Challenges of Curating for Reproducible and FAIR Research Output

The Challenge:

Computational reproducibility is the ability to obtain consistent computational results using the same input data, computational steps, methods, code, and conditions of analysis. As a means of communicating scientific claims, computational reproducibility is imperative for verifying and building upon findings, for preserving a complete scientific record, and for pedagogy. At present, this standard is yet to be achieved.

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What is the solution?

The working group produced a report that summarizes the pain points of those involved with different aspects of computational reproducibility. The report is based on a review of the literature, use cases, and interviews with various stakeholders (e.g., researchers, publishers, funders, data professionals, information technologists, repositories), across scholarly domains, who have an interest in reproducing computation-based results and processes.

What is the impact?

This report identified the current set of key challenges associated with generating, sharing, and using reproducible computation-based scientific results. The report will inform the WG’s forthcoming standards-based guidelines for curating for FAIR and reproducible research outputs.

Find out more about the Supporting Output from the CURE-FAIR WG

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