence.

True to her own advice, she's completing a certificate of legislative affairs at Georgetown University to understand the minutiae of how committees work and bills get passed — skills that will be handy to secure future federal funding.

Meanwhile, her childhood dreams have certainly been realized. "I cannot imagine not being involved with astronomy in some form or another," she says.

SCIENTISTS & SOCIETIES

Community outreach

Young scientists can be enthusiastic, ambitious and full of ideas — but they sometimes lack connections to the greater community, especially their senior colleagues. Because many young researchers in my field, computational biology, have talked about getting more connected, I organized a student council for the International Society for Computational Biology (ISCB).

That led to the society's first mentorship scheme, launched this June at its annual meeting in Detroit, Michigan. About 30 students met with eight mentors, most of whom were members of the ISCB board of directors. The opportunity to talk one-on-one or in very small groups with a leading scientist about career options, research and networking was invaluable to students and postdocs early in their careers. The turn-out of both mentors and students was lower than we had hoped, but all students who took part said they had an inspiring time. Mentors looking to fill postdoc positions may also have found interesting candidates.

We have learned important lessons and will establish new strategies to raise awareness and sort out logistics for our next effort, before ISCB 2006.

Planning such events is not without obstacles. We have faced opposition from some scientists who believe that

students should focus only on the academic aspects of their research. There has been some turnover in council membership, as students joined with great enthusiasm, only for their commitment to fade away over time. This is to be expected, given the nature of the pre- and postdoctoral process, with important deadlines to be met. Engaging with the bioinformatics community has also been a challenge at times, especially in filling our database or getting people to participate in our occasional surveys.

But we plan to expand on this event at our next, an international symposium on 28 September in Madrid. This is targeted at young researchers who are keen to develop their research communication skills, meet like-minded colleagues, network with accomplished scientists and learn about career opportunities in Europe and globally.

We're hoping that advertising will get more students and mentors to take part — and make young computational biologists feel more connected, both to each other and to the field as a whole.

Manuel Corpas, a graduate student in functional and structural genomics at the University of Manchester, UK, is founder of the ISCB student council.

► www.iscbsc.org

GRADUATE JOURNAL

Rule of seven

One of the hardest things about graduate school for me is that the end is so difficult to pin down. When I started, I didn't know how long it would take me to graduate, although I hoped it would be six years or less. Since the end of my sixth year has come and gone, so has that hope. My classmates and I have heard tell of the 'rule of seven' — your committee will let you graduate if the number of years you've been in graduate school plus the number of your first-author papers is equal to or greater than seven. There are students around who have passed their seventh year and wish that this rule was more than just a rumour.

People often tell me that I must be able to see the light at the end of the tunnel. If I do see it, it seems to be flickering on and off. I know exactly what I need to do to finish, I've established estimated timetables and yet I'm still not done. Something that I thought should easily take less than three months is still hanging around after four years like the world's biggest loose end. The need for new experiments and controls continues to crop up out of nowhere.

There is a corridor at Massachusetts Institute of Technology (where I did my undergraduate education) that is called the infinite corridor because it gives the illusion of being a very, very long hallway with a door at the end. Graduate school seems like that to me. There is an end, you just can't tell how far away it is. And still, I inch forward, trying to grasp a goal that continues to remain just out of reach.

Anne Margaret Lee is at Harvard University, Boston, Massachusetts.