

Chemist faces criminal charges after researcher's death

UCLA scientist charged three years after lab fire fatality.

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Three years after a young chemistry researcher died following a lab fire at the University of California, Los Angeles (UCLA), her supervisor, the organic chemist Patrick Harran, and the University of California now both face criminal charges. Health and safety experts think that it is the first instance of criminal prosecution over an accident in a US academic laboratory.

On 27 December, the Los Angeles District Attorney charged Harran and the regents of the UC system with three counts each of "willful violation of an occupational health and safety standard causing the death of an employee". [[Felony filing here as pdf](#)]. An arrest warrant has been issued for Harran, whose lawyer told [the LA Times](#) that he will surrender to authorities. He faces up to 4.5 years in prison if convicted, an attorney spokesperson told the paper, while UCLA could be fined up to \$1.5 million on each count. In a statement, UCLA said it "[intends to mount a vigorous defense against the outrageous charges](#)".

The death of 23-year-old Sheharbano Sangji has already led to fines of around \$70,000 for UCLA, which has also toughened its safety policies. On 29 December 2008, Sangji was using a syringe to draw the reactive t-butyl lithium from a bottle when the pyrophoric liquid burst into flames, setting her clothes alight. She was not wearing a lab coat, suffered third-degree burns, and died in hospital 18 days later. (More details in this 2009 [report from Chemical & Engineering News](#)).

The accident triggered calls to improve academia's safety standards not just at UCLA, but across the United States. But as *Nature* discussed in [an article on laboratory safety after Yale undergraduate Michele Dufault died in April 2011](#), there's little evidence that Sangji's death has shifted the behaviour of bench scientists or laboratory heads, outside of UCLA.

The LA District Attorney's legal action could shake up that attitude. "I think this is a game-changer. It will significantly affect how people think about their responsibilities now that it's clear there's the possibility of going to jail," says Jim Kaufman, president of the Laboratory Safety Institute in Natick, Massachusetts.

Concerns surrounding prosecution have been a powerful incentive for change in the United Kingdom, where around 25 years ago Sussex University, in Brighton, was prosecuted for negligence after an explosion in a chemistry laboratory shot a piece of metal into a student's abdomen. (The student later recovered). Tom Welton, a chemist at Imperial College London, told *Nature* that the episode had a profound effect on safety standards in Britain.

UCLA's [statement](#) notes that an earlier investigation by the California Division of Occupational Safety and Health (which led to fines) found "no wilful violations on the part of UCLA". The university called the district attorney's decision to press charges yesterday "truly baffling"; "the facts provide absolutely no basis for the appalling allegation of criminal conduct," it said. UCLA would not comment beyond its statement.

Russ Phifer, former head of the American Chemical Society's safety division and now executive director of the National Registry of Certified Chemists, thinks this is the first instance of criminal prosecution for an academic laboratory accident in the United States. 'I don't think the University of California or Harran have anything to gain by going to trial,' he says; in his opinion, the case will be settled before trial with an agreement involving significant amounts of community service, such as talking to other lab heads about the case and chemical safety.

Phifer also thinks that Sangji's death has already provided a wake-up call for university laboratory safety, with this week's charges just a new chapter in the story. But Paul Bracher, a chemist at the California Institute of Technology who blogs at ChemBark, notes: "[one wonders if this is the shot in the arm that finally forces academia to take safety seriously](#)".

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