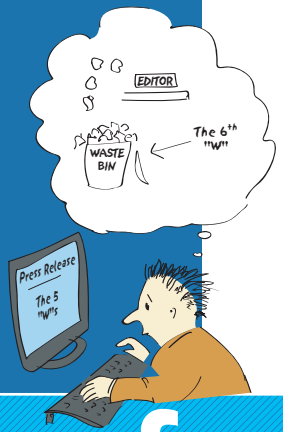


Practical Tips for Press Officers and Scientists wishing to communicate

November 2005

EIROforum

table of contents

Contributors to this brochure:

Henri Boffin (ESO),
Montserrat Capellas (ESRF),
James Gillies (CERN),
Jennifer Hay (EFDA-JET),
Russ Hodge (EMBL),
Renilde Vanden Broeck (CERN), and
Anna-Lynn Wegener (ESO)

An EIROforum production.

Workshop at the EC Communicating European Research 2005 Conference

As part of the CER 2005 conference held in Brussels on November 14 and 15, 2005, the press officers of the EIROforum organisations held a workshop/round table on Practical Tips for Press Officers – and for all scientists who wish to communicate their research.
The idea was to provide very practical suggestions to effectively communicate science news and to secure media coverage, including:

- how to reach European journalists,
- how to write an effective press release,
- when to do a press conference as well as
- examples of successful/unsuccessful stories of working with media.

The speakers were members of the media or from top scientific organisations:

- Henri Boffin, ESO/EIROforum (Germany) – moderator
- Felice Gasperoni, RTBF TV (Belgium)

Abstract: How does TV science journalists work (editorial choices, research, script, realisation and diffusion); why are images crucial?; how to organise a TV shooting session?

- Becky Morelle, Science Media Centre (United Kingdom)

Abstract: The Science Media Centre has now been open for just over 3 years, and in that time has made a significant difference to the way that scientists are engaging with the news media, especially when science hits the headlines. The Centre's philosophy is that the media will “do” science better, when scientists learn to “do” the media better, and it has used this as the basis for much of its work. Becky Morelle will talk about why it is so important that scientists roll up their sleeves and engage with the media, and how in doing so they can make a real impact on the coverage of the stories that the public are most interested in, and concerned with.

- Tim Radford, The Guardian (United Kingdom)

Abstract: Science journalism is not a luxury, but not all scientists understand this, and not all newspaper editors either. In a democracy, people have an obligation to explain themselves and their work to each other, but unfortunately in a democracy there is no corresponding obligation to listen. So scientists need a way not just of making themselves heard, but making themselves listened to. For the scientist, his laboratory's press office is first and foremost a public listening device that filters the kind of signals that might matter to, or interest, the public, from the "noise" of normal research. So press officers - and by extension the scientists they deal with - must be interested not just in the research they do, but the words they might use to explain it, and the imagery they might employ to make the rest of the world listen attentively. The journalist's tool - and therefore the press officer's too - is the story. This word, used indiscriminately within journalism, is not a euphemism or a form of shorthand for "full account" or "fair and accurate report". It is a device for making people listen. It is hard to define, but very easy to recognise: anything you read from beginning to end in a newspaper is an expample of story-telling art. My talk will explore examples of why some apparently compelling science reports attract no attention, and others scientific studies have the media world in a state of excitement.

- Govert Schilling, Freelance science writer: Science, Het Volkskrant, … (The Netherlands)

Abstract: Reporters and editors are the intermediaries between scientists and press officers on the one hand and the general public on the other hand. So if you want to reach your audience through the print media, you'd better have a good understanding of how the newspaper and magazine world works. Dutch freelance science writer Govert Schilling presents a reporter's view of the communication between science and the press: what do news media expect from scientists, how do you maximize your chances of media exposure, and what are the pitfalls and golden rules of communicating with journalists.

- Renilde Vanden Broeck, CERN/EIROforum (Swizterland) - Lessons learned and Useful Tips from EIROforum Press Officers

This brochure is intended to extend the life and the usefulness of the CER2005 workshop. It contains some stories and additional information that will, hopefully, help press officers and scientists in their work at communicating science. After all, communication is no exact science and even the best theory fails sometimes. But nothing beats experiments!

