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Molecules to Landscapes: Building interdisciplinary capabilities



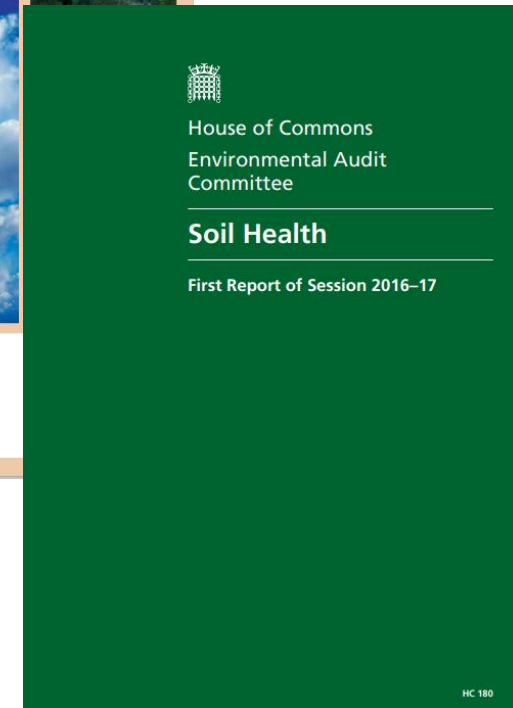
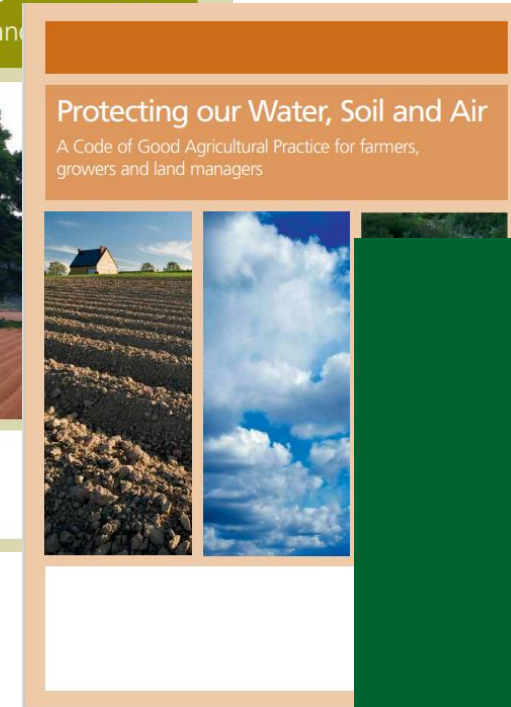
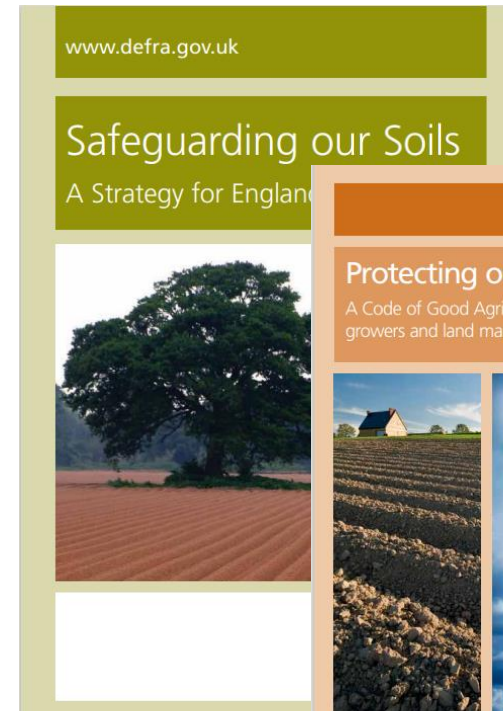
Strategic context for the Molecules to Landscapes programme

