Pedro Principe

University of Minho (OpenAIRE support and training manager)

OpenAIRE Monitoring Services

EC FP7 & H2020 and other national funders



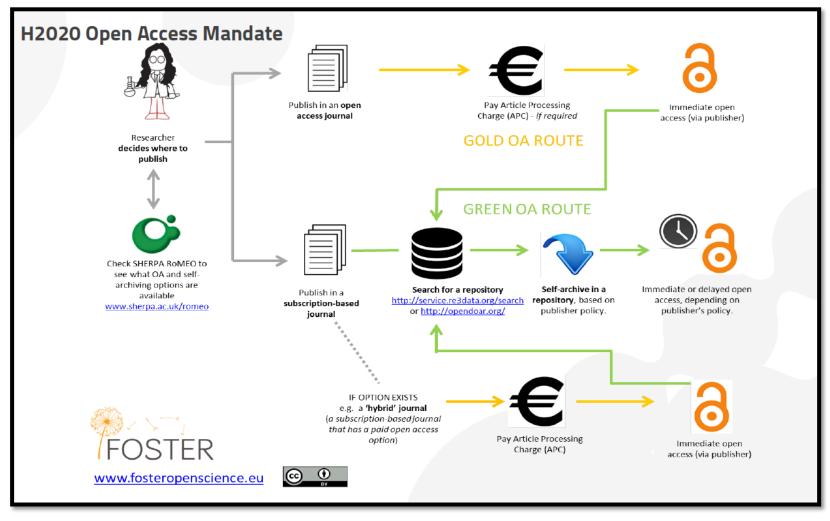


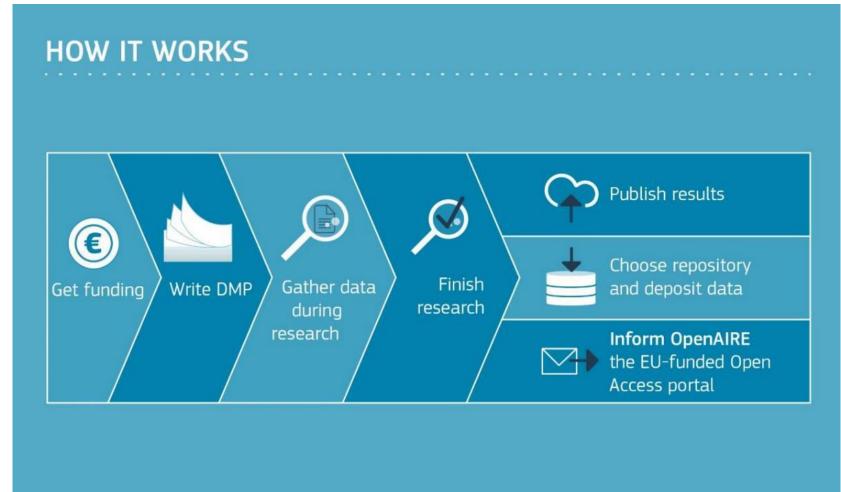






Open Access & Open Research Data in H2020









Deposit once!

- Locate an appropriated repository via OpenAIRE.
 - If no repository is available: use Zenodo (OpenAIRE/CERN repository).
- Acknowledge project funding in the publication or dataset metadata record.
 - Use a fully OpenAIRE compatible repository.
 If don't... use the OpenAIRE linking services
 afterwards and associate your research
 results (Link/Claim publication or datasets to
 projects).
 - But we don't stop there! We apply cleaning, transformation, disambiguation processes, and identify relationships among all research

entities: publications, data, funding...

 All publications accessible via OpenAIRE and linked to a project will be displayed automatically in the reporting section of the EC Participant Portal for the project.

We did it!









Automatically





EC's participant portal (reporting)



Infrastructure to support the policy compliance

OpenAIRE services and tools for projects:

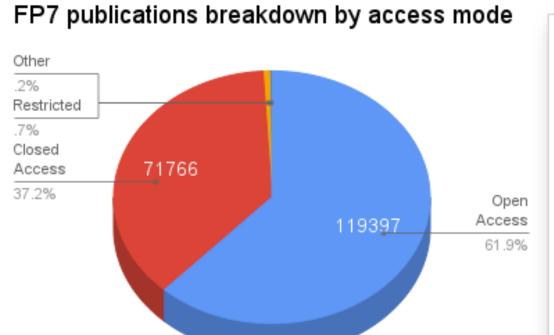
- ✓ Open Access Depositing
- ✓ Storing Research Data
- ✓ Claiming publications and datasets
- ✓ Reporting research outputs
- ✓ Monitoring and analytics
- ✓ Discovery and Access

