



Cambridge's journey towards Open Access

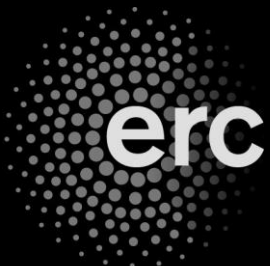
Dr Arthur Smith



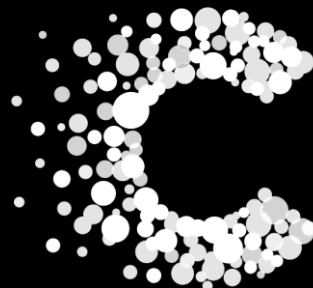
Policies
Response
Systems
Impact
Future

Policies

The Open Access policy landscape in the UK is complex



European Research Council
Established by the European Commission



CANCER
RESEARCH
UK



HEFCE Open Access Policy

HEFCE runs the Research Excellence Framework (REF) which determines the block grant funding to universities.

Green Open Access policy

12 month embargo in STEM fields

24 month embargo in AHSS fields

Accepted manuscripts must be deposited in a repository ***within 3 months of being accepted for publication.***

HEFCE Open Access Policy

We can't know which papers will be used in the REF so we have to make them *all* Open Access.

Our goal: 10,000 manuscripts/year

Research Councils UK Open Access Policy

Green Open Access policy

6 month embargo in STEM fields

12 month embargo in AHSS fields

Gold Open Access policy

When an APC is paid the paper ***must*** be made available immediately under a CC BY licence.

All articles should have a statement describing how to access underlying research data.

Data should be stored for at **least 10 years** or for **10 years from the last request** for access to the data.

Charities Open Access Fund

Gold Open Access policy

Preferred option, but paper ***must*** be made available immediately under a CC BY licence and deposited in PMC.

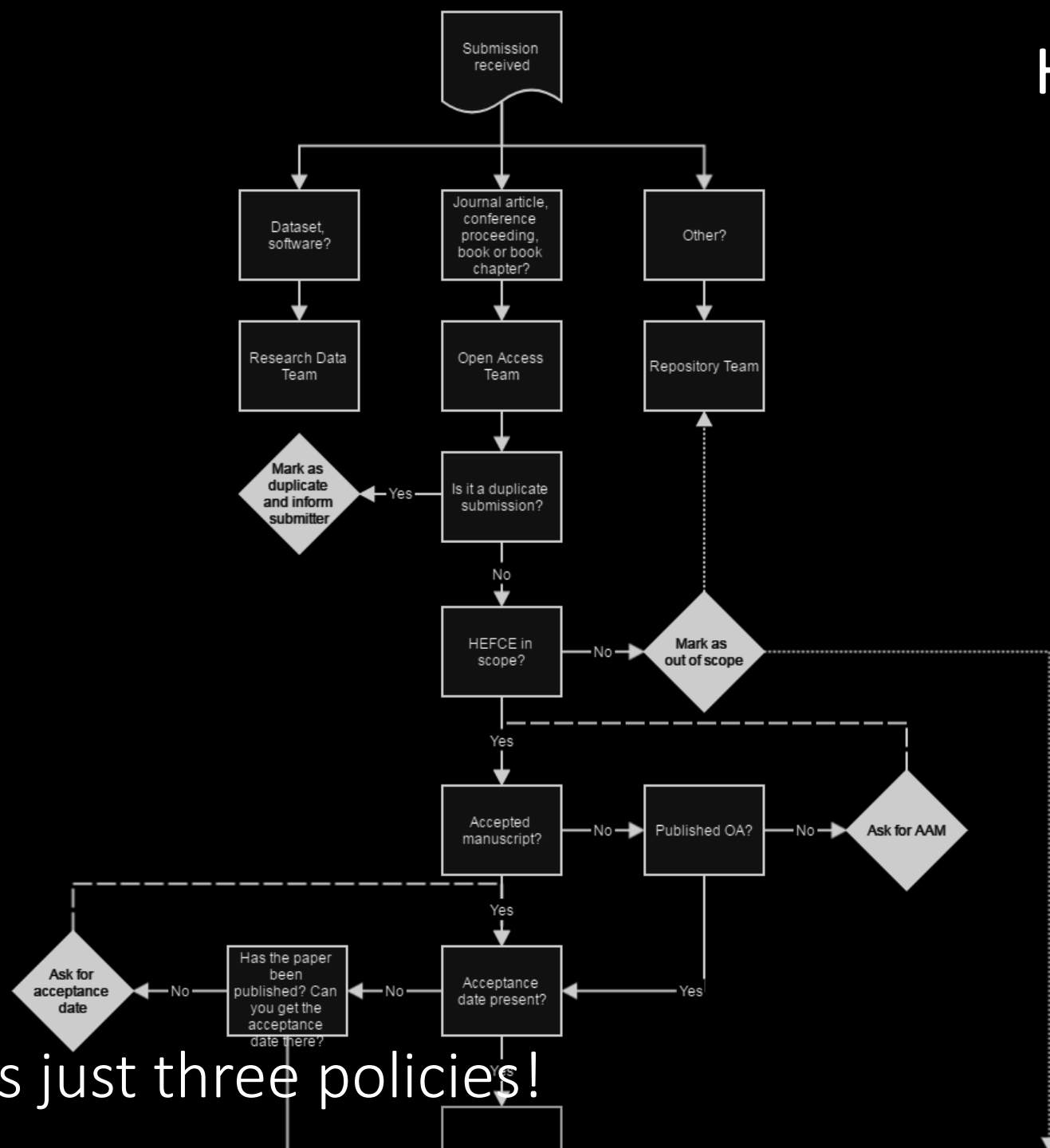
Green Open Access policy

6 month embargo in Europe PMC

Sanctions for non-compliance.



How does this all work?



That's just three policies!

What is the University's position?

“The University of Cambridge is committed to disseminating its research and scholarship as widely as possible... All journal articles and conference proceedings should be submitted to the University's Open Access Service based in the Office of Scholarly Communication.”

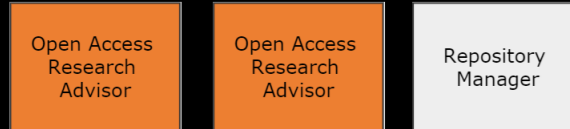
“The payment of additional funds to publishers on top of subscriptions (known as ‘hybrid’ publishing) is considered to be an ineffective transition mechanism towards a wider OA system.”