Dr Amanda Collis, BBSRC

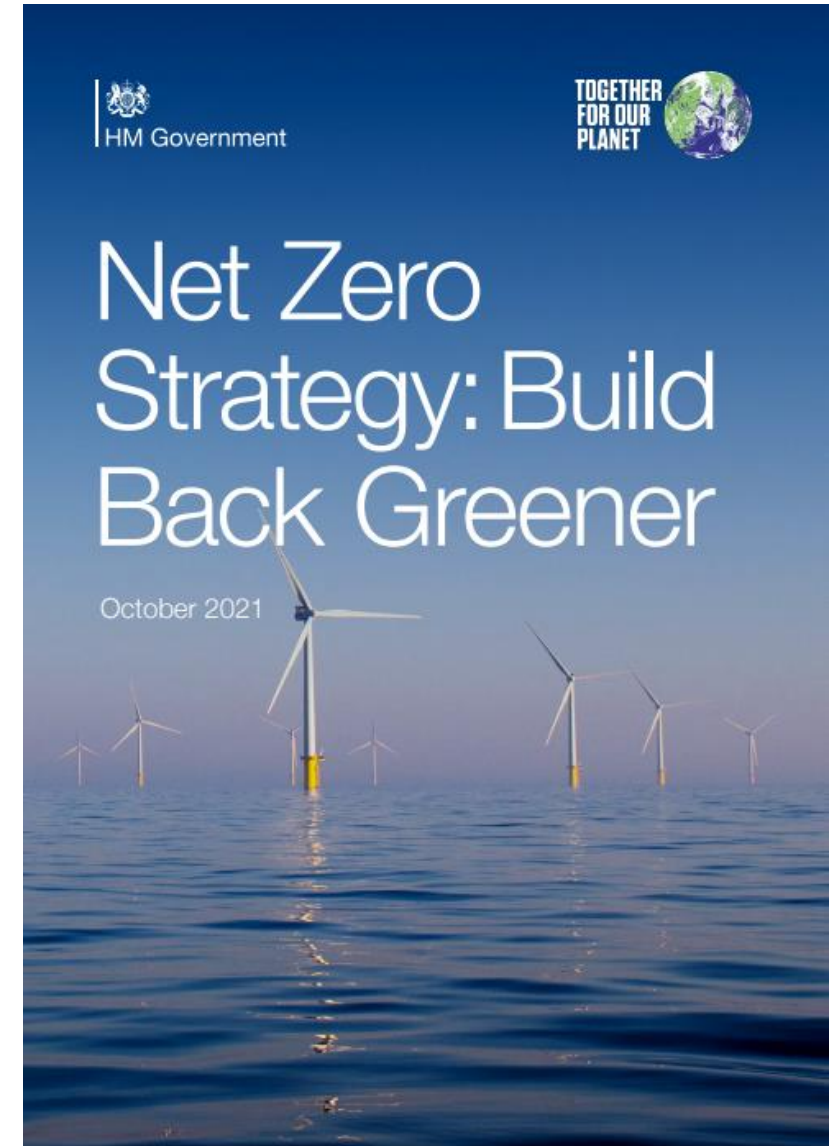


UK Research
and Innovation

Legislation and Policy



Global and national agendas





Our vision:

is for an outstanding research and innovation system in the UK that gives everyone the opportunity to contribute and to benefit, enriching lives locally, nationally and internationally.

Our mission:

is to **convene, catalyse and invest** in close collaboration with others to build a thriving, inclusive research and innovation system that connects discovery to prosperity and public good.



BBSRC and NERC: strong working relationships

- Strong track record of previous investments
- Complementary goals, for example (Delivery Plans 2019):

BBSRC:

- ‘Improve the sustainability and resilience of agriculture by applying interdisciplinary, multi-scale and systems approaches to the understanding and management of agri-ecosystems, soil health and use of resources’

NERC:

- ‘Support research that delivers the systems and solutions which reduce consumption and inefficiency, maximise the productivity of land and oceans while promoting biodiversity and minimising degradation, and embed environmental sustainability in every aspect of economic activity’

BBSRC/NERC: Towards molecules to landscapes

Convening world-class research capability in:

- environmental engineering
- ecology
- agri-systems
- molecular biology
- data science and bioinformatics



Why we need YOU: the difference we need to make together

Dr Iain Williams



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We know that.....



