

# On course for lab safety

With a high concentration of biological and biomedical research carried out at the University, biosafety expertise is essential. *bulletin* learns about the professional training run by our Health and Safety team that ensures lives are protected in the laboratory.

When UK medical photographer Janet Parker became ill with flu-like symptoms in 1978, a diagnosis of smallpox was initially far from anyone's thoughts. An international smallpox vaccine programme had been in place for two decades and the disease was just 12 months away from being officially eradicated.

However Mrs Parker, who used a darkroom above an English university laboratory where scientists were investigating the deadly smallpox virus, contracted the disease at her workplace. She was the last person to die from smallpox in the UK.

Such cases are extremely rare, reassures Alastair Reid, the University of Edinburgh's Director of Health and Safety, but they do highlight the importance of biosafety in environments where potentially dangerous micro-organisms are handled, and the University's Health and Safety team is suitably positioned to offer expertise in this area.

Since April 2011, a team including Mr Reid has been running the Biosafety Training Institute (BTI) at the University, with visiting tutors from other Scottish universities contributing. The Institute was initially set up as part of the Scottish Funding Council's Coordinating Health and Safety in Tertiary Education (CHASTE) project, and was taken on by the University when CHASTE came to an end.

The BTI offers professional biosafety practitioner courses, accredited by the



UK Institute of Safety in Technology and Research (ISTR). The five-day residential course is suitable for health and safety practitioners or biological or biomedical researchers working in higher education or industry. It is also validated by the University at SCQF Level 11 (MSc module), is approved by the UK Society for Biology for continuing professional development and is in line with the European CEN Workshop agreement on biosafety competence.

"We're particularly well placed to run this course because we have a very experienced Biological Safety Adviser, Dr Chris Perrons. Our Training and Audit Coordinator, Lawrence Dickson, is a geneticist, so it's our forte," explains Mr Reid, who is also a trained biologist.


The vast quantity of biological and biomedical research being conducted at the University also makes it a suitable home for such a training facility. Edinburgh hosts Containment Level 3 research: work at the highest hazard level that can be performed at a UK university. This research can involve handling potentially dangerous bacteria or pathogens, including those that have been genetically modified.


Many Edinburgh staff members have benefited from the course, taking advantage of fee subsidies for internal candidates, but the course also attracts participants from further afield, mainly from higher education settings but increasingly from the biotechnology industry too.

"Candidates are a mixture of health and safety practitioners who want to learn more about biological safety and academic or technical biologists who want to know more about health and safety," explains Mr Reid. "We're getting quite a few candidates coming from the big pharmaceutical companies as well."

Marketing the course to industry in the UK and internationally is part of the team's vision for developing the Institute. Plans are also afoot to develop the course portfolio and introduce e-learning options.

"Right now we're trying to get the five-day professional course as good as it can be. We'd then like to move to what we call a hybrid course – part e-learning and part face-to-face – because it's difficult for people to get away from work for five days," Mr Reid says.

And with a 100 per cent pass rate, and unanimously positive feedback from all the course's participants, the potential for expansion is high – keeping the University at the forefront of ensuring biological and biomedical research across the UK remains safe, for both scientists and the wider public. 

 [www.ed.ac.uk/schools-departments/health-safety/training/bti](http://www.ed.ac.uk/schools-departments/health-safety/training/bti)