UNIVERSITY OF
CAMBRIDGE

Response

Staffing December 2014

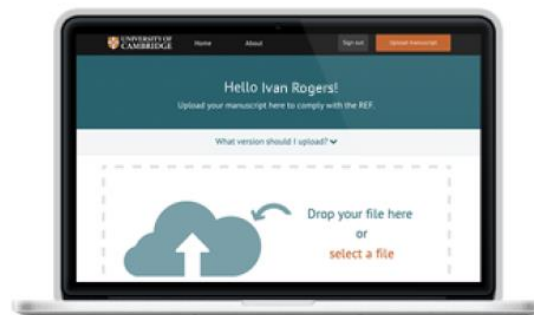


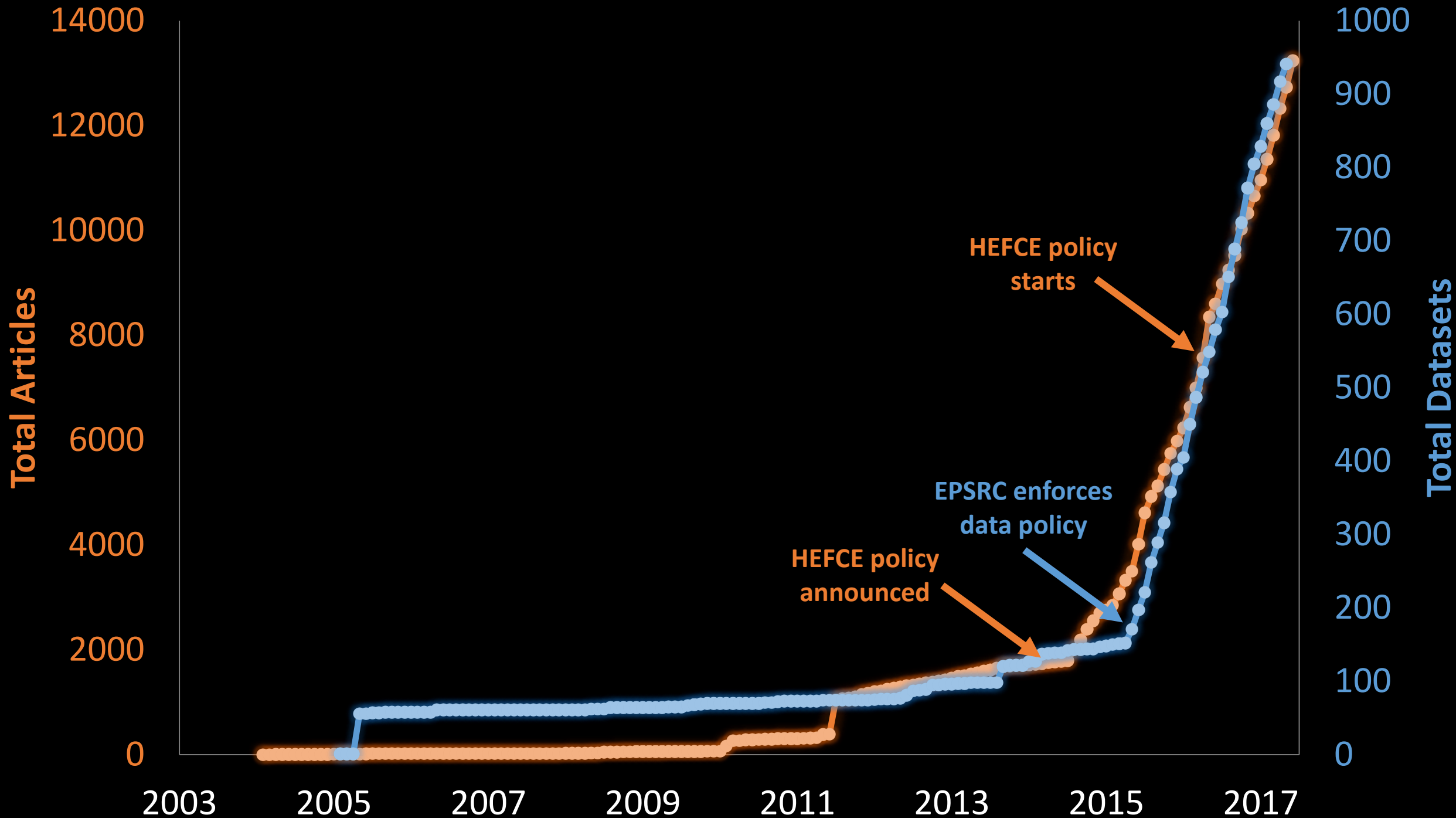
Office of Scholarly Communication formed January 2015

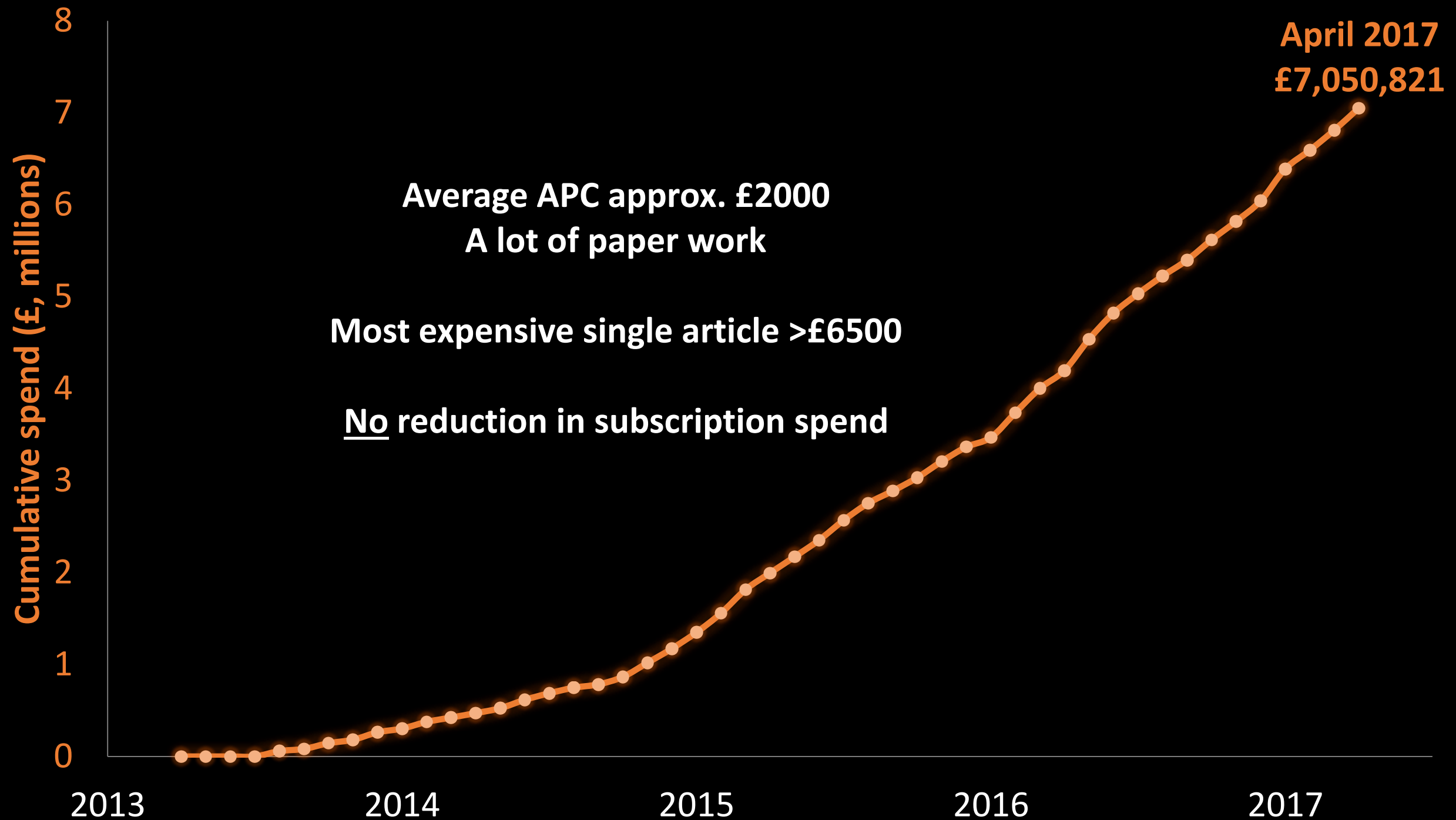
“The Office of Scholarly Communication works in a transparent and rigorous manner to provide recognised leadership and innovation in the open conduct and dissemination of research at Cambridge University through collaborative engagement with the research community and relevant stakeholders.”

