



HOUSE OF LORDS

Science and Technology Select Committee

Corrected oral evidence: Forensic science: follow-up

Tuesday 18 November 2025

10.15 am

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Members present: Lord Mair (The Chair); Lord Berkeley; Lord Lucas; Baroness Neville-Jones; Baroness Northover; Lord Ranger of Northwood; Viscount Stansgate; Baroness Walmsley; Baroness Young of Old Scone.

Also attending: Lord Burnett of Maldon.

Evidence Session No. 2

Heard in Public

Questions 18 - 29

Witness

I: Professor Ruth Morgan, Professor of Crime and Forensic Science, Director of the UCL Centre for the Forensic Sciences.

USE OF THE TRANSCRIPT

1. This is a corrected transcript of evidence taken in public and webcast on www.parliamentlive.tv.

Examination of witness

Professor Ruth Morgan.

Q18 The Chair: Welcome to this morning's meeting of the Select Committee on Science and Technology. We are very pleased to have as our first witness Professor Ruth Morgan, professor of crime and forensic science at UCL and director of the UCL Centre for Forensic Science.

As you were the specialist adviser to this committee's previous inquiry in 2018 and 2019, I will start by asking you, by way of an opening statement: what progress has there been on the issues that we identified in that inquiry? Where has there been progress? Where have things got worse, in your view? Has the Government's response to our report been adequate? Is there a sense that someone in government is taking responsibility for forensic science?

Professor Ruth Morgan: Thank you. I will just set the scene a little bit, because in order to answer those questions it is good to look at the broad context. The 2018 inquiry that the committee held was one of a long line of inquiries into forensic science over the last 20 years. It was extensive and very distinctive, because it took a look at the entire system, and it delved very deeply into forensic science to find the root causes of a lot of the symptoms that had been getting a lot of scrutiny more broadly. Because of that, the recommendations that came out of that inquiry addressed those root causes and were warmly welcomed by the forensic science community broadly.

Zooming forward to today, it is fair to say that there is frustration that we have not seen more progress. I do not believe that that lack of progress is in any way because there was anything fundamentally flawed with those recommendations. In fact, those needs that were identified in 2019 remain incredibly salient today, and those recommendations remain absolutely key at the moment. But it does rather raise the question: why have we not seen the progress that we hoped for?

There are lots of different factors that I will highlight. The first is the context. Since the inquiry, we have had a pandemic, a new Government, and a number of geopolitical and economic shocks that have rather influenced the public purse, which we must bear in mind.

The other factor that is worth highlighting is that there has been an issue of focus. There has been over-focus on some of the more

surface-level issues and an under-focus on some of the root issues. The forensic science regulator recommendation is a good example here of the focus on statutory powers for the regulator, with an under-focus on the full extent of that recommendation, which was to broaden the remit of that role and to get the regulator to revise and reform the procurement process.

The bad news is that we are in a position where the 2019 recommendations remain salient. The needs are still very much with us. We have not seen those foundational changes that we hoped for. The good news is that we have the ability to turn this around. Forensic science needs effective governance and excellent science. We have one of the most committed and dedicated forensic science communities in the world. We have some of the most excellent scientists in the world, and that has not changed since 2019.

We have a very strong basis upon which to build. We have a capability to be world leading again. But the question remains: is there a will to do that? That is why this inquiry is so important and so timely. I hope that it is possible to move forward at this point.

Turning to the sub-questions on what has changed and where we are at, is there activity within the forensic science community? Yes, I think there is. We are seeing a number of areas of activity. The police have a number of areas. The Forensic Capability Network, which is funded by the NPPC—the National Police Chiefs’ Council—has been active in the last six years. We have seen a lot of working groups and activities to support police forces. The office of the chief scientific adviser to policing has been very active, and we are seeing a lot of engagement with the development of science and technology strategy from that quarter.

We are seeing some changes within the Home Office, such as the appointment of the director of the Forensic Science Service, which was made this summer, and the remit of that role to oversee reform in a way that thinks about the whole system, within which forensic science is a part and AI and tech features, as a broad system. There are some signs, even if we are not quite where we wanted to be.

The Chair: Thank you. That is a very helpful start. We have a lot more questions to ask.

Q19 **Lord Burnett of Maldon:** One of the issues that has been identified in connection with forensic science is the limited funding available for research. Science is always moving and, if research is not moving too, then we will fall behind. Can you identify for us the

major areas of research and who is doing it? Is it the providers or the universities? Where is the money coming from? What are the particular difficulties in finding money to undertake research to advance forensic science?

