

The Open Research journey – from concept to implementation

Open in Practice 2019
University of Reading
4 April 2019

SLIDES AVAILABLE: <https://www.repository.cam.ac.uk/handle/1810/291115>

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A matter of language

- **‘Open source software’** dates back to 1970s
 - Software was not considered copyrightable before the 1974 US Commission on New Technological Uses of Copyrighted Works (CONTU) decided that "computer programs, to the extent that they embody an author's original creation, are proper subject matter of copyright"
 - In 1983, Richard Stallman launched the GNU Project to write a complete operating system free from constraints on use of its source code.
- **‘Open access’** - Budapest Open Access Initiative, 2002
- **‘Open science/research’**
 - Informal definition of open science *“Open science is the idea that scientific knowledge of all kinds should be openly shared as early as is practical in the discovery process.”* - Michael Nielsen – 2011
 - Transparency and Openness Promotion (TOP) Committee met in 2014
 - EPSRC ‘Open Data’ – requirement began 2011, was enforced in 2015



Step back in time - 2013

- Open Access Project Board formed. First meeting on 24 January 2013. Terms of Reference:
 - To ensure the University is ready to comply with the new RCUK terms on Open Access to research publications that will take effect from 1 April 2013.
 - To make effective use of the time-limited BIS/RCUK allocation in support of the transition to Open Access. In addressing these terms of reference, the Project Board will:
 - Ensure a suitable policy framework is in place and remains relevant as circumstances develop.
 - Consider sustainable and equitable mechanisms to handle the annual block grants for Gold access charges.
 - Consider the roadmap for Open Access to research data in relation to publication Open Access.
 - Approve monitoring and reporting mechanisms to meet University and funders' requirements

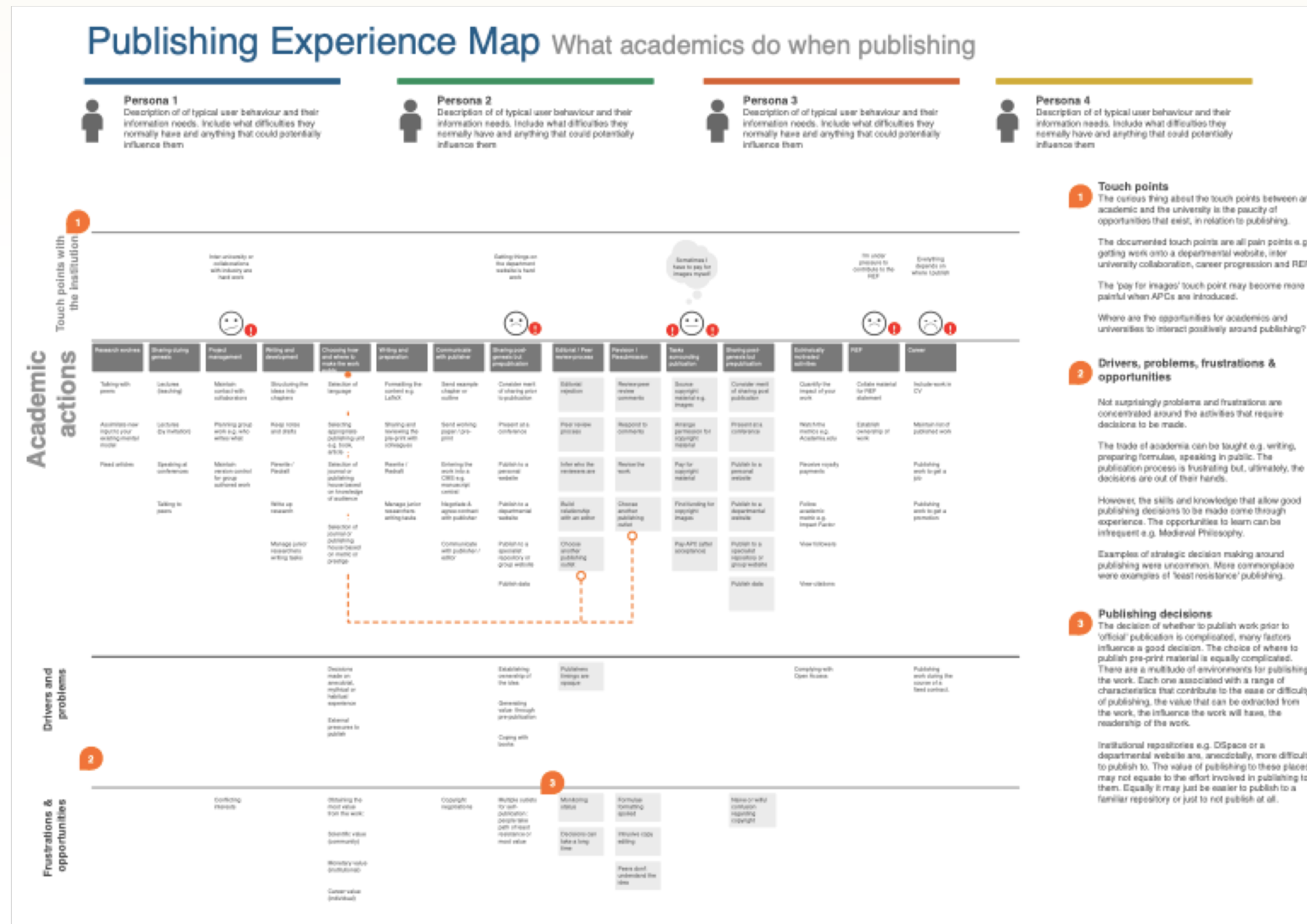


<https://osc.cam.ac.uk/files/minutes-of-oa-project-board-24-jan-2013-gfr.pdf>

Research - FutureLib

- In 2013 and 2014, the Library undertook a large project to try and understand what academics did and what services they needed.
- A 'shadowing' process where academics were closely followed for 48 hours. The team literally sat next to them – watched lectures, sat in supervisions and took notes.
- As the academic undertook tasks the team asked them how they felt about the activity and whether they felt it was worth their time and so on.
- The graphics map out their activities over the time each academic was followed. The image lists the activities they undertook, scaled on a 'happiness' metre, and colour coded depending of the work was Academic, Research or Administration related.
- <https://www.repository.cam.ac.uk/handle/1810/264986>

Publishing experience map



1 Touch points
The curious thing about the touch points between an academic and the university is the paucity of opportunities that exist, in relation to publishing.

The documented touch points are all pain points e.g. getting work onto a departmental website, inter university collaboration, career progression and REF. The 'pay for images' touch point may become more painful when APCs are introduced.

Where are the opportunities for academics and universities to interact positively around publishing?

2 Drivers, problems, frustrations & opportunities

Not surprisingly problems and frustrations are concentrated around the activities that require decisions to be made.

The trade of academia can be tough e.g. writing, preparing formulas, speaking in public. The publication process is frustrating but, ultimately, the decisions are out of their hands.

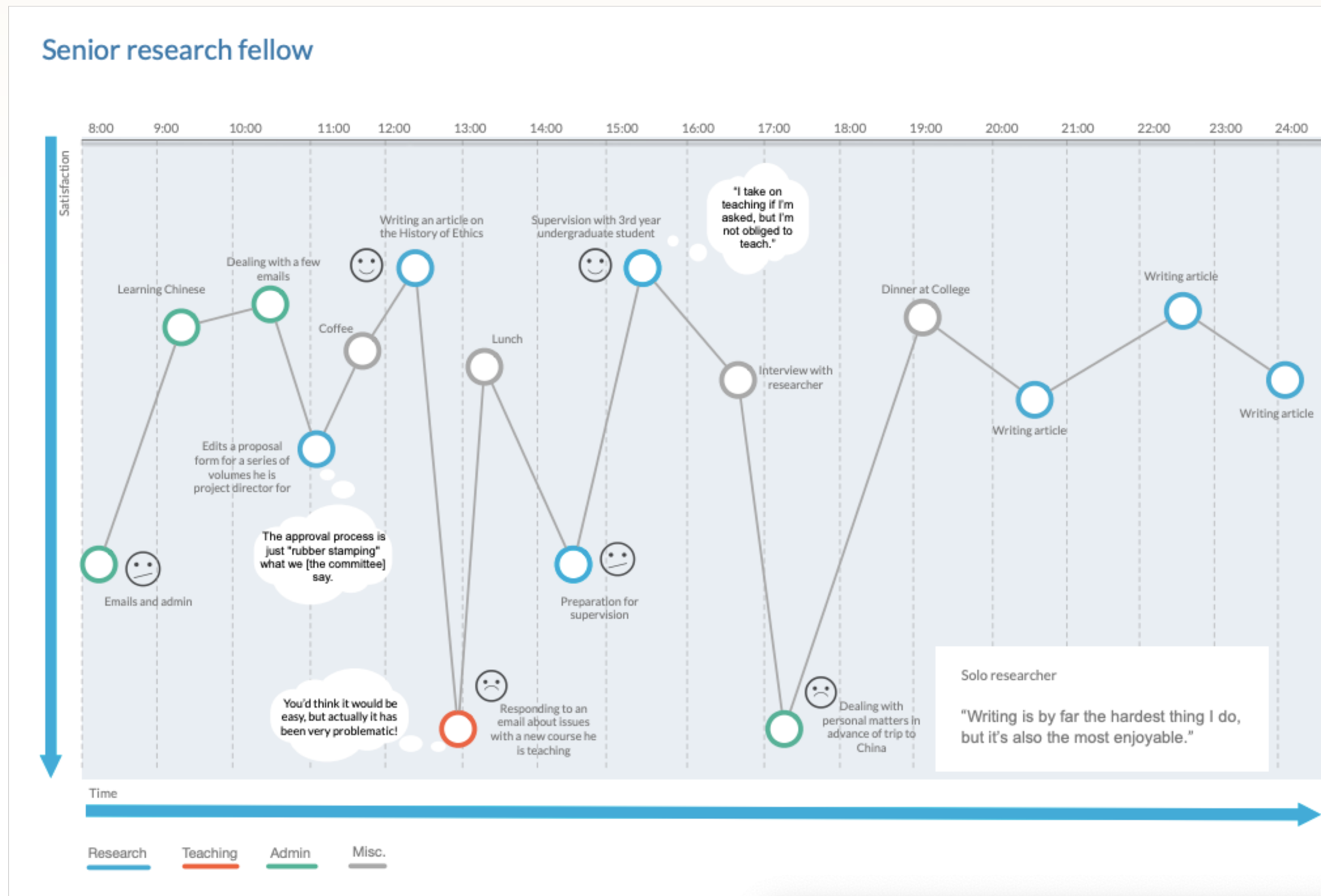
However, the skills and knowledge that allow good publishing decisions to be made come through experience. The opportunities to learn can be infrequent e.g. Medieval Philosophy.

Examples of strategic decision making around publishing were uncommon. More commonplace were examples of 'least resistance' publishing.

3 Publishing decisions
The decision of whether to publish work prior to 'official' publication is complicated, many factors influence a good decision. The choice of where to publish pre-print material is equally complicated. There are a multitude of environments for publishing the work. Each one associated with a range of characteristics that contribute to the ease or difficulty of publishing, the value that can be extracted from the work, the influence the work will have, the readership of the work.

