this parasite enzyme could be a promising new drug target to treat *Trypanosoma* infections. *TS*

Parasites on the move

Global changes as diverse as changes in climate, mobility of people and animals, deforestation and forestation affect the ecology of a variety of organisms, including parasites. The re-emergence of recognized diseases, such as malaria and trypanosomiasis in countries where these diseases have been effectively controlled, is exemplary. In 1977, two years after the WHO declared Europe free of malaria, 83% of the world population was living in malaria-free areas or in areas where control programs were in progress. Today, however, this figure has decreased to 60%. The resurgence of malaria could not be attributed solely to the development of resistance of both the parasite and the mosquito vector to drugs and chemotherapeutics, respectively. In a recent article, Ronald Fayer points out that several other parasitic diseases are increasing globally [Fayer, R.J. (2000) *J. Parasitol.* 86, 1174–1181]. Dazzling figures on the number of cryptosporidiosis cases (from two human cases reported in the USA in 1976, to an estimated 300 000 cases reported annually today), and trichinosis (a 17-fold increase since 1983 in Romania to over 16 000 cases in the 1990s) support the notion that parasites are on the move. In an era when budgets on teaching and research in parasitology have been drastically reduced, it appears that with this increase in the occurrence of parasitic diseases, the parasitologists have the next move. *TS*

Aventis sign deal with WHO to supply sleeping sickness drug

Aventis Pharma (Basel, Switzerland) have agreed to donate a five-year supply of the sleeping sickness (trypanosomiasis) drug eflornithine to the World Health Organisation (WHO), six years after they ceased production because it was deemed unprofitable. The donation, which also includes funding of £17 million for the WHO's treatment and research programs into the disease, follows recent poor publicity for large pharmaceutical companies following their refusal to lower the prices of AIDS treatments sold to South Africa. 'This agreement is excellent news for patients and a major step in the struggle to control sleeping sickness', said Bernard Pecoul, Director of Medicine Sans Frontieres. He then asked for an additional £25 million per year from international donors to support the project. In 2000, Aventis offered the license to produce the drug to the WHO, but the organization were unable to find a manufacturer. *BR*

Want to overcome *Leishmania*? You'll need TNF

Tumor necrosis factor (TNF) is essential for the *in vivo* control of infection with *Leishmania major* according to P. Wilhelm *et al.* [(2001) *J. Immunol.* 166, 4012–4019]. These authors closely analyzed the progression of visceral leishmaniasis in gene 'knockout' TNF-deficient mice. Whereas TNF-normal mice of the same strain were resistant to this infection, the genetically altered mice rapidly succumbed to progressive disease even when inoculated with a low number of parasites. At the cellular level, the generation of anti-leishmanial immune responses was considerably delayed in the TNF-deficient mice, and insufficient production of the potent antiparasitic molecule nitric oxide occurred. *SHK*

Dr Ton Lensen: *in memoriam*

The malaria group in Nijmegen has lost a very valuable and respected researcher and colleague who greatly contributed to the success of their malaria research programme. Unexpectedly, on 13 April 2001, Ton Lensen died at home, aged 46. Ton started his malaria research career in 1979 as a technical assistant at the Department of Medical Parasitology, University of Nijmegen, The Netherlands. In a direct collaboration with the late Dr Tivi Ponnudurai, he made an important contribution to the development of the automated culture of *Plasmodium falciparum*, the production of gametocytes, and techniques to study their transmission to mosquitoes. The 'tipper' and 'shaker' culture systems developed by them are still used routinely in laboratories throughout the world, many of which he visited. His research on *P. falciparum* transmission and the development of transmission blocking immunity allowed him to complete a PhD study in 1998. For the last two years he was an important researcher in the EU Key Action 2 consortium called MALTRANS. *TS*

Direct analysis of human toxoplasmosis from clinical samples

Selection of particular parasite strains during *in vitro* culture of biopsy samples could bias the diagnosis of toxoplasmosis types in humans. To illustrate this point, I. Fuentes *et al.* used a novel, non-culture-reliant genetic test to determine the prevalence of different strains of *Toxoplasmosis gondii* associated with 34 cases of human disease [(2001) *J. Clin. Microbiol.* 39, 1566–1570]. The results suggested that in contrast to previous beliefs, type I strains were present in 75% of congenital *T. gondii* cases. Previous, culture-based methods suggested that all kinds of human toxoplasmosis resulted from infection with type II strains. The genetic test was able to recognize type I, type II and type III strains of *T. gondii*. *SHK*

I spy with my toxoplasmotic eye…

An interesting new publication suggests that the delicate balance of ocular homeostasis is disrupted to control toxoplasmosis infection of the eye [(2001) *Infect. Immun.* 69, 2589–2595]. The normal eye is believed to be a site of considerable immune privilege, with inflammatory responses being carefully controlled to preserve vision. However, during toxoplasma infections in the eyes of mice, R. Lyons *et al.* found that immune privilege becomes somewhat overridden, with locally upregulated MHC Class I expression and enhanced synthesis of pro-inflammatory cytokines such as interleukin-6 (IL-6). The crucial role of IL-6 in control of ocular parasites was further highlighted by IL-6-deficient mice, which develop more severe inflammation and higher parasite burdens than do normal mice. Severe disease was also associated with high tumor necrosis factor-α production. *SHK*

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