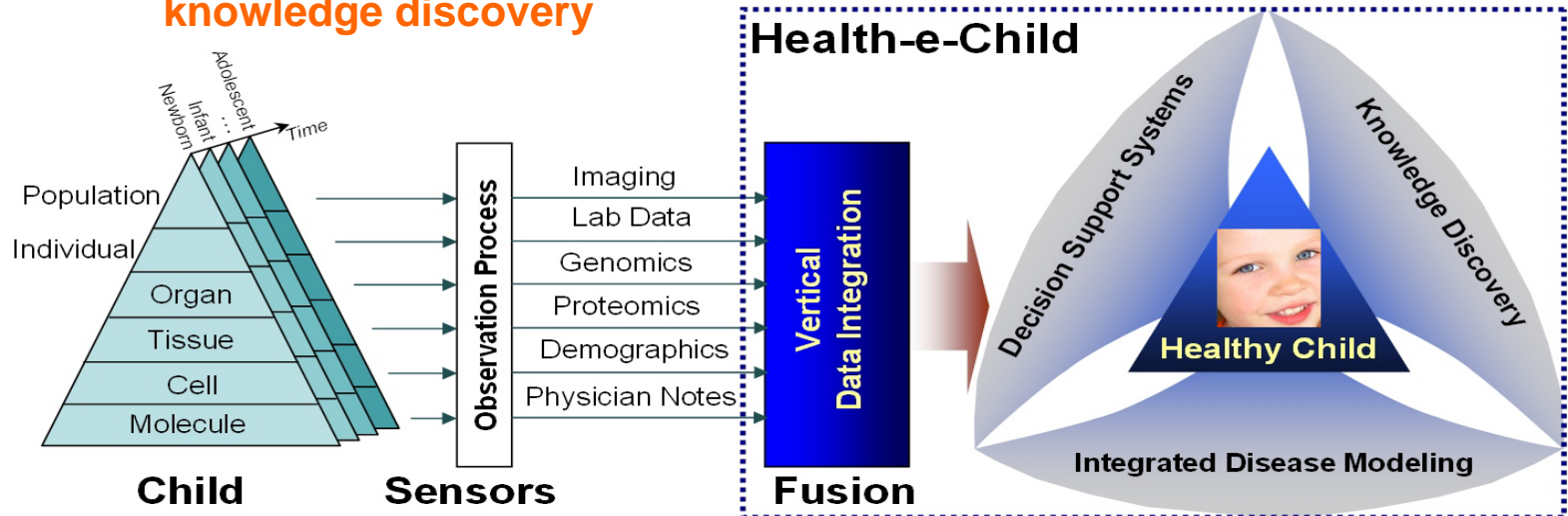


Health-e-Child

Information and **C**ommunication **T**echnologies for **BIO**-Medical Sciences
Brussels, Belgium; 29./30. June, 2006

Dr. Jörg Freund
Siemens – Medical Solutions

- Gain a holistic view of a child's health by integrating traditional and emerging sources of biomedical information: from genetic to clinical to epidemiological across institutions (**horizontal, vertical, and longitudinal integration**)
- Develop a **biomedical information platform**, supported by sophisticated and robust search, optimisation, and matching techniques for heterogeneous information, empowered by the Grid
- Build enabling tools and services that will improve the quality of care and reduce its cost by increasing efficiency
 - ❑ **Integrated disease models** exploiting all available information levels
 - ❑ Database-guided biomedical **decision support systems**
 - ❑ Large-scale, cross modality information fusion and data mining for **knowledge discovery**