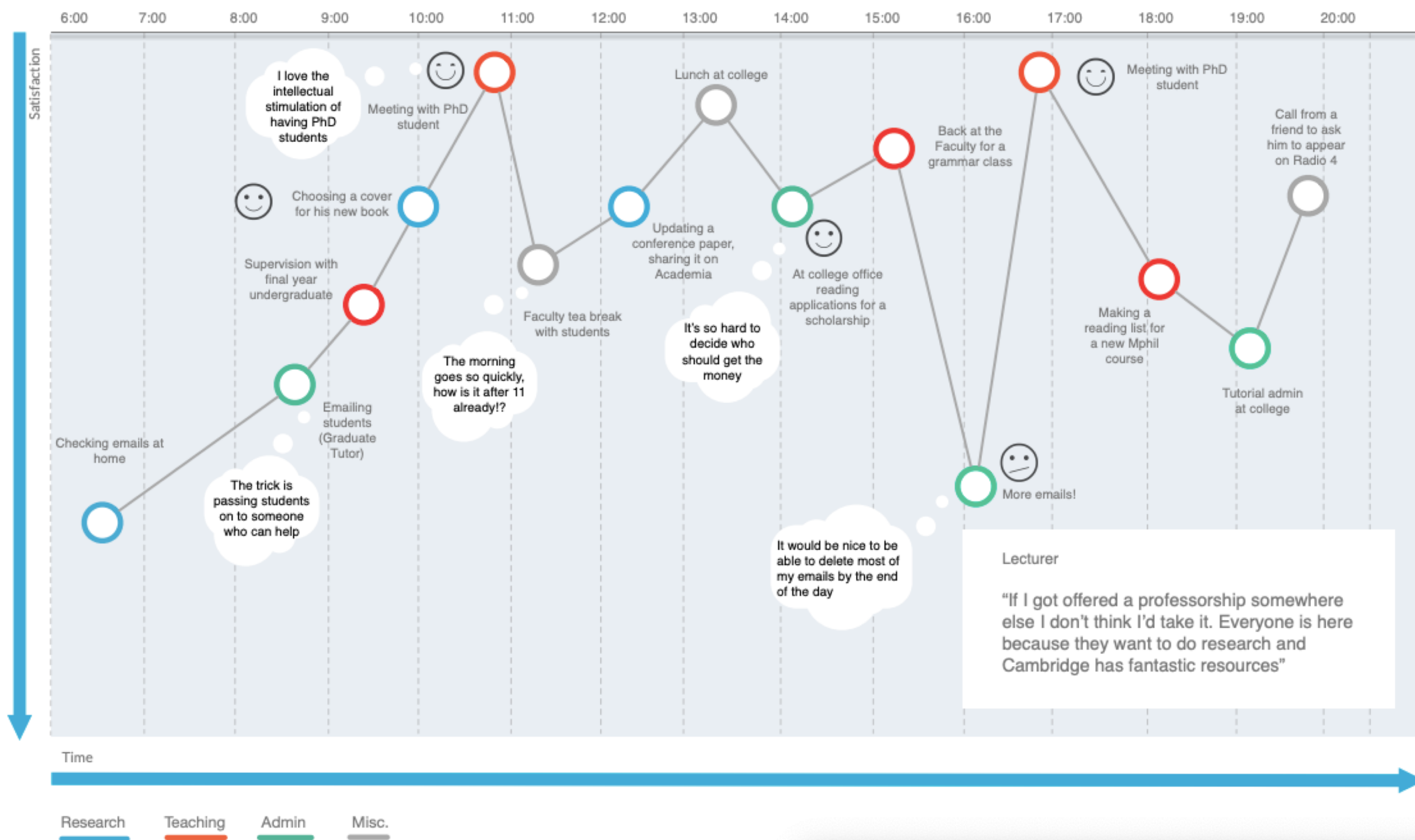
Institutional repositories e.g. OSpace or a departmental website are, anecdotally, more difficult to publish to. The value of publishing to these places may not equate to the effort involved in publishing to them. Equally it may just be easier to publish to a familiar repository or just to not publish at all.

