

Double Research Strategies

OPEN ACCESS SUPPORT

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Data Scientifique

Data Science For Researchers, By Researchers

Transforming Numbers into Knowledge



$$y + h = \frac{T_0}{p g} \cosh \left[\frac{p g}{2 T_0} (2x - a) \right] -$$

What is Open Access?

SPARC

Scholarly Publishing & Academic Resources Coalition

“free, immediate, online availability of research articles coupled with the rights to use these articles fully in the digital environment...ensures that anyone can access and use these results—to turn ideas into industries and breakthroughs into better lives.”

Source: <http://sparcopen.org>



Source: <https://www.youtube.com/watch?v=L5rVH1KGBCY>

Open Access Changing Landscape

Investment in Research:

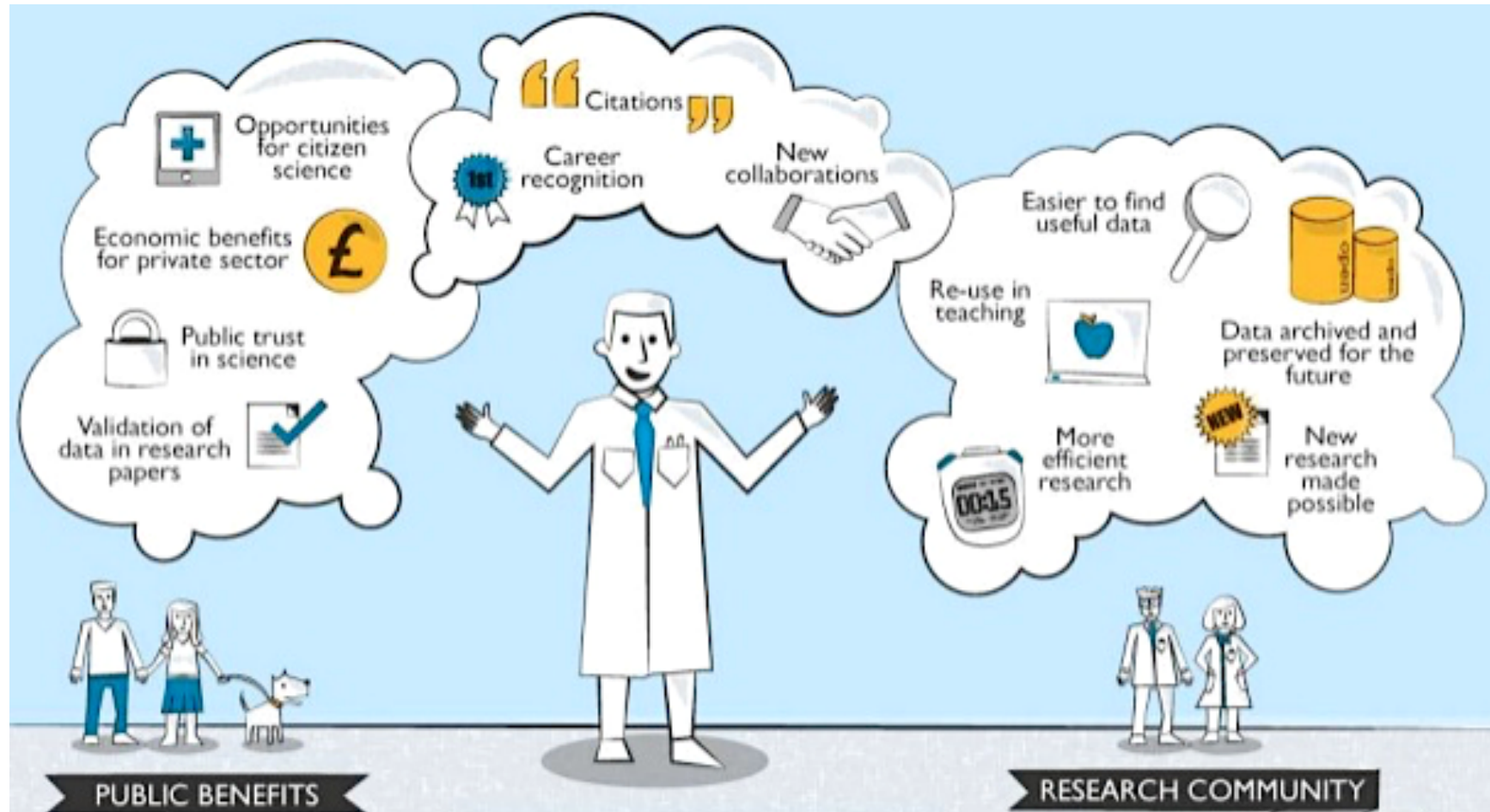
Public
Institutions &
Researchers

Peer Review Process:

Open for
Criticism Larger
Community

Tax Payers:

Contributors
can access &
get value for \$



Open Access Benefits

More exposure for work

Practitioners can apply findings

Higher citation count

Research can influence policy

Compliant with grant rules (Tri-Council requires)

