

INFOBIOMED: Structuring European Biomedical Informatics to Support Individualised Healthcare

- 36 months. Official start date 1-Jan-04.
- 16 institutions.
- 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" (BI and MI have been separate disciplines up to now).
- Specific objectives can be broadly divided in 2 groups:
 - "Community": education, training, mobility, spreading knowledge, creating a self-sustainable structure.
 - "Scientific": progress in data interoperability, interfacing of methods, technologies and tools, pilot applications.

Joint Programme of Activities





INFOBIOMED Consortium



• Consortium profile:





WP1: NoE management

WP2: Dissemination & communication WP3: Training & mobility

WP4: Data interoperabilityWP5: Methods, technologies & tools

WP6: Pilot applications

- 6.1 Pharmainformatics
- 6.2 Genomics & infection
- 6.3 Genomics & chronic inflammation
- 6.4 Genomics & colon cancer

Pilots as 'proof of concept' of the pursued integrative vision of BMI ('scientific' objectives)



- Consortium cohesion, work teams and work procedures
- Detailed definition and setup of "community" activities: dissemination, training and mobility.
- State of the Art analyses and publications.
- Pilot detailed workplans and starting of the work.

Pilots summary



	Scope / Aim	Diseases / processes	Strategy	IT methods & tools
6.1 Pharmainformatics	Pharmainformatics Catalogue of technological gaps. Protocols in BMI.	CRPS NHR	<u>CRPS</u> : Pathology to Ligand <u>NHR</u> : Ligand to pathology	Text mining Systems biology Ontologies Virtual screening Chemogenomics
6.2 Genomics & Infection	Anti-infective therapies Efficacy & combination Find new markers of host immunity resistance and viral Integration of pathaway biology and host/pathogen genomics.	CMV HIV Interferon pathway	Host & genetic variation. Protein interaction. Transcript / translational control. Interaction pathways.	Text mining Systems biology Genotyping Phenotyping Microarray informatics
6.3 Genomics & Chronic inflammation	Knowing bases of disease Complex susceptibility to adult periodontitis Preventive measures New therapies	Periodontitis	Infection. Environmental (smoking, stress). Genetic Variation. Intermediate phenotype. Disease Phenotype.	Genotyping Phenotyping Datawarehousing Data mining Image processing Security/Privacy
6.4 Genomics & Colon cancer	Planning & organizing screening in families with high-risk. Supporting research. Data exchange & integration. Communication with registry Different Countries	Colon Cancer HNPCC Endometrial Cancer Urinary tract Cancer	Surgical Dept. Genetic Counselling. Registry. Labs (genetic).	Genotyping Phenotyping Database integration Pedigrees HL7/XML Security/Privacy

Pilots vs. enabling technologies





Pilots focuses









www.infobiomed.org

Biomedical Informatics Gateway