The EIROforum Press Officers

Life is like a box of chocolate

The European Synchrotron Radiation Facility is an international user facility. This means that a lot of the scientific research is done by external scientists who come for a week, collect data and go back to their home countries to analyse it. They collaborate with ESRF researchers, but the latter are not really involved in their work in general. This is an obstacle for us to get to the press, since the experts on the different subjects are always far from our site. Besides, we welcome users from many different European countries, so, despite being European research, it always has more interest for the press of the country of the researcher (a news is a news when it happens near your house- the proximity criteria). The press release we did on chocolate was a clear example of how good collaboration with our users' institutes can considerably increase the outcome in the press.

René Peschar and Henk Schenk have been studying chocolate for many years. In September 2004 they published their latest findings using synchrotron radiation at the ESRF in a 'paper' like many others they had written before. The results of the publication focused on the identification for the first time of the crystal structure of one of the three main triglycerides that make up chocolate butter. This wouldn't mean much to laymen, but with a big help from the scientists and a good approach it made the cover of the Flemish newspaper De Standaard and took space in different newspapers and magazines all over Europe (Spain, France, ...).

The main feature of the press release was the fat bloom; a white layer that appears when chocolate has been stored in wrong conditions or has been poorly crystallised. The trick was that everyone has seen this effect at sometime in their life, so we are not talking about something abstract, but something "real". The link with the triglycerides is simple: the knowledge of its structure can offer researchers clues about how to better produce chocolate and avoid this white layer. We made the most of this press release to explain the process of making chocolate and all the different phases of chocolate, which is something a lot of people don't know about.

With all this information, we wrote a press release at the ESRF. We got some coverage in different European media and also in the local and regional TV channels and written press (all those who came were offered chocolate without fat bloom by our enthusiastic researchers, so the journalists felt 'involved' in the news somehow – at the Communication Unit we probably put on a couple of kilos during those days).

Schenk and Peschar adopted a very active attitude towards this news and contacted –and convinced- their press office at the University of Amsterdam to publish a press release. A couple of days later, the chocolate news was in the cover of "De Standaard", a well-known Flemish newspaper.

These scientific results became news because we 'made' them news: the hook of chocolate in the first instance, but also the distribution of the press release locally in The Netherlands and Belgium, since the team was Dutch after all. Sometimes, there is no need to be in Nature to have some news: get a sexy subject and motivated researchers and it will work by itself.

The press release on the chocolate story is available at http://www.esrf.fr/NewsAndEvents/PressReleases/chocolate/

Getting Good Coverage Without a Press Release?

You can alert the press to an event or announcement that your organisation is not directly involved in and achieve really good press coverage if you prepare the ground carefully.

This is an example of one such instance that worked well for the European fusion research facility EFDA-JET and its host organisation UKAEA Culham. We took advantage of an announcement concerning a major international fusion project that will take fusion research into a new phase: by giving the journalists details of the planned announcement, timings, venue etc and by letting them know the names of senior staff (already well known to the press) available for comment, the press office obtained huge coverage in international, national and regional broadcast and written media.

For those who know about international fusion research, the photo is the clue to this story. It shows a virtual reality shot of ITER, a huge international project planned to be built at Cadarache in the South of France.

The decision to site ITER in France was taken after about two years of geo-political negotiations between the European Union, Japan, Republic of China, Russian Federation, South Korea and the United States of America. The scale of the project and the political interest in what was basically a "stand-off" between Europe and Japan, both of whom wanted to host ITER, and their supporting camps, resulted in non-scientific media covering the story, so that the science element of the story was considered less important than the politics – a hard lesson for some researchers! We were very fortunate in having senior staff who were not only involved in the ITER discussions, but who were also exceptionally "media-savvy".

Media awareness of fusion correlates clearly with the awareness of future energy shortages and climate change. With this in mind, we had already been in contact with the Science Media Centre in London who were planning a briefing on the "energy gap" and so were able to use their journalist database to reach a wider distribution for news on ITER. (The SMC is a tremendous asset to any science press office in the UK – do use them.) In addition, we had been keeping our science journalist contacts up to date over the months with any snippets of news on ITER, to try to maintain some interest in a story that was dragging on over a long period, resulting in a slight but steady stream of articles..

