PHD EDUCATIONAL WEEK ON TRANSFERABLE SKILLS

PADOVA, 22nd of September 2020
I.

Open Access and scholarly communication
Open Access and scholarly communication

Scientific communication
Publishing models, Intellectual property

Open Access
Creative Commons, Green Road, Gold Road, Versioning of Record

Mandatory Open Access
European Recommendations, Italian Law, Funding Programs

OA at the University of Padova
Policy, University’s Repositories

Social networks of research
Academia.edu & ResearchGate
Scientific communication

The process of publication and dissemination of research findings
The traditional business model of academic publishers is to archive and disseminate works whose authors have transferred exclusive publication rights to the publisher. The revenue of publishers is based upon providing paid access to the papers.
Actors of the process

Authors write scientific essays

Publishers analyze manuscripts and publish them

Distributors make paper and digital products available

Universities / Research Institutions buy books and subscribe to journals
Many Scholarly or Academic Journals require authors to sign away their rights to their own articles!

Intellectual Property (IP) protects different types of intellectual creations. It is usually divided into two parts:

1. **Industrial property** comprises …
   - Designs and models protects the new design of an utilitarian object
   - Patent law protects new inventions
   - Trademark law protects signs used in commerce to distinguish the origin of goods or services

2. **Literary and artistic property** comprises mainly …
   - Copyright / author’s rights
Italian context into the European law framework

- Civil Code (art. 2575-2583)

- Legge 22 aprile 1941 n. 633, "Protezione del diritto d'autore e di altri diritti connessi al suo esercizio"

Amended by
- Legge 18 agosto 2000 n. 248, "Nuove norme di tutela del diritto di autore"
Italian context into the European law framework

International Conventions
- Berne Convention for the Protection of Literary and Artistic Works
- TRIPS Agreement

Direcitive (EU) 2019/520 of 19 March 2019 (Copyright in the Digital Single Market)
Member States shall transpose the Directive by 24 months.
Authorship VS Ownership

Authorship is a moral right (paternity): it can’t be transferred, bought or sold.

Exploitation is an economic right: it can be transferred, bought or sold.
Focus on…
Copyrights on doctoral thesis

Your rights:
Moral rights
Property rights

Rights to respect:
3rd party copyright material

Be careful: your PhD thesis is public!
Focus on…
Patents and doctoral thesis

- Patent request must be submitted before the discussion of the thesis: even the simple declaration of the subject of the patent during the discussion invalidates the evaluation process of the patent.

- The period required by agencies to evaluate subjects and accept communications from submitters takes at least 18 months.

- Patent info at UNIPD

- Embargo (partial) on Doctoral Theses
And you?
"Digital" editorial model

The Web allows new kinds of documents, technologies and editorial policies: e-books, e-journals, databases, full text, Open Access ...

THAT MEANS

• for authors: self-publishing and cooperative text sharing, more dynamic revision process, self-archiving (especially in OA)

• for publishers: reduction of printing and distribution costs

• for readers: easily available documents, interoperability and content reuse
Open access (OA) literature is digital, online, free of charge, and free of most copyright and licensing restrictions. Open Access without barriers and restrictions to scientific knowledge.
It is a type of (open) access to digital contents
Any type of digital content can be openly accessible
OA particularly refers to academic, technical and scientific content
It is NOT a business model, a type of license or content!
There are several editorial models and licenses compatible with OA, in constant evolution
Copyright and Creative Commons

For researchers and authors a wide variety of publishing models are emerging that do not follow the traditional academic pattern of outright assignment of copyright to publishers or data owner...
Creative Commons licenses by Foter (CC-BY SA)
Free Access vs. Open Access

Gratis = Free Access while Libre = Open Access
Which are the benefits?

Nowadays, it is widely recognized that making research results more accessible contributes to better and more efficient science, and to innovation in the public and private sectors.

_European Commission, Horizon 2020_

Which are the benefits?

