Preprint Policy and Perspectives in
The Japanese Journal of Infectious Diseases

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What is Preprint?

- A preprint is a complete scientific manuscript (often one also being submitted to a peer-reviewed journal) that is uploaded by the authors to a public server without formal review (Science 2016).
- After a brief inspection (scientific? Not violative?), MS could be view without charge on the Web.
<table>
<thead>
<tr>
<th>Year</th>
<th>Preprint Server</th>
<th>Subject</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1966</td>
<td>Exchange Groups</td>
<td>Medicine, health science</td>
<td>NIH (US)</td>
</tr>
<tr>
<td>1991</td>
<td>arXiv</td>
<td>Physics, Mathematics</td>
<td>Cornell University (US)</td>
</tr>
<tr>
<td>2007</td>
<td>OSF Preprints</td>
<td>Multidiscipline</td>
<td>COS</td>
</tr>
<tr>
<td>2013</td>
<td>BioXiv</td>
<td>Biology</td>
<td>Coldspring Harbor (US)</td>
</tr>
<tr>
<td>2013</td>
<td>PeerJ**</td>
<td>Multidiscipline</td>
<td>PeerJ</td>
</tr>
<tr>
<td>2014</td>
<td>ChemRiv</td>
<td>Chemistry</td>
<td>Union of 5 societies</td>
</tr>
<tr>
<td>2019</td>
<td>MedRxiv</td>
<td>Clinical medicine</td>
<td>Coldspring Harbor (US)</td>
</tr>
</tbody>
</table>

* Closed in 2012
** Closed in 2019

Area/language-based Preprint Servers: (e.g. IndiaRxiv, ArabiRxiv)
Publisher-based Preprint Servers: (e.g. Research Square-In Review, F1000, Under Review)
ASAPbio meeting 16-17 Feb 2016

• **Academic Perspective:**
  Immediate availability of the manuscript
  Increased communications and comments on the manuscript
  Time stamp enables to keep priority of the findings
  Promotion, carrier development, and grant opportunities for young scientists

• **Founders’ Perspective:**
  Provide more current and complete view of applicant’s idea
  Prompt evaluation of applicants’ progress
  Avoid bias by the Journal name and reputation
  Advantage for unknown, young scientists only holding small grant

Evaluate various stage of developments and quality
Higher burden to the reviewer

Ensure accessibility of preprint manuscript to the Grant reviewers
• Journal Perspective:
  different purpose between Preprint server and peer-reviewed Journal
  Preprint
  Peer-reviewed journal
  Share of findings in early stage
  Contribution to science progress
  Priority
  Correctness

Many publishers will not be able to neglect preprints any more
Preprints help or assist some review process

CONCERNS
  *‘date stamp’= integrity of premature findings and credibility
  * ‘Versioning’ must be adapted to preprints and journal articles

  * ethical / scientific standards
  * how to handle “problematic” preprints (misconduct, inaccuracy)
  => citation must be in a different format from articles
Responses of the Journals to Preprint

List of academic publishers by preprint policy. Wikipedia. 
(15/10/2020)

• Location:  
  unrestricted / not accepted/ conditional: non-profit, non-clinical*

• Version:  
  unrestricted / Not to deposit revised version / include new findings

• License  
  unrestricted / charge for open access / CC-BY-NC-ND / CC-BY-NC

*Especially in Orthopaedics and Radiology journals
“Evolution” of Preprint under COVID-19 pandemic

- COVID-19 pandemic has dramatically increased the volume of preprint manuscripts.
- COVID-19 interferes with the normal cycle of peer-review process of the journals, resulting in extensive delay of publishing time of a manuscript.
- Since Jan 2020, thousands of preprint on COVID-19 has deposited within a few months.
- Media often reported findings on preprint as “scientific facts”, and later some are retracted.
- Preprint servers introduce pre-checking system.
- Cost of managing Preprint servers is increasing:
  “In December 2018, the COS informed repository managers that from 2020, it would be introducing fees, charged to repository managers, to cover maintenance costs. The charges, which were finalized last December, start at about US$1,000 a year, and increase as repositories’ annual submissions grow.” (Nature 578, 349 (2020))
In April 1997, the National Institute of Health changed its name to the National Institute of Infectious Diseases. The functions and responsibilities of the institute are clearly defined in the enactment pertaining to its establishment:

1. To conduct and co-ordinate research projects of national importance on causative agents and pathogenesis of infectious diseases and their diagnosis, prophylaxis and therapy and various other projects necessary for public health and welfare.
2. To serve as the national reference laboratories for diagnosis and epidemiologic investigations of infectious diseases, maintenance of reference materials such as microbial pathogens, antigens and antibodies and distribution of such materials to prefectural public health institutes and other related institutions, and standardization of diagnostic methods, etc.
3. To serve as the information center for the surveillance of infectious disease agents in Japan and other countries, collecting, analyzing and distributing laboratory information concerning the detection of infectious agents, in collaboration with prefectural public health institutes, health centers, and designated hospitals and in providing information of incidence of infectious diseases to the whole country and other countries.
4. To conduct potency assay and safety tests of vaccines, blood products, interferons and other biologic products, antibiotics, disinfectants, insecticides and antirodent drugs related to prophylaxis, therapy, and diagnosis of infectious diseases and to carry out basic research concerning quality control of those products.
5. To serve as WHO collaborating centers and other reference centers for various internationally cooperative medical research.

