

Interdisciplinary Science Rankings

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DATA COLLECTION PORTAL

Interdisciplinary Science Rankings (ISR)

January to March 2024 data collection

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1. INTRODUCTION

Welcome to the Times Higher Education (THE) Interdisciplinary Science Rankings (ISR) guide. This guide explains the key aspects of the ISR data collection process.

Launched in partnership with [Schmidt Science Fellows](#), the Interdisciplinary Science Ranking will provide the sector with data to measure and benchmark achievement in scientific research that crosses disciplinary boundaries by acknowledging and rewarding universities leading on interdisciplinary science.

Universities will be able to use insights from the rankings to assess and develop their own approach to interdisciplinary science to facilitate a culture change in global science and drive high-impact research.

Interdisciplinary research is where an individual scientist or team has deep knowledge of two or more disciplines, including research practices, broad technical skills, and discipline-specific language, and then has the ability to bring together features of those disciplines to tackle a single research question.

THE is currently exploring metrics which will help achieve a better understanding of the factors that lead to interdisciplinary research success. These metrics are underpinned by data, and we will be starting to collect datapoints related to interdisciplinary research. We will use these metrics to inform debate and expect to make the results publicly available.

The portal will open in January 2024, under the World University Rankings data collection.

We will be collecting data this year for the year ending in 2022.

Please note that ISR questions are not mandatory and will not feed into the World University Rankings. They are distinct from the new methodology underpinning the World University Rankings. However, to participate in ISR, you must participate in the World University Rankings as well.

If you do not wish to provide information on interdisciplinary research this will not impact on your inclusion in the World University Rankings.

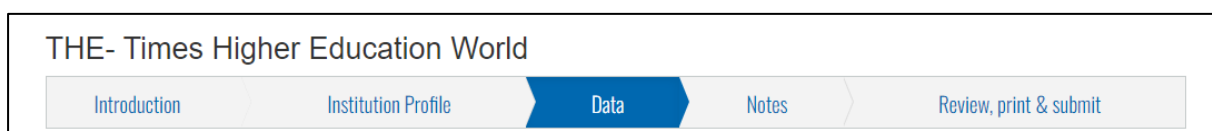
We are asking for your help in collecting:

- Research income allocated to interdisciplinary research amongst science disciplines
- Number of job adverts that explicitly mention or are relevant to interdisciplinary research amongst science disciplines
- Does your university provide measures of interdisciplinary research success amongst science disciplines?
- Does your university provide specific physical facilities for interdisciplinary research teams amongst science disciplines?
- Does your university provide specific administrative support for interdisciplinary research teams amongst science disciplines?
- Does your university have a promotion system in place that recognizes interdisciplinary research amongst science disciplines?

Science disciplines are defined according to our THE 11 subjects as: Physical Sciences, Life Sciences, Engineering, and Computer Science. Only interdisciplinary research done within the confines of these four subjects should be included.

2. DATA SUBMISSION

Submission will be made from the same data collection portal as for the World University Rankings 2024. Tab “Data”, ISR will be the last field in tab ‘data’



Overall – This section is mandatory for all universities to complete
Arts and Humanities
Clinical and Health
Engineering
Computer Science
Life Sciences
Physical Sciences
Social Sciences
Business and Economics
Psychology
Law
Education
Interdisciplinary Science Rankings

3. DEFINITIONS

Please find the definition of each data field below:

DATA FIELD	DEFINITION	CATEGORY NOTES
Research income allocated to interdisciplinary research amongst science disciplines [NUMERIC] - <i>Interdisciplinary Research</i>	<p>The income your institution has received this year specifically for interdisciplinary research purposes amongst science disciplines (in the currency specifically identified by that of your institution)</p> <p>Please provide monetary data in whole numbers ie</p>	<ul style="list-style-type: none"> • To be provided in the currency previously identified as that used by your institution • This may be the result of short-term contracts or longer-term research units. • This is externally sponsored research, and it will NOT include: general funding for your institution, income that is generated by your institution (e.g., donations, awards won, investments or

