BINF 8211/6211
Design and Implementation of Bioinformatics Databases
Lecture #24

Dr. D. Andrew Carr
Dept. Bioinformatics and Genomics UNCC
Spring 2016

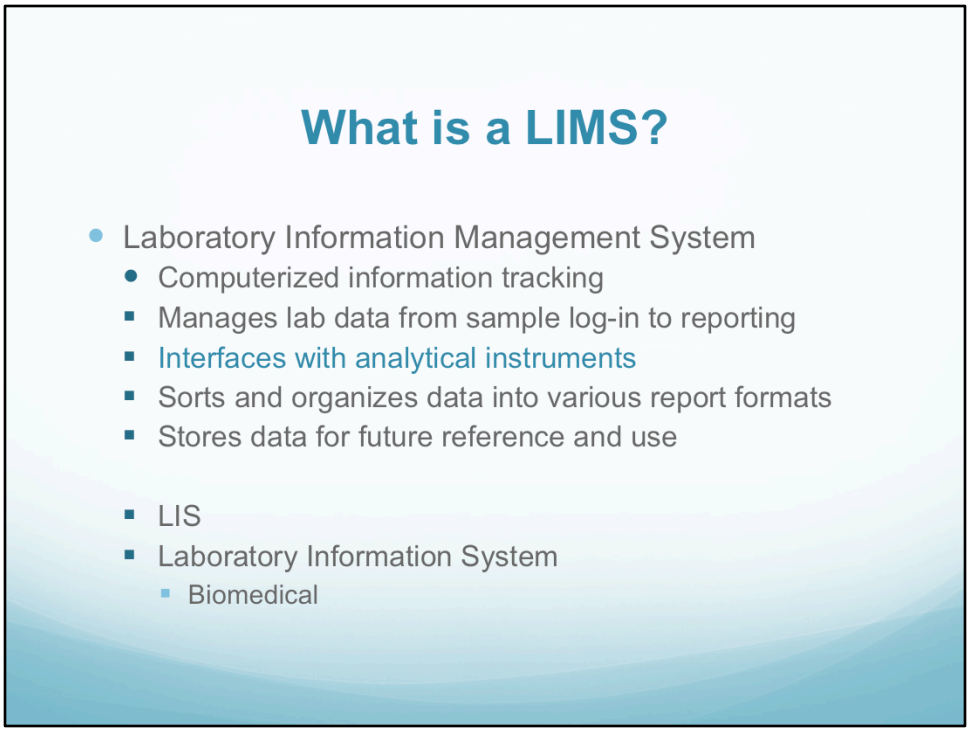
Presentation Dates

April 19th
- 8, Danny Freese

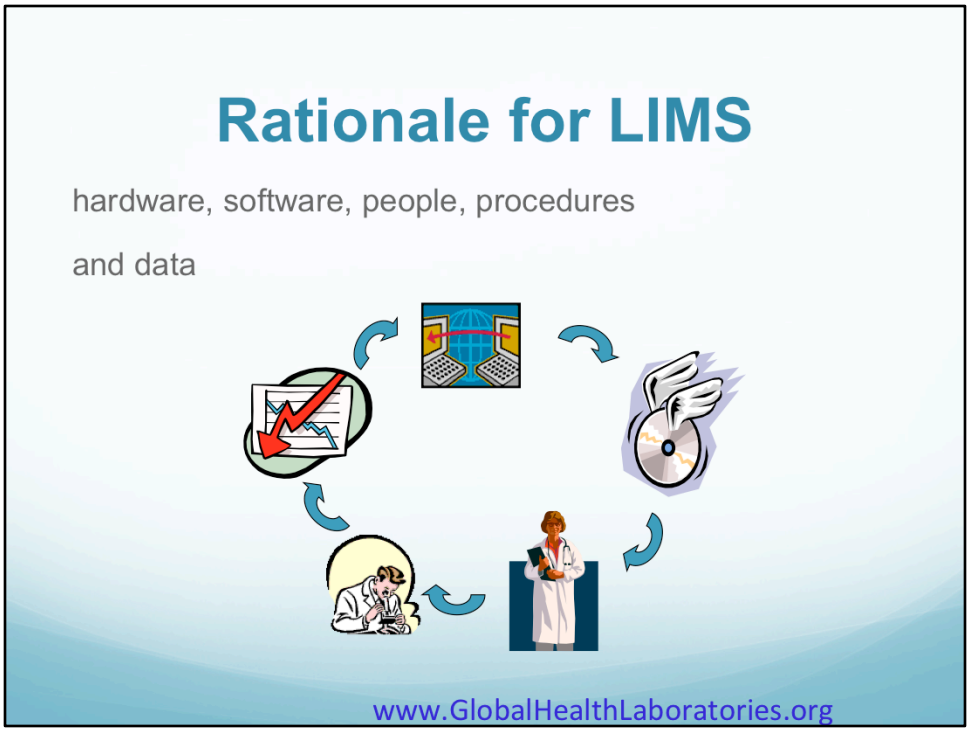
- April 21th
  - 1, Carrie Barlow ??
  - 6, Matthew Deitz
  - 3, Shelvasha Burkes
- April 26th
  - 14 Seyed Nader Nazami
  - 4, John Cashere
  - 9, Samantha Kaiser
  - 5, Molly Crowder
- April 28th
  - 13, Sasan Najar
  - 16, Aarthi Sriram
  - 18, Lei Xu
  - 10, Amoolya Maddali
  - 17, Aneeta Uppal
- May 3rd
  - 11, Shelby Matlock
  - 15, Tyler Robbins
  - 7, Heena Desai
  - 2, Brandon Burciaga

