Development of A Sustainable Open Access Market

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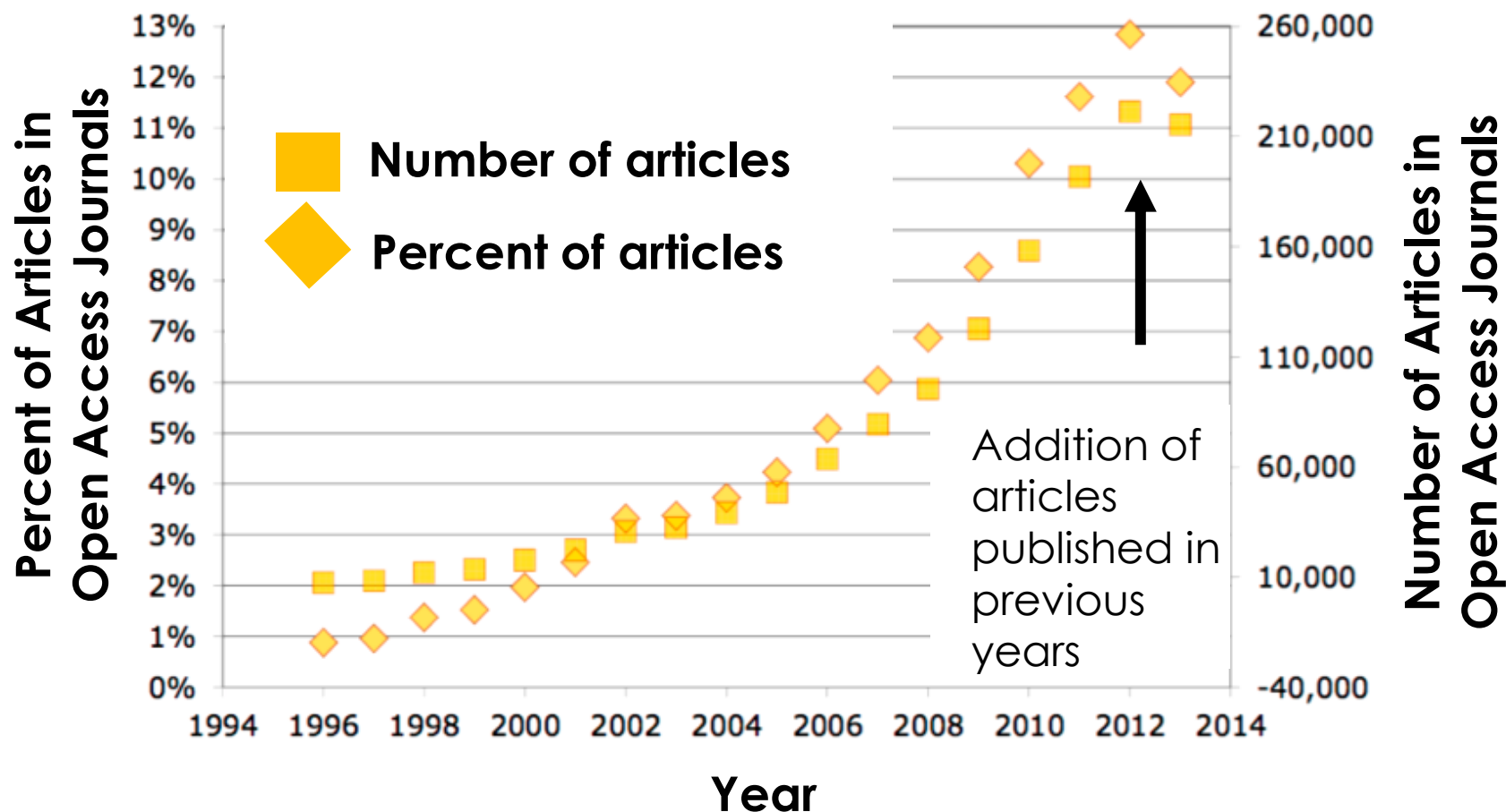
The Publishing Landscape
and
Open Access

