Libraries’ Role in Improving an Institution’s Scholarly Communication Impact
ACRL defined scholarly communication as "the system through which research and other scholarly writings are created, evaluated for quality, disseminated to the scholarly community, and preserved for future use.

https://acrl.libguides.com/scholcomm/toolkit/home
Scholarly Communication Outputs

- Scholarly Publishing
  - Subscription
  - Open access

- Grey Literature
  - Theses and dissertations
  - Presentations / posters
  - Blogs

- Open Science
  - Research software
  - Research data
  - Lab protocols
How does copyright work (simple version)?

1. **Creators**
   - Create content
   - Motivated to create more content

2. **Users**
   - Pay creators
   - Buy copies of content

The cycle continues, ensuring creators are rewarded for their work, which in turn motivates them to produce more content, benefiting users who have access to a wider variety of content.
Open Access
“The basic idea of OA is simple: Make research literature available online without price barriers and without most permission barriers” *

* Peter Suber, the Director of Office of Scholarly Communication at Harvard University, and the author of Open Access
Green Open Access

Posting submitted preprint or accepted manuscript versions of research on the authors’ own websites, in institutional repositories, and on other accepted public platforms.

Most publisher policies support this practice, though they may require that public access to these versions be delayed through use of an embargo.

The KAUST Open Access policy is a “green” policy.
Gold Open Access

Gold open access describes a business model where authors pay an article processing charge (APC) to a publisher so that they allow free access to the article on the publisher site, and assign an open access license to the article, allowing it to be redistributed.

“Hybrid” open access is a form of gold open access where some of the articles in a journal are only available to subscribers, and other articles (for which the authors have paid an extra fee) are available open access.

Transformative open access agreements are a form of gold open access.
### Open Access (Advantage)