- Researchers in developing countries can see your work
- More exposure for your work
- Practitioners can apply your findings
- Higher citation rates
- Taxpayers get value for money
- Compliant with grant rules
- The public can access your findings
- Your research can influence policy

CC-BY Danny Kingsley & Sarah Brown
Which are the benefits?

COVID-19 preprints (cumulative) (up until 2020-09-06)

* 'Other' refers to preprint repositories containing <40 total relevant preprints. These include: AfricArXiv (OSF), AgriXiv (OSF), BioHackXiv (OSF), EarthArXiv (OSF), EcoEvoRxiv (OSF), engrXiv (OSF), Frenxiv (OSF), INA-Rxiv (OSF), IndiaRxiv (OSF), LawArXiv (OSF), MediArXiv (OSF), NutriXiv (OSF), ScienceOpen, SportRxiv (OSF), TechRxiv (IEEE), Zenodo.

Nicolas Fraser, Bianca Kramer, Github https://github.com/nicholasmfraser/covid19_preprints
CC-BY 4.0 International license.

Covid-19: Open or Free Access Online Resources UNIPD
The green road

GREEN OPEN ACCESS
increased dissemination, economic efficiency & social impact

1. Publicly funded researchers conduct research and write up results.
2. Manuscripts submitted to subscription journals & reviewed by peers.
3. Manuscripts accepted for publication.
4. Authors assign copyright to publishers, but retain the right to disseminate an OA copy (of the accepted manuscript) via open access repositories.
5. Accelerated scientific progress & increased return on public investment.
6. After embargo period, public can download the open access copies from repositories.
7. Accepted manuscript versions may be embargoed temporarily.
8. Published versions of articles accessible to journal subscribers immediately.

https://aoasg.org.au/what-is-open-access/
Open archives

disciplinary repositories

- Economics
  - RePEc
    - http://repec.org/

- Physics
  - arXiv.org
    - https://arxiv.org/

- Medicine
  - PMC
    - https://www.ncbi.nlm.nih.gov/pmc/

- Biology
  - bioRxiv
    - https://www.biorxiv.org/

interdisciplinary repositories

- Zenodo

institutional repositories

- Research Padua Archive
The gold road

GOLD OPEN ACCESS
maximised dissemination, economic efficiency & social impact

- Publicly funded researchers conduct research and write up results.
- Manuscripts submitted to Open Access journals & reviewed by peers.
- Manuscripts accepted for publication.
- Authors retain copyright & grant publisher ‘licence to publish’.
- Accelerated scientific progress & maximised return on public investment.
- Public granted reuse rights under open licences.
- Published versions of articles immediately accessible to public.
- Authors may be required to pay publisher an ‘article processing charge’ to cover publishing costs.

PUBLISHING IN OA JOURNALS
POSSIBLE ARTICLE PROCESSING CHARGES (APC)

https://aoasg.org.au/what-is-open-access/
The publishing models of Open Access: green and gold

**SPRINGER**
https://www.springer.com/gp/authors-editors/authorandreviewertutorials/open-access/what-is-open-access/10286522

**WILEY**
https://authorservices.wiley.com/author-resources/Journal-Authors/open-access/index.html

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**Gold Open Access**

**What is it?**
The author pays an Article Publication Charge and the article is immediately freely available online for all to read, download, and share.

