

Enterprise Enabler[®]

Value Study Baylor Automates Lab Process

THE CHALLENGE:

Improve Speed, Accuracy, and Information Flow

Baylor College of Medicine's Department of Molecular and Cellular Biology Core Lab services needed increased data availability for researcher's projects, requests, and status reports. Information needed to be accurately conveyed in a timely manner for analysis and trackable billing of services. Data was handwritten and, in some cases, painstakingly entered after the fact, introducing chances for error. Research monitoring, evaluations, and result analyses were not at all practical, with the existing paper-based system.

THE SOLUTION:

Create a Web-Based Infrastructure to Manage Lab Operations

Stone Bond's Enterprise Enabler[®] Laboratory Information Management System (EE-LIMS) replaced Baylor's paper-based system and automated the entire laboratory process. EE-LIMS manages the full workflow cycle of laboratory test requests including submittal, entering, reviewing results, notes, billing and gathering statistics. Customizable to handle any similar laboratory process, the Web based system accepts data entry from wireless handheld PDAs (Personal Digital Assistant), and is accessible by authorized users from Web browsers on any PC.

Features of EE-LIMS include:

- Requests for various types of tests can be made by authorized researchers at any time via desktop Intranet browser, eliminating trips to the lab to submit paper forms.
- Security is designed for multiple types of users, including researchers, lab and research management, lab technicians, and accountants.
- Lab data and notes can be entered on handheld, wireless PDAs. The workflow is managed so the technicians can see new requests, those in progress, select which to work on, and enter the requested data and results.
- Authorized users can track request status and data as it progresses.
- Billing information and statistics relevant to the request are captured upon completion and integrated seamlessly with Baylor's SAP system.

EE-LIMS provides added functionality and flexibility:

- Ad hoc interfaces can be built easily, making data accessible for spreadsheets or other analysis tools to study and create statistics.
- Any database system can be used internally.
- Billing information can be sent directly to any billing system.

THE BENEFITS:

Faster Processing and Heightened Accuracy

- **Eliminates paper.** Requests are thoroughly tracked and can be immediately located and viewed.
- **Automates data capture.** Leverages cumulative historic information and data associated with requests, enabling analysis and automated calculation of statistics at any time.
- **Measures process performance.** Enables process improvement for future analyses.
- **Interfaces to SAP.** Accurate and complete billing by automating data transfer to the SAP system via an authorized mechanism. Payment for services has increased to 100%.

Automate Laboratory Operations

- *PDA Data Entry*
- *Data Analysis*
- *Audit Trails*
- *Billing Integration*

"We needed for our Core Lab services to be more readily available to all of our researchers and to make the status and information easily accessible to anyone with proper security. With all of our statistics available electronically, our research monitoring, evaluations, and analyses could then be more comprehensive, accurate and timely."

Martin P. Weick

Administrator of the Department
of Molecular and Cellular Biology