

## Appointments

### Education

2023 →	Lecturer / Assistant Professor	Department of Science, Technology & Innovation Studies, University of Edinburgh
2021	Senior Research Fellow	
2021	Teaching Fellow	
2018	Research Fellow	
2016	Research Associate	Department of Global Health & Social Medicine, Kings College London.
2013	Policy Intern	Public Engagement Team, Biotechnology & Biological Sciences Research Council.
2010-15	Research Assistant	Centre for Applied Bioethics and Institute for Science and Society, University of Nottingham.

PhD (Bioethics), University of Nottingham, July 2016.

BSc (Hons, First Class) Animal Science, University of Nottingham, 2009.

### Research programme

social and political dimensions of the life sciences • science and technology studies • science policy • collaborative and experimental methods • cultures of funding • governance • responsible innovation • synthetic biology • biotechnology

### Research outputs

#### Books and articles in press

1. [Governing Synthetic Biology](#). (Under review) Frow, E., Smith, R.D.J. and Sundaram, L. Oxford: Oxford University Press. [equal authorship]
2. [Anticipatory stakeholder engagement provides insights for gene drive in invasive species through the case of gene drive grey squirrels](#). (Accepted pending revisions) Hartley, S. and Smith, R.D.J. *Environmental Science and Policy*.
3. [Engineering Biology Applications for Environmental Remediation: Potential and Challenges](#). (Under review) Lea-Smith, D.J., Hassard, F., Coulon, F., Horsfall, L., Parker, K., Partridge, N., Smith, R.D.J., McCarthy, R.R., Kumar, V., Dotro, G., Krasnogor, N. *Nature Communications*.
4. [The soba restaurant and the oyster bar: Peripheral spaces for responsible research and innovation](#). (Under review) Smith, R.D.J.; Kawamura, K.; Szymanski, E.; Calvert, J.; Shineha, R. *East Asian Science, Technology and Society*.
5. [Histories of scientific responsibility in Japan and the United Kingdom](#). (Under review) Sturdy, S.; Fujigaki, Y.; Smith, R.D.J., Shineha, R. *East Asian Science, Technology and Society*. [equal authorship]
6. [The rise of public engagement in Japan and the UK: de-centering conventional narratives through a cross-country dialogue](#). (Under review) *East Asian Science, Technology and Society*. Mikami, K.; Szymanski, E.; Smith, R.D.J.; Vermeulen, N.
7. [The Living Room](#) (Under review) Szymanski, E.; cookie egret, Calvert, J.; Smith, R.D.J.; Mikami, K. *In Constructing Sites*. Fitzgerald, D. and Woods, A. (eds.) London: Bloomsbury.
8. [Automatic Reply: Another university is possible](#) (2024) Message, R.; Calvert, J.; Smith, R.D.J. *In Revisiting Reflexivity: Liveable Worlds in Research and Beyond*. Davies, S.R.; Schikowitz, A.; Mora Gámez, F.; Goldberg, E.; Dessewffy, E.; Pham, B.; Avkiran, A. and Gregory, K. (eds.) Bristol: Bristol University Press. [Under review]
9. [Foundational Synthetic Biology: A primer](#). (Under contract) Oxford: Oxford University Press. Baldwin, G., Freemont, P., Isalan, M. and Smith, R.D.J. [equal authorship]

#### Published peer-reviewed articles

10. **Smith, R.D.J.**; Schäfer, S.; Bernstein, M.J.B. (2024) [Governing beyond the project: Refocusing innovation governance in science and technology funding](#). *Social Studies of Science*. 54(3): 377–404.

11. Taintongfong, R.I.; Triplett, C.; [...] **Smith, R.D.J.**; [...] Bloss, C.S. (2023) [Exploring the value of a global gene drive registry](#). *Nature Biotechnology*. 41: 9–13.
12. Bernstein, M.J.B.; Franssen, T.; **Smith, R.D.J.**; de Wilde, M. (2022) [The European Commission’s Green Deal is an opportunity to rethink harmful practices of research and innovation policy](#). *Ambio* 52: 508–517. [equal authorship]
13. **Smith, R.D.J.**; Kamwendo, Z.T.; Berndt, A.; Parkin, J. (2021) [Taking knowledge production seriously in responsible research and innovation](#). *Journal of Responsible Innovation*. 8(2):199-208.
14. **Smith, R.D.J.**; Hartley, S.; Middleton, P.; Jewitt, T. (2021) [Knowing when to talk? Plant genome editing as a site for pre-engagement institutional reflexivity](#). *Public Understanding of Science*. 30(6):740-758.
15. Hartley, S.; **Smith, R.D.J.**; Kokotovich, A.; Opesen, C.; Habtewold, T.; Ledingham, K.; Raymond, B.; Rwabukwali, C. (2021) [Ugandan stakeholder hopes and concerns about gene drive mosquitoes for malaria control: new directions for gene drive risk governance](#). *Malaria Journal*. 20: 149
16. Szymanski, E.; **Smith, R.D.J.**; Calvert, J. (2021) [Responsible research and innovation meets multispecies studies: Why RRI needs to be a more-than-human exercise](#). *Journal of Responsible Innovation* 8(2): 261-266.
17. Szymanski, E.; Bates, T.; Cachat, E.; Calvert, J.; Catts, O.; Nelson, L.; Rosser, S.; **Smith, R.D.J.**; Zurr, I. (2020) [Crossing kingdoms: How can art open up new ways of thinking about science?](#) *Frontiers in Bioengineering and Biotechnology* 8: 715.
18. Kemp, L.; [...] **Smith, R.D.J.** [...] Sutherland, W. (2020) [Bioengineering horizon scan 2020](#). *Elife*, 9: e54489.
19. Ribeiro, B.; **Smith, R.D.J.**, Millar, K. (2017) [A mobilising concept? Unpacking academic representations of responsible research and innovation](#). *Science and Engineering Ethics*. 23(1) 81-103. [Equal first authorship; cited over 210 times as of 2024]
20. Raman, S.; Mohr, A.; Helliwell, R.; Ribeiro, B.; Shortall, O.; **Smith, R.D.J.**; Millar, K. (2015) [Integrating social and ethical dimensions into sustainability assessment of lignocellulosic biofuels](#). *Biomass and Bioenergy*. 82: 49-62.
21. Boucher, P.; **Smith, R.D.J.**; Millar, K. (2014) [Biofuels under the spotlight: The state of assessment and potential for integration](#). *Science and Public Policy*, 41(3): 283–293.

