Data sharing: where do we go from here?

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RESEARCH ARTICLE | COMPUTER SCIENCES |

An empirical analysis of journal policy effectiveness for computational reproducibility

Victoria Stodden, Jennifer Seiler, and Zhaokun Ma Authors Info & Affiliations

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March 12, 2018 | 115 (11) 2584-2589 | https://doi.org/10.1073/pnas.1708290115

Immediate, open deposit of data underlying scholarly research

... and plans for open deposit of data not associated with a publication

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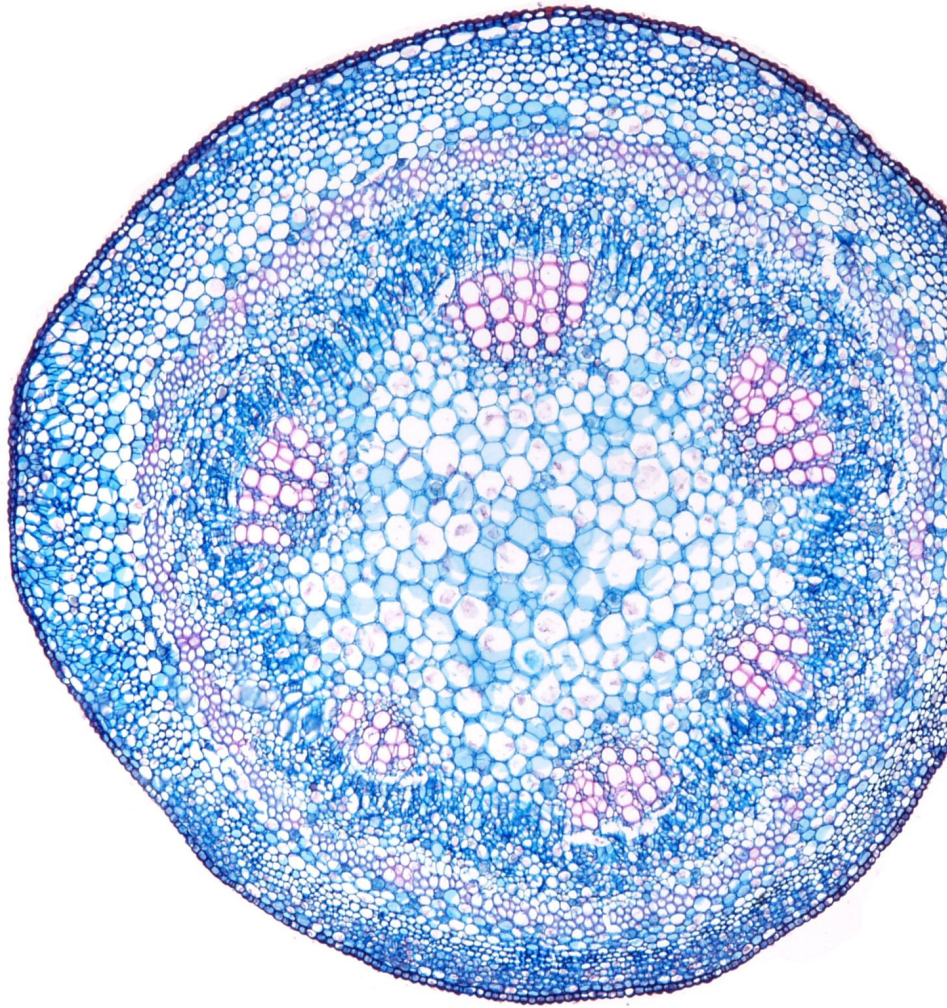

