How the media covers science

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Trieste, Italy
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Summary

1. Why researchers need to communicate
2. How does the media report science?
3.How is the media doing?
4. What Is the situation in developing countries?
4. A case study: “Climategate”
5. Working with the media

1. Why do researchers need to communicate?

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Researchers communicate in order to:

1. Tell people about their work, its results and its significance

2. Receive comments and feedback from others on their work

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Researchers communicate with …

1. Professional colleagues
2. Friends and family
3. Institutions that support – and benefit from – our work
4. Other individuals and social institutions that can make use of our research

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Context :

Policymakers need **accurate**, **timely** and **reliable** information about the **role of science and technology in meeting development objectives**.

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Context (continued):

Public understanding of, and **engagement in**, science and technology promotes **open and democratic debate** about the promises they offer and how to deal with their potentially negative consequences.

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Therefore:

The communication of **accurate** and **accessible** information about science to both policy-makers and the wider community is essential …

1. To achieve social and economic development
2. To ensure adequate and continued support for scientific research

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Remember:

"If you can't explain your research to the cleaning lady, it's not worth doing."

Ernest Rutherford

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And:

The media has a central role in making all this happen

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2. How does the media report on science?


Daily Mail
SELINA SCOTT: My fury at the ageist BBC bosses who sacked Arlene Phillips
Emergency website crashes after 2,600 hits a SECOND
SWINE FLU CASES DOUBLE IN WEEK
Noel and his third time bride
Cocaine Britain
The Sun
SAVE £5.20
LIFE ON MARS
Well, SOMETHING up there has wind
SUE SAVILLE
SUNDAY EXPRESS
FREE VERY BERRY ICE CREAM
WIN A FORD FOCUS
SUICIDES 'LINKED TO MOBILE PHONE MASTS'
THE INDEPENDENT
FREE WALLCHART
CHANGE YOUR LIFE IN 5 DAYS
The Mirror
Zoe to wed her Fatboy
THE PRIME MONSTER
Fury as Blair says: I eat Frankenstein food and it's safe
SWINE FLU PANDEMIC
How do I know I've got swine flu?
Sudden fever with a temperature of at least 38°C
Plus two of the following symptoms:
diarrhoea or stomach upset
sore throat
runny nose
sneezing and
loss of appetite
The universe gives up its deepest secret
DAILY EXPRESS
BANK CHIEF'S WARNING OF HOME LOAN RATE MISERY
Britain is enchanted by Madame Sarkozy
SCANDAL OF TOXIC FUMES IN ALL JETS
SUNDAY EXPRESS
FREE BIRD PACK
FREE GALAXY CARAMEL
GET YOURS TODAY!
JAB 'AS DEADLY AS THE CANCER'
TIMES ONLINE
Do you have a mental health problem?
guardian.co.uk
Science Weekly
with Alok Jha
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environmentguardian.co.uk
Payback time
The cashless man responds to your comments
DAILY EXPRESS
WIN A LIFE OF LUXURY
The Queen told the nation that her children had been vaccinated against polio... So why won't Tony Blair come clean about Leo?
MMR: NOW TELL US THE TRUTH
ABORTION: A MAN'S RIGHT TO KNOW
THE INDEPENDENT
The ultimate supergroup
A NEW WORLD ORDER
The climate challenge
METRO
Stress at work can be
Abandoned: Plan to plant first GM crop in Britain
The Daily Telegraph
CHELSEA FLOWER SHOW
Human animal embryos given go-ahead
Blooms fit for a Queen
MPs will publish a million expenses claims

What makes a story newsworthy?

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What does a reader look for in a news story

- New(s) – i.e. time-related event
- So what?
- Change/impact
- Conflict/controversy
- Tangible/concrete
- Proximity/local relevance
- Personal relevance
- Rarity

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Any news story must therefore meet criteria of

- Topicality
- Significance
- Relevance
- Interest

Background: the role of the media is …

- To inform
- To entertain
- To educate

and (above all)

- To make money

What are the implications of this for the media's coverage of science?

