

## 1: Sample Data Sharing Plan | NIH: National Institute of Allergy and Infectious Diseases

*This course will provide learners with an introduction to research data management and sharing. After completing this course, learners will understand the diversity of data and their management needs across the research data lifecycle, be able to identify the components of good data management plans, and be familiar with best practices for working with data including the organization.*

This is an actual plan from a PI with [brackets] in place of identifying information. Sharing of data generated by this project is an essential part of our proposed activities and will be carried out in several different ways. We would wish to make our results available both to the community of scientists interested in [this disease] and the biology of [its causative agent] to avoid unintentional duplication of research. Conversely, we would welcome collaboration with others who could make use of the vaccine assessment protocols developed in [the project]. Our plan includes the following: Presentations at national scientific meetings. From the projects, it is expected that approximately four presentations at national meetings would be appropriate. This one-day meeting of interested persons presents new information on a variety of topics related to [the disease]. It is expected that the investigators from this [project] will be active participants of this focused group. A lectureship has brought to the University distinguished scientists and clinicians whose areas of expertise were relevant to those interested in [the disease]. Lecturers have been [list of names]. Visiting lecturers will be scheduled to interact with the investigators of the project as appropriate with their specific areas of expertise which will provide an opportunity for members to present their work to the visitor. The [disease interest group] publishes a newsletter which currently has a circulation of [number]. Website of the Interest Group. The [interest group] currently maintains a Web site where information [about the disease] is posted. Summaries of the scientific presentation from the [quarterly project] meetings will be posted on this Web site, written primarily for a general audience. Beginning this fall during the week of [date], the [interest group] will be sponsoring a [Disease] Awareness week. As part of that program, there will be a research poster display with discussions. In future years, [the project investigators] will be active participants in this program. It is our explicit intention that these data will be placed in a readily accessible public database. All efforts will be made to rapidly release data through publication of results as quickly as it is possible to analyze the experiments. Data used in publications will be released in a timely manner. SAGE data will be made accessible through a public site that allows querying as has been set up for a similar project. This site can be accessed at [link to Web site]. Content last reviewed on November 14, For Researchers.

## 2: NIH Data Sharing Information - Main Page

*This guide outlines the process of developing a data management and sharing plan. Planning for the effective creation, management and sharing of your data enables you to get the most out of your research.*

It articulates a context for objects of interest -- "resources" such as MP3 files, library books, or satellite images -- in the form of "resource descriptions. See also a selection of general and discipline-specific metadata standards. What Information Technology Security resources are available on campus? Consulting with IT Security as you are writing your proposal is the ideal time to ensure these protections are put in place and considered when building the research budget. To speak with IT Security regarding your research project, call or email security@uh.edu. General information is available on the IT Security website. The archive must be accessible by scholars analyzing the data, and available to collaborators or others who have rights of access. Primary research data should be stored securely for sufficient time following publication, analysis, or termination of the project. The number of years that data should be retained varies from field to field and may depend on the nature of the data and the research. Sustainable data management is crucial to the value of research and crucial to ensuring continued scholarship. Typically, in data storage, there is an access copy, for use, and an archival copy, essentially for preservation and back-up purposes. Backing up data cannot be overemphasized, just as natural disasters and breakdowns in systems and software cannot be predicted. Back up your data early and often. Choosing data formats and software depends mostly on the preference of the researcher but can often be dictated by discipline-specific standards and customs. While ensuring the long-term usability and sustainability of data requires attention to standard and interchangeable software, there are also Preferred Formats from the UK Data Archive for data creation and preservation. For more information about selecting data formats and software with respect to sustainability, see " Sustainable Data Formats " University of Wisconsin-Madison. Close attention to storage, back-up, security, and sustainability of your data means you lessen the risks of compromising their quality and accessibility over the long term. Issues related to storage include considering how rapidly data are expected to increase over the lifetime of the research project. Part of answering this question involves determining whether data will be collected in automated ways, which potentially steps up the scale of data collection, or whether staff on the project will be gathering data themselves. Options for short-term storage include hard disk drives and portable media. Access to and the retention of data policy can be found on the Division of Research website.

