

# Frequently Asked Questions about Open Science

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Please email any additional questions to [grants@abta.org](mailto:grants@abta.org).

### What is open science?

Open science is the idea that scientific knowledge of all kinds should be freely and openly shared as early as is practical in the discovery process. Open science is characterized by the notion that some or all aspects of the research and discovery lifecycle should be made available with little or no restrictions to the scientific community.

### What is ABTA's approach to open science?

The ABTA believes in increasing the availability of scholarly research outputs as well as the raw data and protocols used to generate these research outputs. Increasing the availability of scholarly research outputs is typically referred to as “open access” or “public access” and focuses on the rapid online availability of peer-reviewed research results, permitting any users to read, download, copy, distribute, print the full text of these articles. Increasing the availability of raw data and protocols, refers to “open data” and promotes the accessibility and reuse of the protocols and raw data generated during a project. Open data applies to datasets, statistics, code, transcripts, survey results, and the metadata associated with these objects. The data is, in essence, the factual information that is necessary to replicate and verify research results.

### What are the ABTA's requirements and recommendations regarding open-access publishing of the data generated as part of an ABTA grant?

The ABTA's policy encourages the immediate free dissemination of journal articles. However, in recognizing the realities of the current publishing system which allows publishers to embargo access for a period of time, the ABTA requires that all journal articles resulting from ABTA funding be made freely available in PubMed Central within 12 months of publication. This can be done by publishing in an open access journal, in a journal that deposits papers into PubMed Central, or by the grantee depositing the paper into PubMed Central. At the grantee's request, the ABTA will facilitate depositing the article into PubMed Central by providing an invitation and instructions for using HRA Open. It is the grantees responsibility to ensure that articles are publicly accessible without charge. Grantees who want to make their publications immediately accessible are encouraged to publish in open access journals or hybrid journals with free, immediate readership rights or to publish in a subscription journal that allows researchers to self-archive the Accepted Author Manuscript in PubMed Central at time of publication, as allowed by the agreement with the publisher. Please reach out to [grants@abta.org](mailto:grants@abta.org) for more information.

### What are the ABTA's requirements and recommendations regarding open data practices for the data generated as part of an ABTA grant?

The ABTA is committed to transparency and reproducibility of research. All grantees with ABTA Research Collaboration Grants, Basic Research Fellowships, and Discovery Grants who produce omics data are required to deposit their data into an ABTA-approved repository within 12 months of the end of the grant term. Refer to the ***ABTA Policies and Procedures for Research Grants and Fellowships***, Appendix B Open Science Policy, located on the [ABTA Funding Opportunities webpage](#), for more information. The ABTA has a list of approved repositories for data and protocols, which can also be found on the [ABTA Funding Opportunities webpage](#). To facilitate data sharing, the ABTA allows grantees to use their ABTA funds for expenses related to data sharing, including article processing charges, data storage fees, and staff salary for curating and documenting data.

All applicants for ABTA Research Collaboration Grants, Discovery Grants, and Basic Research Fellowships are required to submit a [Data Management and Sharing Plan](#), on the provided template, with their Full Application. Data Management and Sharing Plans are not required for Jack & Fay Netchin Medical Student Summer Fellowship applications but are strongly encouraged.

**My paper is based on research only partially funded by ABTA. Is the paper still bound by the ABTA's requirement for public access?**

Yes, the policy applies to any journal article manuscript that arises from any amount of direct funding from the ABTA. Please refer to section 9.3 of the ***ABTA Policies and Procedures for Research Grants and Fellowships***, located on the [ABTA Funding Opportunities webpage](#).

**How can I make my paper openly accessible without paying large article processing charges?**

Authors can often deposit their Accepted Author Manuscript into PubMed Central free of charge, depending on the agreement with the publisher. ABTA can help facilitate the process and can link your publication to your ABTA grant. When your manuscript is accepted, reach out to ABTA staff to get the process started.

**Is a Data Management and Sharing Plan required as part of my ABTA grant application?**

All applicants for ABTA Research Collaboration Grants, Discovery Grants, and Basic Research Fellowships are required to submit a [Data Management and Sharing Plan](#) with their Full Application. Data Management and Sharing Plans are not required for Jack & Fay Netchin Medical Student Summer Fellowship applications but are strongly encouraged.

If the Budget for your ABTA grant application includes costs associated with data sharing, the Data Management and Sharing Plan must reflect the expenses proposed.

**Will my Data Management and Sharing Plan affect the score of my application?**

Reviewers for ABTA Research Collaboration Grant, Basic Research Fellowship, and Discovery Grant Full Applications, are asked to comment on the relevance of the Data Management and Sharing Plan, whether it is appropriate for the types of data being generated in the project and the type of research being conducted, and whether the plan includes adequate information about how the data will be prepared, managed, and shared. They may also consider the merits of the Data Management and Sharing Plan when scoring the application. Refer to the Evaluation Criteria, found in the Full Application Instructions to better understand the evaluation of your application.

**Where can I deposit my data?**

The ABTA maintains a list of ABTA approved repositories for data and protocols, which can be found on the [ABTA Funding Opportunities webpage](#). If your preferred repository is not on this list, and it meets the criteria outlined at the top of the list, you may contact [grants@abta.org](mailto:grants@abta.org) to have it considered for approval. Grantees are encouraged to use subject-focused repositories. If none of the repositories on this list are appropriate for your data, you can search the [Registry of Research Data Repositories](#) for an appropriate subject-focused repository. Please note that all

repositories in the Registry of Research Data Repositories may not meet ABTA criteria, as outlined on the list of approved repositories.

### Once I share my research data, who owns it?

It is generally held that factual data cannot be copyrighted. Anyone can access the data from the repository in which you deposit it, use the data, and build upon it, provided they provide appropriate attribution.

### What about the possibility of scientific misuse or unsophisticated analysis of the research data?

Data sharing can actually decrease the potential for data miscalculation, misinterpretation, manipulation, and fraud by opening raw results up to the broader community. Any conclusions that a scientist draws from the data can be checked, questioned, and countered by the broader community.

### Can I modify my Data Management and Sharing Plan after my grant is awarded?

Yes, you can submit a new Data Management and Sharing Plan in the Deliverables section of your award in ProposalCentral. The template can be found at the bottom of the Deliverables page in ProposalCentral. Note that your new plan must be approved by ABTA before you can implement changes. Approvals take approximately one week. Contact [grants@abta.org](mailto:grants@abta.org) for assistance.

### What happens if I fail to comply with the ABTA's requirements regarding open science?

ABTA will spot check for compliance for public access of publications and deposited datasets; therefore, you may be asked to demonstrate your compliance. Grantees (including their institutions) found not in compliance with ABTA policies will be considered not in good standing and are therefore ineligible for future ABTA funding until they are compliant with all policies.