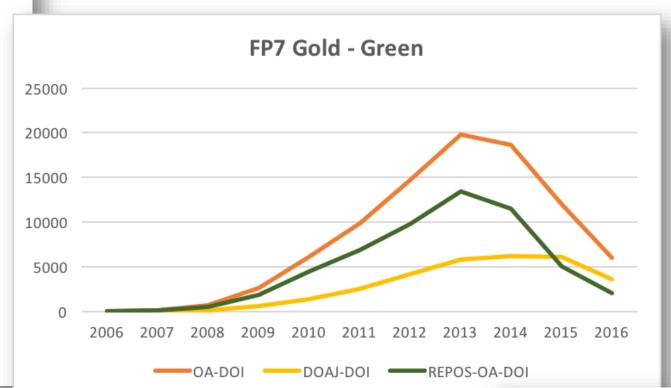






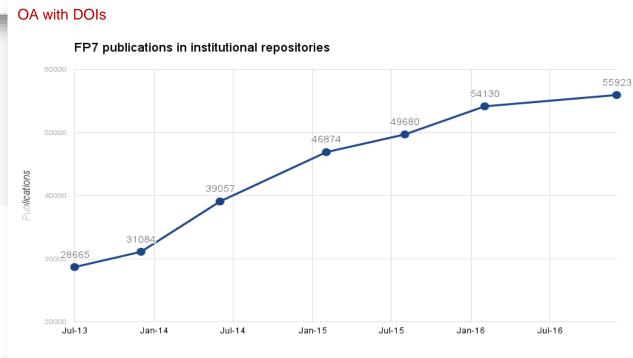
OpenAIRE monitoring for EC



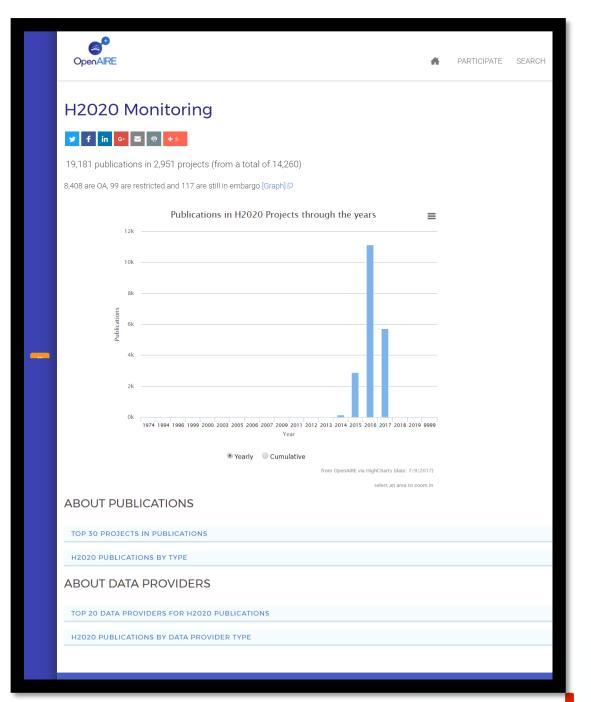








EC projects and funding streams pages and stats



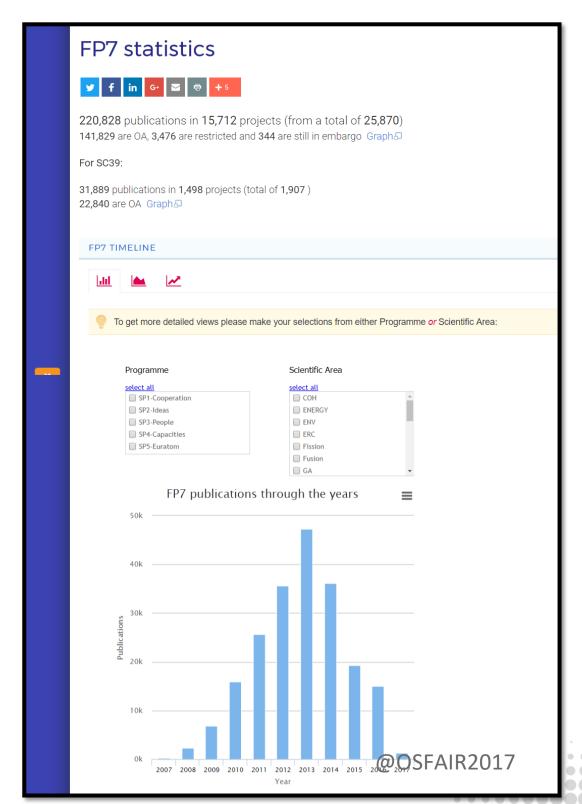






PenAIRE and others

and others



Funders related activities in OpenAIRE



Align and support OA policies



APIs with projects list for repository software



Sync infrastructures and Support national e-infrastructures



Text mining and inference



Guidelines for metadata funding info



Statistics and reporting



Monitor mandate compliance



Analytics and trends





OpenAIRE can offer funders:

- A unique view of the scientific outputs that derive from their funding.
- OpenAIRE enables advanced monitoring (including of compliance with Open Access policies), reporting and analysis of research impact and research trends.
- Funders can assess the impact of their funding by viewing advanced statistics on research outputs (publications and data-sets) and the funding programme/stream/project from which they derive (including co-funded research results and research trends).





Agreement between OpenAIRE & Funders

Agreement for Data Exchange between OpenAIRE and researchfunding organization [FULL ORGANIZATION NAME], in the following referred to as [ORGANIZATION]

OpenAIRE is the European Union initiative for an Open Access Infrastructure for Research in Europe (currently funded by EU-Horizon2020 Grant ID 643410 "OpenAIRE 2020") that aims to establish an open and sustainable scholarly communication infrastructure responsible for the overall management, analysis, manipulation, provision, monitoring and cross-linking of all research outcomes (publications, related datasets, software and services) across existing, planned and future participating data

OpenAIRE supports the Open Access and Open Science policies of funders like the European Commission by aggregating information from a range of data providers (including research funders, publication repositories, data repositories, Open Access publishers, CRISs) in order to link projects, authors, institutions, funding information, publications, data-sets and other resourch output types. From these links, OpenAIRE's information space can be queried to provide value-added services for funders, researchers and repositories.

Inferred information is then used to enrich the original metadata record of the publication and made publicly available via the OpenAIRE portal [https://www.openaire.eu/].

OpenAIRE processes all data according to its Data Management Plan.

With this information, OpenAIRE can offer funders a unique view of the scientific outputs that derive from their funding. OpenAIRE enables advanced monitoring (including of compliance with Open Access policies), reporting and analysis of research impact and research trends. Funders can assess the impact of their funding by viewing advanced statistics on research outputs (publications and datasets) and the funding programme/stream/project from which they derive (including co-funded research

OpenAIRE requires only a very limited set of metadata fields from funders. No personal or private details are required. The mandatory and optional data fields are:

- PROJECT IDENTIFIER (MANDATORY)
- PROJECT TITLE or ACRONYM (MANDATORY)
- FUNDER NAME (MANDATORY) e.g. Welcome Trust, EC
- START DATE (MANDATORY). END DATE (MANDATORY)
- FUNDING STREAM(S) (OPTIONAL) funding categories for more detailed statistics
 PARTICIPANT ORGANIZATION(S) (OPTIONAL) i.e., project partners

Main features OpenAIRE can provide to funding organisations

Using the OpenAIRE portal, funders can:

- · filter publications/data by funder and browse by specific funding streams
- search via project title, acronym or grant agreement and view specific statistics of the project: publications/data over time. OA status, where they were published/deposited, etc.
- view overall funder/funding stream statistics (facets over time, data source, institution, etc.)
- correlate author/institution output with funding information
- . visualize clusters of publications/data or funding based on their interlinking (national or ERA-

Example use-cases include "show levels of open access compliance", "link research outputs to grants", "show cross-discipline relationships", "aggregate by funding scheme/discipline", "show other recommended/similar publications", and "show all research outputs for a project/person/funding

- . This agreement enters into force as of the date of signature of the parties.
- [ORGANIZATION] allows OpenAIRE to use [ORGANIZATION]'s data regarding projects for the stated objectives of OpenAIRE.
- [ORGANIZATION] will deliver the data in [csv/tsw***] format at intervals of no more than [***] months OR [ORGANIZATION] will make the data available via application program interface

[ORGANIZATION]'s representations and warranties

 [ORGANIZATION] represents and warrants that the use of the metadata does not infringe third-party rights. [ORGANIZATION] shall indemnify and hold OpenAIRE and users of OpenAIRE harmless from any third-party claims resulting from the use of the content.