To inform (positive)

- Draws attention to important new scientific discoveries
- Identifies the potential impact new discoveries
- Highlights controversies that may be created by new scientific discoveries

To inform (negative)

- Can make science seem dry and off-putting (particularly if badly written)
- Can encourage deference to the authority of "experts"
- Can place science on a pedestal and discourage interaction with non-scientists

To entertain (positive)

- Stimulates interest
- Makes science accessible and enjoyable
- Encourages engagement

To entertain (negative)

- Can oversimplify or trivialise scientific results

To educate (positive)

- Can provide both members of the public and policy-makers with important information about science
- Can compensate for inadequacies of science teaching in schools

To educate (negative)

- Can “switch off” readers if writing becomes too didactic or badly explained

To make money (positive)

- Can ensure that science stories are written in a way that attracts the interests of potential readers

To make money (negative)

- Science coverage can be cut if it fails to help attract advertising
- “Circulation wars” can provoke exaggerated reporting (e.g. reporting on “mad cow disease” in the UK)

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3. How is the media doing?

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Results of a study carried out in 2009 in the UK by researchers from the University of Cardiff

A report based on:

- 42 survey responses from UK national science, health, environment, and technology news journalists;
- 47 interviews with current and former UK national science, health, and environment news journalists
- Five interviews with senior editors at BBC News, ITN, and The Times newspape

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Numbers of science journalists:

The period 1989 and 2005 saw an unprecedented rise in the numbers of science, health, and environment journalists in the UK national news media (numbers almost doubled from 43 to 82.5).

But most of this historic increase occurred in the '90s, and since 2005 there has been a period of slight decline on the broad science beat.

Increasing prestige and growing appetite for science stories:

Long-term increases in the human resources devoted to covering science have developed alongside an increasing respect for science specialists within newsrooms

Many report the appetite for science news is high, and that they are often asked to contribute specialist editorial advice.

Increasing workloads:

Workload increases have been widespread and are often problematic.

Although the number of journalists employed on the science beat has not risen in the last five years, reporters state that workloads have increased significantly.

Most of these workload rises can be attributed to increasing cross-platform and multi-media journalism and the rise of internet news.

Time for checking facts and researching stories:

Workload pressures have had detrimental effects on how specialist science news journalists work.

Almost half (46%) of respondents reported they had less time to research and fact-check stories than previously

One fifth (22%) said they did not have enough time to sufficiently fact-check their stories.

The problem of "pack journalism“

Specialist reporters complain they are expected to rely too much on "diary stories", and are not given enough time for independent and original journalistic work.

In many news outlets, this can lead to a centralised news-desk-driven homogenisation of science news coverage.

The dominance of the diary

Many news journalists say they do not have enough time for "original journalism“.

One journalist referred to press releases as "low-hanging fruit" because they are "easy stuff to turn around".

Only 23% of respondents said most of their stories originated with active journalistic investigation

46% say they are more usually the passive recipients of news story ideas from sources.

The rise of science public relations

There is a general sense that PR has become an increasingly important and unavoidable presence.

23% of respondents believe science specialists rely on PR too much, and 25% use more PR than previously.

Many interviewees complained that much time is spent trying to convince news desks not to run poor-quality "bad science" stories they have seen on the news wires and/or in eye-catching press releases.

The future of specialist science news in the UK media:

Despite the gloomy picture, most specialists do not believe their beat is under serious long-term threat.

Most do not think that science news has been hit any harder than other specialist patches.

56% of survey respondents disagreed that science specialists are a dying breed in the UK (although 53% also disagreed that there would be more science journalists in the UK in ten years' time).

4. Is the situation in developing countries any better?

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Science journalism 'flourishing' in developing world

Aisling Irwin

18 February 2009 | EN | ES | 中文

[CHICAGO] Science journalism is thriving in parts of the developing world while coming under severe pressure in some developed countries, an international gathering of science journalists heard.

In Africa and the Middle East, journalists are reporting a greater demand for stories about science from both the public and newspaper editors.

