

Data archiving and sharing survey

Start of Block: Consent & Background Information

Q45 The goal of this survey is to **understand general attitudes and habits surrounding [data archiving and sharing](#)** across different biological fields. The target demographic for this survey is researchers as well as other individuals that could be considered either scientific data producers or consumers of data for scientific activities. We are also interested in understanding to what degree the potential benefit for broader impacts and outreach motivates (or could motivate) data sharing. This survey is anonymous and will be used in a descriptive publication that we hope will help journals, funding agencies, and scholarly professional societies in their efforts improve their support and incentives for ethical data transparency and accessibility.

☐ proceed (1)

Q1 Research Participant Informed Consent Form Please read this document carefully before you decide to participate in this research study. Your participation is voluntary, and you can decline to participate, or withdraw consent at any time, with no consequences. Study Title: Data sharing survey Person conducting the research: Connie J. Mulligan, PhD, Department of Anthropology, University of Florida, Gainesville FL, 32610, 352-275-3256, cmulligan@ufl.edu. This survey was approved as exempt from review by UF's IRB. If you have any questions about the study, please contact Dr. Mulligan or IRB01 (352-392-0433, irb2@ufl.edu) Purpose of the research study: The purpose of this study is to learn more about the attitudes, practices, and experiences of [data archiving and sharing](#) among biological anthropologists. What you will be asked to do in the study: You will be asked to fill out an online survey that should take approximately 10-15 minutes. The survey is anonymous and it will not be possible to connect any of the data collected with specific study participants. There is a minimal risk that security of any online data may be compromised, but our survey host (QUALTRICS) uses strong encryption and other data security methods to protect your information. Data will be presented in publications and/or meeting presentations or reports. Risks and benefits: There are no risks or discomforts anticipated due to participation in this study. There are no direct benefits of participation for you.

☐ Agree (1)

☐ Disagree (2)

Page Break

Q16 Through which society, listserv or website did you access this survey? (choose one or more)

- ☐ American Association of Physical Anthropologists (1)
- ☐ American Association of Anthropological Genetics (2)
- ☐ American Anthropological Association (3)
- ☐ American Society of Mammalogists (4)
- ☐ American Society of Ichthyologists and Herpetologists (5)
- ☐ ESHE--European Society for the study of Human Evolution (6)
- ☐ European Society [for] Evolutionary Biology (7)
- ☐ EVAN-- European Virtual Anthropology Network Society (8)
- ☐ Human Biology Association (9)
- ☐ International Congress of Vertebrate Morphology (10)
- ☐ Jim Rohlf's Stony Brook pages (11)
- ☐ Morphmet (listserv) (12)
- ☐ Paleoanthropology Society (13)
- ☐ Society for the Study of Evolution (14)
- ☐ Society for Integrative & Comparative Biology (15)
- ☐ Society of Systematic Biology (16)
- ☐ Society of Vertebrate Paleontology (17)

☐

Palaeontological Association (18)

☐

other (write in) (19) _____

Q2 What is your field of expertise? (choose one or more)

- ☐ archaeology (1)
 - ☐ bioarchaeology (2)
 - ☐ biogeography (3)
 - ☐ evolutionary biology (4)
 - ☐ evolutionary development (5)
 - ☐ functional anatomy/biomechanics (6)
 - ☐ genetics/genomics (7)
 - ☐ global health (8)
 - ☐ human biology (9)
 - ☐ paleoanthropology (10)
 - ☐ paleontology (11)
 - ☐ physical (biological) anthropology (12)
 - ☐ phylogenetics (13)
 - ☐ primate behavior and ecology (14)
 - ☐ skeletal biology (15)
 - ☐ other (write in) (16) _____
-

Q3 What is your career stage or occupation?

- ☐ undergraduate student (1)
 - ☐ graduate student (2)
 - ☐ postdoctoral fellow (3)
 - ☐ adjunct lecturer/instructor (4)
 - ☐ full time lecturer/instructor (5)
 - ☐ assistant professor (6)
 - ☐ associate professor (tenured) (7)
 - ☐ associate professor (non-tenured) (8)
 - ☐ full professor (tenured) (9)
 - ☐ full professor (non-tenured) (10)
 - ☐ emeritus professor (11)
 - ☐ retired (12)
 - ☐ other (write in) (13) _____
-

Q6 Do identify as a member of a under-represented group or marginalized group? (optional)

- ☐ yes (1)
 - ☐ no (2)
-

Display This Question:

If Do identify as a member of a under-represented group or marginalized group? (optional) = yes

Q7 What aspects of your identity affiliate you with an under-represented or marginalized group? (optional)

- ☐ sex (1)
 - ☐ gender identity (2)
 - ☐ sexuality (3)
 - ☐ racial identity (4)
 - ☐ socioeconomic (5)
 - ☐ other (write in) (6) _____
-

Q8 Do at least one of the primary journals used by researchers in your field have a data accessibility requirement? In other words, does at least one require provision of data and/or data identifiers required to repeat the study or a statement of how the required data can be obtained?

