

Annual report from the science council chair

Report by Prof Sandy Thomas

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1. Summary

- 1.1 This background paper to my annual report will reflect on what the Food Standards Agency's Science Council has achieved this year and more widely across its first 3-year term.
- 1.2 Over its first 3-year term the Council has provided detailed strategic advice to the FSA on Science Use and Assurance, Assessing Risk and Uncertainty, Food System Risk and Horizon Scanning. It has also provided targeted advice on the CSA's Strategic Evidence Fund and the development of outcome-based measures for FSA science. This report will provide an overview of the work of the Science Council and to reflect on its successes and challenges over the past year and going forward into the future.

2. Introduction

- 2.1 The FSA Science Council is an independent expert committee of the Food Standards Agency (FSA), comprising a Chair and seven members.
- 2.2 It provides high-level, expert strategic insight, challenge and advice to the FSA's Chief Scientific Adviser (CSA), the Board and Executive on the FSA's use of science to deliver its objectives.
- 2.3 Its purpose is to help to ensure that the FSA identifies, sources, integrates and uses the best scientific evidence and expertise from all relevant disciplines to inform and evaluate its work. FSA defines science in a broad and inclusive way, including the natural, physical, social and economic, digital and data sciences. This means the Science Council has a wide and challenging remit to work within.
- 2.4 I am now almost 3 years into my 5-year term as the inaugural Chair of the Science Council, and our role in providing independent scientific advice and challenge to the FSA Board and Executive is well established.

3. How the Science Council works

- 3.1 The Council provides strategic advice on FSA science using a mixture of approaches with substantial questions addressed through Working Groups:
 - a) Working groups last 12-24 months and chaired by a Council member with experience in the topic under consideration.
 - b) A maximum of two Working Groups active at any one time.

- c) All Council members can participate in Working Groups.
- 3.2 The Council meets four times a year: two open plenary meetings alternating with two closed 'Working Group workshops'. These meetings typically include updates on FSA science activity, progress on ongoing Working Groups, progress on implementation of previous Council recommendations as well as discussion of science questions with the FSA which are not substantial enough to warrant a full Working Group.
- 3.3 The Council supports increased usage of the FSA's digital ways of working in their work and interaction between both each other and FSA officials.
- 3.4 Over the last 3 years engagement and contributions by all Council members remain excellent and the Council is an effective and cohesive group relative to its resources.

4. Achievements over the last 3 years

- 4.1 In the time the Council has been in existence it has provided strategic advice to the FSA on:
 - a) **Science use and assurance:** Working Group 1, led by Prof. Laura Green¹, proposed a solid framework for better engagement internally and externally on FSA science and provided a steer for smarter engagement with researchers.²
 - b) **Assessing risk and uncertainty:** The recommendations from Working Group 2, led by Prof. Mark Woolhouse³, helped establish key principles for the FSA risk analysis process.⁴
 - c) **Food system risks and horizon scanning:** Working Group 3, led by Prof. John O'Brien, gave clear recommendations on looking at trends with strategic impact 5-15 years into the future, which have been adopted as a basis for the FSA horizon scanning approach.⁵
 - d) **Targeted short-term questions** such as advice on the CSA's Strategic Evidence Fund and developing outcome-based measures for FSA science.
- 4.2 Strong relationships have been an important element of being able to deliver candid, independent advice and I have greatly valued my relationship with Guy Poppy, Heather Hancock and the Board.

¹ Prof Laura Green's Science Council profile: <https://science-council.food.gov.uk/science-council-members/professor-laura-green>

² <https://science-council.food.gov.uk/science-council-subgroups/science-council-working-group-on-science-capability-and-assurance>

³ Prof Mark Woolhouse's Science Council profile: <https://science-council.food.gov.uk/science-council-members/professor-mark-woolhouse>

⁴ <https://science-council.food.gov.uk/science-council-subgroups/science-council-working-group-on-risk-and-uncertainty>

⁵ <https://science-council.food.gov.uk/science-council-subgroups/science-council-working-group-on-food-system-risks-and-horizon-scanning>

- 4.3 The Science Council has also been building good relationships with other SACs that we plan to continue to cultivate similar relationships with other government expert committees.
- 4.4 I would like to thank Prof. Laura Green, Prof. Mark Woolhouse and Prof. John O'Brien for their exemplary leadership on delivering the first three Working Groups, each addressing questions put to the Council by the FSA Board. I would also like to say a fond farewell to Mark, and Laura who will be leaving the Science Council after their first terms ends on 31st March, and farewell to Mark Rolfe who has left the Council but has now joined the FSA Board.