Senior Research Fellow

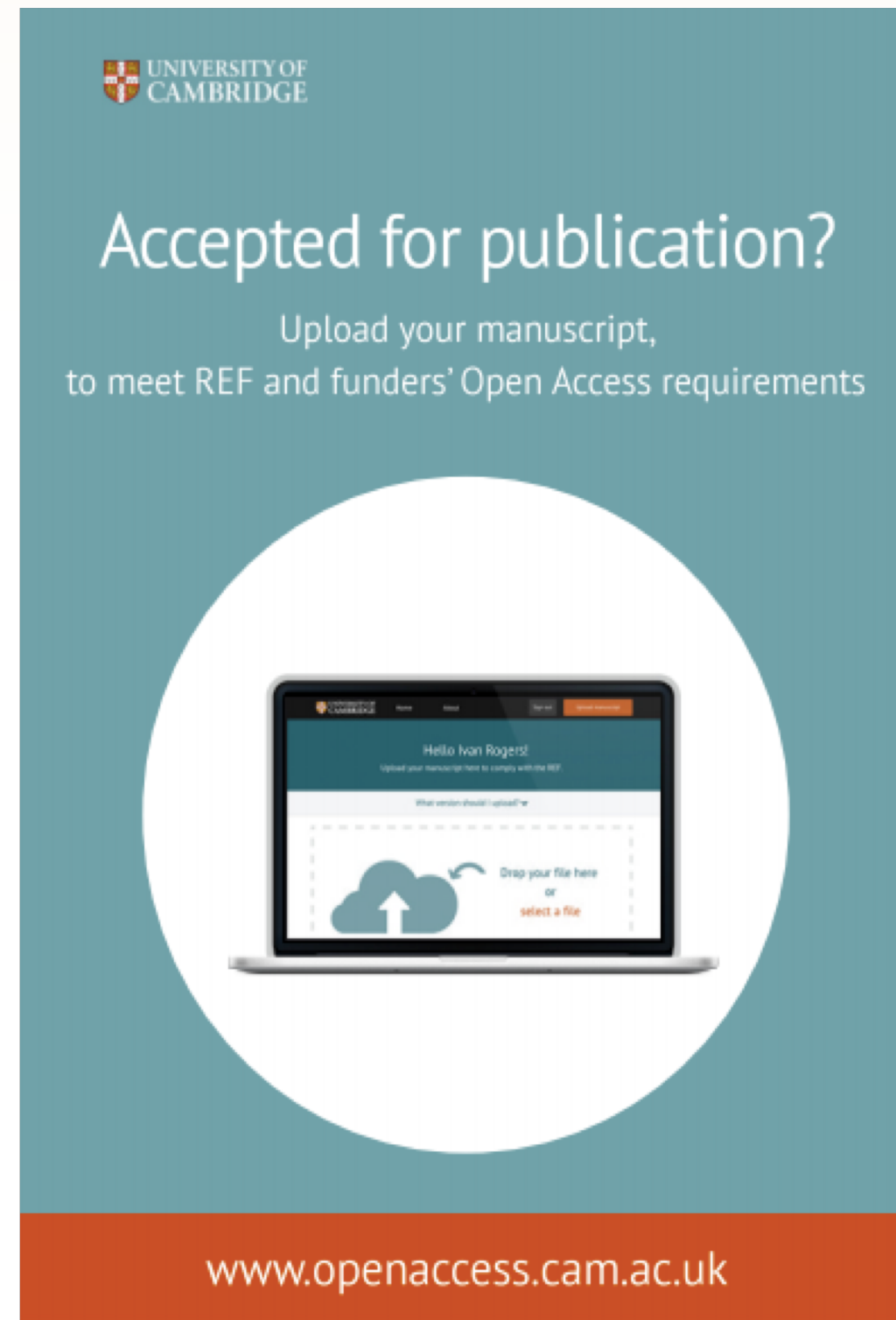


Mid-career solo researcher

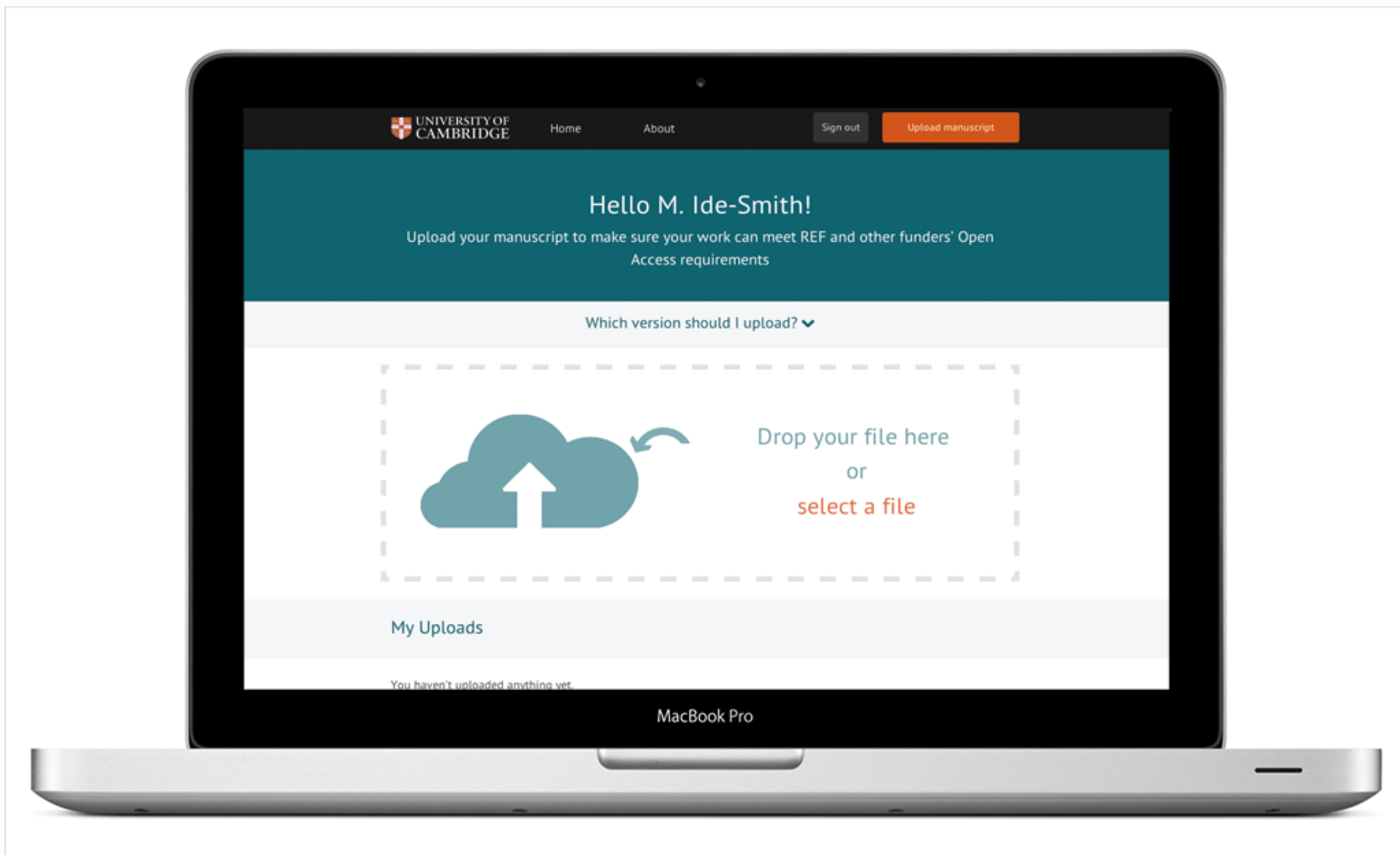
Mid-career, solo researcher



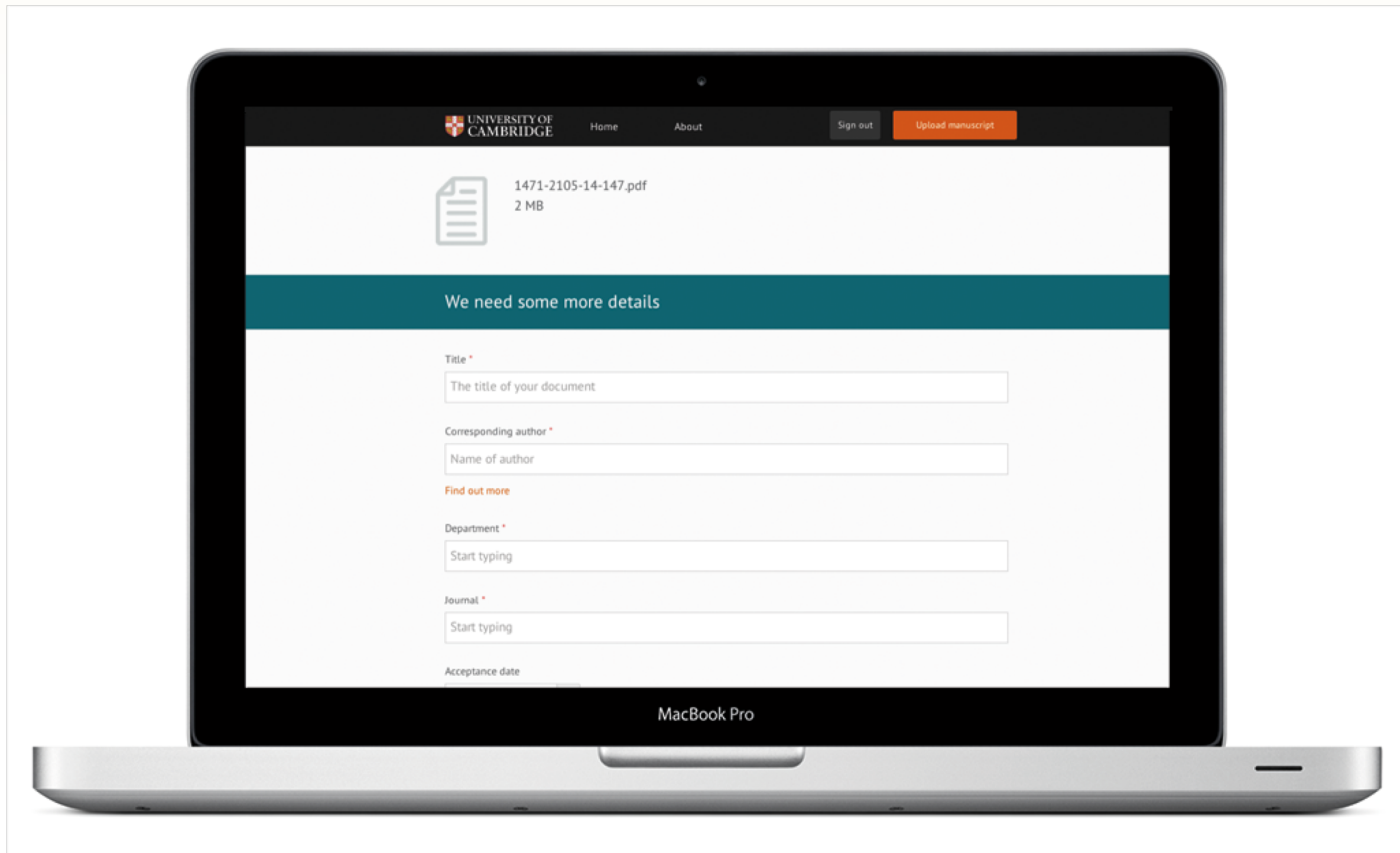
The result - Avocet



Upload your accepted manuscript



– and tell us a bit about it



The image shows a laptop screen displaying the University of Cambridge manuscript upload interface. The header includes the University of Cambridge logo, navigation links (Home, About), and user options (Sign out, Upload manuscript). A file named '1471-2105-14-147.pdf' (2 MB) is shown as uploaded. Below this, a teal banner reads 'We need some more details'. The form contains several required fields: Title (placeholder: 'The title of your document'), Corresponding author (placeholder: 'Name of author'), Department (placeholder: 'Start typing'), and Journal (placeholder: 'Start typing'). A 'Find out more' link is positioned between the author and department fields. An 'Acceptance date' field is at the bottom. The laptop is a MacBook Pro.

UNIVERSITY OF CAMBRIDGE

Home About Sign out Upload manuscript

1471-2105-14-147.pdf
2 MB

We need some more details

Title *
The title of your document

Corresponding author *
Name of author
[Find out more](#)

Department *
Start typing

Journal *
Start typing

Acceptance date

MacBook Pro

What happens next?



1. Upload manuscript



2. We check funder policies, discuss options with researchers and pay APCs for eligible articles



3. We deposit manuscript

Meanwhile....

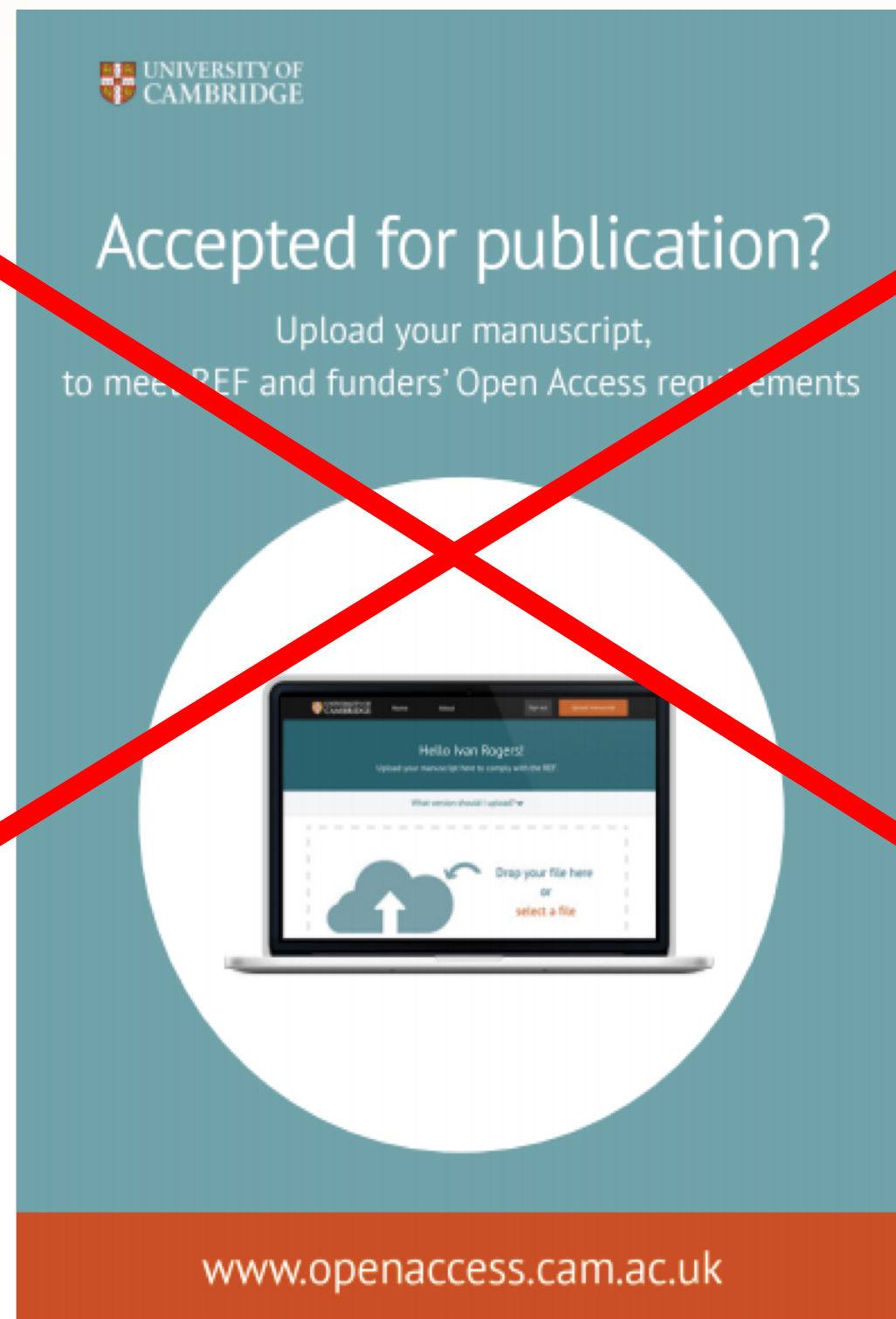
- Proposal to the Research Policy Committee
RPC Committee meeting of 1 May 2014 where
the argument was made for the position of a
head of Scholarly Communication
 - <https://osc.cam.ac.uk/open-access/open-access-policies/cambridge-open-access-policy-framework/open-access-project-board>

2015

1 January 2015



Oh dear



Workflow and focus issues

- The systems were entirely manual and not scalable
- Focus was on open access only and specifically compliance
- Research Data Management was an afterthought
- Old version of DSpace

2016

Realised there was a bigger agenda

Unlocking Research

University of Cambridge Office of Scholarly Communication

Home

Blog archive

Upload your manuscripts

Blog archive

Welcome to the Unlocking Research blog

This blog is maintained by the **Office of Scholarly Communication** based in the University of Cambridge Library and the University Research Office. Blogs cover many topics as follows:

- Open Research

- Hot topics – research integrity and open research – 31 May 2018
- Perspectives on the Open future – 27 March 2018
- Sustaining long-term access to open research resources – a university library perspective – 11 September 2017
- Sustaining open research resources – a funder perspective – 26 July 2017
- Open Research- Who should pay? – 26 June 2017
- Reflections on Open Research – a PI's perspective – 22 June 2017
- Open at scale: sharing images in the Open Research Pilot – 8 May 2017
- Open Research Project, first thoughts – 8 March 2017
- We are going OPEN – the Open Research experiment has begun! – 8 February 2017
- Walking the talk – reflections on working 'openly' – 25 October 2016
- Could Open Research benefit Cambridge University researchers? – 3 August 2016
- The case for Open Research: solutions? – 2 August 2016
- The case for Open Research: does peer review work? – 19 July 2016
- The case for Open Research: reproducibility, retractions & retrospective hypotheses – 14 July 2016
- The case for Open Research: the authorship problem – 12 July 2016
- The case for Open Research: the mis-measurement problem – 11 July 2016
- Software Licensing and Open Access – 21 October 2015
- Openness, integrity & supporting researchers – 12 October 2015



<https://unlockingresearch-blog.lib.cam.ac.uk>

Changing focus? Not at first

- Initial attempts to expand the OAPB focus to Open Research met with resistance.
- This was about moving from a compliance perspective to a proactive recognition there is an issue that needs addressing, and there are no answers - we needed to work it out.
- But first....