Licensing the enriched metadata

- · As mentioned above, OpenAIRE will enrich the metadata, add new information and links to it
- · This enriched metadata that OpenAIRE has created will be published and licensed under Creative Commons BY or Creative Commons ZERO standard form, current version or any future higher version of such standard forms.
- . Funders, along with all others, will then be able to access and re-use this data via the OpenAIRE Portal [https://www.openaire.eu/] and direct machine to machine application programming interface (API) [http://api.openaire.eu/].

The agreement will terminate when OpenAIRE or [ORGANIZATION] gives notice of termination to the other Party (including end of project or service), in which case a minimum notice of three months will be given. In this case OpenAIRE will destroy all copies made of [ORGANIZATION]'s data.

Signatures
We the undersigned hereby agree to abide by the above terms and conditions on behalf of [ORGANIZATION] and OpenAIRE:

URL: https://www.openaire.eu/
Authorised Person:
Email:
Date:
Signature:





Data description

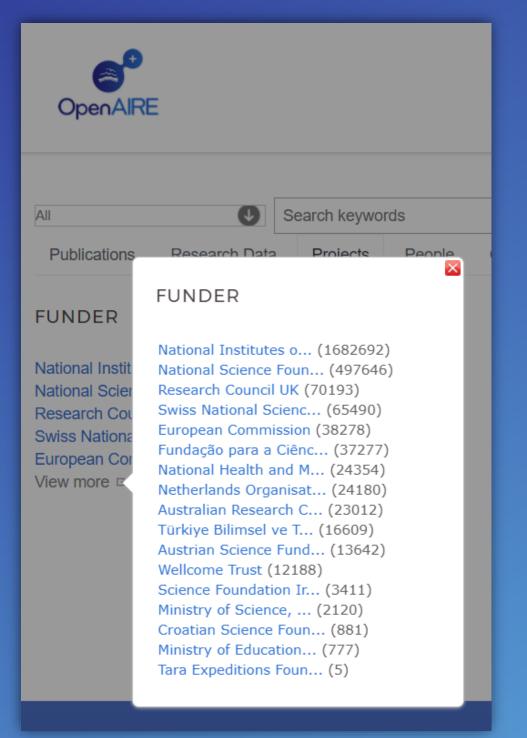
OpenAIRE requires only a very limited set of metadata fields from funders. No personal or private details are required. The mandatory and optional data fields are:

- PROJECT IDENTIFIER (MANDATORY)
- PROJECT TITLE or ACRONYM (MANDATORY)
- FUNDER NAME (MANDATORY) e.g. Wellcome Trust, EC
- START DATE (MANDATORY),
- END DATE (MANDATORY)
- FUNDING STREAM(S) (OPTIONAL) funding categories for more detailed statistics
- PARTICIPANT ORGANIZATION(S) (OPTIONAL) i.e., project partners

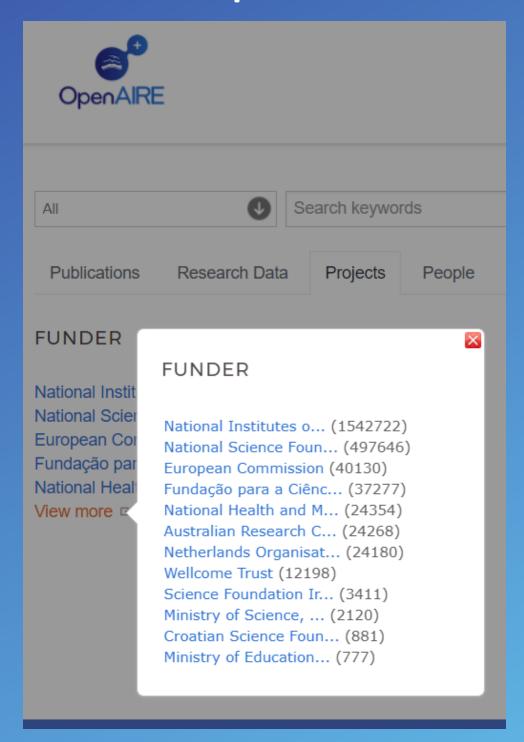




BETA



www.openaire.eu







Funders Integration status:

Funder	Country	Status
European Commission (FP7 & H2020)	EU	Production
Portuguese Foundation for Science and Technology (FCT)	Portugal	Production
Wellcome trust (WT)	UK	Production
National Science Foundation (NSF)	US	Production
National Health and Medical Research Council (NHMRC)	Australia	Production
Australian Research Council (ARC)	Australia	Production
Ministry of Education, Science and Technological Development (MESTD)	Serbia	Production
Ministry of Science Education and Sport (MZOS/MSES)	Croatia	Production
Croatia Science Foundation (HRZZ/CSF)	Croatia	Production
Netherlands Organisation for Scientific Research (NWO)	Nederlands	Production
Science Foundation Ireland (SFI)	Ireland	Production
National Institute of Health (NIH)	US	Production
Swiss National Science Foundation (SNSF)	Switzerland	BETA
Austrian Science Fund (FWF)	Austria	BETA
Research Council UK (RCUK)	UK	BETA
Tara Expedition Foundation (TARA)	France	BETA
Scientific and Technological Research Council of Turkey (Tubitak)	Turkey	Pilot
Academy of Finland	Finland	Pilot
CONICYT	Chile	Pilot
Ministry of Economy, Industry and Competitiveness	Spain	Pilot
German Research Foundation (DFG)	Germany	Pilot

Funder integration in OpenAIRE: simplified workflow



- 1. Obtain list of projects
- 2. Data analysis for integration and inference module
 - 3. Integration on DB
- 4. IIS module integration

5. Inference6. Data provision on beta

7. Quality check
Results available on the
OpenAIRE portal





Results from national EU funders

NWO - Netherlands Organisation for Scientific Research

Updated on 18 May 2017



11,926 publications in 3,661 projects (total of 24,180 projects)

11,368 are OA, 9 are restricted and 0 are still in embargo.

