

German research bodies draft synthetic-biology plan

Three leading German research organizations have outlined how they think the country could play a major part in synthetic biology.

The DFG (which funds university research), the German Academy of Sciences Leopoldina and the German Academy of Science and Engineering argue in a 27 July report that synthetic biology has great value to society — as long as the field's expansion is balanced with ethical debate.

Germany is particularly sensitive to ethical issues in the life sciences, partly because of previous Nazi abuses of bioscience. The report says that a national centre should be created to host a database of information about newly created stretches of DNA, and to assess their safety.

Ralf Wagner, chief executive of Genearth, a leading manufacturer of synthetic genes based in Regensburg, Germany, says he hopes the report will help create a positive environment for public debate.

For a longer version of this story, see <http://tinyurl.com/lfukon>

Step-by-step rating system set to improve African labs

An accreditation system that aims to raise the standard of disease diagnosis in African medical laboratories was launched on 27 July in Kigali, Rwanda.

The process, developed by the World Health Organization in collaboration with the US government, will mark African pathology labs on an incremental scale, upping the rating as their quality improves rather than using the 'pass or fail' system of many developed countries. The scheme was launched alongside a training programme for African lab workers.

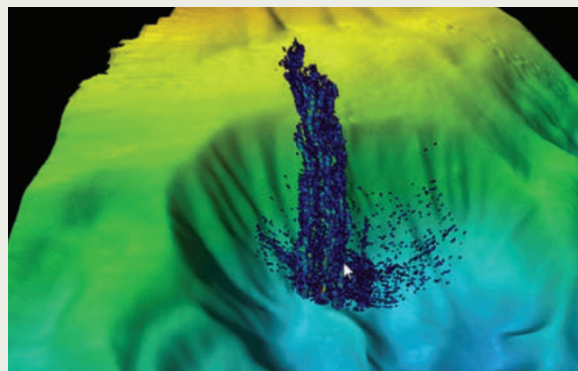
The US Centers for Disease Control and Prevention in Atlanta, Georgia, which will implement the step-by-step system, estimates that it could see 60 currently

Lucky find of undersea methane bubbles

While testing equipment off the Californian coast last month, a newly refitted research vessel stumbled across plumes of methane gas rising 1,400 metres from the sea floor.

The *Okeanos Explorer*, commissioned last year by the US National Oceanic and Atmospheric Administration (NOAA) after a US\$20-million refit, was testing a new multi-beam sonar system in the Mendocino fracture zone (see sonar image, above). On 15 July the ship returned to the site to capture plume material for analysis in the coming weeks.

The plumes, which measure up to 1 kilometre across, typically dissipate about 600 metres below the surface. Cruise scientist Stephen Hammond of the NOAA office in Newport, Oregon, suspects this is because ice with methane gas trapped in its crystal structure melts at the combination of pressure and temperature at that depth. Similar methane plumes have been discovered from the Oregon coast to the Black Sea, but not this large or numerous.



NOAA

unaccredited African laboratories attain ratings verging on the standard of an average lab in the developed world over the next two years.

For a longer version of this story, see <http://tinyurl.com/mlh6x3>

UK government urged to disclose evidence base

If the UK government makes policy decisions that contradict recommendations from its science advisers, it should make clear why it has done so, politicians exhorted last week.

In a 23 July report on the use of science in government, the country's Innovation, Universities, Science and Skills Committee said that chief science advisers should challenge the government to publicly acknowledge when policies are not based on evidence.

Committee members also called for prime minister Gordon Brown to strengthen the role of scientific advice in government policies. They recommended that he create a permanent office for science in the cabinet office — where it would be closer to the heart of government policy-making, and have direct access to ministers.

Mauna Kea adds to its family of telescopes

Mauna Kea in Hawaii has beaten off competition from Cerro Armazones, in Chile's Atacama desert, to host the Thirty Meter Telescope. Henry Yang, chancellor of the University of California, Santa Barbara, and chair of the telescope's board

of directors, announced the winning site on 21 July. The decision has been two years in the making, he said.

Mauna Kea, which already hosts many other telescopes, was picked over its Chilean rival for its superior observing climate. It is higher and drier, has less atmospheric turbulence, and its average temperature fluctuates less through the year and over a day, notes board member Richard Ellis of the California Institute of Technology in Pasadena.

Construction of the telescope, which will cost around US\$1 billion, is scheduled to begin in 2011 and end in 2018.

Genetic barcode for plants close to agreement

Final consensus on a DNA 'barcode' that could rapidly identify plant species should be reached in the next two months.

Botanists have for years debated which genetic sequences would be most suitable for such a barcode, which could be used to inventory biodiversity or monitor plant shipments (see *Nature* 451, 616; 2008).

David Schindel, executive secretary of the Consortium for the Barcode of Life, says that the consortium should be able to reach a decision quickly now that its plant working group has come to what the group calls "community agreement" on the matter.

The working group's recommendation, published this week (CBOL Plant Working Group *Proc. Natl Acad. Sci. USA* doi:10.1073/pnas.0905845106; 2009), should also help barcode-related projects obtain funding.

For a longer version of this story, see <http://tinyurl.com/kuav82>



The number of accredited labs in Africa may rise.

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