Wider circulation globally

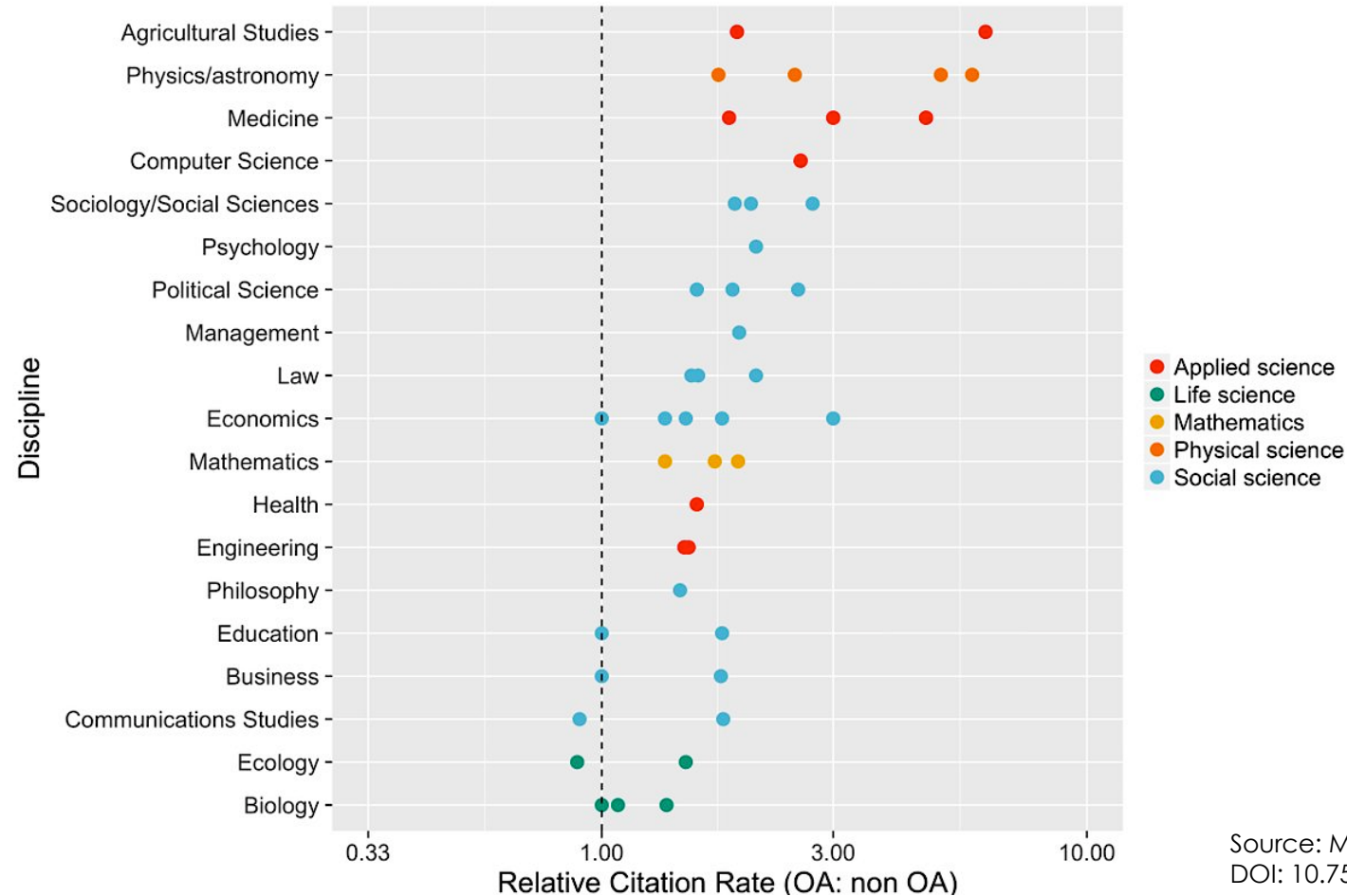
Greater visibility

Larger readership



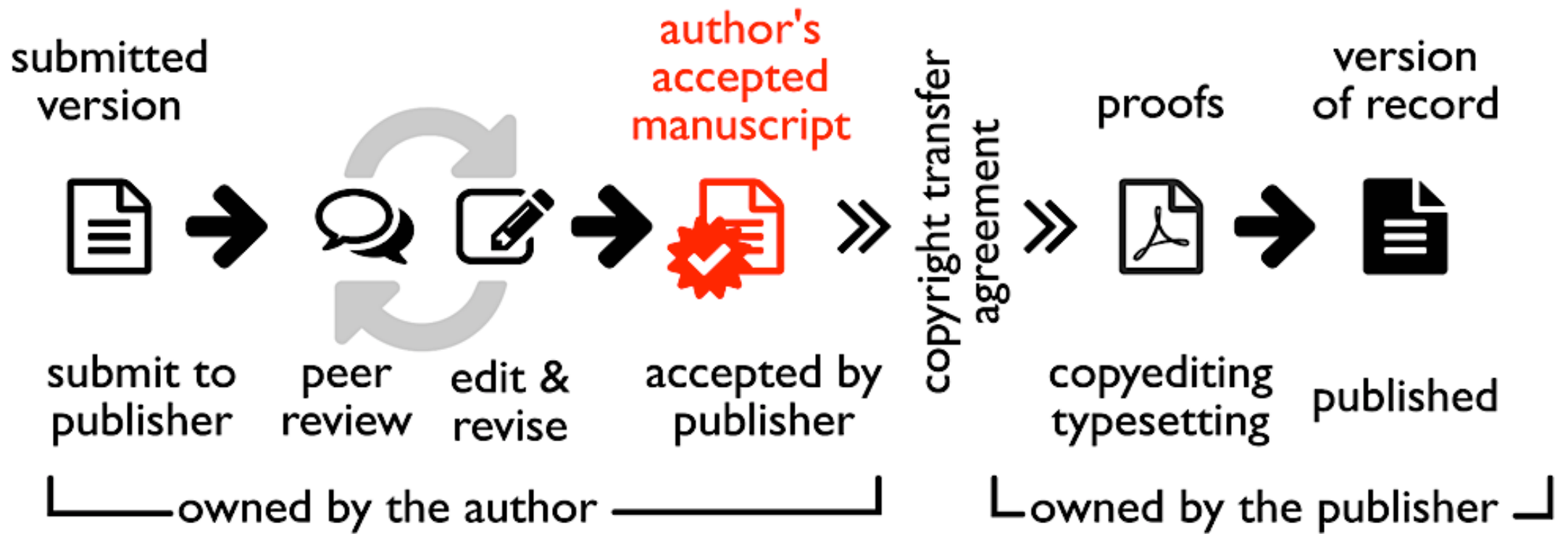
Source: <http://www.aston.ac.uk/EasySiteWeb/GatewayLink.aspx?allid=221535>

Increase Citations by Discipline



Source: McKiernan et al. eLife 2016;5:e16800.
DOI: 10.7554/eLife.16800

Publication Pipeline



Open Access Publishing

Open Access Journal:

Pay Article Processing Charge (DOAJ)

Self-Archive:

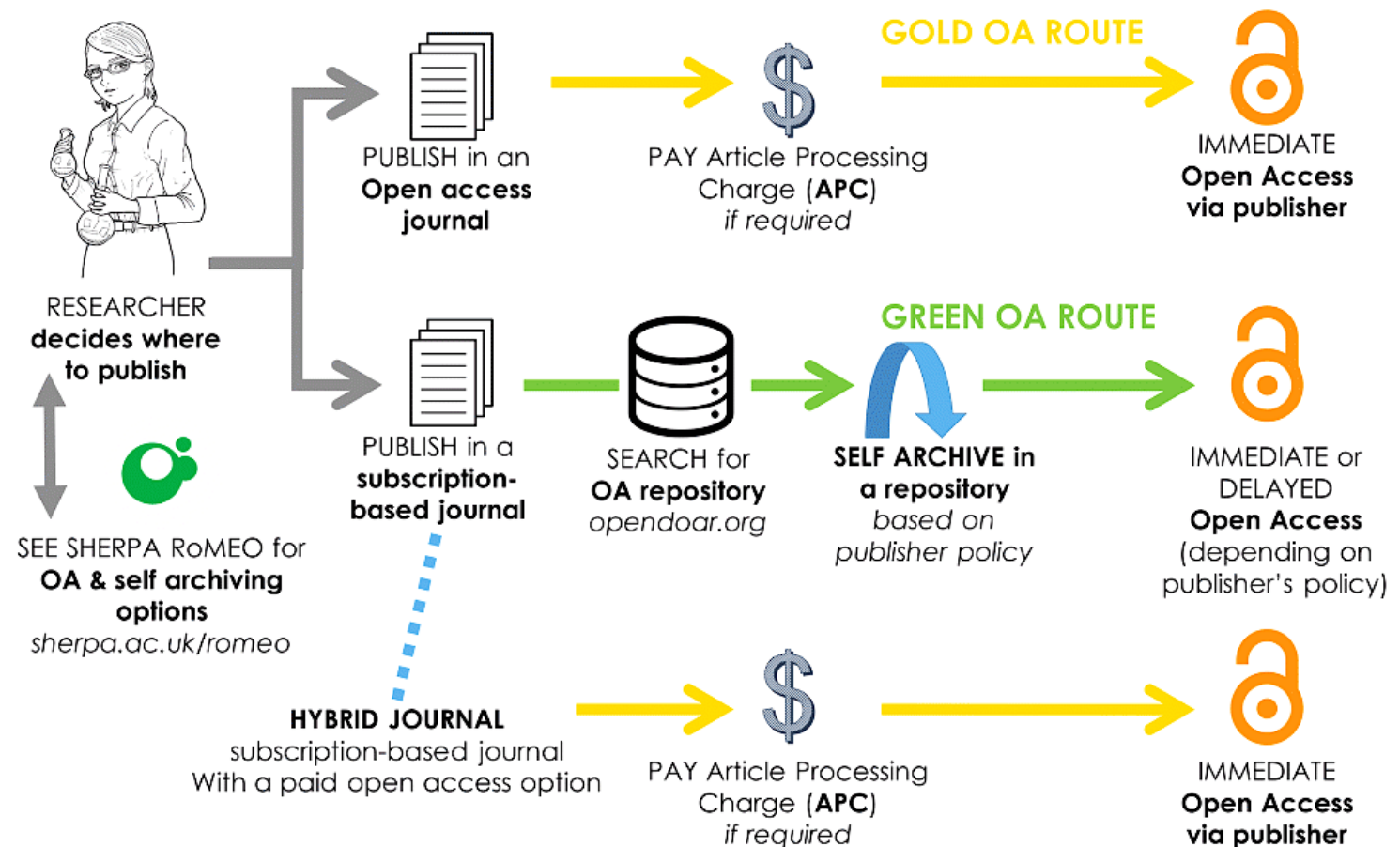
Deposit *pre-print* in repository

Hybrid Journal:

Paid, Subscription Journal with Fee for Open Access

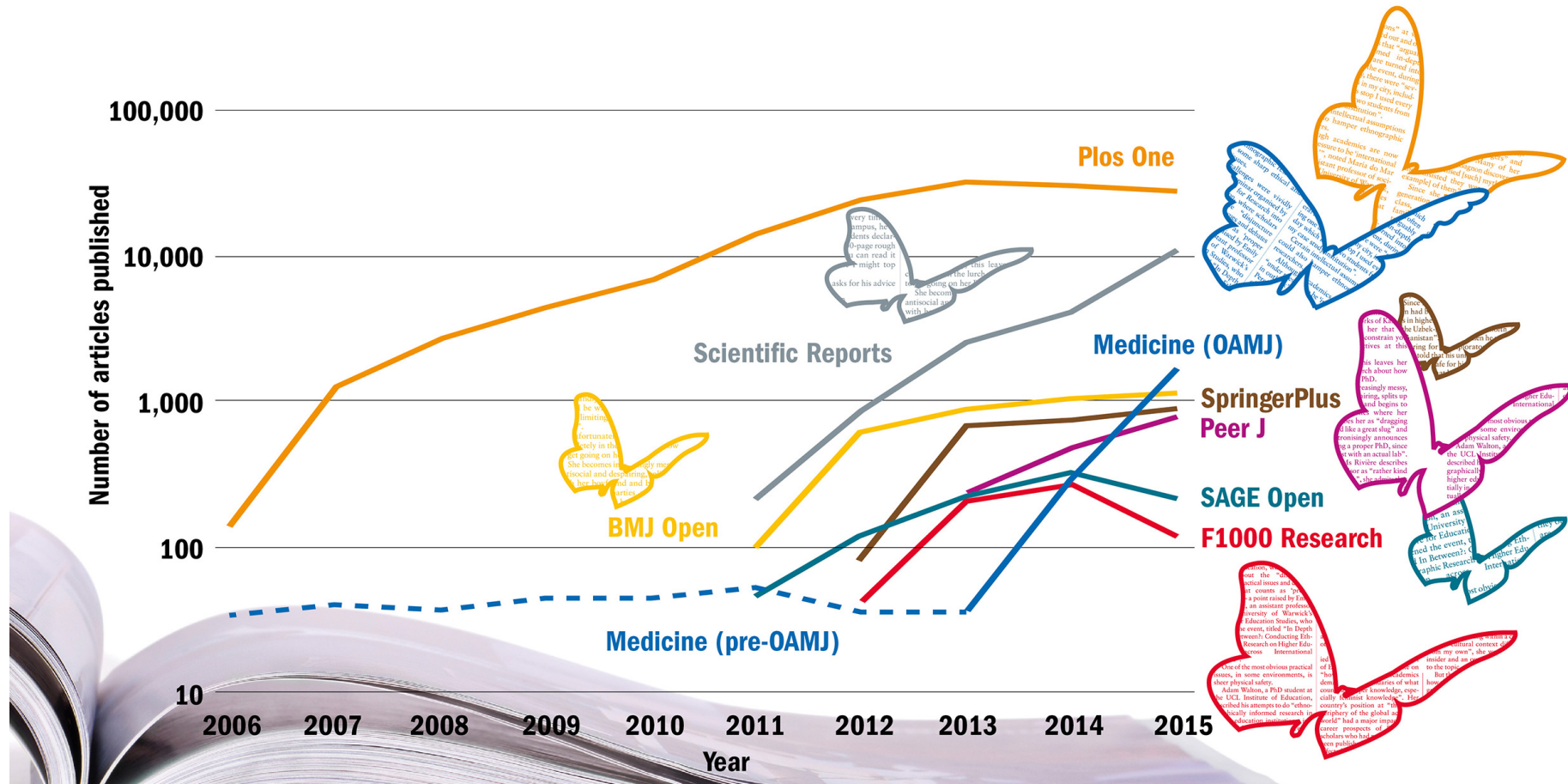
Closed Access:

No Open Access Option
Publisher Restricts Self-Archiving

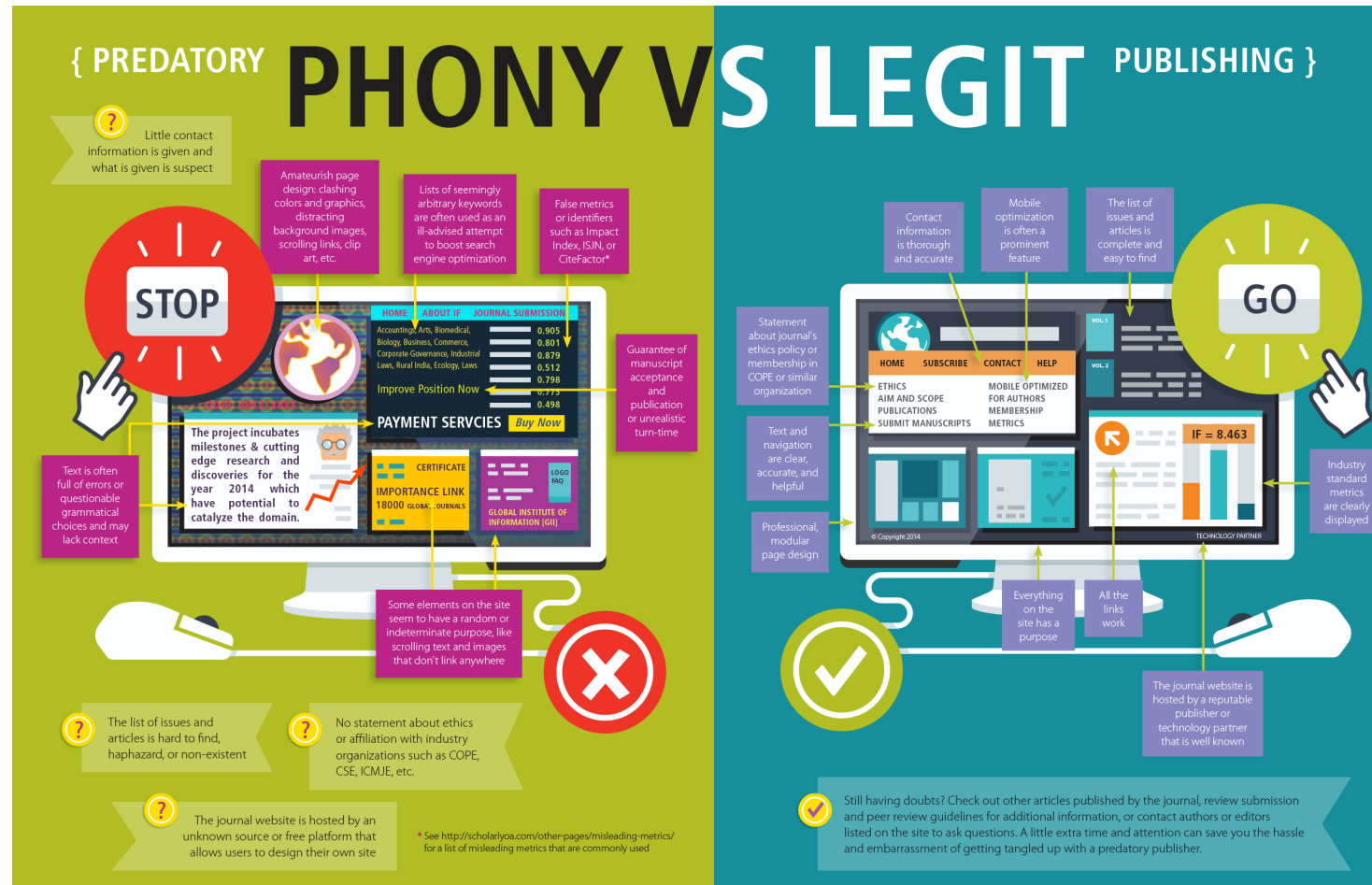


Source: Open Access Publishing,
Publication Cycle by Darren Chase,
Stony Brook University Libraries