## 3: Data Management Plan Examples | NCSU Libraries

*Consult the Special Considerations section of the Data Management Planning guide for more help explaining circumstances that prevent data sharing in a data management plan, and Cornell services related to intellectual property and copyright for a list of services related to copyright, technology transfer, university policies and more.*

The Principal Investigator of this project will take responsibility for the collection, management, and sharing of the research data. The [repository] has estimated their additional cost to archive the data at [insert dollar amount]. This fee appears in the budget for this application as well. The sensitive nature of these data will require that the data be released through a restricted use contract. The primary resource on this population, [give dataset title here], is inadequate because The data collected as part of this project reflect the current time period and historical context. It is possible that several of these datasets, including the data collected here, could be combined to better understand how social processes have unfolded over time. Processed data files are reviewed by a supervisory staff member before release. Related files in different formats will be linked by file naming conventions, e. X metadata standards will be applied during the creation of the metadata. Variables will use a standardized naming convention consisting of a prefix, root, suffix system. Separate files will be managed for the two kinds of records produced: Qualitative descriptions lithological data will be validated through comparative descriptions of collected materials. Data will be contributed to X public database. Data will be submitted to supplementary materials sections of peer-reviewed journals. Researchers will be able to contact the PI for access to data. Data will be maintained in an open XML format to enable open re-use of the data. We recognize that these data are the property of X and hence we will be asking their permission to licence these data to Y for use in their exploration program. The investigators will work with staff of the [repository] to determine what to archive and how long the deposited data should be retained. The PI will be responsible for ensuring that all project members are aware as to the ownership of data and who may access them and under what conditions. Online access to the data will be password protected. The specified embargo period associated with the data being submitting extends from [date] until [date]. The embargo will be lifted by [date]. Through this mechanism, users will apply to use these files, create data security plans, and agree to other access controls. The information in this study will only be used in ways that will not reveal who you are. You will not be identified in any publication from this study or in any data files shared with other researchers. Your participation in this study is confidential. Federal or state laws may require us to show information to university or government officials [or sponsors], who are responsible for monitoring the safety of this study. Research activities envisioned present no more than minimal risk to human subjects. The research project will remove any direct identifiers in the data before deposit with [repository]. A reproduction of the instrument will be provided to [repository] as documentation for the data deposited with the intention that the instrument be distributed under "fair use" to permit data sharing, but it may not be disseminated by users. The site will be established using a content management system like Drupal or Joomla so that data users can participate in adding site content over time, making the site self-sustaining. The site will be available at a. For preservation, we will supply periodic copies of the data to [repository]. That repository will be the ultimate home for the data". De-identified files will be deposited with [repository] whose security policy has been written according to best practices. These data will be retained by [repository] as part of their permanent collection.

## 4: Data Management and Sharing - University of Houston

*Data Management and Sharing What is Data Management? Data Management is the process of controlling the information generated during a research project, including the storage, access and preservation of data throughout the research life cycle and beyond.*

Why develop a data plan? There are many benefits to managing and sharing your data: By considering what data will be created and how, you can check you have the necessary support in place. Planning also enables you to make sound decisions, bearing in mind the wider context and consequences of different options. Publishers and research funders may require that you share your data so it is worth investing time to plan for effective data management. Several funders ask for data plans as part of grant proposals. The DCC views plans submitted in grant proposals as preliminary outlines, which should then be developed into more coherent processes and procedures at the outset of your research. For the purposes of this guide we will focus on the application stage requirements. A further guide - How to put the data management and sharing plan into practice - will address data management during the research process. What do research funders want? Many UK funders have released data policies which advocate curation and data sharing. The plans are an opportunity to demonstrate your awareness of good practice and reassure funders that your proposal is in line with their data policy. Strict word counts or page limits may be imposed, so you need to be clear and concise. Avoid repeating content from elsewhere in your application or using this space to provide details unrelated to data management and sharing. The DCC also provides DMPonline, a web-based tool to help researchers create data management and sharing plans according to the requirements of major UK funders. The main sections are used as headings to structure the guidance in Section 5 of this document. Think through the different options and seek advice to determine what is best for your context. It is particularly useful to consult on technical aspects as these affect how your project is scheduled, the expertise and applications required, and the methods used to acquire and analyse data. Ask for advice from your colleagues, the library, local IT support, legal advisors, ethics boards, data repositories and more. If needed, also build in specialist support. Others have addressed these challenges before you, so build on existing models. Data management infrastructure is increasing, particularly within institutions. Support is also available through a variety of disciplinary data centres, repositories and structured databases. Funders tend not to specify particular file formats, standards or methodologies that you are expected to use. You need to choose and demonstrate that the selections made are the most appropriate for your context, that of your discipline and future users. Similarly, you need to present a convincing case for any restrictions on data sharing. Be prepared to implement your plan: Funders want to see that you understand their requirements and have realistic plans in place to meet these. The description of planned work should be clear and achievable so markers can feel confident that you understand the options and will be able to deliver what is proposed. Clearly defined roles and responsibilities add weight to your plans so be explicit about who will do what, how and when. The content of a data management and sharing plan The guidance in this section is structured around the six core themes of the DCC Checklist for a Data Management Plan. State the relationship to other data available in public repositories e. You should detail what data you will create and explain why you have opted for particular formats, standards and methodologies. Bear in mind that the choices you make may make it easier or harder to share and preserve your data. It can be useful to capture your data in or convert it to community-accepted data formats. Using standard or widely-adopted formats will make your data interoperable. Open or non-proprietary formats are preferable, as you and others will have less trouble processing these later. If your data are to be deposited into an archive, particular formats may be preferred. It is fundamental to capture contextual details about how and why the data were created. Metadata is a subset of this broad documentation, describing the data in detail. Librarians, data repositories or your colleagues may be able to advise on relevant standards. Make informed decision based on review: It can help to show your awareness of good practice or that you have sought advice to develop your plans. Some funders also expect you to demonstrate that existing data are not sufficient for your needs, so you may need to show that you have reviewed repository and data centre holdings or consulted

