

Fostering the Open Science agenda from the library

Ignasi Labastida i Juan
Office for the Dissemination of Knowledge
CRAI Universitat de Barcelona



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#OS19CRO

What is Open Science?

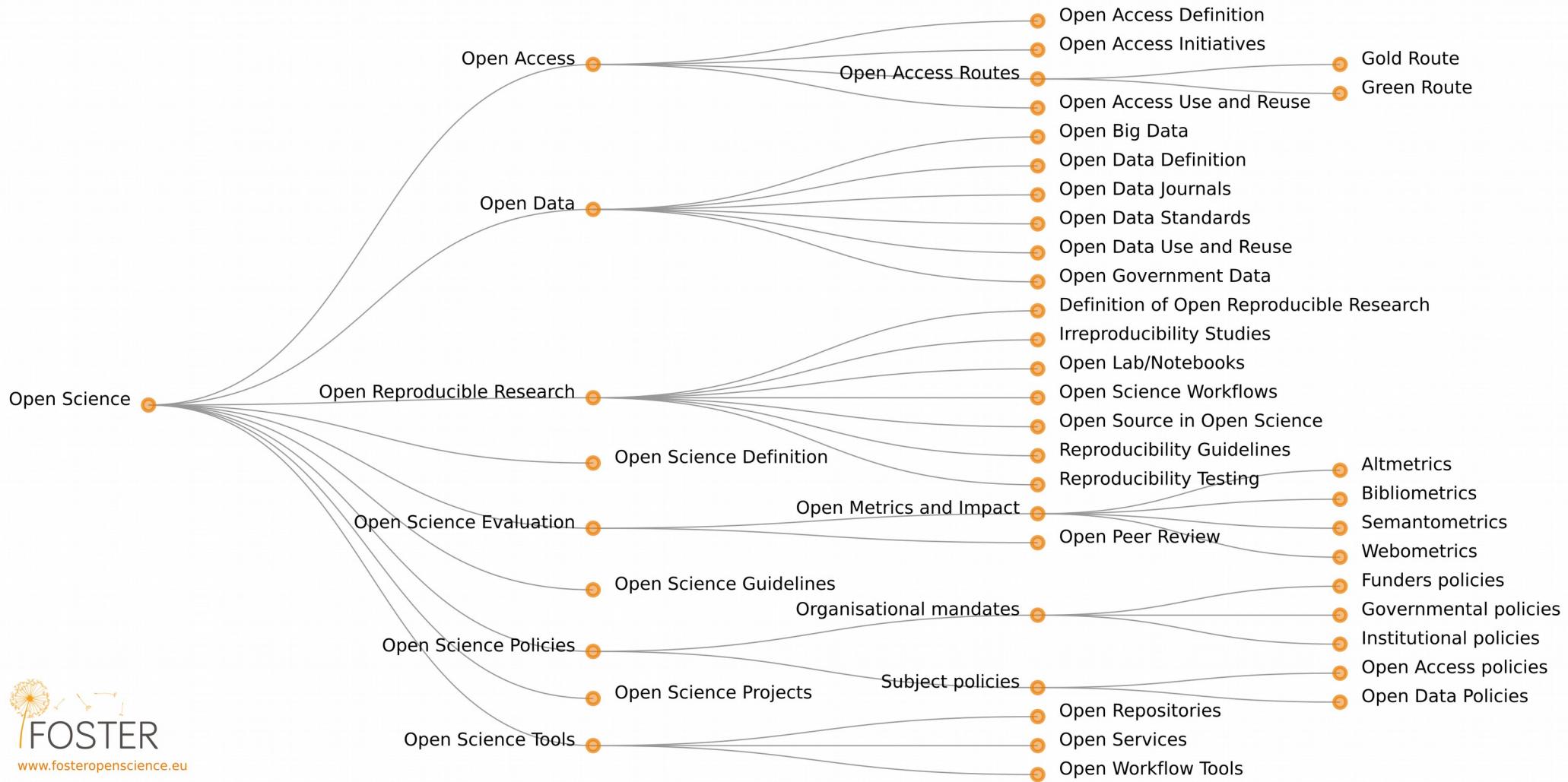
Open Science aims at transforming science through ICT tools, networks and media, to make research more open, global, collaborative, creative and closer to society.