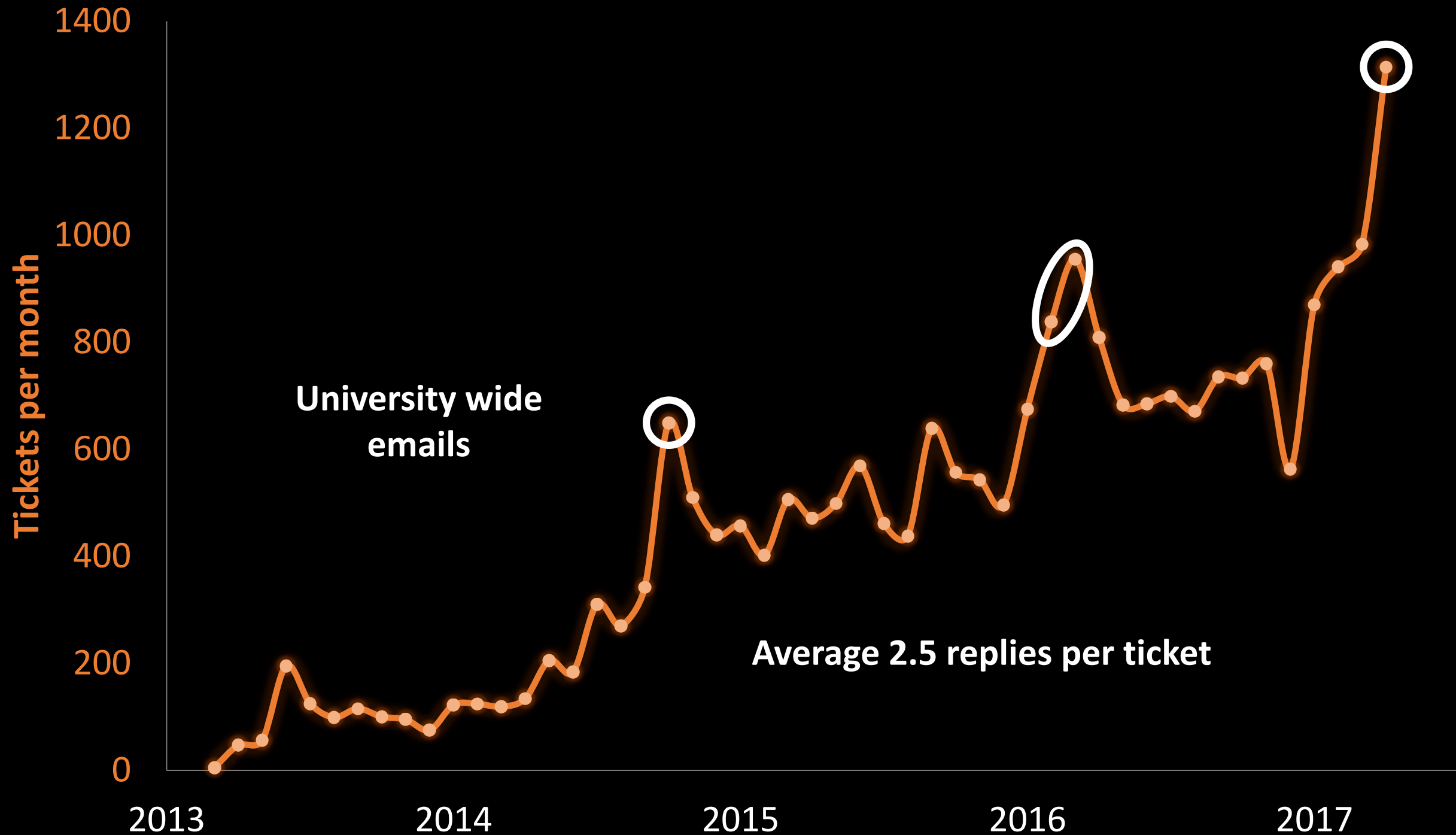
Accepted for publication?

From 1 April 2016 you must upload all manuscripts
to be eligible for the REF.