- ☐ yes (1)
 - ☐ no (2)
 - ☐ I don't know (3)
-

Display This Question:

If Do at least one of the primary journals used by researchers in your field have a data accessibili... = yes

Q9 Do you publish in these journals

- ☐ yes (1)
- ☐ no (provide an explanation of why not if you desire) (2)
-
- ☐ sometimes (3)

End of Block: Consent & Background Information

Start of Block: Data Sharing by Others

Q10 Have you benefited from other researchers [sharing](#) their data?

- ☐ Yes (1)
- ☐ No (2)

Display This Question:

If Have you benefited from other researchers sharing their data? = Yes

Q11 How did you benefit? (choose one or more)

- ☐ Improved my teaching/outreach through data resources made accessible to me (1)
- ☐ Improved an ongoing study through data resources made accessible to me (2)
- ☐ I was able to design and execute a study that would not have been possible otherwise (3)
- ☐ I was able to do a research project much more quickly and less expensively (without having to travel or pay for as much data collection) (4)
- ☐ I was able to design and execute all or part of a thesis with shared data (5)
- ☐ other (write in) (6) _____
-

Display This Question:

If Have you benefited from other researchers sharing their data? = Yes

Q12 How did you get access to [shared](#) data? (choose one or more)

☐ online repository (please write in names of repositories you have downloaded data from) (1) _____

☐ author sent me data directly (2)

☐ other (write in) (3) _____

Display This Question:

If Have you benefited from other researchers sharing their data? = No

Q13 In your opinion, why have you been unable to benefit from [data sharing](#) by others? (choose one or more)

☐ There is not a culture of sharing data in my field (it is not required or expected). (1)

☐ There are no repositories capable of storing my field's data in a useful way (2)

☐ Stakeholders other than the researchers who collected the original data act to prevent data sharing in my field (e.g., museum administrators, descendent populations) (3)

☐ The data collection and reporting methods are complex and poorly standardized meaning it is difficult to re-use data between studies (4)

☐ e. Other (write in) (5) _____

End of Block: Data Sharing by Others

Start of Block: Sharing Your Own Data

Q14 Have you [archived and/or shared](#) data using an online repository before?

- ☐ yes (1)
- ☐ no (2)

Display This Question:

If Have you archived and/or shared data using an online repository before? = yes

Q15 Please list all the online repositories you have used to [archive or share](#) your data (you can write names of multiple repositories in the space below)

Display This Question:

If Have you archived and/or shared data using an online repository before? = yes

Q17 What was your motivation to [archive and share](#) data? (choose one or more)

- ☐ required to by a foundation supporting my research (e.g., NSF) (1)
- ☐ required to by journals in which I publish my research (2)
- ☐ expected/encouraged by my employer (e.g., for promotion/tenure) (3)
- ☐ expected/encouraged by other stakeholders (e.g., museum policy) (4)
- ☐ I hoped to increase impact of my data (e.g., to generate data citations) (5)
- ☐ satisfy my own personal/professional standards (6)
- ☐ I have benefited from others sharing data and wanted to pay it forward (7)
- ☐ I wanted to benefit others by sharing my data (8)
- ☐ other (write in) (9) _____

Display This Question:

If Have you archived and/or shared data using an online repository before? = yes

Q18 What benefits have you experienced from [sharing](#) your own data? (choose one or more)

- ☐ I was invited to collaborate on a paper using data I shared (1)
- ☐ My paper was cited specifically for the shared data it included (2)
- ☐ I was able to report more publications using my data to the grant sponsor who funded the data collection than if I hadn't shared my data (3)
- ☐ I was able to provide evidence of my past data sharing in a new grant proposal (4)
- ☐ The data were used for outreach and education and I was able to report that as impact of my data (5)
- ☐ Evidence of my data sharing was remarked upon positively in my performance reviews/promotion assessments (6)
- ☐ An independent researcher was able to confirm and build upon results of my study because I shared the data. (7)
- ☐ other (write in) (8) _____

Display This Question:

If Have you archived and/or shared data using an online repository before? = yes

Q19 Have you ever experienced any kind of negative consequences of [data archiving/sharing](#)?