FCT - Fundação para a Ciência e a Tecnologia

Updated on 08 May 2017













27,230 publications in 11,566 projects (total of 37,277 projects)

25,239 are OA, 895 are restricted and 82 are still in embargo Graph ₽





SFI - Science Foundation Ireland

Updated on 25 July 2017

2,209 publications in 597 projects (total of 3,411 projects)

1,955 are OA, 2 are restricted and 0 are still in embargo Graph

MESTD - Ministry of Education, Science Republic of Serbia

Updated on 24 July 2017

9,527 publications in 745 projects (total of 777 projects)

9,335 are OA, 0 are restricted and 0 are still in embargo Graph₽

MZOS - Ministry of Science, Education (MSES)

Updated on 25 July 2017

824 publications in 312 projects (total of 2,120 projects)

750 are OA, 0 are restricted and 0 are still in embargo Graph 5

Funded projects info in OpenAIRE



Collect metadata including project grantID from OpenAIRE compliant repositories



Metadata publications record enrichments by OpenAIRE deduplication



Link Publications to projects by **inference** (text mining procedures)



Link Publications to projects using the end-user service: claim publications





Enriched Document Example



□ Comparative transcriptomic analysis of Gardnerella vaginalis biofilms vs. planktonic cultures using RNA-seq



Castro, Joana; França, Angela; Bradwell, Katie R.; Serrano, Myrna G.; Jefferson, K. K.; Cerca, Nuno (2017)

Publisher: Nature Publishing Group

Languages: English

Types: Article

Subjects: Pathogens, Biofilms, Next-generation sequencing

Identifiers: 3 doi:10.1038/s41522-017-0012-7

Bacterial vaginosis is the most common gynecological disorder affecting women of reproductive age. Bacterial vaginosis is frequently associated with the development of a Gardnerella vaginalis biofilm. Recent data indicates that G. vaginalis biofilms are more tolerant to antibiotics and are able to incorporate other bacterial vaginosis -associated species, yielding a multi-species biofilm. However, despite its apparent role in bacterial vaginosis, little is known regarding the molecular determinants involved in biofilm formation by G. vaginalis. To gain insight into the role of G. vaginalis in the pathogenesis of bacterial vaginosis, we carried out comparative transcriptomic analysis between planktonic and biofilm phenotypes, using RNA-sequencing. Significant differences were found in the expression levels of 815 genes. A detailed analysis of the results obtained was performed based on direct and functional gene interactions. Similar to other bacterial species, expression of genes involved in antimicrobial resistance were elevated in biofilm cells. In addition, our data indicate that G. vaginalis biofilms assume a characteristic response to stress and starvation conditions. The abundance of transcripts encoding proteins involved in glucose and carbon metabolism was reduced in biofilms. Surprisingly, transcript levels of vaginolysin were reduced in biofilms relative to planktonic cultures. Overall, our data revealed that gene-regulated processes in G. vaginalis biofilms resulted in a protected form of bacterial growth, characterized by low metabolic activity. This phenotype may contribute towards the chronic and recurrent nature of bacterial vaginosis. This suggests that G. vaginalis is capable of drastically adjusting its phenotype through an extensive change of gene expression This work was presented at Biofilms7 meeting (26-28 June 2016, Porto, Portugal) and was awarded the Biofilms7—SPM Young Researcher Award. N.C. is an Investigador FCT. This work was funded by Fundação para a Ciência e a Tecnologia (FCT) by the strategic project of UID/BIO/04469/2013 unit and the project RECI/BBB-EBI/0179/2012 (FCOMP-01-0124-FEDER-027462), and by the National Institutes of Health; P60 MD002256 "VCU NIMHD Comprehensive Center of Excellence". The funders had no role in study design, data collection and analysis, decision to publish, or preparation of the manuscript. The following authors had an individual FCT fellowship: J.C. (SFRH/BD/93963/2013) and A.F. (SFRH/BPD/99961/2014).

LINK TO PROJECT

LINK TO RESEARCH DATA

OpenAIRE References (50)

Related Research Data (1)

Similar Publications (0)



DOWNLOAD FROM

Nature Publishing Group

IUM 8

FUNDED BY PROJECTS

FCT | RECI/BBB-EBI/0179/2012 (i)

FCT | UID/BIO/04469/2013 (i)

NIH | COMMUNITY ENGAGEMENT AND OU... (i)

CITE THIS ARTICLE

BibTeX

@article{Castro, Joana_França, Angela_Bradwell, Katie R._Serrano, Myrna G._Jefferson, K. K._Cerca, Nuno_2017, title={Comparative transcriptomic analysis of Gardnerella vaginalis biofilms vs. planktonic cultures using RNA-seq}, publisher={Nature Publishing Group}, author={Castro, Joana and França, Angela and Bradwell, Katie R. and Serrano, Myrna G. and Jefferson, K. K. and Cerca, Nuno}, year= {2017}, month={Jan}}

COLLECTED FROM

Universidade do Minho: RepositoriUM

Multiple
Instances host
the same
document (which
is de-duplicated)

Funding Info either from metadata or by text mining

Features OpenAIRE can provide to funders

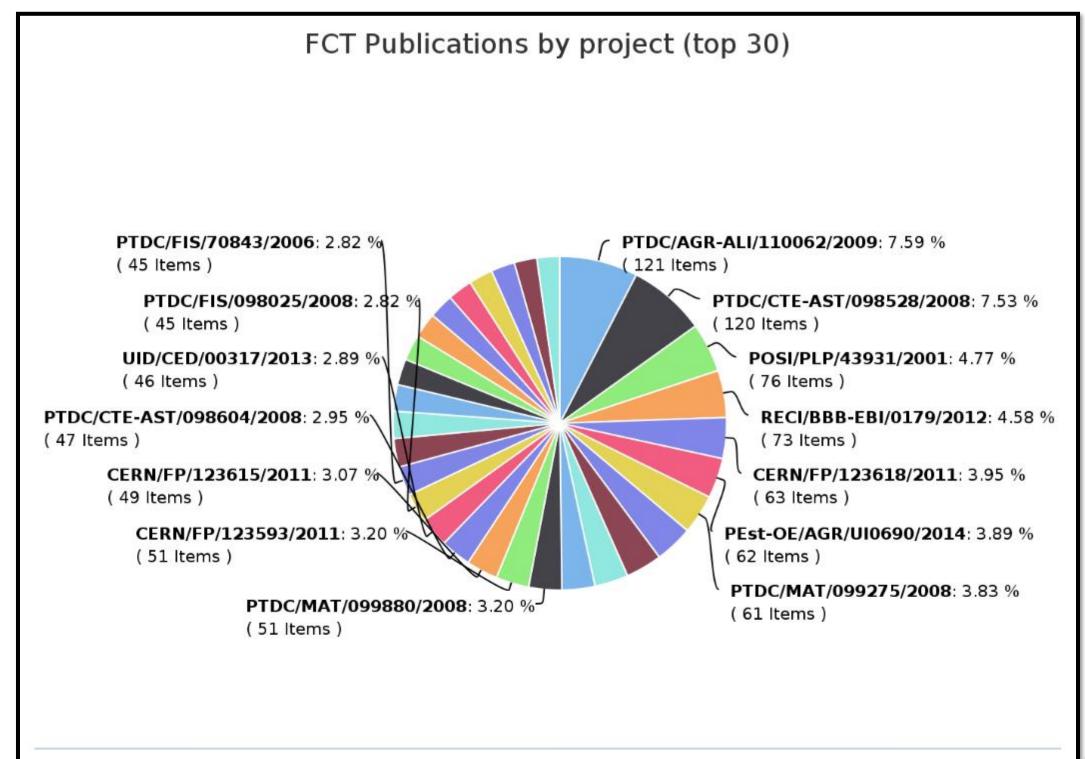
Using the OpenAIRE portal, funder can:

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- view overall funder/funding stream statistics (facets over time, data source, institution, etc.)
- correlate author/institution output with funding information
- visualize clusters of publications/data or funding based on their interlinking (national or ERAwide level).