with similar projects. Ethics and Intellectual Property Funder questions Demonstrate that you have sought advice on and addressed all copyright and rights management issues that apply to the resource Make explicit mention of consent, confidentiality, anonymisation and other ethical considerations, where appropriate Are any restrictions on data sharing required – for example to safeguard research participants or to gain appropriate intellectual property protection? Present a strong case for any restrictions on sharing: Explain any constraints, such as embargo periods or restricted access, and ensure these are properly justified as there is a common expectation that publicly funded research data will be openly available as soon as possible. These justifications may also be of use in the event of a Freedom of Information request for your research data. Where appropriate, you should outline the steps you will take to protect research participants, e. Many University Ethics Committees provide sample consent forms and services such as the UK Data Archive provide excellent guidance in this area. Data ownership should be clarified and, where necessary, plans should be in place to negotiate licences at the start of the research process. Institutional support is also available from experts in university libraries, records management and research offices. How you will make the resource accessible to the potential audience s identified. State any expected difficulties in data sharing, along with causes and possible measures to overcome these difficulties. How will data sharing provide opportunities for coordination or collaboration? Anticipate and plan for data reuse: It can help to envisage which users your data would be of value to, and address their needs when deciding how to make the data available. Data centres may also ask you to meet minimum quality standards to make sure your data can be understood and reused by other researchers. Provide specific details on access: Reassure funders by being very clear about where, when and how your data will be made available. The DCC offers guidance on how to licence your data to make clear who can use it and for what purpose. Where possible select an appropriate disciplinary database, data centre or institutional repository. Outline what provision is available to you within your institution and any additional skills or resources that you need to secure. If local support is available, it helps to demonstrate that you have discussed and agreed requirements. If you need to secure external support, justify the selections made and budget requested. Be clear about who will be responsible for different tasks. Are the investigators co-located, or will you need infrastructure that accommodates secure remote access? How will data quality be monitored if you are working in a distributed network across several sites? Apply appropriate levels of data management: Funders want to be reassured that the day-to-day data management is fit for purpose. You may apply differing levels of service or adopt a combination of approaches: Security may be more robust for any sensitive data you collect than for secondary data you hold under licence. Think about how you will transfer data securely e. If using online services, you should know where your data are hosted and be certain that this is legally permissible. Back-up of your unique data is more critical than copies of secondary data. The more important the data and the more often it is used, the more regularly it needs to be backed up. Fully managed file services with automated back-up, such as those offered by university IT services, are very robust and save you the time and effort of implementing your own system. Such services could be used in combination with portable storage or cloud computing to meet particular needs. Data sharing and preservation may not be applicable in every case. Safeguard the data behind the graph: It is a common expectation among RCUK funders that published results will include information on how to access the supporting data. Assure that your data will remain accessible: Whatever approach you adopt, focus on making a convincing case that your data will remain accessible. If you plan to deposit in a data centre, it helps to speak with their staff early on as they can advise what is appropriate and feasible in terms of preservation. Universities are increasingly providing infrastructure to support data management and there are some disciplinary services which may be of use. Resourcing Funder questions What resources will you require to deliver your plan? Outline additional hardware, software and technical expertise, support and training that is likely to be required and how it will be acquired Outline and justify costs: If you need to purchase storage, outsource services such as back-up and preservation, or plan to pay for data management support, these costs should be outlined and justified in your proposal. Where institutional provision is available, show that the support you require has been discussed and agreed. It also helps to link resources with roles and responsibilities to demonstrate how the plan will be implemented. Creating documentation and making your data understandable to others is very time consuming,

