

Emerging trends in Open Access publishing

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Outline

- Hot topics in the changing landscape
- New trends in traditional scholarly communication?
- Innovative approaches
- Training tips



Hot topics in the changing landscape of scholarly communication

- Is the current concept of scholarly articles outdated?
- Is the current concept of scholarly journals outdated?
- The future of peer review?
- Are we using the full potential of the digital environment?



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Bibliodiversity

“cultural diversity applied to the world of books”

preserving diversity in scholarly communication

greater diversity of products (books, scripts, eBooks,

apps, and oral literature) made available to readers

scholarly communication as an ecosystem resting on:

- multilingualism
- open and shared infrastructures and services
- the diversity of business models in OA publishing
- quality-based research assessment.

Shearer, Kathleen, Chan, Leslie, Kuchma, Iryna, & Mounier, Pierre. (2020).
Fostering Bibliodiversity in Scholarly Communications: A Call for Action.

Zenodo. <https://doi.org/10.5281/zenodo.3752923>

Fostering Bibliodiversity in Scholarly Communications – A Call for Action!

Today, my colleagues and I are issuing a “Call for
Action!”

Fostering Bibliodiversity in
Scholarly Communications
A Call for Action!
April 15, 2020



READ THE FULL PAPER

We are calling on the community to make concerted efforts to develop strong, community-governed infrastructures that support diversity in scholarly communications (referred to as bibliodiversity).

Diversity is an essential characteristic of an optimal scholarly communications system. Diversity in services and platforms, funding mechanisms, and evaluation measures will allow the research communications to accommodate the different

workflows, languages, publication outputs, and research topics that support the needs and epistemic pluralism of different research communities. In addition, diversity

Traditional
scholarly
communication

Concept and planning

Explore and organize

Research lifecycle

Impact and engagement

Collect and analyze

Outputs and publications

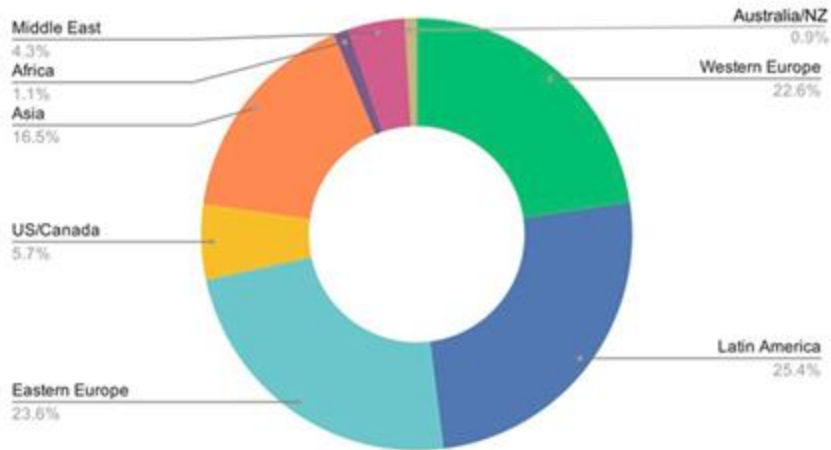
- publications
- preprints
- data

Diamond / Platinum / Non-APC / No-fee

- An old concept revisited in a new light
- Authors, institutions, or funders do not pay an Open Access Fee and readers does not pay to read.
- Diversity of no-fee Open Access Publishing Models (collaborative funding, community/voluntary basis, grants, endowments, library funding, institutional funding)
- More common in some parts of the world
- Sustainability as a challenge

Diamond OA is a more common model in some parts of the world

DOAJ - OA diamond journals (n=11,064)



Source: Bosman, Jeroen, Frantsvåg, Jan Erik, Kramer, Bianca, Langlais, Pierre-Carl, & Proudman, Vanessa. (2021). OA Diamond Journals Study. Part 1: Findings. Zenodo. <https://doi.org/10.5281/zenodo.4558704>
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Gold and Diamond open access journals landscape: Dashboard (based on DOAJ data)

Source: 'Gold and Diamond Open Access Journals Landscape'. 2020. Research Consulting (blog). 22 September 2020. <https://www.research-consulting.com/an-interactive-look-at-the-gold-and-diamond-journals-landscape/>.