Monitor and reporting: statistics service, portal info







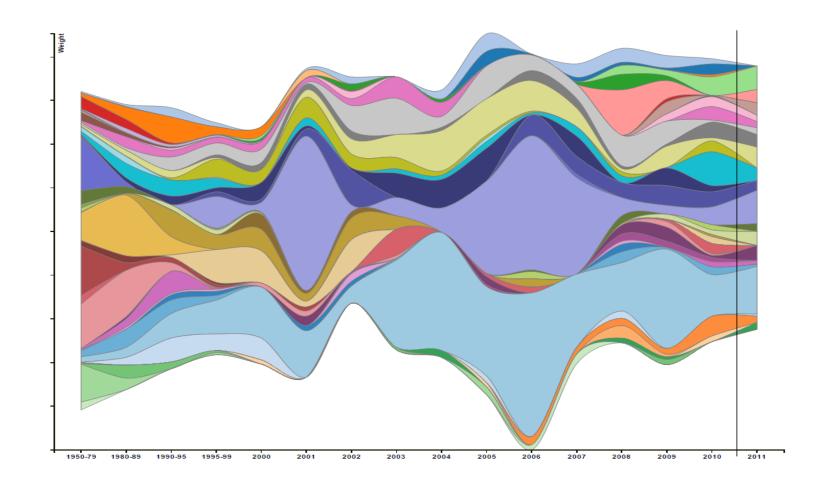
Research monitoring and analytics

Links to software

• 1,290 software links in the References section and 2,985 links in the full text.

Topic modeling

- Trends in research
- Hidden relationships
- Basic version to be in beta



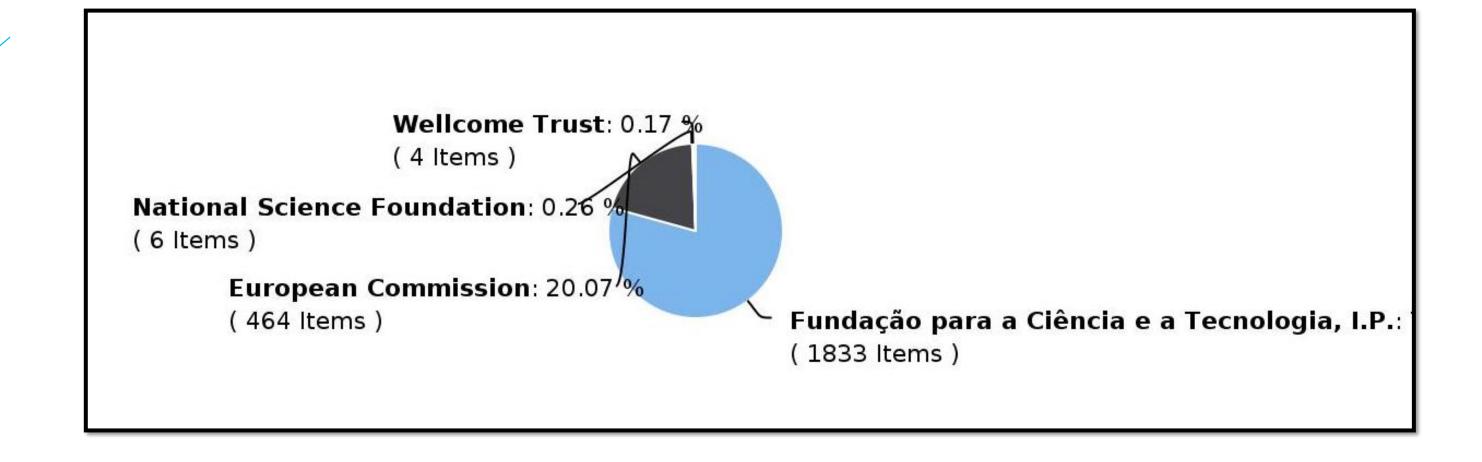






Data provider stats:

Funders in data provider publications





Co-funded publications



Assessing connectivity in coastal systems as a tool for fish management and conservation

SHARE - BOOKMARK



reference

rancisco M.; Baynam,

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cognition error analysis,













□ Universidade de Lisboa: Repositório.UL

9

Santos, Patrick Reis, 1979- (2013)

Languages: English

Types: Doctoral thesis

Subjects: Aquacultura, Viveiros, Estuários, Teses de doutoramento (co-tutela) - 2013, Otólitos

Connectivity is a critical component of m under

Estua

Funding

Go to: ▼

SHARE - BOOKMARK









DOWNLOAD FROM

□ Oxford University Press

FUNDED BY PROJECTS

WT | Wellcome Trust Sanger Instit... (i)

FCT | PTDC/EIA-EIA/119119/2010 (i)

ARC | A framework for building dy... (i)

EC | PHENOMINER (i)

T.G. gratefully acknowledges the support by the Australian Research Council Discovery Early Career Researcher Award (ARC DECRA DE120100508). N.C. gratefully acknowledges the support of the Marie Curie (PI: Phenominer, grant number 301806). A.O. and D.S. kindly acknowledge the support by the Wellcome Trust grant (098051) and National Institutes of Health grant (NIH) (1 U54 HG006370-01). F.M.C. gratefully acknowledges the support by the Portuguese FCT through the LASIGE Strategic Project (PEst-OE/EEI/UI0408/2014) and SOMER project (PTDC/EIA-EIA/119119/2010). G.B. acknowledges the RD-Connect FP7 grant (EU: 205444 RD-Connect), the corresponding NHMRC-EU grant (NHMRC: APP1055319) and the Raine Clinician Research Fellowship (201401). P.N.R. acknowledges the supported by the Bundesministerium für Bildung und Forschung (BMBF 0313911). Funding for open charge: Australian Research Council - Discovery Early Career Researcher Award (DE120100508).