Rise of Open Access Journals

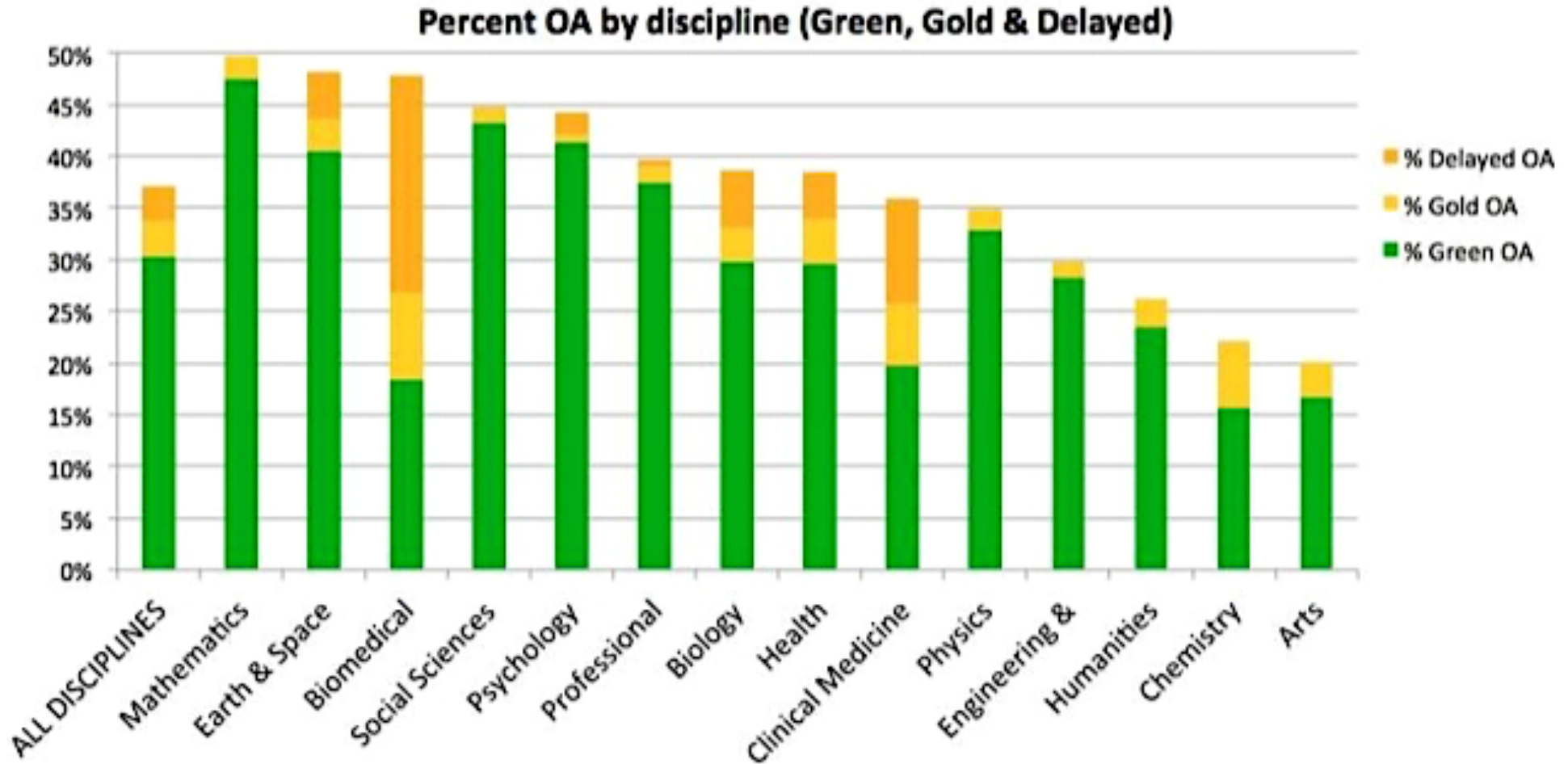


Rise of Predatory Journals



Source: Peter Burns, <https://appocsite2com.files.wordpress.com/2016/03/frontmatter-29.pdf>

Open Access Uptake by Discipline

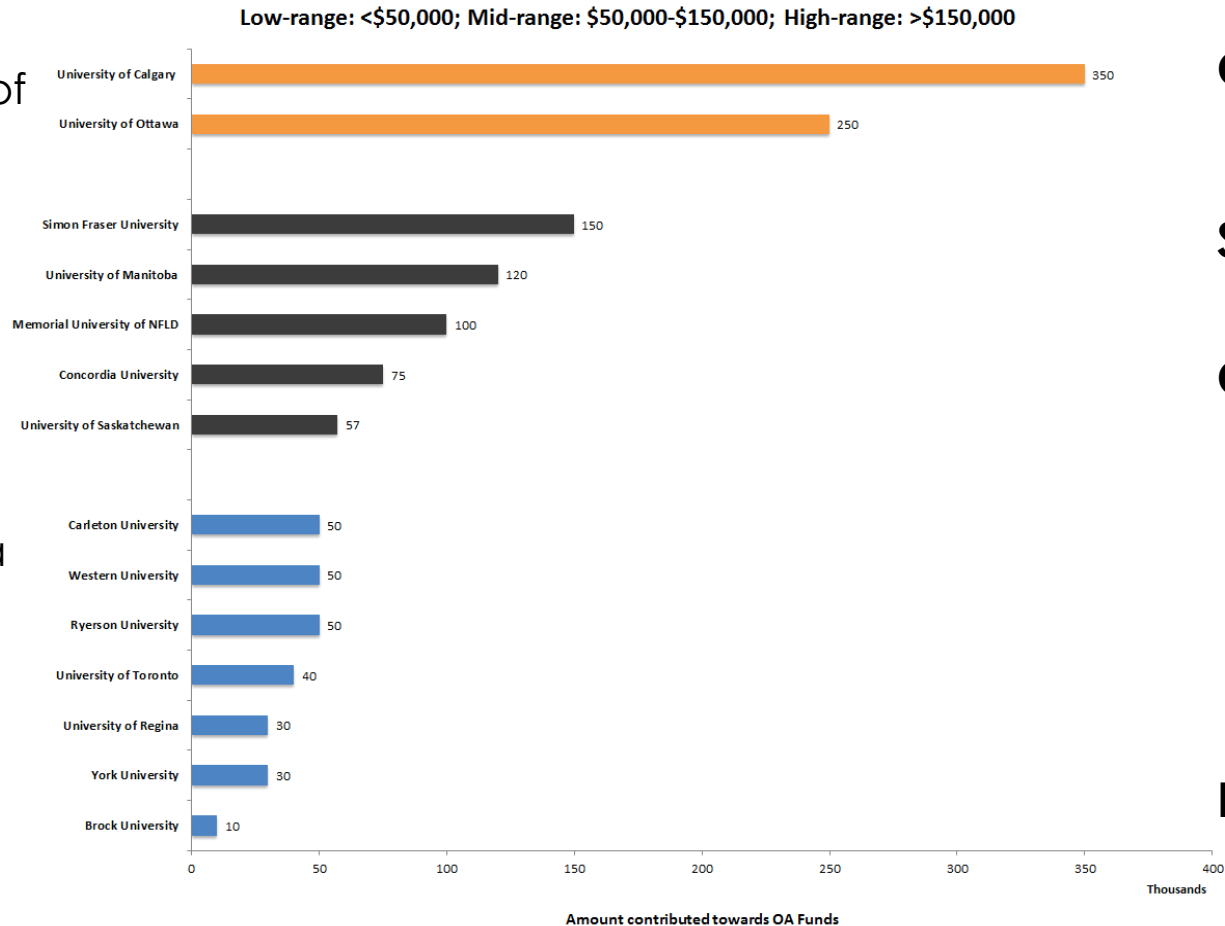


Canadian Funding to Support OA

CARL Report (2016)

Canadian Association of Research Libraries

- Varying definitions of “open” are used
- One size fits all inappropriate
- Adjust eligibility criteria as needed
- Some fund Hybrid journals