Finding Diamond / Platinum / Non-APC / No-fee OA journals

DOAJ OPEN GLOBAL TRUSTED SUPPORT APPLY

SEARCH DOCUMENTATION ABOUT

DIRECTORY OF OPEN ACCESS JOURNALS

Find open access journals & articles.

Journals Articles

In all fields SEARCH

80 LANGUAGES | 130 COUNTRIES REPRESENTED | 12,849 JOURNALS WITHOUT APCs | 18,659 JOURNALS | 8,272,053 ARTICLE RECORDS

<https://doaj.org>

OpenAIRE

+ use Journal Checker Tool to check compliance with funder policies

Which publishing options are supported by your funder's OA policy?

JOURNAL

By ISSN or title



MY FUNDER

By funder name



MY INSTITUTION

By ROR or name



No affiliation

OpenAIRE workshop on Cooperative and Non-APC models, 2019 (2020)



- Library publishing programmes
- Institutional support and third-party funding
- National collaborative funding and publishing
- International collaborative funding and publishing
- Collaborative publication support services

Aasheim, Jens H., Schirrwagen, Jochen, Kuchma, Iryna, Franck, Gwen, Hermans, Emilie, Rettberg, Najla, & Steiner, Tobias. (2020). D6.2 – Best Practice Guide for Co-Operative Models of Publishing. Zenodo.

<https://doi.org/10.5281/zenodo.3701428>

The OA Diamond Journals Study, 2021



- A large-scale study on Open Access journals across the world commissioned by [cOAlition S](#)
- Findings:
 - many relatively small journals serving diverse communities
 - on the road to full compliance with Plan S
 - A mix of scientific strengths and operational challenges
 - An economy that largely depends on volunteers, universities and government

Bosman, Jeroen, Frantsvåg, Jan Erik, Kramer, Bianca, Langlais, Pierre-Carl, & Proudman, Vanessa. (2021). OA Diamond Journals Study. Part 1: Findings. Zenodo. <https://doi.org/10.5281/zenodo.4558704>

Becerril, Arianna, Bosman, Jeroen, Bjørnshauge, Lars, Frantsvåg, Jan Erik, Kramer, Bianca, Langlais, Pierre-Carl, Mounier, Pierre, Proudman, Vanessa, Redhead, Claire, & Torny, Didier. (2021). OA Diamond Journals Study. Part 2: Recommendations. Zenodo. <https://doi.org/10.5281/zenodo.4562790>

Recommendations:

- Streamline technical support
- Ensure compliance with Plan S
- Build capacity
- Increase effectiveness
- Sustain and invest in the future

Action Plan for Diamond Open Access & Diamond Open Access Conference (2022)

Ancion, Zoé, Borrell-Damián, Lidia, Mounier, Pierre, Rooryck, Johan, & Saenen, Bregt. (2022). Action Plan for Diamond Open Access. Zenodo.
<https://doi.org/10.5281/zenodo.6282403>



Diamond OA conference was organized by Science Europe in September 2022.

More details and presentations:

<https://www.scienceeurope.org/events/diamond-oa-conference/>

Endorse the plan:
<https://surveys.scienceeurope.org/index.php/241774>

Projects



CRAFT-OA

- [DIAMAS - Developing Institutional Open Access Publishing Models to Advance Scholarly Communication](#)
- [Creating a Robust Accessible Federated Technology for Open Access](#)

Training focuses

- Explain publishing options and the diversity of no-fee publishing models
- Show how to find Diamond OA journals
- Dispel myths about the prevalence of the APC-based OA
- Be aware of the new developments in the area



[Image by vectorjuice on Freepik](#)

Open Access books

- Not a new topic but there are still many issues yet to be resolved (platforms, text formats, handling footnotes, parsing references and tracking citations, etc.)
- Diversity of business models
- Sustainability

Initiatives and projects

- [Open Access Books Network](#)
- [Business Models for Open Access Books](#)
- Błaszcyńska et al. (2023). Collaborative models for OA book publishers (2.0). Zenodo. <https://doi.org/10.5281/zenodo.7780754>
- Project PALOMERA – [Policy Alignment of Open Access Monographs in the European Research Area](#)