**Options**
Wiley offers two ways to publish gold open access, authors may publish in:
1. Fully open access journal - journals where every article is published open access
2. Subscription journal offering OnlineOpen - an open access option that most Wiley journals offer

**License**
Open Access Agreement with a Creative Commons license

**Charge**
Article Publication Charge - amount varies by journal (Visit our Article Publication Charge page to learn more)

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**Green Open Access**

**What is it?**
The author self-archives a version of the subscription article in an online repository or website.

**Options**
Self-archiving requirements vary depending on the article version being archived. Authors may archive the:
1. Submitted version on acceptance
2. Accepted version with a 12-24 month embargo - embargo period varies by journal (Use our Author Compliance Tool to check)

**License**
Standard CTA or ELA

**Charge**
No charge
Versioning

1. Submitted version (Author's original pre-print)
2. Submit to publisher
3. Peer review
4. Edit
5. Accepted by publisher
6. Copy-editing and typesetting
7. Published version (Version of record)

https://aoasg.files.wordpress.com/2013/12/hefce-publishing.jpg
Production of bioethanol from multiple waste streams of rice milling

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Abstract

This work describes the feasibility of using rice milling by-products as feedstock for bioethanol. Three rice varieties (brea, bran, and degerminated rice) were individually fermented (20% v/v) through Co-fermented Bioprocessing by two industrial strain yeast Saccharomyces cerevisiae. Rice bran (20% v/v), mainly composed of lignocellulose, was pre-treated at 55°C with alkaline peroxide, saccharified through optimized dosage of commercial enzymes (CelliC® CTM-2) and fermented by the recombinant strains.

Finally, a blend of all the rice by-products, formulated as a mixture (20% v/v) according to their proportions at milling plants, was co-processed to ethanol by optimized pretreatment, saccharification and fermentation by amylolytic strains. Fermenting efficiency for each by-product was high (above 80% of the theoretical) and further confirmed on the blend of residues (nearly 52% of ethanol). These results demonstrated for the first time that the co-fermentation of multiple waste streams is a promising option for second generation ethanol production.

Keywords: rice milling by-products, alkaline peroxide pre-treatment, amylolytic saccharification, co-fermented bioprocessing, multiple residues co-fermentation

http://hdl.handle.net/11577/3251351
Versioning: post-print vs. version of record

How to enhance crop production and nitrogen fluxes? A result-oriented scheme to evaluate best agri-environmental measures in Veneto Region, Italy

Nicola Dal Ferro, Elisa Cocco, Antonio Bertil, Barbara Lanzara, and Francesco Morari

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Abstract
The cost-effectiveness of adopting agri-environmental measures (AEMs) in Europe, which combine agricultural productions with reduced N losses, is debated due to poorly targeted site-specific funding that is allocated regardless of local variability. An integrated NAvigation for agricultural Cropping systems and Environment (NACER) model-GIS platform was developed combining pedo-climatic and agricultural systems information. The aim was to evaluate best strategies to improve N fluxes of agro-ecosystems within a perspective of sustainable intensification. Indicators of agronomic efficiency and environmental quality were considered. The results showed that agronomic benefits were observed with a continuous soil cover (conservation agriculture and cover crops), while enhanced nitrogen use efficiency (-17%) and crop yields (+24%), although in some cases these might be overestimated due to modelling limitations. An overall environmental

http://hdl.handle.net/11577/3257505
Effect of Vegetative Propagation Materials on Globe Artichoke Production in Semi-Arid Developing Countries: Agronomic, Marketable, and Qualitative Traits

José Alfredo Ribeiro, Carolina Nicola, Claudio Boulic Trouve, Fabio Sambito, and Karina Soledad Khalilhaki

1. Introduction

Globe artichoke (Cynara cardunculus L. subsp. scolymus (L.) Meyen) is one of the most important cultivated species in the Mediterranean basin and is continuously being planted and accepted in either parts of the world due to its health benefits [1, 2]. In Tunisia, the production of globe artichoke is mainly concentrated in the Gafsa region. In 2015, the total area involved with this crop reached 3,800 hectares, and the total production was approximately 15,000 tons [3]. About 95% of this area is represented by the cultivar “Kiffa 08,” which is the most appreciated variety in Tunisia for its fast commercialization in local and international markets. In the last five years, Tunisian globe artichoke production has increased in a remarkable way, and total 112,000 tons in 2014 [4]. Due to the large quantity of propagation material present in a plant, globe artichokes are generally propagated vegetatively by offsets, stolons, or shoots harvested from commercial fields at the end of the growing cycle [5]. In recent years, the propagation of artichokes has undergone considerable evolution.
And you?
Mandatory Open Access