OA in the STM Journal Market

- STM journal publishing revenue estimated at $9.7 billion in 2015*

- OA journal revenue estimated at $305.5 million in 2015, 3.2% of STM publishing market*

- Gold OA share of STM research article output in 2015 is 13.85%**

- All OA ~20% of STM market output in 2015*

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Rising Share of Open Access STM Articles

Source: Archambault 2014

Publisher APC Market Share (UK) Aug 2014-July2015

Elsevier is the largest-grossing publisher from APCs, with nearly a quarter of the market share

Publisher

1 Elsevier
2 Wiley-Blackwell
3 Nature Publishing Group
4 Oxford University Press
5 Springer
6 Public Library of Science
7 American Chemical Society
8 BioMed Central
9 BMJ
10 Cell Press
11 Taylor & Francis

12 Royal Society of Chemistry
13 Frontiers
14 American Society for Biochemistry and Molecular Biology
15 Royal Society
16 Institute of Physics
17 Wolters Kluwer
18 IEEE
19 Cambridge University Press
20 Company of Biologists
21 Society for Neuroscience

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Shamash, K. 2016 APCs & Subscriptions - JISC Total Cost of Ownership Project (UK Institutions 2013-2015)

APC Pricing Distribution UK Institutions 2014-2015

251 APCs per institution (11-1,600)

Total = 10,762 APCs from 2014-2015 (Jisc TCO, RCUK, COAF)

