# OCHRE DATA SERVICE

## Sandra R. Schloen

The newly established (November 2011) OCHRE Data Service supports the use of the Online Cultural and Historical Research Environment (OCHRE) by research projects at the Oriental Institute and elsewhere. OCHRE is an innovative online database system designed to record, integrate, analyze, publish, and preserve cultural and historical information in all of its digital forms. Over the past several years it has been used by major Oriental Institute projects, including the Persepolis Fortification Archive Project, the Chicago Hittite Dictionary, and the Neubauer Expedition to Zincirli. Through the OCHRE Data Service this database system is now being made more widely available.

The staff of the OCHRE Data Service consists of a team of research database specialists assisted by part-time student workers who have been trained to do data entry and specialized photography. The OCHRE Data Service collaborates closely with the Digital Library Development Center (DLDC) of the University of Chicago Library, which hosts the high-performance database server on which OCHRE runs and provides professional system support, including

reliable data backups and a disaster-recovery protocol. The DLDC also contributes its expertise on the latest standards and procedures for digital data curation and archiving.

Research Database Specialists Miller Prosser and Sandra Schloen consult with researchers about their projects in order to: (1) determine the best strategy for recording and managing complex project information of different kinds; (2) assist with data entry, automatic conversion of existing data, and the integration of data within a coherent and easy-to-use framework; (3) facilitate public viewing of some or all of a project's data with appropriate user-interface options and querying capabilities; and (4) manage the process of archiving a project's data to ensure its long-term preservation.

In addition, advanced imaging services are provided by the OCHRE Data Service through the digital imaging laboratory established in the basement of the Oriental Institute by the Persepolis Fortification Archive Project directed by Matthew Stolper. The lab's specialized equipment is being used to create a highly accurate and comprehensive record of thousands of cuneiform tablets excavated decades ago by the Oriental Institute at Persepolis in Iran. The advanced imaging techniques developed for these clay tablets, namely, Reflectance Transformation Imaging (RTI) and BetterLight scanning, are now being applied to other objects such as fossils, thereby making sets of high-quality images available to a wider range of projects. The OCHRE database system is used for the digital curation of the vast collection of large image files created by the lab, supporting the process from initial image capture to the addition of metadata to describe the images, culminating in their long-term archiving.

## Active OCHRE Projects at the University of Chicago

- Electronic Chicago Hittite Dictionary (Harry Hoffner and Theo van den Hout, Oriental Institute)
- Marathi Online (Philip Engblom, South Asian Languages and Civilizations)
- Neubauer Expedition to Zincirli (David Schloen, Oriental Institute)
- Persepolis Fortification Archive Project (Matthew Stolper, Oriental Institute)
- Tell al-Judaidah Publication Project (Lynn Swartz Dodd, University of Southern California)

### Pilot OCHRE Projects at the Oriental Institute, beginning Summer 2012

- Computational Research on the Ancient Near East: An Archaeological Data Integration, Simulation, and 3-D Visualization Initiative (Timothy Harrison, University of Toronto; David Schloen, Oriental Institute)
- Electronic Chicago Demotic Dictionary (Janet Johnson and Brian Muhs, Oriental Institute)
- Ras Shamra Text Inventory (Dennis Pardee and Miller Prosser, Oriental Institute)

## Active OCHRE Projects beyond the University of Chicago

• Leon Levy Expedition to Ashkelon (Lawrence Stager, Harvard University; Daniel Master, Wheaton College)

- Conrad Akko Excavation Publication Project (Martin Peilstöcker, Israel Antiquities Authority and University of Mainz)
- Jaffa Cultural Heritage Project (Aaron Burke, University of California, Los Angeles; Martin Peilstöcker, Israel Antiquities Authority)
- Lives, Individuality and Analysis (Scott Lidgard, Field Museum of Natural History, Chicago; Lynn Nyhart, University of Wisconsin, Madison)
- Old Assyrian Research Environment (Edward Stratford, Brigham Young University)
- Zeitah Excavations (Ron Tappy, Pittsburgh Theological Seminary)

Anyone interested in volunteering time, data-entry skills, and mental energy to any of our projects is encouraged to contact us at ochre@uchicago.edu. To learn more about the OCHRE Data Service and the OCHRE database system, visit http://ochre.uchicago.edu.