Training focuses

- Explain publishing options and OA book publishing models
- Dispel myths about OA books
- Promote book publishing platforms such as [OAPEN](#) and discovery services, e.g. [DOAB](#)
- Be aware of the new developments in the area

Resources: [Open Access Books Network](#)

OA MYTHBUSTERS



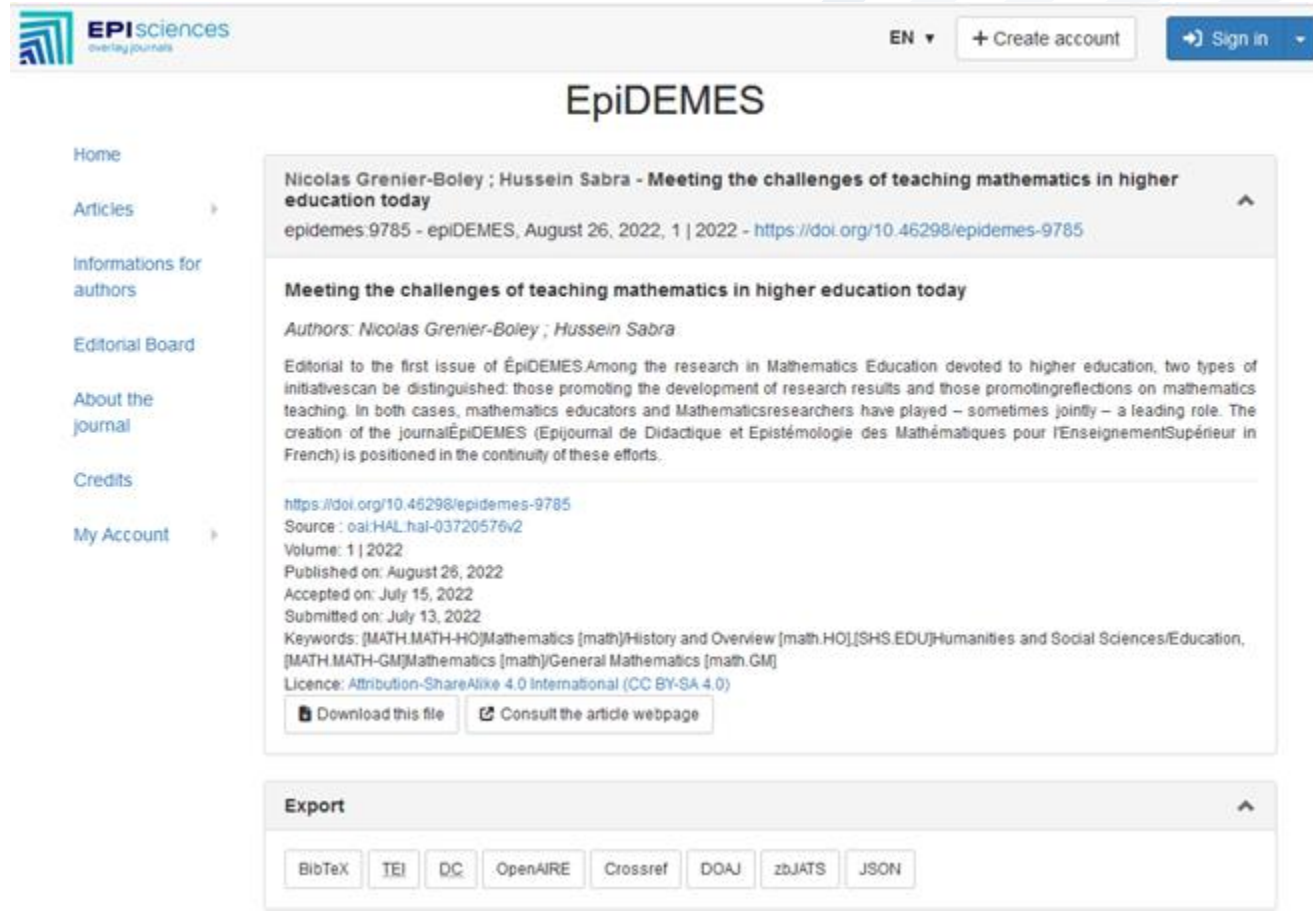
Do you know the facts about OA books?