Professor Ruth Morgan: This remains, exactly as you have outlined, one of the significant issues. There are three major areas of research happening at the moment. The first is in identification and tracing; thinking about the capabilities that we can utilise from physical traces, digital traces and physical pattern evidence. The second is the foundational research that is looking to ensure that we have the underpinning science for the evaluative interpretation of evidence, whether that is the transfer and persistence of physical traces or digital evidence and the whole new set of questions that that is bringing to the table. The third area that we are seeing is thinking about how we bring science insight into the policy space and the public space, and how we are presenting science as it pertains to forensic science, with all the interesting factors, such as uncertainty, probabilistic reasoning, and those kinds of issues, and how we are getting that to different audiences so that it is useful and can be applied.

With regard to who is doing that research, it is a relatively disparate landscape. In the main we are seeing universities picking up in that area, particularly in identification and tracing, and foundational research. There is quite a lot going on with pockets of funding from the policing CSA for a number of things.

The P-ACE, which was £4.5 million, was awarded to nine different centres across the UK for policing academic centres of excellence, and a small part of that has forensic science within it. The police also have the STAR funding. That is there particularly for identification and tracing research, and it is in the region of £2 million a year for much more technologically-ready research, as well as research that will contribute to technological capabilities in policing. UKRI did a sandpit in 2023, which was up to £2 million. My understanding is that three projects were funded through that but it was less than the £2 million that they had available, and I think that was mentioned last week.

A distinction needs to be made between what is needed in forensic science and where the priorities are. What is needed is not necessarily always within the remit of the funding calls. We are therefore reliant on a lot of research happening that is either unfunded or being shoehorned in as best we can.

Q20 **Lord Lucas:** That sounds a pretty chaotic state of affairs. You have called in the past for someone to set the agenda. Should that be

the proposed national institute for forensic science? If you had the money needed for forensic science research, what areas would you focus on? How do we get the interdisciplinary approach, which is required to bring expertise into a range of different disciplines, into forensic science? Is UKRI playing the role that it should here? What should be done? Where should it be done? How much money does it take? Who should be accountable to Parliament for what is happening?

Professor Ruth Morgan: The reason why I am pausing is that that is an incredibly complex question because it is a complex landscape. Essentially, we have two different models potentially on the table. One is a centralised capability that has oversight of research and development, can set an agenda, can ensure that funding is available and that there this collaboration, benefits from efficiencies of scale and enables the debate and dialogue that is needed across the disparate groups that are involved. That approach works incredibly well for incremental science, where we are iterating and developing existing capabilities. The downside of having a fully centralised approach like that is that you reduce the opportunities for the unexpected. A trend that we are seeing more broadly across research is that, by taking a more centralised and incremental approach, we are not seeing the transformational breakthroughs that perhaps we saw in the past. There are lots of benefits to having a centralised capability in terms of oversight and responsibility and a point where the buck stops, but I would be concerned if that was all that we had.

When we are able to incorporate a more distributed model as well—that is the thing here; I do not think we should have an either/or because we need to do both—a more disparate model means there is more space for innovation and the serendipitous, which, as we have seen in the past, leads to breakthroughs, and we need some of those breakthroughs in forensic science.

If I had the budget—I think that was part of the question—I think we need to keep focused on the important needs, which are identification and tracing. We need to focus on the foundational research for evaluative interpretation. We need to be thinking carefully about how we communicate that science and how that science gets into the hands of those that can utilise it, whether that is in investigation, intelligence or policy.

We need to see more of the arts, humanities and social sciences coming into this, because this is a profoundly technological and people challenge. If we do this without reference to the wealth of insight that exists in the humanities, the arts and social sciences,

we will miss things, particularly when you think about the fact that in forensic science we have the intrinsically uncertain iterative approach of science and the “beyond reasonable doubt” requirements of the law. Those two have to come together, and that is something that we need to address.

Another area is machine learning and artificial intelligence. There is a huge amount of potential there, not only for the capabilities where that is already being deployed in terms of large-scale databases and triaging. There is a huge opportunity there to bring about a renaissance of physical trace in terms of the capabilities that those technologies are going to bring us; I am thinking particularly about fingerprints and footwear.

There is a huge amount of work to be done with digital evidence, particularly because an awful lot of it is text-based. To interpret what a text means is a profoundly different task from interpreting what a physical trace means. A physical trace is a single object of study; it is a drop of blood and we are trying to find out who it belongs to. With a text message or an email there are multiple objects of study, and we need to be able to hold all those together if we are going to interpret that effectively. Those are the types of evidence that are becoming incredibly important in cases where physical trace gets us so far but does not get us over the line. For example, in cases where consent or coercive control are an issue, often it is digital forms of evidence that will get us where we need to get to.

