


AMERICAN CHEMICAL SOCIETY

Catch up on the meeting with our daily diary reports.
<http://blogs.nature.com/news>

F.CHMURA/HOLLANDE HOOGTE

SNAPSHOT
Women at work

Scenes such as this one, of the opening ceremony of a Dutch academic year, might become more common if the 'Lisbon target' of 25% female faculty in European universities is ever achieved.

European research ministers set this 2010 goal, now looking unlikely, in June 2000.

But this particular ceremony is staged. Petra Rudolf, a professor and materials scientist at the University of Groningen in the Netherlands, chivvied 35 of the university's 50 female professors into showing up at the opening ceremony of the new academic year on 4 September. Rudolf's whip pushed the gender ratio of those in gowns to more than a quarter.

"The men seemed, shall we say, to feel the difference," laughs Rudolf, "and they were not entirely comfortable." But they'll have some time to get used to it. The university expects to increase female faculty from 10%, the Dutch average, to 15% by 2010.

Alison Abbott



Extreme TB strain threatens HIV victims worldwide

An outbreak of virulent and very drug-resistant tuberculosis in South Africans with HIV is horrifying health professionals and prompting the usually slow-and-steady field of tuberculosis medicine into emergency action. "This is the nightmare scenario of HIV-fuelled drug resistance," says Paul Nunn of the World Health Organization's (WHO's) Stop TB Partnership.

The new strain, called extreme drug-resistant tuberculosis (XDR TB), is virtually untreatable. Neither the standard drugs nor at least three of the six classes of more toxic and less-effective backup drugs are effective.

So far all those infected in the South African outbreak have HIV. Drug resistance is energetically costly for bacteria to maintain, and it may be that a strain resistant to so many drugs is not virulent enough to make healthy people seriously ill. But those with immune systems weakened by HIV are more susceptible to bacterial infections, and in populations with high concentrations of HIV, patients infected with XDR TB will pass it on to those around them.

Delegates to an emergency conference in

Johannesburg heard last week that more than 120 patients in 28 hospitals in rural KwaZulu-Natal province, South Africa, had contracted this severe form of tuberculosis. Nearly all of those known to be infected are now dead, but many others may be carrying the bacteria. "There is no systematic survey, so this is just the tip of the iceberg," says Nunn.

A survey released in March showed that XDR TB is a global phenomenon, with relatively more cases occurring in Eastern Europe and Western Asia. But until now, only isolated cases of XDR TB have been seen. The KwaZulu situation is the first outbreak of XDR TB. It was first reported at last month's International AIDS conference in Toronto, Canada, but the latest figures, from a wider area, give a clearer picture of the scope of the outbreak. The fear is that the disease could spread north where HIV levels are also high, if it hasn't already.

Scientists at last week's emergency conference, organized by the South African Medical Research Council, the WHO and the US Centers for Disease Control and Prevention,

struggled to gear up efforts fast enough to tackle the outbreak.

"The TB community is used to doing things slowly and steadily, and thoroughly and well, not at all in outbreak mode such as with SARS and avian flu, and I think that is required," says Nunn. But he says it is hard to galvanize efforts in KwaZulu because of the problems that are typical across the developing world — including overcrowded hospitals, unfinished treatment courses, lack of well-equipped labs, widespread HIV infection and grinding poverty. "There is a certain amount of fatigue."

Officials at the nonprofit Global Alliance for TB Drug Development in New York say that they have been approached to see if any of the drugs they are researching could be deployed on a 'compassionate use' emergency basis.

Unfortunately, according to alliance president Maria Freire: "The drugs we have are too early for that." The alliance estimates that the first drugs in an entirely new class will not be ready for regular use until 2012.

Emma Marris