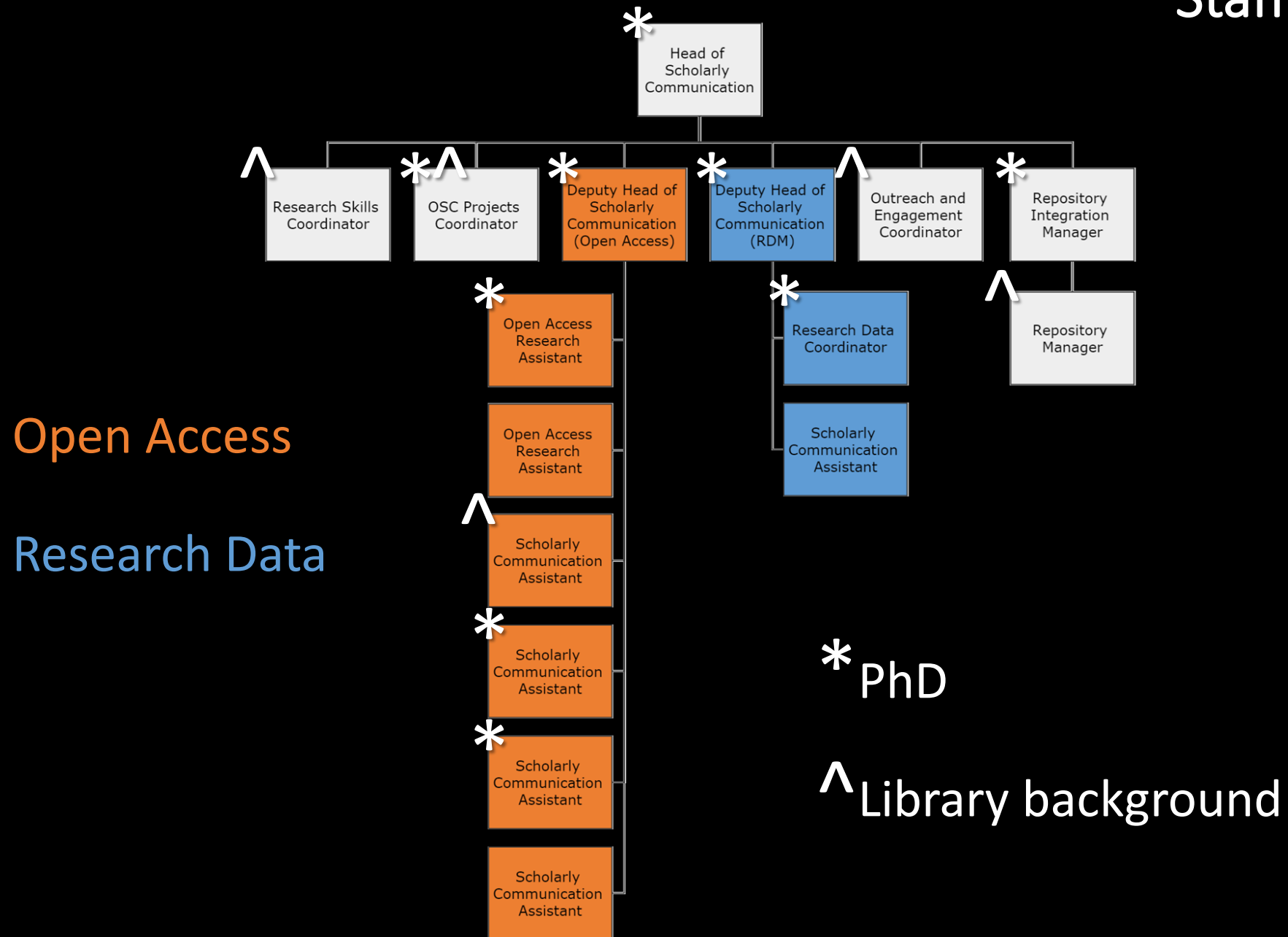








Staffing Today



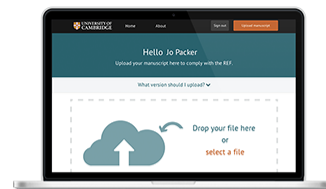
Systems

The way you make your work Open Access will be changing in the next few months. You can [read more about this from the OSC](#). If you are in the Symplectic Elements Deposit Pilot please [submit your manuscripts here](#).

Accepted for publication? Make sure your work can meet REF and other funders' Open Access requirements

[Upload manuscript](#)

What do I need to do?



When your article or conference proceeding is accepted by a journal, or when the journal asks you to sign a copyright agreement or choose an open access option, if that comes first, [upload it](#). Every Cambridge author who is submitting their work in the next REF is affected.

We'll check your funder and journal policies and advise on how to comply with REF and funder requirements.

[Find out more](#)

Open Access policies



The HEFCE open access policy requires research articles and conference proceedings to be available through an institutional repository to be eligible for the next REF.

We will continue to advise on other funders' policies and to pay eligible Open Access costs for papers funded by RCUK and the Wellcome Trust.

[Find out more](#)

[← Back](#)

The way you make your work Open Access will be changing in the next few months. You can [read more about this from the OSC](#). If you are in the Symplectic Elements Deposit Pilot please [submit your manuscripts here](#).




accepted_manuscript.pdf
119.3 KB

We need some more details

Title *


What department are you uploading for? *

Corresponding author  *

Is this corresponding author at the University of Cambridge? *

☒ Yes ☐ No

Journal or conference title * [A note on Open Access charges](#)

Acceptance date  *



☐ I don't know the acceptance date

Was this research funded by any external funders? *

☒ Yes ☐ No

Which funders funded this research?

From here we do a lot of cutting and pasting...

DSpace@Cambridge

DSpace@Cambridge is the University of Cambridge's institutional repository, preserving and providing access to content created by members of the University. It is delivered and managed by the University Library.

Open access research publications published by members of the University are being added to DSpace@Cambridge in line with research funder requirements. If you are publishing articles or conference proceedings with open access requirements from your funders, please see the [Open Access pages](#).

New look and location. On 25 July we upgraded the DSpace@Cambridge software resulting in changes to the repository's look, workflows and web address (the old addresses will continue to work). If you experience any problems please [contact us](#).

Communities in the Repository

Select a community to browse its collections.