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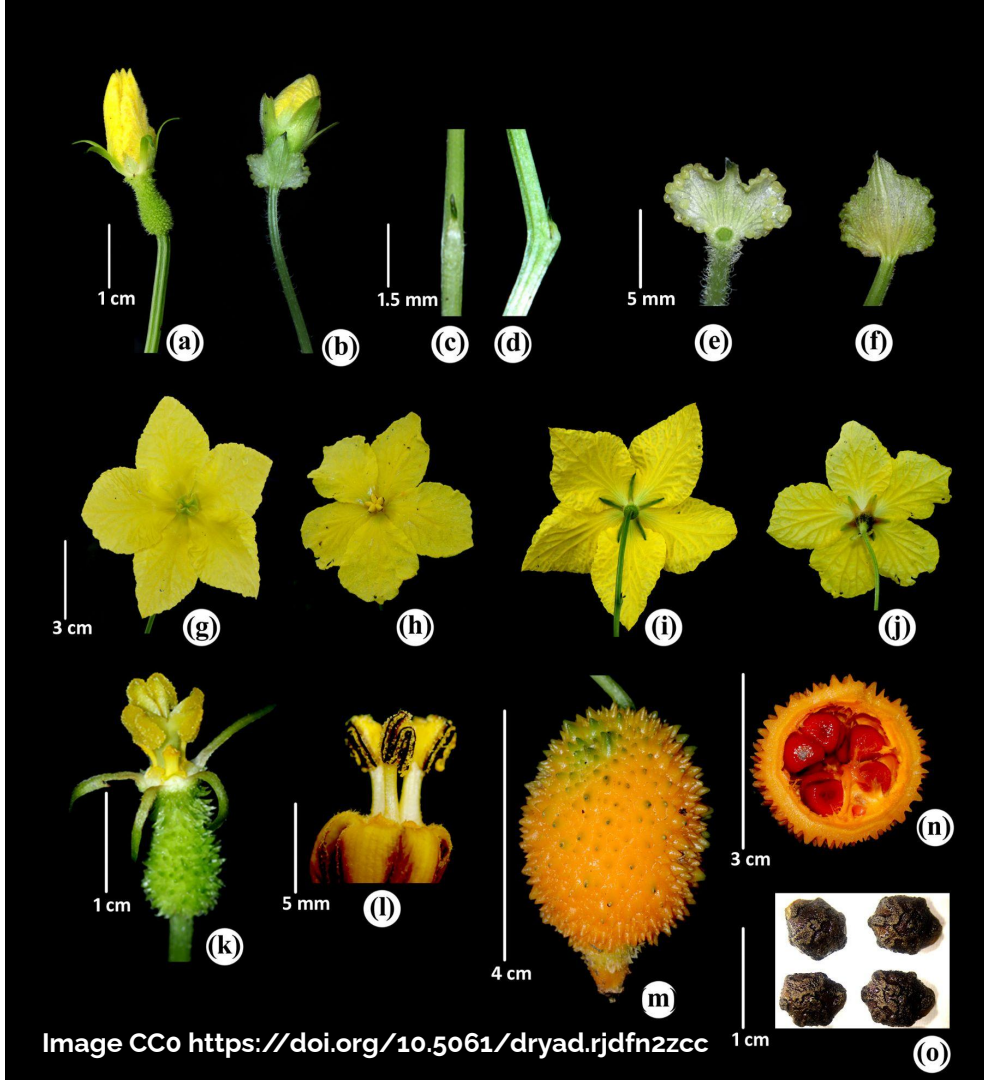
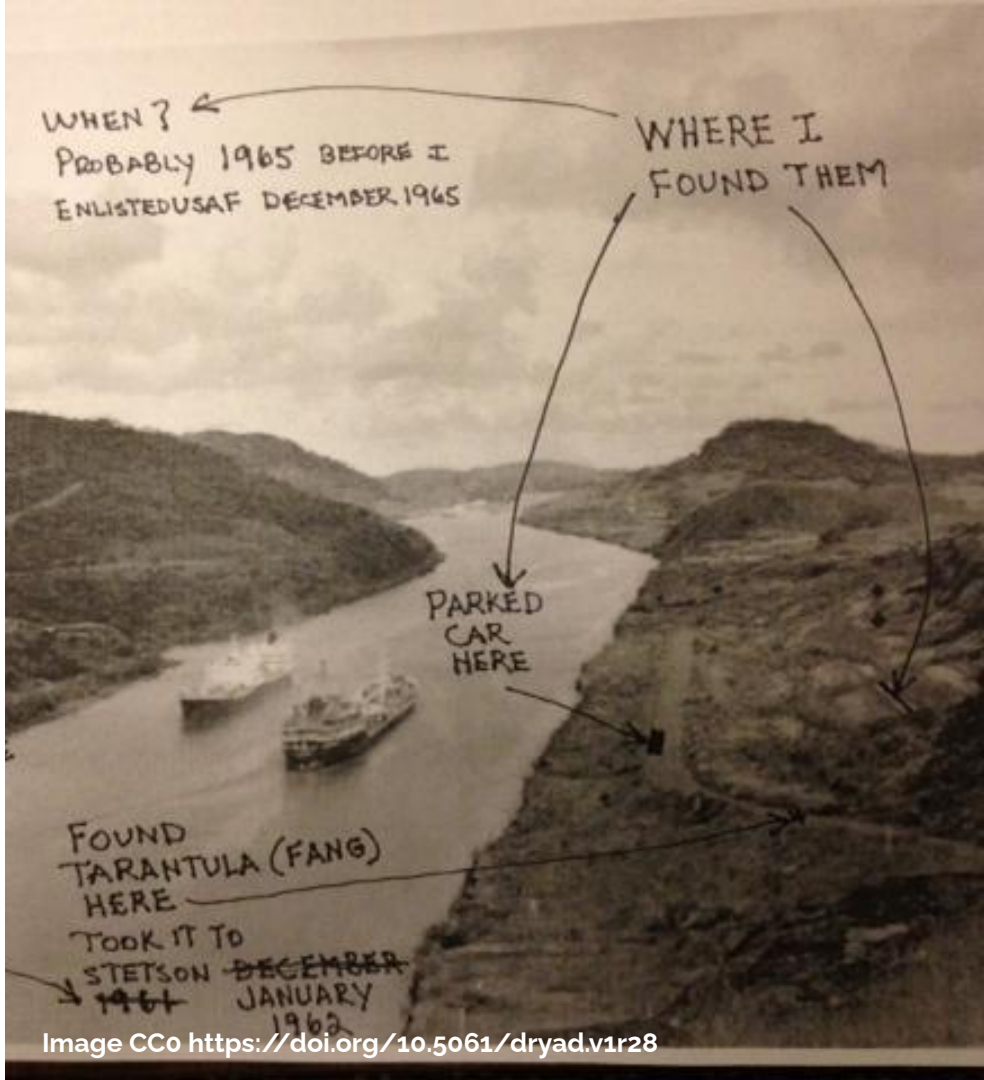
In repositories that align with the NSTC's "Desirable Characteristics of Data Repositories for Federally Funded Research"



