



**SCIENCE POLICY AT THE
ROYAL SOCIETY OF BIOLOGY:**
*enabling evidence and knowledge
exchange in the life sciences*

Biosciences Careers Day 2021 -
#RSBcareersDay

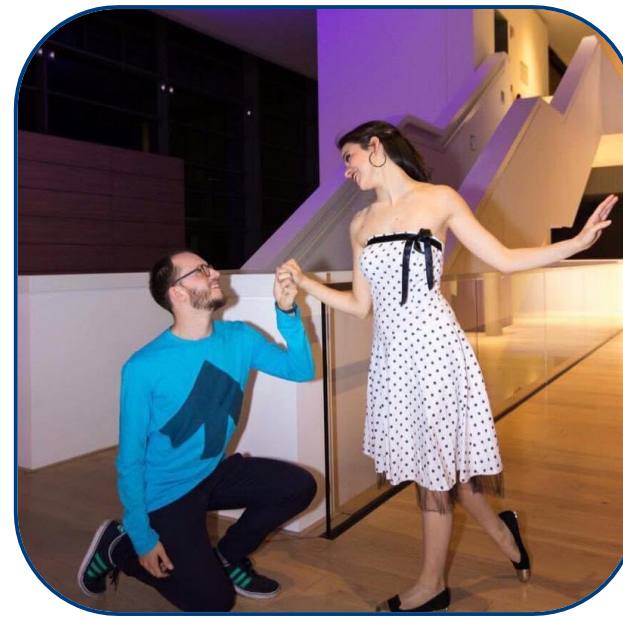
Alessandro Coatti - Senior science