	<p>17654 with no punctuation or thousand separators. Decimal places are also not permitted.</p>	<p>commercialisation) or teaching income.</p> <ul style="list-style-type: none"> • This is the gross income. • Information contained in the OECD's Frascati Manual may help you defining what is considered as 'research'. • This is the income only allocated to interdisciplinary research amongst science disciplines. For instance, it may be a grant funding that spans across two or more research council remit domains. There may be a lead council, but it should span at least two or more research council remit domains. • This is a subset of "research income" in WUR. • Science disciplines are defined according to our THE 11 subjects as: Physical Sciences, Life Sciences, Engineering, and Computer Science. Only interdisciplinary research done within the confines of these subjects should be included.
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<p>Does your university provide measures of interdisciplinary research success amongst science disciplines? – [EVIDENCE] <i>Interdisciplinary Research</i></p>	<p>Please select 'yes' if you offer measures of interdisciplinary research success amongst science disciplines and enter one URL that will act as evidence of your claim. Please add any comments that may be relevant</p>	<ul style="list-style-type: none"> • If you have several URL, please include only the evidence you consider the most relevant • Science disciplines are defined according to our THE 11 subjects as: Physical Sciences, Life Sciences, Engineering, and Computer Science. Only interdisciplinary research done within the confines of these subjects should be included.
<p>Number of job adverts that explicitly mention or are relevant to interdisciplinary research amongst science disciplines [NUMERIC] - <i>Interdisciplinary Research</i></p>	<p>The number of job adverts that explicitly mention or are relevant to interdisciplinary research amongst science disciplines, posted this year</p>	<ul style="list-style-type: none"> • Interdisciplinary research is defined as “integrating information, data, techniques, tools, perspectives, concepts or theories from two or more disciplines or bodies of specialized knowledge. It can be done by teams or by individuals.” • Job advert tags should mention ‘interdisciplinary research’ or any of the characteristics defined above. • Science disciplines are defined according to our THE 11 subjects as: Physical Sciences, Life Sciences, Engineering, and Computer Science. Only interdisciplinary research done

		within the confines of these subjects should be included.
<p>Does your university provide specific physical facilities for interdisciplinary research teams amongst science disciplines? – [EVIDENCE]</p> <p><i>Interdisciplinary Research</i></p>	<p>Please select 'yes' if you provide specific physical facilities for interdisciplinary research teams amongst science disciplines and enter one URL that will act as evidence of your claim. Please add any comments that may be relevant</p>	<ul style="list-style-type: none"> • The physical facilities can be dedicated spaces for interdisciplinary research. They should not be used for any other purposes. • If you have several URL, please include only the evidence you consider the most relevant • Science disciplines are defined according to our THE 11 subjects as: Physical Sciences, Life Sciences, Engineering, and Computer Science. Only interdisciplinary research done within the confines of these subjects should be included.
<p>Does your university provide specific administrative support for interdisciplinary research teams amongst science disciplines? - [EVIDENCE]</p> <p><i>Interdisciplinary Research</i></p>	<p>Please select 'yes' if you provide specific administrative support for interdisciplinary research teams amongst science disciplines and enter one URL that will act as evidence of your claim. Please add any comments that may be relevant</p>	<ul style="list-style-type: none"> • Specific administrative support can be a project manager supporting interdisciplinary research projects. • If you have several URL, please include only the evidence you consider the most relevant • Science disciplines are defined according to our THE 11 subjects as: Physical Sciences, Life Sciences, Engineering, and Computer Science. Only interdisciplinary research done

		within the confines of these subjects should be included.
<p>Does your university have a promotion system in place that recognizes interdisciplinary research amongst science disciplines? - [EVIDENCE]</p> <p><i>Interdisciplinary Research</i></p>	<p>Please select 'yes' if you have a promotion system in place that recognizes interdisciplinary research amongst science disciplines and enter one URL that will act as evidence of your claim. Please add any comments that may be relevant</p>	<ul style="list-style-type: none"> • Promotion system specifically dedicated to reward interdisciplinary research • If you have several URL, please include only the evidence you consider the most relevant • Science disciplines are defined according to our THE 11 subjects as: Physical Sciences, Life Sciences, Engineering, and Computer Science. Only interdisciplinary research done within the confines of these subjects should be included.