We were given details of the ITER site announcement a few days before the event (in Moscow) and simply sent out a press notice with the additional information that our Director would be available for interviews in person or by telephone immediately after the announcement. The phone never stopped ringing that day, or the next….. the story (and our Director) was on peak time TV and radio news programmes and got to Page 3 of most of the broadsheet newspapers.

So, in this case good media relations and availability of good "expert" comment on the day paid dividends.

Angel or

Or how a bestseller 'Angels and Demons' by Dan Brown can attract attention to your laboratory and the science done there...

Dan Brown's novel Angels and Demons begins with the big bold word "Fact". It continues : "The world's largest scientific research facility – Switzerland's Conseil Européen pour la Recherche Nucléaire (CERN) – recently succeeded in producing the first particles of antimatter". That much is true : CERN does really exists. It is the European laboratory for particle physics near Geneva, and it really does make antimatter.
The story is about a plot to destroy the Vatican using antimatter stolen from CERN. And much of what follows is pure fiction. That CERN exists at all probably came as news to a lot of Brown's readers, many of whom have subsequently taken the time to find out what this mysterious place really is. What they have discovered is that while much of the science in the book is pure invention, the real science is every bit as fascinating.

When Angels and Demons first appeared in 2000, it provoked a ripple of interest in CERN. When Brown's next book, The Da Vinci Code, came out a few years later and sold in the millions, people also started buying Angels and Demons in droves. Interest in CERN soared and the centre soon put up a web site to respond to the enormous demand for information about antimatter that resulted. In its first month, the site received nearly 70,000 hits – not bad for a physics lab.

Dan Brown visited CERN in the 1990s while researching the book. CERN's press officer then, a Scotsman who now lives in California, dimly remembers showing a wannabe American author around the laboratory. At that time, not many Americans had heard of CERN. Today, when he tells his neighbours that he once worked at CERN, the reaction is 'Wow! That's cool!'. Thanks Dan!

The CERN described in Angels and Demons is undoubtedly cool. It looks like an Ivy league University. The director-general is a larger-than-life character worthy of a James Bond movie. The lab owns a private jet capable of crossing the Atlantic in just an hour. Would that it were true. There is little that is correct about the science in Angels and Demons. To some scientists, this is an outrage; to others it's just amusing. To me, it really doesn't matter. The whole of the book is so clearly fiction that few people take the science at face value. Instead, they turn to CERN to find out what antimatter is really about.

In the book, just a gram of antimatter is stolen from CERN. As Brown correctly points out, when antimatter meets matter, the mass of the two is converted into pure energy in a process vastly more efficient than nuclear fission. This, he claims, could be used for destructive purposes, which makes for a gripping thriller, or for peaceful purposes such as a new source of energy. But here there's a flaw in the logic. To generate energy, you need a source of antimatter which simply doesn't exist in nature. You can't go out and mine it, you have to make it and that is a very energy inefficient process.

?★ Demon

**This article appeared in New Scientist of 2 April 2005*

Brown is quite right that CERN makes antimatter. We've been making it for decades to help us understand, for example, why there appears to be no naturally occurring antimatter in the Universe. But in all that time we've made less than a billionth of the quantity stolen in Angels and Demons. If we could gather it all together and annihilate it with matter, the energy released would light a single light bulb for just a few minutes. Even if a gram of antimatter did exist, transporting it would not be a simple matter of picking up a bottle and walking off. The kind of antimatter Dan Brown's villain takes to Rome can not be contained.

So, sadly, antimatter will never solve the world's energy problems, and happily, it will never be used to make a bomb. That's not to say that it can't be used at all. Apart from their importance in research, antimatter is used in hospitals on a daily basis. It is matter-antimatter annihilation that allows positron emission tomography (PET) scanners to produce images that are vital in some forms of modern medical diagnosis, frequently for cancer. PET works by detecting the two photons that are produced when an electron in the body annihilates with its antimatter counterpart, a positron, which is released inside the patient by a radioactive isotope.