Overlay journals

“An overlay journal is an open access, quality-assured journal whose articles are held in one or more repositories. An overlay journal does not host the articles on the journal’s website but links back to the relevant article in an open repository or preprint server.”

COAR <https://www.coar-repositories.org/overlay-journals/>

[EPIsciences](#) (a platform hosting overlay journals)



The screenshot displays the EpiDEMES journal website. At the top left is the logo for EPIsciences overlay journals. On the right, there are navigation options: 'EN', '+ Create account', and 'Sign in'. The main title 'EpiDEMES' is centered at the top. A left-hand navigation menu includes links for Home, Articles, Informations for authors, Editorial Board, About the journal, Credits, and My Account. The main content area features an article by Nicolas Grenier-Boley and Hussein Sabra, titled 'Meeting the challenges of teaching mathematics in higher education today'. The article is from August 26, 2022, with a DOI of 10.46298/epidemes-9785. The abstract discusses the journal's focus on research in Mathematics Education for higher education. Below the abstract, there are links for the DOI, source information, volume, and publication dates. Keywords and the license (CC BY-SA 4.0) are also provided. At the bottom, there are buttons to 'Download this file' and 'Consult the article webpage'. An 'Export' section at the very bottom offers various citation formats: BibTeX, TEI, DC, OpenAIRE, Crossref, DOAJ, zbJATS, and JSON.

Concept and planning

- Idea
- research problem
- data
- method
- pre-registered study
- blog post
- social media outlet