Described with robust metadata and persistent identifiers



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NIH Policy for Data Management and Sharing

Maximize the appropriate sharing of scientific data through:

📂 Use of established repositories.
⏱️ Timely publication.
✅ Data quality assurance.

“Data should be of sufficient quality to validate and replicate research findings”

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https://grants.nih.gov/grants/guide/notice-files/NOT-OD-21-013.html#_ftn8

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Data from: Neurologic manifestations in an infant with COVID-19

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Respiratory virus shedding in exhaled breath and efficacy of face masks

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Common goals

Journals and data repositories will need to collaborate to realize the intent of these policies

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Focus on reuse

Reproduce findings

Replicate findings

Repurpose to generate novel findings

Perform meta-analysis

Seed machine learning algorithms

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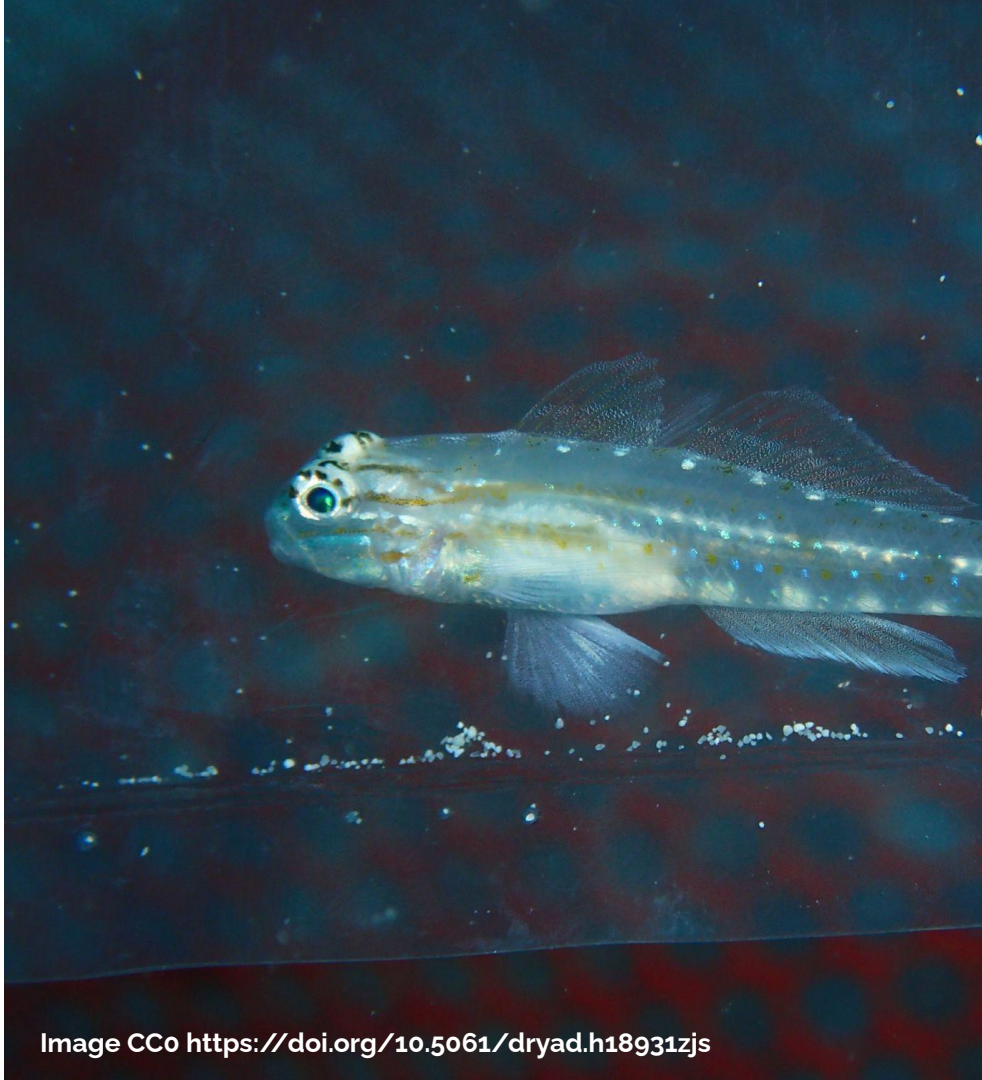