- Increasing need to produce substantially more food over the next decades in order to meet demand.
- Agricultural land accounts for 72% of land coverage in the UK.
- Agricultural practices have significant impact upon the environment, locally and globally.
- Synthetic chemicals can persist and can be washed out of farms into rivers and other watercourses.
- The use of antibiotics and antimicrobials can lead to resistance and biodiversity loss.

So we need....



Interdisciplinary research to identify beneficial agroecological practices. Bringing novel approaches to meet the challenges within this area.



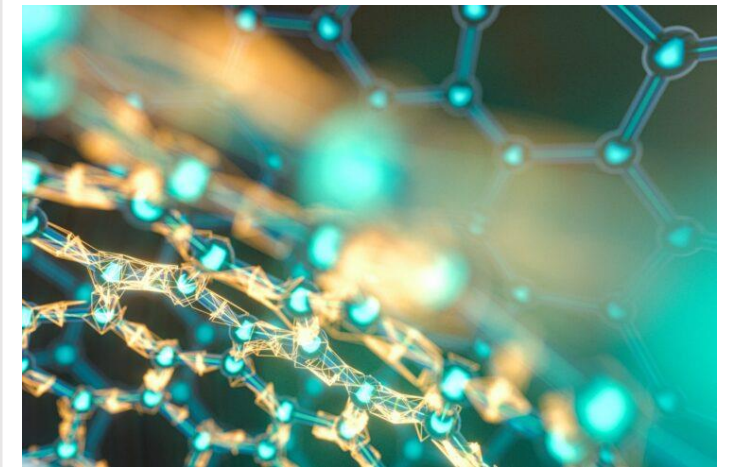
To Integrate data sciences with molecular biological, ecological and agricultural perspectives.



Better understanding of processes that drive biodiversity loss, greenhouse gas emissions and nutrient cycling.



Development and application of biosensors, tools and technologies, to improved agroecological practices at a landscape level.



So how will we do this?

Introducing the Molecules to Landscapes call

This funding call invites applications to build interdisciplinary collaborations and capability, developing new partnerships across the UKRI-BBSRC and UKRI-NERC remits that ultimately aim to reverse biodiversity decline and reduce agri-environmental impact.

This newly emerging field will require **leadership** from research communities transcending traditional disciplinary focused approaches to reflect the **full diversity** of stakeholders. Such communities should be well placed to define the key research questions, test new interdisciplinary ideas and approaches, and develop **interdisciplinary capability** primed for **future funding opportunities**.

Funding available

Total fund amount (indicative): **£1,000,000**

Grant award value range: **£100,000 - £200,000**

- Funded by UKRI BBSRC and UKRI NERC.
- Applications can be up to 12 months duration and should not exceed £200,000 (100% full economic costing). UKRI will contribute 80% full economic costing (up to £160,000).
- Applications must have a start date no later than June 2022 and cannot be delayed beyond this date for any reason.

UKRI wishes to support applications that:

- Build upon and are informed by previous investment from BBSRC, NERC, or other research funders.
- Identify ambitious ‘real-world’ challenges within UK agricultural landscapes to which new interdisciplinary expertise can contribute and propose an agenda for future research.
- Compose research groups with diverse skills, cultural backgrounds, user engagement experience and expertise that are inclusive and inspire change.

- Create new connections by bringing together disciplines to realise and define new research and innovative solutions for agriculture which can be scaled up and implemented.
- Build capability, increase capacity and create communities with the potential to contribute to future funding calls, for longer-term, larger scale projects.
- Develop the foundations of a research base that in the longer term will be able to provide input into UK policy.
- Initiate the development of new interdisciplinary expertise that in the future will be able to support knowledge exchange, translation, and commercialisation as necessary to facilitate impact.

Key dates

Event	Date
Open for applications	07/01/22
Webinars 1 & 2	10/02/22 & 15/02/22
Workshop	25/02/22 (10:00 – 13:00)
Deadline for applications	24/03/22 (16:00)
Panel Meeting	April 2022
Funding announcement	May 2022
Expected project start date	June 2022

Eligibility

Applications from organisations or individuals that are not eligible will be rejected without reference to panel review.

