

Conference Abstract

The Role of the OLS Program in the Development of echinopscis (an Extensible Notebook for Open Science on Specimens)

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Abstract

Starting in early 2022, biodiversity informatics researchers at [Kew](#) have been developing [echinopscis](#): an "extensible notebook for open science on specimens". This aims to build on the early experiments that our community conducted with "e-taxonomy": the development of tools and techniques to enable taxonomic research to be conducted online. Early e-taxonomic tools (e.g., Scratchpads Smith et al. 2011) had to perform a wide range of functions, but in the past decade or so the move towards open science has built better support for generic functionality, such as reference management ([Zotero](#)) and document production ([pandoc](#)), skills development in automation and revision control to support reproducible science, as documented by the Turing Way (The Turing Way Community 2022), and an awareness of the importance of community building. We have developed echinopscis at Kew via a cross-departmental collaboration between researchers in biodiversity informatics and accelerated taxonomy. We have also benefitted from valuable input and advice from our many colleagues in associated projects and organisations around the world.

[OLS \(originally Open Life Sciences\)](#) is a training and mentoring program for Open Science leaders with a focus on community building. The name was recently (2023) made more generic—"Open Seeds"—whilst retaining their well-known acronym "OLS"^{*1}. OLS is a 16-

week cohort-based mentoring program. Participants apply to join a cohort with a project that is developed through the 16 weeks. Each week of the syllabus alternates between time with a dedicated Open Science mentor and cohort calls, which are used to develop skills in project design, community building, open development & licencing, and inclusivity. Over 500 practitioners, experts and learners have participated across the seven completed cohorts of OLS' Open Seeds training and mentoring. Through this programme, over 300 researchers and open leaders from across six continents have designed, launched and supported 200 projects from different disciplines worldwide. The next cohort will run between September 2023 and January 2024, and will be the eighth iteration of the program.

This talk will briefly outline the work that we have done to setup and experiment with echinopscis, but will focus on the impact that the OLS program has had in its development. We will also include the use of techniques learned through OLS in other biodiversity informatics projects. OLS acknowledges that their program receives relatively few applications from project leads in biodiversity and we hope that this talk will be informative for Biodiversity Information Standards ([TDWG](#)) participants and can be used to build productive links between these communities.

Keywords

e-taxonomy, skills development, taxonomic tools

Presenting author

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Conflicts of interest

The authors have declared that no competing interests exist.

References

- Smith V, Rycroft S, Brake I, Scott B, Baker E, Livermore L, Blagoderov V, Roberts D (2011) Scratchpads 2.0: a Virtual Research Environment supporting scholarly collaboration, communication and data publication in biodiversity science. *ZooKeys* 150: 53-70. <https://doi.org/10.3897/zookeys.150.2193>

- The Turing Way Community (2022) The Turing Way: A handbook for reproducible, ethical and collaborative research. Zenodo <https://doi.org/10.5281/zenodo.3233853>.

Endnotes

- *1 This is somewhat similar the evolution of the TDWG name from "Taxonomic Databases Working Group" to "Biodiversity Information Standards", where we too have retained our well known acronym, "TDWG".