Review of Office of Scholarly Communication

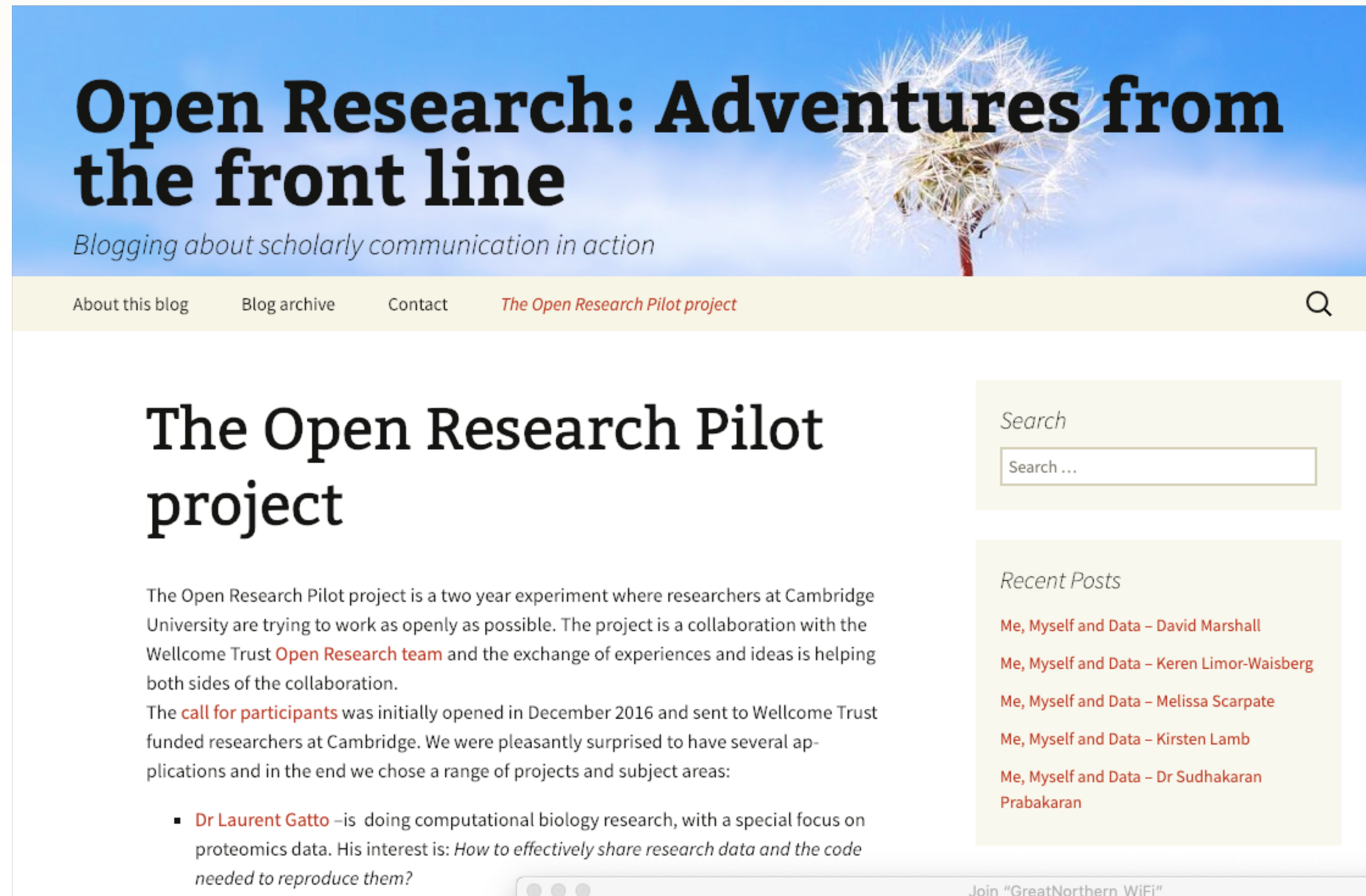
- Review called early 2016, report submitted late 2016
- Recommendation 1:
 - The General Board should commission a Working Party to clarify the University's needs and expectations in relation to Open Research. It should be constituted by key stakeholders and those who are active and informed on Open Research issues.
 - Its work should include agreement on the University's public stance on Open Research.
 - The Working Party should also consider and propose solutions for infrastructure needs relating to Open Research, including increased automation of Open Research processes.



<https://osc.cam.ac.uk/open-research/joining-scholarly-communication-discussion/open-research-working-group/summary-2017>

2017

Open Research Pilot Project began



https://openadventures-blog.lib.cam.ac.uk/?page_id=12

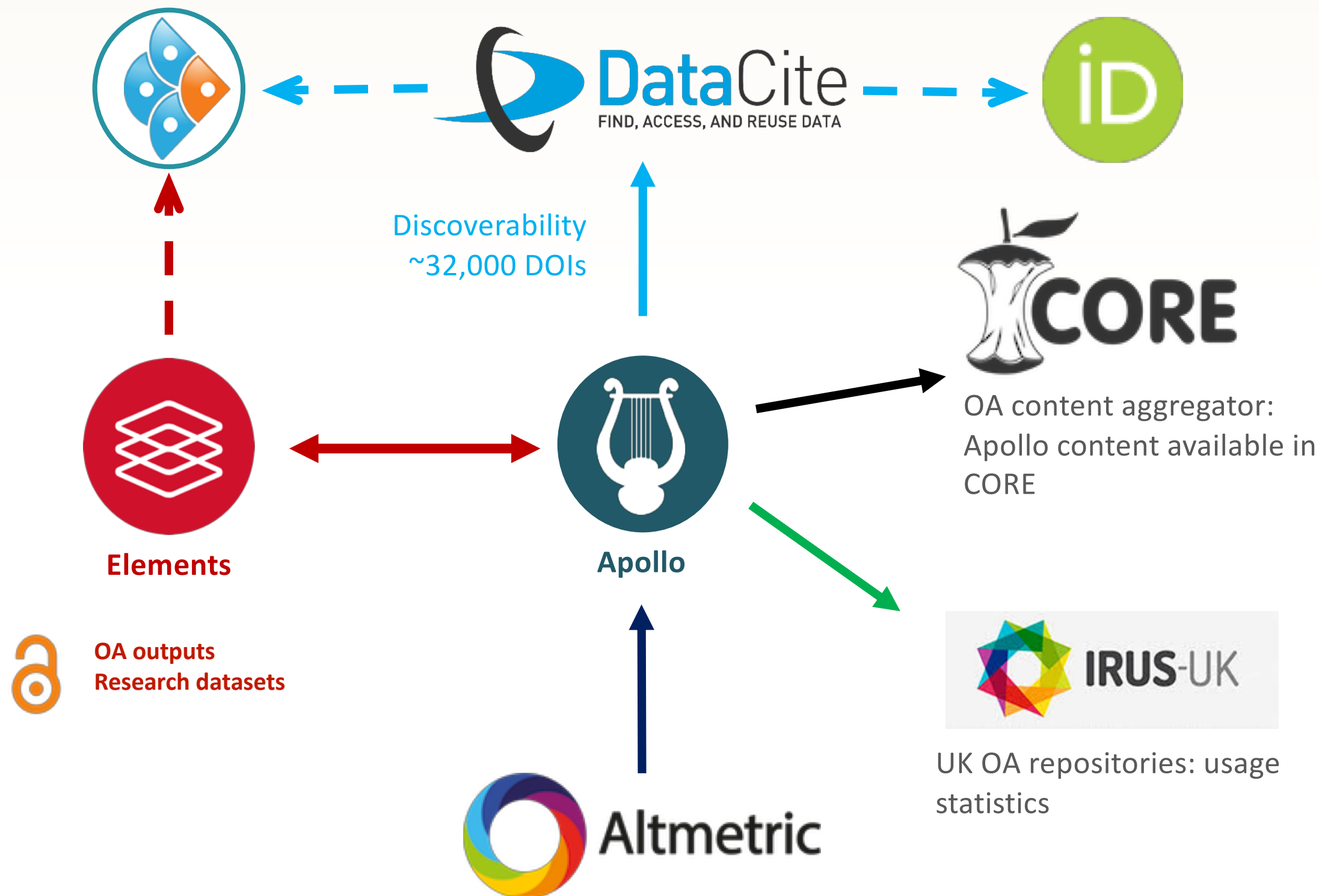
Meanwhile - Electronic Lab Notebooks

- January 2017, the OSC hosted an event on ELNs
 - 72 people registered, several from overseas.
 - ‘Paperless research’ solutions – Electronic Lab Notebooks
<https://unlockingresearch-blog.lib.cam.ac.uk/?p=1280>
- OSC, through the Research Data Management Project Groups, ran a trial of three ELN products
 - Un-conclusive
 - Recommendations were written up by Al Downie
<https://www.gurdon.cam.ac.uk/institute-life/computing/elnguidance>
- The lack of a funding source and lack of a definitive result has meant this project then went on ice – being restarted in 2019

Meanwhile - Overleaf

- Trial of Overleaf at Cambridge
 - Started on September 22nd 2016
 - Coordinated by the Department of Engineering.
 - Ended 17th December 2017
 - 2300 members registered on the University of Cambridge Overleaf account
 - Despite high engagement and continued queries, there was no way to find funding
 - <https://www.overleaf.com/blog/517-case-study-the-university-of-cambridge-significant-and-sustained-growth-in-the-use-of-overleaf#.WjfzFztpGU>