> incorporating 32 different types of test cases corresponding to 2164 HPO concepts. Finally, three established phenotype concept recognizers (NCBO Annotator, OBO Annotator and Bio-LarK CR) were comprehensively evaluated, and results are reported against both the text corpus and the test suites. The gold standard and test suites corpora are available from http://bio-lark.org/hpo_res.html.



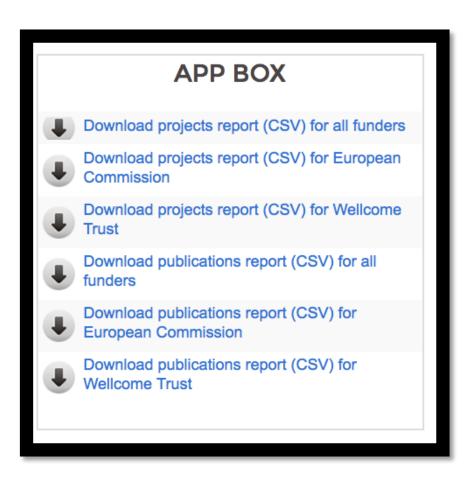


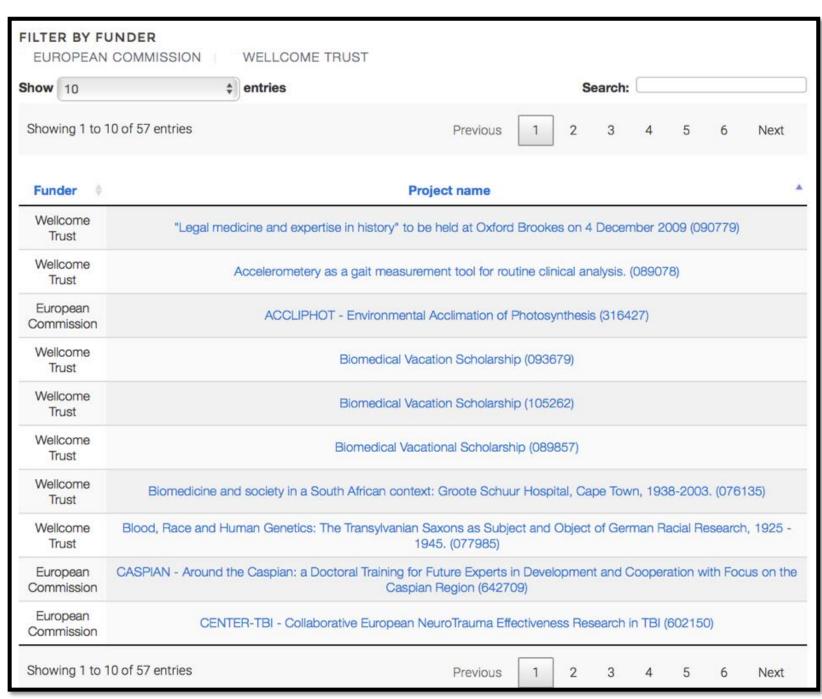




OpenAIRE Organization Page:

Better funding and project information access (page and app box)









Search filters:

Better funding and project information access

SEARCH FILTERS

[X] Funder: European Commission (EC)

REFINE BY

Also funded by

NSF (3166)

Wellcome Trust (WT) (1479)

Fundação para a ... (1246)

Australian Resear... (483)

SFI (381)

View more →

Funding Stream

EC | FP7 (164156) EC | H2020 (50)

Project

HIPEAC (1039)

UNILHC (926)

ELISA (687)

HADRONPHYSICS2 (616)

ENGAGE (493)

View more ➡

164202 documents, page 1 of 16421

1 2 3 4 5 >

Activity clocks: spreading dynamics on temporal networks of human contact

Laetitia Gauvin; André Panisson; Ciro Cattuto; Alain Barrat (2013) Projects: EC | MULTIPLEX (317532)

Dynamical processes on time-varying complex networks are key to understanding and modeling a broad variety of processes in socio-technical systems. Here we focus on empirical temporal networks of human proximity and we aim at understanding the factors that, in simulation, shape the arrival time distribution of simple spreading processes. Abandoning the notion of wall-clock time in favour of node-specific clocks based on activity exposes robust statistical patterns in the arr...

nd design principles of low hole effective mass p-type transparent des

Miglio, Anna; Ceder, Gerbrand; Rignanese, Gian-Marco; Gonze, Xavier (2013) ORTCOS (321988)

The development of high-performance transparent conducting oxides is critical to many technologies from transparent electronics to solar cells. Whereas n-type transparent conducting oxides are present in many devices, their p-type counterparts are not largely commercialized, as they exhibit much lower carrier mobilities due to the large hole effective masses of most oxides. Here we conduct a high-throughput computational search on thousands of binary and ternary oxides and identify several hi...

Mixed volume and distance geometry techniques for counting Euclidean embeddings of rigid graphs

Emiris, Ioannis Z.; Tsigaridas, Elias; Varvitsiotis, Antonios (2012) Projects: EC | SAGA (214584) Search

Publications, data, projects, ...

