

# Exploring the landscape of research on research

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# Our team

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(Sheffield)



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and many other members of the



team

# Guiding research questions

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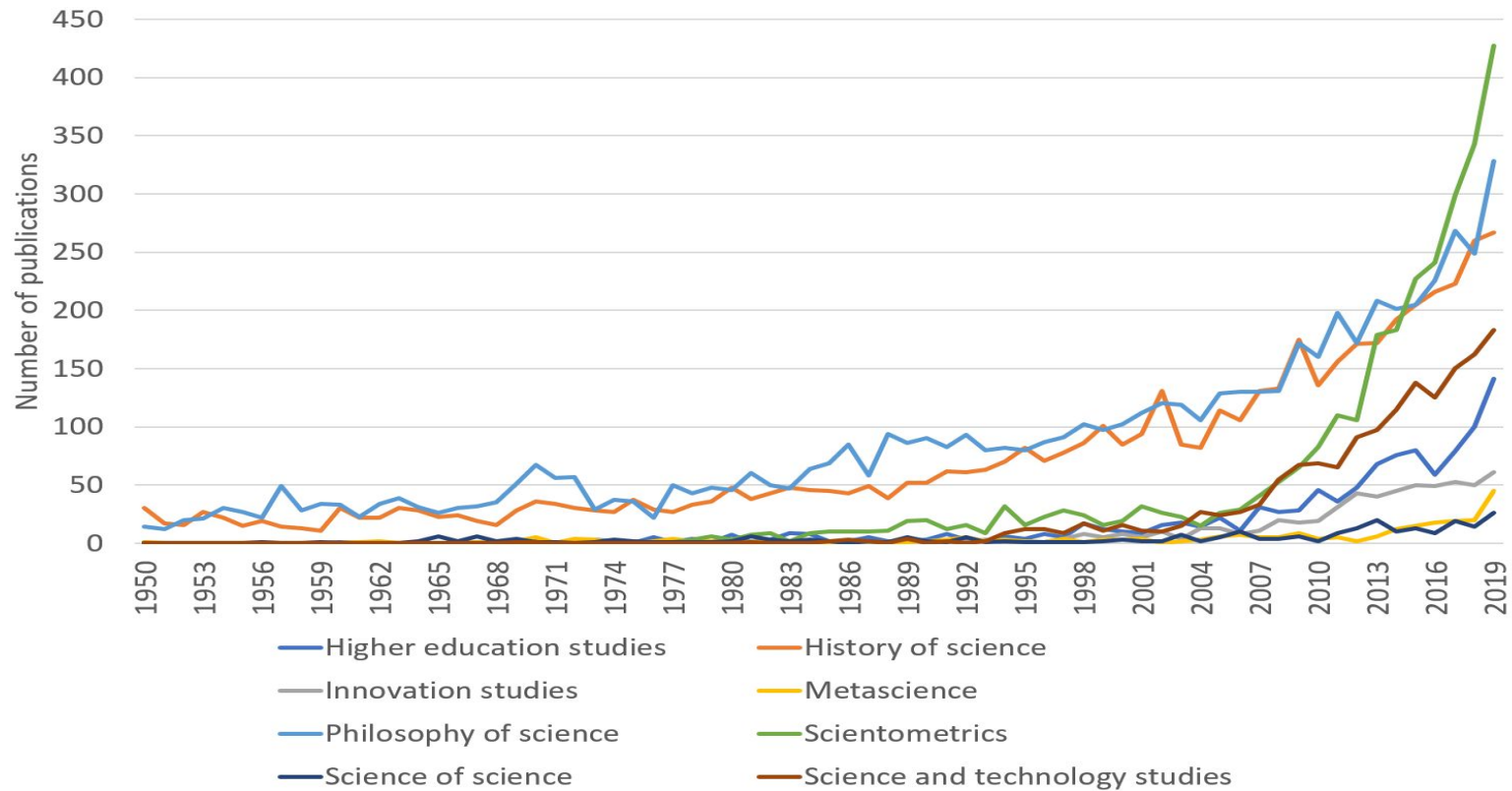
1. How does research on research (RoR) manifest itself in terms of communities and topics? Do the different communities and topics connect?
2. How is RoR translated into practice?
3. What are the origins of RoR and how has RoR expanded over time?
4. In what countries are RoR teams located? Do different countries focus on different RoR communities or RoR topics?

# Methodology / Methods

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- ❑ Scientometric study combined with document analysis and expert knowledge
- ❑ Data gathered by using an information science approach (specially designed queries) and expert knowledge and topic modelling.
- ❑ Queries on RoR communities (7) and RoR topics (13)
- ❑ Data collected from the Dimensions database: <https://www.dimensions.ai/>
  - ❑ contains over 100 million publications.
  - ❑ linked research data platform containing over 100 million publications such as: articles, policy documents, patents, grants etc.

