## Poster perfect

Most scientists are more than familiar with poster presentations – a staple of scientific conferences everywhere and an accepted form of publication, beginning in graduate school. "The first one is the most stressful" says Andrew Carson, a graduate student in Dr Stephen Scherer's

lab at Toronto's Hospital for Sick Children.

Stressful, in part, because graduate students and postdocs are rarely taught how to make a good poster. "We learn by example," says Carson, "by looking at the other posters."



Andrew Carson

From an outsider's perspective, there is definitely room for improvement. "A lot of the posters I've seen at conferences are dreadful," says veteran science reporter Peter Calamai. "There should be, at the very least, a verb in the title and it should say prominently, right at the top, what your conclusion is."

While Calamai is a journalist, not a cancer researcher, there is something to be learned from his

"The best general advice I can give a first-time poster constructor is to describe the circumstances in which a poster will eventually be viewed: a hot, congested room filled with people who are there primarily to socialize, not to look at posters."

Colin Purrington, Swarthmore College, Pennsylvania.

## **Top 10 Poster Tips**

- 1. Make your title short and include a verb.
- 2. Keep the poster short 800 words!
- 3. Use words that are familiar to everyone in the audience.
- State your question, a quick summary of your experimental approach, your results, some insightful discussion and an acknowledgement of your funder.
- Design it well. For example, use easy-to-read fonts and plenty of white space. Don't use a coloured font on a coloured background (purple on green).
- 6. Use simple, well-labelled graphs, pictures and tables (for those who don't read the main poster text).
- 7. Get feedback from a friend outside your lab.
- 8. Make use of purpose statements, headings, subheadings and examples.
- 9. Include a very simple lay summary.
- 10. Be prepared to deliver a **one-sentence** overview of why your research is interesting and relevant.

advice. Even if your audience is entirely made up of fellow scientists who are completely familiar with your work, your poster should be easy on the eye, clear and concise. Besides, you never know when a reporter will turn up at a scientific meeting. If reporters don't understand it, they won't write about it.

## The lay poster

Occasionally scientists are called upon to make "plain-language" posters, as opposed to purely scientific posters. For example, earlier this year Toronto's MaRS Centre held a free public event called *Science at the Summit*. Recipients of *Premier's Summit Awards* spoke to the public about their work.



Rick Bagshaw

Rick Bagshaw, a postdoctoral fellow in Dr Tony
Pawson's lab in Toronto, was given the challenging task
of explaining Dr Pawson's work in a lay-language poster.
"Basic terminology in our lab – like signal transduction –
is not commonly understood," he says.

The biggest challenge for Dr Bagshaw was to simplify the research without making it meaningless. "When you say that you are working on signal transduction, and that

this is how cells communicate with each other, well in a sense that's what all of us are doing in hundreds of different labs, so it becomes a little too vanilla."

Meeting organizers will invariably sandwich your poster between two posters that are infinitely more entertaining, such as "Teaching house cats to perform cold fusion" and "Mating preferences in extraordinarily adorable red pandas."

Swarthmore College website

Andrew Carson, who made a poster for the same event explaining Dr Scherer's work on the human genome says: "As you get deeper into the field, even though you try, you don't really remember what it was like not to have that knowledge, so it can be hard to relate to people who don't understand."

Dr Bagshaw says that the public isn't likely to care about the smaller advances made in his lab. "If we find a novel protein that does something unexpected or perturb a pathway we get excited." But both Carson and Dr Bagshaw say they learned something from their lay-poster experience. "The broader the audience, the fewer the assumptions you can make," says Carson.

And even though the scientific poster and the public poster are "two different beasts," there are ways to make a poster that's good for your peers that also presents the data in a way that others can understand. (See poster tips above).

You might consider attaching a bag of candy or chips to the easel to lure visitors. If you situate yourself a few posters away, you can then pounce on people as they help themselves. If they have taken your food offering, they will feel obliged to stay and talk to you.

Swarthmore College website

For some practical as well as witty advice on scientific posters and more, visit <u>the Swarthmore</u> <u>College website.</u>