The Application Of Integration Approaches Through Biomedical Informatics In Health

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Outline

- Introduction
- Technologies and resources employed
- Applications of BMI
- References

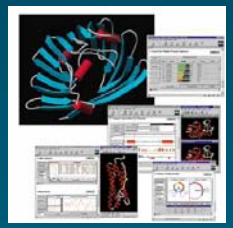
Genomic Medicine

Human Genetic Variation

Technologies | Data | Applications

Information

Genomic



Clinical

Genotyping

Haplotyping

Individual genomics (SNPs and mutations)

Diagnosis

Pharmaco-genetics

BIOMEDICAL INFORMATICS

Gene Expression DNA arrays MS, 2D ef

Functional genomics

Proteomics

Disease reclassification Pharmaco-genomics

Technologies | Data | Applications

Molecular causes of diseases

Genomic medicine

Individualised healthcare

Molecular medicine

Preventive medicine

INFOBIOMED: Structuring European Biomedical Informatics to Support Individualised Healthcare

- 17 institutions. 10 countries
- Main objective: "Set a durable structure for BMI at the European level that supports its consolidation as an integrative scientific discipline that exploits the synergies between BI and MI."
- Specific objectives:
  - “Community”: education, training, mobility, spreading knowledge, creating a self-sustainable structure.
  - “Scientific”: progress in data interoperability, interfacing of methods, technologies and tools, pilot applications.

Biomedical Informatics

Clinical

Genomic

Data

Informatics

Health Research

INFOBIOMED

WP1 NoE management

WP2 Dissemination and communication

WP3 Training and mobility

WP4 Data interoperability

WP5 Methods, technologies and tools

WP6 Pilot applications

Integrated vertical approach of BMI technologies used in INFOBIOMED

INFOBIOMED BIOMEDICAL INFORMATICS TO SUPPORT INDIVIDUALISED HEALTHCARE

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- Project Presentation
  - Summary
  - Objectives
  - Background
- Partners
  - Partners Description
  - Other Participants
- Project Activities
  - Dissemination and communication
  - Training and Mobility
  - Data Interoperability and management
  - Methods, technologies and tools
  - Pilot applications
- Contact Information

INFOBIOMED News

INFOBIOMED has participated with an **oral communication at the XIX International Congress of the European Federation for Medical Informatics (MIE2005)**, last August 28 - September 1, 2005.