- [Animal Health Trust \(University Partner Institution\)](#)
- [Arcadia Programme](#)
- [Babraham Institute](#)
- [British Antarctic Survey](#)
- [Cambridge eScience Centre \(CeSC\)](#)
- [Cambridge Institute for Medical Research](#)
- [Cambridge Neuroscience](#)
- [Cambridge University Student Societies](#)
- [CamRAD](#)
- [Cancer Research UK Cambridge Institute](#)
- [CARET](#)
- [Centre for Family Research](#)
- [Centre for Research in the Arts, Social Sciences and Humanities](#)
- [Centre for Trophoblast Research](#)
- [Centre of African Studies](#)
- [Centre of Latin American Studies](#)
- [Centre of South Asian Studies](#)
- [Department of Applied Mathematics and Theoretical Physics \(DAMTP\)](#)
- [Department of Archaeology](#)
- [Department of Architecture](#)
- [Department of Biochemistry](#)
- [Department of Biological Anthropology](#)
- [Department of Chemical Engineering and Biotechnology](#)
- [Department of Chemistry](#)
- [Department of Clinical Biochemistry](#)
- [Department of Clinical Neurosciences](#)
- [Department of Earth Sciences](#)
- [Department of Engineering](#)
- [Department of French](#)
- [Department of Genetics](#)
- [Department of Geography](#)
- [Department of German and Dutch](#)
- [Department of Haematology](#)
- [Department of History and Philosophy of Science](#)
- [Department of History of Art](#)
- [Department of Italian](#)
- [Department of Land Economy](#)
- [Department of Linguistics](#)
- [Department of Materials Science and Metallurgy](#)
- [Department of Medical Genetics](#)
- [Department of Medicine](#)
- [Department of Obstetrics and Gynaecology](#)
- [Department of Oncology](#)
- [Department of Paediatrics](#)
- [Department of Pathology](#)
- [Department of Pharmacology](#)
- [Department of Physics - The Cavendish Laboratory](#)
- [Department of Physiology, Development and Neuroscience](#)
- [Department of Plant Sciences](#)
- [Department of Psychiatry](#)
- [Department of Psychology](#)
- [Department of Public Health and Primary Care](#)
- [Department of Pure Mathematics and Mathematical Statistics \(DPMMS\)](#)
- [Department of Radiology](#)
- [Department of Slavonic Studies](#)
- [Department of Social Anthropology](#)
- [Department of Spanish and Portuguese](#)
- [Department of Surgery](#)
- [Department of Veterinary Medicine](#)
- [Department of Zoology](#)
- [DSpace](#)
- [European Bioinformatics Institute \(EMBL-EBI\)](#)
- [Faculty of Asian and Middle Eastern Studies](#)
- [Faculty of Classics](#)
- [Faculty of Computer Science and Technology](#)
- [Faculty of Divinity](#)
- [Faculty of Economics](#)
- [Faculty of Education](#)
- [Faculty of English](#)
- [Faculty of History](#)
- [Faculty of Human, Social and Political Science](#)
- [Faculty of Life Sciences](#)

Help

Help Pages
[Browse support pages](#)
Email
support@repository.cam.ac.uk
Contact
[Contact Us](#)

Search the Repository

Go

Browse

All of the Repository
[Communities & Collections](#)
[Authors](#)
[Titles](#)
[Subjects](#)
[Type](#)

My Account

[Login](#)

Discover

Author
[US National Cancer Institute \(175356\)](#)
[Unknown \(7001\)](#)
[Les Goodey, Cambridge University Library \(454\)](#)
[Douglas, B \(409\)](#)
[Namgyal Institute of Tibetology \(296\)](#)
[Macfarlane, Alan \(278\)](#)
[Merron, Hannah \(187\)](#)
[None \(153\)](#)
[Dixit, Kanak Mani \(146\)](#)
[Kaillash \(136\)](#)
[... View More](#)

Subject
[Letter \(1195\)](#)
[Unidentified \(935\)](#)
[Oral Literature \(727\)](#)
[Linguistic Anthropology \(722\)](#)
[Oral Tradition \(694\)](#)
[Legal document \(566\)](#)
[Rabbinics \(486\)](#)
[Document \(435\)](#)
[Bible translation \(366\)](#)
[Accounts \(314\)](#)
[... View More](#)

Type
[Other \(175428\)](#)
[Manuscript \(7205\)](#)
[Article \(4286\)](#)
[Image \(3352\)](#)
[Audio \(949\)](#)
[Video \(919\)](#)
[Thesis \(762\)](#)
[Working Paper \(698\)](#)
[Presentation \(129\)](#)
[Dataset \(67\)](#)
[... View More](#)

RSS Feeds

-  [RSS 1.0](#)
-  [RSS 2.0](#)
-  [Atom](#)

The problem...

OA publications

In-house submission form



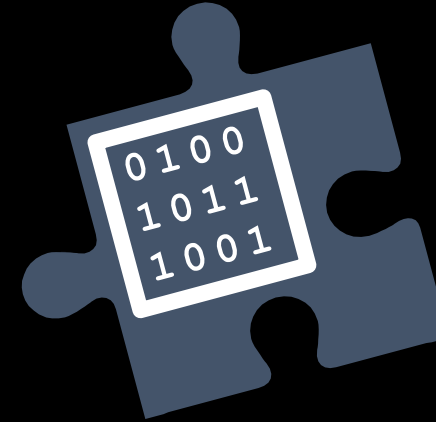
Zendesk helpdesk

Respond to article and data submissions



Symplectic Elements

Add / claim publications and link to research grants



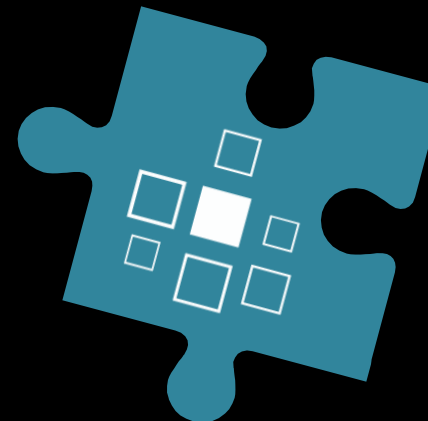
Research datasets

External submission form



Theses

Ad hoc collection usually via email



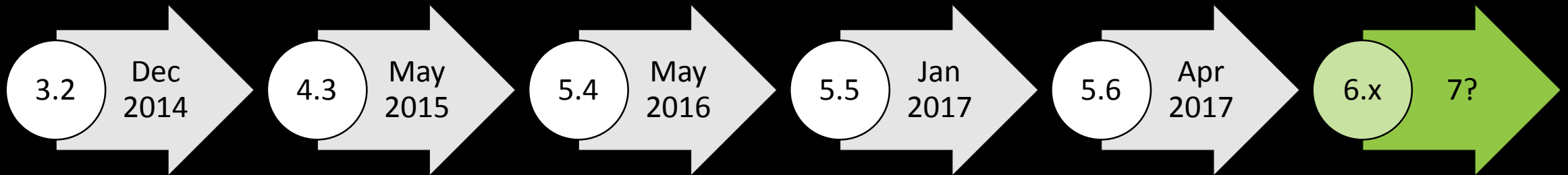
DSpace@Cambridge

Manual deposit of articles, data and theses into the repository

Upgrades



DSPACE



Apollo

The integrated solution

Repository Tools 1

Automatic deposit of data (<2 GB/file)
and articles in Apollo via Elements

Enhanced reporting

Open Access Monitor: compliance data
available from a single source

Enhanced visibility of outputs

Automatic updates from publishers



0 1 0 0
1 0 1 1
1 0 0 1

Automatic DOI minting

Submitters receive immediate email
confirmation of their dataset DOI



Java Zendesk API

Tickets are created in the
workflow step





[Advanced search](#)

Apollo - University of Cambridge Repository

This repository holds the research output of members of the University of Cambridge. It is delivered and managed by the University Library's [Office of Scholarly Communication](#) team.