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Ensure (meta)data quality

… at scale

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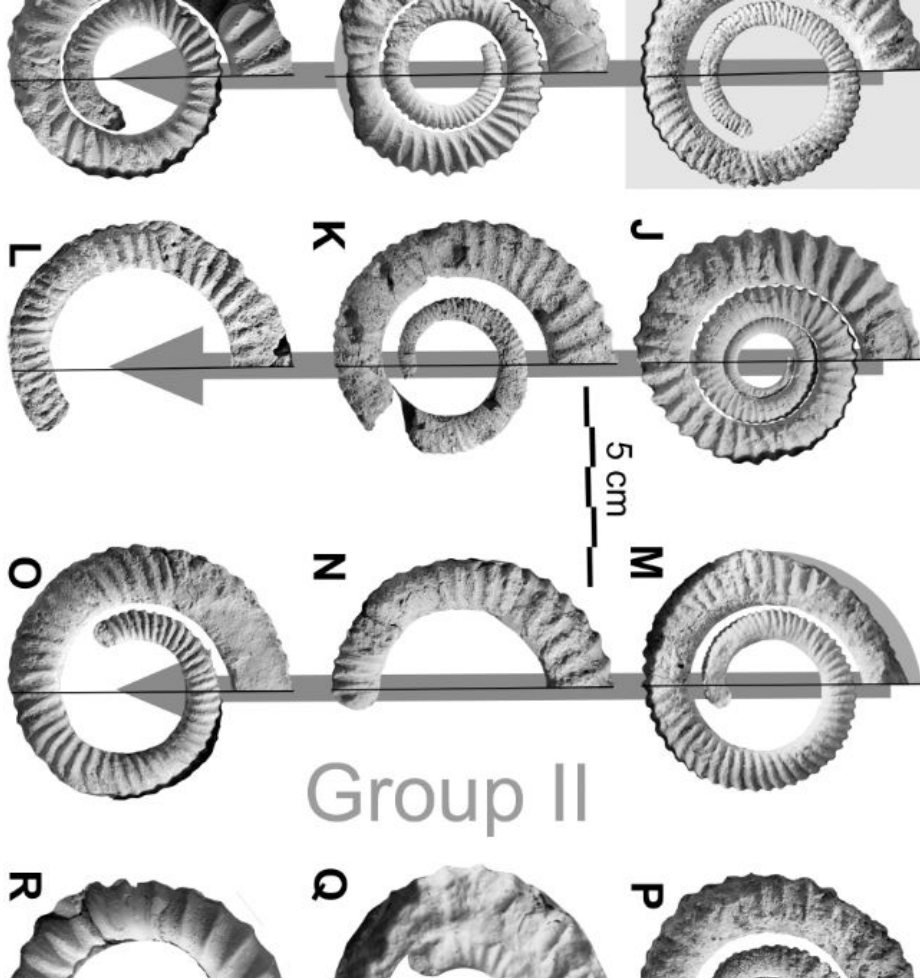
Make connections



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ORCID

ROR

DataCite

DC1
Data Citation Principles

ALAN effects on coastal phytoplankton

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Citation

Spatharis, Sofie (2022), ALAN effects on coastal phytoplankton, Dryad, Dataset, https://doi.org/10.5061/dryad.vdncjsxtn

Abstract

Data files

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August 30, 2022

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Southeastern Ontario Academic Medical Organization

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Preserve over time

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Thank you!

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