Table 1 Research impact of paywalled (not OA) versus open access (OA) papers

<table>
<thead>
<tr>
<th>Field</th>
<th>Paper (n)</th>
<th>Reference (n)</th>
<th>not OA (arc)</th>
<th>OA (arc)</th>
<th>gold (arc)</th>
<th>green (arc)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOTAL</td>
<td>3,350,910</td>
<td>34,865,430</td>
<td>0.81</td>
<td>1.23</td>
<td>1.06</td>
<td>1.28</td>
</tr>
<tr>
<td>Agriculture, Fisheries &amp; Forestry</td>
<td>138,025</td>
<td>804,386</td>
<td>0.85</td>
<td>1.18</td>
<td>0.73</td>
<td>1.35</td>
</tr>
<tr>
<td>Biology</td>
<td>151,424</td>
<td>1,822,514</td>
<td>0.74</td>
<td>1.17</td>
<td><strong>1.33</strong></td>
<td>1.18</td>
</tr>
<tr>
<td>Biomedical Research</td>
<td>291,325</td>
<td>5,581,332</td>
<td>0.80</td>
<td>1.14</td>
<td><strong>1.16</strong></td>
<td>1.09</td>
</tr>
<tr>
<td>Built Environment &amp; Design</td>
<td>16,648</td>
<td>84,825</td>
<td>0.83</td>
<td>1.28</td>
<td>0.79</td>
<td><strong>1.35</strong></td>
</tr>
<tr>
<td>Chemistry</td>
<td>317,930</td>
<td>2,432,155</td>
<td>0.90</td>
<td>1.24</td>
<td>0.65</td>
<td><strong>1.34</strong></td>
</tr>
<tr>
<td>Clinical Medicine</td>
<td>823,924</td>
<td>9,323,440</td>
<td>0.81</td>
<td><strong>1.28</strong></td>
<td>1.25</td>
<td>1.28</td>
</tr>
<tr>
<td>Communication &amp; Textual Studies</td>
<td>28,178</td>
<td>37,152</td>
<td>0.78</td>
<td>1.93</td>
<td>0.81</td>
<td><strong>2.16</strong></td>
</tr>
<tr>
<td>Earth &amp; Environmental Sciences</td>
<td>117,429</td>
<td>1,332,707</td>
<td>0.82</td>
<td>1.16</td>
<td>0.82</td>
<td><strong>1.20</strong></td>
</tr>
<tr>
<td>Economics &amp; Business</td>
<td>66,037</td>
<td>607,155</td>
<td>0.65</td>
<td>1.25</td>
<td>0.67</td>
<td><strong>1.27</strong></td>
</tr>
<tr>
<td>Enabling &amp; Strategic Technologies</td>
<td>250,651</td>
<td>2,404,079</td>
<td>0.89</td>
<td>1.18</td>
<td>0.79</td>
<td><strong>1.30</strong></td>
</tr>
<tr>
<td>Engineering</td>
<td>193,856</td>
<td>1,029,715</td>
<td>0.85</td>
<td>1.25</td>
<td>0.86</td>
<td><strong>1.36</strong></td>
</tr>
<tr>
<td>General Arts, Humanities &amp; Social Sciences</td>
<td>3,932</td>
<td>11,757</td>
<td>0.65</td>
<td><strong>1.69</strong></td>
<td>0.99</td>
<td>1.65</td>
</tr>
<tr>
<td>General Science &amp; Technology</td>
<td>31,793</td>
<td>1,906,904</td>
<td>0.93</td>
<td>1.10</td>
<td>0.84</td>
<td><strong>1.20</strong></td>
</tr>
<tr>
<td>Historical Studies</td>
<td>25,468</td>
<td>50,016</td>
<td>0.80</td>
<td>1.58</td>
<td>0.68</td>
<td><strong>1.91</strong></td>
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<tr>
<td>Information &amp; Communication Technologies</td>
<td>97,786</td>
<td>582,010</td>
<td>0.72</td>
<td>1.23</td>
<td>0.98</td>
<td><strong>1.27</strong></td>
</tr>
<tr>
<td>Mathematics &amp; Statistics</td>
<td>107,426</td>
<td>558,567</td>
<td>0.78</td>
<td>1.14</td>
<td>1.12</td>
<td><strong>1.22</strong></td>
</tr>
<tr>
<td>Philosophy &amp; Theology</td>
<td>17,117</td>
<td>28,107</td>
<td>0.70</td>
<td>1.74</td>
<td>0.76</td>
<td><strong>1.90</strong></td>
</tr>
<tr>
<td>Physics &amp; Astronomy</td>
<td>424,091</td>
<td>3,954,894</td>
<td>0.75</td>
<td>1.27</td>
<td>0.92</td>
<td><strong>1.34</strong></td>
</tr>
<tr>
<td>Psychology &amp; Cognitive Sciences</td>
<td>70,022</td>
<td>1,026,674</td>
<td>0.69</td>
<td><strong>1.23</strong></td>
<td>1.15</td>
<td>1.19</td>
</tr>
<tr>
<td>Public Health &amp; Health Services</td>
<td>85,703</td>
<td>804,085</td>
<td>0.83</td>
<td>1.17</td>
<td>1.00</td>
<td><strong>1.23</strong></td>
</tr>
<tr>
<td>Social Sciences</td>
<td>86,513</td>
<td>421,516</td>
<td>0.69</td>
<td>1.49</td>
<td>0.89</td>
<td><strong>1.63</strong></td>
</tr>
<tr>
<td>Visual &amp; Performing Arts</td>
<td>5,632</td>
<td>1,440</td>
<td>0.83</td>
<td>2.19</td>
<td>1.17</td>
<td><strong>2.69</strong></td>
</tr>
</tbody>
</table>

Source: Computed by Science-Metrix and 1science using OAIndx and the Web of Science

Open Access @ KAUST

Effective Date: June 30, 2014

Researchers will:
“provide an electronic copy of the author's accepted version of each publication no later than the date of its publication.”

Library will:
“develop and monitor a plan to comply with this policy and existing copyright obligations in a manner as convenient for the faculty as possible.”

http://libguides.kaust.edu.sa/openaccesspolicy
Scholarly Communication Services
Scholarly Communication Stages and Services

- Discovery & Access
  - Citation Management
  - Plagiarism
  - Writing tools

- Unique identifier services (ORCID, DOI, URI, etc.)
  - License and copyright guidance
  - Open Access publishing

- Research Repository
  - Specialized Repositories
  - Preprint servers

- Library Discovery
  - Research Repository
  - Academic websites
  - University press releases

- Google Analytics
  - Citation analysis
  - Altmetrics tools

Creation → Publication → Dissemination → Discovery → Impact
Providing Access to Resources: Discovery tools

- OneSearch (Summon)
- Google Scholar
- A-Z list of databases
- Index databases: Web of Science, Scopus
- BrowZine
- KAUST Research Repository
Plagiarism

• Plagiarism and how to avoid it – mandatory course on Blackboard
• Plagiarism checkers
  – Turnitin – for theses/dissertations
  – iThenticate for published research
• Library training sessions on plagiarism
• Library guides about plagiarism and citation management
• Online help (emails, chat service)
Citation Managers

EndNote X9

Zotero

Mendeley
What are identifier services?

