# RESEARCH SUPPORT

# **COMPUTER LABORATORY**

# John C. Sanders

As I write this introduction the Oriental Institute Computer Laboratory is starting its thirteenth year of operation. I am not worried or afraid! Are you? Several important issues concerning the continued operation of the Lab will be decided this coming year: the Lab's role in the Institute as a whole, and how best to ensure the continued upkeep and maintenance of the Institute's website are at the top of the list. But enough of looking forward at this moment. Instead, lets

RESEARCH

look back to what has been accomplished within the Lab in 2001/2002, as it was a busy year in its own right.

### **Laboratory Projects**

# 1905-1907 Breasted Expedition to Egypt and Sudan

In August 2001, the Institute's website was enlarged with the publication of 1,055 photographs from the Institute's Photographic Archives, taken by James Henry Breasted, the Oriental Institute's founder, during his Archaeological site photograph: Parthian architectural detail at early travels throughout Egypt and Sudan. Hatra These images and their captions were origi-



nally published in the 1975 Oriental Institute text/microfiche publication entitled The 1905-1907 Breasted Expedition to Egypt and Sudan: A Photographic Study. Once again, I thank all of the faculty, staff, and volunteers who helped in the production of this exhibition. Initial reactions from the scholarly community and the public have been very positive.

# Mellon Grant – Less Commonly Taught Languages

For three days in mid-October, the Lab was the focus of the external review of the Institute's Less Commonly Taught Languages Mellon grant. The review went very well, with many positive suggestions for improvements that will make an already successful piece of computer software even better by the time it is ready for a test run in a classroom situation. Congratulations to Janet Johnson, Sandy Schloen, and Michael Berger for a job well done.

As was the case during summer 2001, again this summer a host of students are using the Lab's Windows and Macintosh computers to add and/or correct data for several of the Middle Egyptian texts being entered into the METEOR program's Readingbook.

# **Electronic Publications**

In conjunction with Thomas Urban, Oriental Institute Publications Office, Professor Janet Johnson posted the following eleven Adobe Portable Document Format (PDF) files of the Chi-

cago Demotic Dictionary on the Institute's website: the Introduction, nine letters (Y, F, R, L, H, H, K, T, D), and the Problems file.

Computer Lab assistant Katherine Strange Burke finished processing and markup for 34 News & Notes articles, going back to issue number 122 (January-February 1990), as I started to write this article. All of them are now available on the Institute's website. Eight or ten additional News & Notes articles are in the text processing and scanning stages, as well, and will go up on the website over summer 2002.



Archaeological site photograph: "Arch" at Ctesiphon, southeast of Baghdad



Archaeological site photograph: Sphinx Temple, Khafre pyramid right distance, Giza

this in next year's Annual Report.

The 2000/2001 Oriental Institute Annual Report was made available on the Institute website in early February, as was the Publications Office's Print Publications Catalog — February 2002, the latter using the PDF format.

The 1980 Oriental Institute publication *Ptolemais Cyrenaica*, by David Nasgowitz, will be the next addition to the Photographic Archives section of the Institute website. The text was processed via Optical Character Recognition (OCR) in December, and we hope to start scanning the photographs during summer 2002. I'll report more on

#### Archaeological Site Photographs from Mesopotamia and Egypt

A total of 993 photographs from archaeological sites in Mesopotamia (414 photographs) and Egypt (579 photographs), shot between 1973 and 1990 by John and Peggy Sanders, were made available on the website in April 2002 as part of the Individual Scholarship section. I want to thank Computer Lab assistant, Katherine Strange Burke, for her work in both scanning the original slides and creating the HTML pages and maps.

Mesopotamian sites are: Aqar Quf (Dur Kurigalzu) [25], Assur [12], Babylon [33], Tell Billa [4], Borsippa [18], Ctesiphon [4], Eridu [16], Tepe Gawra [3], Girsu [11], Tell Harmal [10], Hatra [30], Isin [13], Khafajah [5], Khorsabad (Dur Sharrukin) [13], Kish [22], Lagash [15], Nimrud [21], Nineveh [20], Nippur [18], Abu Salabikh [11], Samarra [14], Seleucia [9], Sippar [4], Tell al'Ubaid [2], Ur [16], Uruk (Warka) [57], and Zibliyat [8].

Egyptian sites are: Abusir [37], Deir el-Bahri [33], Edfu [27], Giza [179], Medinet Habu [41], Karnak [68], Valley of the Kings [26], Luxor [51], Deir el-Medina [12], Memphis [6], Ramesseum [15], and Sakkarah [84].

#### Women's Board Grant – Map Digitization Pilot Project



Archaeological site photograph: Parthian "slipper" coffin at Nippur

Under the overall supervision of Charles Jones, the Research Archives and the Computer Laboratory were awarded a grant in May 2002 by the Women's Board of the University of Chicago to develop a program to preserve and electronically distribute a portion of the map collection of the Oriental Institute to scholars and the public worldwide via the Internet. Initial work on the project will start in fall 2002, as we determine which maps to use in the pilot project and which technology is best suited to deliver the maps over the World Wide Web (WWW). Progress reports will appear in future *Annual Reports*.