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@AI_Coax @RoyalSocBio

1. ABOUT ME
2. WHAT IS SCIENCE POLICY?
3. THE ROLE OF LEARNED SOCIETIES
4. SCIENCE POLICY AT THE RSB
5. CAREERS IN SCIENCE POLICY



1. A BIT ABOUT ME



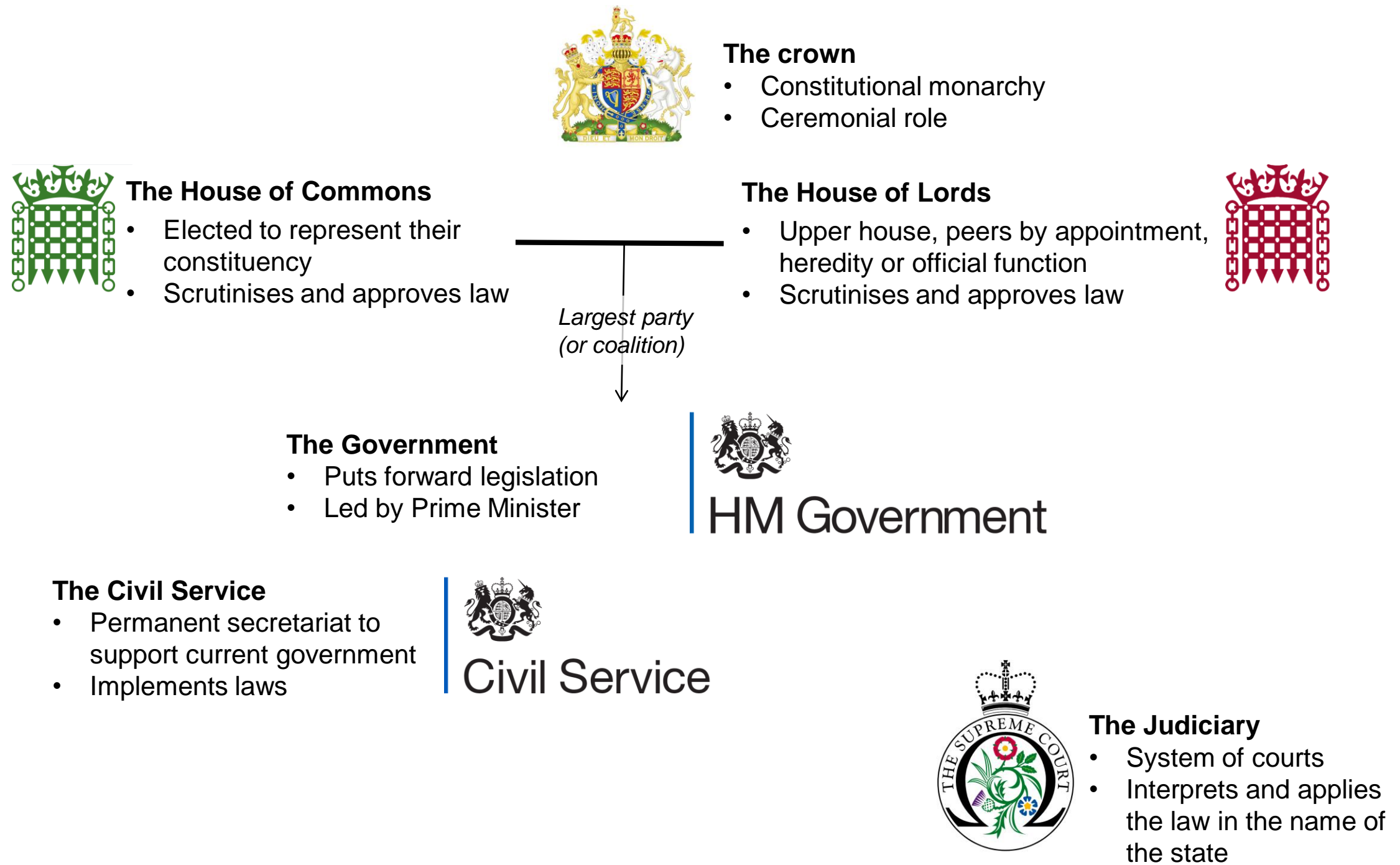
2. WHAT IS POLICY?