Minimum requirement	Encouraged
<p>Institutions and researchers normally eligible for UKRI funding include:</p> <ul style="list-style-type: none">• higher education institutions• eligible independent research organisations (IROs)• public sector research establishments• UKRI funded labs and facilities.	<p>New collaborations and partnerships including across disciplines and sectors. The involvement of private sector partners is welcome. However, businesses cannot be funded through this opportunity. The nature of the collaboration and the role of the industrial partner should be made clear in the case for support.</p>
<p>You must be based at an eligible UK organisation.</p>	<p>Partnerships with international research groups, where they add value to the project through access to key facilities or in-kind contributions are encouraged. Funding will only be provided to UK eligible organisations, but international researchers can be named as project partners.</p>
<p>Your proposal must include at least two co-principal investigators from different and relevant disciplines to the call.</p>	<p>We encourage applications from individuals with diverse backgrounds and experiences, either as principal investigator or co-investigator.</p>
<p>Individuals may apply only once as a principal investigator or once as a co-investigator. In addition, it must be clear from the application what contribution these co-investigators will make to the success of the application.</p>	<p>Institutions are encouraged to rigorously consider and prioritise applications submitted to this funding opportunity.</p>

Assessment of applications

Assessment Process

- Single stage, panel assessment process
- Multidisciplinary panel with appropriate expertise reflecting the nature of this opportunity
- No peer review stage
- Applications will be fully assessed by the expert panel
- Applications will not be sent to reviewers and therefore applicants will not receive reviewer comments.
- No principal investigator rebuttal stage.
- Applicants should expect to be informed during April of the outcome of funding decisions.

Assessment Criteria

Scientific and technical excellence

Specific objectives of the project demonstrate excellence, novelty, and appropriateness of the proposed activities. The scientific merit of the project and its potential to make a significant contribution to advancement of the area.

Strategic value

Fit to the scope of the opportunity and relevance to UKRI-BBSRC and UKRI-NERC strategies.

Timeliness and potential impact

Potential scale of impact, applicability to possible end user applications, and potential to build a foundation for further investment.

Capability to deliver

The capabilities and sustainability of the assembled research teams to deliver the proposed research and other activities.



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How to apply

Applications should be submitted through the Joint Electronic Submission system (Je-S) by 16:00 on 24 March 2022

In addition to the proforma the following documents are **mandatory**:

- Case for Support (**maximum 4 pages**)
- Justification for Resources (**maximum 1 page**)
- Capability to Deliver (**maximum 2 pages**)
- If project partners are being added to the proposal, please additionally provide a Project Partner Letter of Support.*

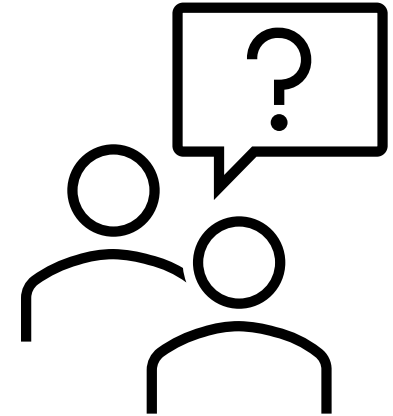
Additional support and guidance can be found at:

- **grants guide**
- opportunity guidance
- resume for researchers guidance.



Contacts

- For help and advice on costings and writing your proposal please contact your research office in the first instance, allowing sufficient time for your organisation's submission process.
- Any queries regarding the submission of proposals through Je-S should be directed to the Je-S helpdesk:
 - jeshelp@je-s.ukri.org
 - 01793 444164, refer to Je-S homepage for opening hours.
- For any other queries, please contact a member of the project team:
 - Luke.williams@bbsrc.ukri.org
 - Rachael.foy@nerc.ukri.org



Workshop

- For those interested in applying for this opportunity a workshop will be held **25 February 2022 (10:00 – 13:00)**.
- The workshop will focus on building the community, provide an environment for creative thinking, and will support and promote interdisciplinary collaboration.
- Attendees will be expected to fully participate in the workshop

Join us

Please complete [this form](https://www.surveymonkey.co.uk/r/F7MH39W) (<https://www.surveymonkey.co.uk/r/F7MH39W>) to register your attendance for the workshop. Once registered an email with the workshop link will be sent to you.



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Thank you



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