Explore and organize

- Idea
- hypothesis
- data
- blog post
- social media outlet

Collect and analyze

- data
- analysis
- interpretation
- blog post
- social media outlet

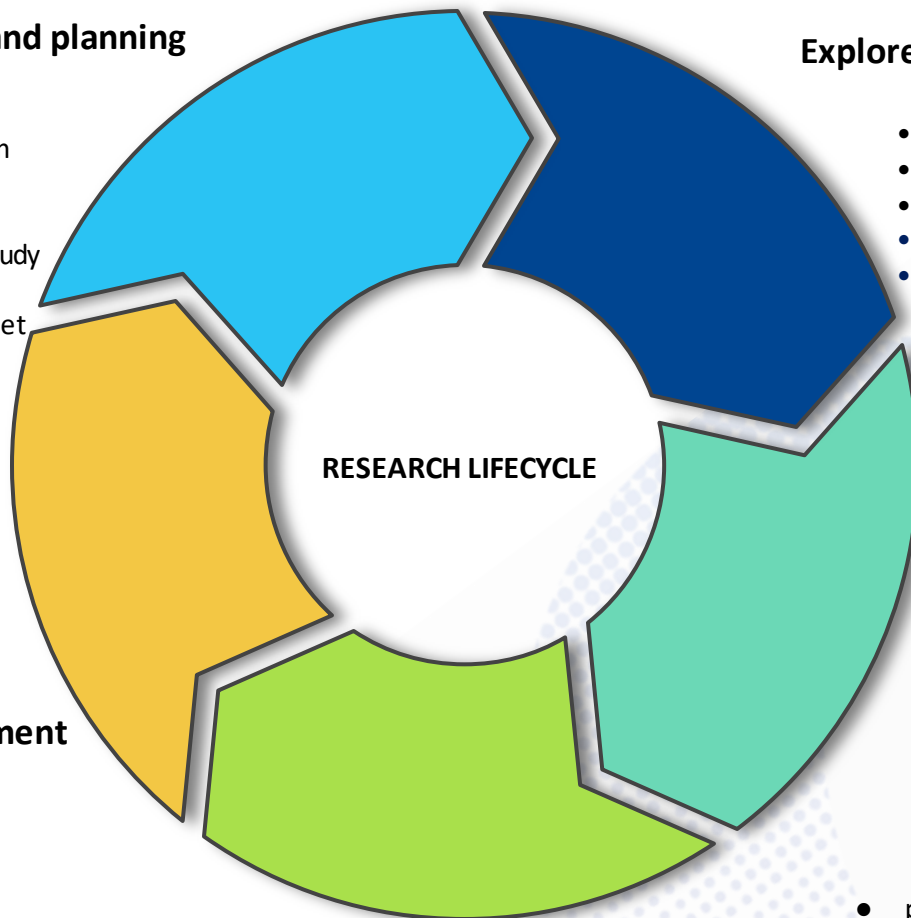
Outputs and publications

- publications
- preprints
- data
- peer review

Impact and engagement

- data
- peer review
- blog post
- social media outlet

Innovative approaches:
communication throughout
the research lifecycle

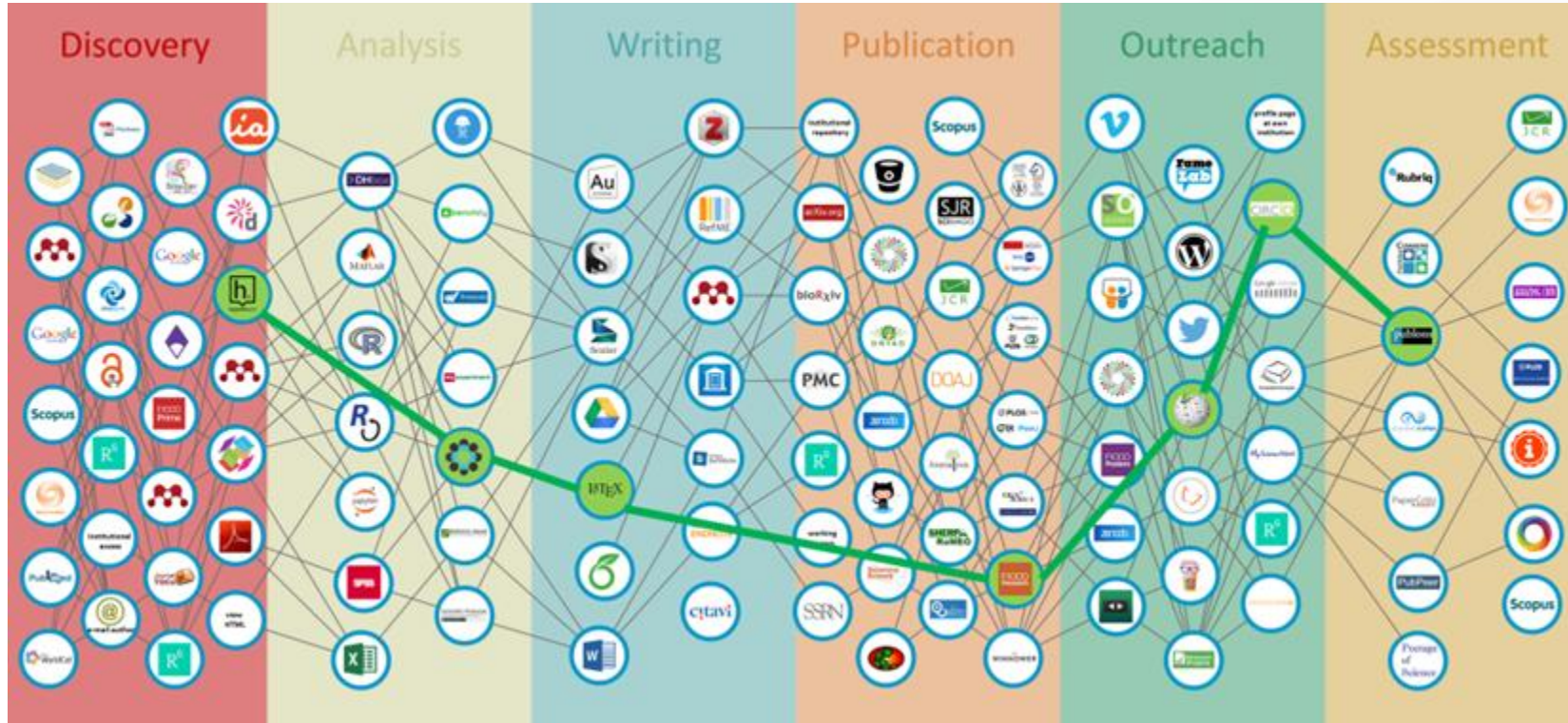


Workflows

Innovations in scholarly communication,
<https://101innovations.wordpress.com/>

Bianca Kramer & Jeroen Bosman, 400+ Tools and innovations in scholarly communication (2015, updated in 2017)

Combinations of tools in hypothetical workflows:
<https://101innovations.wordpress.com/workflows/>