Welcome to the European Network of Excellence INFOBIOMED Website

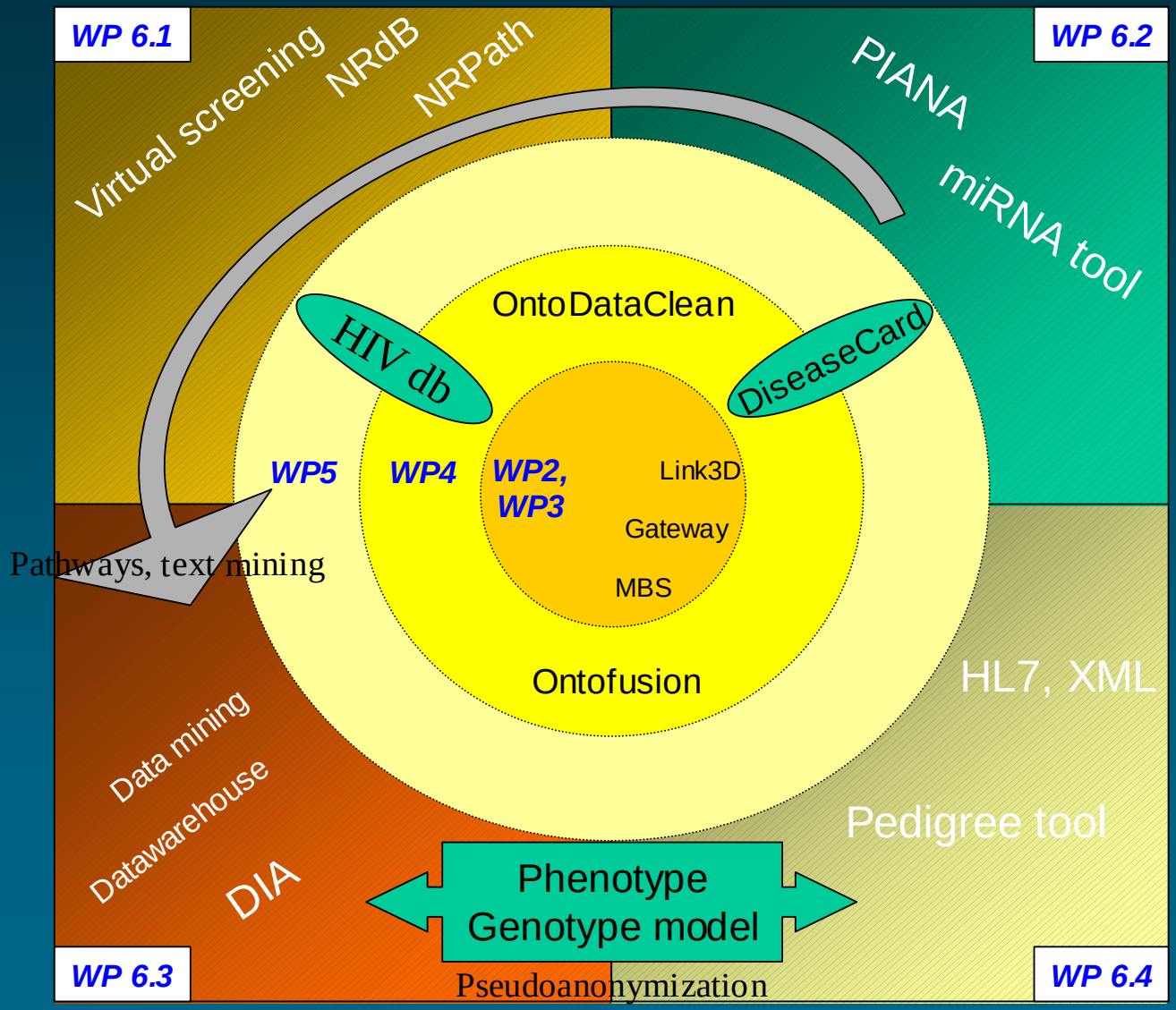
Structuring European Biomedical Informatics to Support Individualised Healthcare funded by the Information Society Directorate-General of the European Commission within the VI Framework Programme for Research and Technological Development.

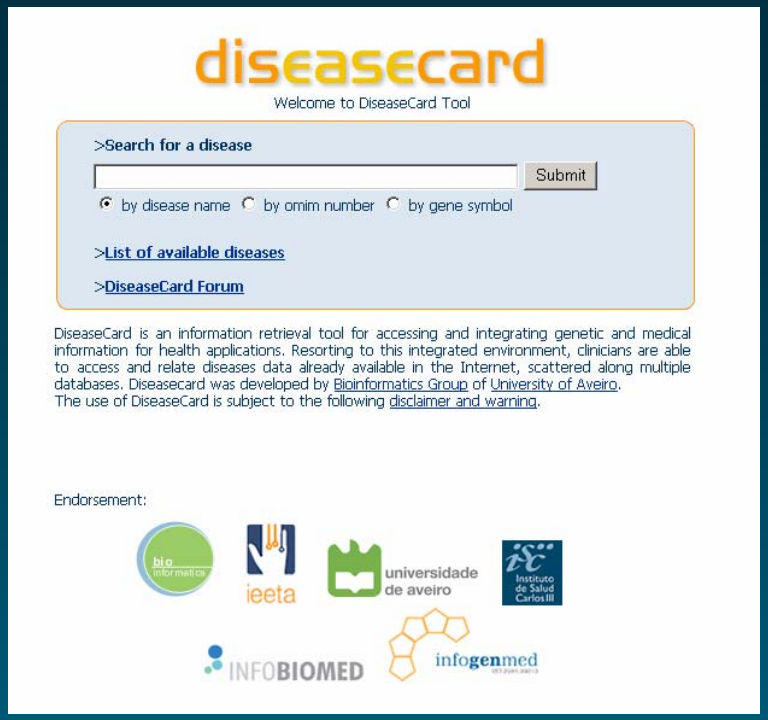
NEW INFOBIOMED MOBILITY BROKERAGE SERVICE
Find out about mobility opportunities in Biomedical Informatics