5. Recent and Ongoing Work Programme

- 5.1 A summary of the Science Council's current and planned activity is provided in **Annex 1**:

- (a) **Working Group 3** on horizon scanning reported its findings in June last year;
- (b) **Working Group 4** continued to develop its recommendations on data and data analysis and will be reporting them to the FSA Board in June this year; and
- (c) **Working Group 5** on food hypersensitivity started November 2019 and will be reporting its results to the Board in March 2021, with an update in September this year.

- 5.2 **Working Group 3** on food system risks and horizon scanning was established to answer a question posed by the FSA Board:

"What should the FSA do to improve its horizon scanning and its understanding of global food systems risks (and opportunities)?"

- (a) Established in June 2017.⁶
- (b) Chaired by Prof. John O'Brien⁷, an international expert on food safety and quality and founder of the Food Observatory.
- (c) The report⁸ was endorsed by the FSA Board June 2019 and included high-level principles on how FSA can better access and use horizon scanning.
- (d) Its recommendations synthesise ideas drawing on commissioned work from RAND Europe⁹ and the Council's own systems expertise.
- (e) FSA is moving forward with Horizon Scanning with a dedicated resource to build its capability and a community of interest in this area. Initial testing of the resulting horizon scanning process will take place in early 2020.

⁶ Working Group 3 Terms of Reference: <https://science-council.food.gov.uk/sites/default/files/wg3tor.pdf>

⁷ Prof John O'Brien's Science Council profile: <https://science-council.food.gov.uk/science-council-members/professor-john-o-brien>

⁸ Working Group 3 Final Report: <https://science-council.food.gov.uk/sites/default/files/fsascwg3finalreport.pdf>

⁹ RAND Europe Report: <https://science-council.food.gov.uk/sites/default/files/fsafoodsystoresightfinrep.pdf>

5.3 **Working Group 4**¹⁰ on data usage and digital technology was established to answer a question set jointly between the FSA Board and Science Council:

“How can the FSA better understand the next phase of technology developments, recognising future challenges and opportunities, and having sufficient understanding of them to be able to ensure positive governance of the food system?”.

- (a) Established in September 2018.¹¹
- (b) Chaired by Prof. Patrick Wolfe¹², an international expert on data science.
- (c) Aims to provide recommendations to the FSA in June 2020, appreciating the fast pace of development and FSA’s already advanced work in this area.
- (d) Working Group 4 was split into two phases:
 - 1) Phase 1 was a scoping phase to better understand current FSA data usage across several business areas.
 - 2) Phase 2 has commissioned research to look outwards at future trends and opportunities for data manipulation and utilisation.

5.4 **Working Group 5**¹³ on food hypersensitivity was established at the request of the FSA Board which asked the Science Council to consider two issues:

- *Consider and advise on future research priorities and direction in respect to food hypersensitivity.*
- *Conduct a review of the science and evidence base for addressing food hypersensitivity, and the part the FSA and others should play in enhancing knowledge.*

- (a) Established in November 2019.¹⁴
- (b) Chaired by Dr Paul Turner¹⁵, international expert on food hypersensitivity.
- (c) Delivery of the Working Group 5 Report is the Council’s current priority.
- (d) Report will be presented to the FSA Board in March 2021, with a progress update in September 2020.
- (e) Considers lessons from the previous FSA Food Allergy and Intolerance Research Programme and will identify key gaps in current understanding to establish future research recommendations.
- (f) There will also be a horizon scanning workshop in Autumn, using the recommendations from Working Group 3, to look 5-15 years into the

¹⁰ <https://science-council.food.gov.uk/science-council-subgroups/science-council-working-group-on-data-usage-and-digital-technology>

¹¹ Working Group 4 Terms of Reference: <https://science-council.food.gov.uk/sites/default/files/wg4tor.pdf>

¹² Prof Patrick Wolfe’s Science Council profile: <https://science-council.food.gov.uk/science-council-members/professor-patrick-j-wolfe>

¹³ <https://science-council.food.gov.uk/science-council-subgroups/science-council-working-group-on-food-hypersensitivity>

¹⁴ Working Group 5 Terms of Reference: <https://science-council.food.gov.uk/sites/default/files/sciencecounciltermsofreferencenov2019.pdf>

¹⁵ Dr Paul Turner’s Science Council profile: <https://science-council.food.gov.uk/science-council-members/dr-paul-turner>

future to consider potential emerging issues that the FSA needs to be ready to address.