To focus clearly on basic research in infectious diseases, the journal is changing its name to the **Japanese Journal of Infectious Diseases (JJID)** and modifying its scope.
Scope:

Japanese Journal of Infectious Diseases (JJID), an official bimonthly publication of National Institute of Infectious Diseases, Japan.

JJID publishes on infectious diseases in humans with respect to the fields of bacteriology, virology, mycology, parasitology, medical entomology, vaccinology, toxinology, epidemiology, surveillance, and public health, related to infectious diseases. Papers on pathology, immunology, biochemistry, and blood safety related to microbial pathogens are among the fields covered.

The following types of papers are included in JJID: (1) Original Articles, (2) Short Communications, (3) Epidemiology Communications, (4) Invited Reviews, and (5) Letters to the Editor.
Aim of JJID

• International communication of research findings on infectious diseases between Japan and other countries
• Encouraging Japanese local government laboratories to release scientific reports with infectious diseases
• Encouraging researchers in low-middle income countries to release scientific reports in infectious disease researches.
  – Publication fee: free
  – Copyright: authors
History of JJID: established in 1948

- 1948 The Japanese Medical Journal
- 1952 The Japanese Journal of Medical Science and Biology
- 1999.3.31 renamed as JJID Vol 52, Number 1
- 2000.3 Join to National library of Medicine MEDLINE/PubMed system

2012
- Abandoned printed version and shifted to electric journal
- Join to J-STAGE in order to online submission/ reviewing
2013-2019
Dramatically increased:
• number of submitted manuscripts
• Invitation to oversea reviewers
• Inappropriate submission:
  – Submission with incorrect format
  – Duplicate submission/ publication
2017-

• Revision of Instruction for Authors
• CC-BY 4.0
• Accept Preprint as Reference
• Introducing Preprint Policy (under discussion)
Number of submitted manuscripts

COVID-19
Number of submitted manuscripts from:

- Oversea
- Japan
- Others
- NIID
Total pages and number of articles

Pages /year

Number of articles

- 1999
- 2001
- 2003
- 2005
- 2007
- 2009
- 2011
- 2013
- 2015
- 2017
- 2019
## Major Preprint servers in medical researches

<table>
<thead>
<tr>
<th></th>
<th>precheck</th>
<th>delete</th>
<th>Multiple posting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Rxiv(bioRxiv, medRxiv)</strong></td>
<td>Offensive Non-scientific Plagiarism</td>
<td>No (Withdraw with mark as Withdrawn)</td>
<td>Not recommend</td>
</tr>
<tr>
<td><strong>OSF Preprints</strong></td>
<td>Offensive Illegal</td>
<td>Yes (metadata remains after withdraw)</td>
<td>Share only</td>
</tr>
<tr>
<td><strong>Research Square (In review)</strong></td>
<td>English Lack of originality Non-scientific Disclosure Ethics &amp; Privacy Risks to health</td>
<td>No (withdraw due to issues that cannot be clearly be addressed by submitting a revised version)</td>
<td>Free (CC-BY)</td>
</tr>
</tbody>
</table>

*Requiring an indication of the type of study*
Preprint policy

*Japanese Journal of Infectious Diseases* (JJID) publishes only original, previously unpublished materials, but will consider for publication manuscripts that have been posted on non-profit preprint servers (e.g., bioRxiv and medRxiv). Preprints may be posted at any time during the peer review process. Posting of preprints is not considered prior publication and will not jeopardize consideration at JJID. Manuscripts posted on preprint servers will not be taken into account when determining the advance provided by a study under consideration at JJID.
Preprint policy (continued)

During submission, authors must indicate in their cover letter where their article has been posted, including the digital object identifier (DOI) to the preprint version of their manuscript. They must also agree, if the article is accepted, to update the archived preprint with their article’s DOI, a link to the version of the article published in JJID, and a complete citation upon publication in JJID. Upon publication of the article by JJID, please add the following text to their preprint:

“This article has been published in [insert full citation] following peer review and can be also viewed on the journal’s website at [insert DOI].

Journals should also outline an expectation that authors will declare any relevant preprint copies of the work on submission.
Preprint policy (continued)

Authors may choose any license of their choice for the preprint including Creative Commons licenses, but authors must retain copyright of their work when posting to a preprint server.

Preprints may be cited in the reference list of articles under consideration at JJID as shown below:
Preprint citations should include the author name(s), title, preprint server, the Preprint ‘tag’, the document version (e.g. most recent date modified), the date the preprint was cited, the Digital Object Identifier (DOI) and should follow the JJID reference format.


Authors may contact with JJID at jjid@nih.go.jp to discuss whether a preprint posting will affect the eligibility of the article for publication in JJID.
Future concerns

Preprint: a new business model?
  Cost
  Enclosure
  Science communication?
  Role in Science /Academia-seamless service

Peer-review Journal:
  Higher burden to Editorial Office
  Unity with peer-review journal?
  Unique evolution?

Japan: 2 raps behind in Preprint argument
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NIID
NATIONAL INSTITUTE OF INFECTIOUS DISEASES