THIS WEEK

Pfizer's payments to censured doctors



Peter Aldhous and Jim Giles

THEY are billed as "healthcare professionals who spend years building expertise in their fields". Using materials grounded in science, they educate their peers in the risks and benefits of drugs.

This is how Pfizer, the pharmaceuticals giant, describes the experts it hires to lead forums in which doctors are lectured on the use of its products.

Yet *New Scientist* has found that some of Pfizer's experts have been disciplined for deficiencies in patient care, while others have been reprimanded for how they conducted drug research trials.

The findings add to controversy surrounding the pharmaceutical industry's efforts to market drugs by influencing prescribing. Doctors paid to educate their peers are a particular worry, argues Sidney Wolfe of consumer advocacy group Public Citizen in Washington DC. "They are doing things that may be influencing your doctor and you have no way of knowing about it," he says. "It's made worse by the fact that some

Who's speaking for them?

of them have been disciplined." Many drug firms sponsor educational events for doctors.

The talks may include research results, advice on identifying patients suitable for treatment and guidance on prescribing. *New Scientist* matched doctors

licensed to practice in the four most populous US states – California, Texas, New York and Florida – against Pfizer's records of payments to doctors and medical researchers in the second half of 2009. These were published in March as a condition of Pfizer's \$2.3-billion settlement with the US government over charges of illegal drug marketing.

Our search revealed 26 doctors paid to lecture on the company's drugs whose records include disciplinary actions related to problems with patient care or drug prescribing. Some were under probation from their state medical boards as they gave talks.

Further cross-referencing against US Food and Drug Administration (FDA) records revealed another four who have received warning letters over problems with how they conducted drug research. The speaking fees were between \$800 and \$22,500.

In the four largest states, roughly 1 in 50 of Pfizer's experts had disciplinary records for problems with patient care or prescribing. Yet campaigners for patients' rights say that it could be close to zero, if drug companies checked databases provided by most US states. "If it's Pfizer's position that these are respected thought-leaders, they should have clean records," says Elizabeth Woeckner of Citizens for Responsible Care and Research in Philadelphia, Pennsylvania.

Censured Pfizer speakers approached by New Scientist deny that their records make them unsuitable to educate peers. Joseph Altieri of Vero Beach, Florida, and Mark Kosins of San Clemente, Californiawho both lectured about Pfizer's antipsychotic drug Geodon while under probation – argue that their disciplinary actions have no bearing on their talks because they concerned other drugs. Thomas Gazda of Scottsdale, Arizona, who was reprimanded by the FDA over a Geodon trial, points out that he has extensive clinical experience outside of research trials. "One learns from mistakes," he says.

At least one other drug firm has employed doctors disciplined

"Some doctors were under probation from their state medical boards as they gave talks for Pfizer"

over patient care. Of the 26 we found speaking on Pfizer's behalf, four were also paid to speak for GlaxoSmithKline in 2009.

Pfizer says that it already excludes those who are debarred from US government healthcare schemes. "We are continually refining our review process to ensure we are selecting the most appropriate healthcare providers to partner with to educate the medical community," says spokeswoman Kristen Neese. ■ Additional reporting by Brad Stenger.

Decaying beauty spied for first time by LHC

BEAUTY may be rare and fleeting, but the Large Hadron Collider (LHC) has already found it.

The LHC started work on 30 March, and within a week one of its four large detectors had found evidence of a beauty quark - also known, less poetically, as a bottom quark. This should be the first of many such quarks that LHCb, the LHC's beauty experiment, will observe, and shows the detector is working properly.

The first recorded particle was a meson composed of an anti-beauty quark - the beauty quark's antiparticle - and an up quark, which is one of the two common quarks that make up protons and neutrons. While up quarks can last for billions of years, the large beauty quark swiftly decays into lower-energy particles in about 1.5 × 10⁻¹² seconds, or a billionth of the blink of an eye.

After travelling only 2 millimetres in the detector, the beauty quark decayed to a lighter quark - still paired with the original up quark and the extra energy was carried off in the form of electron-like particles called muons.

