

What is your professional role?



What is your research discipline/field of expertise?



What is interdisciplinary study/data?

whatever people make of it

future

Data and research with more than one facet

complex

studies which require multiple types of expertise

Data that can be used by researchers in multiple domains to different ends

Study/data that incorporates knowledge and techniques from multiple disciplines

Working with colleagues from other areas with other specialties

collaboration on new societal problem

What is interdisciplinary study/data?

Studies/data that are a collaborative effort of a number of different disciplines where all stakeholders have set the research agenda together

data from different scientific disciplines

Incorporate multiple data types and connect them to answer new questions

problem-solving

Studies/data that cross disciplinary boundaries, methodologies, approaches, theories, etc.

Study/data from more than one discipline. These days virtually all research is interdisciplinary.

Data relevant for more than one discipline

expanding boundaries

future usage of data

What is interdisciplinary study/data?

data created from nature with different techniques. Eg/ DNA vs. physical measurements vs. chemical parameters

Collaboration and data that are created in one context but applied in others, concurrently and in the future

working together to solve a common problem

mare atmosphere terra

combining data from multiple fields and finding common threads

It is a connected study from different disciplines with complete new focus

can be great joy and a hassle for the individual members

different type of environmental data coming from different domains and expertises

Integrating data from different targets

What is interdisciplinary study/data?

Collaboration with researchers from different backgrounds

Subdisciplines within a large discipline (biology, medicine) working together, or different disciplines working together (humanities and natural sciences), or fully interdisciplinary from the start.

research questions at the intersection of multiple disciplines

Do you have specific examples to share?

Lab on a chip - engineering with molecular biology

Archeology and GIS working together

Ecology/evolution projects

Bioethics is by nature a very interdisciplinary field

cultural heritage, bringing researchers from humanities, material, chemistry, data science, etc.

transfer of knowledge from about 2000 B.C. to 1750

Monarch Initiative - semantic technology and biology

Climate analysis combined to social aspects and feedback.

Meteorology and oceanography

Do you have specific examples to share?

use of a standard metadata format for data from multiple disciplines

Science and technology studies + data + animal breeding + robotics

Environmental health data

environmental risk assessment

connecting related biological and environmental data across data systems

computer vision engineering and bio-engineering

census data: public health, social sciences, etc.

biology + chemistry; biology + informatics

Yes, from the Arts to the Physical sciences, Bio and health, 30 years participating or coordinating projects in all fields

Do you have specific examples to share?