Average APC of £1,745 for 2014-2015

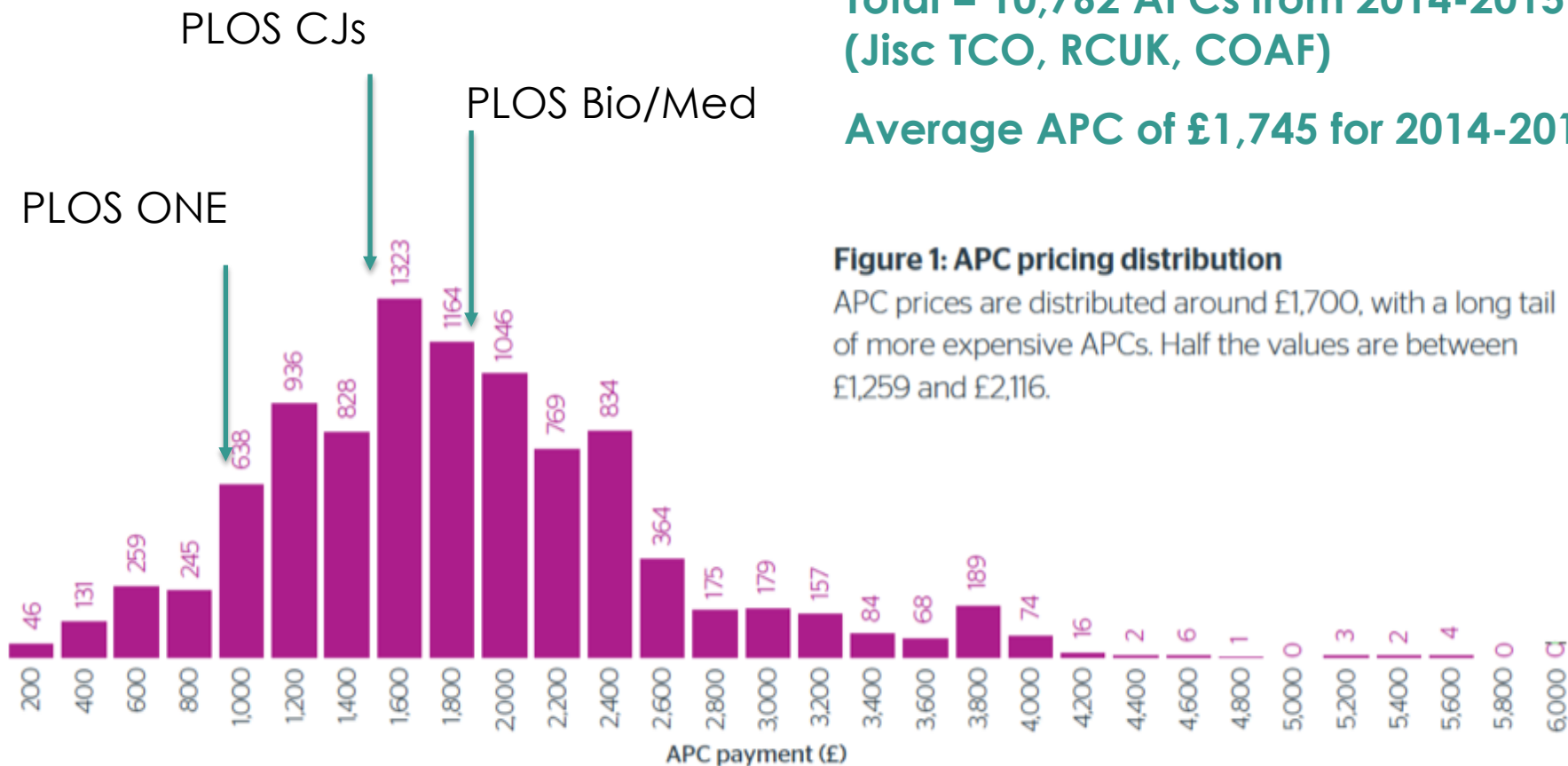PLOS CJs

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Figure 1: APC pricing distribution
APC prices are distributed around £1,700, with a long tail of more expensive APCs. Half the values are between £1,259 and £2,116.

APC payment (£)

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Who We Are: Public Library of Science

PLOS is a nonprofit publisher and advocacy organization with a mission to accelerate progress in science and medicine by leading a transformation in research communication.

100 PERCENT
OPEN ACCESS

13+ YEARS
AS A LEADER IN OPEN ACCESS PUBLISHING
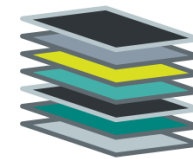
7 PEER-REVIEWED JOURNALS

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2016 Highlights

ARTICLE HIGHLIGHTS*

ARTICLES PUBLISHED
27,000+

12+ MILLION
MONTHLY ARTICLE VIEWS

2,000,000+
MONTHLY ARTICLE DOWNLOADS

195,000+ ARTICLES PUBLISHED‡

*2016
‡Through 2016

COMMUNITY HIGHLIGHTS*

2.1 MILLION
UNIQUE VISITORS TO PLOS BLOGS

300,000+
TWITTER FOLLOWERS*

61 NOBEL LAUREATES
HAVE PUBLISHED THEIR WORK WITH PLOS ‡

*2016
‡Through 2016

GLOBAL REPRESENTATION*

7,000 EDITORS
78,000 REVIEWERS

AUTHOR CONTRIBUTIONS FROM
190+ COUNTRIES*

*2016
‡Through 2016

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The Open Access Spectrum

	Reader Rights	Reuse Rights	Copyrights	Author Posting Rights	Automatic Posting	Machine Readability	
OPEN ACCESS	Free readership rights to all articles immediately upon publication	Generous reuse & remixing rights (e.g., CC BY license)	Author holds copyright with no restrictions	Author may post any version to any repository or website	Journals make copies of articles automatically available in trusted third-party repositories (e.g., PubMed Central) immediately upon publication	Article full text, metadata, citations, & data, including supplementary data, provided in community machine-readable standard formats through a community standard API or protocol	OPEN ACCESS
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CLOSED ACCESS	Subscription, membership, pay-per-view, or other fees required to read all articles	No reuse rights beyond fair use/ limitations & exceptions to copyright (all rights reserved copyright) to read	Publisher holds copyright, with no author reuse of published version beyond fair use	Author may not deposit any versions to repositories or websites	No automatic posting in third-party repositories	Article full text & metadata not available in machine-readable format	CLOSED ACCESS

