TIGER TIPS RESOURCES FOR AUBURN RESEARCHERS

U.S. Department of Energy Data Management Requirements

The U.S. Department of Energy's Office of Science has issued new requirements for the management of digital research data. In order to integrate data management planning into the overall research plan of a proposal, the following requirements will apply to **all** Office of Science research solicitations and invitations for new, renewal, and some supplemental funding issued <u>on</u> <u>or after October 1, 2014</u>. These requirements apply to proposals from all organizations including academic institutions, DOE National Laboratories, and others. These requirements do *not* apply to applications to use Office of Science user facilities.

All proposals submitted to the Office of Science for research funding must include a Data Management Plan (DMP) that addresses the following requirements:

- 1. DMPs should describe whether and how data generated in the course of the proposed research will be <u>shared</u> and <u>preserved</u>. If the plan is not to share and/or preserve certain data, then the plan must explain the basis of the decision (for example, cost/benefit considerations, other parameters of feasibility, scientific appropriateness, or limitations discussed in #4). At a minimum, DMPs must describe how data sharing and preservation will enable <u>validation</u> of results, or how results could be validated if data are not shared or preserved.
- 2. DMPs should provide a plan for making all research data displayed in publications resulting from the proposed research open, machine-readable, and digitally accessible to the public at the time of publication. This includes data that are displayed in charts, figures, images, etc. In addition, the underlying digital research data used to generate the displayed data should be made as accessible as possible to the public in accordance with the principles stated above. This requirement could be met by including the data as supplementary information to the published article, or through other means. The published article should indicate how these data can be accessed.
- 3. DMPs should consult and reference available information about data management resources to be used in the course of the proposed research. In particular, DMPs that

explicitly or implicitly commit data management resources at a facility beyond what is conventionally made available to approved users should be accompanied by written approval from that facility. In determining the resources available for data management at Office of Science User Facilities, researchers should consult the published <u>description of data management resources</u> and practices at that facility and reference it in the DMP. Information about other Office of Science facilities can be found in the <u>additional guidance from the sponsoring program</u>.

4. DMPs must protect confidentiality, personal privacy, <u>Personally Identifiable Information</u>, and U.S. national, homeland, and economic security; recognize proprietary interests, business confidential information, and intellectual property rights; avoid significant negative impact on innovation, and U.S. competitiveness; and otherwise be consistent with all applicable laws, regulations, and DOE orders and policies. There is no requirement to share proprietary data.

DMPs will be reviewed as part of the overall Office of Science research proposal merit review process. <u>Additional requirements</u> and review criteria for the DMP may be identified by the sponsoring program or sub-program, or in the solicitation. DOE has provides a number of valuable links in regard to these new requirements including <u>Frequently Asked Questions</u> and a general <u>Statement on Digital Data Management</u>. As a note, the Auburn University Libraries have a number of resources/tools available to help researchers:

- 1. Make their research (including datasets) publicly discoverable and accessible through the university's institutional repository, AUrora (http://aurora.auburn.edu/).
- 2. Preserve their research materials (including datasets) through the Alabama Digital Preservation Network, or ADPNet (http://adpn.org/).

Questions related to these resources can be directed to <u>Jaena Alabi</u> (AUrora liaison) or <u>Andrew Wohrley</u> (subject specialist for data management) in the AU Libraries.