- Q21 **Viscount Stansgate:** Could you comment on how changes to DNA science and sensitivity have affected forensic science in the last few years? For example, are there other scientific developments that you would highlight that have serious implications for forensic science?

Professor Ruth Morgan: DNA is not my specialism but I can speak with an overview. We are seeing lots of exciting developments. A lot is happening. Massively parallel sequencing was a particular approach that started to be adopted about six years ago, at the time of the previous inquiry. The commercialisation of the equipment that made that analysis possible came through around 2021, and now we are exploring a lot of broader and wider capabilities. How can we use RNA and body fluids in additional ways to what we have been able to in the past? We are seeing improved extraction and preservation capabilities with DNA. We are also seeing a real focus on how we can unpick multiple contributors to DNA, which has been a big challenge in the past. Those are all going strong.

Viscount Stansgate: My second couple of questions are about the quality of training for forensic scientists in the university sector. We have heard that some undergraduate courses do not give enough scientific background, and that it may be more effective for people to convert into being forensic scientists from a different first discipline. Do you think there is adequate training for the next generation of forensic scientists? In your view, what would be the best way to provide it?

Professor Ruth Morgan: I am very influenced by some of the broader work that is looking at the future of work. There was a study in 2018 by the Institute of the Future that highlighted, in its view, that 85% of jobs that would be available in 2030 did not currently exist. It is in that context that I believe that, to have the next generation of forensic scientists, we need to have people who are resilient, agile and able to adapt and to respond to things that are changing. That is no small task.

I am a believer in primary discipline undergraduate degrees. There is incredible value in gaining deep disciplinary skills, capability and insights, and then you can build on that. That comes from a position where I am a strong advocate of interdisciplinarity, and I believe that the complex challenges that we are seeing in the world require interdisciplinarity more and more. However, my view from the research we have done is that, in order to achieve that, it is less of a case of needing new insight; it is more a case of being able to mine the depth of insight that exists across a broad range of disciplines and being able to bring that together in innovative ways to ask new questions. In that sense, a thriving next generation of forensic scientists will be a broad and diverse group who have different disciplinary capabilities and can bring them together, but they then need to be able to critically think, be analytical and think laterally and across problem and challenge areas. When it comes to disciplinary undergraduate degrees, there is a place for master's degrees that can then bring forensic science approaches, methods, theory and application capabilities to that first disciplinary skill set.

Viscount Stansgate: Will there be enough of them in the future?

Professor Ruth Morgan: That is the multimillion-dollar question. My sense is that it will not be a lack of training that means we do not have enough; it will be about whether we can retain them in the field. What we are seeing in the digital space is that it is difficult for forensic science entities to retain their talent because they simply earn so much more money in the private sector. It is more a case of retention.

Lord Lucas: How do you handle all this at the undergraduate level? This goes back to the troubles over putting computer games in undergraduate degree titles and most of them being totally unsuitable for the industry. It sounds as if those courses that call themselves “forensic science” should be repurposed, if we are to be fair to the students concerned.

Professor Ruth Morgan: There is probably a distinction to be made. There are certain degree programmes that have a clearly stated aim to train in a vocational setting, and those clearly have a very different set of remits and goals from those that are primary discipline degrees. That question needs to be addressed because we need to make sure that graduates are coming out with skills that mean they are able to make positive and helpful contributions, whatever the landscape might be when they graduate. It is a pretty tricky one to answer, but I can see where the question lies, and it is an important one that needs to be discussed in this broad setting.

Q22 Baroness Walmsley: My question is about fragmentation. The Westminster commission suggested that forensic science services should be taken out of the supervision of the police altogether for various reasons—quality variability, independence and so on. The question is: is that practical, especially in light of the fact that if you moved it into the market the funding would also have to move into the market? That is what they have done in Scotland, but the situation there is very different. What model do you think would work in England and Wales?

Professor Ruth Morgan: That is another multimillion-dollar question, and a salient one. It is a challenging issue because it is so complex and there is so much history and antecedent conditions that create an interesting context. As you mentioned, the Scottish approach is one model but it operates in a very different context. Last week you heard about the historical approach, which was to have forensic science as part of the Home Office. Clearly that had lots of advantages, not least an R&D laboratory with 70 active scientists who were working shoulder to shoulder with casework scientists, which was certainly a jewel in the crown. However, there were challenges in terms of sustainability and efficiency that have been widely documented.