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- Reuse Rights
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- Author Posting Rights
- Automatic Posting
- Machine Readability

http://sparcopen.org/our-work/howopenisit/
https://www.plos.org/open-access/howopenisit/

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Author Satisfaction Metrics

- Speed of decision

- Speed of publication

- Interaction and quality of feedback from editors and reviewers

- Fairness of peer-review process

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Selective Journal vs. Mega Journal

Rank Selective Journal	Reason for Publishing	Rank Mega Journal
1	Journal Fit / Scope	5
2	Quality	3
3	Prestige	9
4	Impact Factor	4
5	Open Access	2
10	Speed	1

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Progress Toward Open Science

Open Access allows everyone to access research. Open Data allows everyone to do research.

PLOS Data Policy

PLOS journals require authors to make **all data underlying the findings** described in their manuscript fully available without restriction, with rare exception.

When submitting a manuscript online, authors must provide a *Data Availability Statement* describing compliance with PLOS's policy.

Since March 2014

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The growing number of research output makes it difficult to assess individual contributions to research. Open Standards are the answer.

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ORCID
Connecting Research and Researchers

- On January 7, 2016, a coalition of publishers signed an Open Letter committing to start requiring ORCID IDs in 2016.

1. Implementing best practices for ORCID **collection** and **auto-update** of ORCID records upon publication

2. Require ORCID IDs for corresponding authors and encourage for co-authors

ORCID Statistics

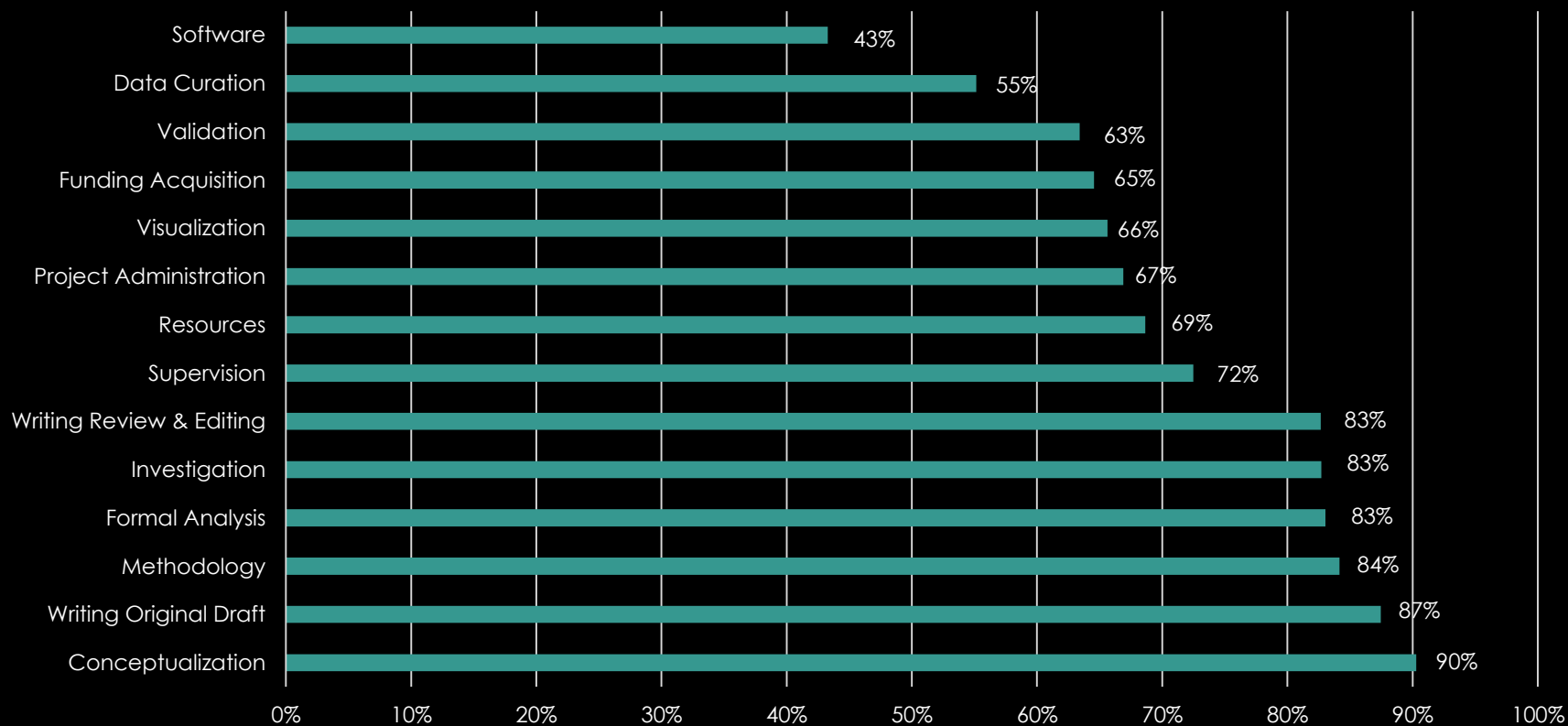|	
Live ORCID iDs	2,546,121
ORCID iDs with at least one work	523,062
Works activities (publications, data sets, patents and other research outputs)	15,534,645
Unique DOIs	6,860,580
Employment activities	929,758
Employment to unique organizations	288,974
Education activities	1,110,968
Education at unique organizations	191,022
Funding activities	201,048
Funding from unique organizations	62,632

