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## Forensic failure: 'Miscarriages of justice will occur'

08 February 2012 by [Linda Geddes](#)  
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**Editorial:** "The case for revamping forensic science remains unproven"

MORE than three-quarters of UK forensic scientists that responded to a *New Scientist* survey believe that the closure of the UK's Forensic Science Service (FSS) next month will lead to an increase in miscarriages of justice. Most also believe that switching to private and in-house police labs will reduce impartiality in interpretation, and therefore accuracy, of evidence.

The survey also raises fresh questions about issues of bias in forensic science, with nearly a third of respondents admitting they sometimes feel pressured to produce a particular result, while three-quarters say they sometimes have insufficient time to evaluate cases.

The FSS is a UK government-owned company that provides forensic services to the police and government agencies of England and Wales, as well as other countries including Sweden and New Zealand. It will close next month, with private and police labs picking up the slack. The main reason given for the closure is a shrinking forensics market, with claims that the FSS was losing between £1 and 2 million a month. Its closure will leave the UK as the only major country without a national forensics service. "At a time when the deficiencies in forensic science are increasingly apparent, to lose one of the major research institutes is not just a loss for Britain, it's a loss for the entire world," says William Thompson of the University of California at Irvine.

*New Scientist* decided to ask UK forensic scientists what they thought the effects of this closure would be. A survey was circulated via the professional networking site LinkedIn, and 365 people responded. Many of them came from the FSS, but the survey also drew 65 responses from private and police labs.

"This survey is important because this is the only hard evidence we have on what is really happening (in labs)," says Peter Gill, former senior scientist at the FSS. "There has been a problem with obtaining information from the scientists because they are prohibited from expressing opinions in public."

Overall, 92.3 per cent of respondents said they thought the impact of the closure on criminal justice would be mostly negative, while 76.4 per cent said they thought it would lead to an increase in miscarriages of justice.

When asked about the effect of switching forensic work to private and in-house police labs, 70.3 per cent agreed or strongly agreed that this would reduce impartiality in the interpretation of evidence, while 64.7 per cent said it would make it harder for scientists to accurately interpret evidence. "What's interesting is that if you look at the admittedly small proportion of people that answered who work for the police, they are even more convinced," says [Jim Fraser](#) of the University of Strathclyde's Centre for Forensic Science in Glasgow.

Of the 21 police scientists who responded, 15 said the switch would make it harder to interpret evidence. "More and more cases are being broken into component parts and incomplete examinations are requested of private laboratories because in-house police laboratories believe they are saving money," said one respondent from a private lab. "This makes the interpretation

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of the evidence within the context of the whole case very difficult because the scientist does not have a complete picture."

One police scientist said that the breaking up of services could make it easier for defence scientists to challenge cases because key questions, such as what body fluid DNA came from, may no longer be asked.

Those managing private and police labs are quick to refute these suggestions. "We have exactly the same values, ethics and the same type of scientists [as the public sector]," says Steve Allen, managing director of the UK's largest private forensics provider, [LGC Forensics](#).

"If we weren't objective and impartial we wouldn't be of any value to the criminal justice system," says [Gary Pugh](#), director of forensic services for the Metropolitan Police in London. He admits that police are under pressure to cut costs, but says if cuts have to be made, "that would probably mean not doing forensic science in some lower-level crimes, rather than compromise on quality or standards".

James Brockenshire, minister for crime and security at the UK's Home Office, also denies that the closure of the FSS will lead to an increase in miscarriages of justice. "Private companies have provided high-quality forensic science to the criminal justice system for a number of years and there is no reason why the closure of the FSS will reduce impartiality or affect the accuracy of their work," he says. He adds that any police labs taking on FSS work will need to work to the same high standards as private labs, and that the market is overseen by the Home Office's [Forensic Science Regulator](#).

However, 78.2 per cent of forensic scientists we surveyed don't feel confident that the regulator has sufficient resources to ensure that standards are adequate and consistent between providers. "If anything, the regulator's resources have reduced over the past 1 to 2 years," wrote one independent forensic consultant.