‘**Policy**’ is a general term used to describe a formal decision or plan of action adopted by an actor [..] to achieve a particular goal. **Public policy** is a more specific term applied to a formal decision or a plan of action that has been taken by, or has involved, a state organisation. (Richards and Smith, 2002)

Whatever governments choose **to do or not to do.** (Dye in Birkland, 2005)



Public policy is hard to research as it is a composite of different processes that cross-cut **most branches of government** and involve **many decision-makers.** (John, 1998)

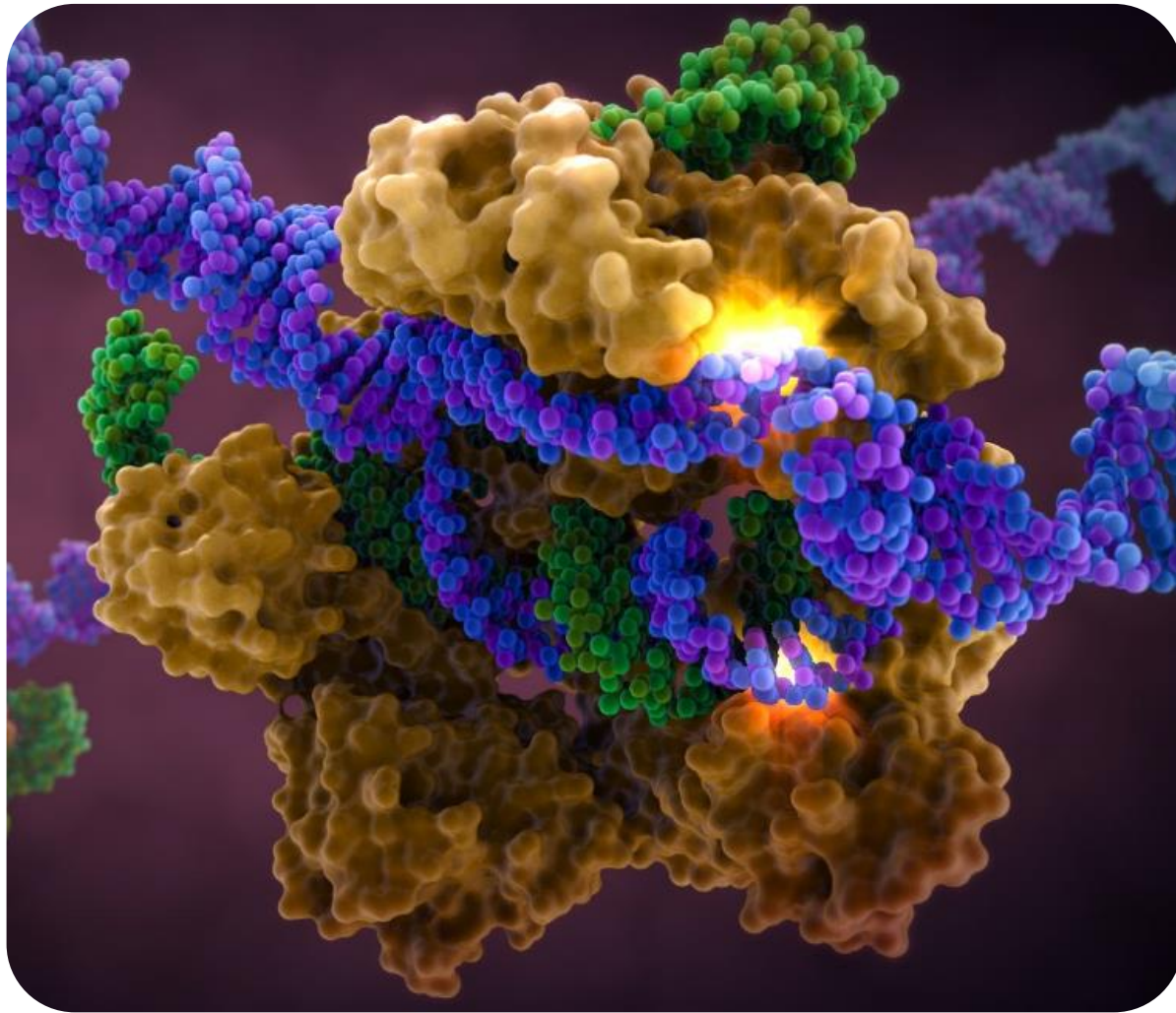


What is science policy?

The place (relationship/contribution) of science (knowledge/practice)
in the public policy process and society

[Top 20 things politicians need to know about science](#)

[Top 20 things scientists need to know about policy-making](#)