First INFOBIOMED Training Challenge

European Biomedical Informatics Gateway
Check our repository containing extensive information and the latest news on Biomedical Informatics in Europe

INFOBIOMED: technologies, tools and resources



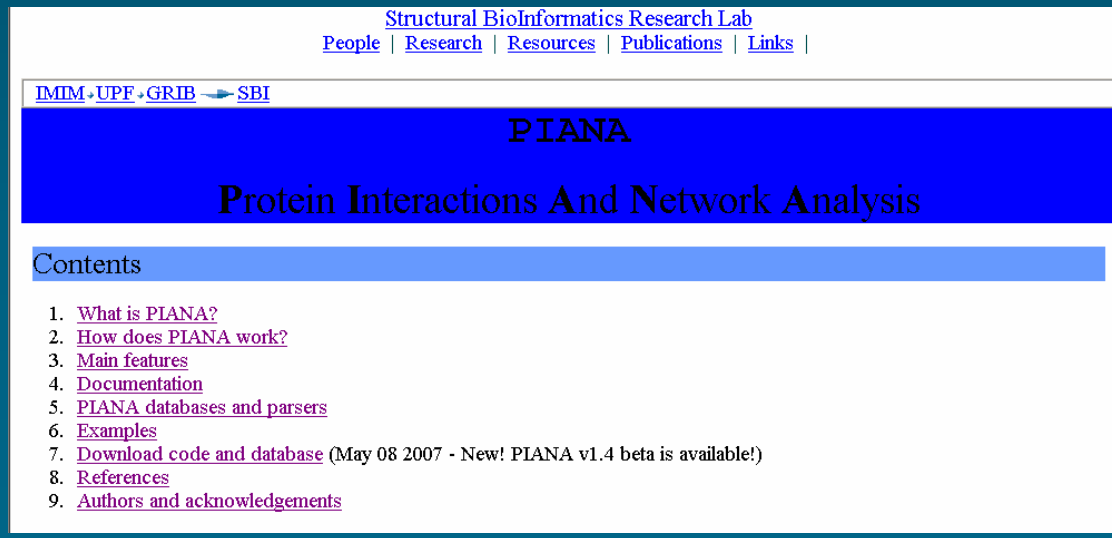


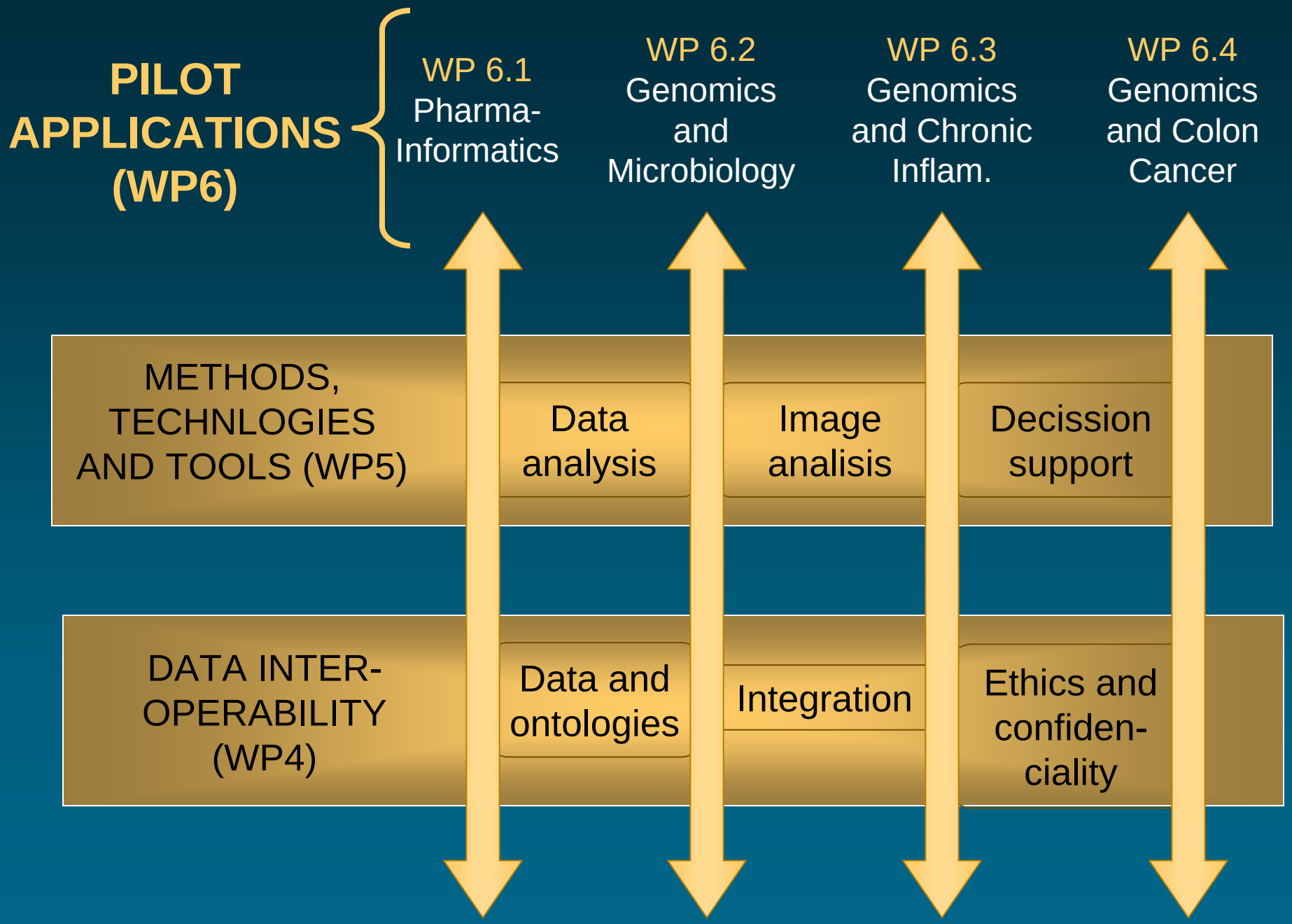
Diseasecard

http://bioserver.ieeta.pt/diseasecard/

PIANA

http://sbi.imim.es/piana/




PILOT APPLICATIONS (WP6)
WP 6.1 Pharma-Informatics
WP 6.2 Genomics and Microbiology
WP 6.3 Genomics and Chronic Inflam.
WP 6.4 Genomics and Colon Cancer
METHODS, TECHNLOGIES AND TOOLS (WP5)
Data analysis
Image analisis
Decission support
DATA INTER-OPERABILITY (WP4)
Data and ontologies
Integration
Ethics and confiden-ciality

INFOBIOMED: pilot aplications

- Pharmainformatics
  - Research in the drug discovery process
  - Establish an information continuum from pathology to pathway to target to ligand/approved drug.
- Genomics and Microbiology:
  - Improve clinical evaluation strategies through a comprehensive pathway-related with host/pathogen interaction.
- Genomics and chronic inflammation
  - Investigates the susceptibility to adult chronic periodontitis.
- Genomics and colon cancer
  - Built a infrastructure based on standards (in XLM)
  - Connecting genetic labs with hospitals and central registry

Acknowledgments

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References

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