

UK research council hits back at 'horror lab' allegations

THE UK Agricultural Research Council last week held a press conference to present journalists with a defence of its use of animal experiments, after the *Sunday Mirror* had published 'shock' accounts (see right) of experiments at the ARC's principal laboratory, the Institute of Animal Physiology at Babraham near Cambridge. "Scientists transplant udders!" said the *Sunday Mirror*, and "Our verdict: vile".

But last week the director of the centre, Dr Barry Cross, countered that the story was "a statement about human reaction, not about animal cruelty". He questioned the credentials of the *Sunday Mirror*'s two witnesses of what went on at the institute. The first, Dr Cross said, "was a grade EW6 technician — the lowliest form of human life — no O-levels, no CSEs", and he was remembering 10 years after the event. The second "was a window cleaner or an asphaltter who strayed from his proper job". To an expert, their reports "indicate pain and distress on the part of the unqualified observer".

Dr Cross's response was perhaps not calculated to enlist the sympathy of the journalists from the popular press (the *Star*, the *Express*, the *Sun*, the *Daily Mirror* and the *Sunday Mirror* were present); but the statement that followed was.

"I'm not here to defend cruel experiments on animals", Dr Cross said. "I was the first student president of the Union for Animal Welfare". Cruel experiments "would frustrate all our work — because we are studying healthy animals".

The experiments questioned by the *Sunday Mirror* involved udder transplants in goats and cows, to investigate secretions into the milk; permanent access to the animal's stomach, to investigate the digestion of the rumen; and an operation to bring a vein in the neck closer to the surface, to allow less painful injections to be made.

The ARC scientists have developed techniques, involving skilled surgery such as would "shame the National Health Service", which induces only mild post-operative pain while the wounds are healing, said Dr Cross. After that, the animals enjoy "a life of 5-10 years of cossetted living".

Stress levels in the animals are remarkably low. A researcher attempting to measure cortisol levels — a stress indicator — in Babraham cattle was shocked to discover amounts well below textbook levels. At first he thought that the Babraham cattle must be of a particularly phlegmatic strain, thus disqualifying many previous experiments, but then the cortisol shot up to the standard level when a noisy visitor entered the room. "Animals are

more stressed on a farm than in our laboratory", said Dr Cross. "Our animals are the friendliest I know. They don't expect hostile people."

Moreover, said Dr Cross, referring to the case of a goat udder transplant, which appears to have caused most public reaction, a new-born kid actually prefers the transplanted teat, "and he must be considered unbiased".

"We have never been refused a Home Office licence" said Dr Cross. (The Home Office controls animal experiments through the 1876 Cruelty to Animals Act.) "I've only been a director at Babraham for five years; previously I've worked in seven laboratories in the US, Scandinavia, and the UK, and I've visited many hundreds of others, and I have never seen a standard of care that surpasses or even equals Babraham's."

Dr Cross also defended the Babraham work on scientific, economic, and medical grounds. "One in seventeen women suffer from breast cancer", said Dr Cross, "but ruminants do not. Our experiments may give a clue to what predisposes women to this." Tranquillisers derived from experiments in the 1940s and 1950s on the effects of drugs on animal brains. The contraceptive pill based on hormones secreted by the ovary, a lot of work on which was done at Babraham. Furthermore, "there is a lot of evidence" that the brain is altered by sex hormones at a very early period, and there is a question of injurious effects from the mother's milk if the mother is on the pill. The basic work on the udder at Babraham may shed light on this, said Dr Cross.

More direct agricultural benefits have been: pregnancy tests, synchronisation of oestrus in herds of cows to save veterinary labour, the use of prostaglandin to induce pigs to give birth in daylight (which reduces mortality), the improvement of animal welfare in intensive production, a reduction in methane production in the digestion of cattle (so lowering energy



costs), and the protection of plant protein in the rumen (so increasing the conversion efficiency of plant to animal food). "If you lock up Babraham, you lock up these advances", said Dr Cross.

It was also "a complete myth" that Babraham concealed its work. The institute has produced 2,700 scientific publications, and nine biennial reports — with photographs. Large numbers of the public have been admitted — 12 parties a month of students, farmers, foreign correspondents "and all sorts of layman" pass through. In the past 18 months there have been four visits from journalists; four TV teams; and three broadcasts.

Nevertheless Dr Cross refused to allow *Sunday Mirror* journalists, whom he called "propagandists", or photographers into the laboratory; but there was an agreement to allow an observer acceptable to both sides. Subsequently (8 July) the *Sunday Mirror* commented: "He is really saying to the public: 'It's none of your business, and you are too ignorant to be told the facts anyway'".

Meanwhile, Jean Pink, organiser of the anti-vivisection group 'Animal Aid', has claimed that the *Sunday Mirror* is prepared to give further press coverage to the "diabolical tests", and will photograph demonstrators outside the Institute on Saturday.

Robert Walgate

Polish science writers go too far

Last month the Polish media celebrated the first anniversary of the flight of Cosmonaut Miraslaw Hermaszewski. Ironically, their special features coincided with a growing disillusion among Polish scientists not so much with the space programme itself but with what they see as its propaganda exploitation — notably in the case of the controversial 'Syrena' results.

'Syrena' was a Polish-designed experiment, carried out aboard the Salyut-6 space station, in order to obtain semi-conductor triple crystals of mercury, cadmium, and tellurium using a gradual

cooling method and of mercury, cadmium and selenium, using gas phase sublimation. In order to maintain controlled conditions of weightlessness, the production of the crystals, using the Soviet-built 'Splay' furnace, was carried out during the cosmonauts' rest period, lest undue motion disturb the space-craft.

Nevertheless, last autumn, Hermaszewski intimated to *Nature* that he had got up several times during the 'night' to ensure that the experiment was working properly, since the project, named after the symbol of Warsaw, had considerable national significance.