"It's a very rare event; it's like a needle in a haystack," says Andreas Schopper, a spokesman for LHCb. "In these 10 million data or so we find this one event."

Beauty quarks could take us back to the first moments of the universe. They form in high-energy explosions, so the big bang must have created quite a few. By examining the quarks' decay, LHC researchers hope to find clues as to what happened to the universe's antimatter: the big bang should have created antimatter alongside matter, but there is little sign of it today.

"While precision measurements will need many millions of beauty particles, as with kisses, the first is always very special," says Jürgen Schukraft, spokesperson for the LHC's ALICE experiment, which studies heavy ions. Kate McAlpine

Jungle funerals: how chimps mourn their dead

IN A forest clearing in south-east Guinea, a mother chimpanzee gently puts down her baby to crack open a nut. There's something wrong with the apparently mundane scene, though: the baby is dead, and has been for weeks.

The 1-year-old infant, Jimato, died of flu when an epidemic struck a chimp community in the district of Bossou in 2003. The virus also killed 2-and-a-half-year-old Veve, and both corpses were carried by their mothers for weeks (see photo). The events were observed by Dora Biro of the University of Oxford and her colleagues, who have just published their account.

Five years later, in Blair Drummond Safari and Adventure Park in Stirling, UK, a group of chimps was seen to "mourn" the death of a 50-year-old female called Pansy. After she died, her daughter stayed beside her throughout the night. Later, members of the group cleaned the corpse and avoided the place where Pansy had died (Current

Biology, vol 20, p R349).

James Anderson, a psychologist at the University of Stirling who studied the episode, says Pansy's group of apes showed signs of "rituals" to cope with death - although he says different behaviour has been seen around adult deaths in the wild.

The events in Bossou. on the other hand, suggest that a period of continued contact after the death of an infant may be

"Chimps may not only understand the concept of death but have wavs of coping with it"

important for a mother chimp to adjust psychologically to her loss, Anderson says.

Other primates have been seen carrying infant corpses around, but rarely for more than a few days before they were snatched by males or wet conditions caused them to fall apart. The Bossou corpses, on the other hand, were



mummified by dry-season conditions, and carried for 68 and 19 days respectively before they were abandoned (Current Biology, vol 20, p R351).

In many ways, their mothers treated the corpses as though they were still alive: they groomed them, swatted flies away and made high-pitched screams of distress

Not ready to let go

when they accidentally dropped the bodies. But there were telltale signs-occasional flinching, for instance - showing that they knew the infants were dead.

The two studies "make a strong case that chimps not only understand the concept of death but also have ways of coping with it," says Anderson. Shanta Barley

Female sharks are doing it for themselves

CAN'T find a mate? Try

parthenogenesis. The type of asexual reproduction may be part of an extreme survival strategy for sharks.

In parthenogenesis, females' eggs start dividing without being fertilised. This produces daughters that are genetically similar to the mother. It was first observed in a captive hammerhead shark in 2001, but this was an isolated incident, and the shark pup died after three days, making it difficult to say much about its evolutionary significance.

Kevin Feldheim at the Field Museum in Chicago, and an international team of colleagues,



have now shown that the incident was not exceptional and sharks born from a virgin mother can survive for many years (Journal of Heredity, vol 101, p 374).

The team were inspired by the 2001 birth to keep eggs produced by a captive white-spotted bamboo

shark at the Belle Isle Aquarium of the Detroit Zoological Institute. The female had never encountered a male during her adult life and biologists had assumed the eggs were infertile. To their surprise seven incubated eggs produced two pups that survived five years before they were

transferred to another facility. Genetic analysis confirmed that they were parthenogens.

"This suggests that parthenogenesis is a viable shark survival strategy," says Paulo Prodöhl of Queen's University Belfast, UK, who is investigating a possible case of virgin birth in the whitetip reef shark.

Modern sharks have been on Earth for several hundred million years. One theory is that switching from sexual reproduction to virgin birth might have helped these ancient creatures survive so long. Prodöhl suggests virgin birth could have been a safeguard mechanism. Several shark species live in single-sex groups and he says parthenogenesis may have ensured that isolated populations of females could survive without males. Shaoni Bhattacharya 🔳