so be realistic about how much effort is needed to prepare your data for sharing and preservation. The UKDA offers a toolkit to help researchers cost activities related to managing and sharing social science data. The RCUK Common Principles on Data Policy state that it is appropriate to use public funds to support the management and sharing of publicly-funded research data, but this is expected to be efficient and cost-effective. It proposes elements to include, advises why each is important, and gives a wealth of example texts. Some funders offer detailed guidance to help you develop your plan. It is useful to speak with them early on so you can build their contributions into your proposal. Data plans are an integral part of grant applications – not an afterthought. Reviewers will look for evidence that data management is embedded throughout your proposal and forms an integral part of your research process. Include high-level data management and sharing details in the Case for Support and briefly explain associated costs in the Justification for Resources. Data plans are enhanced through collaboration. Few people have all of the skills required to manage and share data throughout its lifecycle, so seek input from others with relevant expertise and use tools provided by your community.

## 5: Elements of a Data Management Plan

*Data Management and Sharing Plan. This Data Management and Sharing Plan (Plan) is for the Selecthere to enter Incident Name. TBD 2 â€¢ Proprietary or non-incident related information or data.*

This checklist can help you identify best practices for data management and data sharing. Planning Who is responsible for which part of data management? Are new skills required for any activities? Do you need extra resources to manage data, such as people, time or hardware? Have you accounted for costs associated with depositing data for longer-term preservation and access? Documenting Will others be able to understand your data and use them properly? Are your structured data self-explanatory in terms of variable names, codes and abbreviations used? Which descriptions and contextual documentation explain what your data mean, how they were collected and the methods used to create them? How will you label and organise data, records and files? Will you be consistent in how data are catalogued? Formatting Are you using standardised and consistent procedures to collect, process, transcribe, check, validate and verify data, such as standard protocols, templates or input forms? Which data formats will you use? Do formats and software enable sharing and long-term sustainability of data, such as non-proprietary software and software based on open standards? When converting data across formats, do you check that no data, annotation or internal metadata have been lost or changed? Storing Are your digital and non-digital data, and any copies, held in multiple safe and secure locations? Do you need to securely store personal or sensitive data? If so, are they properly protected? If data are collected with mobile devices, how will you transfer and store the data? If data are held in multiple places, how will you keep track of versions? Are your files backed up sufficiently and regularly and are backups stored safely? Do you know which version of your data files is the master? Who has access to which data during and after research? Is there a need for access restrictions? How will these be managed after you are dead? How long will you store your data for and do you need to select which data to keep and which to destroy? Confidentiality, ethics and consent Do your data contain confidential or sensitive information? If so, have you discussed data sharing with the respondents from whom you collected the data? Are you gaining written consent from respondents to share data beyond your research? Do you need to anonymise data, for example, to remove identifying information or personal data, during research or in preparation for sharing? Copyright Have you established who owns the copyright in your data? Might there be joint copyright? Have you considered which kind of license is appropriate for sharing your data and what, if any, restrictions there might be on re-use? Can you preserve for the long-term, personal information so that it can be used in the future? Sharing Do you intend to make all your data available for sharing or how will you select which data to preserve and share? How and where will you preserve your research data for the longer-term? How will you make your data accessible to future users?