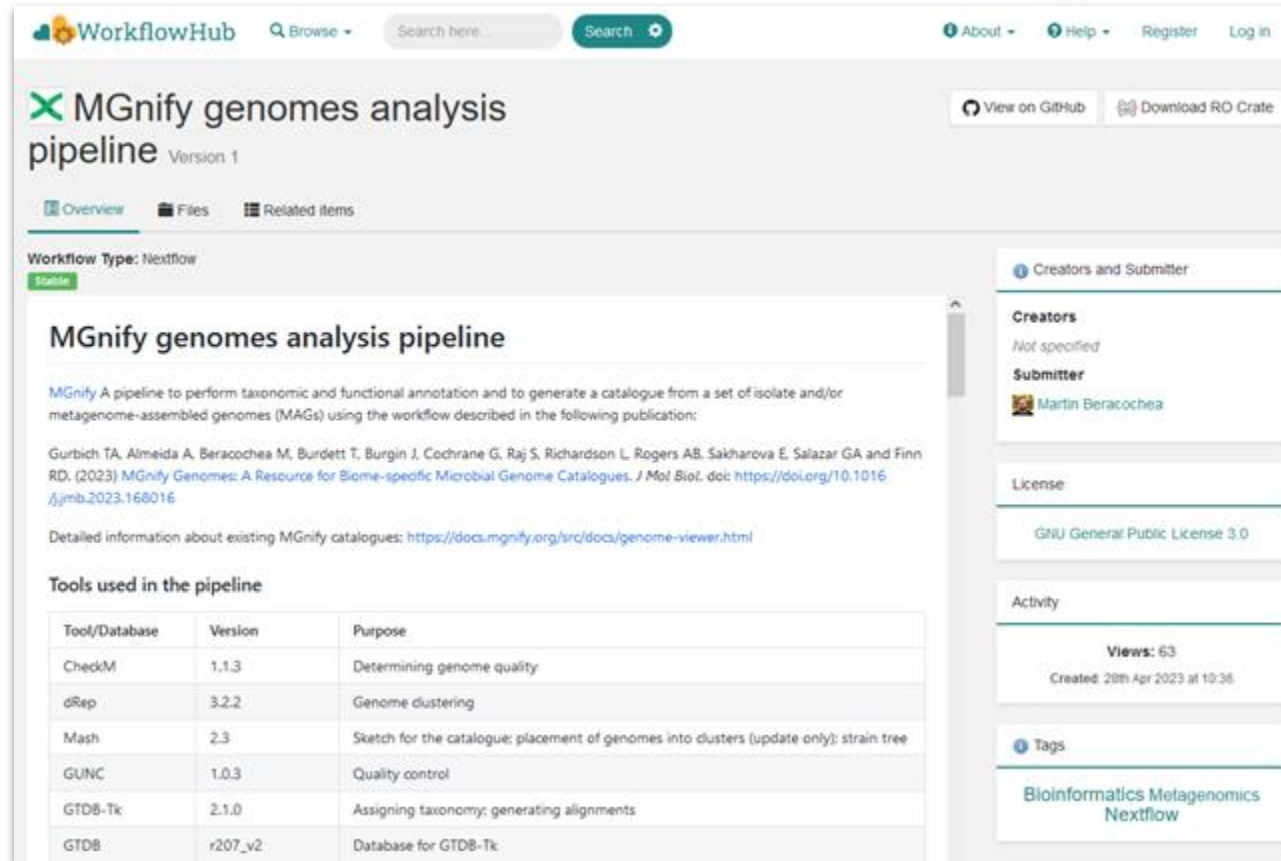


Workflow as a research output

<https://workflowhub.eu/>

- “workflow describes a set of computational tasks and their relationships”
- “workflow management system or workflow engine is software in charge of executing and monitoring a workflow” (computational pipelines)
- “Registries are catalogues that can be queried manually or automatically to locate and obtain tools and workflows.”

