

## Developing specimen and sample citation guidelines in collaboration with publishers

**Dr. Sarah Ramdeen**<sup>1</sup>, Dr Andrea Thomer<sup>2</sup>, Adam Mansur<sup>3</sup>, Dr. Lesley Wyborn<sup>4</sup>, Chris Erdmann<sup>5</sup>, Shelley Stall<sup>5</sup>

<sup>1</sup>*Columbia University, Palisades, United States*, <sup>2</sup>*University of Michigan School of Information, Ann Arbor, United States*,

<sup>3</sup>*Smithsonian National Museum of Natural History, Washington, United States*, <sup>4</sup>*Australian National Data Service, Acton, Australia*, <sup>5</sup>*American Geophysical Union, Washington, United States*

Specimen and sample citation is a complex topic. Journals have varying recommendations for listing materials examined; there are varying standards for listing specimen identifiers; and some journals still do not provide space for listing all materials examined in a sufficiently detailed manner. However, while it is challenging, citation is also crucial for making samples and specimens a part of the research data ecosystem. Citation makes specimens more accessible for reuse, helps support the reproducibility of studies that use specimens, and is important in measuring the impact of natural history collections.

The Earth Science Information Partners's (ESIP) Physical Samples Curation Cluster is currently working to develop author guidelines and recommendations for physical samples (including natural history specimens). The Physical Samples Curation Cluster is a forum for the community supporting physical samples in the earth, space, and environmental sciences which includes but is not limited to geological, marine and biological samples and specimens. These guidelines are intended to help journals and publishers communicate expectations for authors. Our aim is to improve the discoverability of specimens/samples in the future such that they can be used by all researchers, from sample generation to sample use and understanding. Our group is developing these guidelines through monthly calls and at twice yearly ESIP meetings. We hope to be done by July – but we need the help of the SPNHC community.

In this presentation, we will share our progress to date and solicit feedback on our guidelines. We plan to have our first draft of guidelines available by May and input from the SPNHC community will be crucial in ensuring that these guidelines are broadly applicable. We are working with the American Geophysical Union (AGU) as the first adopter and model for these guidelines but hope they will be of use to other communities. We are reaching out to the SPNHC community to learn more about your concerns and priorities related to biodiversity specimen citation which might be incorporated into the guidelines or community specific variations.