4. FREQUENTLY ASKED QUESTIONS

4.1 GENERAL DEFINITIONS

1. What is the definition of interdisciplinary research?

The definition that we are using is where an individual scientist or team has deep knowledge of two or more disciplines, including research practices, broad technical skills, and discipline-specific language, and then has the ability to bring together features of those disciplines to tackle a single research question. The idea is that single discipline research would typically look at a problem from within a single perspective, usually bound within the expectations and norms of that subject.

Multidisciplinary research might look at the same problem from more than one perspective, but true interdisciplinary research requires these perspectives to be integrated, either by a single researcher or a team.

We are trying to understand the extent to which universities are deliberately and explicitly creating the environments and opportunities for this kind of interdisciplinary research.

2. What is considered as interdisciplinary research amongst science disciplines?

This year, we only request information about interdisciplinary research amongst science disciplines. Science disciplines are defined according to the [THE 11 subjects mapping guide](#): Physical Sciences, Life Sciences, Engineering, and Computer Science. Only interdisciplinary research done within the confines of these four subjects should be included. See example:

Discipline 1	Subject 1	Discipline 2	Subject level	IDR Science
Astrophysics	Physical Sciences	-	-	No
Astrophysics	Physical Sciences	History	Arts and Humanities	No
Astrophysics	Physical Sciences	Chemistry	Physical Sciences	Yes
Astrophysics	Physical Sciences	Materials Science	Engineering	Yes

- 3. Almost all research projects contain interdisciplinary elements. How can we distinguish interdisciplinary research from mono-disciplinary research, as we believe there are interdisciplinary traits in every project?**

We are not looking for projects that may, coincidentally, contain some traces of interdisciplinary research. We are only looking for projects that are significantly interdisciplinary in nature and by design.

- 4. Do collaborations with other institutions count as interdisciplinary? Or does it have to be within the same institution?**

For the Portal data we are focusing on the activities that you are undertaking to foster interdisciplinary research within your own university. However, collaborative interdisciplinary research will be recognised in our bibliometrics.

- 5. Can we conclude that interdisciplinary research includes any researchers or research teams/groups/centres who have come across and made use of knowledge from two or more disciplines to tackle a single research question?**

We are looking at research that is explicitly interdisciplinary from the start. A research program that was only tangentially interdisciplinary - for example the research is primarily within a single domain, but a few elements are taken from another during the research process - would not count. The involvement of a second disciplinary area needs to be intentional, and significant for this to count.

4.2 PORTAL DATA

- 6. Can universities submit interdisciplinary research data alone, without submitting data for WUR?**

Universities will be required to complete the WUR overall section as well as 1 subject in order to participate in the Interdisciplinary Science Ranking. However, it is possible for institutions to select 'unavailable' or 'withheld' on non-mandatory fields for WUR 'overall' section and a

subject, and then complete only applicable fields within the interdisciplinary section. Nevertheless, we would encourage institutions to submit to both, as even if an institution provides interdisciplinary data it does not mean they will be included in the final interdisciplinary research ranking.

Finally, it is worth noting that the interdisciplinary research data that we are requesting, will NOT feed into the World University Rankings.

7. Which interdisciplinary data fields are mandatory?

None of the data fields is mandatory for submission. However, if universities want to be included in the Interdisciplinary Science Rankings, then they should try to complete the interdisciplinary section of the portal submission as fully as possible.

8. Which year should data be collected from?

The data submitted should be from 2022.

9. My institution submitted data for 2022 however I cannot see it in the portal

If you submitted data for ISR 2022, please note that you will not see it in this year's data collection portal as we will not display year to year data.

10. For questions that require evidence URLs, do these links/webpages need to be in English?

No, you can submit the URL/link/webpage in any language.

11. Can we enter PDFs instead of URLs?

No PDFs allowed, only URLs (enter a string of text in the field).