RoR communities Seven queries	Search query Timespan=2010-2020 (Run 21st April 2020)
Metascience	“science on science” or “science of science” or “metaresearch” or "meta research" or “meta-research” or “metascience” or "meta science" or “meta-science”
Science and Technology Studies	“science and technology studies” or “science technology studies” or “science and evaluation studies”
History and Philosophy of Science	“philosophy of science” or “history of science”
Sociology of Science	“sociology of science” or “sociology of scientific knowledge” or "sociology of research"
Scientometrics	scientometrics
Higher Education Studies	(“higher education studies”) (("higher education") and ("policy research")) (("higher education") and ("policy studies"))
Innovation Studies	“innovation studies”



Number of publications in which the field is mentioned in the title or abstract

RoR Topics Thirteen queries	Search query Timespan=2010-2020 (Run 21st April 2020)
Governance of emerging technologies	(( “emerging technologies” or “emerging technology”) and (governance or policy))
Innovation management	(“Innovation policy” or “innovation policies” or “national innovation strategy” or “national innovation strategies”)
Equality issues in the research workforce	((intersectionality or diversity or equality or “equal opportunities” or inclusion)) and ((lecturer* or post-doc or postdoc or post-doctoral or postdoctoral or "early career researcher*" or professor* or "research workforce" or “scientific workforce” or “scholarly workforce” or “academic workforce”) )
Research funding	("research funding" or “science funding”)
Research careers	("academic career" or "academic profession" or "research career" or "research profession" or "scientific career" or "scientific profession" or “career in research” or “career in science” or “career in academia”)
Scholarly publishing	("scholarly communication" or "scientific communication" or "research communication" or “academic communication” or "scholarly publishing" or "scientific publishing" or "research publishing" or “academic publishing”)
Open Science	TI=("open access" or "open science" or “open scholarship” or "open peer review" )
Research quality	("research quality" or "scientific quality" or “academic quality” or “scholarly quality” or "research excellence" or " scientific excellence" or “academic excellence” or “scholarly excellence” or “scholarly performance” or “scientific performance” )
Research impact	( "research commerciali?ation" or "research impact" or "research translation" or “research into practice”)
Research culture	("research culture" or "academic culture" or "scientific culture" or "scholarly culture" or “epistemic culture” or "academic freedom")
Research integrity	(“research integrity” or “scientific integrity” or “scholarly integrity” or “academic integrity”)
Research ethics	TI=(“research ethics”)
R&D	TI=(“R&D”)

## **T1: Governance of emerging technologies**

Query: (“emerging technologies” OR “emerging technology”) AND (“governance” OR “policy”)

Interactive landscape: <https://bit.ly/3lipRRZ>

Overall Impression: Applied



## **T2: Innovation policy**

Query: “innovation policy” OR “national innovation strategy”

Interactive landscape: <https://bit.ly/33uoAkr>

Overall Impression: Framework

### **T3: Equality, diversity, and inclusion in the scientific workforce**

Query: (“intersectionality” OR “diversity” OR “equality” OR “equal opportunities” OR “inclusion”) AND (“lecturer” OR “post-doc” OR “postdoc” OR “post-doctoral” OR “postdoctoral” OR "early career researcher" OR “professor” OR "research workforce" OR “scientific workforce” OR “scholarly workforce” OR “academic workforce”)

Interactive landscape: <https://bit.ly/2GGI2BS>

Overall Impression: Distributed

## **T4: Research funding**

Query: "research funding" OR "science funding"

Interactive landscape: <https://bit.ly/2Sut3NL>

## **T5: Research careers**

Query: "academic career" OR "academic profession" OR "research career" OR "research profession" OR "scientific career" OR "scientific profession" OR “career in research” OR “career in science” OR “career in academia”

Interactive landscape: <https://bit.ly/2GGlxfe>

Overall Impression: Area of Study, Area of Implementation  
(medical pipeline), Area of reflection (History)

## **T6: Scholarly publishing**

Query: "scholarly communication" OR "scientific communication" OR "research communication" OR "academic communication" OR "scholarly publishing" OR "scientific publishing" OR "research publishing" OR "academic publishing"

Interactive landscape: <https://bit.ly/2SuohQC>

Overall Impression: Strong area of focus, which is then thinly distributed

## **T7: Open science**

Query: "open access" OR "open science" OR “open scholarship”  
OR "open peer review" [title only]

Interactive landscape: <https://bit.ly/3nd2pY5>

Overall Impression: Area of Study, and an area of distributed practice

## **T8: Research quality**

Query: "research quality" OR "scientific quality" OR "academic quality" OR "scholarly quality" OR "research excellence" OR "scientific excellence" OR "academic excellence" OR "scholarly excellence" OR "research performance" OR "scholarly performance" OR "scientific performance"

Interactive landscape: <https://bit.ly/36wYqj2>

## **T9: Research impact**

Query: "research commercialization" OR "research impact" OR  
"research translation" OR "research into practice"

Interactive landscape: <https://bit.ly/3ira3KI>



## **T10: Research culture**

Query: "research culture" OR "academic culture" OR "scientific culture" OR "scholarly culture" OR "epistemic culture" OR "academic freedom"

Interactive landscape: <https://bit.ly/2HPu9l8>

## **T11: Research integrity**

Query: “research integrity” OR “scientific integrity” OR  
“scholarly integrity” OR “academic integrity”

Interactive landscape: <https://bit.ly/3ixPxlc>

## **T12: Research ethics**

Query: “research ethics” [title only]

Interactive landscape: <https://bit.ly/2HZ2O03>

## **T13: R&D**

Query: “R&D” [title only]

Interactive landscape: <https://bit.ly/3nlmnzG>

# Topics: Research funding

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4000 publications in Dimensions in the period 2010–2020 mentioning ‘research funding’ in their title or abstract

Core topics identified based on a random sample of 50 publications:

1. Priority setting (usually focused on a particular field or country)
2. Funding allocation (e.g., grant schemes, lotteries, bibliometrics)
3. Governance (e.g., concentration of funding, transparency, crowdfunding)
4. Miscellaneous topics (e.g., public engagement, knowledge translation, commercialization, researcher careers, gender)

