

*Bench philosophy (25): Communicating science*

# Promote your Research

Science today demands that researchers convey their findings to the society. Rhiannon Meredith and Johannes Hjorth, from the Centre for Neurogenomics and Cognitive Research within the VU University Amsterdam, explain how to share research with the scientific and general community.

A scientist's relationship with the media has not always been an easy one. The herald of genetic engineering in the 1990s brought a wave of Frankensteinian labelling of scientists, a boycott of companies and destruction of research crops out in the field. Every decade has its scientific scare broadcast in the public arena; this last decade has seen the rise of stem-cell technology and the medical and societal implications being hotly debated. Regardless of your field of study, not having a relationship with the media or communicating your science to journalists is becoming less of an option for a scientist. Research funded through national government bodies is funded by the taxpayer and almost all funded grant applications for either governmental or private charities require a short summary of the supported research in layman's terms. Taking a proactive stance though is a far better strategy in the long-term and there are many different routes through which you can communicate your scientific findings and ideas to the general public.

## Time is of the essence

Most research institutes and universities regularly publish scientific results from their host scientists, usually coordinated by a press officer. To maximise your exposure for the future letter to *Nature* or communication in *Science*, find out who your press officer is and supply them with a brief summary of your group and contact details to keep on file. Press officers will often come to you for a press release statement or will be able to help with organising publicity for the novel data you're publishing. If a journalist contacts you directly, time is of the essence. "React fast when a journalist calls," advises Anders Sandberg ([www.nada.kth.se/~asa](http://www.nada.kth.se/~asa)), a Swedish researcher at Oxford University used to dealing with the media, "They have tight deadlines so if you do not answer the same day, they may have already written the article."

Whilst writing your own promotion (PR) may seem like yet another hat for the

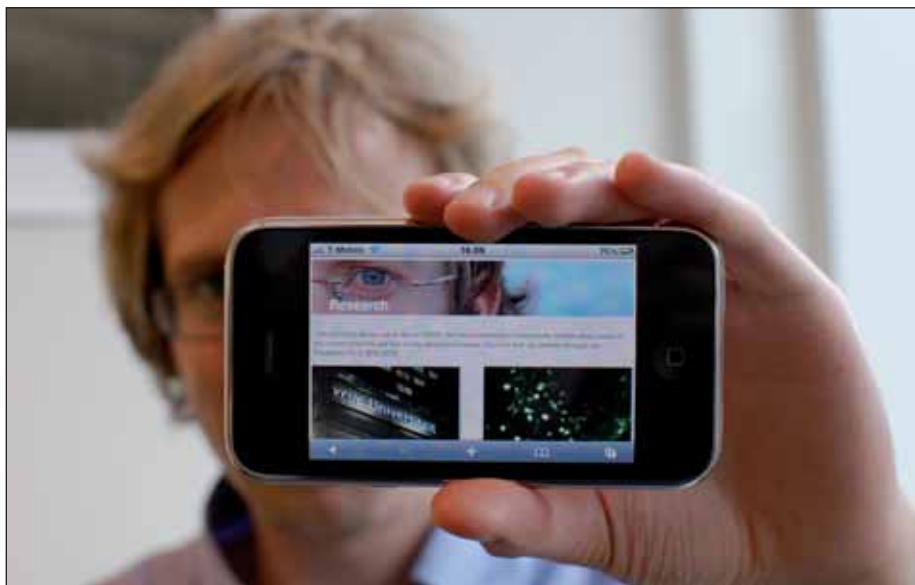


Photo: Johannes Hjorth

Presenting your work on a website is an easy way to spread your latest research news to the world. Johannes Hjorth shows his own site on the mobile phone display.

principal investigator (PI) to wear, it will ultimately prove to be a valuable addition to your range of skills. Don't feel the pressure though to do this entirely on your own. Firstly, involve your own team members. Delegate small tasks to people, e.g. it is usually clear that one person in the group has an eye for visual design whilst another can write concisely about the research focus of the lab. As well as getting the task done more quickly than you could do on your own, a group project will provide a common goal for the team, puts your research into a broader perspective and usually proves highly motivating for the team.

## Promotion strategies

A second strategy for publicising your research is to link up with neighbouring labs or those across campus who work in similar fields or are tackling the same topics from a slightly different angle. More often than not, your PhD students will have friends in these neighbouring teams and departments so the connections are already in place. This strategy of 'branding'

your research theme may also bring dividends for project grant-writing and future experimental collaborations which increasingly call for multidisciplinary approaches.

With the advent of national campaigns such as National Science Week in the UK or international events in your field, such as the DANA Brain Awareness week, there are increasing opportunities to participate in talking to the public about your research. However, many opportunities to spread your scientific message exist at the grassroots level, giving talks to local school students or business and entrepreneurial venture groups.

A popular and growing movement is the café scientifique which features in many locations across the US and Europe. These science cafés are evening events where one or more scientists talk with an audience in layman's terms about their research. These less formal, local opportunities enable you to explain your work in a different manner to the formulaic model of conference presentations, be challenged by an array of audience questions and often let you see your research in a different light away from the

laboratory. Timely opportunities to present and publicise your lab profile and research will arise and, if taken, can have a significant effect on the visibility of your research within the popular media. For example, public health issues such as the H5N1 and H1N1 influenza viruses ('bird' and 'swine' flu, respectively) were headline-grabbing news across the globe in 2009. Television, radio and newspapers were all interviewing virologists, not necessarily working directly with these viruses in their labs, to explain the science behind the headlines and provide information in an easily understandable form to the layman.