Meanwhile - Linking systems

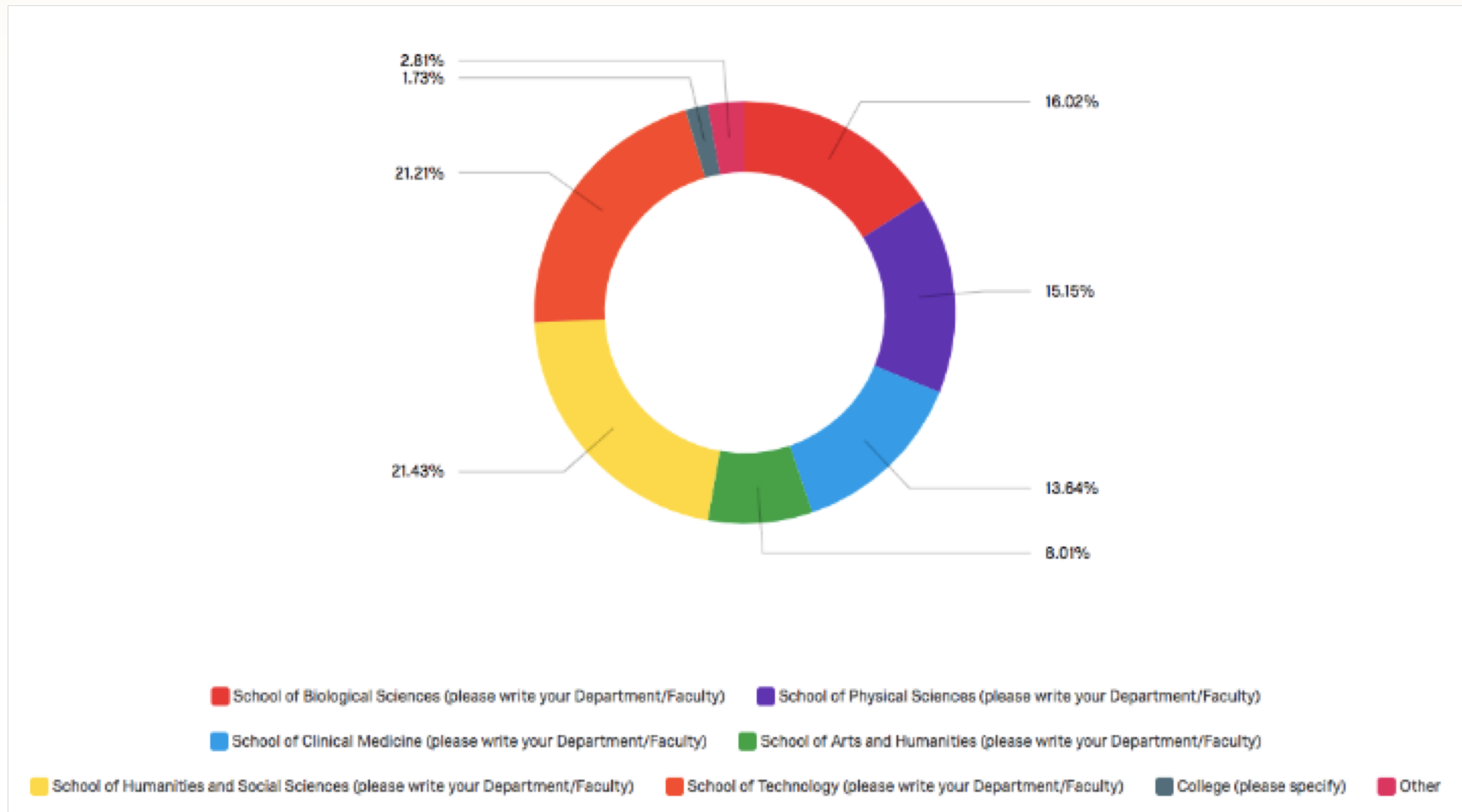


2018

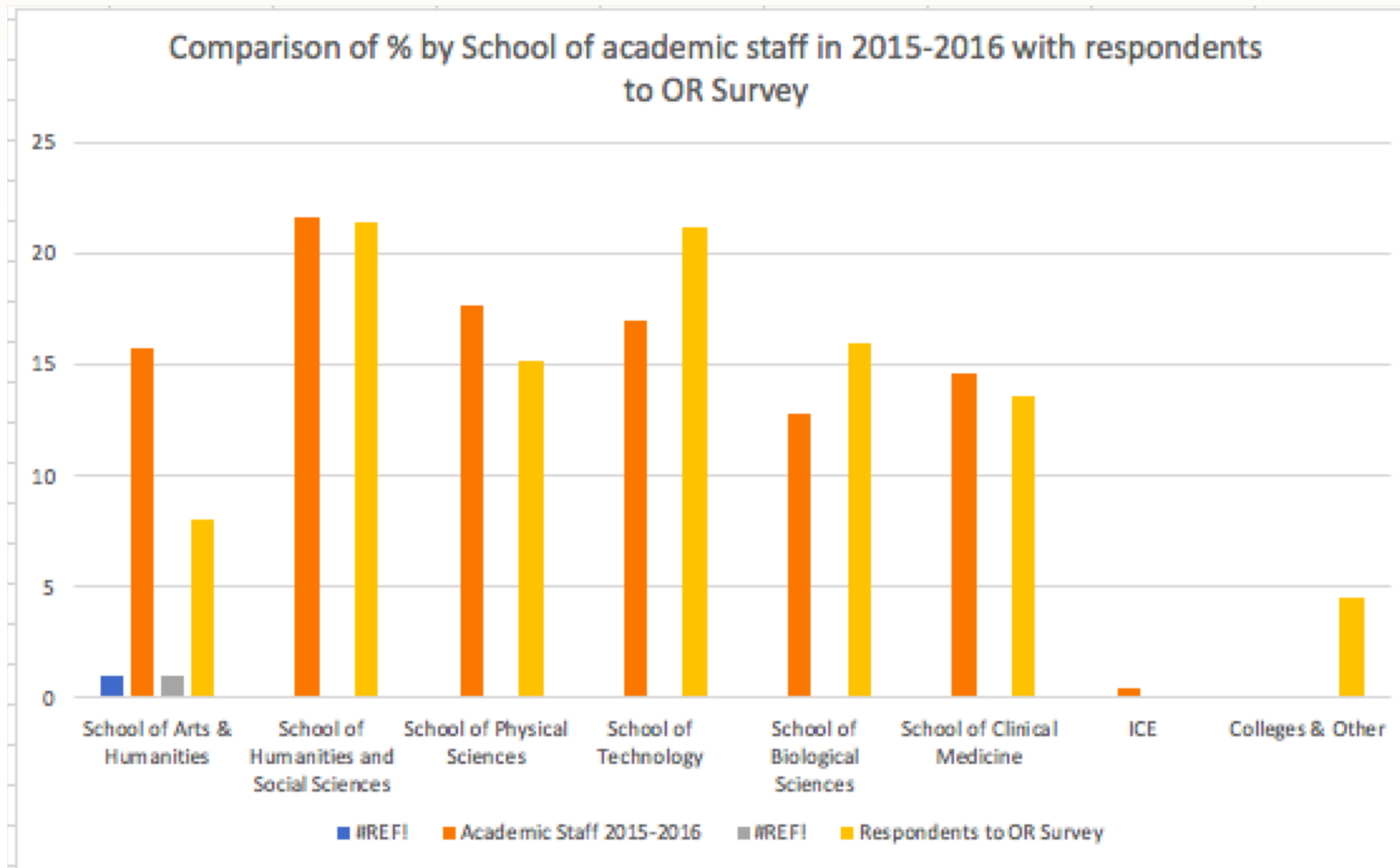
Open Research Working Group

- Convened in early 2018 – during the ‘Beast from the East’ & the USS strikes
- Representatives from all Schools, CUP, PostDocs, Library and Research Office
- Conducted a survey, developed a draft position statement & wrote a report with recommendations
- Benefited from advice and discussion with Reading University

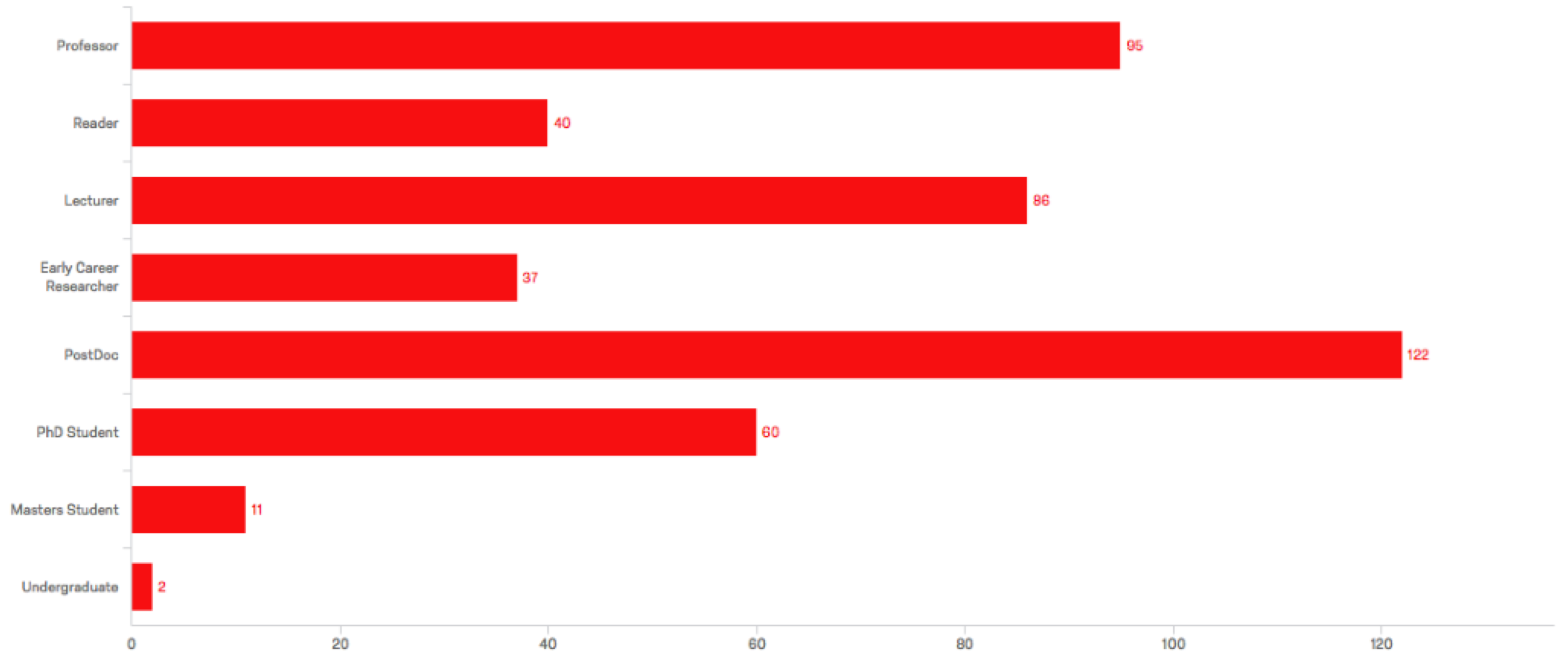
Survey - Breakdown by school



Representative



Career level breakdown



496 responses to the survey

"I think a lot of people idealistically agree with the goals of open research but don't do it because it's not rewarded and academia is very competitive. Why bother when it doesn't help and you need every bit of time you can get? Tools, training, etc is nice but doesn't change that. To make meaningful change you need to incentivize it by career progression: hiring and promoting. Essentially nothing else is taken seriously." Applied Maths PhD Student



<https://osc.cam.ac.uk/open-research/joining-scholarly-communication-discussion/open-research-working-group/report-2018>

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"The main gap I see has been and continues to be monetary - many folks want to publish OA but simply can't afford to, or don't see it as a reasonable use of research money that could be spent on research itself" Zoology PostDoc



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Biological Science ECR*

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"We want our research to benefit the common good. We believe that this is most likely if others are able to reproduce and build upon it without restriction." Engineering Lecturer



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"At the moment there appears to be very little guidance on Open Research" DPMMS PostDoc

"Sci

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ECR

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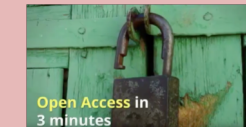
<https://osc.cam.ac.uk/open-research/joining-scholarly-communication-discussion/open-research-working-group/report-2018>

Meanwhile - the OSC got on with it



Services

Training – library and research community



Outreach and Engagement




Public face

Repository - Apollo





Infrastructure solutions

 Journals Publishers Conferences Sources More asap!ort

Advanced Materials (Journal)

[\[edit journal\]](#) [\[add synonym\]](#) [\[delete\]](#)

Name status	Preferred name
ISSN	0935-9648
e-ISSN	1521-4095
Publisher	Wiley
Source	SHERPA/RoMEO [view]


 

Embargoes for self-archiving in Apollo (in months)

AM	12
VoR	unknown

Open Access status


[\[add open access status\]](#)

 Hybrid Journal/Publisher [\[edit\]](#) [\[delete\]](#)

Source	Wiley Author Compliance Tool [view]
Last checked	Oct. 4, 2018

Gold policy

[\[add gold policy\]](#)

 Wiley Author Compliance Tool [\[edit\]](#) [\[delete\]](#)

Min. APC	USD 5000.00
Max. APC	USD 5000.00
Gold licence options	CC BY
Default licence	CC BY

Fast-track Deposits

[Find out more](#)

Home Help Admin My processed items Apollo


Number of items processed today: 1

Publication summary

Title	Sulfide resorption during crustal ascent and degassing of oceanic plateau basalts.		
Publisher DOI	10.1038/s41467-018-08001-3	Elements ID	1039732
Acceptance date	2018-12-09	Journal Title	Nature communications

Required information

Uploaded File(s)