- ☐ yes (1)
 - ☐ no (2)
-

Display This Question:

If Have you ever experienced any kind of negative consequences of data archiving/sharing? = yes

Q20 What negative consequences did you experience? (choose one or more)

- ☐ My research was scooped (1)
- ☐ My student's research was scooped (2)
- ☐ People mis-used and/or mis-represented my data (3)
- ☐ Another stakeholder became angry with me (4)
- ☐ People criticized me for perceived errors (5)
- ☐ People used the data without acknowledging/citing me or other sources (6)
- ☐ other (write in) (7) _____

Display This Question:

If Have you archived and/or shared data using an online repository before? = no

Q21 Why have you never [archived/shared](#) your data? (choose one or more)

- ☐ I have not yet completed a research project or scientific manuscript to the point of having to plan for data archiving or sharing yet (1)
- ☐ There is not a culture of data archiving/sharing in my field (it is not required or expected) (2)
- ☐ I am not aware of any repositories capable of storing my data in a useful way. (3)
- ☐ I am not aware of any repositories that allow my data to be archived with the appropriate restrictions/embargos on access. (write in the restrictions/embargos of known repositories) (4)
- ☐ Too time consuming (5)
- ☐ Too expensive to pay repository fees (6)
- ☐ Not relevant to verifying the study's conclusion (7)
- ☐ Other stakeholders did not allow me to archive/share data (e.g., collaborator, advisor, museum administrator, descendant population) (8)
- ☐ Other researchers denied my requests for data in the past and it did not seem fair that they would get access to my data if I shared it openly (9)
- ☐ I could have been scooped on current or planned future research if I did (10)
- ☐ I planned to give first priority of reuse to my students (or future students) (11)
- ☐ other (write in) (12) _____

Display This Question:

If Have you archived and/or shared data using an online repository before? = yes

Q22 Have you ever chosen not to [archive/share](#) a particular set of data from any of your published studies?

☐ yes (1)

☐ no (2)

Display This Question:

*If Have you ever chosen not to archive/share a particular set of data from any of your published stu...
= yes*

Q23 What was your reason for choosing not to [archive/share](#) in this/these instance(s)? (choose one or more)

☐ I was not aware of any repositories capable of storing the data in a useful way. (1)

☐ I was not aware of any repositories that allow my data to be archived with the appropriate restrictions/embargos on access. (2)

☐ Too time consuming. (3)

☐ Too expensive to pay repository fees. (4)

☐ Not relevant to verifying the study's conclusion. (5)

☐ Other stakeholders did not allow me to archive/share data (e.g., collaborator, advisor, museum, descendant population) (6)

☐ Other researchers denied my requests for data in the past and it did not seem fair that they would get access to my data if I shared it openly. (7)

☐ I could have been scooped on other current or planned future research if I did (8)

☐ I planned to give first priority of reuse to my students (or future students) (9)

☐ other (write in) (10) _____

Q48 Optional: We are extremely interested in personal "success" stories of how [shared](#) data helped you or how sharing your own data lead to a possibly unexpected positive outcome for you or others.

Q43 Optional: What challenges have limited your [data sharing or archiving](#) in the past? What would help you (and/or others) archive and shared data more effectively in the future?

End of Block: Sharing Your Own Data

Start of Block: General Opinions about Data Sharing

Q24 Do you agree with the following statement? "Scientists will experience a career-boosting net benefit by openly [sharing](#) their own data whenever possible"

- ☐ yes (1)
- ☐ no (2)
- ☐ not sure / depends (3)

Display This Question:

If Do you agree with the following statement? "Scientists will experience a career-boosting net bene... = no

Or Do you agree with the following statement? "Scientists will experience a career-boosting net bene... = not sure / depends

Q25 Which scientists are **UNLIKELY** to experience a net benefit from [sharing](#) their own data?
Which scientists are **LIKELY** to experience a net benefit.

	LIKELY to benefit (1)	UNLIKELY to benefit (2)
Early career scientists (1)	<input type="radio"/>	<input type="radio"/>
Mid-career scientists (2)	<input type="radio"/>	<input type="radio"/>
Senior scientists (3)	<input type="radio"/>	<input type="radio"/>
Scientists representing privileged groups (4)	<input type="radio"/>	<input type="radio"/>
Scientists representing under-represented or marginalized groups (5)	<input type="radio"/>	<input type="radio"/>
Scientists in first world countries (6)	<input type="radio"/>	<input type="radio"/>
Scientists in developing countries (7)	<input type="radio"/>	<input type="radio"/>
other (write in) (8)	<input type="radio"/>	<input type="radio"/>