12. If we have more than two ISR projects, can we enter one URL per project?

The Portal is designed to only accommodate one URL per data field. We do recommend that if you have several URLs, please include only the evidence you consider the most relevant.

13. I need more help on how to use the portal in general

For general information about the use of the portal, please refer to the World University Rankings portal guide, available in the data collection portal.

4.3 RESEARCH INCOME QUERIES

14. 'Research Income allocated to interdisciplinary research amongst science disciplines' - is this the same as 'Total Research income' in WUR?

'Research income allocated to interdisciplinary research amongst science disciplines' is not the same as 'Research income' in WUR, it is a subset of 'Research income'. Additional definitions include:

The income your institution has received this year specifically for interdisciplinary research amongst science disciplines purposes (in the currency specifically identified by that of your institution). For instance, it may be a grant funding that spans across two or more research council remit domains. There may be a lead council, but it should span at least two or more research council remit domains.

15. Can you explain or provide some examples on research councils and research council remits?

The term 'research council' is a UK-specific example and is only meant as an indicator of one way that interdisciplinary research can be identified. A more general case would be where there are different funding bodies for different disciplines (however those might be named) - in that case it would be clear that a piece of research that was co-funded between funding bodies was interdisciplinary. However, this may not be the only way that interdisciplinary research is funded.

There could be funding that is tied to a specific research project, or the funding could be more generally allocated to a team (so on an ongoing basis).

16. Can we include the research income received from collaborative interdisciplinary projects that were undertaken in other institutions?

No, we are focusing on the activities that you are undertaking to foster interdisciplinary research within your own university. So please do not include research income from collaborative projects with other institutions.

17. When entering WUR data, can we decide/choose which subject category to include interdisciplinary income in (as they are cross-over subject research) as long as we don't duplicate the data?

Since this is by definition interdisciplinary research it's likely to span many subjects. As such, you can split the income received across the relevant subjects or choose to include in one subject that is most appropriate for the research.

18. Can the income data we submit for the interdisciplinary research income fields duplicate the income data which we submit for each WUR subject category?

Interdisciplinary research amongst science disciplines income is a subset of research income overall, and part of the interdisciplinary research income can be a part of research income in the subject category.

4.4 JOB ADVERTS QUERIES

19. We don't explicitly require interdisciplinary relevance; however, the research staff's milestones and published work may be considered interdisciplinary research. So is it the total number of research job postings?

The goal here is to understand how many of your job postings explicitly look for people to fill roles that are interdisciplinary.

20. Does "posted this year" mean the year 2022? (same as all other fields?)

Yes, this is for the reference year (in most cases the year ending in 2022.)

21. Can we count multiple times for one project advert if we posted it multiple times in one year?

No, if the exact same advert was posted multiple times, then it should only count as one.

4.5 ADMINISTRATIVE SUPPORT QUERIES

22. Can you define administrative support in more detail? What kind of other support are you expecting? (Other than project manager supporting?)

We have heard from academics that interdisciplinary research can often mean interacting with multiple departments and therefore increased administration overheads. We are trying to determine if universities are able to provide additional support to account for this. This could also include support in grant applications, access to appropriate facilities - we are trying to be open about this.

4.6 MEASURES OF SUCCESS QUERIES

23. Can you define 'measures of success' in the context of interdisciplinary research?

The University values all of *THE's* metrics, and nearly all of them have been discussed in the evaluation of a research project to provide a scope for whether it is successful.

Here we are looking to see if universities have their own measures of success that directly explore interdisciplinary success amongst science disciplines. These could be (for example) around successful project funding bids that involve interdisciplinary teams.

4.7 PHYSICAL FACILITIES QUERIES

24. Does your university provide specific physical facilities for interdisciplinary research teams?': What kind of information or data or evidence is THE expecting for this question? Any other research facilities or do we need to provide a list of equipment as evidence?

Facilities could be on or off campus. Facilities don't have to be on their main campus, as long as they are used by the university (for example they may rent laboratory space elsewhere). Evidence could be a website describing the facilities, for example.