But in the United States, the number of science

Science journalism is thriving in the developing world
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Vietnam is improving science communication
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Arab world debuts its first science news website
3 November 2008

The evidence:

- Increase in space allocated to science stories
- A growing interest in science and an increasing desire from editors to publish science articles.
- New interest on behalf of media organisations in promoting science as a means of development.
- More international attention is being paid to issues such as global warming.

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5: Case studies

Climategate

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The story:

Scientists at the University of East Anglia were found to have destroyed some emails concerning the conclusions of their research on climate change, and to have spoken loosely in others about their use of evidence.

The press coverage:

Press coverage of the issue turned the action of the scientists into a conspiracy designed to cover up their manipulation of data.

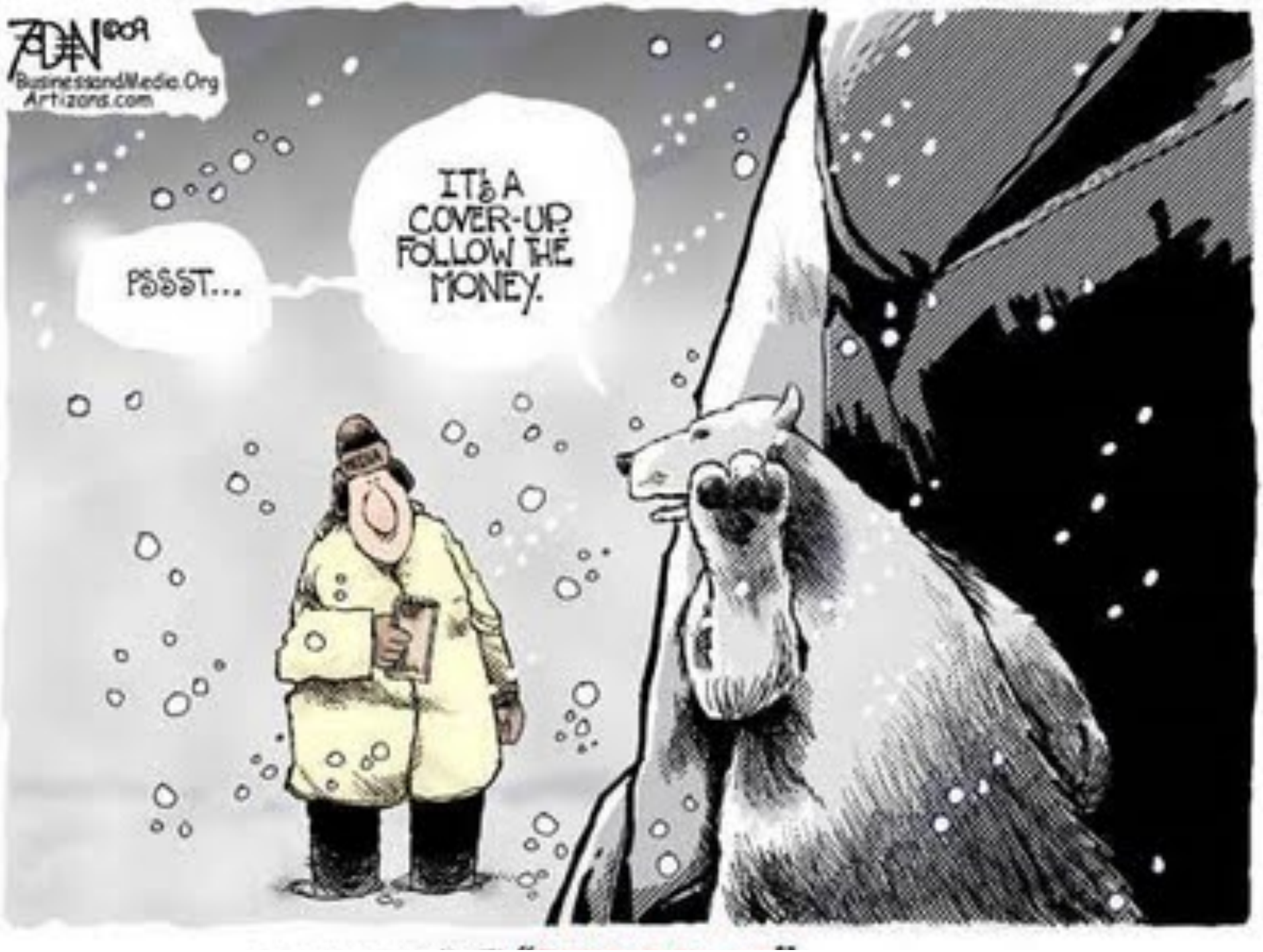
"BURN THE TAPES."