Calgary: \$350,000

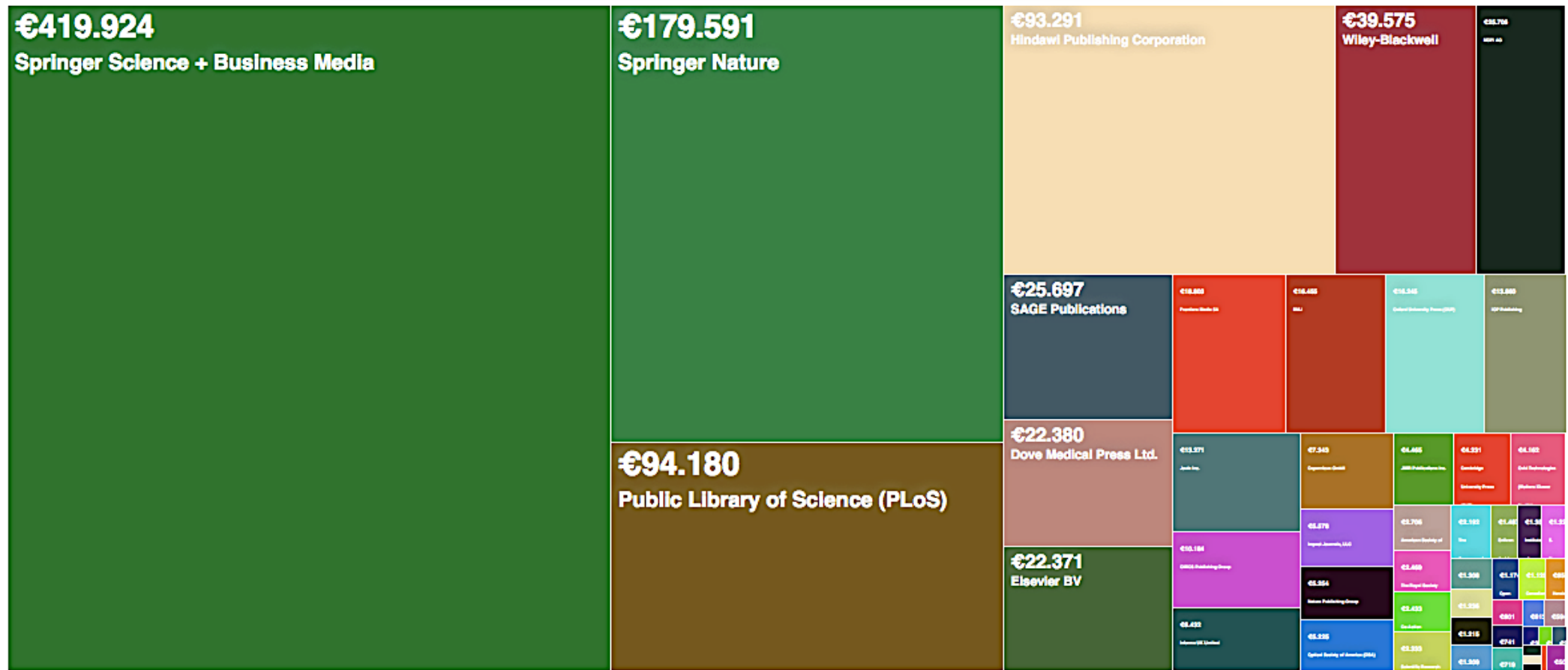
Simon Fraser: \$150,000

Concordia: \$75,000

Brock: \$10,000

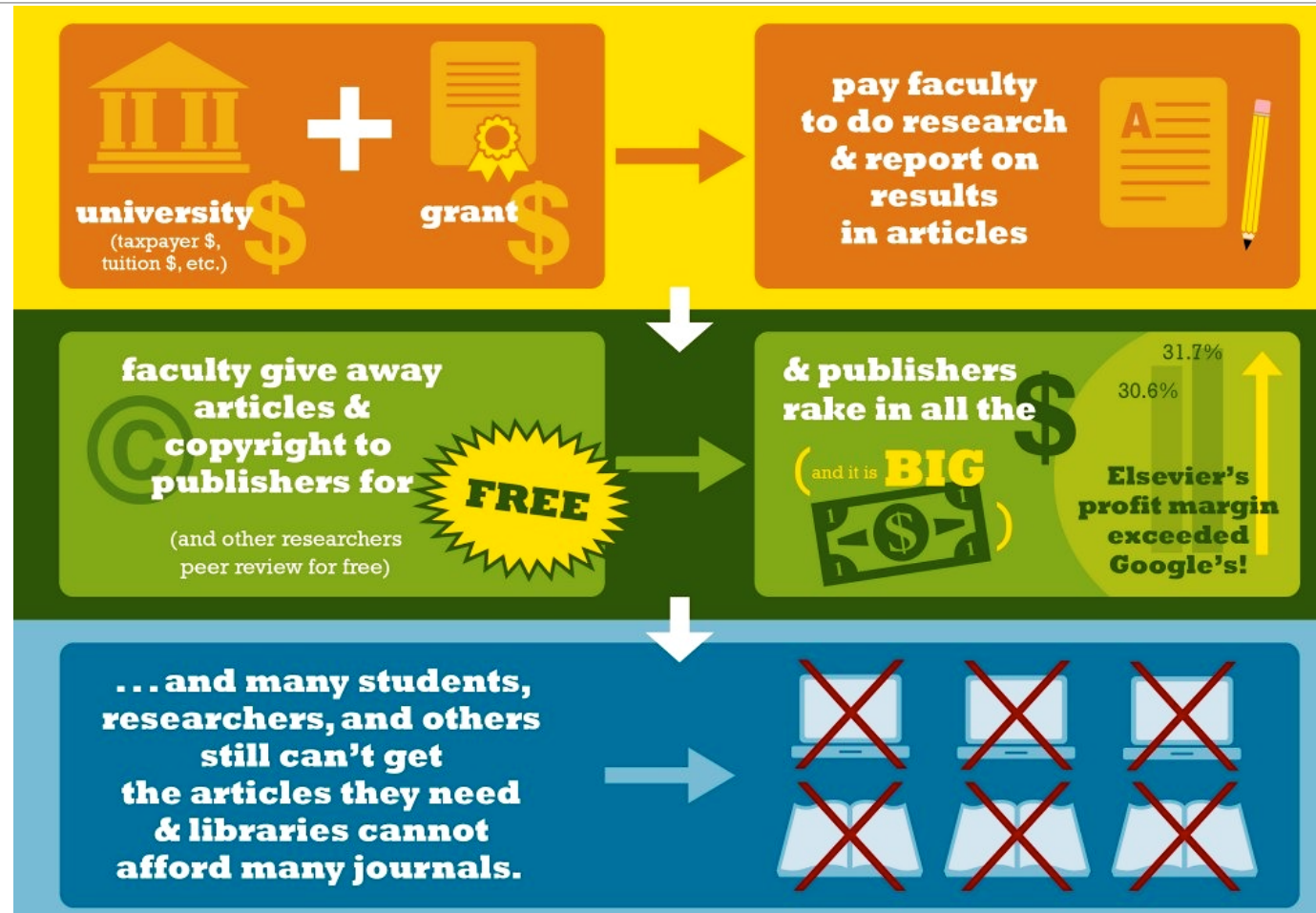
Source: <http://www.carl-abrc.ca/doc/CARLOAWGLibraryOAFundsFinalReport-Jan%202016.pdf>

How is Calgary spending funds?



