

# Moral quandary over stem cell research

In an editorial in the 18 August issue of *Science*, Ruth Faden, a bioethicist at Johns Hopkins University, Baltimore, Maryland, examines the challenges faced by scientists in countries with differing legal requirements. The immediate problem has arisen over national laws governing the use of human embryonic stem cells in research. These vary widely from place to place, and so far no reasonable compromise has been reached that might serve to guide the scientists concerned.

An international group of scientists and other interested people gathered earlier this year in Hinxton, near Cambridge, to consider moral challenges that emerge from differences in national laws affecting research

into human and non-human animals, pathogens, biohazards, genetic modification of plants and animals, and access to medical and public health records in different places. There are disagreements concerning the ethical factors attached to the moral status of embryos in particular.

The question has been raised, whether it is ethically correct for scientists to travel to other countries to engage in research procedures that would not be legally permissible at home. The intensity of debate over the issue has become substantial. Scientists have regarded their own ethical stand towards their domestic regulations, but need also to consider the effect of their conduct on the public's trust in the entire scientific community.

It has been concluded that researchers living in countries that restrict elements of human embryonic stem cell research should be free to engage in them in other regions where permission has been granted. Nevertheless, aspects of ethics cannot be overridden freely. A balance has to be struck between conforming to a society's accepted values and the global context in which science operates.

In matters of morality scientists should not expect society to defer to their views. An appeal to reason requires researchers to make a continued appeal to the general public in the face of criticism. Unfortunately, institutional and academic cultures rarely prepare scientists for engaging with the lay public.

## Puzzling escalation in hospital admissions arising from insect stings

There is an intriguing suggestion in the 22 July issue of *The Lancet* that some other living creatures might be conceived as rebelling against the human race that has assumed, with incredible arrogance, that it is so superior as never to be reckoned with.

Recent records have indicated a rise in hospital admissions in the UK because of stings from hornets, bees or wasps. Between 2003 and 2004 the annual number of patients admitted to hospital for medical care as a result of being stung averaged 425. For the period 2004–05 this rose to 843, and in the same year eight people died from a sting compared with the average of two per year during the previous four years.

One possible factor contributing to the increase may be our greater demand for fruit of all varieties. Pollination techniques of tomatoes and strawberries, for instance, has called for importation of bees for use in



commercial glasshouses, where workers kept in close proximity to the nests are at high risk of stings.

It is not only bees, but also an invasive species of wasp brought from continental Europe that plays a part in increasing the hazard. These tend to build small nests at eye level, so that anyone approaching them stands the chance of encountering wasps patrolling the surface. Faced with a possible threat to the nest, they naturally react.

And it is not only the fruit farmer who is imperilled. When their natural food grows scarce, particularly at the end of the summer, wasps seek food further afield and may lurk in items

such as picnic sandwiches, a trap for the unwary consumer.

Experts advise people who know they are allergic to stings to carry their medication with them. Anyone who is stung and develops a bad reaction should seek immediate medical attention.

## The lacing of illicit drugs with fentanyl is an expanding deadly hazard

A world report in *The Lancet* of 12 August draws attention to the ever-increasing threat of the deliberate adulteration of narcotic drugs with opioid analgesics. The latest examples in the international drug traffic business have been diamorphine and cocaine laced with fentanyl.

Fentanyl is not new to drug abusers. In the past it was usually derived from prescribed medicines but in the 1980s and 1990s the occasional clandestine fentanyl laboratory gave way to a widespread distribution system.

Health workers noticed that the frequency of opiate overdoses and resultant deaths rose to a peak. Closer examination revealed the presence of fentanyl in specimens obtained for autopsy, and tests were carried out on

samples of diamorphine acquired from street dealers. These often revealed the presence of added fentanyl. By May of this year findings of fentanyl overdoses in the US were spreading to cities in eight states, including Chicago, Detroit, St Louis, Philadelphia, Pittsburgh and New Jersey. In a single weekend in New Jersey the drug cocktail killed three individuals and resulted in another 42 being admitted to hospital for antidotal treatment. At much the same time, there were 130 deaths in Detroit and 100 in Chicago, all attributed to the contaminated opiate.

The pattern of diamorphine abuse in the US revealed a steady demand for the drug, but whereas it was once regarded as an urban problem it became a suburban one and

involved younger abusers, particularly those under 25 years old. There has been much pressure on available methadone programmes.

Drug abusers, it is believed, need better access to the opiate antagonist naloxone. The antidote has saved many lives, and more education concerning its value is needed. For some strange reason, however, the federal drug authorities have not supported its readier access.

According to the European Centre for Drugs and Drug Addiction, trafficking in illegally produced fentanyl is on the rise in some parts of Europe. A warning has been issued that overdose epidemics like those seen in US cities are likely to become a problem across Europe too.