<https://ec.europa.eu/digital-agenda/en/open-science>

Open science is the movement to make scientific research, data and dissemination accessible to all levels of an inquiring society, amateur or professional

https://en.wikipedia.org/wiki/Open_science

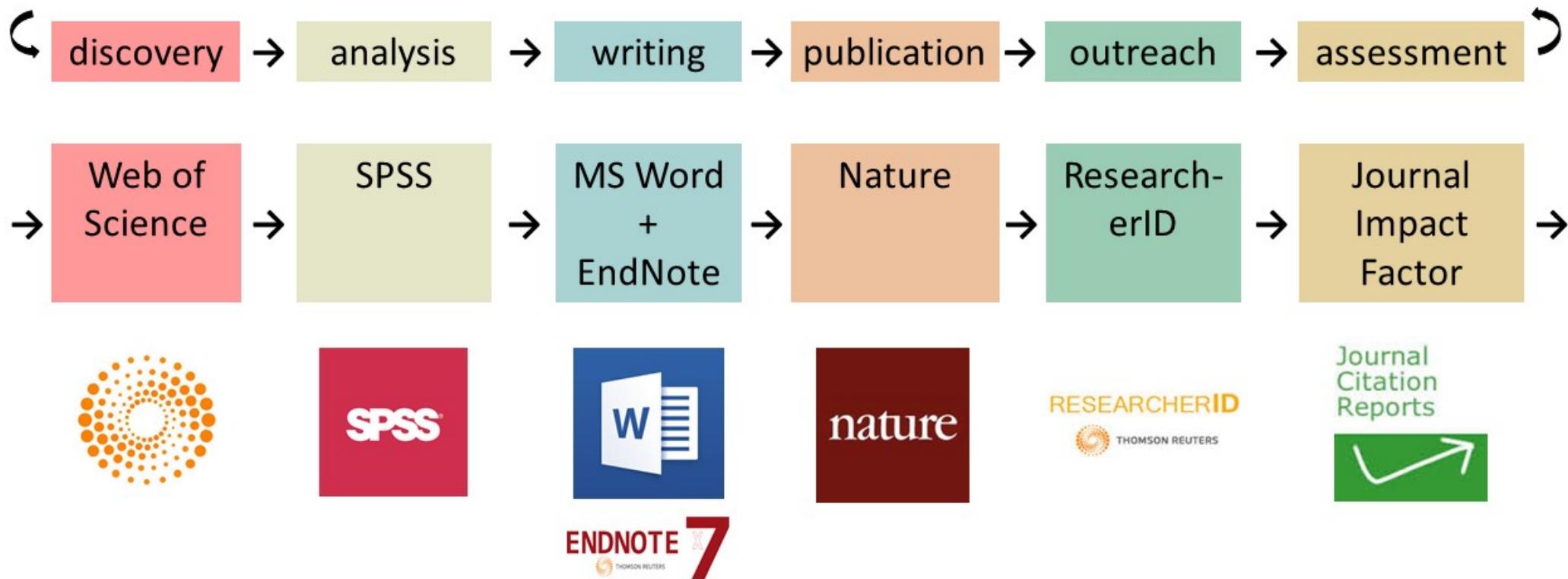
Open Science Taxonomy



Open Science challenges

- Understanding what Open Science means
- Preparing the institution for a change
- Acknowledging new ways of doing science
- Improving infrastructures
- Sharing outputs and best practices
- Reshaping evaluation and assessment

The tools on the traditional research workflow



<https://101innovations.wordpress.com>

... have changed



<https://101innovations.wordpress.com>

Let's create an Open Science agenda

- Identifying working areas and prioritising them
- Acknowledging what has been done until now
- Appointing a leader and a team
- Engaging all the people involved in the change
- Planning actions
- Monitoring actions
- Reviewing and updating



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ADVICE PAPER
NO.24 - MAY 2018

Open Science and
its role in universities:
A roadmap for cultural change

LEAGUE OF EUROPEAN RESEARCH UNIVERSITIES

University of Amsterdam • Universitat de Barcelona • University of Cambridge • University of Copenhagen • Trinity College Dublin • University of Edinburgh • University of Freiburg • Université de Genève • Universität Heidelberg • University of Helsinki • Universiteit Leiden • KU Leuven • Imperial College London • University College London • Lund University • University of Münster • Ludwig-Maximilians-Universität München • University of Oxford • Sorbonne University • Université Paris-Sud • University of Strasbourg • Utrecht University • University of Zurich



The eight pillars proposed by the Commission...

- Future of Scholarly Communication
- FAIR Data
- European Open Science Cloud
- Rewards and Incentives
- Research Indicators and Next-Generation Metrics
- Research Integrity
- Skills and Education
- Citizen Science

...can be reduced to work on

- Scientific Publications
- Research Data
- Research Evaluation
- Research Integrity
- Skills and Education
- Social Impact and Participation

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How can the library support it?