OBLIGATIONS

OPPORTUNITIES
European recommendations

- **EC Recommendation 2012/417**
  - COMMISSION RECOMMENDATION of 17 July 2012 on access to and preservation of scientific information (2012/417/EN)

- **EC Communication COM(2012) 401 final**
  - Towards better access to scientific information: Boosting the benefits of public investments in research

- **EC Recommendation 2018/790**
  - COMMISSION RECOMMENDATION (EU) 2018/790 of 25 April 2018 on access to and preservation of scientific information
Italian law

Art. 4
Legislative Decree n. 91/2013

Research evaluation call 2015-2019
Funding programs

- projects funded with public funds (Horizon 2020, Marie Curie, ERC)
- projects funded by private foundations or entities (e.g. Bill & Melinda Gates Foundation or Wikimedia Foundation)
- projects funded by institutions or research networks that adhere to Plan S
Funding programs

2008
- OA Pilot Deposit and OA
- & ORD/DMP Pilot

2014
- OA Mandatory Deposit and OA
- & ORD/DMP by default (exceptions)

H2020
- OA Mandatory Deposit and OA
- & ORD/DMP by default (exceptions)

2017
- OA Mandatory Deposit and OA
- DPM in line with FAIR Mandatory
- Open Data by default (exceptions)
- & Open Science embedded

2021
- Horizon Europe
  - OA Mandatory Deposit and OA

OpenAIRE webinar: Horizon 2020 Open Science Policies and beyond, October 22nd, 2019 by Emilie Hermans (Ghent University)
https://www.slideshare.net/OpenAIRE_eu/horizon-2020-open-science-policies-and-beyond-with-emilie-hermans-openaire
Plan S

Initiative for the publication in OA of all research contents financed with public money.

https://www.coalition-s.org/10-principles

-- immediate publication, without embargo, in Open Access journals / archives;
- authors retain copyright;
- publication fees aren’t covered by individual researchers;
- commitment to create OA journals and platforms;
- limit to APC costs;
- no financing for publication in journals with double dipping.
University of Padova

UNIPD supports Open Access

- **Statute**, Tit. III, Art. 56, Par. 3
- Endorsement to [Messina declaration](#) – Academic Senate, 9/11/2004
- [Policy on Open access to scientific literature](#) – Academic Senate, 08/06/2015
- [Regulation on Open access to UNIPD scientific production](#) – Academic Senate, 07/07/2017
- [Policy on the management of research data](#) – Academic Senate, 19/11/2018
ART. 32.2: La domanda di ammissione all’esame finale deve essere corredata: a) da un esemplare della tesi in formato digitale per il deposito presso l’archivio dell’Ateneo che ne garantisce la conservazione e la pubblica consultabilità. Lo stesso deposito è funzionale anche ai fini di adempiere all’obbligo di deposito della tesi presso le biblioteche nazionali di Roma e Firenze. In caso di richiesta di revisioni da parte dei valutatori la tesi definitiva deve essere depositata secondo i tempi e le modalità annualmente stabilite dall’Ateneo.

[You should attach to the application to the final exam: a) a digital copy of your thesis to be stored in the Unipd institutional repository, which garanties conservation and public accessibility. The storage meets the requirement to store the thesis in the Italian national libraries in Rome and Florence. In case the evaluator requires a revision of the thesis, the revised final version must be stored accordingly to the calendar annualy established by Unipd.]
ATTENZIONE

Per le valutazioni della ricerca (VQR) deposita il tuo lavoro nell'archivio istituzionale Padua Research Archive (IRIS)

Padua@research è l'archivio istituzionale per il deposito dei lavori di ricerca dell'Università degli studi di Padova. L'archivio ospita documenti in formato elettronico derivanti dall'attività scientifica di docenti, ricercatori e collaboratori dell'Ateneo. Vengono depositate in Padua@research anche le tesi di dottorato.