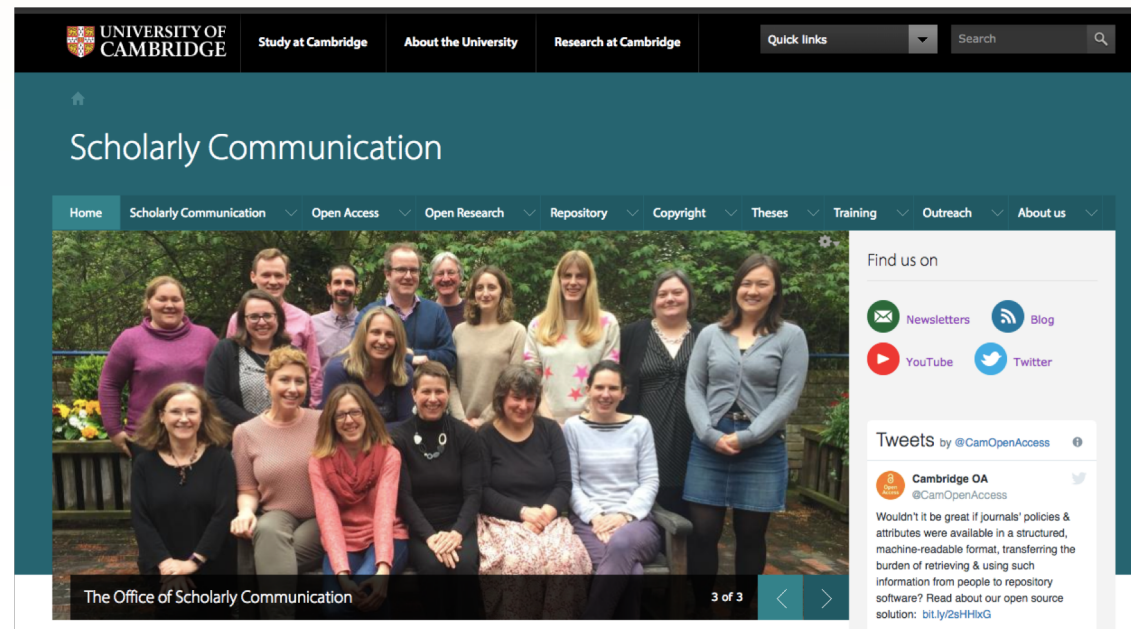
File name	What's this version?	Delete?
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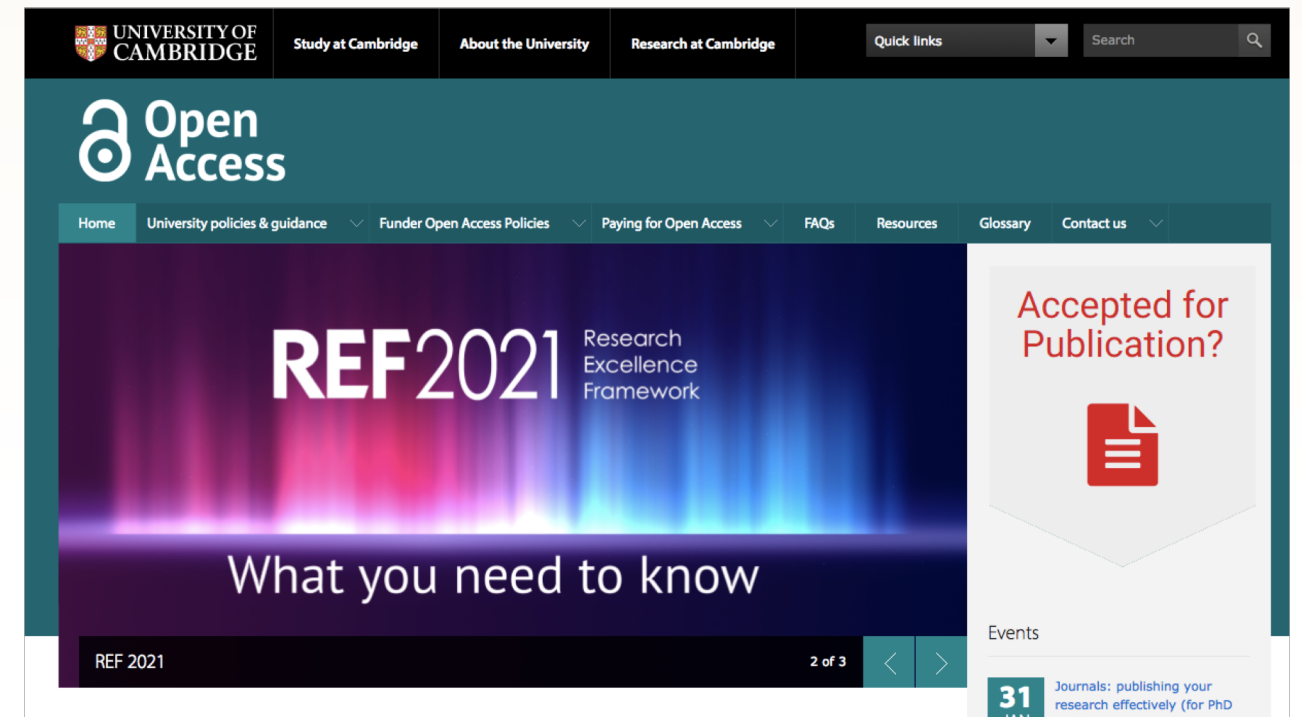
Describe this manuscript *

Accepted version	Final author version, after formal acceptance but before copy-editing/typesetting
Published version	Final published version, after copy-editing/typesetting
Submitted version	Version before peer-review changes and formal acceptance

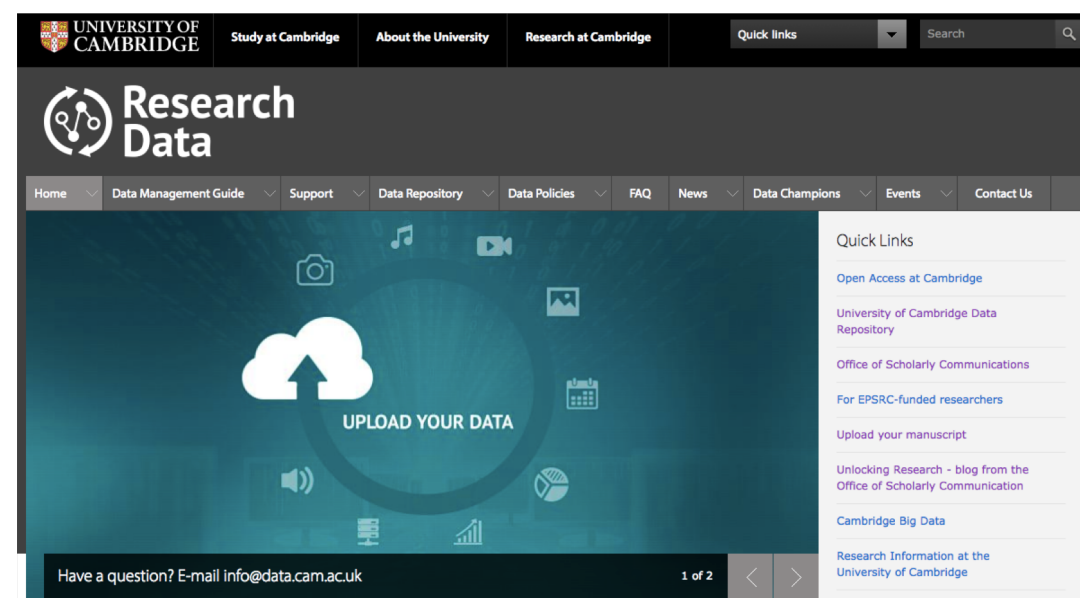
Websites



<https://osc.cam.ac.uk/>



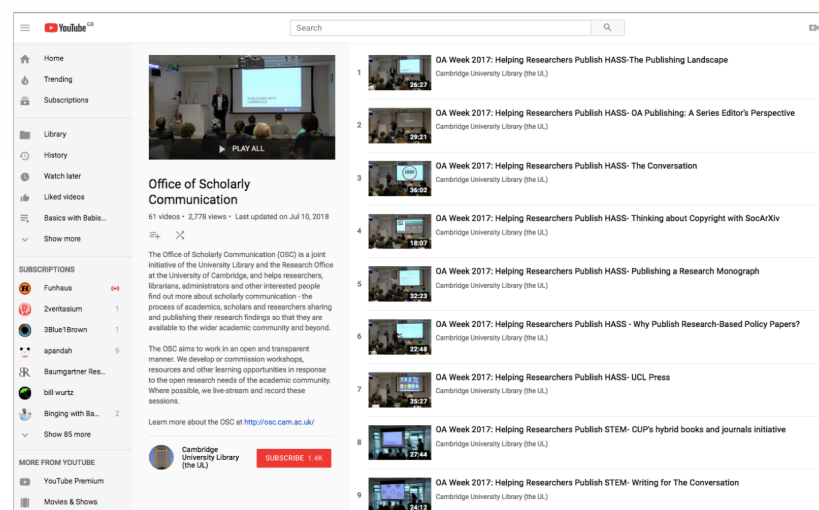
<https://www.openaccess.cam.ac.uk/>



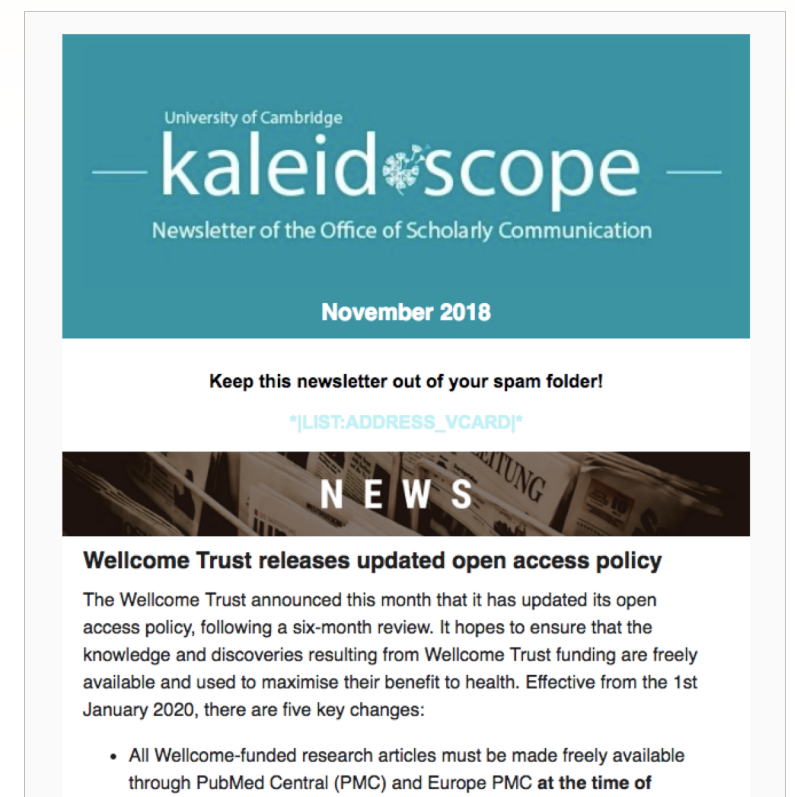
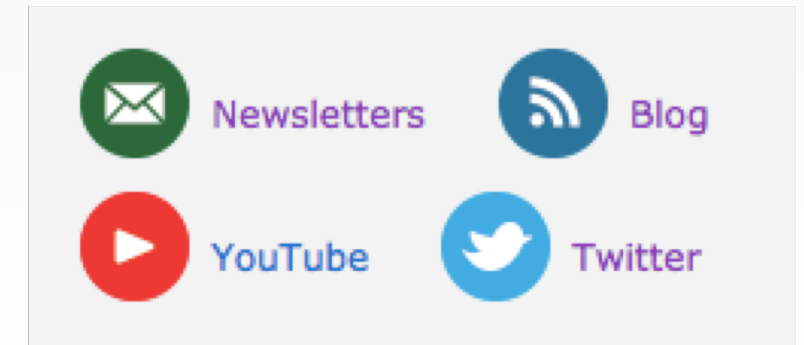
<https://www.data.cam.ac.uk/>



