Open access models of publication: a strategy for improving 3R information retrieval for fundamental research?

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Open access models of publication: a strategy for improving 3R information retrieval?

1. Publication business models and the SNSF

2. 3R information accessibility current situation

3. Possible strategies for improving 3R accessibility
How many **publication business** models do you know?

A. 1 or 2  
B. 3 or 4  
C. 5 or 6  
D. More
1. CLASSICAL ACCESS TO ELECTRONIC ARTICLES «PAY-PER-VIEW»

Example: Animal Welfare Journal (by UFAW)
2. GREEN OPEN ACCESS MODEL «POST-REFEREE SELF-ARCHIVING»

Example: Nature Methods

Money flow

Subscriptions and licences only for embargo period

- Public granting Donations
- University Research Institutes
- Libraries
- Salaries
- Consultation
- Content
- Validation
- Publishers

Information flow

Latest issues and backfiles access based on authentication

Post-referee repository after embargo period

World (citizens, privates, state)

Researchers Teachers

$
3. **GREEN OPEN ACCESS MODEL «PUBLISHER SELF-ARCHIVING»**

Example: **JOVE** Journal of Visualized Experiments
• The rules of the SNSF require the researchers it funds to opt for the Green Road

• The SNSF expects that the researchers to which it provides funding will, where possible, make their publications freely accessible through the Green Road (institutional repository, repository of a specific discipline, personal website) no more than 6 months after the first date of publication
4. GOLD OPEN ACCESS MODEL «AUTHOR PAYS»

Exemple: ALTEX Alternativen zu Tierexperimenten
• The **SNSF** encourages researchers to opt for the Gold Road where possible

• The costs of publication in a purely Open Access journal with an academically acknowledged level of quality can be claimed from the agreed project funding up to a limit of CHF 3000 per publication during the project life-time. The publication must be related to the SNSF grant or, in the case of follow-up grants, to the preceding application
5. Hybrid model «AUTHOR PAYS» and «PAY PER VIEW»

Example: Laboratory Animals
- The SNSF rejects hybrid models of Open Access, since a relatively high publication fee is demanded of the author while the publisher continues to sell access licenses to libraries at typically consistently high prices.

- Any costs incurred in such publications must always be borne by the researcher.
What tools do you most use to find animal experimentation and replacement information for your research?

A. Search engines and bibliographic articles databases
Google scholar, WOS, Scopus, Embase, Pubmed, Go3R

B. Book series search tools
Current Protocols, Springer protocols, RERO, IDS, NEBIS

C. Peer-reviewed methods journals websites
Nature methods, Nature protocols, Jove

D. Governmental organizations 3R websites
ECVAM, ICCVAM, NC3Rs, Zebet
Case 1
3Rs journals indexed my major databases: none full fill SNSF rules!

<table>
<thead>
<tr>
<th>Journal</th>
<th>WoS</th>
<th>Scopus</th>
<th>Pubmed</th>
<th>Embase</th>
<th>E-Access</th>
<th>E-self archiving</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Animal Welfare Journal</strong> (Kluwer)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>Hybrid</td>
<td>no embargo</td>
</tr>
<tr>
<td><strong>ALTEX Alternativen zu Tierexperimenten</strong> (Springer)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>Gold</td>
<td>12 months embargo</td>
</tr>
<tr>
<td><strong>ATLA Alternatives to Laboratory Animals (FRAME)</strong></td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>Pay per view</td>
<td>12 months embargo</td>
</tr>
<tr>
<td><strong>ILAR Institut of Laboratory Animal Resources</strong> (Oxford University Press)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>Pay per view</td>
<td>24 months embargo</td>
</tr>
<tr>
<td><strong>JAAWS Journal of Applied Animal Welfare Science</strong> (Taylor &amp; Francis)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>Hybrid</td>
<td>12 months embargo</td>
</tr>
<tr>
<td><strong>JAS Journal of Animal Science</strong> (American Society of Animal Science)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>Pay per view</td>
<td>12 months embargo</td>
</tr>
<tr>
<td><strong>Lab Animal</strong> (Nature Publishing Group)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>Hybrid</td>
<td>6 months embargo</td>
</tr>
<tr>
<td><strong>Laboratory Animals</strong> (SAGE publications)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>Hybrid</td>
<td>12 months embargo</td>
</tr>
<tr>
<td><strong>Toxicology in vitro</strong> (Elsevier)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>Hybrid</td>
<td>12 to 48 months embargo</td>
</tr>
</tbody>
</table>
Case 2

Methods journals for 3R articles indexed my major databases: none full fill SNSF rules!

<table>
<thead>
<tr>
<th>Journal</th>
<th>WoS</th>
<th>Scopus</th>
<th>Pubmed</th>
<th>Embase</th>
<th>E-Access</th>
<th>E-self archiving</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature methods (Nature Publishing Group)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>Hybrid</td>
<td>Post-referee version: ● 6 months embargo</td>
</tr>
<tr>
<td>Nature protocols (Nature Publishing Group)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>Hybrid</td>
<td>Post-referee version: ● 6 months embargo</td>
</tr>
<tr>
<td>JOVE Journal of visualized experiments</td>
<td></td>
<td>●</td>
<td></td>
<td></td>
<td>Pay per view except preceding 2 years period?</td>
<td>2 years embargo, period may be reduced, if required by funding agency?</td>
</tr>
</tbody>
</table>

NB: Google scholar indexation of these journals and collection is unknown
Case 3
ARRIVE and GSPC compliances are not mentioned on pdf articles, neither on journal websites

😊
• 324 journals support the ARRIVE check list, and some journals decided to remove formal limits on the length of the Material and Methods section

😢
• Researchers do not find ARRIVE or GSPC compliance on journal websites during journals selection process
• Researchers do not know where to deposit animal reporting following ARRIVE and GSPC guidelines if length of Material and Methods is limited
• Readers do not know if animal reporting followed ARRIVE or GSPC guidelines
Researchers could improve 3R accessibility...

1. Select 3R journals or scientific journals at least indexed by 3 major search tools

2. Select journals supporting ARRIVE and GSPC guidelines, indicate these terms in author keywords

3. Avoid hybrid models of publications, as recommended by SNSF

4. Negotiate systematically with publishers 6 months post-referee or publisher version self-archiving

5. Systematically reposit post-referee versions in their institutional open archives after 6 months for better Google and Google scholar findability
... but it is believed that **Swiss institutions** should start projects to improve **3R information accessibility**!

1. **Open methods repositories** for animal experimentation reporting, following ARRIVE and GSPC guidelines?

2. **Financial support** of the new semantic search engine **Go3R**?

3. **Swiss 3R Foundation open archives repository**?

4. **Negotiation** for post-referee self-archiving after 6 months embargo?

5. **Swiss national licenses** on selected 3R journals indexed by major search tools?

6. **Negotiation** for publisher versions self-archiving after 2 years embargo?

7. **Negotiation** for gold-open access, without additional higher costs for researchers, universities and libraries, without loosing self-archiving rights within 6 months?

8. **Evaluation of indexation and ranking** of Swiss academic open archives repositories by Google and Google scholar?

9. **Evaluation of indexation** of Swiss academic open archives by PubMed?