In the US, there have been numerous examples of lab analysts coming under pressure to produce particular results (see "[Could the UK learn lessons from across the pond?](#)"). As our survey reveals, UK analysts face similar pressures: 28.6 per cent of respondents told us they sometimes or always feel pressured to produce a particular result, while 75.4 per cent say they have insufficient time to evaluate a case properly (see diagram). The overwhelming majority - 83.6 per cent - of these felt the issue would get worse over the next five years.

"Many of us do not have enough time to do our work, but if you combine this with the fact that nearly a third of [forensic scientists] are coming under pressure to produce a particular result, it gets extremely dangerous," says [Itiel Dror](#), an expert in cognitive bias at University College London. *New Scientist* recently showed how DNA analysts can reach very different conclusions about the same evidence (11 August 2010, p 8), raising the danger of contextual information about a case colouring judgement.

All together, this suggests a real need for measures to reduce bias in UK labs and raise standards of forensic science as a whole, regardless of the decision to close the FSS. Eighty-one per cent of respondents felt that more independent research is needed to overcome current weaknesses in forensic science in the UK - something many feel will now no longer get done.

"The fact that more forensic work is going to be done by police doesn't necessarily mean it's bad, but it means you have to take extra measures such as buffering examiners from police detectives, so they are not breathing down their necks saying 'we think it's this person'," says Dror.

Time will tell whether the concerns raised by our survey come to pass, but Gill warns that it may take five years or more before the full effects of the closure are realised and any miscarriages of justice come to light. "Unfortunately the wheels of justice grind very slowly," he says. "So there is a considerable time lag between the wheels falling off and anyone noticing."

**Read more:** See a selection of [comments from the forensic scientists who took our survey](#) and [a link to the full aggregated results](#).

### Could the UK learn lessons from across the pond?

GREG TAYLOR spent 17 years in a North Carolina jail for the murder of a prostitute that he didn't commit. He was released in 2010 after a panel of three judges concluded that the blood found on his SUV wasn't blood at all. As a result, the North Carolina state crime lab was investigated and found to have withheld or distorted evidence in more



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than 230 cases over a 16-year period - three of which resulted in executions. Investigators found widespread evidence of forensic analysts coming under pressure from police and prosecutors to produce results that would help secure convictions, including a policy of not reporting the results of more sophisticated blood tests if they challenged those of earlier tests.

North Carolina is one of 38 states where crime labs are under police or prosecution control, and is far from alone in having such problems. In 2009, a report by the US National Academy of Sciences (NAS) strongly recommended that forensic labs should be buffered from the forces investigating crimes, and a new centralised authority created to oversee standards and conduct much-needed research to improve the field of forensic science as a whole. "Forensic labs are supposed to be independent, objective evaluators, but here we have them being influenced or even controlled directly by law enforcement," says Thomas Bohan, former president of the [American Academy of Forensic Sciences](#).

Fast-forward to the UK in 2012. Next month, the UK's leading supplier of forensic services, the Forensic Science Service (FSS), will close, with private and police labs expected to pick up the slack. The expansion of in-house police labs has raised alarm bells on both sides of the Atlantic.

"The UK's move toward decentralisation will bring it closer to the US model of forensic science - which is a step in the wrong direction," says [William Thompson](#), a professor of criminology, law and society at the University of California at Irvine. "The NAS report encouraged the US to create a centralised authority that could deal with some of the deficiencies in the field: lack of validation, biased procedures, overstating evidence. All of those issues seem to flourish in a system where the control of forensic science is in the hands of local law enforcement agencies whose interest is in producing the most convincing evidence, rather than improving the field as a science."

The UK government has defended its decision to close the FSS, insisting that all police labs undertaking forensic work will eventually be accredited - though many currently aren't. But many feel accreditation isn't enough. "North Carolina was an accredited lab," says Bohan. "Accreditation should be done, but it is certainly not the solution."

Thompson agrees. "It is a good way to make sure that the various labs working in the field all rise to the same level and meet the same standards, but when the fields themselves are inadequate then accreditation just becomes window dressing."



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