### Thesis

22. **Smith, R.D.J.** (2015) [Constructing ‘the ethical’ in the development of biofuels](#). University of Nottingham.

### Commissioned policy reports

23. **Smith, R.D.J.** and Eriksson, H. (2024) Piloting responsible innovation in Edinburgh’s Impact Accelerator Accounts. Edinburgh: Edinburgh Innovations.
24. **Smith, R.D.J.**, Mathiesen, C. and Forsberg, E-M (2023) [Guidelines for Responsible Research and Innovation in European Health Research & Innovation](#). Oslo: Norwegian Research Council.
25. Stone, S.; **Smith, R.D.J.**; Cuttica, F.; Vidmar, M. (2023) [Critical Codes: A Public Interest Technology roundtable on Ethical Codes of Conduct as a mode of governance for emerging technologies](#). Edinburgh: University of Edinburgh, for New America Foundation.
26. Smith, R.D.J.; Bernstein, M.J.B.; Cuttica, F.; O’Donovan, C. [Capabilities to support responsible research & innovation in European biotechnology](#). (2022) Edinburgh: University of Edinburgh, for ERA CoBioTech funding programme.
27. King, A.; **Smith, R.D.J.** [Infrastructure for Responsible Research and Innovation: An appraisal of the EuroNanoMed III portfolio](#). (2022) Edinburgh: University of Edinburgh, for EC EuroNanoMed III programme.
28. Mathiesen, C.; **Smith, R.D.J.**; Forsberg, E-M. (2022) [M-ERA NET guidelines for responsible research and innovation](#). Research Council of Norway and M.ERA-NET Funding Programme.
29. **Smith, R.D.J.**; Leng, R.; Kamwendo, T.K. [An appraisal of responsible research & innovation in ERA CoBioTech](#). (2021) Edinburgh: University of Edinburgh for ERA CoBioTech.
30. Attenborough, R.; **Smith, R.D.J.**; Kamwendo, Z.T.; DePrie, K. (2020). [Results and recommendations of the virtual 2nd Biotech Hub Meeting convened by the ERA-NET Cofund on Biotechnology](#). Saxon State Ministry of Science, Culture and Tourism (SMWK).

31. **Smith, R.D.J.**, Scott, D., Kamwendo, Z.T., Calvert, J. (2019) [An agenda for responsible research and innovation in ERA CoFund for Biotechnology](#). Swindon: Biotechnology and Biological Sciences Research Council.
32. Ellis, T., Rosser, S., Cai, Y., **Smith, R.D.J.**, Freemont, P. (2018) [Synthesing a human genome. What could go right?](#) Report of a Wellcome Trust Workshop.
33. **Smith, R.D.J.**; Samuel, G. (2018) [Who's talking about non-human genome editing? Mapping public discussion in the UK](#). London: Department of Business, Enterprise and Industrial Strategy and Sciencewise.
34. **Smith, R.D.J.**, Marris, C., Berry, D., Sundaram, L., Rose, N. (2017) [Synthetic biology biosensors for global health? A report of the Flowers Consortium](#). London, King's College London.
35. Hartley, S.; Pearce, W; [...] **Smith, R.D.J.** [...] (2016) [The TERRAIN tool for teaching responsible research and innovation](#). Nottingham: University of Nottingham.
36. **Smith, R.D.J.**; Hartley, S. (2015) [BBSRC Knowledge integration tool](#). Nottingham: University of Nottingham for Biotechnology and Biological Sciences Research Council (BBSRC).
37. **Smith, R.D.J.** (2013) [Bridging public and stakeholder engagement in BBSRC bioenergy research](#). Swindon: Biotechnology and Biological Sciences Research Council (BBSRC)
38. Boucher, P.; **Smith, R.D.J.**; Millar, K. (2013) [Biofuels and the need for integrated assessments](#). Oslo: EST-Frame project.

### Book chapters

39. **Smith, R.D.J.**; Millar, K. (2012) [Examining the inclusion of ethics and social issues in bioscience research: Concepts of 'reflection' in science](#). In *Climate change and sustainable development: Ethical perspectives on land use and food production*. Potthast, T & Meisch, S (Eds.) Wageningen Academic Press.

### Editorials, films and other formats

40. [Should we create gene drive squirrels?](#) (2022) Short documentary created w/Sarah Hartley and Tom Law.
41. [Fieldnotes on FlyingLess conferencing](#) (2022) Collaborative commentary in *EASST Review* 42(2) with Vanessa Ashall, Tobias Held, Stefan Laser, Julie Sascia Mewes, Mace Ojala, Nona Schulte-Roemer, Robert Smith, Richard Tutton, Sine Zambach.
42. [When should funders talk about new technologies?](#) (2021) Centre for Science, Knowledge and Policy blog based on collaboration with BBSRC staff.
43. [Crossing Kingdoms](#). (2021) Contributor to installation created by Tarsh Bates, Oron Catts and Ionat Zurr as part of University of Pittsburgh *Art's Work in the Age of Biotechnology* exhibition.
44. [Crossing kingdoms, disciplines and continents](#). (2019) Centre for Systems and Synthetic Biology Blog on the 'crossing kingdoms' project.

### Working papers

- [Using a capabilities approach to evaluate and design responsible innovation policies in synthetic biology funding programmes](#). [For *Minerva*]. w/ Bernstein, M.J.B, O'Donovan, C. and Cuttica, F.
- [Negotiating discomfort: Accommodating gene drives at the UN Convention on Biological Diversity](#). [For *Science, Technology & Human Values*] w/ Hartley, S.
- [The topography of engagement in biotechnology risk assessment](#). [For *Journal of Risk Research*]. w/Hartley, S., Stelmach, A., Kokotovich, A.
- [Thinking with capabilities in European Funding Cultures](#). [For *Social Studies of Science*]. w/ Hadley Kershaw, E.
- [A collaborative researcher's packing list](#). [For *The Sociological Review*]. w/ Calvert, J. and Szymanski, E.A.
- [Partial agitations at a scientific conference](#). [For *The Sociological Review*] w/ Stone, S.
- [Haunted by dreams of a Tuscan Castle, or conferences as sites of governance in synthetic genomics and beyond](#). [For *Biosocieties*]. w/Calvert, J.
- [Are people who care the key to responsible innovation?](#) [For *Journal of Responsible Innovation*] w/ Attenborough, R. and Bernstein, M.J.

