

Poster presenters should prepare different versions of their talk for passers-by and specialists.

an iPad at his poster session. Presenters can also direct viewers to large audio or video files, or to websites with additional data, using Quick Response barcodes that can be scanned by smartphones.

Purrington recommends that posters include laminated white space where the presenter can use a dry-erase marker to go through the research model. Get creative, he says, and have a section called 'What I need help with', or overlap a panel with white tape so that extra information, such as a control experiment or an equation's derivation, can be revealed. Images that don't merit inclusion in the main poster can be attached on a ring.

Props can also serve as ice-breakers and attract viewers. "No one's ever taken me up on this suggestion, but why not have a pitcher of beer and cups at your poster?" says Simon.

#### **CONVERSATIONAL SCIENCE**

Poster presenters should engage in conversations to help solve conundrums in data, get advice on improving the work or form possible future collaborations. At the ASCB poster session, Gutierrez seemed poised and in control. Her adviser at Rutgers and poster judge Alex Rodriguez, a cell biologist, who sat nearby, says that adopting an appropriate outlook in a poster session can be tricky for junior researchers. "Presenters have to be confident, but not defensive, and that's a difficult line to ride, especially for young scientists," he says. When a viewer challenged Gutierrez on her choice of cells, she pushed back in a friendly manner. "I hear what you are saying," she responded, "but I still think this is a good model of wound healing."

Perhaps most important, say judges and experienced presenters, is that presenters keep conversations with viewers friendly and two-way. It is a good idea to prepare different versions of an oral presentation for casual passers-by, interested observers and interested specialists, says Faulkes. Presenters should practise their story, but not overrehearse it. "You shouldn't give it the same way twice," he says.

Part of the preparation should be to anticipate tough questions. As a postdoctoral fellow, Lenart was caught off-guard when he presented research that used a proprietary compound provided by a pharmaceutical company. When people asked how the compound worked, he had to answer sheepishly that he could not say. Lenart advises presenters to prepare answers — or at least good excuses — for as many questions as they can think of. Presenters should do practice runs and discuss plans with a supervisor to decide what material is too sensitive to be shared.

Joseph Ramahi, the first-place winner of the ASCB poster competition and a doctoral student in cell biology at the University of California, Davis, thinks that his enthusiasm for presenting posters probably had an impact on the judges. "The questions I've been asked from giving posters have helped my project to grow," he says. "Smile, and thank visitors for coming by, because they are helping you to get better, and that's a really important part of science."

Purrington believes that poster sessions are often under-rated as a place for scientists to air their "half-baked ideas". The best part, he says, is picking other people's brains about where a line of research should go next. "If you can get people excited enough about your question to want to be your colleague, or to give you a completely different take — that's the fun of the poster session," he says. "It can change your career."

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## UNITED STATES Protect research ideas

A proposed US bill requiring all funded federal-grant applications to be posted on a government website would help competitors, including non-US scientists and businesses, to poach innovative research ideas, warns a group of US universities and scientific and professional societies. A letter sent on 15 February from the Coalition for National Science Funding (CNSF) in Washington DC to the US House of Representatives recommends that the bill require only abstracts to be posted. Samuel Rankin, associate executive director of the American Mathematical Society, a CNSF member, says that publicly open proposals would allow anyone to use researchers' ideas in potential commercial applications, possibly even before the researcher can file a patent. "You're giving away a lifetime of work," savs Rankin.

#### **ENVIRONMENT**

### New observatory sites

The US National Ecological Observatory Network (NEON) will hire 15-20 ecologists who will collect ecological and climatic data, including soil, plant and animal samples, at three new observatory sites. NEON - a continent-wide network that will gather data over 30 years on the ecological impacts of climate change, invasive species and land-use changes anticipates US\$60 million this year from the US National Science Foundation to build the observatories. The sites in Florida, Massachusetts and Colorado are expected to be completed by late 2013. NEON was established by the US National Science Board in 1999 to form a long-term network of ecological monitoring sites.

### UNIVERSITIES

# Top student city

Paris has been named 'Best Student City 2012' by QS Intelligence Unit, a company that compiles annual world university rankings. Paris earned the honour in part because of research institutions École Normale Supérieure Paris and École Polytechnique. London was second owing to the research institutions University College London and the London School of Hygiene and Tropical Medicine. Boston, Massachusetts, was third thanks to Harvard University and Massachusetts Institute of Technology, both in Massachusetts.