The resolution:

Several inquiries into the scientists' actions cleared them of any wrong-doing, and concluded that their actions had had no impact on the underlying science.

The impact:

Reporting of the issue fanned growing scepticism about man-made global warming, and led to accusations that the scientists were primarily motivated by their need for grant money.


ZUDA 09
BusinessandMedia.Org
Artizans.com
PSSST...
IT'S A COVER-UP. FOLLOW THE MONEY.

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Criteria for a news story

- New(s) – i.e. time-related event
- So what?
- Change/impact
- Conflict/controversy
- Tangible/concrete
- Proximity/local relevance
- Personal relevance
- Rarity

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So which criteria does it meet?

- Topicality?
- Significance?
- Relevance?
- Interest
- **but …**
- Was it really important?
- What was the real "story behind the story"?

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6: Working with the press

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Summary of guidelines for scientists working with the media

Royal Society
March 2000

Perspective

When a journalist contacts you, think about who he or she represents, and how this will affect the way they treat your work.

A daily broadsheet newspaper will have a different perspective from a popular tabloid, and is likely to be looking for different types of information.

Deadlines

Respect the deadlines to which journalists have to work.

Respond promptly to media enquiries. If they ask for information in a couple of hours, they usually mean it.

If you offer to find information for journalists, be sure that you can meet their deadlines.

Competition

News stories about science have to compete against the other stories that appear each day.

A reporter must make a case to the news editor, who makes the final decision about whether a science story should receive coverage after it has been written and filed.

To give your story the best chance of appearing, think about angles, photographs, graphics, colour and background that can help the reporter to win over the editor.

Content (1)

Science stories need to appeal to an audience or readership that may have little knowledge of science.

Explain your work in simple, everyday language and avoid jargon. Imagine you are trying to explain it to a friend over a drink.

If you have to use a technical term, explain what it means. Think imaginatively about the possible implications and applications of your work.

Content (2)

When describing the results of your research, highlight what is novel or unexpected.

Highlight other notable features that might add personal interest (for example, a sense of the bizarre).

Explain the impact your work might have on the audience or readership.

Be prepared to talk about the wider implications, such as ethics or funding issues.

Approach

Some media have staff who specialise in reporting science stories, although you may be contacted by a reporter who lacks a background in science.

But even reporters with a PhD in a science subject are unlikely to know much about your specific area.

Don’t give them references to consult in a library, opr even refer to your scientific papers, but offer a quick explanation.

Think of a couple of sentences that provide a succinct overview of your work.

Responsibility

Act responsibly when dealing with the media.

Don’t exaggerate the significance of your work. Refer to similar work by your peers to put yours in context.

Don’t be pressurised into making a response that you will later regret, even if a reporter asks for a straightforward yes or no answer, .

If you do not know the answer to a particular question, say so. Never lie as your statement may come back to haunt you.

Attribution

Avoid saying “No comment”. If a journalist thinks that you are trying to hide some facts, they will only probe deeper.

Be very careful about talking ‘off the record’.

If you have established a degree of trust with a particular journalist, he or she may use you for an ‘off the record’ opinion about somebody else’s work.

Remember that even if such information is unattributed, it is often obvious who supplied it. So **if you don’t want it to be reported, don’t mention it**.

Authenticity

Scientists also have a responsibility to help journalists to establish the authenticity of a story.

Let a journalist know if your work has been subject to peer review, for instance by submission to a journal, or some other quality control mechanism.

Credibility

Be honest about your competence when it comes to commenting on an issue.

Make clear to a journalist what your direct area of expertise is, and whether your comments lie outside it.