## Funding

### Awarded (£16m+)

1. [A Programme for Responsible Research and Innovation in Materials and Health Funding](#). (2024–2029) **Principal Investigator** w/ Co-Is Ellen-Marie Forsberg (Norsus) and Michael Bernstein (AIT). **£175,000**. Norwegian Research Council.
2. [Engineered Genetic Control Systems for Advanced Therapeutics Hub](#) (2024-2029) **Co-Investigator** w/ PI Susan Rosser and Co-Is Steven Pollard, Andrew Baker, Diego Oyarzún, Giovanni Stracquadanio, Jane Calvert, Owen Sansom, Jennifer Morton, Daniel Murphy, Mark Isalan, Geoff Baldwin, Alexander Douglas, Deborah Gill and Stephen Hyde, plus rCo-I Adam Mol. **£14.25m**. UKRI Engineering Biology Mission Hubs.
3. [RRI Lead for Centres for Doctoral Training in Chemical Biology, Next Generation Synthesis and Convergence Technologies in Cancer Research](#) (2023-) **PI** w/ Co-Is Sophie Stone and Reuben Message. **£20,000**. Imperial College London.
4. [Piloting responsible innovation in the University of Edinburgh's devolved funding programmes](#). (2023) **PI**. **£8,666**. EPSRC IAA Secondment.
5. [Exploring methods of RRI that intervene in places and spaces of scientific practice](#). (2023) **PI** w/ Co-Is Sophie Stone. **£10,000**. BBSRC Transition Award MicroFund.
6. [Critical Codes: Ethical Codes of Conduct as a mode of governance for emerging technologies](#). (2022) **PI** w/Co-Is Matjaz Vidmar and Filippo Cuttica. **\$30,000**. New America Foundation.
7. [Preparing for debate on gene drive mosquitoes in Uganda](#). (2022-23) **Co-I** w/PI Sarah Hartley and Co-Is Aleksandra Stelmach and Chris Opesen. **£52,870**. University of Exeter Research England Global Challenges Research Fund.
8. [Mapping Responsible Research and Innovation in EuroNanoMed's portfolio](#). (2021) **Commissioned Lead Author**. **£2,500**. Research Council of Norway.
9. [Future organisms: Synthetic genomics and responsible research and innovation in the UK, the USA and Japan](#). (2021-2024) **Co-I** w/PI Jane Calvert and Co-Is Erika Szymanski and Koichi Mikami. **£854,457**. Economic and Social Research Council - NSF Lead Agency Agreement.
10. [Learning from ERA CoBioTech's RRI Agenda](#). (2021-22) **PI** w/ Co-Is, Rosalind Attenborough and Zara Thokozani Kamwendo. **£25,680**. Biotechnology and Biological Sciences Research Council.
11. [Geographies of scientific collaboration](#). (2021-23) **Collaborator** w/ PI Niki Vermeulen and collaborators at Centre de Sociologie de l'Innovation-i3, Mines ParisTech, PSL, CNRS. **£20,000**. Royal Society of Edinburgh Research Network Grant.
12. [Inclusive and international risk assessment: building a framework for gene drive organisms through collaboration](#). (2020-2022) **Col** w/PI Sarah Hartley and collaborators in Uganda, USA and UK. **£199,998**. British Academy Knowledge Frontiers Award.
13. [Building Capacity for Responsible Innovation in International Biotechnology Policy Organisations](#). (2020-2021) **PI** w/Cols Thoko Kamwendo and Jane Calvert. **£15,013**. ESRC Impact Accelerator Award.
14. [Strengthening gene drive governance for malaria control in Africa](#). (2021) **Co-I** w/ Prof. Sarah Hartley (P.I.) and collaborators in Uganda. **£39,742**. Global Challenges Research Fund.
15. [Co-developing risk assessment across disciplines and borders: Gene drive mosquito field trials in Uganda](#). (2019-2021) **Co-I** w/ PI Dr Sarah Hartley and collaborators in Uganda, USA and UK. **£49,585**. British Academy Knowledge Frontiers Award.
16. [Embedding an Agenda for Responsible Research & Innovation](#). (2019-2021) **PI** w/Co-Is Jane Calvert, Zara Kamwendo, Deborah Scott. **£63,520**. ERA-NET CoFund on Biotechnology.
17. [Building alternative practices for responsible research and innovation in the United Kingdom and Japan](#). (2018-2021) **Named researcher**, PI: Jane Calvert, collaborators at Seijo University, Tokyo University, Keio University and Colorado State University. **£32,187**. Economic and Social Research Council. UK-Japan Connections Award.
18. [Inclusive risk assessment of gene drive mosquitos in Uganda](#). (2018) **Co-I** w/ Sarah Hartley. **£29,982**. [declined]. University of Exeter GCRF Facilitation Fund.
19. [Mapping public discussion of non-human Genome Editing](#). (2018) **Commissioned Lead Author**. **£3,000**. UK Department for Business, Energy & Industrial Strategy (Sciencewise).
20. [Developing an Agenda for Responsible Innovation in ERA-Net Cofund for Biotechnology](#). (2017-2018) **Co-PI** w/ Jane Calvert, University of Edinburgh. **£22,500**. Biotechnology and Biological Sciences Research Council.

