

## House of Commons Science and Technology Committee: Brexit science and innovation Summit inquiry

### Written evidence submitted by the Society for Applied Microbiology

#### *Introduction*

1. The Society for Applied Microbiology (SfAM) welcomes the opportunity to respond to the Science and Technology Committee's inquiry into the next steps required by the UK Government to preserve and continue developing the UK science and innovation base after Brexit.
2. SfAM acknowledges that many fundamental issues remain uncertain regarding Brexit, particularly the UK's future involvement in EU-wide research funding mechanisms and ensuring the flow of science talent to and from the UK continues unhindered. To that end, we endorse the written submissions of the Royal Society of Biology (RSB) and the Campaign for Science and Engineering (CaSE), which speak to the concerns of the wider scientific community.
3. This evidence submission relates in particular to the application of microbiological science to issues of public health and food safety. UK microbiologists maintain a world-leading impact in both these areas, enabled by ease of collaboration with partners throughout the EU.
4. It is our firm belief that these collaborations must continue after Brexit. To demonstrate this, we will focus on two main points: preserving the UK's collaboration with the European Union Reference Laboratory (EURL) network, and supporting the future contribution of UK science to EU agencies.

#### **European Union Reference Laboratories**

##### *Background*

5. The UK National Reference Laboratories (NRLs) are responsible for developing reliable, standardised testing methods in the areas of feed and food, and animal health.<sup>1</sup> This work helps safeguard the public against threats such as avian influenza, foot and mouth disease, contaminated food packaging and antibiotic drug-resistance. Many other countries house their own NRLs, which perform similar functions.
6. The European Commission has played a co-ordinating role by establishing a network of EU Reference Laboratories (EURLs).<sup>2</sup> For each topic, say avian influenza, one EU Member State NRL will function as the European lead. These EURLs ensure that reference laboratories in other countries work in a harmonised manner, through the provision of standard methods, materials, proficiency testing schemes and training for laboratory staff. The EURL network ensures that EU regulations on food safety and

---

<sup>1</sup> See <https://www.food.gov.uk/enforcement/sampling/nrl> for details on the UK NRLs responsible for food and feed.

<sup>2</sup> More information on EURLs can be found at <https://ec.europa.eu/jrc/en/eurls>

health are properly implemented, reducing the need for repeat testing within each Member State.

7. Seven designated EURLs are currently based in the UK; these reference laboratories will lose EURL status when the UK exits the EU.<sup>3</sup>
8. The UK Government's 'collaboration on science and innovation' paper briefly acknowledges that the "UK and EU will need to consider future collaboration through EURLs", pointing to the precedent for "third-country participation".<sup>4</sup> However, little is said about the mutual benefits of links to the EURL network, and no acknowledgement is given of the impacts of UK NRLs losing EURL status.
9. **The Society for Applied Microbiology recommends that HM Government make a strong commitment to maintain collaboration with the EURL network, and to provide additional support to UK NRLs to compensate for any loss in funding as a result of losing EURL status.**
10. SfAM has contacted experts based in UK NRLs, to better understand the main issues facing reference laboratories as a result of the UK's intention to leave the EU. Some main points are described below.

#### *Potential concerns*

11. When UK-based EURLs lose their status, they will also lose the funding they receive from the European Commission. The full implications of this loss in funding should be considered by the UK Government.
  - 11.1. For example, a number of EURLs in the UK also function as worldwide reference centres for the Food and Agriculture Organization of the United Nations (FAO) and the World Organisation for Animal Health (OIE).<sup>5</sup> Activities related to the FAO/OIE are not necessarily supported by additional funding, so in practice EU-funding goes toward enabling this internationally-relevant work.
  - 11.2. UK NRLs are also actively involved in research collaborations funded through Horizon 2020. An example of this is the EU-China-Safe project, which aims to facilitate knowledge transfer between reference laboratories in the EU and China.<sup>6</sup>
  - 11.3. The UK Government should ensure that UK NRLs are adequately funded to continue such internationally-leading activities.
12. The relocation of EURLs from the UK is already underway. A European Parliamentary question tabled by José Blanco López MEP in June 2017 requested that the EURL for *monitoring bacteriological and viral contamination of bivalve molluscs* be relocated from

---

<sup>3</sup> EURLs based in the UK: avian influenza; bluetongue; crustacean diseases; foot and mouth disease; transmissible spongiform encephalopathies; viral and bacteriological contamination of bivalve molluscs.