Outreach



<https://www.youtube.com/playlist?list=PLG24w6ETyHS3fYbDnB6LOOzOfATVhP3zp>



<https://www.repository.cam.ac.uk/handle/1810/266814>



<https://unlockingresearch-blog.lib.cam.ac.uk/>



Programmes



<https://librarianresources.taylorandfrancis.com/developing-21st-century-library/>

Open Access Week 2018

[View](#) [Edit](#) [Revisions](#) [Nodequeue](#)

Established by SPARC and partners in the student community in 2008, [International Open Access Week](#) happened worldwide between 22 and 28 October 2018 with the theme :

Designing Equitable Foundations for Open Knowledge

The Office of Scholarly Communication prepared a packed programme to mark this year's theme. On this page you can explore our:

- announcements
- blogs
- films in the series 'My thesis, open access and me'
- events

OAWeek 2018 Announcements

Monday: relaunching www.openaccess.cam.ac.uk

Announcing the relaunch of www.openaccess.cam.ac.uk

#OAWeek18

OSC
Office of Scholarly Communication

There was no better way to begin [International Open Access Week 2018](#) than by announcing the relaunch of our [Open Access](#) website!

<https://osc.cam.ac.uk/outreach/open-access-week-2018>



<https://www.data.cam.ac.uk/intro-data-champions>

All around the world, people want to access our research

"Our daughter is being investigated for Beckwith Wiedemann Syndrome. We would like as much information as possible about this area."

"My task is to convince policy makers in Sri Lanka to switch to circular economy. I am looking for all possible information to do this."

"I'm a pediatric radiation oncologist and this paper is a "practice changer" one!"

"I hope to learn more about the potential risks of my decision to donate a kidney."

Request a Copy service

Launched in June 2016, the "Request a Copy" feature on Apollo, the University of Cambridge institutional repository, allows interested individuals to request a copy of a work which is under embargo (published or unpublished).

Image credit: Keith H via Flickr (CC BY-NC-ND 2.0)









Presentation to SLT 31 January 2019



Theses

Increasing numbers of alumni theses

Terminology for different access levels to theses

View	Edit	Revisions	Nodequeue		
Icon	Access Category	Metadata & Abstract	Thesis	Requestable	Request managed by
	Open Access	Open – repository & catalogue	Open	N/A	N/A
	Embargoed Access	Open - repository & catalogue	Closed temporarily	Yes	Author
	Controlled Access	Open - repository & catalogue	Closed permanently in Apollo but available on request. Hardcopy open to visitors of CUL.	Yes <i>For private research purposes only</i>	OSC- Cambridge Library <i>Legally binding paperwork collected and maintained</i>
	Time Limited Restricted Access (including patents)	Closed temporarily	Closed temporarily	No	N/A
	Indefinitely Restricted Access (very rare)	Closed permanently	Closed permanently	No	N/A
	Historical	Open – catalogue only	Open to visitors of CUL	Yes	Digital Content Unit at Cambridge Library <i>Thesis scanned and legally binding paperwork collected and maintained</i>

<https://osc.cam.ac.uk/theses>

Watch PhD alumna, Dr Emily Dourish, talk about her experience of making her thesis Open Access in Apollo.



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Digital Thesis submission system

Home Theses List More information Login Privacy policy

Thesis Deposit (Raven login)

Contribute your digital thesis

To submit your digital thesis, please complete all sections (fields marked with * are compulsory). If you need assistance completing this form, please email the Office of Scholarly Communication at theses@repository.cam.ac.uk.

Important information: If none of the access options offered on this form meet your requirements and you believe your thesis should be fully restricted, please email theses@repository.cam.ac.uk with details of the content of your thesis. Additionally, further information on what the different access options mean and a decision tree to help you decide what is appropriate for your circumstances is available in the [OSC website](#).

1. Personal information 2. Thesis information 3. Access control 4. Third party copyright 5. File upload

Personal information

First names *

<https://upload.repository.cam.ac.uk/deposit/theses/form>



Managing policy requirements for deposit



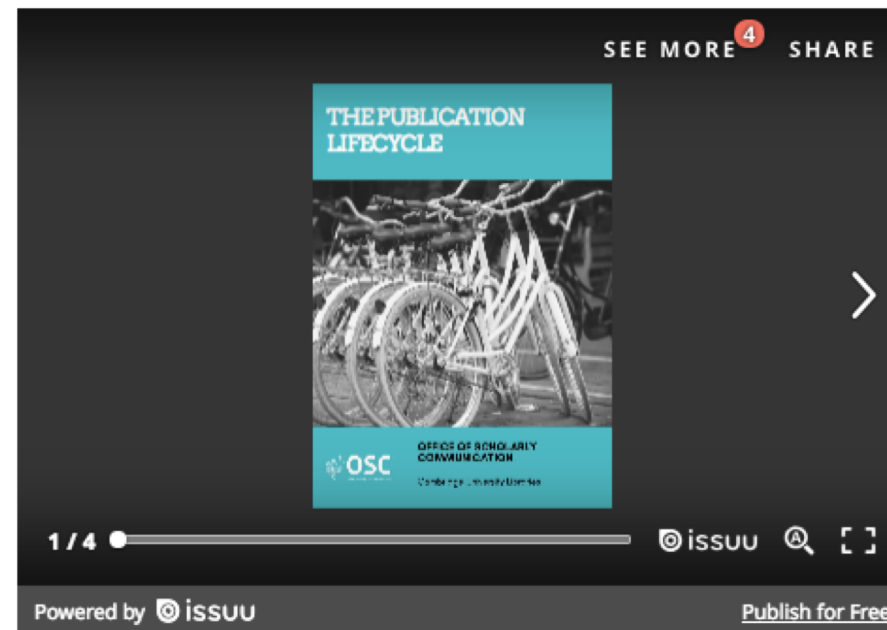
Presentation to SLT 31 January 2019



Training

Information booklets

We have also produced a series of information booklet on a range of topics relevant to scholarly communication. Although these are aimed at library staff they will also be useful for those wanting materials to share with their own research community. All of the information booklets are made available under a CC-BY 4.0 license.



Which personal attributes do you think are most valuable in scholarly communications roles?



Research in 3 Minutes

Scholarly communication is a large and confusing topic and it can be hard to grasp the basic concepts you need to start building your knowledge. We have prepared a set of short videos to cover *Research in 3 Minutes*. Each one covers a core concept such as the publication lifecycle, Research Data Management or Text and Data Mining. So sit back, relax and click the image below to learn about research support in less time than it takes to make a cup of coffee:



<http://bit.ly/ResearchIn3Minutes>

Working in RDM - Clair Castle

SCHOLARLY COMMUNICATION

VOX POPS

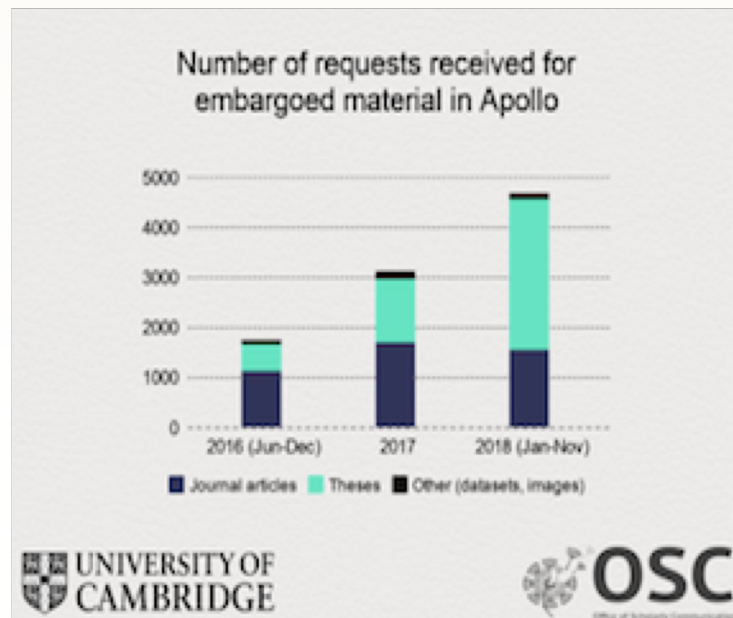


<https://osc.cam.ac.uk/training>



OSC in numbers 2018

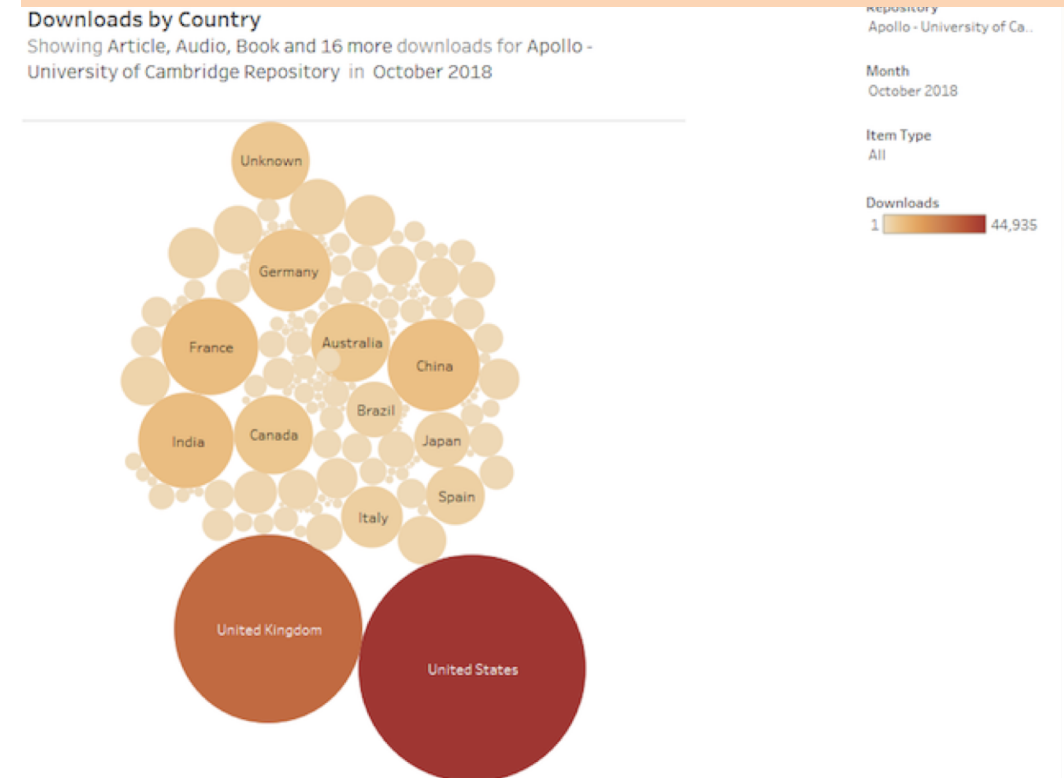
Request a Copy >4600 requests in 2018, 27 hrs p/wk



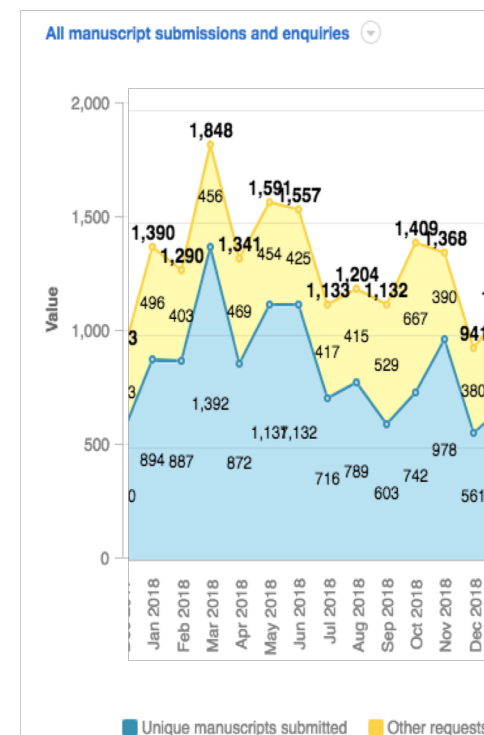
Apollo contains:
>1,500 research datasets
 >70% linked to RCUK funding
 ~30% of all datasets in UK institutions

46 Data champions

Apollo: over 2.2 million downloads in 2018



57 events run for researchers, librarians & wider Cambridge community
 Over 800 attendees in 2018



Unlocking Research: 35 blogs in 2018, >25,000 visits Apr-Dec 2018



9703 manuscripts submitted
 5,501 queries received by OA Helpdesk
 65 hours p/wk



What about Overleaf?