Source: treemaps.intact-project.org/apcdata/calgary-u/

Sticky-Wicket of Funding Hybrids



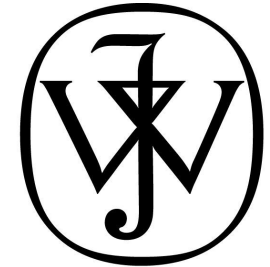
Oligopoly of Academic Publishing



ELSEVIER



Springer



WILEY-
BLACKWELL



Taylor & Francis
Taylor & Francis Group



SAGE

Source: PLOS ONE | DOI:10.1371/journal.pone.0127502
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4465327/pdf/pone.0127502.pdf>

Concordia Open Access Fund

<http://library.concordia.ca/help/open-access/author-fund.php>

Corresponding author: Full-time & part-time faculty members, staff, graduate students, postdoctoral fellows

Maximum amount reimbursed \$3000 per fiscal year; up to two (2) requests per fiscal year

Peer-reviewed journal articles, monographs, and monograph chapters

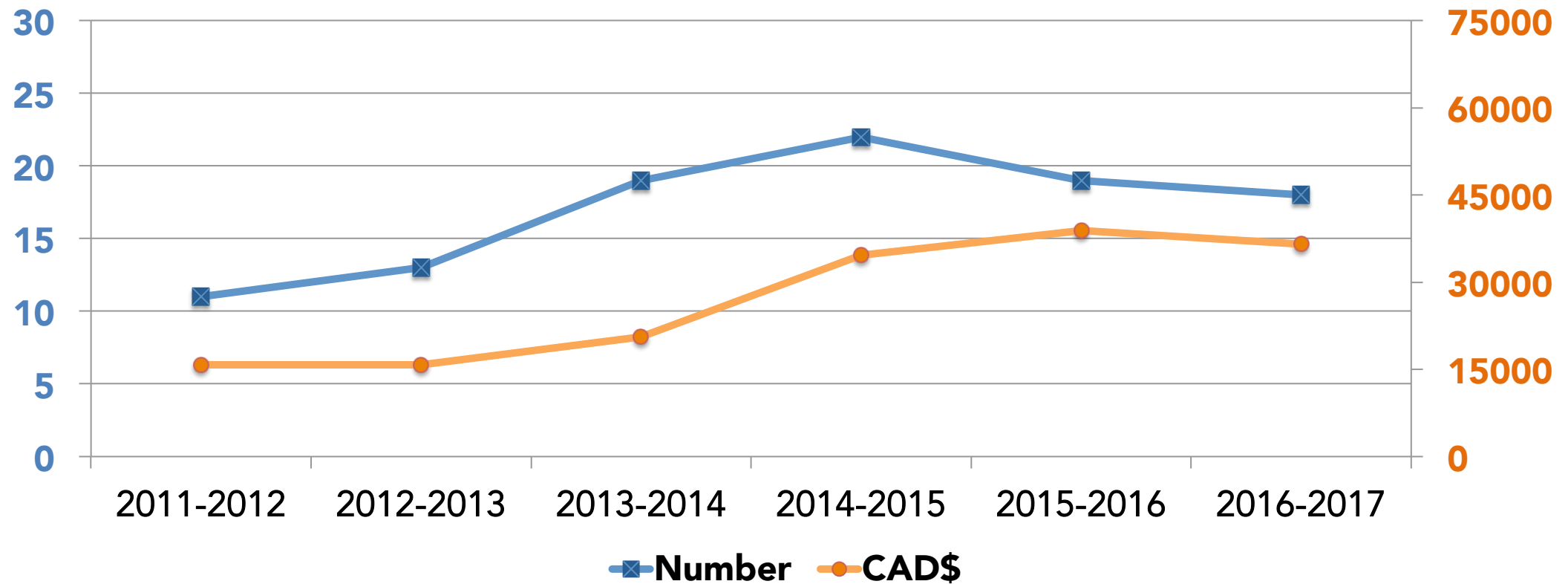
Must be published in a **fully open access journal**. Traditional subscription-based or **'hybrid'** journals that offer an open access option for a fee are **not eligible**.

Eligible Open Access journals will be listed in the Directory of Open Access Journals

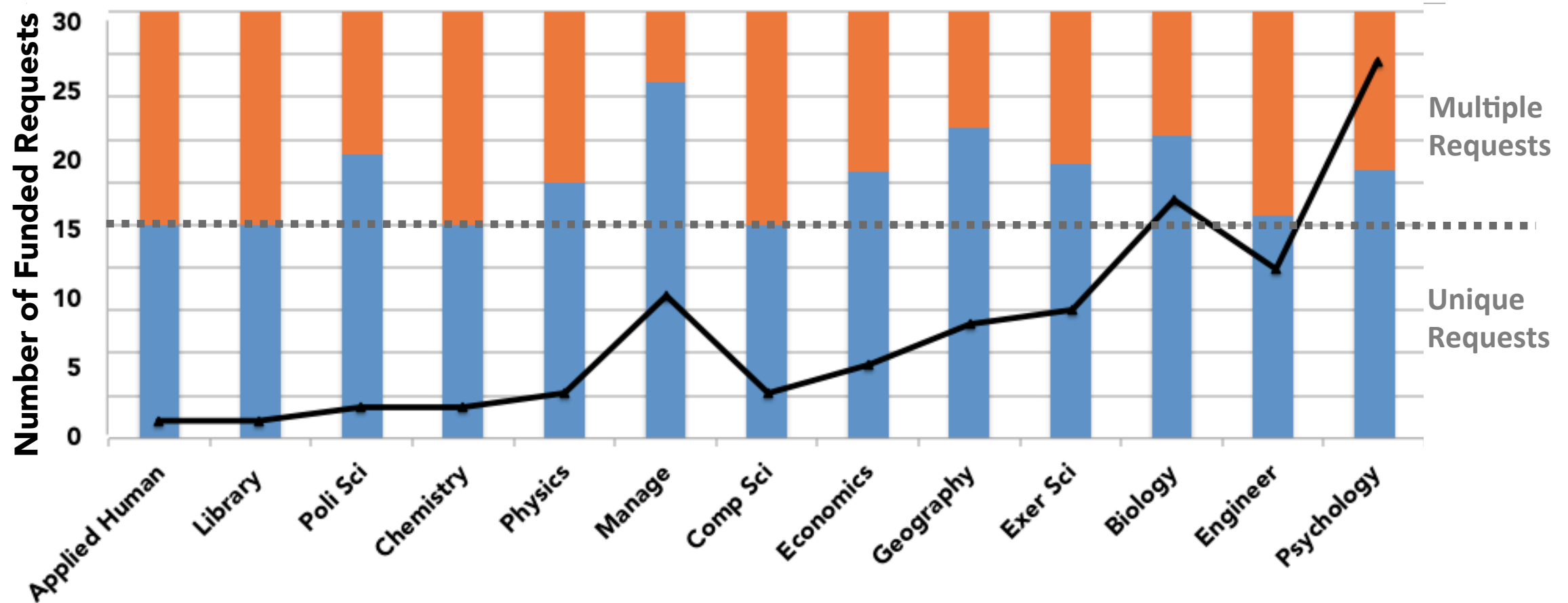
Use research grant funding before applying to Open Access Author Fund.

Deposit article / monograph / chapter in Spectrum Research Repository.

