Clinical Bioinformatics: New Challenges for Human-Centered Decision-Support Systems

Speakers:
Riccardo Bellazzi, University of Pavia
Patrice Degoulet, Hospital Georges Pompidou (Paris)
Amnon Shabo, IBM Research (Haifa)
Vimla Patel, New York Academy of Medicine

Moderator:
Edward H. Shortliffe, Arizona State University
1990s: Relationship of Medical Informatics and Bioinformatics

Solution: “Biomedical” Informatics

- Biological and Clinical Applications
- Anticipation of their Future Clinical Interdependencies
- Solution: “Biomedical” Informatics
- Relationship of Medical Informatics and Bioinformatics
Biomedical Informatics in Perspective

Clinical Bioinformatics

Bioinformatics and Structural (Imaging) Informatics

Methods, Techniques, Theories

Health Informatics: Clinical Informatics and Public Health Informatics

Informatics in Translational Science: Translational Bioinformatics (TBI) and Clinical Research Informatics (CRI)

Basic Research

Applied Research and Practice

Molecules, Cells, Tissues, Organs

Patients, Individuals, Populations, Societies
Four Presentations

• Clinical Bioinformatics – decision support through knowledge and data integration (Riccardo Bellazzi)

• Bioclinical data warehouses and translational research (Patrice Degoulet)

• The Data Representation Challenge: Encapsulate and Bubble-up (Amnon Shabo)

• Cognitive Foundations for Decision Support in Clinical Bioinformatics (Vimla Patel)
Discussion

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