### 6: Data sharing policy - BBSRC

*Plans for data management and sharing of the products of research. Proposals must include a supplementary document of no more than two pages labeled "Data Management Plan". This supplement should describe how the proposal will conform to NSF policy on the dissemination and sharing of research results.*

Need help with your plan? Sharing your data with other plans. This support article will give you key information about sharing data with other plans. If you have more than one plan on your account that supports sharing, the data will be automatically pooled and shared between eligible plans. For all other plans, you can share the data of up to 10 eligible plans on your account. How to share data with other plans. If you signed up to more than one plan in store or over the phone, your data will be automatically shared across eligible plans. When the transfer is complete, their plan will be under your account. You can see the plans that are shared on your account through My Vodafone. To opt-out of sharing, give our team a call on Which plans are eligible for sharing? All of our current plans are eligible for sharing. How to manage access to the pool of data with Data Control. Data Control is accessed through My Vodafone. Will the plan that has restricted data still be able to use the included data on their plan? Will the plan that has restricted data still be able to use data when connected to a Wi-Fi network? Can I share Data Add-ons? Data Add-ons will be automatically added to the shared data pool. How many plans can I share with? Is additional data shareable? Is the 5GB bonus data for your first month shareable? Can I share data with Business Advance plans? On our Business Advance Plans you get as much data as you want at speeds of up to 1. What else can we help with? Other ways to get help.

## 7: UK Data Service » Checklist

*Sharing your data with other plans. This support article will give you key information about sharing data with other plans. If you have more than one plan on your account that supports sharing, the data will be automatically pooled and shared between eligible plans.*

It is particularly important for unique data that cannot be readily replicated. Data sharing allows scientists to expedite the translation of research results into knowledge, products, and procedures to improve human health. There are many reasons to share data from NIH-supported studies. Sharing data reinforces open scientific inquiry, encourages diversity of analysis and opinion, promotes new research, makes possible the testing of new or alternative hypotheses and methods of analysis, supports studies on data collection methods and measurement, facilitates the education of new researchers, enables the exploration of topics not envisioned by the initial investigators, and permits the creation of new datasets when data from multiple sources are combined. Data should be made as widely and freely available as possible while safeguarding the privacy of participants, and protecting confidential and proprietary data. To the sharing of final research data for research purposes. To basic research, clinical studies, surveys, and other types of research supported by NIH. It applies to research that involves human subjects and laboratory research that does not involve human subjects. It is especially important to share unique data that cannot be readily replicated. To research applications submitted beginning October 1, Policies with respect to data sharing vary across countries. Investigators from foreign institutions and U. Even if NIH support is sought to transform or link datasets as opposed to producing a new set of data, the investigator should still include a data-sharing plan in the application. If there are limitations associated with a data-sharing agreement for the original data that preclude subsequent sharing, then the applicant should explain this in the application. That policy directs applicants to contact in writing or by telephone IC program staff during the development process of the application but no later than 6 weeks before the anticipated submission date. Applicants are encouraged to discuss their proposed data-sharing plan with IC program staff at that time. Final research data are recorded factual material commonly accepted in the scientific community as necessary to document, support, and validate research findings. This does not mean summary statistics or tables; rather, it means the data on which summary statistics and tables are based. For most studies, final research data will be a computerized dataset. For example, the final research data for a clinical study would include the computerized dataset upon which the accepted publication was based, not the underlying pathology reports and other clinical source documents. For some but not all scientific areas, the final dataset might include both raw data and derived variables, which would be described in the documentation associated with the dataset. Given the breadth and variety of science that NIH supports, neither the precise content for the data documentation, nor the formatting, presentation, or transport mode for data is stipulated. What is sensible in one field or one study may not work at all for others. It would be helpful for members of multiple disciplines and their professional societies to discuss data sharing, determine what standards and best practices should be proposed, and create a social environment that supports data sharing. NIH is planning to convene workshops where investigators with experience in data sharing will share their expertise with others. When the Principal Investigator PI and the authorized institutional official sign the face page of an NIH application, they are assuring compliance with policies and regulations governing research awards. NIH expects grantees to follow these rules and to conduct the work described in the application. Thus, if an application describes a data-sharing plan, NIH expects that plan to be enacted. If progress has been made with the data-sharing plan, then the grantee should note this in the progress report. In the final progress report, if not sooner, the grantee should note what steps have been taken with respect to the data-sharing plan. In some instances, for example, NIH may make data sharing an explicit term and condition of subsequent awards. Grantees should note that, under the NIH Grants Policy Statement, they are required to keep the data for 3 years following closeout of a grant or contract agreement. Contracts may specify different time periods. For the most part, NIH makes awards to institutions and not individuals with very few exceptions, such as F32 awards. Thus, the grantee institution may have additional policies and procedures regarding the custody,

