

Guidelines for Research Data Management

Established by decision of the Executive Board on 15 December 2014

1. The institution emphasises the importance of treating research data with care and integrity. Research data constitute an essential component of the scientific research cycle. It is necessary to ensure that any research data generated during the entire scientific cycle can be traced and verified. To this end, it should be clear on what data are based or from where they have been derived, as well as where they can be found. The institution emphasises that free access to research data, supporting the research and publications, will help to guarantee the integrity, transparency and quality of the research. Offering access to research data supports the fundamental scientific premise that all research results should be verifiable by others. In some cases, legislation, regulations and other considerations (e.g. privacy) require restrictions to such access. Nevertheless, the basic principle is that information should be open to the public whenever possible and closed whenever necessary.
2. The institution as a whole and its faculties/schools, shared service units, researchers, external staff and research funders should work together to develop and implement a proper data policy. This should be done with due consideration for national and international legislation, requirements imposed by research funders and the customary forms of data management within the relevant scientific discipline.
3. These guidelines for working with research data shall apply to all types of research conducted at the University of Amsterdam (UvA), the AMC and ACTA, as well as at the Amsterdam University of Applied Sciences (AUAS), regardless of the source through which the research is funded. These guidelines shall thus apply to disciplines and topics that differ from each other in terms of scientific methods and conventions. These generally applicable guidelines should therefore be translated to the specific situation of the faculty, school, research institute, knowledge centre, graduate school or college.
4. The community of the UvA or AUAS as a whole, as well as individual researchers, should acknowledge their obligations to research funders, and they should be aware of the prevailing demands for data management and the applicable codes of conduct, which ensure the quality of data collection, data entry, data storage and data processing is properly secured.
5. The central guidelines for research-data policy described here shall be extended to the formulation of guidelines for working with research data for each research institute, graduate school or knowledge centre. These guidelines describe the responsibilities and roles of parties involved in research projects, as well as the rules and agreements concerning access to and the storage and archiving of research data. They also address support for and the education and training of researchers and students in the area of research data management (RDM).
6. A Data Steward shall be appointed for research in each research unit. They shall be expected to possess the experience and expertise necessary in order to offer advice and support to researchers with regard to RDM. In practice, this could be the research director, the head of a research group or the Principal Investigator. At the AUAS, a professor may be appointed as Data Steward. Local guidelines (for each faculty/school/graduate school) should describe who is to

appoint the Data Steward and how this role is to be carried out, with the goal of ensuring that research data are treated with care and integrity within the unit.

7. Data Stewards may delegate their duties, under the condition that these duties are documented in a Research Data Management Plan (RDMP). The Data Steward shall be responsible for RDM in one or more research projects, shall inspect progress concerning RDM at least once each year and shall report to the research director/school chair.
8. A Data Steward employed by the UvA and/or the AUAS will also be appointed for research conducted at the UvA and/or the AUAS in collaboration with external parties. For cases in which multiple co-investigators are working on a single research project, only one Data Steward shall be appointed.
9. If the Data Steward leaves the institution (or the research institute), an agreement shall be made concerning who is to succeed the Data Steward, thereby assuming ultimate responsibility for RDM in the research project or knowledge centre. This agreement is to be made with the research director of the relevant institute or the school chair of the school at the university of applied sciences during an exit interview.
10. Scientists shall bear primary responsibility for their own use of research data generated within their research. This responsibility is structured within the RDMP. Each researcher must prepare an RDMP for each project or programme. Researchers shall be free to structure the RDMP in a manner of their own choosing, except with regard to national or international legislation, the requirements of research funders, the policies of their own graduate schools, research institutes or knowledge centres, and the forms of data management that are customary within their own scientific disciplines.
11. Scientists should be aware that a proper RDMP should allow them to continue to support the results of their research in the future. It is therefore important to ensure the proper documentation of the choice of the research question, the design of the study, the method selected and references to the sources consulted. The proper management of research data through the RDMP remains important for researchers throughout the duration of their research, and it remains valuable in the long term. Moreover, the proper management of research data is important with regard to use by and accountability to private parties, governmental bodies, the business community and other organisations. The proper management of research data and the presence of the RDMP are to be discussed during the annual review.
12. Researchers should attempt to include the direct costs associated with RDM in the grant requests for their research proposals. Various online tools are available for making realistic estimates of the costs associated with RDM. The information specialists in the UvA and AUAS libraries are also able to assist researchers in the various faculties and schools in their efforts to compile RDM plans and budgets.
13. In order to support their researchers, institutes and graduate schools are responsible for ensuring the availability of a reliable technical infrastructure for working with research data. In doing so, they are making an active contribution to reducing security risks and their potentially negative social, economic and financial consequences.

14. Research data should:

- a. Be accurate, complete, authentic and reliable;
- b. Be able to be recognised, located and consulted when necessary;
- c. Be assigned the proper metadata;
- d. Use open standards for files and metadata whenever possible;
- e. Be assigned a persistent object identifier;
- f. Observe the relevant legislation and regulations for purposes of storage and access, in addition to any requirements imposed by research funders, prevailing data-policy plans and applicable codes of conduct with regard to data;
- g. Be made accessible to the public whenever possible; in other cases, offer restricted access (if restricted/inaccessible, provide justification), in conformity with the applicable principles of ethics, data sharing and open access;
- h. Be accessible to the Ethics Committee, which shall assess whether the research is in compliance with the rules and standards established in its statutes.

Data repositories should:

- i. Offer facilities allowing the data deposited in them to comply with Requirements a-h;
- j. Use open standards whenever possible for access (for purposes of both consulting and depositing) and metadata;
- k. Be secured against unauthorised access;
- l. Be certified (preferably);
- m. Be both technically and organisationally sustainable.

15. The minimal retention period for raw research data is 10 years. These data are to be open to the public whenever possible. If not, they should be made available to other scientific practitioners upon request, subject to the applicable legislation, regulations and any written exceptions. For the use of medical data and human tissue for scientific research and education, researchers must comply with agreements made between physicians, researchers and patient associations. These agreements are based on existing legislation concerning privacy and other aspects. Research data are to be archived in such a way that they can be consulted during this period at a minimum expense of time and effort.

16. Processed data derived from raw data shall be stored in compliance with applicable legislation and regulations (e.g. patent law), requirements imposed by research funders, prevailing data-policy plans and applicable codes of conduct. The minimal retention period for research data is five years following publication of the study.

17. Doctoral candidates shall deposit the datasets underlying their doctoral thesis in their choice of repository a. specific to the discipline and/or b. national and/or c. institutional. The publication shall be assigned a unique persistent object identifier (POI), thus ensuring that the data will always remain accessible and facilitating online and offline references to the publication.

18. For cases in which it is necessary to delete or destroy data, this must be done in conformity with the applicable legislation and regulations, requirements imposed by research funders, prevailing data-policy plans and/or applicable codes of conduct relating to such data. A data curator from the UvA or AUAS library can provide advice on these matters.