21. [Learning from Interventions with/in Emerging Science and Technology](#). (2017) **Co-PI** w/ Dr Michael Bernstein, Arizona State University and Dr Stefan Schäfer, Institute for Advanced Sustainability Studies, Potsdam. **\$10,000**. NSF-funded Virtual Institute for Responsible Innovation.
22. [Postgraduate Forum for Science, Technology and Innovation in Society Early Career Workshop Series](#). (2017) **Co-I** w/ Cian O'Donovan (PI), Barbara Ribeiro and Rob Meckin. **£6,000**. University of Sussex Researcher-led Initiative Fund.
23. [Securing benefits from challenge-led research in the new philanthropy](#). (2016) **Co-I** w/ Professor Nikolas Rose and Dr Lalitha Sundaram. **£3,400**. King's College London International Partnership Award.
24. [Early career visiting fellowship to Arizona State University](#). (2016) **\$2,500**. Virtual Institute for Responsible Innovation.
25. [Responsible Innovation at the BBSRC: Facilitating policy formulation and implementation](#). (2015) **Co-PI** w/ Sarah Hartley. **£5,337**. ESRC Impact Accelerator Award (£4,553) and KCL Impact Award (£784).
26. [Travel grants \(3\) for 'post-normal projects in the making', Hamburg, Germany](#) (2012-14). **£2,700**. Altonaer Stiftung für philosophische Grundlagenforschung (ASFPG).
27. [Misc. Awards](#) (2010-13), incl. BBSRC policy placement, University of Nottingham Travel Prize: Presentation of research at conferences in Denmark, The Netherlands and to meet with members of the Danish Board of Technology and full funding of PhD via. BBSRC doctoral training quota scholarship. **£78,687**. BBSRC and University of Nottingham.

## Teaching and supervision

### University of Edinburgh

1. [Proposer and Co-convenor, Data Ethics as Practice](#) (2024-) MSc in AI and Data Ethics, Edinburgh Futures Institute, School of Social and Political Sciences, University of Edinburgh.
2. [Convenor, Foundations in Responsible Research and Innovation](#) (2021-) MSc, School of Social and Political Sciences and Centre for Doctoral Training in Biomedical AI, University of Edinburgh.
3. [Co-convenor, Social Dimensions of Systems and Synthetic Biology](#) (2020-23) MSc, School of Social and Political Sciences, University of Edinburgh.
4. [Guest lectures](#) (2017-) e.g. Science, Nature, Environment, School of Social and Political Science; Technologies in Synthetic Biology, School of Biological Sciences.

### Imperial College London

5. [Responsible Research & Innovation Lead](#) (2024) Cancer Research UK Centre for Doctoral Research in Convergence Technologies, Imperial College London.
6. [Responsible Research & Innovation Lead](#) (2020-) EPSRC Centre for Doctoral Training in Chemical Biology, Imperial College London.
7. [Responsible Research & Innovation Lead](#) (2020-23) EPSRC Centre for Doctoral Training in Next Generation Synthesis & Reaction Technology, Imperial College London.
8. [Social Dimensions of Synthetic Biology Lead](#) (2016-) Multiple BSc & MSc modules at Institute of Systems and Synthetic Biology, Imperial College London.

### King's College London

9. [Co-convenor, Case Studies in Global Health and Social Medicine](#) (2016/17) Department of Global Health and Social Medicine, King's College London.
10. [Guest lecturer, Key Concepts in Global Health](#) (2016/17) Department of Global Health and Social Medicine, King's College London.

### University of Nottingham

11. [Guest lectures](#) (2013-15) Applied Bioethics 1, Applied Bioethics 2, School of Biosciences.
12. [Graduate Teaching Assistant](#) (2013-15) Neuroscience and pharmacology, Reproductive physiology, School of Biosciences.

### PhD supervision

1. [PhD co-supervisor](#) (2024-) Beren Sekerci: More-than-human perspectives at the intersection of synthetic biology and artificial intelligence. Wellcome Trust One Health Models of Disease: Science, Ethics, and Society, University of Edinburgh.

2. [PhD co-supervisor](#) (2022-) Vorathep Sachdev: Practicing “Bio-safely”: Supervisor-Supervisee Relationships in High-Risk Labs. Wellcome Trust One Health Models of Disease: Science, Ethics, and Society, University of Edinburgh.
3. [PhD co-supervisor](#) (2021-) Mayline Strouk: Geography of Fieldwork-based Research in the Anthropocene. The Example of Seabird Study in Scotland and European Arctic. Science, Technology & Innovation Studies, University of Edinburgh and Centre for Science & Technology Studies, University of Leiden.
4. [PhD co-supervisor](#) (2019-2023; Minor Corrections) Sophie Stone: Concepts of the human in synthetic biology. Science, Technology & Innovation Studies, University of Edinburgh.

### Other supervision

5. [MSc dissertation supervisor](#) (2019 -) School of Social and Political Sciences, University of Edinburgh; School of Biological Sciences, University of Edinburgh.
6. [Human practices advisor, international Genetically Engineered Machine \(iGEM\) competition.](#) (2016-2023) Edinburgh Undergraduate and Postgraduate Teams (2019-). Imperial College London iGEM 2016 Team, *eco.librium*. **Winners of grand prize, and finalists for human practices work on reflexivity.**

## Leadership

### University of Edinburgh

- [Academic Lead on Responsible Innovation](#), (2023-) University of Edinburgh Harmonised Impact Accelerator Programmes.
- [Principal Investigator](#) (2023-) [Centre for Engineering Biology](#).
- [Designee](#) (2021-) University of Edinburgh Affiliation to [Public Interest Technology University Network](#).
- [Early Career Academic Representative](#) (2021–24) School of Social and Political Sciences.
- [Seminar Series Co-Lead](#) (2021–24) Department of Science, Technology & Innovation Studies.
- [Coordinator](#) (2020-) Funding Cultures Laboratory.
- [Coordinator](#) (2019-) [Edinburgh Hub for Responsible Innovation](#).

### King’s College London

- [Vice-Chair](#) (2017-18) Biotechnology & Society Research Group (BioS), Department of Global Health & Social Medicine.
- [Hub Co-Lead](#) (2016-18) Virtual Institute of Responsible Innovation, Department of Global Health & Social Medicine.
- [Chair, Equality and Diversity Committee](#) (2016-18) Department of Global Health & Social Medicine.

### University of Nottingham

- [Member](#) (2012-15) Knowledge Transfer and Outreach Group, School of Biosciences.

