The NIST Center for Neutron Research (NCNR) is a user facility serving thousands of scientific researchers per year. NCNR has a history of providing open data to the community: raw data taken from the instruments has been made available on our website for decades. More recently we have begun a push to address the other aspects of the FAIR principles, to increase the value of data taken at our facility to the experimenters, and the scientific community at large. We are developing an improved metadata workflow that will help users add sample-specific metadata to their stored datafiles, and letting them automate their data processing and making the experimental process more robust and transparent. We are in the process of implementing: automated creation of a DOI for each user experiment, tooling for adding sample metadata to our data streams, capture of process metadata and an expanded search infrastructure for data and metadata.