LIMS

- What does LIMS stand for?
- What is the difference between a LIMS and a LIS?
- What is the most common DBMS type used for development of LIMS and LIS systems?
  - Why?
- What are the most common challenges in development and design of a LIMS system?

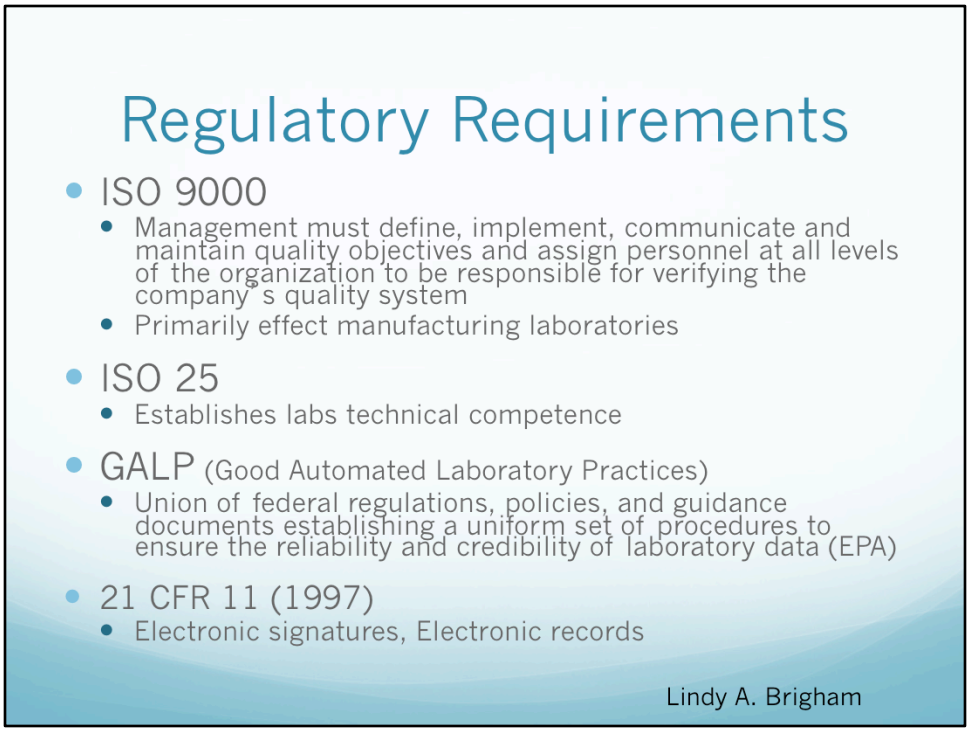


LIMS is an abbreviation for Laboratory Information Management System, which is a computer based solution providing, streamlined workflow automation and management in the laboratory.



One fundamental aim if LIMS is the integration of many different sub-processes, bringing together and consolidating the efforts of potentially many individuals and consequently speeding up the whole process.

The pen-ultimate challenge is integration of all of these components. The ultimate challenge is keeping the system flexible and forward capable.


Regulatory Requirements
ISO 9000
Management must define, implement, communicate and maintain quality objectives and assign personnel at all levels of the organization to be responsible for verifying the company's quality system
Primarily effect manufacturing laboratories
ISO 25
Establishes labs technical competence
GALP (Good Automated Laboratory Practices)
Union of federal regulations, policies, and guidance documents establishing a uniform set of procedures to ensure the reliability and credibility of laboratory data (EPA)
21 CFR 11 (1997)
Electronic signatures, Electronic records
Lindy A. Brigham

Rubric for Presentations

- Was the topic “scientifically” interesting?
- Is the ER diagram clear?
  - Is it normalized properly? If not point out the which component needs to be fixed.
- Was the system able to handle an additional query?
- What other questions could be asked of the system?