### National and international convening

- [Convenor](#) (2024) Open-Track: More-than-human research and innovation. EASST / 4S Joint Conference, Amsterdam. w/ Thomas Franssen, Leiden University.
- [Working Group Lead](#) (2024-) Social Dimensions of Environmental Biotechnology, BBSRC Environmental Biotechnology Network (EBNet).
- [Organiser](#) (2024) International Writing Retreat on ‘Studying with’ in STS, Eastwood House, Dunkeld Scotland.
- [Organiser and Facilitator](#) (2024) Workshop: UK-Japan perspectives on Responsible Research and Innovation, British Embassy in Tokyo, Japan.
- [Convener](#) (2023) Open-Track: More-than-human science policy? at [6th Nordic STS Conference](#), Oslo. w/ Michael Bernstein, Thomas Franssen, Cian O’Donovan and Mandy de Wilde.
- [Convenor](#) (2023) Open-Track: Reimagining research and funding cultures in the Anthropocene, [EU-SPRI Annual Conference](#), Brighton. w/ Michael Bernstein, Filippo Cuttica and Cian O’Donovan.
- [Working Group Member](#) (2023-) Public Interest Technology University Network International Working Group

- [Founding organiser](#) (2023) UK Association for the Social Study of Innovation, Science and Technology Spring Writing Retreat, Melrose, Scotland.
- [Local Organising Committee](#) (2022) European Society for Agricultural and Food Ethics 17th International Conference, 'Transforming Food Systems', Edinburgh, Scotland.
- [Organiser](#) (2022) Postgraduate Forum for Science, Technology and Innovation Studies Winter Writing Retreat, Eastwood House, Scotland.
- [Organiser](#) (2022) Workshop: Opening up the novel research and innovation evaluation imperative, "Do No Significant Harm", Transformative Innovation Consortium Conference. w/ Michael Bernstein, Thomas Franssen and Mandy de Wilde.
- [Co-convener](#) (2020-2021) [European Biotechnology & Society Seminar Series](#).
- [Organiser](#) (2020) Closed Panel: Institutionalised? Domesticated? Feral? Exploring affective capacities in STS with synthetic biology, 4S Annual Conference w/Barbara Ribeiro. [withdrawn due to Covid Pandemic].
- [Co-convener](#) (2019-) [Biological Engineering Collaboratory](#).
- [Founding Organiser](#) (2019) Postgraduate Forum for Science, Technology and Innovation Studies Winter Writing Retreat, Gargunock House, Scotland.
- [Organiser](#) (2017) Workshop: The Death of Synthetic Biology? Society for New and Emerging Technologies Conference. Phoenix, Arizona, 9th-11th October 2017. w/Jane Calvert, Emma Frow, Deborah Scott.
- [Organiser](#) (2017) Roundtable: Questioning intervention with and within Science and Technology Studies: A roundtable. w/ Rider Foley, Stefan Schäfer, Michael Bernstein, Shannon Spruit and Sean Low. 4S Conference, Boston, Massachusetts, 30th August – 2nd September 2017.
- [Organiser](#) (2016) Workshop: What are you busy doing? New directions in Science, Technology & Innovation Studies, 11th Annual Science in Public Conference, Sheffield, UK. w/ Dr Cian O'Donovan, Dr Barbara Ribeiro and Dr Rob Meckin.
- [Co-convener](#) (2016-2022) [Postgraduate Forum for Science, Technology and Innovation Studies](#).
- [Organiser](#) (2016) Closed Panel: Flexing and reflexing authority in STS engagements, 8th Society for New and Emerging Technologies Conference. Bergen, Norway, 12-14th October 2016. w/ Shannon Spruit, Shaun Low, Andreas Huber and Stefan Schäfer.

### **Expert advice and peer reviewing**

- [Review panel member](#) (2024) European Commission ERA4Health NanoMedTec Call 2024.
- [Review panel member](#) (2024) Medical Research Council and Japan AMED call, Engineering Biology for Novel Therapies Diagnostics.
- [Project advisor](#) (2024) Exploring Environmental Biotechnology as a field (PI: Adrian Ely, University of Sussex). Funder: BBSRC Network in Environmental Biotechnology.
- [Representative](#) (2024) UK Government Engineering Biology Mission to the USA.
- [Representative](#) (2024) UK Government Engineering Biology Mission to Japan.
- [Review panel member](#) (2023) University of Edinburgh UKRI Harmonised Impact Accelerator Account.
- [Expert reviewer](#) (2023) Canadian Social Science and Humanities Research Council, Insight Awards.
- [Strategic Expert Group Member](#) (2022-) European Innovation Council Project, Targeted Nano-formulations for Treatment of MRSA: A multicomponent platform for nano- formulated treatment of resistant microbial infections.
- [Expert Advisor on Responsible Innovation](#) (2022-) European Commission ERA-Health funding programme.
- [Review panel member](#) (2021) Research Council of Norway funding programme, Technological Convergence Related to Enabling Technologies.
- [Expert Advisor on Responsible Innovation](#) (2021) European Commission FLAG-ERA funding programme.
- [Early Career Researcher Representative in BBSRC-JST Mission to Japan](#). 23rd October 2020 [Online due to Covid Pandemic].
- [Strategic Expert Group Member](#) (2020-) European Commission Materials ERA-NET funding programme.
- [International Advisor](#) (2020-23) JST RISTEX (Japan) project, Understanding the methods and impacts of social experimentalization in the 'Experimental Society'.

- [Invited participant](#) (2019) Kenyan National Commission on Science, Technology and Innovation Synthetic Biology Delegation to the United Kingdom. 26-27th June 2019. Imperial College London.
- [International Expert Reviewer](#) (2018) L'Agence Nationale de la Recherche (ANR) open call, France.
- [Committee Member](#) (2017-22) Ethics, Policy and Society Working Group, Genome Project-Write, USA.
- [Committee Member](#) (2017) Responsible Research and Innovation Working Group, European Commission ERA-NET Co-fund on Biotechnologies.
- [Peer Reviewer](#) (2016-) Biosocieties; Elementa; Journal of Bioethical Inquiry; Interdisciplinary Science Reviews; Journal of Responsible Innovation; Plants, People, Planet; Science; Science as Culture; Science, Technology & Human Values; Science and Technology Studies.