# Museum Education's On-line Teacher Resource Center

Taking over the role of Teacher Services and Family Projects Coordinator from Anna Rochester in November 2001, Wendy Ennes has continued to develop the Online Teacher Resource Center component of the Institute's website. Along with Nitzan Mekel-Bobrov, Near Eastern Languages and Civilizations student volunteer/programmer, she and I had many discussions throughout the year on design and layout, as well as content and delivery issues, because the audiences for these materials demand



Archaeological site photograph: "Stepped" pyramid at Sakkarah

the use of audio and video resources that have yet to appear in other parts of the Oriental Institute's website. The fruits of Wendy's work, and Anna's before her, will open to the public in 2002/2003, and we will report on it fully in next year's *Annual Report*.

# University-wide, Networking Authentication Change

My biggest concern in May 2002 was the change in the university's authentication methods for accessing the NSIT unix cluster computers (harper, midway, home, etc.). It was a rocky transition because of some unforeseen issues that caused major disruptions in NSIT email service for almost two weeks. And email was not supposed to be a part of this spring's alterations (NSIT email changes are scheduled for fall 2002). All seems quiet now, but this fall's email switch promises even more excitement, and plenty of late nights trying to figure out why it isn't all working as it was supposed to.

# **XSTAR Project**

At the end of November a new Oriental Institute research and publications project, The XSTAR Project: XML System for Textual and Archaeological Research, under the direction of David Schloen and Gene Gragg, was announced on the Institute website. The goal of XSTAR project is to create a sophisticated Internet-based research environment for special-

ists in textual and archaeological studies. In particular, XSTAR is intended for archaeologists, philologists, historians, and historical geographers who work with ancient artifacts, documents, and geographical or environmental data. It will not only provide access to detailed, searchable data in each of these areas individually, but will also integrate these diverse lines of evidence as an aid to interdisciplinary research.



Archaeological site photograph: Colossus of Memnon Ramses II at Ramesseum

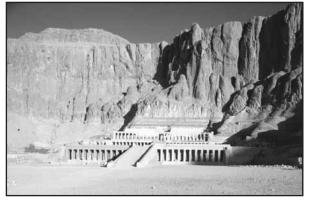
# Developing a New Oriental Institute Website Design

The discussions I started with the University's Networking Services and Informational Technologies (NSIT) group back in 2000/2001 regarding the moving of the Institute's entire website from our own in-house web server to an NSIT supported server were put on hold most of this year due to a shifting of computer priorities and budget constraints. The web hosting advantages offered by a move to NSIT services will cause me to reopen these discussions this coming year, however, with Gil Stein, once he has adjusted to his new role as director.

# Laboratory Equipment/Institute Resources

In November 2001, several hardware upgrades were made to Laboratory computers:

• In conjunction with the Museum, the large-format  $(11 \times 17)$  scanner now has a transparency adapter attached to it, so we can scan negative as well as positive materials at up to 800 dpi.



Archaeological site photograph: Deir el-Bahri, Egypt

• The 800 MHz Dell Windows computer now has a second, 40 GB, hard disk installed, loaded with the Windows 2000 operating system in a dual-boot configuration with Windows 98. This was done to accommodate the loading of the Oracle 9-i database program for use by the Diyala Publications Project as a test-bed for their application development.

• The Macintosh computer which supports the CD burner in the Lab was changed to a Macintosh G3 with 196 MB RAM.

- A new 700 MHz Apple iMac, with the lab's first CD-RW (read-rewriteable) drive, was installed in the Laboratory in March 2002, replacing an older Apple Power Macintosh computer.
- Several software additions have also upgraded the Laboratory's computer applications. With the assistance of Todd Schuble, GIS Support Specialist, Social Science Research Computing, four copies of the ArcGIS (ArcInfo, ArcMap, ArcView) software were installed on Institute computers in January 2002: one in Aslıhan Yener's lab, two in Tony J. Wilkinson's lab, and one copy on the 800 MHz Dell computer in the Computer Laboratory.
- A single seat license for the Oracle Standard Edition database program (server and client components) was obtained for the Laboratory's 800 MHz Dell computer, to be used by the Diyala Publications Project as a test-bed for converting their original FoxPro database of Diyala objects and photographs into a database capable of being served via the Internet and the World Wide Web. I want to thank George Sundell, a volunteer and former AT&T database administrator consulting with the Diyala Publications Project, for his efforts to install the software. It was a pleasure to watch a "card-carrying" database expert do what he does best. The Oracle software product, used by many Fortune 500 companies to manage their computer operations, is a full-featured, professional strength

application whose installation can be a daunting task first time around. Thanks again, George!

• I set up the first Macintosh System X computer in the building the last week of May. It is for the APIS Project (Advanced Papyrological Information System), and will temporarily be set up in the Computer Lab for use by Near Eastern Languages and Civilizations student Hratch Papazian. Over the next few months I will become very familiar with this newest, unix-based, Macintosh operating system — as it is the future for all Macintosh computers.

# World-Wide Website

For further information concerning several of the above-mentioned research projects, the Institute's World Wide Web (WWW) database, and other Electronic Resources in general refer to the What's New page on the Oriental Institute's website, at (the following URLs are case sensitive):

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http://www-oi.uchicago.edu/OI/INFO/OI\_WWW\_New.html

The homepage for the Oriental Institute website is at:

http://www-oi.uchicago.edu