all

publications

research data

projects

people

organizations

data providers

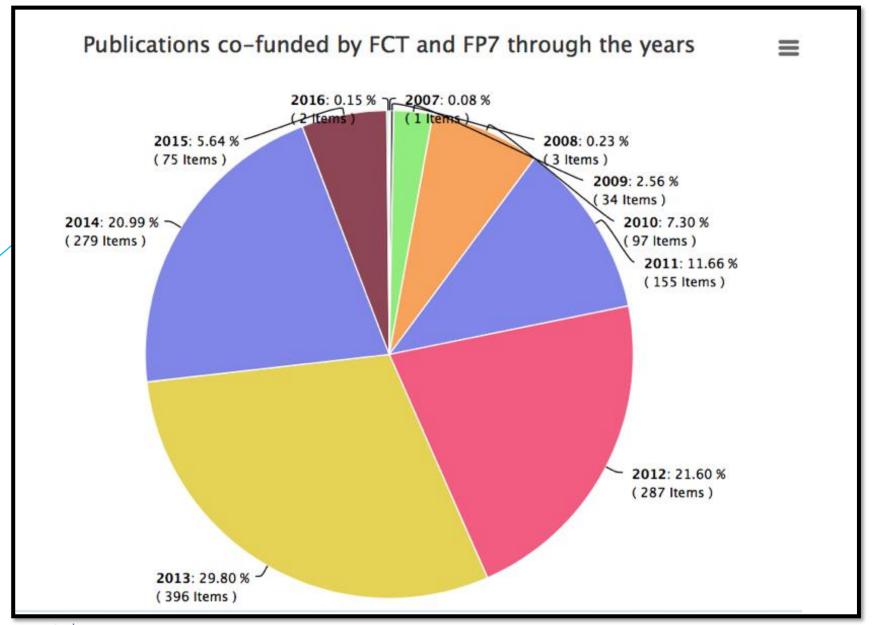
Data Providers

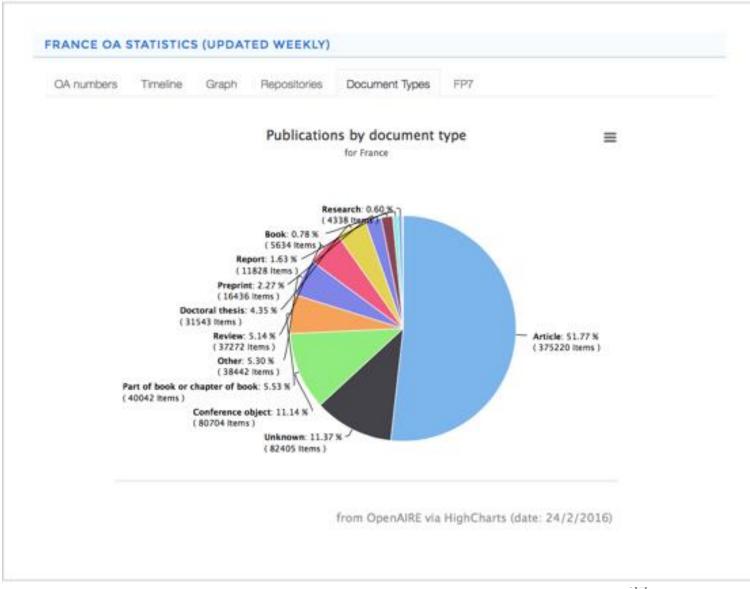
General information



Funder Statistics

More options: co-funded...







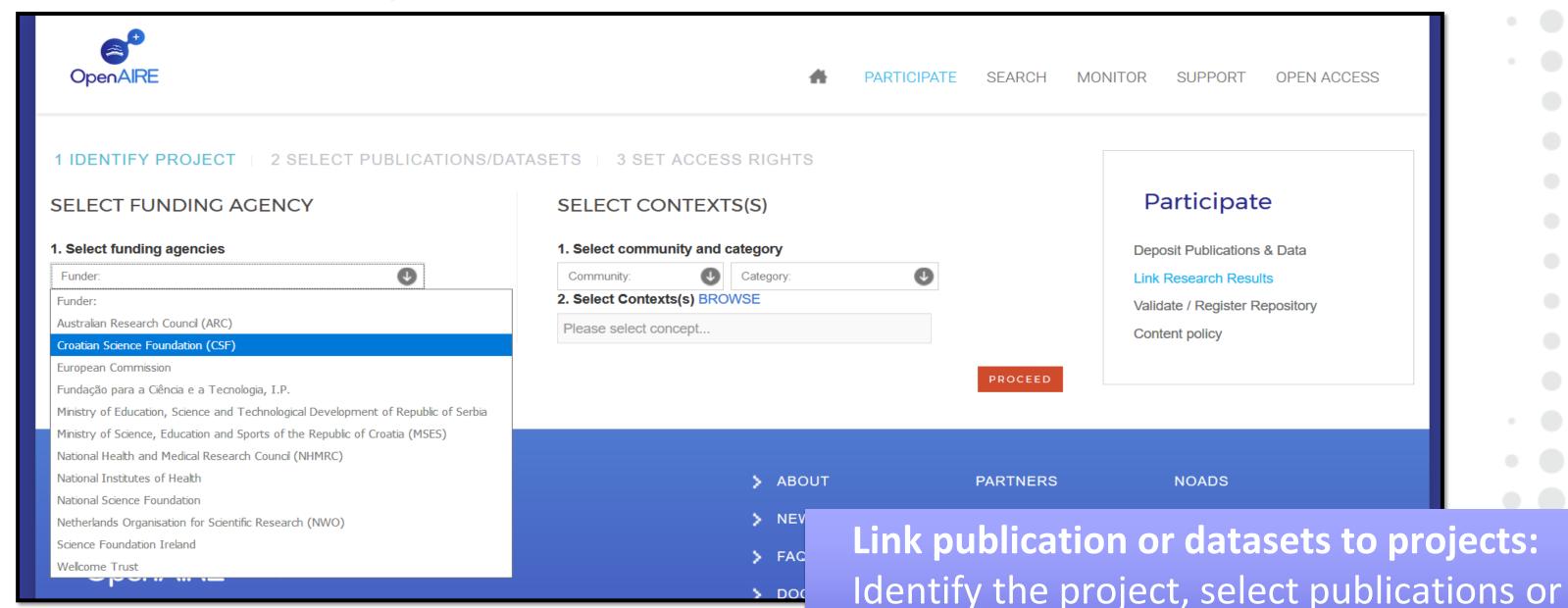






Link research results portal facilities (1/4)

'Claim' functionality available for all national funders



datasets and set the access rights.





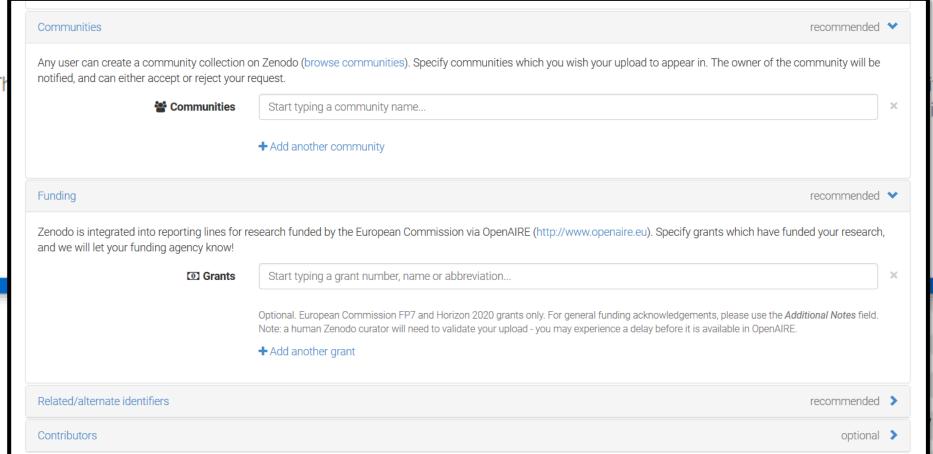
Zenodo – extended grant support (2/4)



Upcoming Features

Extended grant support

We are extending our grants database with 600,000 more grants from funders such as National Science Foundation (US), Wellcome Trust (UK), Fundação para a Ciência e a Tecnologia (Portugal) and the Australian Research Council - all thanks to OpenAIRE's ever growing grants database.







