Let’s introduce Open Science in your PHD:

University Libraries are there for you!
What is Open Science?

Free dissemination of the results, methods and products of scientific research.

**Scientific issues**
- Rapid and free dissemination of research
- Scientific integrity
- Reproducibility

**Democratic issues**
- Transparency
- Dissemination of knowledge: free, open and permanent access for everyone

**Financial issues**
- Publicly funded research
- Time savings
- Explosion of the cost of access to scientific research
What is Open Science?

- A wide variety of processes, impacting the entire research cycle
- New ways to...
  - Conduct research
  - Teach
  - Collaborate among researchers
  - Share knowledge
- Open, global, collaborative, creative research, closer to society...
In practical terms... what can I do? (examples)

**GREEN ROUTE**
- **Self-archiving** by the researcher himself
- Loi pour une république numérique (2016): it’s legal! And an embargo period may apply
- in an open repository

**GOLD ROUTE**
- **Publishing** in open access journals, sometimes with Article processing charges
- Free for the readers, not for the authors
- No embargo

**DIAMOND ROUTE**
- **Publishing** in open access journals, funded by public organizations
- Free for the readers, free for the authors
- No embargo

• Share your publications
  • Free access to research results, especially scholarly publications
  • Three main “routes” to open access
In practical terms... what can I do? (examples)

- Share your data
  - Manage your research data throughout the data life cycle, in order to make it reusable by you and by others.
  - Whenever possible, disseminate the Research data collected and produced during your PhD, in open data repositories, such as Zenodo or Recherche Data Gouv.
The University of Lille Libraries are here to help!

- Several PhD trainings to learn how to...
  - Publish in Open Access
  - Manage your PhD data
  - Increase your researcher visibility
  - Understand bibliometrics
  - Use Zotero for bibliography

- Dates for 2022-2023 are yet to be settled => watch for ADUM and the college doctoral.

- [Catalogue for 2021-2022](#)
The University of Lille Libraries are here to help!

Stay tuned for news for 2023!!

- Workshops to learn how Open Science is made:
  - Events during the year
  - Experts to answer your questions in direct with your scientific production.
  - Solutions and platforms for your disciplines.
  - Other social activities ...

Ouvrir la recherche : place à la pratique!

la Fabrique de la science ouverte
The University of Lille Libraries are here to help!

Open Archives (LilloA or HAL)?
- lilloa@univ-lille.fr

Structuring, sharing and opening up your data?
- scd-aap@univ-lille.fr

Depositing, disseminating (or printing) your thesis?
- diffusion-theses@univ-lille.fr
- lilliad-theses@univ-lille.fr

Publishing in Open Access with APC?
- apc-scd@univ-lille.fr

Any other subject?
- chercheurs-scd@univ-lille.fr
Online resources

• Lille University libraries | Open science
• Comité pour la science ouverte website
• Passport for Open science
What are the objectives of the Passport for Open Science project?

To give PhD students an introductory vision summarizing open science (glossary, issues, mechanisms, benefits for the scientific community and more broadly for society);

To provide PhD students with the information required to put open science into practice: Open access of scientific publications, data, open source.

Raise awareness of Open Science
What can PhD students find in the Passport for Open Science?

A guide designed to accompany PhD students at every step of their research career, whatever their disciplinary field.

Planning an open approach to scientific work

- Using freely accessible resources: Examples of journal platforms, open archives, databases, data warehouses
- Data Management Plan: Tools to directly manage Data
- Working in a reproducible way: For yourself, for others

Disseminating research

- Disseminating your publications in open access: APC definition, Hybrid journals and predatory publishers
- Making your thesis freely accessible: Depositing in a open archive, exemples of repositories, explanation of publishing rights...
- Making research data open: FAIR principles, choosing a data warehouse

Preparing for after your thesis, join the movement

- Deeply rooted public policies: French National Plan for Open Science, Plan S, Horizon Europe etc.
- Evaluating research differently: open peer-review, creating a new standard for evaluation of researchers and research

Testimonials, practical examples, inserts with "good to know", external links to go further, glossary...