<sup>4</sup> [Collaboration on science and innovation](#), HM Government, September 2017, para. 32

<sup>5</sup> For more information, see <http://www.oie.int/en/our-scientific-expertise/reference-laboratories/list-of-laboratories/> and [http://www.fao.org/ag/aq/info/partners/en/ref\\_centres.htm](http://www.fao.org/ag/aq/info/partners/en/ref_centres.htm)

<sup>6</sup> For more information see [http://cordis.europa.eu/project/rcn/210500\\_en.html](http://cordis.europa.eu/project/rcn/210500_en.html) and <https://www.fera.co.uk/eu>

the UK to Spain.<sup>7</sup> The European Commission responded that the duties of the EURL would be split across laboratories in Italy, the Netherlands, Sweden and Spain.

12.1. Mr López stated that moving the EURL to Spain would boost “*collaborative work in the area and... the industry’s productivity and its development.*” Efforts should be made to assess the corresponding loss that local areas in the UK may experience due to relocation of the EURLs.

13. If all collaboration between the EURL network and UK NRLs ceased, some NRLs would be required to develop their own reference materials and standards from scratch. The development and maintenance of these would place a significant demand on resources and capacity.

13.1. One scientist who spoke to SfAM believed that a complete disconnect would be unlikely, but had the potential to be “disastrous” for the area they worked in.

#### *Future collaboration*

14. If the UK continues to trade food and feed with the EU, we will need to demonstrate regulatory equivalence in terms of standards and safety. The UK’s reference laboratories will therefore be required to operate much in the same way they do now.

14.1. The EURL networks are open to non-EU countries, with representatives from Norway and Switzerland regularly attending meetings and participating in group proficiency tests. Strong consideration should be given to this option for future UK-EU reference laboratory collaboration.

14.2. In this instance, NRLs in the UK would potentially be subject to more frequent audits by the European Commission.

14.3. Maintaining regulatory equivalence with the EU may also be advantageous for UK trade with other markets (e.g. throughout Africa and Asia), as many of these countries are already working to be in line with EU food regulations (e.g. the EU-China-Safe project highlighted above).

15. Authorities and NRLs in the UK should continue to be active partners in the EU’s Rapid Alert System for Food and Feed (RASFF).<sup>8</sup> The RASFF system enables urgent notifications of health risks to be circulated as soon as they are detected by any of the partnering countries.

#### **European Union agencies**

16. HM Government’s ‘collaboration on science and innovation’ paper indicates that “*the UK is fully committed to continuing the close working relationship*” with the European Medicines Agency (EMA).<sup>9</sup> Understandably, the EMA has been the focus of much

---

<sup>7</sup> European Parliament question number [E-004403/2017](#)

<sup>8</sup> [https://ec.europa.eu/food/safety/rasff\\_en](https://ec.europa.eu/food/safety/rasff_en)

<sup>9</sup> [Collaboration on science and innovation](#), HM Government, September 2017, para. 29

attention from the Government and media, predominantly due to its pending relocation from the UK to the Netherlands.