What do we do in future? My sense is that there needs to be some caution, because we run the risk of losing the proverbial baby with the bathwater. I think we have to find a way to bring together the critical insight that comes from all three areas—policing, the legal system and science—but trying to do that in a silo has some

challenges. Looking at the broad landscape, in some ways the police are possibly the most invested in forensic science working of everyone. It is incredibly important that forensic science works in terms of the intelligence that they need and the evidence that is part of their remit. How we aim for a best-of-all-worlds approach is what we need to think about, but that has to happen in a way that ensures that it is not done in silos.

Forensic science is very contextual at almost every scale where you look at it, and this is another area where context is going to be key. We need to explore multiple options rather than just looking at the pros and cons of one particular model. I am aware that that takes time but in lots of ways we are out of time, so there is a real tension, but there is a way forward if we can have the conversation in a way that has skilled facilitation and a lot of contributions from the very motivated community that we have, but which involves all the voices that need to be represented. It is also important that it is done transparently.

Baroness Walmsley: You have just talked about the need to bring together all the elements and all the various players. We heard from Professor Nic Daeid last week that that is exactly what they did in Scotland but, as you just said, that is in a different context. Do you think it is possible to do that in England and Wales?

Professor Ruth Morgan: All things are possible if there is enough will and enough investment. It would not be without challenge. There would be a reasonably significant set-up cost in terms of both finance and hearts and minds. It would be possible, but a collective would need to be clear that that was the way to go, and they would need to be keen.

Baroness Walmsley: With a clear objective.

Professor Ruth Morgan: A clear objective and a transparent process to get there.

Q23 **Baroness Neville-Jones:** This is partly to do with the model we are operating, and it leads into the question of how research is done. We have heard that one of the concerns about the current system is that it can lead, and I think people would say it is leading, if not to the extinction then certainly to the subordination of, and much less emphasis on, different specialisms in forensic science—things like fibre analysis, blood pattern analysis and toxicology. You talk about bringing things together. Is there a model for how we can preserve these specialisms? It seems to me that they are in danger of being driven to the wall and being too expensive and not used enough. Is a national institute one of the

answers? How would you go about it?

Professor Ruth Morgan: I have been thinking about this. What we saw historically was that the so-called niche capabilities were able to thrive because, crudely speaking, there was more money in the system and it was possible to cross-pollinate. Where surplus was generated in one area, it could be used to support niche areas where perhaps there is a huge amount of value in specific cases but it is less easy to demonstrate financial value. I guess that illustrates a critical issue that we see in forensic science: lots of parts of forensic science are highly valuable but it is not easy to quantify their value in financial terms. Trying to preserve niche areas and ensure that they thrive is something that cannot be done in a silo; it has to be done more collectively. In that sense, as part of a broader body like a national institute, there is some light. That is a possible way to bring the component parts together so that as a whole we are greater than the sum of our parts and we are able to support one area so that we have it available when it is critical, even if it is not financially viable if it sits alone.

Baroness Neville-Jones: Do you believe that these specialisms are being lost as things stand, and is that serious?

Professor Ruth Morgan: It is incredibly difficult for the people who have those niche capabilities to remain viable in a solely forensic science context.

Baroness Neville-Jones: Does that matter or not?

Professor Ruth Morgan: I would position myself to say that if we need a particular form of specialist capability on a very few number of cases a year, but it is critical in those cases and there is no other way of solving them, then yes, we need them.

Baroness Neville-Jones: So do you have in your mind's eye a way of doing this?

Professor Ruth Morgan: The cross-pollination system is the one that seems most credible, in two ways. One is having that niche area as part of a whole so that there can be supported. For example, I came from an environmental science background, and in that setting, as with others, there were experts who were able to deploy their skills and capabilities for forensic science applications but also in other applications, such as environmental reconstruction, and that, as a whole, enabled those skills to survive.

The challenge is that you cannot simply transpose what you do in one domain into a forensic science domain; there is quite a lot that

needs to be done, and you heard last week about the challenges of accreditation and the costs involved in making sure that things are all above board and the assurances are there for the procurers of that work. The only way forward that I see is that these have to be part of a broader whole. We have to be able to sit with the fact that they are never going to necessarily be financially viable, but they are so valuable that we need to find a way to keep them alive.

Lord Burnett of Maldon: As a former judge, I am slightly disturbed to hear that those particular topics are thought to be niche. Fibre analysis, toxicology and so forth, as you have indicated, can be critical in a large number of cases.

