biologists write and publish papers, which the practitioners seldom read. The practitioners, in turn, rarely document their actions or collate their data in forms useful to conservation biologists. Typically, practitioners make decisions based on personal experience and intuition. Their knowledge stays untapped by others — and can be impervious to fresh scientific findings.

The existence of this gap has been acknowledged, and numerous efforts are already directed at bridging it. Some publications try to bring scientific news to practitioners. William Sutherland, a conservation biologist at the University of Cambridge, UK, runs a site called ConservationEvidence.com where practitioners are encouraged to deposit reports on the outcomes of their interventions — successful or otherwise. Data from these reports can then be fed into systematic reviews of the kind being done by Andrew Pullin at Bangor University in Wales, whose Centre for Evidence-Based Conservation attempts to answer questions such as 'are Japanese knotweed control and eradication interventions effective?'.

There have been many calls for more mid-career training of practitioners. Conservation biologists could run workshops, and squeeze in some much-needed interaction with their peers on the application side of the discipline. The need for this may sound obvious — but in a field so cash-strapped that many conservation projects can't even afford to assess their own effectiveness afterwards, it sometimes seems like a luxury.

Local and national governments with a stake in conservation should be encouraged to support such training as a cost-effective means of raising the efficiency of the conservation projects on their turf — an objective that constituents at both ends of the political spectrum are liable to support.

**"What is needed is a concerted effort by both academic scientists and practitioners to get out of their respective ruts."**

But the gap can also be bridged if conservation biologists remember to look at all of their professional activities in light of their interest — be it practical, moral, aesthetic or even humanitarian — in saving species from extinction. In essence, the more time that they can spend working with local practitioners on real conservation issues the better.

What is needed is a concerted effort by both academic scientists and practitioners to get out of their respective ruts, open up paths of communication, share information and seek ever more efficient means to a common end. ■

# Deadly consequences

## Health authorities have yet to respond effectively to the combination of HIV and tuberculosis.

Tuberculosis (TB) is not only completely treatable, it is curable and controllable, and has been so for decades. So it is appalling that the disease is currently flaring up around the world in an epidemic of co-infection with HIV, which is also associated with a frightening increase in strains of TB that are resistant to existing drugs.

This week, the 38th Union World Conference on Lung Health convenes in Cape Town, South Africa. The main themes of the meeting will be the challenges of HIV–TB co-infection and multiple-drug resistance in TB.

The importance of co-infection has been emerging steadily, especially in Africa, since the early days of the AIDS pandemic. TB is now the most common opportunistic infection in HIV-positive patients starting antiretroviral therapy. Such co-infection presents particularly troubling complications for treatment: there are overlapping drug toxicities and the risk of a life-threatening inflammatory syndrome if infection status is unknown and treatment administered incorrectly.

**"Researchers, doctors and health-care workers need to do far more to respond to the scale of the problem that TB and co-infection with HIV presents."**

The South African city of Tugela Ferry presents a startling example of how an HIV–TB epidemic could play out. The incidence of TB there is very high, and of some 400 multidrug-resistant cases identified since 2006, more than half were classified as extensively drug resistant, meaning that they are resistant to second-line as well as first-line drug treatments. Most of the resistant infections occur in individuals co-infected with HIV. Efforts to manage both diseases in patients may itself encourage the emergence of drug-resistant strains.

Activists and health-care workers have often sought to blame the South African government for its lax response to this crisis. But it has also been aggravated by an unfortunate historical divide in the worlds of research and health care between those addressing TB and those tackling AIDS (see *Nature* **446,** 109–110; 2007). Researchers, doctors, health-care workers and the entities that support them need to do far more to respond to the scale of the problem that TB presents, and its interconnectedness with HIV. Priorities outlined in 2004 by the World Health Organization for HIV/TB research have not been implemented adequately, according to a report released by the Forum for Collaborative HIV Research last week.

Large parts of sub-Saharan Africa are becoming subsumed by co-infection. And although the rate of infection has dropped elsewhere, many European and Asian nations still face large numbers of patients with active TB infections. A report from the US Centers for Disease Control and Prevention last month showed that the phenomenon may present a threat in the United States as well (*Morbid. Mortal. Wkly Rep.* **56,** 1103–1106; 2007). One-third of TB patients there didn't know their HIV status, despite official policy that routine testing be performed on everyone with TB. And 9% of those with TB were also HIV positive, according to the report.

The global co-infection epidemic is all the more troubling because it was potentially avoidable with better use of existing drugs. The rising incidence of drug-resistant TB is now forcing agencies in Africa and around the world to react to the scale of the problem. The list of needs is a familiar one: better delivery of existing care approaches, development of more useful diagnostics, and community-based care. But a bigger mental shift is needed in recognizing the size of the problem and its interconnectedness with the AIDS pandemic. ■