<https://www.eosc-life.eu/tools-workflows/>



WorkflowHub

MGnify genomes analysis pipeline Version 1

Workflow Type: Nextflow

MGnify genomes analysis pipeline

MGnify A pipeline to perform taxonomic and functional annotation and to generate a catalogue from a set of isolate and/or metagenome-assembled genomes (MAGs) using the workflow described in the following publication:

Gurbich TA, Almeida A, Beracochea M, Burdett T, Burgin J, Cochrane G, Raj S, Richardson L, Rogers AB, Sakharova E, Salazar GA and Finn RD. (2023) MGnify Genomes: A Resource for Biome-specific Microbial Genome Catalogues. *J Mol Biol.* doi: <https://doi.org/10.1016/j.jmb.2023.168016>

Detailed information about existing MGnify catalogues: <https://docs.mgnify.org/src/docs/genome-viewer.html>

Tools used in the pipeline

Tool/Database	Version	Purpose
CheckM	1.1.3	Determining genome quality
dRep	3.2.2	Genome clustering
Mash	2.3	Sketch for the catalogue; placement of genomes into clusters (update only); strain tree
GUNC	1.0.3	Quality control
GTDB-Tk	2.1.0	Assigning taxonomy; generating alignments
GTDB	r207_v2	Database for GTDB-Tk

Creators and Submitter

Creators: Not specified

Submitter: Martin Beracochea

License: GNU General Public License 3.0

Activity

Views: 63
Created: 28th Apr 2023 at 10:36

Tags: Bioinformatics Metagenomics Nextflow

Modular publishing

- Platforms open by default (even “pay-to-close”)
- Modular publishing
- Diversity of outputs (abstract, analysis, research problem, hypothesis, data, method, interpretation, peer review, etc.)
- Focus on the process (all steps made transparent)
- Collaborative

ResearchEquals

Recent modules

Creating nice tables in R	ResearchEquals Lightning Talk @ Exploring the potential of alternative publishing models (JISC workshop)	Manuscript accepted for publication	Updated version after review of: R script Individual Patient Data Meta-analysis Type D
Creating nice tables in R - mind map	Making all research work visible	An interactive research dilemma using Twine	Bribery Games - A Meta-Analysis
ALL-IN-META-BCG-CORONA Newsletter 4	ALL-IN-META-BCG-CORONA Newsletter 3	ALL-IN-META-BCG-CORONA Newsletter 2	ALL-IN-META-BCG-CORONA Newsletter 1
Precision of detecting identifying information	URLs to open datasets (CSV) hosted on the Open Science Framework	Workshop 2, Leaving the Academy	Workshop 1, Leaving the Academy
Leaving the Academy: A Participatory C Research App	Objective characterization	Probabilities of	Charting the Constellation Form

Idea
Low-cost cellular reagents for biotech programming in a community lab setting

View authors

Summary
Cellular reagents could be prepared for polymerase to lower the cost of reagents for PCR-based workshops delivered as outreach out of community labs. Research in the methods for accomplishing such a feat would contribute to global efforts to better document the process of making enzymes used as biotech reagents at the small-scale. Furthermore, well-documented protocols would provide an opportunity for volunteers to participate in preparing the materials for PCR & Pizza. Ultimately this would serve to develop and highlight the capacity to create low-cost enzyme reagents within community labs.

Octopus

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Publication type

Research Problem

Rationale / Hypothesis

Method

Results

Analysis

Interpretation



Real World Application

Peer Review

Latest publications


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How did the COVID-19 pandemic impact antibiotic prescribing and antim...


R. Elshenawy , N. Umaru , Z. Asla...

Research Problem

May 19, 2023


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Communication Management in Crises. The role of the media in strategi...


M. Otterpohl 

Research Problem

May 14, 2023


[View this publication](#) 

Can we help people understand their personal likelihood of dying from...

A. Freeman 

Research Problem

May 11, 2023

[View this publication](#) 

Training focuses

- Explain how Open Science practices change scholarly communication
- Present various publishing options
- Compare the innovative approaches and platforms to the traditional publishing venues and practices
- Present tools



[Image by vectorjuice on Freepik](#)



[Image by vectorjuice on Freepik](#)

Training tips

- Don't forget that the purpose of scholarly publishing should be scholarly communication (and not profit).
- Highlight and explain the diversity of publishing models.
- Uncover misconceptions.
- Present use cases.
- High-quality materials are available. Use them in your training!
- The topic is huge. Try not to cover all in one session.
- Be informed and cover new developments in your training!

THANKS

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[@lessormore4](https://twitter.com/lessormore4)