Browse

All of Apollo

> [Communities & Collections](#)

> [Authors](#)

> [Titles](#)

> [Subjects](#)

> [Type](#)

Statistics

> [View Usage Statistics](#)



School of Arts and Humanities



School of Clinical Medicine



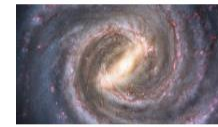
School of Technology



School of the Biological Sciences



School of the Humanities and Social Sciences



School of the Physical Sciences



Colleges



Other Communities

Share your
research

Recently Added



Clinical diagnosis of progressive supranuclear palsy: The movement disorder society criteria

Höglinger, GU; Respondek, G; Stamelou, M; Kurz, C; Josephs, KA; Lang, AE; Mollenhauer, B et al. (Wiley, 2017-01-01)

BACKGROUND: PSP is a neuropathologically defined disease entity. Clinical diagnostic criteria, published in 1996 by the National Institute of Neurological Disorders and Stroke/Society for PSP, have excellent ...



Identification of Post-Transcriptional Modulators of Breast Cancer Transcription Factor Activity Using MINDY

Campbell, TM; Castro, MAA; Ponder, BAJ; Meyer, KB (Public Library of Science (PLOS), 2016-12-20)

We have recently identified transcription factors (TFs) that are key drivers of breast cancer risk. To better understand the pathways or sub-networks in which these TFs mediate their function we sought to identify upstream ...

[Advanced search](#)

Rare and low-frequency coding variants alter human adult height

Browse

All of Apollo

> [Communities & Collections](#)

> [Authors](#)

> [Titles](#)

> [Subjects](#)

> [Type](#)

This Collection

> [Authors](#)

> [Titles](#)

> [Subjects](#)

> [Type](#)

Statistics

> [View Usage Statistics](#)



View / Open Files

Accepted version (PDF, 620Kb)

Authors

[Stirrups, KE](#)
Butterworth, AS
Chowdhury, R
Danesh, J
 [Di Angelantonio, E](#)
Howson, JMM
 [Surendran, P](#)
Young, R
 [Dennis, JG](#)
 [Easton, DF](#)
 [Thompson, DJ](#)
 [Dunning, AM](#)
Pirie, A
Tyrer, JP
 [Langenberg, C](#)
Luan, J
Scott, RA
 [Wareham, NJ](#)
Willems, SM
 [Zhao, JH](#)
Sivapalaratnam, S
[Show less](#)

Publication Date

2017-02-01

Journal Title

Nature

Publisher

Nature Publishing Group

Language

English

Type

Article

This Version

AM

Citation

Stirrups, K., Butterworth, A., Chowdhury, R., Danesh, J., Di Angelantonio, E., Howson, J., Surendran, P., et al. (2017). Rare and low-frequency coding variants alter human adult height. *Nature* <https://doi.org/10.1038/nature21039>

Abstract

Height is a highly heritable, classic polygenic trait with ~700 common associated variants identified so far through genome-wide association studies. Here, we report 83 new height-associated coding variants with lower minor allele frequencies (range of 0.1-4.8%) and effects of up to 2 cm/allele (e.g. in IHH, STC2, AR and CRISPLD2), >10 times the average effect of common variants. In functional follow-up studies, rare height-increasing variants of STC2 (+1-2 cm/allele) compromised proteolytic inhibition of PAPP-A and increased cleavage of IGFBP-4 in vitro, resulting in higher bioavailability of insulin-like growth factors. These 83 height-associated variants overlap genes mutated in monogenic growth disorders and highlight new biological candidates (e.g. ADAMTS3, IL11RA, NOX4) and pathways (e.g. proteoglycan/glycosaminoglycan synthesis) involved in growth. Our results demonstrate that sufficiently large sample sizes can uncover rare and low-frequency variants of moderate to large effect associated with polygenic human phenotypes, and that these variants implicate relevant genes and pathways.

Sponsorship

Cancer Research UK, Wellcome Trust A full list of acknowledgments appears in the Supplementary Note. Part of this work was conducted using the UK Biobank resource.

Embargo Lift Date

2017-08-01

Identifiers

External DOI:

<https://doi.org/10.1038/nature21039>

This record's URL:

<https://www.repository.cam.ac.uk/handle/1810/262031>



[See more details](#)

Picked up by 91 news outlets
 Blogged by 19
 Tweeted by 492
 On 17 Facebook pages
 Referenced in 1 Wikipedia pages
 177 readers on Mendeley
 7 readers on CiteULike

Rights

Licence:

<http://www.rioxn.net/licenses/all-rights-reserved>



[Advanced search](#)

Request a copy of the document

Browse

All of Apollo

- > [Communities & Collections](#)
- > [Authors](#)
- > [Titles](#)
- > [Subjects](#)
- > [Type](#)

This Collection

- > [Authors](#)
- > [Titles](#)
- > [Subjects](#)
- > [Type](#)

Administrators of this collection can login to view this document.

[Login](#)

Enter the following information to request a copy of the document from the responsible person. Please note that if requesting a thesis, there may be a charge for this service.

Rare and low-frequency coding variants alter human adult height

Your name:

Your email address:

This email address is used for sending the document.

Files:

- ☒ All files (of this document) in restricted access.
- ☐ Only the requested file.

Message:

[Request a copy](#)