Some forms of cancer treatment already rely on bombarding tumours with particles to kill the cancer cells. Today these techniques use protons or carbon ions. In the future, antimatter may have a role to play. A recent experiment at CERN has taken the first steps towards testing whether antiprotons can kill cancer cells.

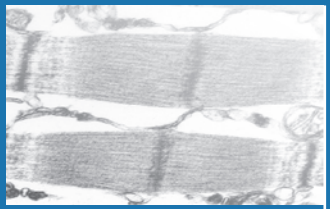
CERN is a very open laboratory. Anyone who wants to find out about antimatter can visit the website http://www.cern.ch and click the 'Spotlight on' button. And the lab has an on-site exhibition and a visitor programme that takes you in the antimatter facility.

By telling people that CERN exists, Dan Brown has provided us with the opportunity to share the excitement of fundamental research with a whole new audience. And in the case of antimatter, the truth is every bit as strange and exciting as the fiction.

Several years ago, our office at EMBL was asked to write a press release about a story from one of our structural biology laboratories. This caused a dilemma, because the world is divided into two types of people: those who are passionately interested in the inner architecture of proteins and those who aren't. We couldn't see any way to transform type-2 people (99.99% of the general public) into structural-biology fanatics through a 500-word article.

If the story itself had been inherently suspenseful (for example, if it featured a molecule linked to an important disease), we could have taken the press officer's easy way out: "Researcher discovers cause for cancer; Cure on the horizon." But while a lot of what happens in basic research has some (usually remote) connection to disease, that wasn't the case this time. The only thing this story had going for it was the fact that it dealt with a really big protein (which someone cleverly had named *titin*). In utter frustration, we kept inviting the scientists to coffee, hoping that something miraculous (or at least caffeine-inspired) would give us a handle on the story. Finally somebody thought to ask the right question: "Why on earth would anyone spend twelve years of their life working on one molecule?"

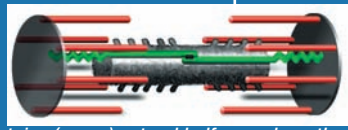
Keeping the science in press releases about science



As an embryo develops, muscle cells fuse into piston-like structures called sarcomeres.

The researcher looked confused for a moment, as if the question had never occurred to him. Then a gleam came into his eyes. "This is a really fascinating protein," he says. "Titin is the largest molecule produced by human cells – almost the largest found anywhere in nature. For a long time people didn't believe cells could produce a single molecule this size. And if you look at its architecture, it's composed of over a hundred copies of the same subunit – how could something like this ever have evolved?"

In the grand scheme of things, their latest discovery probably wasn't very important. The team had learned that early on as an embryo develops, titin is produced in muscle cells. One of its subunits docks onto another molecule (well, probably). This connection *might* help muscle cells assemble into huge, piston-like structures that allow our muscles to contract and relax. Without titin, the scientist said, we would all be huge blobs of protoplasm, lying in lumps on the ground. "On second thought," he said, "we would probably be floating around in the ocean, because none our ancestors would have been able to crawl out. Although you might find some of us washed up on the beach, getting tans."



Huge titin proteins (green) extend half-way along the length of sarcomeres and are thought to play an important role in the formation and function of muscle tissue. (illustration by Petra Riedinger, EMBL)

We finally had the handle we needed. We could talk about the mysteries of evolution, or record-breaking molecules, or lumps of protoplasm. All that was left was to write the story (still not easy – after all, it was structural biology), fax it off to zillions of jaded science editors at newspapers across the world, and hope that a few of them might be interested in printing it.

It wasn't until days later that the lesson that we had learned sank in: just about everything in science is interesting. Instead of trying to warp stories to fit one of the three generic science-press-release headlines ("Cure diseases" – "Improve your sex life" – or "Frankenstein is at it again") we could explain why a story was important to the *scientists*. There are fabulous reasons for transforming liquids into crystals, zapping proteins with X-rays or exposing them to such strong magnetic fields that you have to leave your pacemaker and credit cards outside the room. The real story is that day-by-day, biologists and other scientists are steadily solving fascinating mysteries about our bodies and life itself. Exposing that story is easy if you ask the researcher the right questions: "Why are you doing this work?" and "Why are they interesting to you?" The scientist might not spontaneously explain these things – after a dozen years of working on a problem, the original passion has usually evaporated. But with a little helpful prodding, and some coffee or beer, he or she will be happy to tell you everything you ever wanted to know about the mysteries of the universe (and often a lot more).

