Darwin Retains Seat in Ohio

The Ohio state school board stuck up for science last week, voting to adopt new science standards that explicitly require the teaching of evolutionary theory in the state's public schools. The old science standards made no mention of evolution. The new ones do not prevent schools from teaching "intelligent design" (ID), a concept favored by creationists; however, students will not be tested on it.

Ohio has been closely watched on the evolution front since early this year as new science standards wended their way through the approval process. It's been a tense time, with creationists of various stripes (represented by the group Science Excellence for All Ohioans) trying to get the standards committee of the education board to delete Darwinian terms or at least present the concepts as controversial. Defenders of evolution (represented by the group Ohio Citizens for Science) lobbied to keep the standards confined to science.

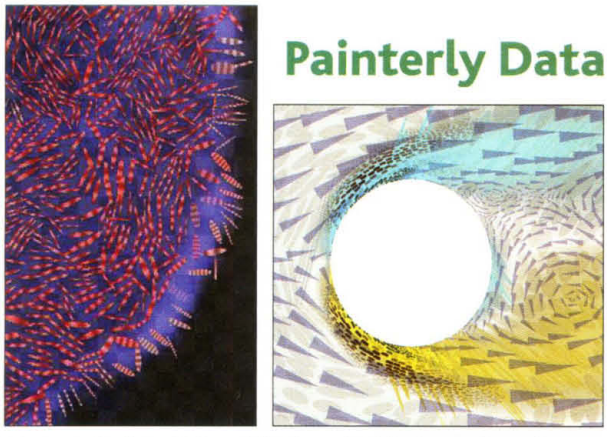
The school board's decision "makes me proud to be an Ohioan," says philosophy professor Patricia Princehouse of Case Western Reserve University in Cleveland. She says the board adopted a last-minute change that scientists had been pressing for: They changed the term "evolution theory" to "evolutionary theory." And they threw a small bone to the other side by adding the assertion that students should "understand how scientists today continue to investigate and critically analyze aspects of evolutionary theory." ID backers, who argue that teachers should "teach the controversy," expressed satisfaction with this addition.

Just before the board voted, Case Western and the University of Cincinnati published the results of a scientists' poll that belied the creationist argument that there are scientific arguments for ID. Of the 500 respondents—including some from fundamentalist colleges—93% said they were not aware of any evidence that challenges the principles of evolution.

New IOM Members

Sixty new members and five foreign associates have been elected to the U.S. Institute of Medicine, bringing its total membership to 1358 and foreign associates to 66. For names, visit www.nationalacademies.org/topnews

Painterly Data



Mouse spinal cord (l) and fluid model (r). Six to nine values are represented at each data point.

Inspired by artists such as Vincent van Gogh, computer scientist David Laidlaw of Brown University has come up with what he calls "textured" representations of data. One technique inspired by van Gogh is "underpainting," in which complex details are layered over an averaged-out version of the same data, bringing the "shape" of the data into sharper contrast. Another technique adds depth to the picture by creating layers in which data points are represented by different icons, such as ovals or arrows of different colors. With up to nine independent variables layered at each point, the viewer can extract different information depending on the distance from which the presentation is viewed.

Laidlaw has applied the techniques to a variety of types of data, including pathological changes in mouse spinal cords and turbulence in fluid dynamics. Peter Richardson, a bioengineer at Brown, says Laidlaw's approach is great at presenting arterial blood flow: "You can see the causes of phenomena at a glance." Laidlaw is teaching the new technique to a joint graduate class of Brown engineers and artists from the Rhode Island School of Design next door in Providence, RI.

Nippon Start-Up Goes Public

Japanese hopes of capitalizing on academic research got a boost last month when for the first time a biotech company launched from university research went public on the Tokyo Stock Exchange.

AnGes MG Inc. was set up in December 1999 by Osaka University gene therapist Ryuichi Morishita and colleagues to develop a gene therapy based on Morishita's discovery of hepatocyte growth factor, a protein that promotes the growth of blood vessels.

What would be a routine event in the West made headlines in Japan. Only 5 years ago, national university researchers were barred from serving as corporate officers, university-industry technology transfers were hindered by red tape, and venture capital was scarce. But the government has been progressively loosening restrictions and generating inducements for new ventures to help Japan's long-sputtering economy.

A Russian rocket similar to the one that fizzled. (The Russians confiscated all photos from the disaster.)

Russian Rocket Flop

In a major setback for the European Space Agency, a Soyuz rocket carrying a satellite with 44 experiments exploded seconds after lifting off from Pletensk, Russia, on 15 October, killing one and injuring eight people. The satellite was to orbit for 15 days before returning for a soft landing on Earth. The experiments, which are not likely to be repeated for up to 2 years, were designed by scientists from five nations and ranged from physical biochemistry to exobiology.

A similar Soyuz rocket is due to spirit three Russian cosmonauts up to the international space station on 28 October. According to the Russian space agency Rosaviakosmos, this launch will go ahead as scheduled.

CREDITS: (TOP TO BOTTOM) AP/IT AR TASS; D. LAIDLAW *ET AL.*