

Who are the Guardians of Truth and Integrity?*

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Abstract

Brain Health Alliance (BHA), a 501c3 not-for-profit organization, will host an online virtual workshop at [ASIST 2022](#) for the library, data, and information sciences community to discuss the now tragically prevalent information cyberwars impacting global citizens of planet earth. These online information wars have resulted in real deaths with loss of life and destruction of entire cities that many believe should have been prevented, whether in the current fight to stop the spread of viral disease, in political election voting disputes and the fight to stop the spread of polarizing and extremified propaganda, and in military campaigns and the fight by freedom-loving peoples who defend their sovereign territory to stop unnecessary wars of aggression, invasion, and criminal genocide. We believe that when some choose to spread propaganda and lies for autocratic dictators, others must stand up and fight to defend truth and integrity in support of democracy and the freedom to live in safety without fear of being imprisoned or poisoned to death for speaking and writing the truth with integrity that should save lives. The BHA workshop on guardians of truth and integrity will provide tutorials with training sessions on open-source PDP-DREAM software and open-access NPDS data repositories from the PORTAL-DOORS Project with its mission to promote transparency, reproducibility, accountability, and citational justice in scholarly communications. In order to support democratic societies for all global citizens of planet earth who wish to be free and safe from unnecessary wars of criminal genocide, we must build the necessary software systems and electronic digital cyberinfrastructure to assure that all citizens of planet earth in every society and country have access to the free flow of information without censorship by any single person, organization, or government.

Keywords

Research integrity, citational justice, FAIR metrics, idea-laundering plagiarism, idea-bleaching censorship, misconduct, retractions.

Workshop Questions

Early in the 17th century, the Habsburg Monarchy banned the works of Johannes Kepler as heretical [[Bonner \(2011\)](#)]. Later, the government of the Massachusetts Bay Colony did likewise to William Pynchon's *The Meritorious Price of Our Redemption* bringing the heavy-handed

approach of Old World governments to the New World [[Winship \(1997\)](#)]. Shortly before its end, the Irish Parliament similarly banned John Toland's *Christianity not Mysterious* for going against the accepted orthodoxy [[Gilbert \(1854\)](#)]. However, in stark contrast more recently in 2017, the American Library Association adopted the position expressed in [Politics in American Libraries: An Interpretation of the Library Bill of Rights](#) that "A balanced collection need not and cannot contain an equal number of resources representing every possible viewpoint on every issue. A balanced collection should include the variety of views that surround any given issue." Others have critiqued the Library Bill of Rights as overly vague and blind to realities that influence the creation of knowledge resources, such as self-censorship by textbook companies that depend on the business of ideologically biased school boards [[Baldwin \(1996\)](#)]. These examples show both that collections of texts, artworks, and artifacts have long been key battlegrounds for control over what knowledge and ideas reach the public and that the role of curators has shifted dramatically over the centuries from enforcers of state-mandated orthodoxy to officially neutral maintainers of the arena. As the role practitioners of information science play continues to evolve, we face new questions and old ones in new contexts: What initiative should we take in helping readers to distinguish between a claim or opinion that someone at some point voiced and one that has support from extensive, reproducible, and validated scientific research? When does representing all opinions supposedly in the 'name of neutrality' morph into irresponsibility by spreading fear of medical interventions such as vaccines when the overwhelming preponderance of scientific evidence and information [[Jacobson et al. \(2015\)](#)] proves that those vaccines can save millions of lives? To what extent are different stakeholders responsible for calling attention to plagiarism, censorship, misrepresentation of others' work, fabrication and falsification of data, and other violations of the trust placed in those whose profession should be the search for truth? What are the differences among retraction, de-platforming, and censorship? When is each one appropriate or not appropriate per *common sense for the common good*? Under what circumstances does presenting either some or all available information harm innocent people, and what lessons can we derive from the tension in the legal system between the need for openness and the need to protect the privacy of victims [[Cameron \(2013\)](#)]? How can we keep up with the flood of new publications and identify those written with respect for truth and scholarly integrity in a world where bad-faith actors can spread wrongful information so effectively that mainstream news outlets succumb to the pressure to take even demonstrably false claims seriously [[Prier \(2020\)](#)]? How can we help preserve the privacy and dignity of vulnerable populations when advanced algorithms can discern personally identifiable information from supposedly anonymized data sets, such as when researchers reported identification of individuals via their brain scans [[Shivayogi \(2013\)](#); [Ravindra and Grama \(2021\)](#)]?

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Format and Schedule

The workshop will be organized as a half-day (≤ 4 -hours) online virtual meeting combining both practical tutorials on the use of the NPDS Cyberinfrastructure with PDP-DREAM software and also discussion of current issues with contributions solicited from community members.

Hour 1: Information Cyberwars Review of online information cyberwars and discussion of the problems described in the original 2006 blueprint for the PORTAL-DOORS Project (PDP) which persist today in 2022 (or perhaps have even worsened since 2006?) including information silos, idea-laundering plagiarism, idea-bleaching censorship, misinformation, disinformation, anti-information, caco-information, and mal-information. For more background on these topics, see [Taswell \(2008\)](#); [Craig et al. \(2019a\)](#); [Taswell et al. \(2020, 2021\)](#); [He and Yu \(2021\)](#)).