Will these stories be published? Success has been mixed. A beefy story about outer space will always hijack precious inches of newspaper space that might otherwise be used to describe brief events in the muscle cells of mouse embryos. But overall, the feedback has been very positive. People appreciate reading well-told, compelling stories whose only message is that science satisfies one of mankind's most basic traits: an insatiable curiosity about ourselves and the world.

On Credibility


Solar Neighbourhood Stars in the Milky Way Galaxy

For journalists to consider our press releases, it is important to have established a reputation of credibility and a relationship of trust with them. They must know that press releases coming from our organisation will be hot news but not "over hyped" and are always based on solid scientific grounds. Such a relationship can only be established after a long period of time, during which the organisation needs to make its mark.

It is for example essential to make sure that less important news to the journalists – but maybe essential for corporate communication – are handled as such, e.g. by not calling them fully fledged "press releases". Even more important is to ensure the scientific content of the press release to be as secure as possible. Thus, except for very exceptional cases, it should always be based on a paper accepted for publication in a refereed journal. Nevertheless, not all good scientific papers are appropriate for a press release and a selection has to be made: based on the potential to make a nice story out of the science and/or on the extraordinary character of the discovery. These are not always easy to discern. Of course, when the farthest galaxy or the lightest exoplanet are discovered, there is little doubt about making a press release. But what about some less obvious cases? In our organisation, there is an internal press committee, composed of senior scientists, whose role is to advise the press officer about the solidity of the scientific claim in a paper, but mostly, about its "selling value", putting it into its context. However, this does not always prove to be the best approach. To give an example, in the case of one very exhaustive statistical study based on data collected over 15 years, the committee, although not questioning the solid scientific basis of the paper, considered it too technical for an ESO press release. The press office decided to go ahead nevertheless, a move that proved rewarding: this press release was one of the most successful that year. People were indeed very interested in the results, because they sparked a completely new idea on the surroundings of the Sun in the galaxy. The "proximity factor" had stuck again!

In another case, the claim of the farthest galaxy ever discovered, the committee, after a very lengthy appraisal of the scientific evidences – despite the fact that the paper had been accepted in a renowned refereed journal – agreed to have a press release. This was of course a huge success, as this discovery smashed all previous records. A few weeks thereafter, another team of scientists questioned the validity of the analysis and the existence of this record. It did not take long for the press office to receive requests to formally withdraw the press release, even from inside the organisation. However, the original team of astronomers who made the discovery quickly replied to their critics and the matter is, at this time, still not settled. There is therefore no reason yet to withdraw the press release. Science is an evolving process, especially in the forefront, and it is certainly not infallible. Press officers should take this into account and react accordingly, i.e. make a withdrawal when deemed necessary but not simply due to pressure. Of course, withdrawal does not mean removal of the press release from the archive just a clear note indicating why the press release is not valid any longer.

Five Cent Advice

- Stories need to be new and with a wide interest.
- Develop a feeling for hot topics and if you can contribute to a story that is already in the media, your chances are better.
- Know which science is going on in all the laboratories in your organisation, sometimes very interesting stories are less obvious.
- Be aware of the areas that are covered by the press agency or the newspaper or programme that you are targeting: study your sources, see what type of information they normally publish instead of sending out random press releases to every paper, because that diminishes your standing with them. Adapt the form of your press release to their style.
- Often something different/strange/unexpected makes a much better story than a big discovery. Have the courage to try something new or funny.
- Show the relevance to people's lives

It might also be a good idea for press officers to spend a day or so in the editorial department of a newspaper or TV programme to understand better how they work and what they are looking for (In Germany, for example, FAZ, DPA and Deutschlandfunk offer these possibilities).

Making Use of Press Agencies

Press agencies are an efficient and convenient way to distribute your press release to a great number and wide range of media. Organizations like Reuters, dpa or afp, gather news from different sources and function as a supply of information for journalists throughout Europe and worldwide. While agencies are happy to receive press releases as a source of information they are not mere distribution services. Received materials are usually edited by the agency's staff and will only be sent out when considered credible and newsworthy. One major advantage of big press agencies is that they accept press releases in different European languages and that their news are translated and sent out to various countries, so that international media can be easily reached through agencies. Below you find a list of the contact details of major European news agencies with Science Departments that can be helpful for the successful communication of European research.