Il deposito, la modifica e l'accesso ai documenti avvengono in maniera semplice e diretta.

La procedura di autoarchiviazione rende visibile via web il testo completo dei documenti depositati. [Continua...]

Cosa vuoi fare?

- Cerca un documento
- Crea un account
- Accedi alla tua area
- Deposita un documento
- Deposita una tesi di dottorato
- Sapere di più

Padua@Research supports OAI 2.0 with a base URL of http://paduarserarch.oab.unipd.it/oai2
Regolamento per i corsi di dottorato di ricerca
(D.R. 468343 dated 17/10/2018)

ART. 24.9: E’ condizione necessaria per il conseguimento del titolo di dottore di ricerca che il dottorando acceda al catalogo IRIS e inserisca i dati relativi alla propria produzione scientifica, se presente.

[It’s mandatory for PhD students to log into IRIS catalogue and submit information about their own scientific production, if produced.]
# to increase the visibility of research conducted at the University of Padova;
# to increase the relevance of scientific contributions in international consideration and encourage the comparison of ideas and positions;

# to increase efficiency in obtaining data and documents, thanks to specialized indexing;
# to centralize document management in a single collector and thereby avoid the dispersion of resources in local repositories;

# to guarantee the integrity of documents and their appropriate description, regardless of technological and instrumental changes;

# to respond to funders requirements, since in many cases they expect the submission of research products to open access repositories.

(From: Regolamento per l’Accesso Aperto alla produzione scientifica dell’Università di Padova)
Sherpa Romeo

Search

Enter a journal title or issn, or a publisher name below:

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<thead>
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<th>Journal Title or ISSN</th>
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<td>Search</td>
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</table>

| Publisher Name |  |
|----------------| Search |

You can also browse publications by publisher.
And you?
Support services

In the section “About publishing” of the Library System web portal, authors will find information on Open Access, on publishing, and on the management of data.
The red road

**RED OPEN ACCESS**

*maximised dissemination*

1. Publicly funded researchers conduct research and write up results.
2. Manuscripts submitted to Open Access journals & reviewed by peers.
3. Manuscripts accepted for publication.
4. Authors retain copyright & grant publisher 'licence to publish'.
5. OA Published versions of articles immediately accessible to public.
6. Accelerated scientific progress
7. Public granted reuse rights under open licenses.
8. Authors pay publisher article processing charge
   Libraries purchase subscription

**HYBRID OPEN ACCESS JOURNALS**

**DOUBLE DIPPING**
Trasformative agreements

From paying for reading...

Support from institution via library?

Subscriptions

Readers / Authors

Contract

Publishers
Trasformative agreements

Readers / Authors

Publishers

... to paying for publishing

Support from institution via library?

APC
The bronze road

**BRONZE WAY**

*maximised dissemination in an ambiguous way*

1. Publicly funded researchers conduct research and write up results.
2. Manuscripts submitted to Open Access journals & reviewed by peers.
3. Manuscripts accepted for publication.
4. Authors retain copyright & grant publisher “licence to publish”
5. Minimized return on public investment and uncertain reuse conditions
6. No open license on the publications, no granted reuse
7. Published versions of articles immediately accessible to public, and the future...
8. Authors may be required to pay publisher an ‘article processing charge’ to cover publishing costs.

Declared OA Publishers

But

No Clear Licences
The black way

Hints:
- https://beallslist.weebly.com
- Think. Check. Submit.
Court Rules in FTC’s Favor Against Predatory Academic Publisher OMICS Group; Imposes $50.1 Million Judgment against Defendants That Made False Claims and Hid Publishing Fees

FOR RELEASE
April 3, 2019

TAGS: Bureau of Consumer Protection | Consumer Protection | Advertising and Marketing | Education

A federal judge has ordered journal publisher and conference organizer Srinubaba Gedela and his companies to pay more than $50.1 million to resolve Federal Trade Commission charges that they made deceptive claims to academics and researchers about the nature of their conferences and publications, and hid steep publication fees.