distribution, and required retention period for data produced under research awards. Timeliness of Data Sharing Recognizing that the value of data often depends on their timeliness, data sharing should occur in a timely fashion. NIH expects the timely release and sharing of data to be no later than the acceptance for publication of the main findings from the final dataset. The specific time will be influenced by the nature of the data collected. Data from small studies can be analyzed and submitted for publication relatively quickly. If data from large epidemiologic or longitudinal studies are collected over several discrete time periods or waves, it is reasonable to expect that the data would be released in waves as data become available or main findings from waves of the data are published. NIH recognizes that the investigators who collected the data have a legitimate interest in benefiting from their investment of time and effort. NIH continues to expect that the initial investigators may benefit from first and continuing use but not from prolonged exclusive use.

**Human Subjects and Privacy Issues** The rights and privacy of human subjects who participate in NIH-sponsored research must be protected at all times. It is the responsibility of the investigators, their Institutional Review Board IRB, and their institution to protect the rights of subjects and the confidentiality of the data. Prior to sharing, data should be redacted to strip all identifiers, and effective strategies should be adopted to minimize risks of unauthorized disclosure of personal identifiers. Stripping a dataset of items that could identify individual participants is referred to by several different terms, such as "data redaction," "de-identification of data," and anonymizing data. In addition to removing direct identifiers, e. Deductive disclosure of individual subjects becomes more likely when there are unusual characteristics of the joint occurrence of several unusual variables. Investigators may use different methods to reduce the risk of subject identification. One possible approach is to withhold some part of the data. Alternatively, an investigator may restrict access to the data at a controlled site, sometimes referred to as a data enclave. Some investigators may employ hybrid methods, such as releasing a highly redacted dataset for general use but providing access to more sensitive data with stricter controls through a data enclave. Researchers who seek access to individual level data are typically required to enter into a data-sharing agreement. They may prohibit the recipient from transferring the data to other users or require that the data be used for research purposes only, among other provisions, and they may stipulate penalties for violations. For further information on these alternative mechanisms to share data while protecting participant confidentiality, see also the section concerning "Methods for Data Sharing. The procedures adopted to share data while protecting privacy should be individually tailored to the specific dataset. Investigators seeking NIH support for clinical trials may wish to consider several factors as they develop their data-sharing plan. Researchers who are planning clinical trials and intend to share the resulting data should think carefully about the study design, the informed consent documents, and the structure of the resulting dataset prior to the initiation of the study. For example, many early phase clinical trials use small samples, which make it difficult to protect the privacy of the participants. Furthermore, some study designs afford greater privacy protection to subjects than others. For example, longitudinal research poses challenges because the need to retain identifiers in order to link individual-specific data collected at different time points. NIH recognizes that the sharing of data from clinical trials and under other situations may require making the data anonymous or sharing under more controlled means, as through a restricted access data enclave. Sharing through data enclaves would grant access only to researchers who agree to preserve the privacy of subjects and provide means to protect the confidentiality of the data. It should be noted that the Privacy Rule is relatively new, and additional information and guidance will be shared on the DHHS website as soon as it is available. If research participants are promised that their data will not be shared with other researchers, the application should explain the reasons for such promises. Such promises should not be made routinely and without adequate justification. For the most part, it is not appropriate for the initial investigator to place limits on the research questions or methods other investigators might pursue with the data. It is also not appropriate for the investigator who produced the data to require coauthorship as a condition for sharing the data. Many research efforts supported by NIH do not include human subjects. Final research datasets from studies that do not include human subjects generally should not be constrained by the limitations deemed necessary and appropriate for human subjects. The data rights protection period lapses only upon expiration of the protection period applicable to the SBIR award, or by agreement between the small business concern and NIH. Issues

