Introducing STATPack™

SECURE **T**ELECOMMUNICATIONS **A**PPLICATION **T**ERMINAL **P**ACKAGE

by Ann Fruhling, PhD, UNO and Tony Sambol, Assistant Director, NPHL

The NPHL has been working with Dr. Ann Fruhling, Assistant Professor at the University of Nebraska at Omaha's College of Information Science and Technology, on a new project to help laboratories become more prepared for a bioterrorism event. The project which is funded by a Nebraska Research Initiative (NRI) grant aims to develop a laboratory-based **S**ecure **T**elecommunications **A**pplication **T**erminal **P**ackage™, termed "STATPack™". The goal of the NRI program is to leverage Nebraska resources to develop new technologies that may have commercial potential.

STATPack™ is a secure, dedicated, HIPPA compliant web-based network system that will support telecommunications between clinical laboratories in Nebraska. In the initial phase of field implementation, the STATPack™ will be placed in regional hospital laboratories throughout Nebraska. This connectivity will allow for immediate communication and data transfer of urgent test related problems by transmitting images and text. This system will serve as means for providing immediate consultation with the NPHL, for example, a "unknown" organism growing from a culture that a laboratory may be processing, or a "suspicious" package delivered to the laboratory. The need for such a system became apparent during the anthrax scare in 2002 when laboratorians wanted immediate answers to questions concerning processing unusual organisms.

The STATPack™ system **(Figure 1)** consists of a computer terminal and a high resolution digital camera by which pictures of culture plates may be taken. These images and descriptive text messages may be sent to the NPHL for consultation. NPHL will receive a notice that a laboratory is requesting consultation via a pager and on the system. Should a message need to be communicated to the laboratories, the STATPack™ system allows the NPHL to send notices to laboratories including an audible computer alarm.

A future version of the STATPack™ is planned that will allow laboratories to capture microscopic images of Gram or Fluorescent Antibody (FA) stains and send these images to a consultant.

Objectives of the STATPack include:

Provide a web-based means where the NPHL can interact and share current and timely information with rural health laboratories

Provide a secure network for transmission of sensitive biosecurity information including health messages and images of laboratory specimens for "real-time" consultation that is HIPPA compliant.

Provide a repository of laboratory specimen images

Provide a repository of laboratory messages.

Provide a user-friendly interface for clinical laboratorians and the NPHL staff.

The NPHL will utilize the STATPack™ system to increase statewide laboratory responsiveness in the identification of biological microorganisms that may be associated with bioterrorism.

For questions about the STATPack™, please contact Tony Sambol at 402-559-3032 or asambol@unmc.edu.

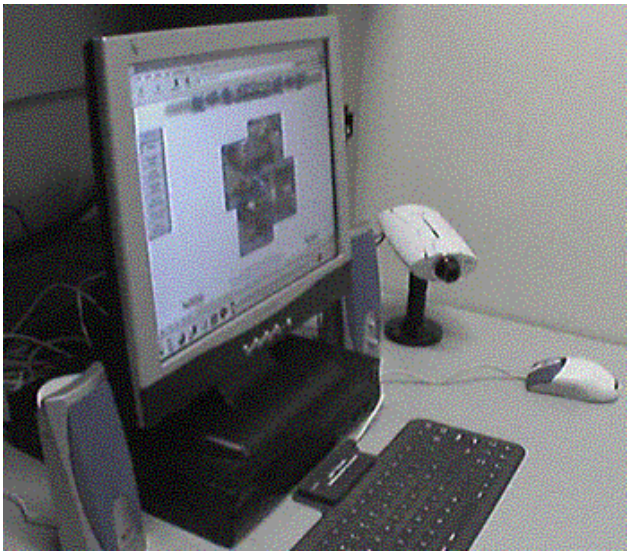

Figure 1