

## Darwin was right

From Daniel Dennett, Jerry Coyne, Richard Dawkins and Paul Myers  
What on earth were you thinking when you produced a garish cover proclaiming that “Darwin was wrong” (24 January)?

First, it’s false, and second, it’s inflammatory. And, as you surely know, many readers will interpret the cover not as being about Darwin, the historical figure, but about evolution.

Nothing in the article showed that the concept of the tree of life is unsound; only that it is more complicated than was realised before the advent of molecular genetics. It is still true that all of life arose from “a few forms or... one”, as Darwin concluded in *The Origin of Species*. It is still true that it diversified by descent with modification via natural selection and other factors.

Of course there’s a tree; it’s just more of a banyan than an oak at its single-celled-organism base. The problem of horizontal gene-transfer in most non-bacterial species is not serious enough to obscure the branches we find by sequencing their DNA.

The accompanying editorial makes it clear that you knew perfectly well that your cover was

handing the creationists a golden opportunity to mislead school boards, students and the general public about the status of evolutionary biology. Indeed, within hours of publication members of the Texas State Board of Education were citing the article as evidence that teachers needed to teach creationist-inspired “weaknesses of evolution”, claiming: “Darwin’s tree of life is wrong”.

You have made a lot of extra, unpleasant work for the scientists whose work you should be explaining to the general public. We all now have to try to correct all the misapprehensions your cover has engendered.

*Medford, Massachusetts, US; Chicago, Illinois, US; Oxford, UK, and Morris, Minnesota, US*

■ Find a longer version of this letter online.

## Due credit

From Joy Delhanty  
Richard Hammond discusses keeping children interested in science (3 January, p 14). The media have a vital role to play here. Their obsession with doctors and hospitals means that the

scientists behind medical breakthroughs do not receive sufficient credit.

Witness the recent media frenzy over the birth of the first baby in the UK to be born free of a gene that would predispose her to



breast and ovarian cancer, thanks to embryonic screening. All the credit was given to the “IVF doctor”; none to the laboratory team at University College London who made this advance possible through years of work.

There is always a team of scientists behind the scenes, whether the result is testing a single cell from an eight-cell embryo or developing gene therapy for blindness. If more prominence were given to them, youngsters might see a future for themselves in the biomedical sciences.  
*London, UK*

## Truth or pare

From Sherry Seethaler, University of California, San Diego  
A. C. Grayling suggests that “an international consortium of universities should set up panels to audit the worth of websites” (17 January, p 44). Considering the volume of information online and its exponential growth, any such undertaking would be outdated before it could report.

We should not worry about the transcription errors that Grayling dwells on, so much as inadvertent misrepresentations of scientific information or the process of science, or deliberate attempts to

hoodwink. People need tools to defend themselves against these – tools such as those I describe in my book *Lies, Damned Lies, and Science: How to sort through the noise around global warming, the latest health claims, and other scientific controversies* (FT Press Science, 2009).

To help people function in the information age, our education system needs to shift from an emphasis on memorising facts to an emphasis on equipping students with the tools they need to critique information.

Students need to learn about the tricky ways in which statistics are used; why there are legitimate reasons that scientists disagree; how media often misrepresent these disagreements; the importance of consulting multiple sources and seeking the original source when possible; and so on. Unlike a list of good and bad websites, these kinds of tools help people critique new information as it comes along.  
*La Jolla, California, US*

## Tetris to the rescue

From Ruth Hill  
I can confirm, from personal experience, that post-traumatic stress can be moderately alleviated by Tetris (17 January, p 12). Having had two nervous breakdowns in the last five years, I needed (and still need) to find some way of suppressing my thoughts, memories and flashbacks of trauma.

Not being a drinker and being too middle-class to have access to illegal drugs – and finding prescription drugs ineffective – I was fortunate to stumble across the distraction of Tetris – which I played day and night for many months. I played to the extent that I acquired repetitive strain injury. I find it requires such extensive spatial and visual brainpower that it disengages my capacity for verbal thought and brings relief from anxiety and

## Enigma Number 1533

### Roman grid

#### RICHARD ENGLAND

Put one of the letters C, L, X, V into each cell of a 5 × 5 grid so that each row and each column is a valid five-letter Roman numeral less than 300. No numeral may appear more than

once; the five horizontal numerals should be in descending numerical order from top to bottom, and the five vertical numerals in descending numerical order from left to right.

What is the sum of your 10 Roman numerals (expressed in ordinary Arabic numerals)?

**WIN** £15 will be awarded to the sender of the first correct answer opened on Wednesday 25 March. The Editor’s decision is final. Please send entries to Enigma 1533, New Scientist, Lacon House, 84 Theobald’s Road, London WC1X 8NS, or to [enigma@newscientist.com](mailto:enigma@newscientist.com) (please include your postal address).

**Answer to 1527** Square from primes: (a) 11449 (b) 19881

**The winner** Peter Kaufeler of London, UK