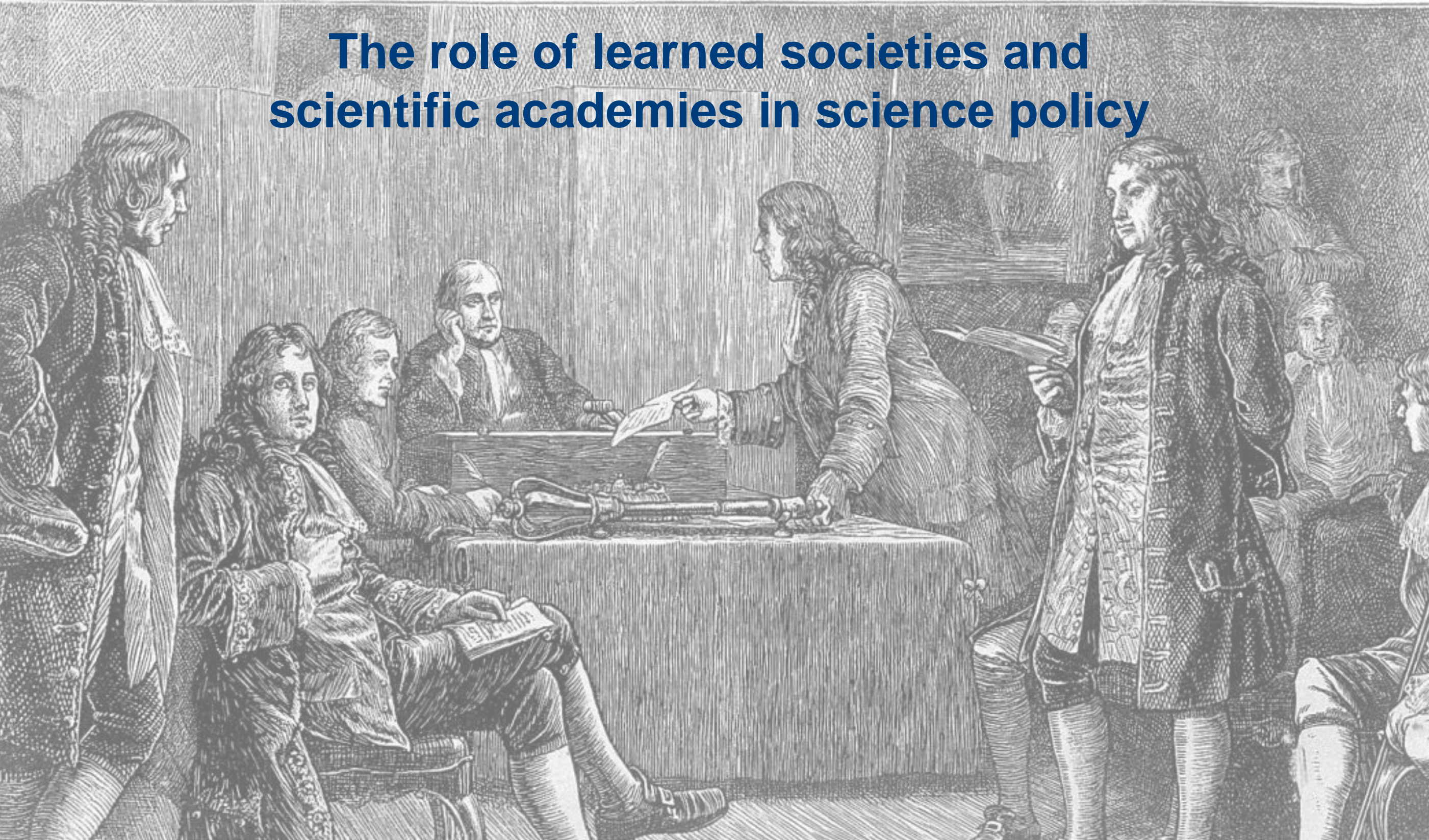
"The wave has only got bigger" (*The Biologist*, 66(5))