Some actions on publications

Adopting an institutional mandates to support the move to full Open Access, and if you have it, monitor it regularly.

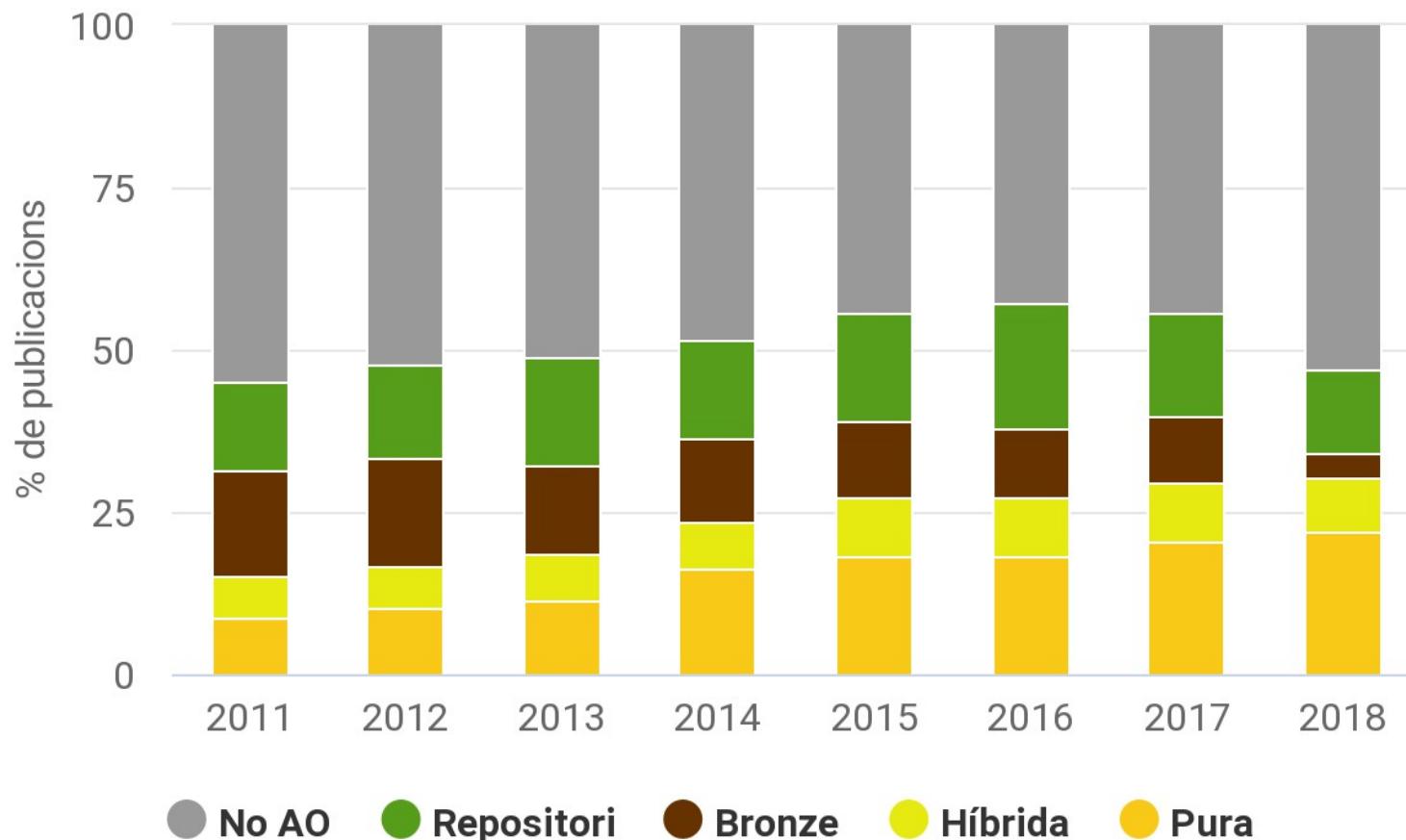
Analyse your current situation on publishing and establish some milestones or goals for the next years.

Set up a plan for research monographs.