Concordia OA Fund by Year



Concordia OA Fund by Discipline



Field	Paper (n)	Reference (n)	not OA (arc)	OA (arc)	gold (arc)	green (arc)
TOTAL	3,350,910	34,865,430	0.81	1.23	1.06	1.28
Agriculture, Fisheries & Forestry	138,025	804,386	0.85	1.18	0.73	1.35
Biology	151,424	1,882,514	0.74	1.17	1.33	1.18
Biomedical Research	291,325	5,581,332	0.80	1.14	1.16	1.09
Built Environment & Design	16,648	84,825	0.83	1.28	0.79	1.35
Chemistry	317,930	2,432,155	0.90	1.24	0.65	1.34
Clinical Medicine	823,924	9,323,440	0.81	1.28	1.25	1.28
Communication & Textual Studies	28,178	37,152	0.78	1.93	0.81	2.16
Earth & Environmental Sciences	117,429	1,332,707	0.82	1.16	0.82	1.20
Economics & Business	66,037	607,155	0.65	1.25	0.67	1.27
Enabling & Strategic Technologies	250,651	2,404,079	0.89	1.18	0.79	1.30
Engineering	193,856	1,029,715	0.85	1.25	0.86	1.36
General Arts, Humanities & Social Sciences	3,932	11,757	0.65	1.69	0.99	1.65
General Science & Technology	31,793	1,906,904	0.93	1.10	0.84	1.20
Historical Studies	25,468	50,016	0.80	1.58	0.68	1.91
Information & Communication Technologies	97,786	582,010	0.72	1.23	0.98	1.27
Mathematics & Statistics	107,426	558,567	0.78	1.14	1.12	1.22
Philosophy & Theology	17,117	28,107	0.70	1.74	0.76	1.98
Physics & Astronomy	424,091	3,954,894	0.75	1.27	0.92	1.34
Psychology & Cognitive Sciences	70,022	1,026,674	0.69	1.23	1.15	1.19
Public Health & Health Services	85,703	804,085	0.83	1.17	1.00	1.23
Social Sciences	86,513	421,516	0.69	1.49	0.89	1.63
Visual & Performing Arts	5,632	1,440	0.83	2.19	1.17	2.69

Source: <http://www.1science.com/1numbr/>

Double Our Research Strategy

Augment Open Access throughout entire Concordia Community

Greater promotion across departments and faculty (more buy in)

Increase understanding of open access & predatory journals

Enhance flexibility of fund for hybrid journals, depending on discipline

Consider levers for cultural shift toward open access (data repositories, source code, methods)

Capitalize on disciplines that are advanced in uptake (genetics, physics, fine arts)

General Resources

Tri-Agency Statement of Principles on Digital Data Management

http://www.science.gc.ca/eic/site/063.nsf/eng/h_83F7624E.html

Tri-Agency Open Access Policy on Publications

http://www.science.gc.ca/eic/site/063.nsf/eng/h_F6765465.html

Tri-Agency Financial Administration Guidelines & Responsibilities

[http://www.nserc-crsng.gc.ca/Professors-Professeurs/
FinancialAdminGuide-GuideAdminFinancier/Responsibilities-
Responsabilites_eng.asp#SSHRC](http://www.nserc-crsng.gc.ca/Professors-Professeurs/FinancialAdminGuide-GuideAdminFinancier/Responsibilities-Responsabilites_eng.asp#SSHRC)

General Resources

ORCID
(Persistent Digital Identifier)

<https://orcid.org/>

SCOPUS
(Author Identifier; many agencies use Elsevier's SCOPUS Database)

https://service.elsevier.com/app/answers/detail/a_id/11212/supporthub/scopus/

SHERPA/RoMEO

<http://www.sherpa.ac.uk/romeo/index.php>

Library Resources

Concordia Open Access Author Fund

<http://library.concordia.ca/help/open-access/author-fund.php>

Funding Agencies and Open Access

<http://library.concordia.ca/help/open-access/open-access-mandates.php?guid=funding>

Open Access at Concordia

<http://library.concordia.ca/help/open-access/index.php>

Research Data Management Guide

<http://library.concordia.ca/help/data/index.php>

Bibliometrics and Research Impact Guide

<http://library.concordia.ca/help/bibliometrics/index.php>

SSRHC Resources

Research Data Archiving Policy (SSHRC Only)

http://www.sshrc-crsh.gc.ca/about-au_sujet/policies-politiques/statements-enonces/edata-donnees_electroniques-eng.aspx

“...researchers whose work is publicly funded have a special obligation to openness and accountability. All research data collected with the use of SSHRC funds must be preserved and made available for use by others within a reasonable period of time. SSHRC considers "a reasonable period" to be within two years of the completion of the research project for which the data was collected.” [underlining added]

CIHR Resources

Public Database Deposit

http://www.science.gc.ca/eic/site/063.nsf/eng/h_94D49094.html

“Deposit bioinformatics, atomic, and molecular coordinate data into the appropriate public database (e.g. gene sequences deposited in GenBank) immediately upon publication of research results...” See examples in Annex: http://www.science.gc.ca/eic/site/063.nsf/eng/h_94D49094.html

PubMed Central Canada

<http://pubmedcentralcanada.ca/pmcc/>

NSERC Resources

Current Policy

http://www.nserc-crsng.gc.ca/NSERC-CRSNG/policies-politiques/OpenAccess-LibreAcces_eng.asp

Summary Consultation Document

http://www.nserc-crsng.gc.ca/_doc/NSERC-CRSNG/NSERC-SSHRC-OpenAccess_e.pdf

PubMed Central Canada

<http://pubmedcentralcanada.ca/pmcc/>

Intellectual Property / Patents

NSERC

http://www.nserc-crsng.gc.ca/NSERC-CRSNG/Policies-Politiques/ip-pi_eng.asp

SSRHC

http://www.sshrc-crsh.gc.ca/funding-financement/policies-politiques/g_copyright-s_droits_auteur-eng.aspx

CIHR

<http://www.cihr-irsc.gc.ca/e/22631.html#2-A19>

Selected Readings

How Open Science Helps Researchers Succeed

<https://elifesciences.org/download/aHR0cHM6Ly9jZG4uZWxpZmVzY2llbmNlcy5vcmcvYXJ0aWNsZXMvMTY4MDAvZWxpZmUtMTY4MDAtdjlucGRm/elifesciences-16800-v2.pdf?hash=XF6ptxz6fW58%2BOnwblhiolVe29hNekdl3kCDtbvOry8%3D>

Self-Selected or Mandated, Open Access Increases Citation Impact for Higher Quality Research

<http://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0013636&type=printable>

Promoting an Open Research Culture

<http://science.sciencemag.org/content/348/6242/1422/tab-pdf>

Evaluating and Promoting Open Data Science Practices in Open Access Journals

<http://www.utpjournals.press/doi/abs/10.3138/jsp.49.1.66>