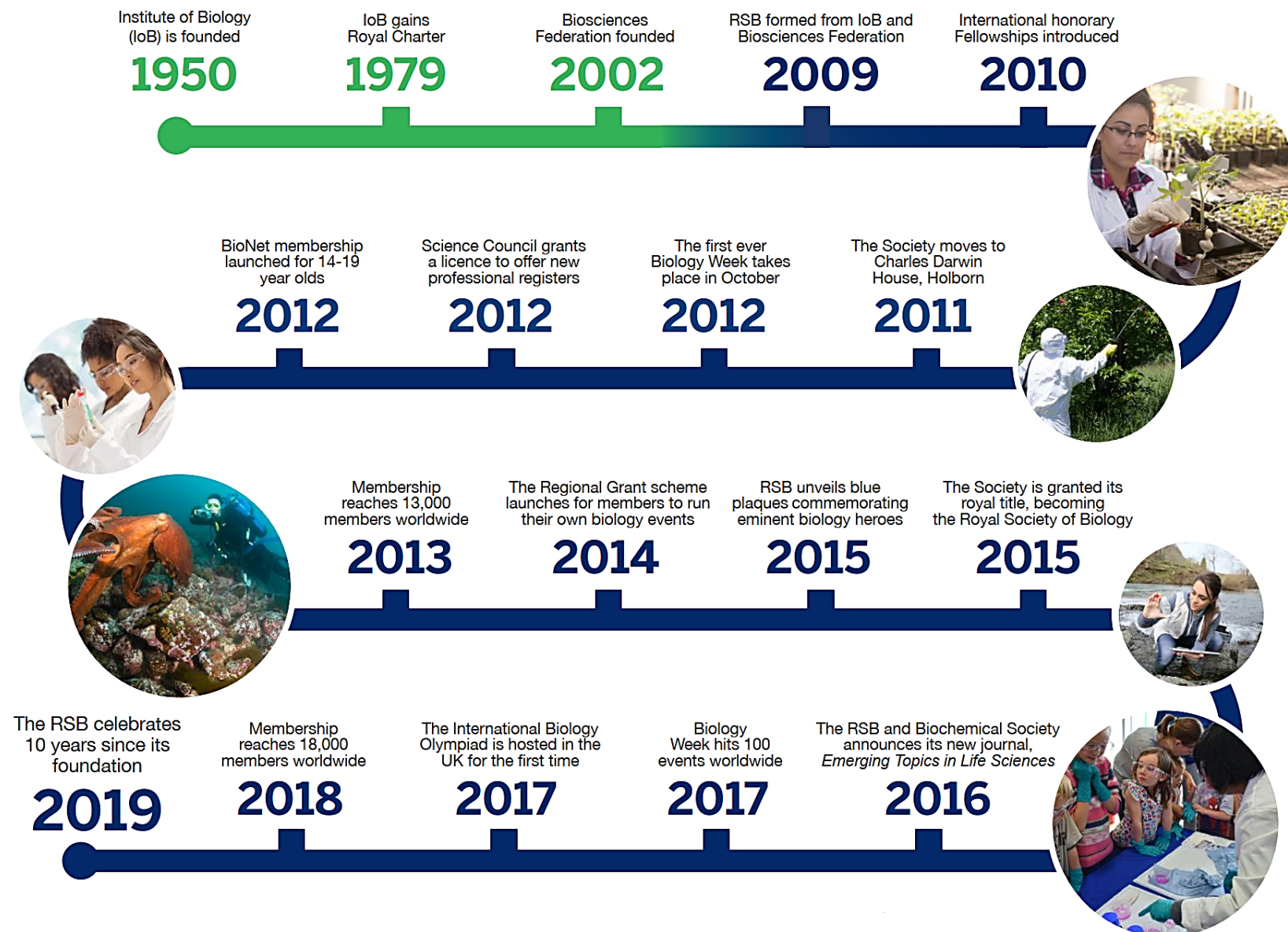
Henry T Greely on He Jiankui's CRISPR babies
(*The Biologist online edition*)