You are talking about what is going on principally in England and Wales, and a withering is the impression that one gets. Is that true more widely in advanced nations? In other words, if push came to shove, could the necessary expertise be found in Europe when a judgment is made here that the specialism is not available in an appropriate case?

Professor Ruth Morgan: For certain disciplines, that could be feasible. Obviously Europe has a different system; we have an adversarial system, which is different, but that does not need to be a deal breaker. We see a lot of synergies with what is going on in Australia, whose legal system is closer to ours, but obviously there are time and distance issues there. That could be worth exploring, but context is important, so there would need to be a way of ensuring that that expertise was being applied in an England and Wales setting in ways that were appropriate and we could demonstrate the quality and the assurances that would be needed.

Q24 **Baroness Northover:** In some ways, I am going to link this question back to your original statement about the, as it were, financial situation here. As we have understood it, post the 2008 crash all sorts of areas were being scrutinised. So-called quangos were being dismantled and suchlike, and this was one that went that way. You have mentioned inefficiencies and we have heard about that too—initially it worked well when in effect it was privatised or put out to the private market, but then the big provider either squeezed out the other ones or there was not sufficient funding, so the market narrowed down and produced the unstable situation that we are addressing now. You have just mentioned that, subsequent to the previous report, there was the pandemic and political and economic shocks, which continue. So there is huge pressure on the economy, and forensic science is just one bit. You are talking about what you would ideally like to see but it is in that context, so it is much more vulnerable being

outside the state provision that it was in before.

Given that instability, and hearing that the situation seems to have got worse with the near monopoly of provision—with pressure even upon that company—the question is: how much has funding for forensic science in the UK declined and, more importantly, what reforms would lead to a sustainable funding model? You have been talking about what you would ideally like to see, but you started by saying that the context is extremely negative because of the situation that the country and the world are in. So how do you make it sustainable? Does the procurement of forensic services need to change? If so, how? What sort of model do you see as being sustainable and effective?

Professor Ruth Morgan: That is incredibly helpful framing, thank you. It is difficult to work out the size of the cuts that we have seen, but we know that the police have seen successive cuts; there has been another one very recently. We also know that, because of the pressure to ensure that front-line policing is visible, those cuts hit the less visible parts harder, and obviously forensic science is one of those. In the context of such pressure, there are a couple of things that would be worth exploring. The first is reframing forensic science. It is seen as a service but I wonder, if we saw it as a fundamental part of the infrastructure of justice and national security, if that might help in making a case for its value.

Baroness Northover: Could you expand on national security? Obviously that is a prime concern at the moment. How do you put it in terms of national security?

Professor Ruth Morgan: In terms of the value that science evidence can bring to building an intelligence picture of what is happening and early-warning approaches. So there is the intelligence side but the evidence side is also critical, given the scrutiny that the Government are under in the national security umbrella, and digital is only going to play a bigger role in that. Forensic science could position itself as the enabler of ensuring that we have the world-class automated approaches and the AI machine-learning capabilities that we need to maintain our capabilities in securing our borders as well as the national security agenda.

Baroness Northover: Would that feed into the justice side because you were building up that capacity elsewhere?

Professor Ruth Morgan: I believe that would bring in the funding that would enable the R&D that is needed, and that would then support the use of science evidence in the justice system. I

suppose it may be a good example of dual use. That would certainly be one way. I am very aware that people must come to you a lot and say, "We just need more money and that will solve our problems". There is so much that can be done, but we really are at a point where there needs to be some investment and that might be one way of releasing some budget in a way that is mutually beneficial.

Q25 The Chair: One of the things the committee wants to ask you about is digital forensics and AI, which you have touched on already. In our previous inquiry we raised concerns about the rise of digital forensics in scale and volume. It has been said that 80% of all cases now are to do with digital forensics, and that is principally around mobile phone data. Is that correct?

Professor Ruth Morgan: And other devices, but mainly mobiles, yes.

The Chair: There are concerns about bias and even fake evidence. We are in a world where it is quite possible now to have data on mobile phones that might not even be genuine. How is that being addressed?

Professor Ruth Morgan: If I may, I would love to connect that to the previous question too. Misinformation, disinformation and fake information are at the very top of the national security agenda. That has been highlighted as one of the key threats. If we think about how forensic science can address that, and I believe we are a discipline that is well placed to do that, hopefully that is another part of the offer that could be made there.