Impact

Repository Stats

Since upgrading to 5.x

**1,000,000 bitstream
downloads**

3,000 item requests

1,100 ORCIDs added

Since 2015 we've added

10,000 articles

1,700 images

1,600 theses

800 datasets

500 working papers



Apollo

0% 10% 20% 30% 40% 50% 60%

Not OA

48%

OA

52%

In Apollo

26%

In other repository

13%

In EPMC

26%

OA according to WoS

12%

DOAJ OA journal

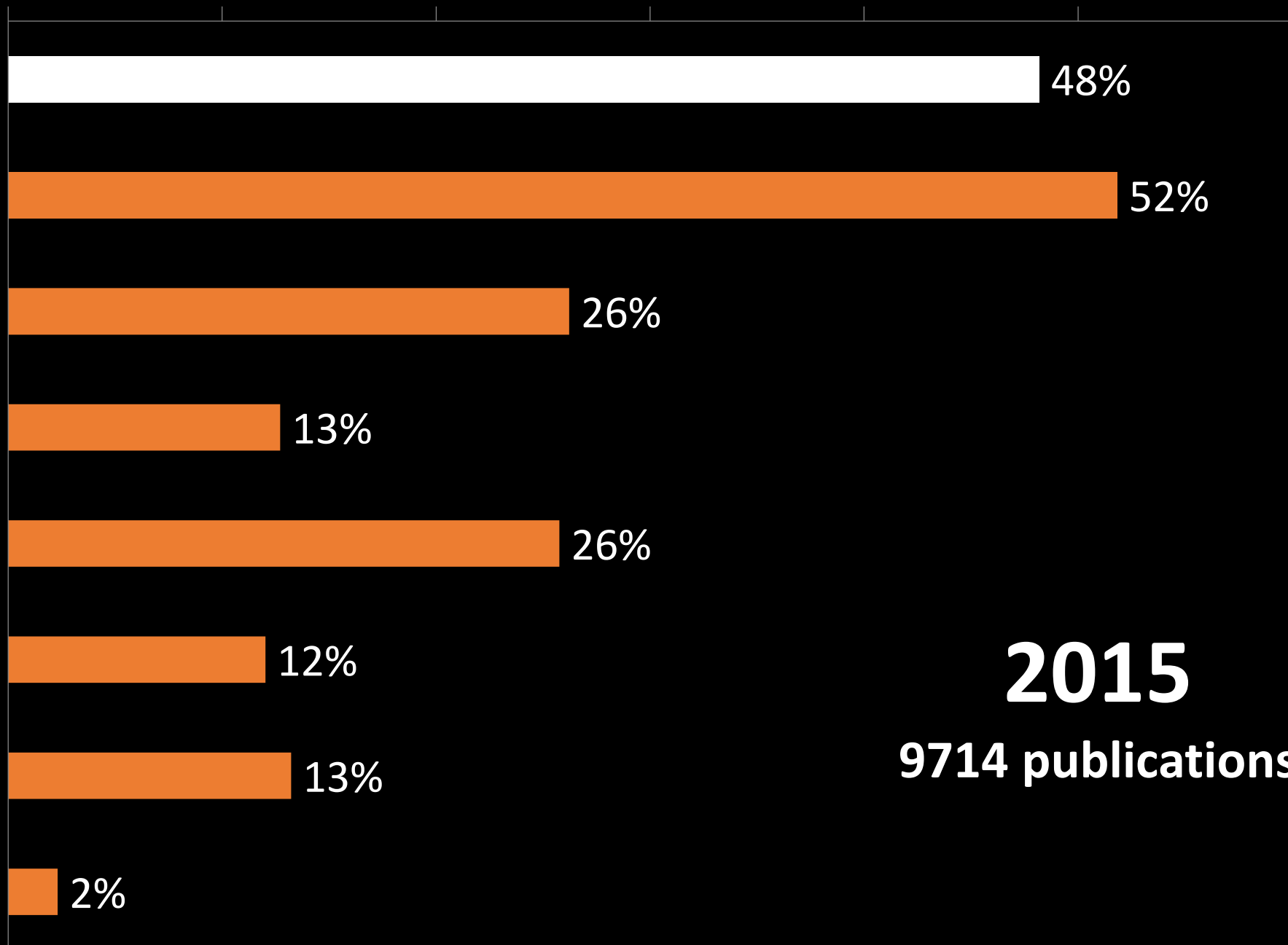
13%

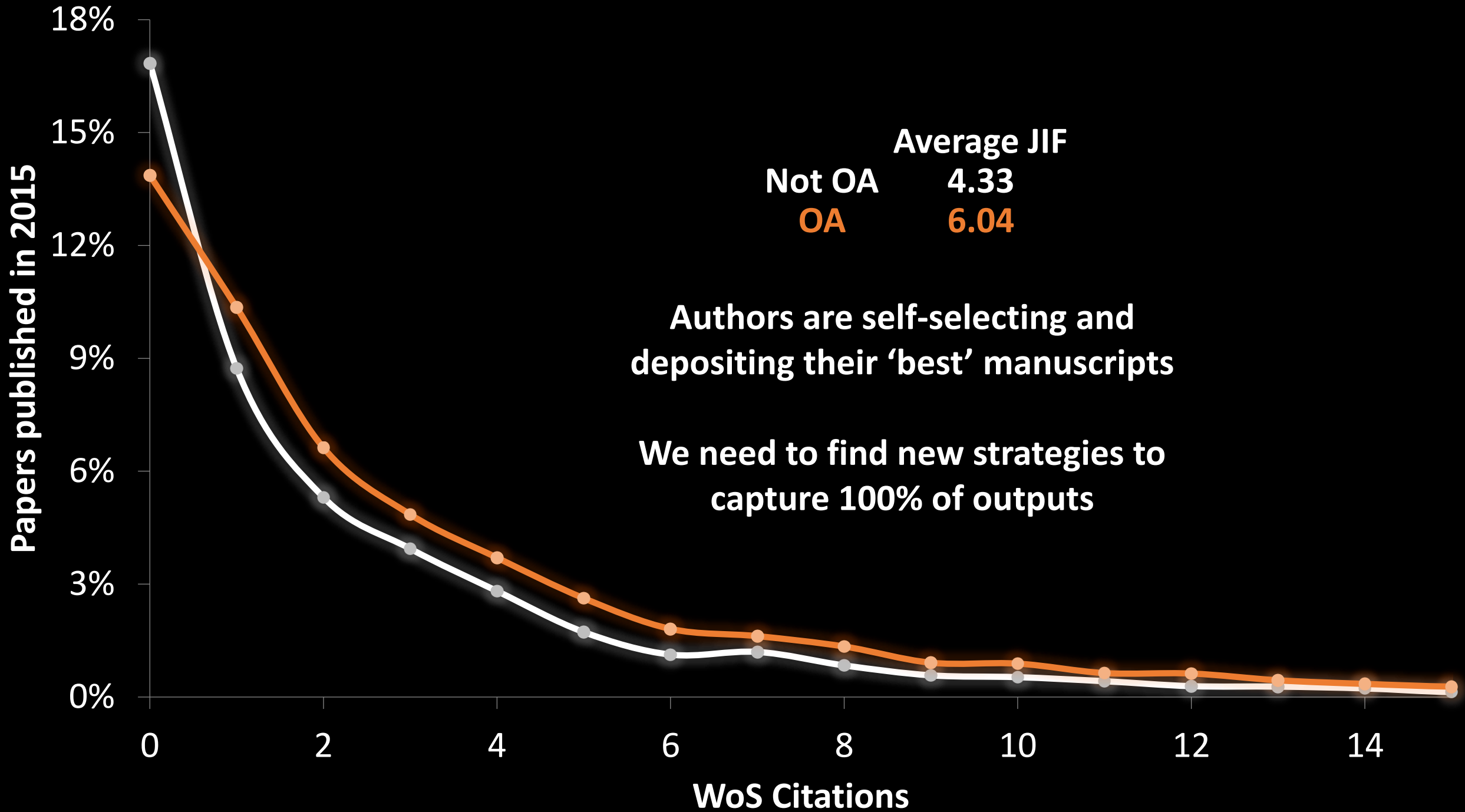
OA on publisher website

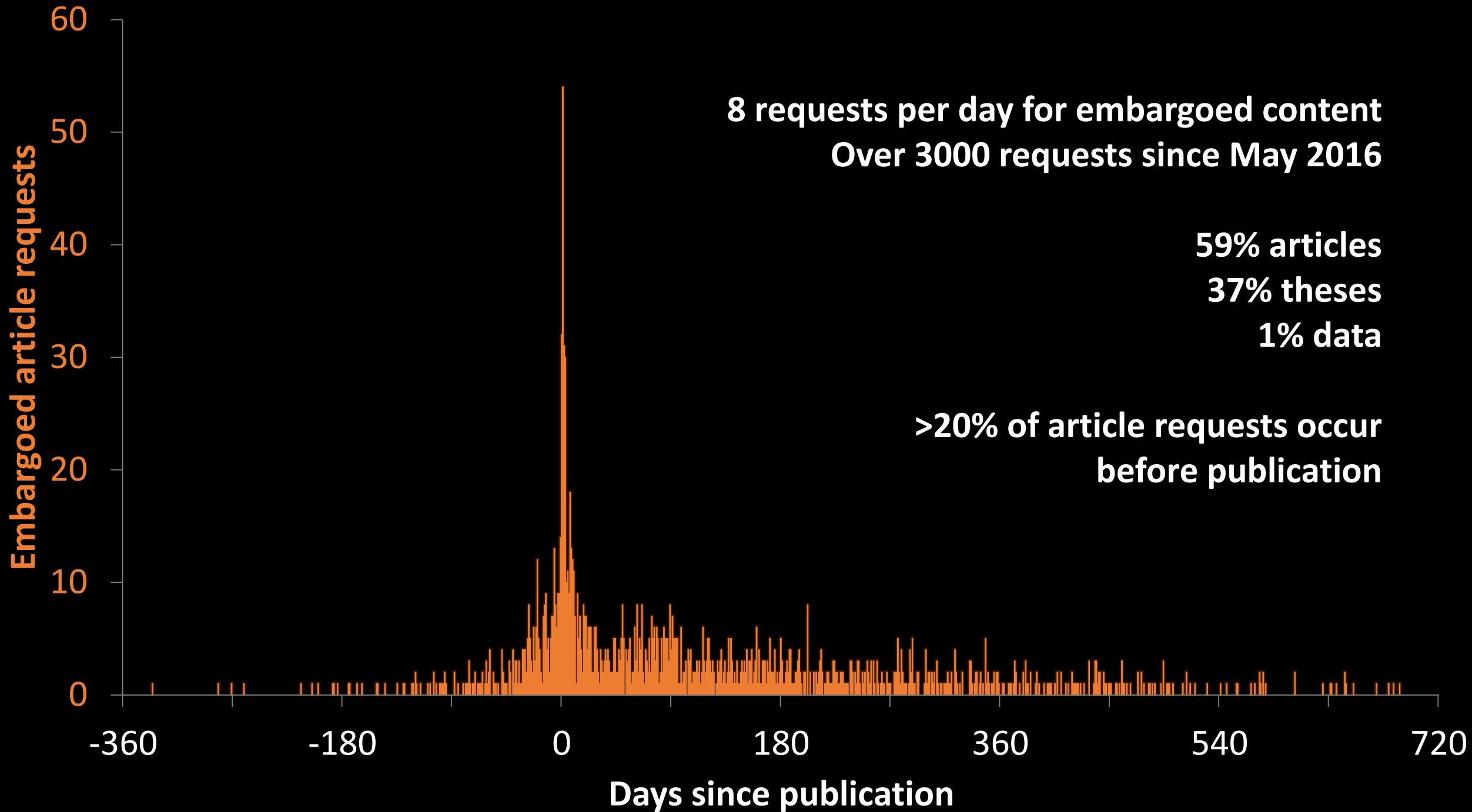
2%

2015

9714 publications







Future

Symplectic Elements upgrade to Repository Tools 2

Apollo upgrade to DSpace 6 and/or 7



+



=

UK Research
& Innovation

Brexit...

Across the sector we've spent a lot on Gold Open Access
>75% going towards hybrid journals

In 2015 the UK as a whole spent:
£22.6 million from RCUK
£6.6 million from COAF

Researchers are equating Open Access with Gold

What we really need is cultural change from researchers and policy changes from funders (stop paying for hybrid!)