3. LEARNED SOCIETIES

The role of learned societies and scientific academies in science policy

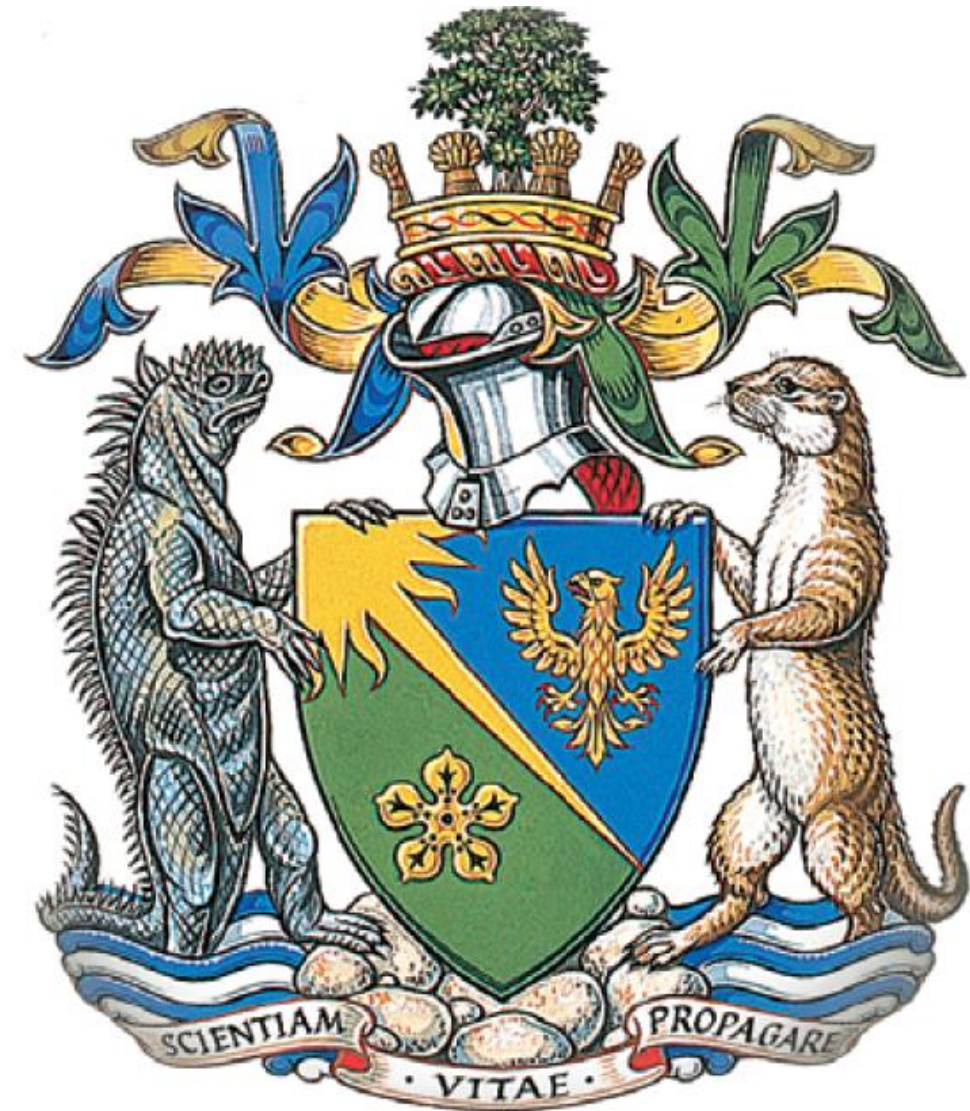


- Scientific societies & Academies
- Institute of Physics (1960) & Royal Society of Chemistry (1980)
- The birth of the Society of Biology (2009)
- 10-year anniversary of the RSB (2019)
- The RSB is a learned society, professional body and charity



[RSB@10: The first decade & beyond](#)

To act as a single unified voice for biology: advising Government and influencing policy; advancing education and professional development; supporting its members, and engaging and encouraging public interest in the life sciences.



[BIOLOGY CHANGING THE WORLD \(RSB Strategy 2019-2021\)](#)