### Management and mentorship

- [Line Manager](#) (2024-) Iñaki Goni and Mayline Strouk, RCN Advisory Project.
- [Mentor](#) (2024-) Kyle Parker, Environmental Biotechnology Innovation Centre, School of Biological Sciences and School of Political Sciences, University of Edinburgh.
- [Mentor](#) (2024-) Oliver Moore, University of Exeter.
- [Line Manager](#) (2023-) Sophie Stone, Future Organisms & BBSRC Transition Award MicroFund.
- [Line Manager](#) (2022-) Sophie Stone, Critical Codes project.
- [Line Manager](#) (2022) Abigail King, Research Council of Norway Commissioned Report.
- [Line Manager](#) (2021-22) Alec Ross, UK Centre for Mammalian Synthetic Biology.
- [Mentor](#) (2021) Society for the Social Studies of Science Mentorship Programme.
- [Mentor and Line Manager](#) (2020-22) Rhodri Leng, Rosalind Attenborough and Filippo Cuttica, BBSRC and ESRC Impact Accelerator Projects.
- [Mentor and Line Manager](#) (2018-20) Zara Thokozani Kamwendo, ERA CoBioTech and ESRC Impact Accelerator Projects.
- [Mentor](#) (2018-2019) Disha Trivedi, Mapping Public Discussion of Gene Drive. Harvard University Independent Internship (May-August 2018) and Engineering Life Visiting Fellow (September-November 2019).

### Invited seminars, keynotes and panels

1. [Gene drive mosquitoes for malaria control](#). May 2024. London School of Hygiene and Tropical Medicine Malaria Centre. (w/ Chris Opesen and Sarah Hartley)
2. [Gene drive mosquitoes for malaria control](#). Societies and Cultures Institute Seminar. May 2024 University of Exeter. (w/ Chris Opesen and Sarah Hartley)
3. [Changing the hoop: A harmonised approach to responsible innovation in Edinburgh](#). May 2024. Multi-Impact Accelerator Account Universities Workshop, University of Glasgow. (w/Hjalmar Eriksson)
4. [A flavour of responsible innovation and engineering biology in the UK](#). March 2024 British Embassy Workshop on Responsible Research and Innovation. Tokyo, Japan.
5. [Invited Discussant, "Alternative approaches to science - responding to the call to be open and responsible"](#). March 2024. Keio University, Tokyo.
6. [Creating collaborative spaces for responsible innovation](#). March 2024. JST RISTEX workshop on collaboration as/for ELSI & RRI. Tokyo, Japan.
7. [Capabilities for responsible innovation in European biotechnology](#). Austrian Institute of Technology Centre for Innovation Systems & Policy Seminar (July 2023).
8. [Conferences as sites of governance, or haunted by dreams of a Tuscan castle](#) (May 2023) Engineering Life: Legacies of Asilomar, Rice University, Houston, USA. w/Jane Calvert
9. [Gene drive governance for wildlife conservation and management](#) (February 2023) NatureScot, UK. w/Sarah Hartley.
10. [We have noticed some tensions when trying to create caring funding cultures...](#) (November 2022) Science with and for Society Ecosystem Seminar Series, Leiden, UK.
11. [Capabilities for responsible innovation in synthetic biology](#). (November 2022) Keynote at Sixth Applied Synthetic Biology in Europe Conference, Edinburgh, UK.
12. [Future Organisms: Synthetic genomics and responsible innovation in the UK, USA and Japan](#). (October 2022) Institute for System Genomics Nano Seminar, New York.

13. [Experimental collaborations with funding agencies: Plant genome editing, institutional reflexivity and engagement at BBSRC](#) (June 2022). Talk at Edinburgh Futures Institute workshop, Sustainably Towards Net Zero and Beyond: Strategy Tools for Carbon Negative Futures.
14. [Turning science around? Responsible research and innovation in ERA CoBioTech](#) (June 2022). Keynote at ERA CoBioTech Final Status Seminars.
15. [Urgency, scarcity and abundance in European funding cultures](#) (June 2022). Talk at RRI in/under urgency workshop, Onassis Foundation, Athens.
16. [ERA CoBioTech Strategic Agenda – a vision for biotechnology in Europe](#) (June 2022). Invited Keynote w/Anja Berndt and Thoko Kamwendo at ERA CoBioTech Final Conference.
17. [Crisis, urgency and scarcity in European funding of synthetic biology](#) (April 2022). Invited talk at Lund Pufendorf Institutet workshop, Synthetic biology and society: legal and political challenges.
18. [Turning science around? Responsible research and innovation in ERA CoBioTech](#) (September 2021). Keynote at ERA CoBioTech Final Status Seminars.
19. [Accidental administrators](#) (June 2021). ERA CoBioTech Seminar Series, w/ Thoko Kamwendo.
20. [Responsible Research and Innovation in ERA CoBioTech](#) (November 2020). Meso Level Governance Case Study Webinar as part of the Expert Consultation on the Post COVID-19 Implications on Collaborative Governance of Genomics Research, Innovation, and Genetic Diversity (PC-GIG)
21. [Not another framework! ERA CoBioTech’s approach to responsible innovation](#). (June 2020). Blue-Bio Kick CoFund Virtual Workshop, Responsible Research and Innovation (RRI) in the Blue Bioeconomy: from ideology to implementation.
22. [Not another framework! Intervening with/in European Research Policy](#). (April 2019) CWTS Seminar Series, University of Leiden.
23. [Panellist, What Drives Societal Rejection and Embrace of Technology?](#) (June 2019). CRISPRcon, Wageningen.
24. [Intervening in European research policy: Lessons from an agenda for Responsible Research & Innovation in ERA-CoBioTech](#) (June 2018). Communication, Philosophy and Technology Seminar Series at Wageningen University, The Netherlands.
25. [Panellist: The ethical, legal and social issues of genome synthesis](#). (May 2018). GP-write annual conference, Harvard Medical School, Boston.
26. [The politics of value and the making of mega-chunks](#). Synthesis and the Organism Workshop, (November 2017). Chemical Heritage Foundation, Philadelphia.
27. [Panellist: The ethical, legal and social issues of genome synthesis](#). (May 2017). GP-write annual conference, Centre of Excellence for Engineering Biology, New York.
28. [Envisioning and enacting value in public biology](#). (January 2017). School for the Future of Innovation in Society Seminar Series, Arizona State University, Phoenix.
29. [Navigating uncertain futures with political biotechnologies; or, social and ethical dimensions of synthetic biology](#). (June 2016). UK iGEM meet-up, University of Westminster. (Keynote)
30. [Constructing Ethics in the Biosciences: The Case of \(Advanced\) Biofuels](#). (October 2013). ASFPG, Hamburg, Germany.
31. [Integrated assessments: Challenges posed by the example of biofuels](#). (September 2012). ASFPG, Hamburg, Germany.
32. [Exploring concepts of ethical and social engagement in the biosciences: UK experiences and tentative definitions](#). (October 2011). Post-Normal Science and its Ethical Aspects – Doctoral and Other projects in the Making, ASFPG, Hamburg, Germany.