Acknowledgements

The Office of Scholarly Communication

Dr Danny Kingsley

Dr Marta Teperek

Dr Lauren Cadwallader

Phillipa Grimstone

Dr Joyce Heckman

Claire Sewell

Dr Agustina Martínez-García

Dr Debbie Hansen

Dr Matthias Ammon

Peter Sutton-Long

Maria Angelaki

Dr André Sartori

Mel Turner

Lucy Welch

Dr Marta Busse-Wicher

Dr Juergen Wastl

Dr Owen Roberson

David Piper

Dr Philip Boyes

Matthew Wright

Nick Dodd

Patrick Linton

Catherine Milne

Sarah Middle

Hannah Haines

Rosie Higman

Peter Brindle





UNIVERSITY OF
CAMBRIDGE

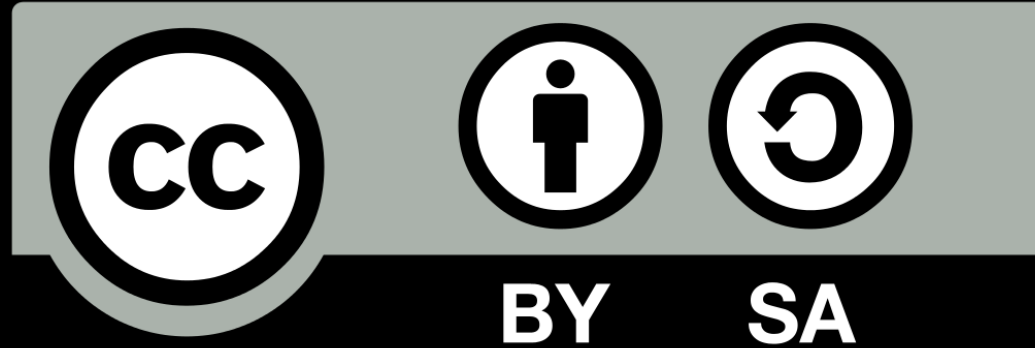
Thank you

as2507@cam.ac.uk

[@CamOpenAccess](#)

info@osc.cam.ac.uk

[@CamOpenData](#)



This work is licensed under a Creative Commons Attribution ShareAlike 4.0 International (CC BY SA 4.0) licence. The logos in this presentation are not included in the presentation's Creative Commons licence, and users may need to obtain permission from the licence holder to reproduce the material. To view a copy of this licence, visit <http://creativecommons.org/licenses/by-sa/4.0/>