Yes, it is a hugely growing area. It is not just that the capabilities are growing; it is about the pace and the scale at which they are changing things. Is the necessary R&D happening? A lot of work is happening, but we are seeing some interesting differentiators from emerging technologies that we may have seen in the past. For digital, we are seeing that the centre of gravity of that research is happening outside the university sector; possibly for the first time, it is happening in the commercial sector, and there are lots of benefits to that but also challenges associated with that. It is worth saying that a lot of machine learning, AI and digital capabilities have existed and have been working in forensic science for many years, if you look at some of the database capabilities, so it is not a brand new thing, but it is changing and there is a growing sense that we are entering into a significant decade in the changes that we are going to be seeing.

As for the degree to which it is happening, I know that, for example, the work that is happening within the NPCC has struggled because of funding problems. We need to have some recognition that there are lots of resonances with physical trace. Digital traces are not completely different from physical trace, and we have a wealth of insight and capability to deal with physical trace that is pertinent and relevant to digital. However, there is a profound difference, as I mentioned earlier, in terms of the nature of these forms of evidence. Physical trace has a single object of study but digital traces have multiple objects of study, which means we cannot transpose the way that we evaluate and interpret trace physical traces to digital traces—I am talking predominantly about text-based digital traces—so that requires something quite significant. How do we hold together the understanding of the intent of the person who wrote a message; the metadata that tells us which device they were using and where they were; the textual analysis of the meaning of words depending on who sent the message and which part of the world they sent it from, and what the generation is of the people involved in that conversation? How do we hold all those insights together, which often are seemingly contradictory? And how do we present that in a legal setting, which requires “beyond reasonable doubt”, without tending towards a mean that ends up in a soggy middle rather than highlighting the strengths of each of those insights so that we can build up a bigger picture? That is one area where we need to see a lot more research and acknowledgement.

The other area is that there is an interesting and significant shift here. Generally speaking, for physical traces it is a case of trying to find a minute microscopic trace and eliciting as much information as you possibly can out of an incredibly small amount of material. We are now in a situation with digital traces where there is so much material that it is about finding what is relevant and then interpreting what that means, in a sea of insight. That is a significant difference and one that we need to really sort out.

The Chair: On the question of the increasing use of machine learning and AI that you have been referring to, is there any degree of regulatory oversight? AI is sometimes—perhaps many times—a cause for concern. To what extent is there regulatory oversight of the use of AI in examining forensic evidence?

Professor Ruth Morgan: We stand with many other areas where there is not a huge amount of oversight. I am not aware that forensic science is leading the way on regulation and oversight. I know there have been concerns about the level of regulation of digital materials over and above the physical traces, so that

certainly needs to be looked at carefully. Innovation and opportunity exist on the one hand with the potential for harm and unintended consequences on the other, so there needs to be balance. However, we need to recognise that, as much as there is bias and influence from intrinsic and extrinsic factors in human decision-making, those exist in the digital realm as well. The solution on the human side of things is not to exclude all bias because that would mean excluding all people. We have to find a way to live with that and ensure that there is as much transparency as possible, but eliminating bias would be a road to nowhere.

Baroness Walmsley: I get the impression that there is a lot going on but there is perhaps not enough regulatory oversight over it. The question really is: given that there is a big opportunity in digital and AI forensics, what do you think the Government should do in responding to that opportunity?

Professor Ruth Morgan: That is part of a much wider conversation that is going on. I would like to see forensic science being part of that conversation as a critical application area, but it needs to be done at that broad-picture level. Clearly the stakes are high in forensic science, so we need to be looking at ways to minimise harms and anticipate unintended consequences.

Baroness Walmsley: Is there a forum for the potential for forensic science to be part of, in the wider picture that you have just referred to? Do you know of a forum, or is it a matter of the forensic science community muscling its way into the broader discussion that you quite rightly refer to?

Professor Ruth Morgan: There are a number of conversations going on. The Government have clear groups that are looking at this, particularly in terms of how we can ensure that the UK is ahead and we are equipping our citizens.

Baroness Walmsley: To whom are they reporting? Is there a Minister?

Professor Ruth Morgan: My understanding is that the Prime Minister is overseeing one of those conversations. It is a working group, I think, that is looking at this. I can probably find the details later and send them—I am sorry, I do not have them to mind—but that is one area. I am a great believer in science being at the table, not on tap when there is a crisis, so I wonder if there is a potential role for a forensic science advisory council, either for the chief scientific adviser in the Home Office or for the government Chief Scientific Adviser, and whether that might be a way of infusing the

needs but also the capabilities that forensic science has into these broader national agendas. That might be one way.