microbial DNA data with physical and chemistry measurements

environmental stressors affecting humans in addition to environment

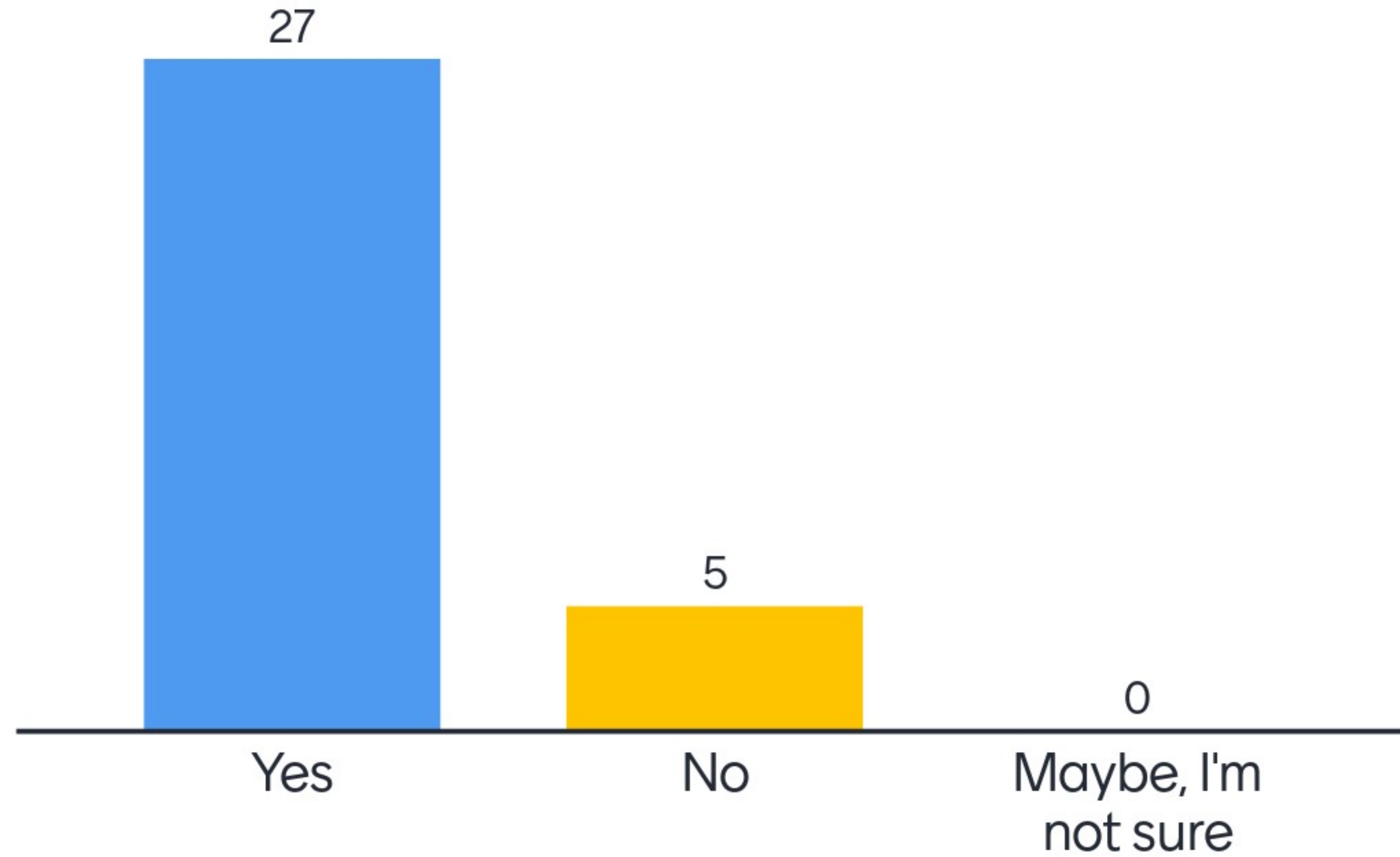
Manchester Digital Collections

Agricultural and computing

My own thesis was interdisciplinary - info studies, digital humanities, anthropology, social science, computer science.

Semantics of Agriculture data

Do you create/handle/advise on disciplinary study/data?



What is the added value of interdisciplinary study/data?

It naturally includes multiple perspectives and methodologies.

a) creating new collaborations and b) creating new research directions

Perspective / tools / analytical methods / communication methods and venues

novel perspectives

Some problems cannot be understood through a single discipline. Disciplines change and evolve.

New perspectives

often where the big advances happen

get a glimpse beyond own (small?) research bubble

potential for novel investigations to be identified

What is the added value of interdisciplinary study/data?

bringing new development, beyond the boundaries of a single scientific point of view

The most exciting discoveries come from here

multiple perspectives on the matter, correlation between multiple variables in nature

Better understanding of topic, new perspective

gain in knowledge

expanding the reach of tools & practices

Additional perspectives

New perspectives

share techniques so that we don't reinvent the wheel for each data type

What is the added value of interdisciplinary study/data?

Some problems as e.g. climate change influence can only be studied with interdisciplinary data

wide view of the problem

Interdisciplinary research can ensure that all facets of an issue are being addressed: ethics, preservation, historical perspective, computational approaches, critical approaches...

In the environmental health sciences, it is essential. It connects measurement in the field to lab work, to policy formulation, etc.

Learn from practices of multiple disciplines

Mutual understanding of both approaches

What are the challenges of interdisciplinary study/data?

find out intersections

speaking the same language

lack of a common 'language'

data management is tough within a single discipline, even harder to manage between groups

Lack of understanding about context in which data was gathered

Different disciplinary traditions of data management

coordination

Standards

getting people to understand each other (even in the same team), and then accomodating data to all, throughout the data cycle

What are the challenges of interdisciplinary study/data?

People think they talk about the same topic / subject, but in fact they don't

Agreement on approaches, methodologies, and theories.

Cultural approaches - methods of communication / expectations of privacy / publication venues

Researchers with very different opinions on data management or even data.

Good enough documentation to say that the phenomena being described are understood in different disciplinary contexts.

lack of common terminology

time to understand languages of each other

creating an encompassing framework : simple but 'complete'

Lack of common language

What are the challenges of interdisciplinary study/data?

faculty custodianship

publishing, acknowledgement of developing paths over academic constraints

Communication, research culture, data management across disciplines

different standards, data formats, terminologies

lack of standards and repositories - different data cultures - lack of shared mental model

lack of common terminology

Dealing with small teams of researchers with widely divergent skills based on the disciplines they work in. How to train, support, etc.

Coordinating across existing practices to develop new and efficient practices

Do you know of any RDM communities that are involved in interdisciplinary study/data?

No

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multiomics

no

some, rather limited, project based teams f
researchers

None that are on purpose.

HMC (helmholtz metadata collaboration)

No. I think it is to different bubbles

AIMOS looks at meta research

Do you know of any RDM communities that are involved in interdisciplinary study/data?

Our institution is setting up an interdisciplinary collaboration space.

Some of the metadata schema developers, e.g. schema.org

model organism databases

INSPIRE

Agriculture IG

There is a collaboration between the Genomics Standards Consortium (GSC) and TDWG for biological data

There are funders who are starting to work on this, such as NIH in the U.S.

I'd guess communities related to subdisciplines within a discipline (-omics)

Work in the intersection of human society and the environment

Do you know of any RDM communities that are involved in interdisciplinary study/data?

Data from Photon and Neutron Sciences