### Develop your profile

Being aware of and responding to topical themes in the media can help the profile of your lab develop, in addition to providing a worthy service explaining scientific theories and mechanisms for the general public. Once you provide a couple of quotes to a media organisation, they often return to you in future times when new and related topics become headline news again. This can be an excellent way to highlight your own strategies and projects in the lab. Many universities and research councils now run one-day media relations courses to brief you on getting across key points in your scientific message in these public forums.

In this age of the internet, not having some form of online presence for your research is simply not an option. A website need not be fancy and can consist of the basic contact details and a short summary of the research projects running in the lab. This option is offered by most host institutions and is sufficient for many research groups. However, many researchers are now using their websites increasingly for exchanging information with both the general public and other researchers. Running your own website provides numerous advantages, such as providing rapid updates on research results or uploading the latest versions of articles or open-source coding scripts to be shared with others.

### Don't shy away from networking media

There are numerous published guides to setting up a website for your research. Aside from the practicalities, a good website is easily navigated, provides clear and succinct explanations of the research projects and, importantly, is regularly maintained.

Maintenance of a research website can refer to simple text alterations such as funding updates or attachment of new publica-

tions. Increasingly, scientists are adding short blogs to their webpages, passing comment on topical research areas and providing a forum to view their scientific opinions. With such a website profile, regular maintenance is key and gives the reader reasonable curiosity and interest to return to your webpages again.

Whilst the domination of social networking media such as Facebook is something anyone under the age of 40 readily accepts into their personal life, the use of networking media in the working life of a scientist has yet to catch up. For many, novel networking applications are seen as gimmicks, taking away time from the real goal at stake, namely that of investigating scientific data. For others, such applications are seen as tools more at home in the world of business, PR and media. LinkedIn ([www.linkedin.com](http://www.linkedin.com)) is one such example of a work-orientated networking site, with the aim of connecting colleagues and enabling the user to create their online business network. However, only a small proportion of users are scientists and far fewer are independent researchers as opposed to those employed in the pharmaceutical industry.

As a recent report reveals (Amy Maxmen, Science networking gets serious, *Cell* 141: 387-389 April 2010), many scientists feel networking sites are currently tackling networking issues that researchers don't feel they need to address in order to develop their career. An alternative view is that networking sites are just one way to formalise existing connections and establish new ones. This may become increasingly important for researchers as these website media develop and funding strategies change. Receiving email updates via these websites or seeing who you're commonly connected to may prove to be fruitful in later months and deliver a contact for collaboration in industry or an opportunity to write a joint research proposal.

In addition to these virtual networks, our contacts in the 'real' world are vital to success in research and can really further scientific development. Richard Hamming, Professor at the Naval Postgraduate School in Monterey, California made an interesting observation about interactions between his colleagues during his time at Bell Laboratories and the longevity of their ideas in the field (Richard Hamming "You and Your Research". Transcription of the Bell Communications Research Colloquium Seminar, 7 March 1986). He noted that "if you have the door to your office closed, you get more work done today and tomorrow, and you

are more productive than most". However, "he who works with the door open gets all kinds of interruptions, but he also occasionally gets clues as to what the world is and what might be important". In the long run, an open door policy and perhaps spontaneous opportunities for discussion appeared a more beneficial behavioural strategy for the success of one's research line and its influence in the field.

For a research scientist, conferences and meetings are the typical events that spring to mind when the topic of 'networking' arises. A quick discussion over coffee with an old colleague can prove just as valuable as the entire one-day conference you attend. The art of networking though, is not just a mix of business card-swapping and coffees at conferences. Whilst new connections can be made at the click of a mouse or sending of an email, these contacts need to be maintained on a fairly regular basis to be worthwhile. Taking a passive role in your network is not a viable long-term option. In all cases, a healthy network will contain a mixture of both 'horizontal' connections with similar status peers and 'vertical' links with fresh-faced graduate students or wizened professors and directors. Having this diversity of contacts with differing strength of connections from a close colleague to a distant contact creates a healthy web to operate within.

### Essential survival skills

At the end of the nineteenth century, Ramon y Cajal, the Nobel prize-winning anatomist wrote "Advice for a young investigator" as a manual to guide the eager young scientist of the day [Reglas y Consejos sobre Investigación Científica/ (Advice for a young Investigator -Translation) 1897, 1<sup>st</sup> Edition, Ramon y Cajal]. Although he advised upon the communication skills as both a teacher and author of scientific papers, the role of the scientist to convey their research to the public and a global network of scientists was not considered. More than one hundred years later, these have become necessary skills for the survival of a researcher.

To get ahead in the twenty-first century, a scientist has a whole array of electronic tools at their fingertips, cheap international travel costs and a plethora of rapidly advancing technologies. Exploiting these media, grabbing that coffee with a colleague in the Institute across town and keeping your office door open for at least a large part of the week will bring benefits of a scientific nature to you and your network.

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