List of Press Agencies with Science Departments

ANSA
www.ansa.it
Send press releases to:
Via della Dataria, 94, 00187 Roma, Italy
P.I.: 00876481003

AP (Associated Press)
www.ap.org
Press releases can be emailed to: info@ap.org
Or mailed to one of the European offices:
• Associated Press Frankfurt/Main
Moselstr.27, 60329 Frankfurt am Main, Germany

• Associated Press Paris
162, rue du Faubourg Saint Honoré, 75008 Paris, France

• Associated Press Rome
Piazza Grazioli 5, 00186 Rome, Italy

APA (Austria Presse Agentur)
www.apa.co.at
Email press releases to: wibi@apa.at

AFP (Agence France Press)
www.afp.com
To send a press release use the web-based contact form at:
http://www.afp.com/english/afp/?pid=contact

Belga Press Agency
www.belga.be
Email press releases to: redaction@belga.be
Or use the web-based contact form at:
http://www.belga.be/EN/contact.asp?menu=form

DPA (Deutsche Presse Agentur)
www.dpa.com
Press releases can be mailed to any of the European Offices:

• Hamburg Headquarters
Mittelweg 38_, 20148 Hamburg, _Germany
Post Office Box: Postfach 13 02 82_, 20102 Hamburg_, Germany_
E-Mail: info@dpa.de

• dpa International Service in English Main Desk
5 French Church Street, _Cork_, Ireland
E-Mail: dpa-cork@hbg.dpa.de

• dpa International Service in Spanish Desk
Capitán Haya 56_Of. 8, E_28020 Madrid, _Spain
E-Mail: madrid@dpa.com

Reuters
www.reuters.com
Press release are only accepted in electronic format and should be emailed to:
editor@reuters.com

Nippon News (Japan)
Press releases can be sent to:
Hamada Building, 2-7-11 Sarugakucho, Chiyoda-ku, Tokyo 101-0064, Japan
Or emailed to:
contact@nipponnews.net

Additional Resources

• AlphaGalileohttp: //www.alphagalileo.org

As a registered contributor you can post press releases, book announcements and event information for immediate distribution to journalists world-wide. You can also nominate yourself as an expert for the media; if eligible your details are added to the database which is accessed only by registered journalists.

• Eurekalert: http://www.eurekalert.org

EurekAlert! is an online, global news service operated by AAAS, the American science society. EurekAlert! provides a central place through which universities, medical centers, journals, government agencies, corporations and other organizations engaged in research can bring their news to the media. EurekAlert! also offers its news and resources to the public. EurekAlert! features news and resources focused on all areas of science, medicine and technology.

• AthenaWeb: http://www.athenaweb.org

Professional portal of audiovisual scientific information in Europe

• Euroscience.net: http://www.insidescience.net/eurosciencenet/

The open network for science and writers

• Guide to successful communications: http://europa.eu.int/comm/research/science-society/science-communication/index_en.htm

This European Commission website and the associated brochure particularly addresses science communications via the 'mass media' (TV, radio and the written press). It also covers websites and other internally generated support such as print publications, CDs and video.

• STEMPRA: http://www.stempra.org.uk/

STEMPRA is an informal UK group, set up in 1993 to bring together people working in communication in scientific societies, research institutes and other non- commercial organisations in science, technology, engineering and medicine. Its web site offers practical advice for science communicators.

• Communicating Science News: http://www.nasw.org/csn/

Prepared by the US National Association of Science Writers, this site hosts a guide for Public Information Officers, scientists and physicians. It covers topics such as "why communicate science", "who are the media?", "telling your story", "media arrangements at scientific meetings" and "some pitfalls in reporting science news".

• Science and development network: http://www.scidev.net/ms/sci_comm/

An E-Guide to Science Communication. This e-guide provides an invaluable 'one-stop shop', containing original articles and guidance and links to the best material elsewhere.