**Sir David Attenborough, RSB
Lifetime Achievement Award**

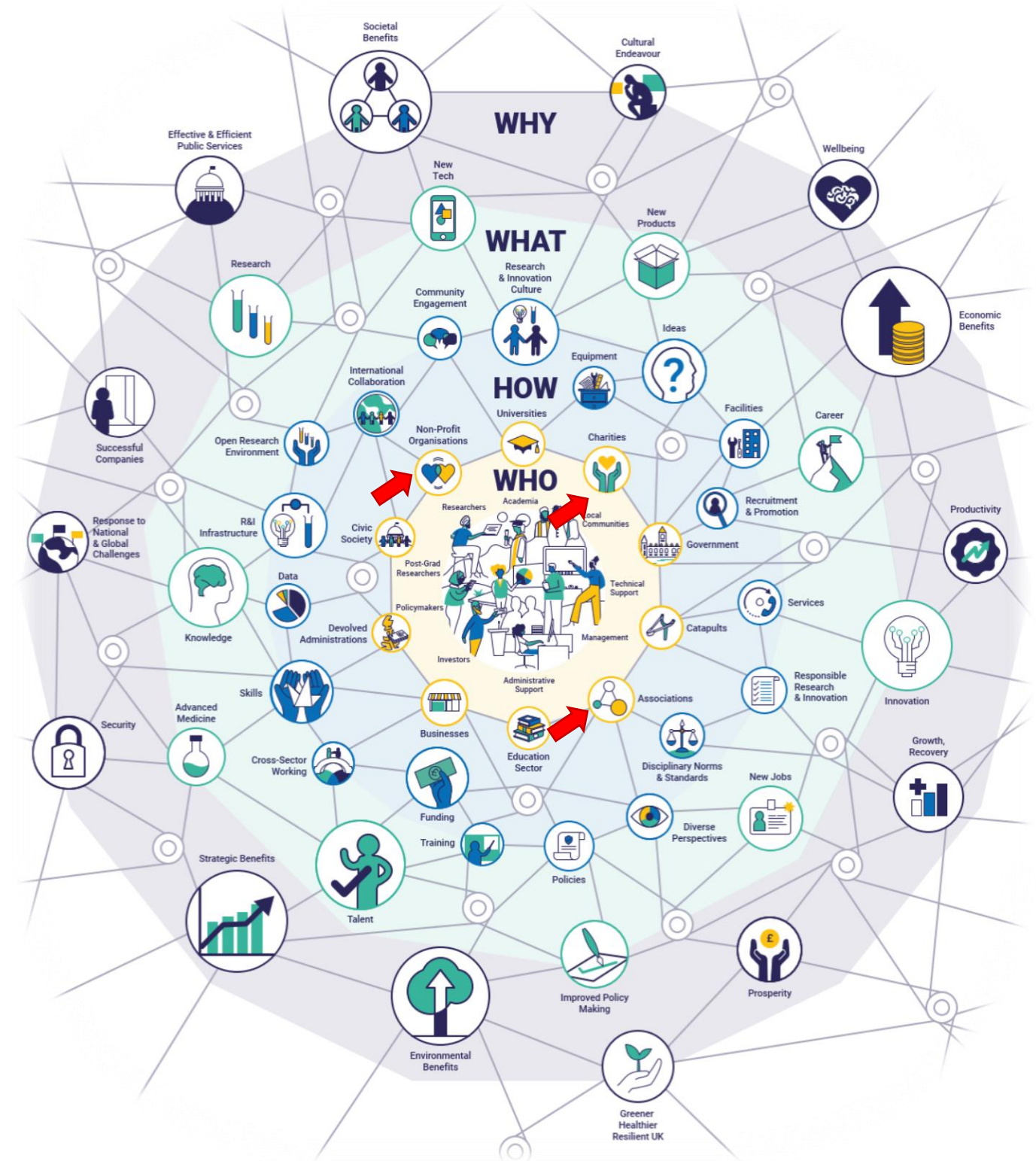
*“ You are biologists - you understand how the natural world works, and it’s essential that **people we put in power, and the people who vote**, should understand the meaning of biology and the way the world works, and understand that it is not just fiction to worry about carbon dioxide and the effects it has, to understand that we are dependent on the natural world for every breath of air we breathe and every mouthful of food that we eat.*

*[...] Its unthinkable that what happened fifty to one hundred years ago, that biology was regarded as something not of particular great importance, and its unthinkable that **people could be put into power without an understanding of the way the world works.**”*

4. SCIENCE POLICY AT THE RSB

1. Evidence synthesis & knowledge exchange
2. Community building & stakeholder engagement
3. Active node in a complex ecosystem

If you want to know more:
[RSB@10: Policy highlights](#)
[From Biosecurity to Brexit](#)



[UK Research & Innovation \(corporate plan 2020-21\)](#)

The science policy team



Laura Bellingan

Director of policy & public affairs (incl. education policy, outreach and publications)

Laura Marshall

Head of Policy, Impact measurement, cross-team activities



Jonathan Carruthers

Plant science, genetic technologies, environmental policy

Alessandro Coatti

Animal science, genetic technologies, other biomedical issues



Jade Hall

Diversity and inclusion, open access, research integrity

The **Animal Science Group** ([ASG](#))

- has 24 member organisations & 5 observers;
- meets quarterly;
- acts as a forum for the discussion of all animal science policy issues and promotes the development of policy on animal science issues relating to both research and teaching;