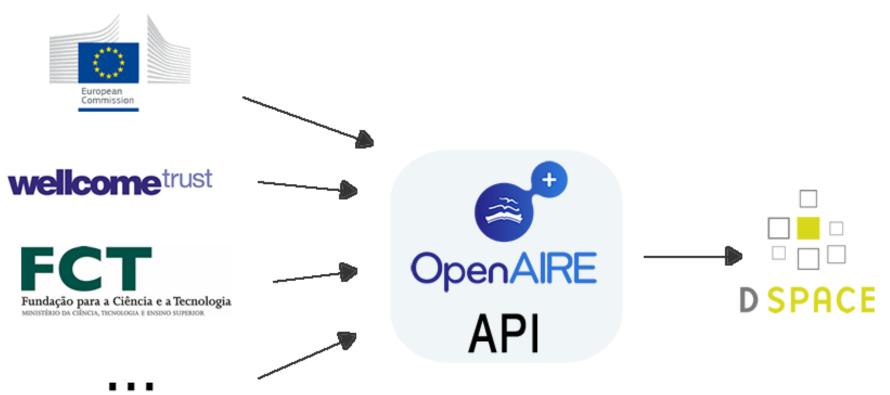
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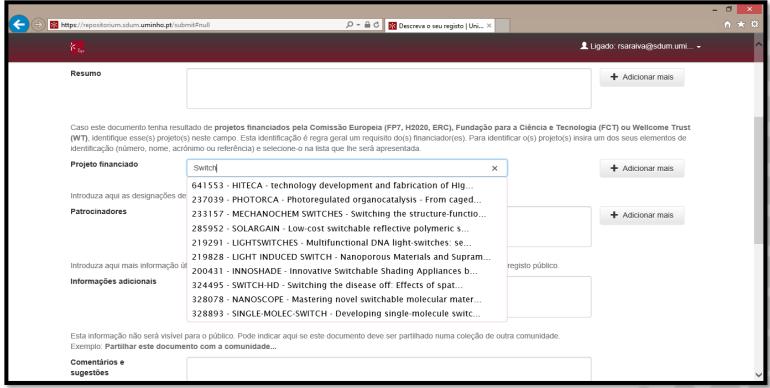
30

OpenAIRE API (3/4)

The APIs offer custom access to metadata about projects funded by all funders integrated in the OpenAIRE info space (Dspace, Eprints, other repository platforms).

(E.g. Funders Projects List Dspace Add-on)



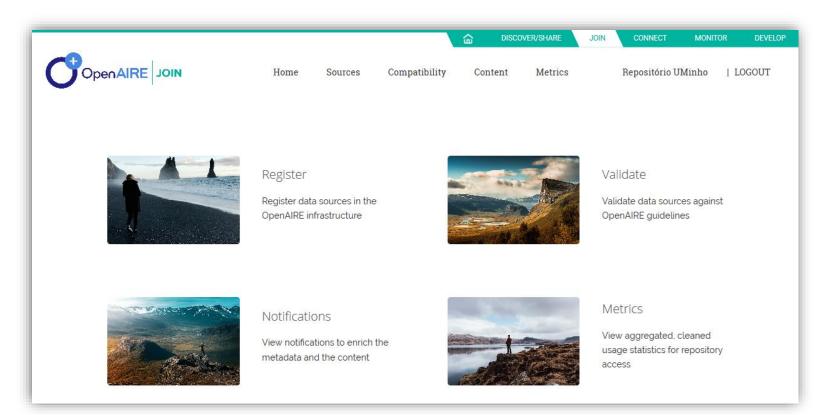






Dashboard for Content Providers (4/4)

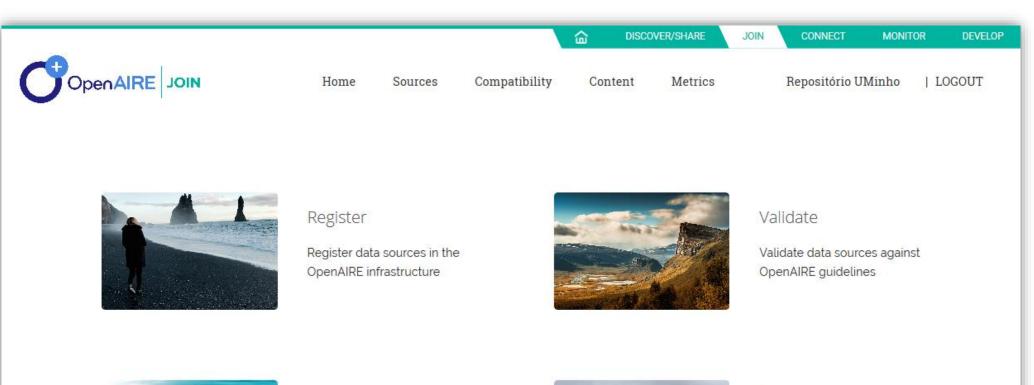
- IDEA: Repositories in OpenAIRE may be interested to acquire metadata information about publications that are "potentially of interest to them": i.e. be part of their collection: add new records, enrich the records with extra metadata information.
- CHALLENGE: Literature broker service
 - Enrichment: harvesting from repository and return to repository its records if they have been "enriched" by deduplication and/or inference.







Dashboard Functionalities





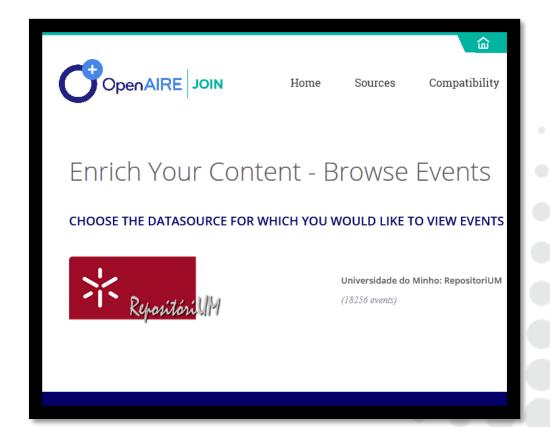
View notifications to enrich the metadata and the content



Metrics

View aggregated, cleaned usage statistics for repository access

- ✓ Data source registration
- ✓ Validation (against guidelines)
- ✓ Content enrichment and fixing
- **✓** Content notifications
- ✓ Data source usage statistics







Content events - enrichments & alerts