Statistics as of: 09-09-2016

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An open standard for expressing roles intrinsic to research

Usage of CRediT taxonomy at PLOS

Frequency of use per contributor role

Role	Percentage
Software	43%
Data Curation	55%
Validation	63%
Funding Acquisition	65%
Visualization	66%
Project Administration	67%
Resources	69%
Supervision	72%
Writing Review & Editing	83%
Investigation	83%
Formal Analysis	83%
Methodology	84%
Writing Original Draft	87%
Conceptualization	90%

PLOS ONE submissions (n=3,833) – 92% at least one answer

Researchers don't work alone.

PLOS Channels

A modern framework for curating and presenting published work

- A single destination for research communities
- Content selected by researchers from PLOS journals as well as the broader literature
- Includes commentary, blogs, news and discussion.

http://channels.plos.org/

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PLOS is just getting started

Veterans Disability & Rehabilitation Research

The Open Source Toolkit

Tuberculosis

Launching a journal of forgotten diseases

- PLOS Neglected Tropical Diseases
- Affects the poorest people
- Most prevalent in developing countries
- Open access model promotes greatest worldwide distribution and reuse
- Initial funding by Bill and Melinda Gates Foundation

"A journal run by and for the community"
Peter Hotez, Editor in Chief

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Although the Journal Impact Factor (JIF) is widely acknowledged to be a poor indicator of the quality of individual papers, it is used routinely to evaluate research and researchers.

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PLOS Article-Level Metrics provide a snapshot of an individual article's reach:

- Views
- Citations
- Saves
- Discussions
- Recommendations

Crossref

An Economic Geography of the United States: From Commutes to Megaregions

Garrett Dash Nelson, Alasdair Rae

| 81 Save | 1 Citation |
| 217,092 View | 609 Share |

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We **write software** to enable the PLOS mission, from pre-publication to publication to advocacy.

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Lowering barriers to entry

- Open source

- Publisher agnostic

- Interoperable via standards

- Ease of experimentation

New players and new market potential

PLOS

Aperta

Modern interface

Modular components

Streamlined workflow processing

Open Science

- PLOS and others led the way - OA is now a sustainable standard in scholarly publishing

- Next on our agenda:
  - Experience: faster, more efficient, modern, cheaper
  - Transparent: breakdown the APC, peer review
  - Assessment: continuously through lifetime of the work
  - Recognition: credit for all research objects for all contributors
  - Reproducible: open data, open notebooks
  - Collaborative: interoperable with new services

Thank you.