6. Risks, Opportunities and Future Direction

The Food Standards Agency

- 6.1 The FSA's operating environment will continue to be significantly impacted by wider global risks and political changes. For example, EU Exit demands greater self-reliance from the FSA as a body that is charged with protecting the public by ensuring food is not just safe but that they can make safe choices (e.g. food hypersensitivity).
- 6.2 The scale and complexity of these challenges, and how they will interact with one another is not always fully appreciated in both the public and political landscapes.
- 6.3 This means there will be a strong demand for expertise and oversight to ensure the science that supports decision making in the FSA is robust and fit for purpose.
- 6.4 Fundamental changes that will shape the future food system are already starting to emerge (increased use of food banks, online takeaway delivery services, changing protein sources, etc.). One key question is how to best make use of the wealth of data that is in the digital realm for better oversight of food safety?
- 6.5 Recommendations from the Science Council such as those from Working Group 4 will provide insight into future tools for better data access and use that will improve FSA's ability to protect food consumers' interests and safety.

The Science Council

- 6.6 Looking forward for the Council, Working Group 5 is the most challenging project so far commissioned with five substantial workstreams.
- 6.7 It will be identifying key public concerns about food hypersensitivity, understanding the current state of knowledge for these concerns and potential future factors in managing food hypersensitivity.
- 6.8 This ambition and scale come with risks in terms of delivery and timing. A careful balance has to be struck so that the questions asked are the right ones, with resource to deliver the answers in a timeframe where they are useful. Working Group 5 has been structured to do this but as with any ambitious project, it needs robust project management to maintain the course that has been set.
- 6.9 At a more operational level, three originating members of the Science Council are leaving or have left (Mark Rolfe, Mark Woolhouse and Laura Green) and the Council's complement will soon be increasing to 10 members, including myself to provide resilience and capability to deliver against its objectives. This

will be a challenging time, losing that valuable expertise they have brought the Council, but also there are opportunities with new insight and an expanded membership.

7. Conclusions

- 7.1 As Chair of the Science Council having ongoing feedback from FSA Board and Executive is vital to know whether the Science Council is continuing to strike the right balance between high-level principles and operational detail.
- 7.2 It is heartening to know that the hard work of the Council over the last 3 years has paid dividends and that our high-level, expert strategic insight, challenge and advice has been valued by the FSA Board, Executive and the CSA. It provides a strong motivation and impetus as we move forward into the next period of the Science Council.
- 7.3 It is an exciting time for me and I think for the Science Council and we are all looking forward to what the next 3 years bring.

Annex 1

Summary of Science Council Activity and Output (Current and Anticipated)

March 2019	June 2019	September 2019	December 2019	March 2020	June 2020	September 2020	December 2020	March 2021
Meeting - <i>Working Group Workshop.</i>	5 th Open Plenary Meeting	Meeting - <i>Working Group Workshop.</i>	6 th Open Plenary Meeting	Meeting - <i>Working Group Workshop.</i>	7 th Open Plenary Meeting	Meeting - <i>Working Group Workshop.</i>	8 th Open Plenary Meeting	Meeting - <i>Working Group Workshop.</i>
2 nd Annual Science Council Report to FSA Board	Working Group 3 report and initial implementation plans reported to FSA Board			3 rd Annual Science Council Report to FSA Board Anticipated handover of Working Group 4 report to the FSA for response formulation.	Working Group 4 report and initial implementation plans will be presented to FSA Board		Anticipated handover of Working Group 5 report to the FSA for response formulation.	Working Group 5 report and initial implementation plans will be presented to FSA Board 4 th Annual Science Council report to FSA Board