### **Knowledge exchange, workshops and public events**

1. [Governing beyond the project: reimagining responsible innovation](#). 10 April 2024. Webinar to secretariat of US Senate National Security Commission on Emerging Biotechnology.
2. [Japanese and UK perspectives on the ethics of engineering life](#). March 2024. Invited Panellist for Public Event at British Embassy in Tokyo.
3. [A very quick introduction to reviewing responsible innovation](#). March 2024. Webinar given to applicants and evaluators of EC Materials ERA-NET programme. (w/ Ellen-Marie Forsberg).
4. [Creating spaces for responsible innovation in synthetic biology](#). September 2023. International Workshop Organised in collaboration with The Nuffield Council on Bioethics, London. (w/ Jane Calvert)

5. [Engineering Life sciences: do we need a paradigm change in bioethical reflection?](#), June 2023. Invited panellist at [Swiss Embassy Engineering Life Symposium](#), London.
6. [Critical Codes: Exploring codes of conduct as a mode of governing emerging technologies](#), November 2022. [Public Interest Technology Roundtable](#), Edinburgh (w/ Filippo Cuttica, Sophie Stone and Matjaz Vidmar).
7. [Should we create gene drive squirrels?](#) November 2022. Public screening and panel as part of ESRC Festival of Social Science, Exeter (w/ Sarah Hartley and Tom Law).
8. [Biology, biotechnology and public value: learning from ERA CoBioTech's approach to Responsible Research & Innovation](#), 4th, 11th and 18th February 2022. Workshops w/ Filippo Cuttica, Michael Bernstein and Filippo Cuttica as part of ERA CoBioTech funding programme.
9. [Unpacking responsible research and innovation and transformative innovation policy in multilateral research funding](#), 20th January 2022. Workshop w/ Filippo Cuttica, Cecilie Mathiesen and Ellen-Marie Forsberg as part of the Transformative Innovation Consortium Conference.
10. [Developing Responsible Research and Innovation Guidelines for Materials Science](#), 14th September 2021. Workshop w/ Filippo Cuttica, Cecilie Mathiesen and Ellen-Marie Forsberg as part of M.ERA-NET funding programme.
11. [A social science and humanities approach to gene drive mosquitos for malaria control](#). (2021) Joint Ugandan and U.K. workshops held in Kampala and Online. (w/Chris Olesen, Stella Neema, Sarah Hartley).
12. [2nd European Biotechnology Hub](#), 10-11th November 2020. Co-convened with Saxon State Ministry for Science, Culture and Tourism, Germany.
13. [Two experiments with responsible innovation and research funding organisations](#), 12th September 2019. Co-convened meeting with Research Council of Norway, Oslo.
14. [Host to Nuno Moreira, Fundação para a Ciência e Tecnologia](#), to develop shared practices for monitoring and evaluation of research funding programmes, 23-25th July 2019.
15. [ERA-NET for EuroNanoMedicine III Training Workshop: Responsible Research and Innovation](#). 29th June 2019. Slovakian Academy of Science, Bratislava.
16. [Unpacking Evidence and Value in Research Evaluation](#), Fundação para a Ciência e Tecnologia, Lisbon, 27th October 2018. Workshop w/Thoko Kamwendo and Marta Norton.
17. [Synthesising a human genome: what could go right?](#) Wellcome Trust, London, 17th September 2018. w/ Paul Freemont, Tom Ellis, Susan Rosser, Patrick Cai.
18. [Who's talking about non-human genome editing?](#) 31st July 2018. Genome Editing Public Engagement Synergy Workshop. Wellcome Collection, London.
19. [ERA CoBioTech's Agenda for Responsible Research and Innovation](#). 5th May 2018. L'Agence Nationale de la Recherche (ANR), Paris.
20. [Beyond responsible research and innovation: Science, technology and public value](#). 7-8th March 2018. Final International Workshop of the Flowers Consortium, London. w/Nikolas Rose.
21. [Developing a Strategic Agenda for ERA CoBioTech](#). Saxon Ministry for Knowledge and Culture, Dresden. w/Anja Berndt, BBSRC.
22. [The End of Synthetic Biology: What Futures?](#) December 2017. ERC Engineering Life International Conference. w/Jane Calvert, Emma Frow, Deborah Scott, Dominic Berry.
23. [Should we synthesise a human genome?](#) Invited panellist as part of the Oxfordshire Science Festival, University of Oxford, June 2017.
24. [Inverting Interventions with/in Science, Technology and Society: A World Café](#). w/ Michael Bernstein. 3rd Virtual Institute for Responsible Innovation Meeting, Phoenix, Arizona. 15th – 16th May 2017.
25. [Examining STS Engagements with Science, Technology and Society](#). International Workshop at Institute for Advanced Sustainability Studies, Potsdam. November 2016, w/ Stefan Schäfer and Michael Bernstein.
26. [Facilitator and organiser, Biotechnology and Biological Sciences Research Council \(BBSRC\) Bioenergy Stakeholder Workshop](#), University of York, July 2013
27. [Facilitator, Biotechnology and Biological Sciences Research Council \(BBSRC\) Bioenergy Dialogue Pilot event](#), Dana Centre, London, 24 January 2013
28. [Facilitator, BBSRC Bioenergy Dialogue Workshop](#), Derbyshire Nursery and Primary Headteachers Conference 2013, Swanwick, 14 March 2013.