Hour 2: NPDS Cyberinfrastructure Review of the Nexus-PORTAL-DOORS-Scribe (NPDS) cyberinfrastructure and how to use the open-source PDP-DREAM Software and open-access NPDS data repositories to track the provenance of cultural artifacts and the provenance of concepts, ideas, and claims in the published literature. For an introduction to NPDS, see [Taswell \(2010\)](#); [Craig et al. \(2020\)](#); [Taswell \(2021\)](#).

Hour 3: PDP-DREAM Ontology and FAIR Metrics Review of the PDP-DREAM Ontology and Fair Attribution to Indexed Reports (FAIR) Metrics and how to use them to track progress on investigations into allegations of plagiarism, misrepresentation of the published literature, and violations of citational justice. For more background on these topics, see [Craig et al. \(2019b\)](#); [Dutta et al. \(2020\)](#); [Craig and Taswell \(2021\)](#)).

Hour 4: Open Contributions Discussion and networking session with moderated contributions from the community with the goal of encouraging and developing international collaborations from organizations with global citizens representing planet Earth from countries across the world. We will adjust time allocation of the sessions (with 2 instead of 1) to accommodate more contributions from the community if there is strong interest from community members who wish to contribute 10 minute slide presentations.

References

- Baldwin, G. B. (1996). The library bill of rights – a critique
- Bonner, P. (2011). *Change and continuity in early modern cosmology*, vol. 27 (Springer Science & Business Media)
- Cameron, J. (2013). Victim privacy and the open court principle
- Craig, A., Ambati, A., Dutta, S., Kowshik, P., Nori, S., Taswell, S. K., et al. (2019a). DREAM principles and FAIR metrics from the PORTAL-DOORS Project for the semantic web. In *2019 IEEE 11th International Conference on Electronics, Computers and Artificial Intelligence (ECAI)* (IEEE), 1–8, doi:10.1109/ECAI46879.2019.9042003
- Craig, A., Ambati, A., Dutta, S., Mehrotra, A., Taswell, S. K., and Taswell, C. (2019b). Definitions, formulas, and simulated examples for plagiarism detection with FAIR metrics. In *2019 ASIS&T 82nd Annual Meeting* (Wiley), vol. 56, 51–57, doi:10.1002/PRA2.6
- Craig, A., Hong, P., Choksi, S., Athreya, A., and Taswell, C. (2020). Survey, analysis, and requirements for semantic enhancement to support machine understanding of scientific literature. *Brainiacs Journal of Brain Imaging And Computing Sciences* 1, D11DABE6D, doi:10.48085/D11DABE6D
- Craig, A. and Taswell, C. (2021). PDP-DREAM software for integrating multimedia data with interoperable repositories. *Brainiacs Journal of Brain Imaging And Computing Sciences* 2, HA46280EF, doi:10.48085/HA46280EF
- Dutta, S., Uhegbu, K., Nori, S., Mashkooor, S., Taswell, S. K., and Taswell, C. (2020). DREAM Principles from the PORTAL-DOORS Project and NPDS Cyberinfrastructure. In *2020 IEEE 14th International Conference on Semantic Computing (ICSC)* (IEEE), 211–216, doi:10.1109/ICSC.2020.00044
- Gilbert, J. T. (1854). *A History of the City of Dublin*, vol. 1 (Jam. Mac)
- He, P. and Yu, K. (2021). Disruptive information on social media: A perspective of information and communications technology processing. In *2021 2nd International Conference on Electronics, Communications and Information Technology (CECIT)* (IEEE), 513–517
- Jacobson, R. M., Sauver, J. L. S., and Rutten, L. J. F. (2015). Vaccine hesitancy. *Mayo Clinic Proceedings* 90, 1562–1568
- Prier, J. (2020). Commanding the trend: Social media as information warfare. In *Information warfare in the age of cyber conflict* (Routledge), 88–113
- Ravindra, V. and Grama, A. (2021). De-anonymization attacks on neuroimaging datasets. In *Proceedings of the 2021 International Conference on Management of Data*. 2394–2398
- Shivayogi, P. (2013). Vulnerable population and methods for their safeguard. *Perspectives in clinical research* 4, 53
- Taswell, C. (2008). DOORS to the semantic web and grid with a PORTAL for biomedical computing. *IEEE Transactions on Information Technology in Biomedicine* 12, 191–204, doi:10.1109/TITB.2007.905861. In the Special Section on Bio-Grid published online 3 Aug. 2007
- Taswell, C. (2010). A distributed infrastructure for metadata about metadata: The HDMM architectural style and PORTAL-DOORS system. *Future Internet* 2, 156–189, doi:10.3390/FI2020156. In Special Issue on Metadata and Markup.
- Taswell, C. (2021). The NPDS Cyberinfrastructure. In *Gateways 2021 Proceedings*. 1. <https://zenodo.org/record/5585404#.Ycs4FmjMK4Q>
- Taswell, S. K., Athreya, A., Akella, M., and Taswell, C. (2021). Truth in science. *Brainiacs Journal of Brain Imaging and Computing Sciences* 2, 1–9, doi:10.48085/M85EC99EE. www.BrainiacsJournal.org/arc/pub/Taswell2021Truth
- Taswell, S. K., Triggler, C., Vayo, J., Dutta, S., and Taswell, C. (2020). The hitchhiker's guide to scholarly research integrity. In *2020 ASIS&T 83rd Annual Meeting* (Wiley), vol. 57, e223, doi:10.1002/pr2.223
- Winship, M. P. (1997). Contesting control of orthodoxy among the godly: William pynchon reexamined. *The William and Mary Quarterly* 54, 795–822