Q26 Baroness Young of Old Scone: When you talked about research, you talked about a blended model of getting the benefits of some centralisation but also the benefits of a more disparate model. Does that read across into how you feel about forensic science being supervised by the police? Or are you more black and white on that one? Do you think the almost total oversight of forensic science now by the police is a good or bad thing?

Professor Ruth Morgan: My sense is that the police have oversight of part of forensic science but they do not have oversight over, say, the research agenda. What I keep coming back to is the recommendation that the committee made back in 2019, which was having two entities. The forensic science board could be an arm's-length group answerable to the Ministers for the Home Office and the Ministry of Justice. It would have that broad oversight across the whole piece. Then there would be the national institute, with the remit of oversight over the research strategy and enabling that research. I have struggled to find another option that as elegantly addresses that need as the one that was outlined. I suppose, yes, I would be cautious of having a single entity with oversight over the entirety of forensic science for a whole host of reasons—not because people are not intending to do good. I just think that diversity and friction foster innovation. We need elements of that alongside the oversight, accountability and responsibility that forensic science very much needs.

Baroness Young of Old Scone: One of the things that happened since our report was that the forensic science regulator got statutory powers, but we hear that it does not use them often because the market might collapse if it had them. It is regarded by the police as a bit of a nuisance, rather than an asset. It may be establishing standards that would be okay if the market was well functioning but they are inappropriate for the current set-up. How do you feel it is doing?

Professor Ruth Morgan: Since the last report, there was the appointment of a new regulator from the time of the original inquiry. That term has also finished. This summer was the appointment of the newest forensic science regulator. There is quite a difference between those two appointments. The first had a policing and forensic science background. The current regulator comes from a regulatory background rather than a forensic science background. From what I have heard, that is being presented as a

regulatory role and those powers will be used where necessary. But it is too early to tell quite what the context is right now.

Baroness Young of Old Scone: I know this sounds a bit brutal, but what was your verdict on the previous regime?

Professor Ruth Morgan: The role of forensic science regulator has been a challenging one in every iteration and for different reasons. In terms of the last few years, getting Royal Assent was time consuming. Producing the codes of practice was also time consuming. The state of the market and of the Forensic Science Service was incredibly precarious. It was an incredibly difficult balancing act.

Baroness Young of Old Scone: Allegedly, the current terms mean that the regulator cannot regulate the market, simply the providers. Is that really the case? I come from a regulatory background myself and have always regarded the market as fair play, given that that is where the providers sit. You cannot regulate the providers without having an eye to the market as well. Has that been an omission and will the new broom do something about that?

Professor Ruth Morgan: That is exactly where the recommendation that the committee made in 2019 was so critical, because it was not just about awarding statutory powers to the regulator but about expanding and broadening the remit of that role and enabling it to do that regulatory work. That did not happen. That is why things are still challenging. We are seeing a piecemeal development rather than that broader picture of equipping that role to do the regulatory work.

Baroness Young of Old Scone: Presumably with the number of staff that the regulators have—only eight people still in a part-time role themselves—it feels a bit thin.

Professor Ruth Morgan: Yes.

Q27 **Baroness Walmsley:** I was interested in your first answer to Baroness Young. You mentioned the Home Office and the Ministry of Justice. Currently, as I understand it, the responsibility lies just with the Home Office. Some suggestions have been made that it should be the Ministry of Justice. It occurs to me that, particularly if oversight was moved from the police to an independent group—a more independent market and independent oversight—the Ministry of Justice would be more appropriate. But it could well be a cross-government responsibility because we are talking about research, and the Department for Science, Innovation and Technology may also have a role here. Then it gets more complicated, and cross-

government working is often not terribly successful. Do you have any view on that?

Professor Ruth Morgan: I agree that more than a single point of contact makes things incredibly challenging and difficult. I wonder, though, if there is a way in which perhaps one of those could have ultimate oversight with clarity about the importance of the insight from those other departments. You are illustrating the exact issue that forensic science has suffered from for decades, which is that it has to be multidisciplinary. It has to bring in practice, research, science and law. It cannot operate effectively without all those contributing and working well together. The way in which our institutions are structured does not lend itself to that. There are too many cracks for it to fall down. We either need to build bridges or create a single point of contact but with clear contributions from the relevant departments, because otherwise there will be too many cracks.

The Chair: We have heard concerns about storage of evidence and archives, and the difference since the closure of the FSS and the inconsistent storage practices with different police forces. Can you comment on that?

Professor Ruth Morgan: It is not something that I have engaged with a lot—I am only able to share the insights that I have observed—but that fragmented landscape seems to be problematic. I have seen cases where it has not been possible to retrieve items or re-evaluate them. That raises a question as to whether we are able to deliver justice.