• DOI registration:
  – For institutionally hosted research outputs such as theses/dissertations, datasets, software, etc.
  – Requires:
    • Membership with a DOI registration agency (such as Crossref or DataCite)
    • Tools to manage metadata registration with the agency.
What are identifier services?

• ORCID integration:
  – For researchers
  – Requires:
    • Membership with ORCID to push works and affiliation information to the ORCID records of individual researchers
    • Tools to manage the exchange of information with ORCID.
Identifier services help...

- **Students**
  - Link their outputs and education to them throughout their career.

- **Researchers**
  - Keep track of their research activities across systems.

- **Library**
  - Track metadata about publications for the open access policy.

- **Administrative offices**
  - Research evaluation: Review and report on researcher outputs and impact.
  - Alumni: Follow research careers of graduated students.
Institutional Research Tracking Service (IRTS)

• Public data and software tracking
• Data and software deposit options
  – Institutional Repository
  – Dryad membership
• Coordination of institutional services provided by different units
• Training on data and software sharing and citation
Transformative Agreements
Transformative Agreements (TA)

Business as usual for Collections/Acquisition?
Transformation
Hybrid and gold journals

**Transformative agreements are temporary and transitional**

Goal: reaching 100% OA

OA Publishing models:
Read and publish (R&P), Publish and read, Subscribe to open (S2O), APC discount
<table>
<thead>
<tr>
<th>YEAR</th>
<th>NUMBER OF AGREEMENTS</th>
<th>TYPE OF AGREEMENTS</th>
<th>NUMBER OF ARTICLES PUBLISHED</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>3</td>
<td>R&amp;P</td>
<td>31 hybrid (free)</td>
</tr>
<tr>
<td>2020</td>
<td>7 + 2</td>
<td>R&amp;P, APC discount</td>
<td>122 hybrid (free) + 118 gold (discount)</td>
</tr>
<tr>
<td>2021</td>
<td>11 + 2</td>
<td>R&amp;P, APC discount</td>
<td>127 hybrid (free) + 179 gold (discount)</td>
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</tbody>
</table>
TA Cycle

- Preparation
- Analyzing
- Negotiation
- Reporting
- Managing
Does the publisher have a transformative model?

"If you have a read and publish or other transformative models to deal with OA publishing in hybrid journals, we would like to receive an offer." (email to publishers)

Do our authors publish with the publisher?

How many articles? How many OA articles?
Tool: ESAC Guidelines for Transformative Agreements

Creating your own OA Publishing strategy

Journals: Only hybrid (read and publish), only gold (APC discount), hybrid and gold

Is there additional payment (comparing to subscription cost)?

License agreement terms (eligible authors, eligible articles, workflow, reporting)
Library administrator(s) of transformative agreements

Communication with authors and publishers (different workflows)

Promoting agreements

Library guide

Tracking articles publishing
Reports from publishers: a dashboard or monthly, quarterly, annual reports

<table>
<thead>
<tr>
<th>Profile Nickname</th>
<th>Profile Name</th>
<th>Agreement Name</th>
<th>Publisher</th>
<th>Invoicing Frequency</th>
<th>Eligibility Timeframe</th>
<th>Eligibility Start</th>
<th>Eligibility End</th>
<th>Profile Status</th>
<th>Automatic Approvals</th>
<th>Notifications</th>
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</tr>
</tbody>
</table>

Analyzing: How many of available free APCs/discounts has been used, savings, cost effectiveness, increased visibility (and impact)
Taking Action(s)
Next Steps at Your University

- Identify existing scholarly communications services being provided at your university (across departments)
- Understand scholarly communications workflows that are most widespread at your university
- Identify gaps between what is being provided and what is needed
- Agree on what department is best suited to improve the services in each area of need
- Investing in open infrastructure: membership in arXiv, DataCite, Dryad, ORCID
Opportunities for Collaboration

- Developing Open Access policy and implementation
  - Policy development
  - Procedures
  - Tools and systems for implementation

- National consortia
  - ORCID membership
  - DOI registration

- Knowledge sharing
THANK YOU