Q30 For each group, indicate whether you believe they will experience a strong **career** benefit from access to **data shared by others**, medium benefit, or little to no benefit.

	experiences little benefit (1)	experiences strong benefit (2)	experiences the strongest benefit (3)
Early career scientists (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mid-career scientists (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Senior scientists (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scientists representing privileged groups (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scientists representing under- represented or marginalized groups (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scientists in first world countries (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scientists in developing countries (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
other (write in) (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q31 For each group, indicate whether you believe they have a large obligation to [share their own data](#), a medium obligation or little to no obligation.

	little obligation (2)	strong obligation (3)	strongest obligation (4)
Early career scientists (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mid-career scientists (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Senior scientists (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scientists representing privileged groups (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scientists representing under-represented or marginalized groups (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scientists in first world countries (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scientists in developing countries (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
other (write in) (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q32 Professional incentives for [data sharing](#) are increasing and will fuel more ubiquitous and meaningful data sharing as time goes on

- ☐ strongly disagree (1)
 - ☐ Somewhat disagree (2)
 - ☐ Neither agree nor disagree (3)
 - ☐ Somewhat agree (4)
 - ☐ Strongly agree (5)
-

Q33 Better [data sharing](#)/transparency will help to democratize the ability of all scientists to contribute to scientific advances

- ☐ strongly disagree (1)
 - ☐ Somewhat disagree (2)
 - ☐ Neither agree nor disagree (3)
 - ☐ Somewhat agree (4)
 - ☐ Strongly agree (5)
-

Q34 Better [data sharing](#)/transparency will help advance scientific knowledge more rapidly and efficiently than would otherwise be possible

- ☐ strongly disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neither agree nor disagree (3)
- ☐ Somewhat agree (4)
- ☐ Strongly agree (5)

Q35 Stricter policies for [data sharing](#) must be enforced at all scholarly institutions, from journals to professional societies to universities to funding agencies.

- ☐ strongly disagree (1)
 - ☐ Somewhat disagree (2)
 - ☐ Neither agree nor disagree (3)
 - ☐ Somewhat agree (4)
 - ☐ Strongly agree (5)
-

Q42 Journals and funding agencies should adopt stricter criteria that authors and researchers must meet to gain exceptions to [data sharing](#) requirements.

(For instance, providing a letter from a museum stating that measurements/imagery cannot be archived or shared.)

- ☐ Strongly disagree (1)
 - ☐ Somewhat disagree (2)
 - ☐ Neither agree nor disagree (3)
 - ☐ Somewhat agree (4)
 - ☐ Strongly agree (5)
-

Q36 The concerns of all stakeholders (first authors, collaborators, thesis advisors, museums, descendant populations) about [sharing](#) a given dataset should be considered and respected.

- ☐ strongly disagree (1)
 - ☐ Somewhat disagree (2)
 - ☐ Neither agree nor disagree (3)
 - ☐ Somewhat agree (4)
 - ☐ Strongly agree (5)
-

Q37 There needs to be more flexibility in [data sharing](#) requirements by open access journals due to ethical considerations of some datasets.

- ☐ strongly disagree (1)
 - ☐ Somewhat disagree (2)
 - ☐ Neither agree nor disagree (3)
 - ☐ Somewhat agree (4)
 - ☐ Strongly agree (5)
-

Q38 The push for open access [sharing](#) of data is too strong and may lead to wide scale misuse of shared data.

- ☐ strongly disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neither agree nor disagree (3)
- ☐ Somewhat agree (4)
- ☐ Strongly agree (5)

Q39 It is important to [archive](#) data using professional platforms even when there are restrictions on sharing in order to allow future verification of a study's results.

- ☐ strongly disagree (1)
 - ☐ Somewhat disagree (2)
 - ☐ Neither agree nor disagree (3)
 - ☐ Somewhat agree (4)
 - ☐ Strongly agree (5)
-

Q40 There are online repositories that allow [data archiving](#) without overly strict requirements for subsequent [data sharing](#).

- ☐ strongly disagree (1)
 - ☐ Somewhat disagree (2)
 - ☐ Neither agree nor disagree (3)
 - ☐ Somewhat agree (4)
 - ☐ Strongly agree (5)
-

Q41 When appropriate repositories are available, all individuals should [archive](#) their data in potentially accessible ways regardless of career stage.

- ☐ strongly disagree (1)
- ☐ Somewhat disagree (2)
- ☐ Neither agree nor disagree (3)
- ☐ Somewhat agree (4)
- ☐ Strongly agree (5)

End of Block: General Opinions about Data Sharing