“These publishing companies lied about their academic journals and took millions of dollars from aspiring researchers and writers,” said Andrew Smith, Director of the FTC’s Bureau of Consumer Protection. “We’re pleased with the court’s strong order holding these companies and its owner responsible for the damage they caused.”

In its 2016 complaint, the FTC alleged that OMICS Group Inc., iMedPub LLC, Conference Series LLC, and the owner of these companies, Gedela, advertised hundreds of online academic journals and international conferences for scientists and medical professionals, and deceptively claimed that their journals provided authors with rigorous peer review and had editorial boards made up of prominent academics. In reality, many articles were published with little to no peer review, and many individuals represented to be editors had not agreed to be affiliated with the journals.

The Price for ‘Predatory’ Publishing? $50 Million

The Federal Trade Commission accused Omics International, a publisher in India, of operating hundreds of questionable scientific journals. A federal judge agreed.

By Gina Kolata

April 3, 2019

In the world of scientific research, they are pernicious impostors. So-called predatory journals, online publications with official-sounding names, publish virtually anything, even gibberish, that an academic researcher submits — for a fee.
How to make your research open access

- Do you know a free Open Access journal?
  - Publish via 'gold' route
  - Most Open Access journals do not have publishing charges

- Do you have funding for Open Access?
  - Publish via 'gold' route

- Can you publish the post-print?
  - Publish your post-print
  - Post-print: manuscript after it has been peer reviewed, but before type-setting by the publisher

- Can you publish the pre-print?
  - Publish your pre-print
  - Pre-print: manuscript that has not yet been subject to formal peer review, distributed to receive early feedback on research from peers

- Choose a different journal
Open Access roads

**Gold OA**
Access to content immediately available in Open Access, with open license, in open access journals (with possible payment of APC)

**Green OA**
Access to content self-archived by the author in an institutional or disciplinary repository, with open license, in the version eventually granted by the publisher

**Red OA**
Open access to an article published in a subscription magazine. The single content is accessible on the publisher's site with an open license

**Bronze OA**
Access to content published and available for free on the Publisher's website, declared OA, without an open license stated. Copyright notice possible. Status free revocable.
Social networks of research

A social networking site is not an open access repository

ResearchGate
Academia.edu

OA repositories
### Social networks of research

<table>
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<th></th>
<th>Open access repositories</th>
<th>Academia.edu</th>
<th>ResearchGate</th>
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<tbody>
<tr>
<td>Supports export or harvesting</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Long-term preservation</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Sends you lots of e-mails (by default)</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Wants your address book</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Fulfills requirements of Unipd’s OA policies</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
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http://osc.universityofcalifornia.edu/2015/12/a-social-networking-site-is-not-an-open-access-repository
In 2013 Elsevier began sending take-down notices to Academia.edu for articles that authors posted: they were in violation of the copyright transfer agreement that the author has signed.

In 2018 ACS and Elsevier have taken legal action to clarify ResearchGate’s responsibility for copyright infringements on its site.
And you?
Library System support services

Submit specific requests to the Library System Help Service, choosing:

- 11 Supporto Open Access (Supporto Ricerca)

Kyle James
https://www.flickr.com/photos/jameskm03/2711755476
Library System support services

Before and after publishing articles and data, improve your knowledge with:

**Scholarly Communication and principles of Open Science**

a Training Course For PhD Students, composed by five modules.

It aims to introduce early-career researchers to scientific communication and to the principles of Open Science (Open Access, Open Data, Open Licences)
Presentation by OA Support Group
University of Padova Library System

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