4.8 PROMOTION SYSTEM QUERIES

25. "Promotion system specifically dedicated to reward interdisciplinary research":

Does it mean that candidates can get benefits when they have participated in interdisciplinary research?

Yes, benefits in a way, but basically here we're trying to see if there are incentives in the workplace that reward interdisciplinary research. Another comment we have had back from academics – and this is especially common in tenure track countries such as the USA – is that the need to chase tenure typically pushes academics into single discipline research. We are looking to see how many universities take active steps to avoid this in their promotion and tenure decisions. Examples of evidence can include Human Resources policies mentioning these benefits.

4.9 SURVEY DATA

26. What format does the survey take?

The survey targets experienced, published scholars who offer their views on excellence in interdisciplinary research. We ask researchers' view in their own research and their opinion on their institutions' interdisciplinary research. We kindly request you to distribute this survey across your staff who would be relevant to interdisciplinary research. The survey typically should not take more than 10 minutes to complete and is available in twelve languages.

27. Can academics fill in multiple surveys?

No, each academic is expected to fill in the survey only once.

28. Can the survey be forwarded to my colleagues?

Yes, the survey can be forwarded to colleagues.

29. When does the survey take place?

The ISR Survey will open in February 2024. Kindly request your staff to participate in this survey.

30. What is required from universities?

We would greatly appreciate your support in distributing the survey across your university research staff. Emails will be sent from surveys@timeshighereducation.com and surveys@timeshighereducationemail.com

31. What about GDPR?

We have worked with our Data Protection Officer to ensure that all personal data is compliant with GDPR. We have conducted a Data Privacy Impact Assessment, and our legal basis for processing is based upon Legitimate Interest; we have successfully conducted a Legitimate Interest Assessment (LIA). Our privacy notice includes information to reflect this. You can find our full privacy policy here: <https://www.timeshighereducation.com/privacy-policy?webSyncID=6f96fc2a-a106-48a6-88b1-0e6a6868adc0&sessionGUID=7588dc4b-98a0-4ee7-b03e-aff59f0fa029>

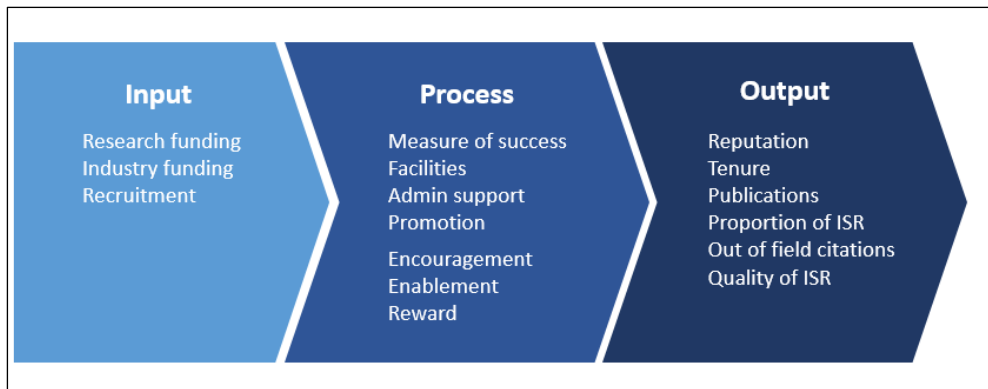
4.10 BIBLIOMETRICS DATA

32. Where do you source your bibliometric data?

The bibliometric data is sourced a third-party data supplier. Each publication is tagged with a set of subjects and relevance scores. Based on this information our data scientists calculate an ISR score for each publication. A publication is considered ISR if its ISR score is in the top 25% percentile of all eligible publications.

33. Is there a methodology for ISR?

The ISR rankings will be built on three pillars



A detailed methodology is being developed and it will be released after the ranking publication in 2024.

34. I still need more help – what do I do?

Guidelines and documentation are built into the collection tool pages. You can also consult definitions by hovering your cursor over the data fields. Should you have any further questions, please contact the data collection team by email at interdisciplinary@timeshighereducation.com or speak to a member of the team on +44 (0)20 3963 4700 during UK office hours.