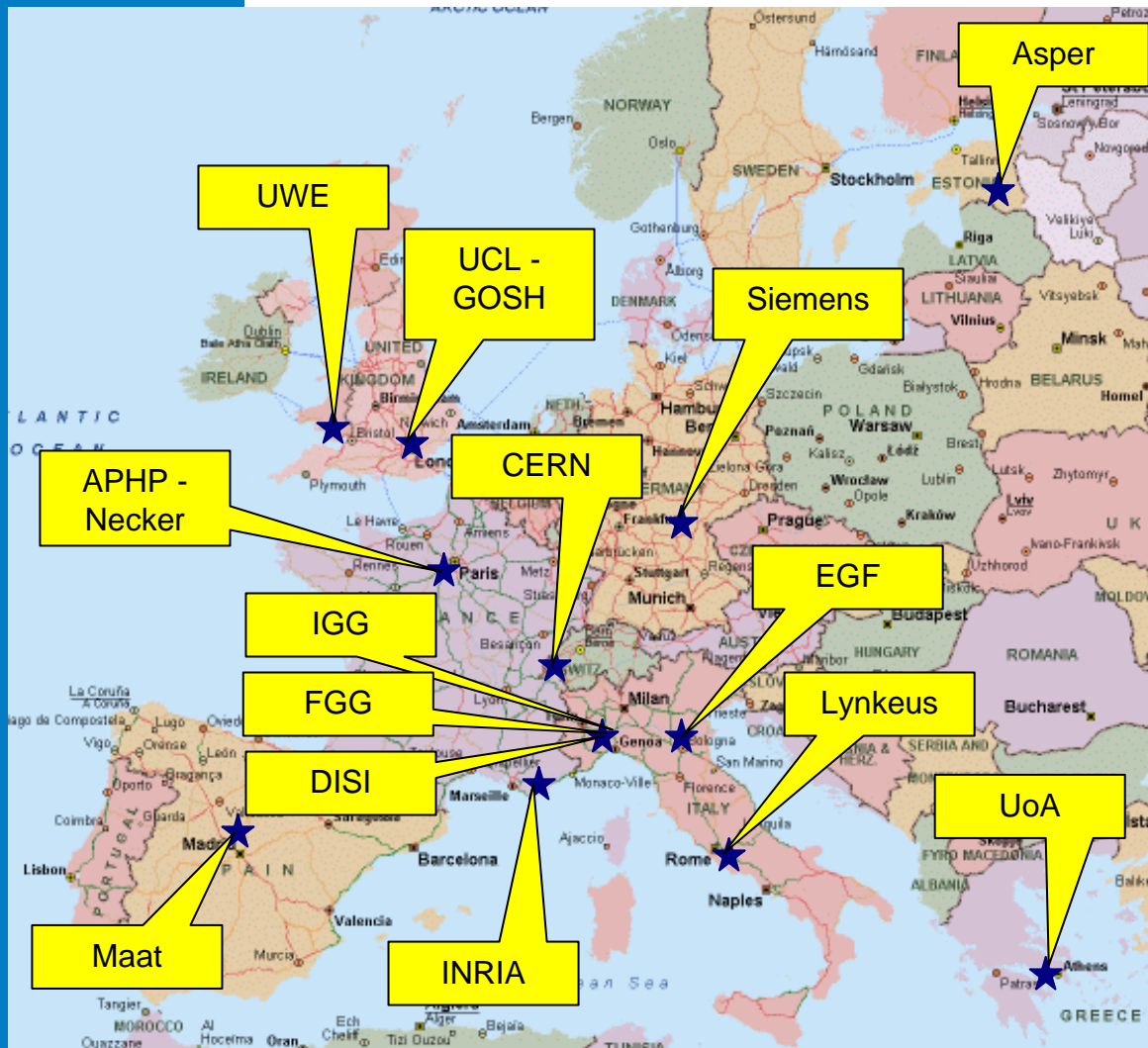
- **Strategy:** Enhancing the **level and quality** of medical services offered in Europe and significantly advancing medical research, beyond what is traditionally possible and **improvement of the competitiveness** in the area of medical service provision and will facilitate the adoption of new policies in member state.
- **Technology:** Bringing forward **information-based medical technology** and **integration of mostly separate areas**, i.e., vertical information integration, advanced medical querying, Grid infrastructures, disease modeling, medical imaging, knowledge discovery and data mining, and decision support.
- **Society and economy:** Improvement of the **success rate** in resolving difficult medical cases, **saving children's lives**. Furthermore, such improved medical decision making will often result in **lowering medical cost** and/or treatment duration.

Facts

- Coordinator: Siemens AG, Dr. Jörg Freund
- Partner: 14 European companies, hospitals, institutions
- Timetable: 01-Jan-06 to 31-Dec-09 (4 years)
- Total cost: 16.7 Mio. €
- EC funding: 12.2 Mio. €

- Web page: <http://www.Health-e-Child.org>

- Instrument: Integrated Project (IP) of the Framework Program FP6
- Project Identifier: IST-2004-027749



- **Siemens AG**, Germany
- **Lynkeus SRL**, Rome, Italy
- **Giannina Gaslini Hospital**, Genoa, Italy (IGG)
- **University College London, Great Ormond Street Children's Hospital**, London, UK (UCL)
- **Assistance Publique Hopitaux de Paris – Necker**, Paris, France (APHP)
- **European Organisation for Nuclear Research (CERN)**, Geneva, Switzerland
- **Maat G Knowledge**, Toledo, Spain
- **University of the West of England**, Bristol, UK (UWE)
- **University of Athens**, Athens, Greece (UoA)
- **Universita' degli Studi di Genova (DISI)**, Genoa, Italy
- **National Institute for Information and Automation Research (INRIA)**, Sophia Antipolis, France
- **European Genetics Foundation (EGF)**, Bologna, Italy
- **Aksiaselts ASPER BIOTECH**, Tartu, Estonia
- **Gerolamo Gaslini Foundation**, Genoa, Italy (FGG)

■ Diseases

- Heart diseases (*Right Ventricle Overload, Cardiomyopathy*),
- Inflammatory diseases (*Juvenile Idiopathic Arthritis*), and
- Brain tumours (*Gliomas*)

■ Clinical Institutions

- I.R.C.C.S. Giannina Gaslini, Genoa, Italy
- University College London, Great Ormond Street Children's Hospital, London, UK
- Assistance Publique Hopitaux de Paris – Necker, Paris, France

■ Clinical Departments

- Cardiology
- Rheumatology
- (Neuro-)Oncology
- Radiology
- Lab (Genetics, Proteomics, Lab)
- Administration

■ Modalities / Data Sources

- Imaging (MR, echo, CT, x-ray)
- Lab
- Genetics
- Proteomics
- Patient information