

CAREERS

TURNING POINT Christian scientist spreads message about climate change **p.567**

RECRUITMENT Swedish research grant leads to hiring drive for global scientists **p.567**

NATUREJOBS For the latest career listings and advice www.naturejobs.com



process might be even more involved — it could mean planning a year or more ahead of the event to find venues, apply for funding and approach conference sponsors. At the meeting, volunteers can hone their public-speaking skills by introducing speakers and kicking off follow-up questions after the talk. And they will find out how to develop a symposium that will address controversial issues in a balanced way, how to plan for a certain number of attendees, and how to determine the right length of time for a meeting to last. In addition, they will learn how to respond to unexpected challenges, such as last-minute programme changes or faulty audio-visual equipment.

Anne-Marie Glynn rapidly acquired novel skills as a PhD student while helping to organize the 2005 PhD Student Symposium for the European Molecular Biology Laboratory (EMBL) in Heidelberg, Germany. She and other student organizers had to solicit funding from industry, where they had no contacts, and write financial and scientific reports for a funder, which they had never done before. Several speakers cancelled at the eleventh hour. In one case, she and other organizers arranged a remote-video presentation for a speaker in Australia who was no longer able to attend. “No matter how well prepared you are, you won’t have all eventualities covered,” she says, adding that the need to think quickly and to handle the unexpected makes conference organizing an excellent learning experience.

The annual EMBL PhD symposium is one of many conferences that are aimed at early-career scientists. PhD students are encouraged to organize the three-day event, helping them to learn about conference creating. And many other scientific organizations are also eager for young scientists to come on board during the planning of workshops and conferences for researchers at all levels.

Conferences are professional-development opportunities in terms of both the information shared there and the organizing process itself, says Jodi Wesemann, assistant director for educational research at the American Chemical Society in Washington DC. A conference is richer when its organizers are diverse (see ‘Organizing for diversity’), and Wesemann says that early-career scientists are a key part of the scientific enterprise. She notes that such scientists often gravitate towards organizing symposia on cutting-edge topics and encourage more career- and professional-development sessions, as the organization’s Younger Chemists Committee has done at past conferences. ▶

SYMPOSIA

Behind the scenes

Early-career researchers who help to organize conferences develop crucial skills that go beyond just booking speakers.

BY CAMERON WALKER

When Erin Eastwood’s adviser suggested in January that their laboratory should organize a symposium, the graduate student had several questions, including a very basic one: what exactly is a symposium? Now Eastwood, who is studying for a master’s degree in conservation biology at Columbia University in New York, intimately understands the meaning of the word: along with several others in her lab, she has developed a symposium topic and talks, and has contacted researchers in the field, none of whom she had met before, to speak at the

Society for Conservation Biology’s Oceania Section meeting in Fiji in July.

As a result, Eastwood has considerably expanded her network in the South Pacific, where she hopes to continue doing research, and will soon meet her new contacts face to face. “This is great for me, to not only identify the people who I should be connecting with, but also getting to know them in person,” she says.

Building a professional network by finding speakers is just one of the many benefits that early-career researchers can gain from organizing scientific meetings. Like Eastwood, they might also need to write abstracts for symposium topics and for individual talks. But the

► Less-experienced volunteers might fear that they do not have the skills or connections to organize a symposium. But Wesemann says that volunteering is a safe place to hone existing skills and develop new ones. First-time organizers can seek advice on new tasks from more-experienced colleagues in addition to enhancing their existing skills, such as improving fluency with abstract-submission software.

“A lot of symposium-organizing is making it happen,” says Wesemann, and that could involve simply asking to be included.

As a graduate student in the Scott Polar Research Institute at the University of Cambridge, UK, Allen Pope volunteered as an organizer of a career-skills workshop sponsored by the UK Polar Network, a branch of the Association of Polar Early Career Scientists. With that and subsequent work for these organizations under his belt, he approached the cryosphere division of the American Geophysical Union (AGU), which focuses on Earth’s frozen regions, to ask whether early-career scientists could help to put sessions together. He ended up co-convening a session on mountain glaciers and their response to climate change at the AGU Fall Meeting in 2011.

As a first-timer, Pope learned the nuts and bolts of operating electronic session timers and using audio-visual equipment so that he could help speakers who were unfamiliar with the technology — and also so that he knew how to use them when his own talk came up. It was “much less daunting” when he knew he did not have to fumble with the equipment, says Pope, now a postdoctoral researcher at the National Snow & Ice Data Center in Boulder, Colorado.