- Close to science & scientists
- Honest broker for/Advocate for science
- Science for the benefit of society & the environment
- Analysis and research is involved
- People-centred job & diverse audiences
- How science fits within the bigger picture
- Diplomacy & mediation
- Fast-paced and pushes you to learn new things

4. CAREERS IN SCIENCE POLICY



Within public policy institutions:

- At a national level
 - Parliament
 - Gov departments
 - Regulators
 - Non-departmental advisory bodies
- At an international level
 - EU Commission, UN agencies (e.g. FAO, WHO) or the OECD

Non-governmental organisations:

- Scientific societies
 - Learned societies
 - Scientific Academies
- Campaign/Advocacy groups
 - Campaign for Science & Engineering
- Trade and professional bodies
- Think tanks (e.g. RAND, NESTA)

Funders/Charitable organisations:

- Public funders
 - UK Research and Innovation
- Private & Philanthropic org
 - Wellcome Trust
 - Bill & Melinda Gates Foundation

Private sector:

- Consulting firms
- Pharmaceutical and bioindustries
- Other firms (e.g. Google or DeepMind)

Communication

- Excellent oral and written communication skills
- Presenting scientific evidence and ideas to diverse audiences
- Handling sensitive issues with care & confidentiality
- Engaging communicator (narratives & storytelling)

Interpersonal

- Team working
- Working with Committees
- (Some) Line manager experience
- Collaboration & delegation
- Diplomacy and tact
- Negotiation and facilitation skills
- Giving/taking feedback
- Being adaptable

Knowledge & experience:

- Graduate/Postgraduate degree (e.g. PhD)
- Strategic understanding/interest in policy environment
- Familiarity (or deeper knowledge) science/science community
- In-depth knowledge of specialist areas

Other competences:

- Organisational & project management skills (incl. time management)
- Analytical skills: attention to detail & accuracy; make/defend decisions;
- Creativity
- Responsibility/accountability: lead within remit & strategic development
- Autonomy: problem-solving skills & tolerance of ambiguity

1. Master's courses (e.g. UCL, SPRU, Kings College)
2. Dedicated short courses (e.g. [Wellcome Sanger Genome Campus Science Policy course](#))
3. Science policy internships (e.g. [UKRI scheme](#))
4. Science policy seminars & events (e.g. [RSB Policy Lates](#))
5. Science and policy exchange networks (e.g. [Cambridge University Science and Policy Exchange](#))
6. POST/GO Science collaborative fellowship schemes
7. Royal Society [Pairing Scheme](#)
8. **Join a learned society!!**
 - RSB [Education and Science Policy Committee](#)

Some resources if you want to explore further:

- ❑ [POST Notes](#) (and [how to write a policy briefing](#))
- ❑ The RSB [Science Policy Newsletter](#)
- ❑ The [Policy Resource Library](#)
- ❑ The Biologist – policy perspectives (e.g. [Can we flatten the curve for climate change?](#))
- ❑ Blogs (e.g. [Nuffield Council on Bioethics](#))
- ❑ The [Science Media Centre](#)
- ❑ Scientific journals often feature written policy articles (e.g. [20 tips for interpreting scientific claims](#))
- ❑ Life Scientific – [Sir Patrick Vallance on the role of the Government Chief Scientific Advisor](#)



And if you have questions about our work or you want to collaborate, get in touch!

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THANK YOU !





The House of Commons

- > HoC **S&T select committee**
- > **Parliamentary Office for Science and Technology (POST)**
- > **Parliamentary Libraries**
- > HoL **S&T select committee**



The House of Lords

> **Government Office for Science** – incl. Gov CSA & departmental CSAs

> **Office for Science & Technology Strategy** (Cabinet Office)

> Government **science and engineering profession**



HM Government

- > PM **Council for Science and Technology** (independent)
- > **Scientific Advice for Emergencies** (independent)
- > **Advisory Councils and Committees** (independent)



Civil Service

> Science focused agencies and Public laboratories



UK Research and Innovation