17. **Nevertheless, it is deeply concerning that the collaboration paper does not contain a similar dedication to maintain links with other EU agencies, such as the European Food Safety Authority (EFSA) and the European Centre for Disease Prevention and Control (ECDC).** UK agencies, such as the Food Standards Agency (FSA) and Public Health England (PHE), have established strong cooperative links with these agencies. Furthermore, UK-based scientists and experts play a significant role in informing and influencing the work of EU agencies, which should not be overlooked.
18. The 66<sup>th</sup> meeting of the EFSA Advisory Forum, in December 2017, indicates the level of UK involvement in EU-wide food safety activities.<sup>10</sup> Since the triggering of Article 50, EFSA has been taking stock of the UK's involvement and has prepared an *"Inventory of possible impacts of the UK withdrawal on the work of EFSA"*.
- 18.1. UK-based experts made up **12.5%** of the population of EFSA's Scientific Panels in the period of 2009-2018. In particular, between 2015 and 2018, **23.8%** of experts on the panels on Dietetic Products, Nutrition and Allergies (NDA), Biological Hazards (BIOHAZ) and Plant Health (PLH) were from the UK.
- 18.2. The UK has the highest share, at **11%**, of organisations (e.g. universities, research institutes and agencies) represented in EFSA's list of *Article 36* competent organisations.<sup>11</sup> This list encompasses organisations from all EU Member States, Iceland and Norway.
- 18.3. Article 36 organisations can apply for exclusive funding from EFSA for tasks such as providing technical assistance and data collection. Between 2009 and 2016, UK beneficiaries received **23%** of the total grant funding supplied by EFSA.
19. Scientists from the UK regularly contribute expertise and advice to EU agencies on a wide variety of topics. Important examples include:
- Coordinated responses to the 2011 outbreak of *E. coli* in Germany,<sup>12</sup> the deadliest in recent history, and the 2014 Ebola crisis in West Africa.<sup>13</sup>
  - Long-term surveillance and monitoring of issues including drug-resistant infections (e.g. EARS-Net) and viral infections (e.g. EVD-LabNet).<sup>14</sup>
20. EU agencies fund the training of scientists, making use of cross-border links to maximise opportunities. For instance, the ECDC Fellowship Programme enables public health professionals to access sites across Europe and receive training in the key areas of microbiology and epidemiology.<sup>15</sup>

<sup>10</sup> [https://www.efsa.europa.eu/sites/default/files/event/AF171205-p6\\_EFSA\\_PPT%20BREXIT.PDF](https://www.efsa.europa.eu/sites/default/files/event/AF171205-p6_EFSA_PPT%20BREXIT.PDF)

<sup>11</sup> <https://www.efsa.europa.eu/sites/default/files/assets/art36listq.pdf>

<sup>12</sup> For information on the 2011 outbreak of O104:H4 strain of *E. coli* in Germany, see the [Annual Report of the Chief Scientist 2011/12](#), Food Standards Agency, pg. 28.

<sup>13</sup> [http://europa.eu/rapid/press-release\\_IP-14-2629\\_en.htm](http://europa.eu/rapid/press-release_IP-14-2629_en.htm)

<sup>14</sup> <https://ecdc.europa.eu/en/about-us/partnerships-and-networks/disease-and-laboratory-networks>

<sup>15</sup> <https://ecdc.europa.eu/en/epiet-euphem/about/intro>

20.1. Public Health England is an active partner in this initiative, hosting fellows who have worked on the detection and investigation of disease outbreaks.<sup>16</sup>

International training programmes such as these not only support excellence in the next generation of scientists, but also demonstrate the importance of the UK's involvement.

21. When negotiating the UK's future collaboration with the European Union, HM Government should fully consider the mutually beneficial arrangements that exist through these agencies (e.g. FSA and EFSA) as well as the influence exerted through the contributions of the UK science base.

### ***About the Society for Applied Microbiology***

22. The Society for Applied Microbiology (SfAM) is the oldest microbiology society in the UK, representing a global scientific community that is passionate about the application of microbiology for the benefit of the public. Our Members work to address issues involving the environment, human and animal health, agriculture and industry.

SfAM works in partnership with sister organizations and microbiological bodies towards enabling microbiologists to inform policymaking within the UK, in Europe and worldwide.

**February 2018**

---

<sup>16</sup> For examples, please see <https://ecdc.europa.eu/sites/portal/files/media/en/epiet/who-we-are/Documents/Portfolios%202012/EUPHEM-portfolio-A-Mikhail.pdf> and [https://ecdc.europa.eu/sites/portal/files/media/en/epiet/who-we-are/Documents/Portfolios%202014/Summary%20of%20work%20%20activity%20Sabrina%20Weiss\\_2016.pdf](https://ecdc.europa.eu/sites/portal/files/media/en/epiet/who-we-are/Documents/Portfolios%202014/Summary%20of%20work%20%20activity%20Sabrina%20Weiss_2016.pdf)