- Discovered there was no central fund or committee process for research systems - this is “managed at the School or Faculty/Department level”.
- In late 2018 University Information Service reworked its governance to a committee structure focusing on portfolios, one being Research.
- The High Performance Computing Committee was reformed as the Research Computing Sub-Committee, ToR agreed in December 2018
- Identified a possible source of funds

2019

Where to from here?

- In 2019 we have come to an end
- But it is also the beginning of the next phase



Announcement



6,000 and counting: Cambridge Vice-Chancellor joins Stephen Hawking in making his PhD 'Open Access'

Cambridge also becomes first UK university to publish position statement on Open Research

By Stuart Roberts



<https://www.cam.ac.uk/6000thThesis>
<https://osc.cam.ac.uk/open-research/open-research-position-statement>



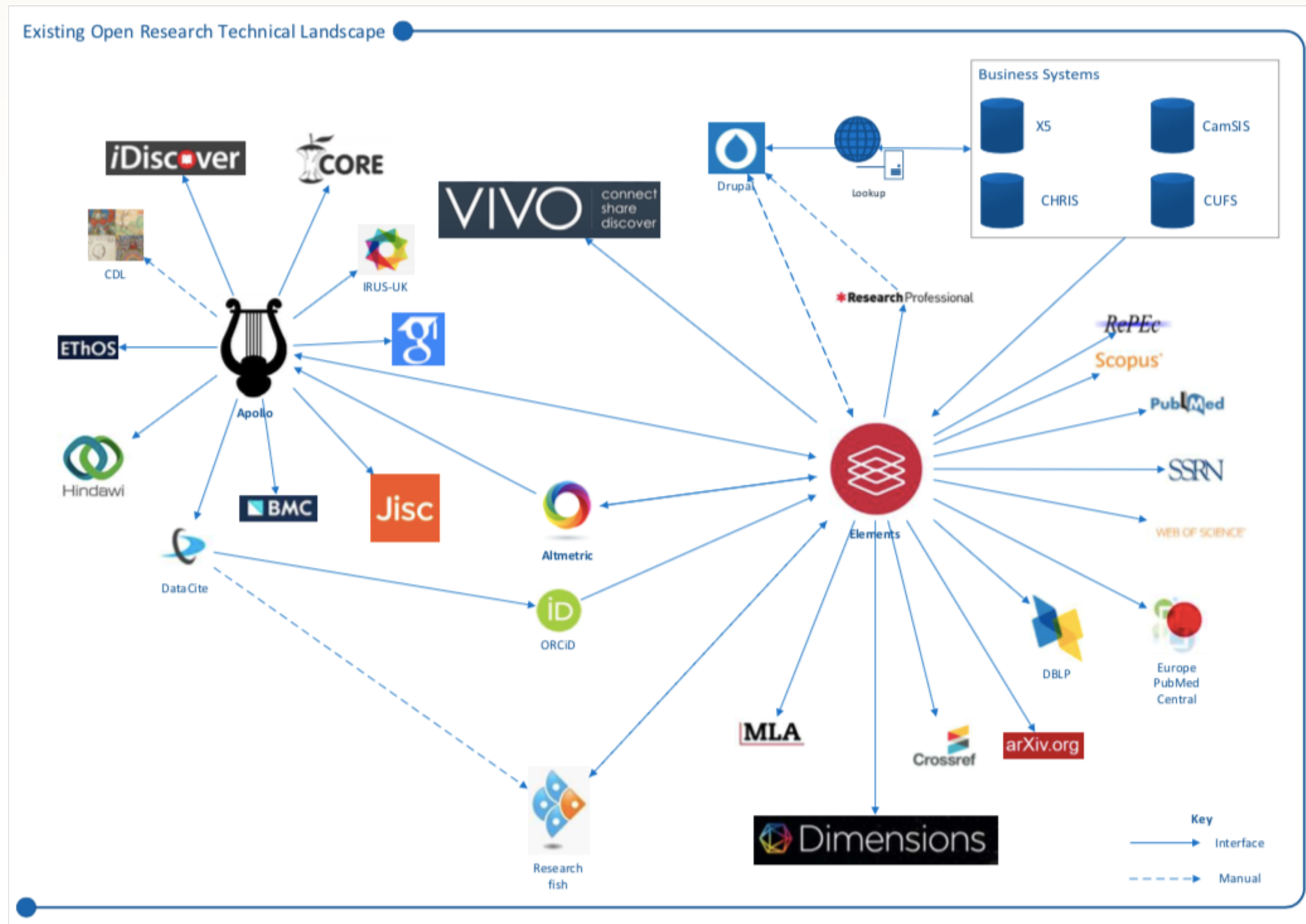
Governance changes

- Open Access Project Board (OAPB) replaced with Open Research Steering Committee (ORSC) – 1st meeting April 2019
 - Chaired by PVC-R
 - Reporting to Research Policy Committee

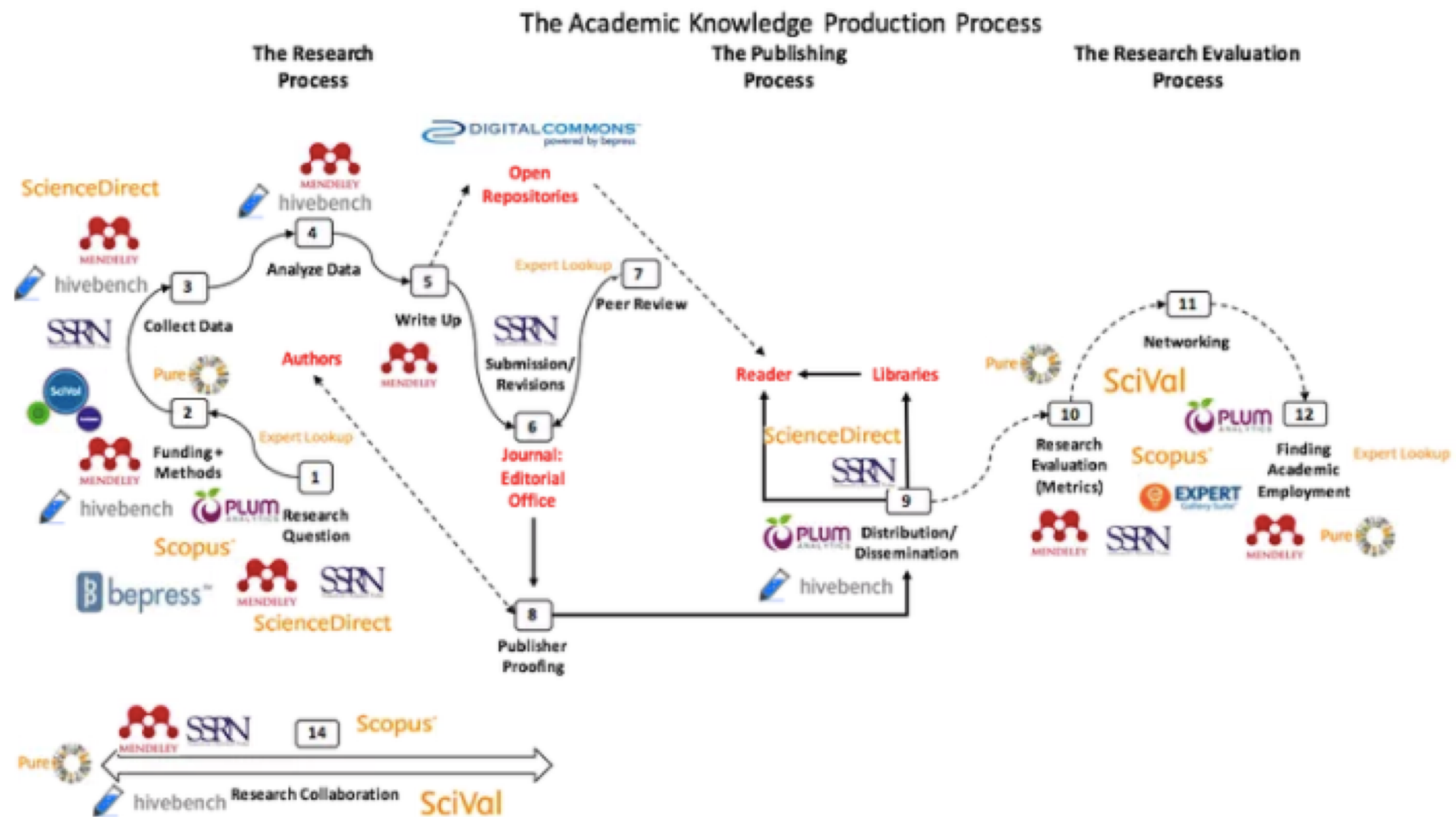
Next steps - infrastructure

- Open Research Infrastructure Group (ORIG)
 - Preparing infrastructure landscape map at Cambridge. What are the gaps?
 - Conducting survey to identify needs
 - ELN Working Group being formed
 - Develop parameters about procurement across the institution:
 - Able to extract our business data at any time without penalty
 - Consider Open Source and sector wide solutions before purchase

Technical landscape



We want to avoid this:



Vertical integration resulting from Elsevier's acquisitions, from Alejandro Posada and George Chen, (2017) *Rent Seeking and Financialization strategies of the Academic Publishing Industry - Publishers are increasingly in control of scholarly infrastructure and why we should care- A Case Study of Elsevier*
<http://knowledgegap.org/index.php/sub-projects/rent-seeking-and-financialization-of-the-academic-publishing-industry/preliminary-findings/>

Next steps - training & reward

- Human Resources and Research Policy Committees working on implications and implementation of signing DORA
- Open Research Training Pilot with Education Faculty
 - Running a survey – confusion about terms
 - Requesting primarily face to face training
- Developing online training portal with CUP, focusing on Research Integrity in first instance

Questions/Discussion

Thanks!

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