related to proprietary data also can arise when cofunding is provided by the private sector e. NIH recognizes the need to protect patentable and other proprietary data. Any restrictions on data sharing due to cofunding arrangements should be discussed in the data-sharing plan section of an application and will be considered by program staff. Methods for Data Sharing There are many ways to share data. Under the auspices of the PI Data enclave Mixed mode sharing. The method for sharing that an investigator selects is likely to depend on several factors, including the sensitivity of the data, the size and complexity of the dataset, and the volume of requests anticipated. Investigators sharing under their own auspices may simply mail a CD with the data to the requestor, or post the data on their institutional or personal Website. Although not a condition for data access, some investigators sharing under their own auspices may form collaborations with other investigators seeking their data in order to pursue research of mutual interest. Others may simply share the data by transferring them to a data archive facility to distribute more widely to interested users, to maintain associated documentation, and to meet reporting requirements. Data archives can be particularly attractive for investigators concerned about a large volume of requests, vetting frivolous or inappropriate requests, or providing technical assistance for users seeking help with analyses. There are several mechanisms for data sharing that investigators can use. For example, investigators sharing under their own auspices should consider using a data-sharing agreement to impose appropriate limitations on users. Such an agreement usually indicates the criteria for data access, whether or not there are any conditions for research use, and can incorporate privacy and confidentiality standards to ensure data security at the recipient site and prohibit manipulation of data for the purposes of identifying subjects. Many examples of data sharing agreements for specific datasets are available on the Internet, including the following: Datasets that cannot be distributed to the general public, for example, because of participant confidentiality concerns, third-party licensing or use agreements that prohibit redistribution, or national security considerations, can be accessed through a data enclave. A data enclave provides a controlled, secure environment in which eligible researchers can perform analyses using restricted data resources. Investigators may also wish to develop a "mixed mode" for data sharing that allows for more than one version of the dataset and provides different levels of access depending on the version. For example, a redacted dataset could be made available for general use, but stricter controls through a data enclave would be applied if access to more sensitive data were required. Investigators will need to determine which method of data sharing is best for their particular dataset. Data Documentation Regardless of the mechanism used to share data, each dataset will require documentation. Some fields refer to data documentation by other terms, such as metadata or codebooks. Proper documentation is needed to ensure that others can use the dataset and to prevent misuse, misinterpretation, and confusion. Documentation provides information about the methodology and procedures used to collect the data, details about codes, definitions of variables, variable field locations, frequencies, and the like. The precise content of documentation will vary by scientific area, study design, the type of data collected, and characteristics of the dataset. It is appropriate for scientific authors to acknowledge the source of data upon which their manuscript is based. Journals generally include an acknowledgement section, in which the authors can recognize people who helped them gain access to the data. Authors using shared data should check the policies of the journal to which they plan to submit to determine the precise location in the manuscript for such acknowledgement. Most journals now expect that DNA and amino acid sequences that appear in articles will be submitted to a sequence database before publication.

### 8: How to Develop a Data Management and Sharing Plan | Digital Curation Centre

*A data management plan (DMP) is a key tool for Principal Investigators (PI) to show the funder how the PI will meet, or already meets, their responsibilities to the funder for research data quality, sharing and security.*

### 9: Data management | Helping MIT faculty and researchers manage, store, and share data they produce

*The scientific process is enhanced by managing and sharing research data. Good data management practice allows reliable verification of results and permits new and.*

*Mechanics of materials 2nd edition solutions DeNoizr. Productivity Booster for the Common Man Ing the medievalin early modernengland Introduction to mixed-signal IC test and measurement Just Pembroke Corgis 2008 Calendar (Just) The managers handbook for corporate security C primer plus 5th edition eng Sanctuary (Volume 6) Research related to multi degree of freedom magnetic suspensions Inside the Wright Brothers Grits in office, profession and practice contrasted Food and Wine Festivals and Events Around the World The Baroness de Bode, 1775-1803 The world of chocolate. Frances Abington. Asrock 970 extreme4 manual English-language philosophy, 1750 to 1945 Kinematics and mechanisms design Woman In The Golden Ages 2006 bnw 3 series electrical schematic The antidumping and countervailing duty injury determination The Honorable Dorsey Pentecost, Esquire Creightons castle Nietzsche, politics, and modernity Successful personal selling through TA Amyloid beta and the cerebral vasculature Paula Grammas Caribbean Castaways English sample paper for class 10 sa2 Programming collective intelligence latest edition Doorways between the worlds Intelligence came first The complete fables of Jean de La Fontaine The art of war book review First book of radio and electronics Return to Skoki Lake Capitalism, economic individualism to todays welfare state Elementary linear algebra 7th ed Half a life novel In defence of scientism Don Ross, James Ladyman, and David Spurrett Pacific shore fishing*