Consider supporting new forms of scholarly publishing

Some examples

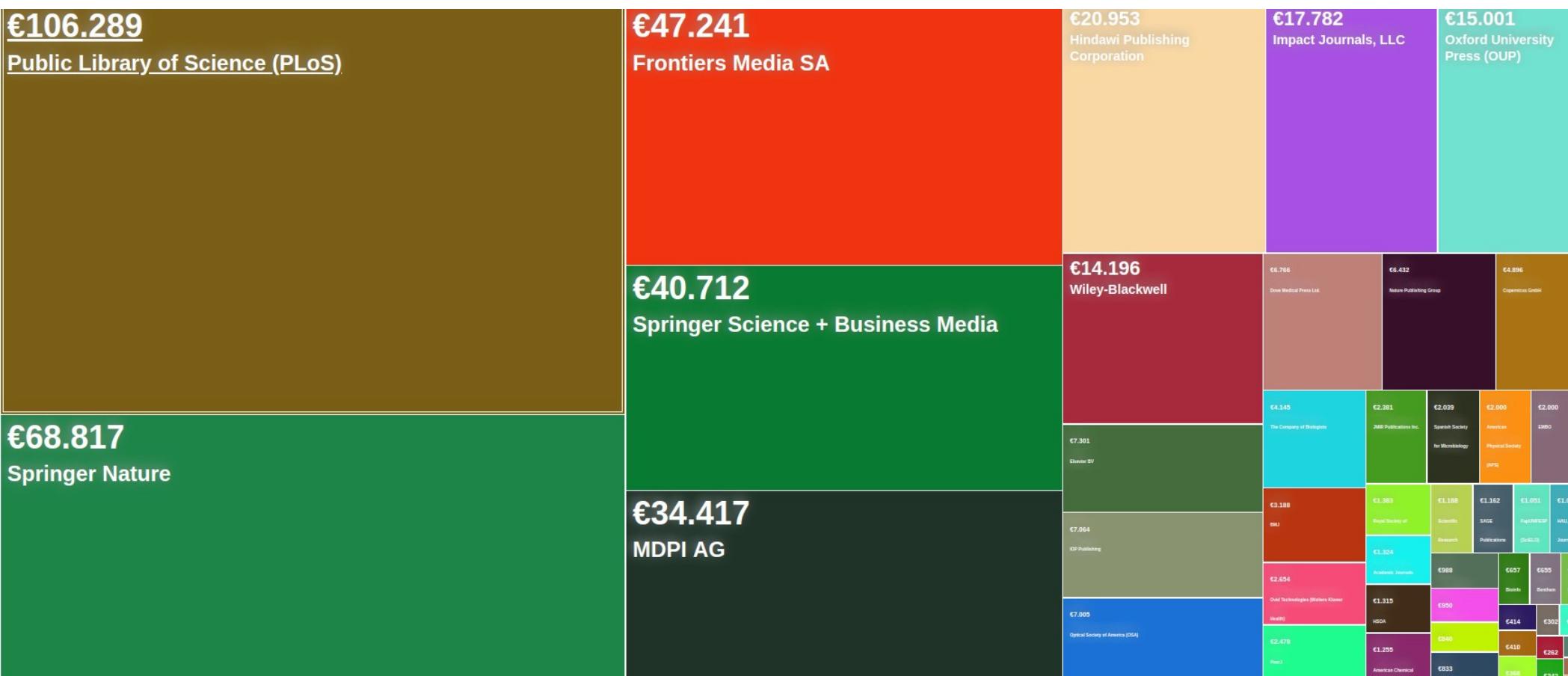
Evació de l'accés obert a la UB: 2011-2018



Highcharts.com

<http://bibliotecnica.upc.edu/en/observatori/>

Some examples



<https://treemaps.intact-project.org/apcdata/barcelona-u/>

Some examples

The banner features the UCL logo at the top right and the text "UCL LIBRARY SERVICES" at the top left. Below this, the text "UCL Press" is displayed, followed by "The UK's first fully Open Access University Press". To the right, the UCL Press logo is shown with the text "UCL PRESS". A large red rectangular box in the center contains the text "UCL Press" and "50 monographs published (Sept 17)" and "9 journals published (Nov 17)". At the bottom, the URL "<http://www.ucl.ac.uk/ucl-press>" is provided.

UCL LIBRARY SERVICES

UCL

UCL Press

The UK's first fully Open Access University Press

UCL PRESS

UCL Press

50 monographs published (Sept 17)

9 journals published (Nov 17)

<http://www.ucl.ac.uk/ucl-press>

Research Data

Adopt an institutional policy on research data management, embracing the FAIR principles and based on an “as open as possible, as closed as necessary” philosophy

Design and establish services for data stewardship, provide researchers with suitable infrastructures, and identify funding and resources to archive and to publish data.

Provide support on drafting Data Management Plans

Some examples

10 passos per elaborar un Pla de Gestió de Dades

Un Pla de Gestió de Dades (PGD) o Data Management Plan (DMP) és un document formal, que es presenta a l'inici de la investigació, en el qual es descriu què es farà amb les dades al llarg i després de finalitzar la investigació i que es pot modificar si es produeixen canvis en la mateixa.