## Selected conference talks

1. [Gene Drive for Malaria Control in Uganda](#) (2024) Film Screening at EASST/4S Joint Conference, Amsterdam, July 2024. w/Sarah Hartley.
2. [Haunted by dreams of a Tuscan castle, or conferences as sites of governance](#) (2024) EASST/4S Joint Conference, Amsterdam, July 2024. w/Jane Calvert.
3. [Unpacking the institutionalisation of 'research culture' reform in UK universities](#) (2024) EASST/4S Joint Conference, Amsterdam, July 2024. w/Rhodri Leng and Niki Vermeulen.
4. [Using a capabilities approach to explore the design space for responsible innovation policies](#) (June 2023). w/Cian O'Donovan, Michael Bernstein and Filippo Cuttica at EU-SPRI Annual Conference.
5. [Is it possible to create spaces for more-than-human science policy in synthetic biology?](#) (June 2023). w/Jane Calvert at 6th Nordic STS Conference.
6. [Local publics, global impacts: The challenges of public engagement in risk assessment for gene drive technology](#) (July 2022). w/Aleksandra Stelmach at European Association for the Study of Science and Technology.
7. [Choreographies of Scottish Seaweed](#) (July 2022). w/Niki Vermeulen at European Association for the Study of Science and Technology.
8. [Stakeholder views on grey squirrel population control by gene drive technology](#) (May 2022). w/Sarah Hartley. Talk at 9th International Conference on Wildlife Fertility Control.
9. [Histories of responsibility in Japan and the U.K.](#) (October 2021). Closed panel on Alternative Practices for Responsible Research and Innovation in Japan and the U.K., Society for the Social Studies of Science Annual Conference. (w/ Yuko Fujigaki, Steve Sturdy and Ryuma Shineha).
10. [Accommodating discomfort in international governance: Engineered gene drives at the United Nations Convention on Biological Diversity.](#) September and October 2021. UK Association for the Study of Innovation, Science and Technology Annual Conference and Society for the Social Studies of Science Annual Conference (w/ Sarah Hartley and Disha Trivedi).
11. [Proximity, hypocrisy and hegemony: STS in research policy.](#) (4th September 2019). Closed Panel: Reflections on Engineering Life, Society for the Social Studies of Science Annual Congress, New Orleans, Louisiana.
12. [How do you get a project off the ground? The politics of value in the making of mega-chunks.](#) (10th July 2019). Co-convened interdisciplinary session on biological engineering and the International Society for the History, Philosophy and Social Study of Biology Annual Conference, Oslo.
13. [RRI: Institutionalising STS intervention in emerging science and technology?](#) 19th March 2019. ESRC UK-Japan connections workshop, University of Edinburgh.
14. [Crossing Kingdoms, Disciplines and Continents: Plenary Panel.](#) Quite Frankly: It's a Monster! SymbioticA Triennale at University of Western Australia, Perth, 18-19th October 2018. (Co-convened w/ Jane Calvert, Oron Catts, Ionat Zurr, Susan Rosser, Elise Cachat, Erika Szymanski and Tarsh Bates)
15. [Institutionalising Intervention: STS in an Age of Impact.](#) 17th Annual Science and Democracy Network Meeting, Munich, Germany. (Co-author with/ Dr Stefan Schäfer and Dr Michael Bernstein).
16. [Groundwork for an ethics of promising.](#) The 5th Annual Conference on Governance of Emerging Technologies: Law, Policy and Ethics. Phoenix, Arizona, 17th – 19th May 2017.
17. [Integrating diverse knowledges into strategic research policy for gene-edited crops, and what it means for governing agricultural biotechnologies.](#) 2nd September 2016. 4S / EASST Conference, Barcelona.
18. [Mobilising Energy Demands, Enacting Supply: The Paradox of Renewable Fuels in UK Transport Policy.](#) 13-16th April 2016. What energy is for: the making and dynamics of demand. DEMAND Centre Conference 2016, Lancaster, UK.
19. [Why engage, with what? Engagement rationales and their consequences at the Biotechnology and Biological Sciences Research Council, 2003 – 2013.](#) 15-16th September 2015. Policy and Politics Conference 2015: Democracy, Inequality and Power: Redefining Classic Concepts for the 21st Century. Bristol, UK.
20. [Mapping and understanding responsible research and innovation.](#) Graz STS Conference: Critical issues in science, technology and society, Graz, Austria, 11-12th May. (Co-author with Ribeiro, B and Millar, K.)

21. [NGOs, values and the role of research in biofuel controversies](#). 29-30 October 2014. Altonaer Stiftung für philosophische Grundlagenforschung (ASFPG), Hamburg, Germany.
22. [How scientists working in biofuels construct ethics: Some concepts and \(coping\) strategies](#). 7th May 2014. University of Nottingham.
23. [Examining Responsible Innovation in the Biosciences](#). 22-23rd July 2013. Science in Public Conference, University of Nottingham, UK.
24. [Roles for reflection and responsibility in the biosciences: the case of advanced biofuels](#). Society for Nanoscience and Emerging Technologies (S.NET) annual conference, University of Twente, The Netherlands, 22-25th October 2012; Society for the Social Studies of Science (4S) and European Association for the Social Studies of Science joint meeting, Copenhagen Business School, Denmark, 17-20th October 2012.
25. [Examining the inclusion of ethics and social issues in bioscience research: Concepts of 'reflection' in science](#). 30 May – 2nd June 2012. European Society for Agricultural and Food Ethics (EurSafe) 10th Congress, University of Tübingen, Germany.
26. [Ethical reflection and the biosciences: Fumbling around in the dark?](#) Institute for Science and Society Postgraduate Symposium. 21st June 2011. University of Nottingham, UK.

### **Professional affiliations**

Member, European Association for the Study of Science and Technology (2011-)

Member, Society for Social Studies of Science (2011-)

Member, UK Association for Studies in Innovation, Science and Technology (2016-)

Member, International Society for the History, Philosophy and Social Studies of Biology (2019-)