You can could still offer help to a journalsit, even if your expertise is not exactly what is required, by, for example, suggesting the names of other scientists who work in a relevant field.

Quotes

There will not usually be enough time for you to check a news or feature story before it is broadcast or printed.

However most journalists will respect a request to check quotes before they are used, but make sure that this is agreed from the outset.

Don’t be surprised if the outcome of a half-hour interview is often just one or two short quotes.

Collaboration

If you are collaborating with other researchers, agree beforehand what to say if journalists contact you.

Remember that unlike technical journals, there is no onus on journalists to mention every researcher and institution that is involved in a project.

Be reasonable about requests to give appropriate credit - remember the constraints on the availability of column inches or air time.

Contacts

If a print journalist contacts you for a comment about a ‘breaking’ story, you could offer to write an opinion piece if time and space allow.

If he or she agrees, be sure at the outset to agree on the terms and conditions, including copyright and fees.

If journalists do approach you, make a note of their full contact details - you never know when you may have a story that you can take to them.

Corrections

If you have been misquoted or there is a serious factual error, contact the journalist setting out your concerns.

You can also write to clarify matters and ask for it to be printed on a letters page, but make your contribution brief, punchy and entertaining.

If you are unable to achieve a satisfactory resolution, write to the editor to whom the journalist reports.

If, you are still not satisfied with the outcome, contact the relevant media ‘watchdog’.

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Disease eradication: an aim for galvanising global health support

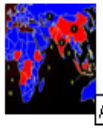
Setting sights high with proven scientific tools for eradicating malaria will advance efforts to control it — and generate demand for the research needed to tackle other diseases.

News

Micro-insurance scheme pays off for Kenyan farmers

Farmers whose crops failed in the Horn of Africa drought may still be able to farm next year, through a mobile phone insurance scheme.

14 October 2011 | EN



Cookstove revolutionaries failing to measure their impact

A map of deaths caused by cookstove air pollution

There are research gaps in assessing whether clean cookstoves have the desired health effects, say researchers.

14 October 2011 | EN | ES

UK science academy calls for world nuclear forum

13 October 2011 | EN | ES

GM cotton genes found in wild species

13 October 2011 | EN | ES

MORE NEWS

Editorial

Eradicating disease: an ambitious but energising goal

Focussing on the steps needed to eradicate malaria, not just control it, can broaden and stimulate support for health research agendas.

14 October 2011 | EN | ES | 中文

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Opinions

Islam Analysis: Solar energy project must be more open

Desertec, an ambitious solar power project in the Middle East and Africa, should be more transparent and participatory, argues *Athar Osama*.

13 October 2011 | EN

How 'geotags' could track developing world science

Online tools reveal a lot about world

Burning question
Are clean cookstoves efficient enough to cut health problems?

Desertec: think local
The huge solar energy scheme in the Middle East and Africa needs a new process that puts countries' needs first, says *Athar Osama*

Location, location
Plotting where field work takes place can reveal important details for policymakers in the developing world

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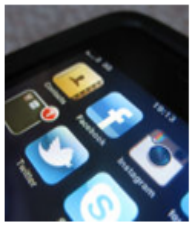
How scientists can reach out with social media



The world needs scientists to bring science to life. *Jennifer Rohn* with tips on how researchers can use social media to engage new audiences.

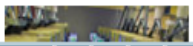
11 August 2011 | EN | ES | FR

How to write about your science

Tips from *Marina Joubert* on how to switch from writing for science to writing about it — and reach a much wider audience.

31 May 2011 | EN | ES | FR

Keeping genomics in perspective



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International Day of Rural Women

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How do I become media savvy?

Marina Joubert
Southern Science
10 February 2008 | EN

Flickr/stejahen

***Marina Joubert* explains that cooperating with the media is in scientists' interests — and isn't as scary as you might think.**

We all base many of our everyday decisions on what we hear or see in the mass media, which for the majority of the population has become the only source of scientific information. The scientific community therefore can no longer afford to dismiss its importance.

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For more details, go to:

http://www.scidev.net/en/practical-guides/

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