Per què? És una bona pràctica, és un element clau de l'Open Science i és obligatori als nous projectes H2020.

Eines gratuïtes per elaborar un PGD

PGDonline (Consorci Madròñ) <http://dmp.consortiomadrono.es/>

DMPonline (Digital Curation Centre, UK) <https://dmponline.dcc.ac.uk/>

-  Reviseu els **requisements** de l'ens finançador (H2020).
-  Identifiqueu les dades: tipologia, procedència, volum, formats i fitxers.
-  Definiu com s'organitzaran i gestionaran les dades: nom dels fitxers, control de versions, programari necessari...
-  Expliqueu com es documentaran les dades: identifiqueu la informació a processar, consulteu si hi ha estàndards o esquemes de metadades, identifiqueu eines per a gestionar-los.
-  Descriu els processos que asseguren una **bona qualitat** de les dades.
-  Prepareu una estratègia d'**emmagatzematament** (durant el procés) i de preservació de dades (repositori).
-  Definiu les **polítiques de dades del projecte**: qüestions sobre propietat intel·lectual i com es tractaran les dades sensibles i personals.
-  Descriu com es difondran les dades: on, quines, quan es difondran. Si publicareu les dades en un repositori, com a informació complementària de l'article o com un "data paper".
-  Assigneu rols i **responsabilitats** a les persones i organitzacions participants en el projecte.
-  Prepareu un **pressupost realista**: la gestió de dades costa temps i diners en termes de programari, maquinari, serveis i personal

Adaptat de Michener, WK. Ten simple rules for creating a good data management plan. PLOS Comp Biol. 2015; 11(10)

El personal de la teva Biblioteca et pot assessorar



crue Universidades Españolas Red de Bibliotecas REBIUN

Research Evaluation

Collaboration on bringing evidences for Research Evaluation

Development of a bibliometrics policy grounded in the principles of the Leiden Manifesto and the DORA Declaration

Assessing the Leiden Principles

Leiden Manifesto: Ten principles to guide quantitative research evaluation	Assessment
1) Quantitative evaluation should support qualitative, expert assessment The bibliometric analysis is part of the background information for the department's self-evaluation report and the external peer review panel's report.	
2) Measure performance against the research missions of the institution, group or researcher The analysis design from last year's SUND Health Report was kept. Neither SUND nor the bibliometrists have updated the design according to the focus areas of the protocol for the research evaluation.	
3) Protect excellence in locally relevant research The analysis includes non-English publications but does not use metrics built on high-quality non-English publications that would serve to identify excellence in locally relevant research.	
4) Keep data collection and analytical processes open, transparent and simple All datasets and sub-analyses are available to the department. The majority of the indicators are simple. Two indicators (Share of 10% highly cited publications and BFI) are explained to help non-bibliometrists understand the indicators.	
5) Allow those evaluated to verify data and analysis The analysis is verified by the department.	
6) Account for variation by field in publication and citation practices The first part of the analysis is based on CURIS which includes all research publications authored by the department. This part of the analysis shows journal publications, books and contributions to books. The second part of the analysis is based on SciVal and includes 89% of the journal publications from CURIS. The indicators Share of 10% highly cited publications and BFI can be used across research fields.	
7) Base assessment of individual researchers on a qualitative judgement of their portfolio Not relevant as the analysis is carried out at department level.	-
8) Avoid misplaced concreteness and false precision The analysis presents multiple indicators to give a pluralistic picture of the department. All indicators are presented as integers, bars, or dots. Still, small variations from one year to the next year should not be interpreted as an increase or decline.	
9) Recognize the systemic effects of assessment and indicators The analysis presents multiple indicators without highlighting any of them, and the analysis design was introduced in 2015 without any links to an incentive structure.	
10) Scrutinize indicators regularly and update them See principle 2.	

Skills and Education

Integrate Open Science concepts, thinking, and its practical applications in training programmes.

Best practices on dealing with copyright and open licensing

Encourage, incentivise, support and recognise staff with regard to Open Science skills development.

Explore innovative mechanisms and tools to provide Open Science skills training, and engage with others outside the university to exchange good practice.

The library at the University of Barcelona

- Participation in the Open Science Committee
- Review and update of the 2011 Open Access Policy
- Draft of a new research data policy
- Working in the establishment of an infrastructure for working and archiving research data
- Regular training sessions on Open Science
- Close collaboration with Catalan colleagues through CSUC
- Planning actions with the scientific dissemination unit

Questions ?

ilabastida@ub.edu

@ignasi

Oficina de Difusió del Coneixement

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<http://www.ub.edu/odc>