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Watch out!

HYBRID JOURNALS
To increase their revenues, some publishers are retaining the traditional subscription access model while offering the paid option of publishing the article in open access. This amounts to charging an institution twice - once for access to the journal and once for publication of the article.

This controversial business model is often used by major commercial publishers. It is not advisable to pay these additional costs especially because you can distribute your article via an open archive.

PREDATORY PUBLISHERS: BEWARE OF APPEARANCES
The development of digital technology has led to the emergence of publishers with dubious practices who contact you to promise your work will be rapidly published. These publishers do not guarantee editorial quality and an effective peer review process but they may charge a fee for publication. As well as the financial costs, your scientific credibility will also be damaged. It is sometimes difficult to spot a predatory journal but certain tools can help you to do so. There are also predatory preprint repositories in a similar fashion.

→ Think. Check. Submit.: This website gives access to a set of checklists to help you assess the reliability of the journal in which you plan to publish your work.
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Evaluating research differently

Open science represents a profound change in science and research which means it is currently questioning evaluation practices.

Reinventing peer review

Peer review is a prerequisite for any publication and a guarantee of the reliability of scientific results. The process is usually organised by the journal or the publisher who submits the manuscript to other researchers in the same field as the author and who are not known to the author. However, this system is currently having difficulties particularly because reviewers may be competitors of the author.

Conversely, some reviewers sometimes work on research themes which are too far removed from the article needing review. Generally speaking, peer review is not an infallible solution. In the 2000s, there has been an increase in the publication of fraudulent or questionable articles because of data manipulation or plagiarism (Grenet, 2012, Fung, Steen & Casadevall, 2013).

Open science has brought about the emergence of Open Peer Review practices with two main methods: the names of reviewers are made public and the review is carried out on a platform that enables all users to comment on the article. This practice has been made easier by the existence of pre-publication platforms like ArXiv and BioRxiv which journals can use to collect comments.

Example

The "Peer Community" platform organizes the peer review of pre-publications deposited in an open archive which can lead to the publication of a certificate of validation. Journals can thus publish articles freely without having to ask for reviewers.

In certain disciplines such as biology and health, the pre-registration of hypotheses and protocols (research reports) in registers or journals has led to practices changing. Peer review is carried out in two stages which reduces the impact of publication bias (tendency to publish only positive results) and spotlights the research process.
Testimonials, practical examples, inserts with "good to know", glossary, external links to go further ...
Multiple tools and good practices that can be directly implemented
Evolution of the project

*New objectifs for better adapting to your needs*

- Need to deepen certain issues
- Diversify awareness-raising materials

Continue to address to a multidisciplinary audience

**Creation and disemination of**

- **2 new thematic guides**
  - 16 pages

**Creation and disemination of**

- **5 short videos**
  - < 3 min

Dissemination of new guides in French version on September 2022 !!
(English version will be also disseminated in a next step of the project)

Available in French, English and subtitles in both languages!
# Thematic guides

**Science ouverte – Code et logiciels**

<table>
<thead>
<tr>
<th>Format</th>
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<tbody>
<tr>
<td>• Content accessible to a multidisciplinary audience: <strong>accessible to all PhD students having contact with code and software and not only computer science students</strong></td>
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<table>
<thead>
<tr>
<th>Content</th>
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<tbody>
<tr>
<td>• What are software and code? Why open them? How to open them? What to do after?</td>
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<tr>
<td>• Concepts covered: source code, version control, archiving, documentation, concept and definition of license choices, referencing, copyright, testimonials, etc.</td>
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Thematic guides

« Science ouverte – Entrez dans le débat »

Format

- Presentation questions about Open Science with explanations and arguments,
  to promote the conversation between PhD students and their professional network
- Testimonials and key figures to spread the message to raise awareness of Open Science.

Content

- Summary of questions raised through a large collection within professional networks.
- Questions on all aspects of open science
- General issues for a multidisciplinary public

Progress

- First version in revision before layout.
- Outside proofreaders
Thank you for your attention!
Lille University libraries | Open science

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