

# Science Communication: are we making progress?

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# The rise of PUS in Britain: science communication as a duty

- 1985 *Public Understanding of Science* (Bodmer Report)  
“Learn to communicate with the public, be willing to do so and consider it your *duty* to do so”
- 1986 Establishment of COPUS
- 1993 *Realising Our Potential* (OST White Paper)
- 1995 The Wolfendale Report  
“Scientists, engineers and research students in receipt of public funds have a *duty* to explain their work to the general public”
- 1997 Corporate Plan of PPARC  
“We believe that those engaged in publicly funded research have a *duty* to explain their work to the general public”

# A proliferation of PUS activities

- **Science Book Prizes**
- **Media training & Media Fellowships**
- **MSc Courses**
- **Westminster Fellowships**
- **Grants for activities**
- **Michael Faraday Award**
- **AlphaGalileo website**
- **Young Engineers**
- **BAYS, CREST**
- **Science Clubs**

# A series of controversies

- **Radioactive waste disposal**
- **Mad Cow Disease/variant CJD**
- **Embryo research**
- **Animal rights**
- **Ozone depletion**
- **Climate change**
- **GM foods**
- **Genetic testing**
- **Cloning & stem cells**
- **Xenotransplantation**
- **Mobile 'phones**
- **Nuclear power & energy supply**
- **MMR vaccination and autism**
- **Foot and mouth disease**
- **Nanotechnology**

# A new agenda: dialogue

2000 House of Lords Report on *Science and Society*

“Society’s relationship with science is in a critical phase”

“Crisis of confidence”

“Crisis of trust has produced a new mood for dialogue”

# Trusted to tell the truth?

	%
Doctors, Priests	91
Teachers	85
<i>Scientists</i>	<i>64</i>
Police	59
Person in street	54
Civil servants	45
Business leaders	25
Politicians	19
Journalists	13

(MORI 2002)

# Trusted to tell the truth

Doctors	87%
Teachers	85%
Clergymen	78%

WHY SUCH HIGH TRUST?

# Trusted to tell the truth

Journalists 13%

Television news readers 71%



# Trust depends on paymasters

## Scientists from

University

Environment groups

Government

Industry

Climate change

Mobile phones

Radioactive waste

GM Foods

71

74

68

67

71

69

69

63

42

46

48

37

31

30

36

36

(UEA/MORI 2003)

# Do you trust this man?

- Professor (77%)
- Scientist (64%)
- Civil servant (45%)
- Government scientist (37%)



# Trust depends on context

Fraction of the public with 'a lot' of trust in statements by scientists about:

- GM food 10%
- Cloning animals 12%
- Mobile phones 28%
- New medicines 37%
- Organ transplantation 57%

Guardian CM poll 2000

# Risks and benefits

## Risk

- Mobile 'phones - small
- GM foods - small

## Benefit

- Mobile phones - great

ACCEPT

- GM crops - small

REJECT

# Public attitudes to animal experimentation

## 1999 *New Scientist* Poll

Childhood leukaemia,  
only on mice:

No pain	83% agree
Death	69% agree
Pain	63% agree

## 2000 MORI Poll

Any research: as long  
as no alternatives

32% agree

Medical research: no  
unnecessary  
suffering

84% agree

# Study gives MMR jab the all-clear

**T**HERE is no evidence that MMR or single measles vaccines are linked with autism or inflammatory bowel disease, researchers announced yesterday.

A team carried out the most

By **JULIE WHELDON**

Muthu and information scientists at Clinical Evidence concluded the Wakefield study was retrospective, small, lacking in a control group and was selec-

measles itself causes acute fever in all infected children.

● The National Autistic Society (NAS) said yesterday's research repeated work done in previous reviews, most recently the Medical Research Coun-

*New Letter (Northern Ireland)*  
12 June 2002

# MMR 'may be linked to certain type of autism'

BY DAVID DERBYSHIRE  
SCIENCE CORRESPONDENT

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A BRITISH researcher believes he has identified a sub-group of autism that could be linked to the MMR vaccine.

Dr Paul Shattock, director of the Autism Research Unit at Sunderland University, said one in 10 autistic children appeared to have the distinctive form of the disease.

had an abnormal gait and were friendlier than other autistic children.

But crucially, there were also differences in the chemicals found in their urine. Around 80 per cent of all people with autism have high levels of the compound indolyl acryloyl glycine in their urine, thought to be produced when the body breaks down the amino acid tryptophan.

autism. We believe it may be measles in the intestine which causes inflammation and permeability of the intestines," Dr Shattock said.

"Nobody has suggested that MMR is the only factor in the rise in autism cases. We are pro vaccine, but it needs to be done sensibly."

He stressed that more research was needed. "The numbers here are quite small

*Daily Telegraph*  
28 June 2002

# One in every 1,500 MMR jabs 'could be causing autism'

By **Beezy Marsh**  
Medical Reporter

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**ONE** in every 1,500 MMR injections could trigger autism, it was suggested yesterday.

The figure emerges from a study of 4,000 children with the condition, and will compound the fears of parents about the so-called triple jab.

Paul Shattock, director of

need to know for certain whether these things are connected.'

One theory is that chemical differences in the urine could be caused by the measles virus lodged in the guts of children with a particular form of autism which some parents claim is caused by MMR.

Other studies have shown the presence of the measles virus from the MMR vaccine in the guts of children with autism and a rare form of

nary samples from the ten per cent of children whose parents blame their condition on the jab were very different from samples provided by the 90 per cent whose parents did not think there was a link.

There were other differences too, he added.

'There are three things. First of all, the clinical differences. The children appear subtly different to typical forms of autism,' he said.

'The clinical history is different for the children and there

*Daily Mail* 28 June 2002



# MEASLES SOAR AS PARENTS SAY NO TO MMR Danger of an epidemic

By **Tim Utton**  
and **Beezy Marsh**

**A DRAMATIC increase in measles cases brought calls last night for a public inquiry into the MMR jab.**

The number of children catching the disease has quadrupled as parents shun the triple vaccination amid fears of a link to autism.

Mike Stone, chief executive of

*Daily Mail*  
1 July 2002