The Chair: It seems particularly important in the context of potential miscarriages of justice that, some years on, something might emerge and if the original forensic or physical evidence is somehow missing, or is not well managed, that is unfortunate in preventing potential miscarriages of justice.

Professor Ruth Morgan: Yes; and sorting them out after the fact, particularly because often it is not after one or two years but 15 or 20 years.

The Chair: Are we right in understanding that, since the closure of the FSS, the management of evidence in archiving and storage has not been ideal? Is that your view?

Professor Ruth Morgan: My understanding is that it has been become a distributed model, which each force deals with in its own way. That leads, therefore, to a lot of variability; it seems to have resulted in something of a postcode lottery in whether or not your

evidence will remain accessible and be preserved in ways that mean it is viable for reanalysis.

Q28 Baroness Northover: Drawing all this together, you have mentioned that, in drawing on the last report, you think that there should be a board that is answerable to MoJ—an institute to oversee research strategy—and that there is a need for sustainable finance. Are those your key recommendations, for the Government to improve the provision of forensic science in the UK, or do you have others?

Professor Ruth Morgan: My sense on this is that, because forensic science is broad and complex, there are lots of different voices that all have important contributions to make. We must put this problem and this challenge in the right light; it is too easy to get caught up in the issues of funding and institutions and forms of expertise.

My sense is that forensic science is critically bound up in a justice system that is cracking; and that, if it reaches a tipping point, it is going to be incredibly difficult to recover from that. I believe that there is an emerging opportunity in national security, where forensic science is also absolutely critical; it is key to ensuring that we are world-leading in that area.

In answer to your question, there are two key things on my mind. The first is the question that still remains from the 2019 report—the one about oversight, accountability and responsibility. The Government need to lead the way on how to bring together the key voices that we have in forensic science, policing and the justice system—including the forensic service providers and the researchers; that is, the full remit—to ensure that there is science in the justice system and in our national security ecosystem. This will mean us remaining world-leading.

The second thing—I am so frustrated that this is the one I am coming to you with, but it does require investment—is funding. It is critical at this point. There has to be investment in ensuring that forensic science is accessible to the prosecution and the defence, as well as to the national security agenda. We must have a strategy for forensic science research that ensures that we have both the immediate capabilities—underpinned by good science—and a pipeline coming through so that we are ready for the future things that are emerging very rapidly and are difficult to predict. We cannot assume that the tools we have now are going to be fit for purpose in the future.

One of the ways in which we can do that is by connecting these needs to the top priorities of Government. National security and the justice system must be in there; for example, there is a role for showing better how forensic science will tackle misinformation and can tackle digital evidence. However, we need to ensure that the window of opportunity to address this that exists right now is acted on. I fear that it is getting to a point where that window is closing.

Q29 Baroness Northover: The tail-end of the question, which you will see in front of you, is: what do you think it is going to take for the Government to take notice of this and act? You have mentioned the pressure on the justice system—we see the MoJ dealing with prisoners who have been released but should not have been—and the Home Office is regarded as a dysfunctional department trying to tackle a multitude of problems, especially with what is happening around what is described as illegal migration and so on. All of those things are registering with the public, and the Government are seeking to respond. How do you get this into their thinking at all, so that the kinds of solution you are talking about might be addressed?

Professor Ruth Morgan: There is a place for top-down, and for recommendations from committees such as this one, to re-highlight the importance of tackling this situation. However, there is also a significant role for grass roots. Creating channels for input into science advisory mechanisms that already exist could be a very helpful way of going about this.

It is also about telling the story of forensic science in ways that connect with the public. People have mentioned this to me in the past—I am a researcher in this space—and they’ve said for people to understand why what you do matters we need to have a big miscarriage of justice; that will demonstrate this point”. We have had many miscarriages of justice, so I have come to the conclusion that we do not need a miscarriage of justice but, in essence, a David Attenborough. He has championed the climate agenda and told incredible stories that have been beamed into people’s living rooms for years and years. He has told stories that have connected with people. We need to get better at telling the story of forensic science to show people why it matters and why we need to ensure that we have a thriving science system that works in our country; that will, I hope, drive the debate and make it a priority.

The Chair: Professor Morgan, that is a very good ending to this interesting session. Thank you very much for coming to talk to us and reflecting on what you have seen in the six or seven years since our first inquiry; we are very grateful.

Professor Ruth Morgan: Thank you.

The Chair: We are now going to pause and prepare for the next session.