Praveena Chackrapani, a recent graduate of the master’s programme in environmental monitoring and management at the Malaysia campus of the University of Nottingham in Semenyih, has become immersed in conference organizing. As a full-time coordinator for the Society for Conservation Biology’s biennial Asia Section meeting in August, her tasks include sorting incoming abstracts and registrations; seeking sponsorships to offset conference and speaker costs; coordinating workshops held before and after the conference; planning event food menus with caterers; and working with a web manager to update and maintain the conference website.



“This is great for me, to not only identify the people who I should be connecting with, but also getting to know them in person.”

Erin Eastwood

ORGANIZING FOR DIVERSITY

Balanced conferences encourage female scientists

When female scientists help to organize conferences, the speaker roster tends to shift in a way that may be good for other female researchers and, arguably, for science overall, according to a study published in January (A. Casadevall and J. Handelsman *mBio* **5**, e00846-13; 2014). The analysis, which included nearly 2,000 speakers at plenary sessions and symposia at several microbiology meetings between 2011 and 2013, showed that symposia organized by committees that included at least one woman had up to 74% more female speakers than symposia organized by all-male committees. Co-author Arturo Casadevall, a microbiologist and immunologist at the Albert Einstein College of Medicine at Yeshiva University in New York, said that although more data are needed, it is possible that female conveners are more aware of the need for gender balance and might seek out female speakers.

Some societies provide guidelines for achieving gender balance. For example, the European Molecular Biology Organization calls for at least 30% of the speakers on

workshops and courses to be female. Other professional organizations have also begun to look at gender balance at conferences. The American Astronomical Society’s Committee on the Status of Women in Astronomy has been tracking the numbers of male and female speakers at astronomy conferences and offers advice for organizing committees on how to increase diversity.

Katayun Kamdin, a physics graduate student at the University of California, Berkeley, used her role as a conference organizer to encourage women in her field. At the American Physical Society’s West Coast Conference for Undergraduate Women in Physics in January, which drew more than 150 women, she and her colleagues brought in career panels that included female researchers in both industry and academic institutions. Post-conference surveys showed that attendees left more enthusiastic about their options, more confident about applying to graduate school and less likely to consider an academic track as their only choice. “It made a difference in what students could see as possible career paths,” she says. **C.W.**

Chackrapani says that six months of conference organizing have provided an intensive dose of the soft skills that were tougher for her to pick up in her previous career as an engineer. And she has also widened her contact network to include people she has worked with locally and the hundreds of delegates and speakers who will arrive in Malaysia in a few weeks. “You have to speak to sponsors, you have to deal with government, you have to network with all these famous, world-renowned scientists,” she says.

The organizing process itself can make this last step easier, giving a younger scientist the confidence to approach more-experienced and highly celebrated researchers. “A lot of graduate students and early-career faculty feel that they’re not worthy of talking to the ‘big’ people,” says Josh Drew, a conservation biologist at Columbia, and Eastwood’s adviser. Connection to the conference or society gives them a way into the circle that forms, sometimes literally, around renowned scientists, he says. “This title — symposium organizer — gives [other scientists] a reason to speak with them. It gives that e-mail the gravitas of the organization behind it.”

Junior scientists might feel unsure about requesting time away from their research to arrange conferences or workshops. But in many cases, such activities benefit the entire laboratory. By pulling together a symposium based on their lab’s research interests, the students in Drew’s Columbia laboratory not

only took some work off his plate but also enhanced Drew’s own network. “Students are able to identify collaborations that might not be on your radar as a faculty member,” he says. Plus, he adds, being able to point to his current students’ accomplishments in an arena outside the lab allows him to show potential graduate students what their career-development opportunities might be should they choose to join his laboratory.

Matt Mio is an organic chemist at the University of Detroit Mercy in Michigan and chairs an advisory board at the American Chemical Society that brings undergraduates and student organizers to meetings. He says that encouraging young scientists to get involved in conference organizing is important for senior researchers who are interested in training the next generation and keeping their fields alive, and that junior scientists need to develop skills beyond those taught in an academic setting, including leadership, communication, task delegation and people management. Organizing and managing conferences and their logistics is a way to develop and exercise these skills, he says. “Show me the other place in their training, not in the classroom or the lab, where they’re getting that kind of instruction.” ■

Cameron Walker is a freelance writer in Santa Barbara, California.