

Advanced multi-paRametric Monitoring and analysis for diagnosis and Optimal management of epilepsy and related bRain disorders



Key Concept

The main objective of the project is to design a holistic, personalized, medically efficient and economical monitoring system for epileptic patients. This will be achieved by managing and analyzing a large number of already acquired and new multimodal and advanced technology data from brain and body activities of epileptic patients and controls (MEG, multichannel EEG, video, ECG, GSR, EMG, etc).

Main Objectives

Clinical

- Facilitate and increase the yield of diagnostic, treatment and follow-up practices in epilepsy
- ✓ Support health care professionals in their decision making and provide accurate signaling of risks
- ✓ Reduce epilepsy related management costs
- ✓ Advance the technology of PHS suitable for chronic diseases of multifactorial causes and unpredictable expression of their symptoms

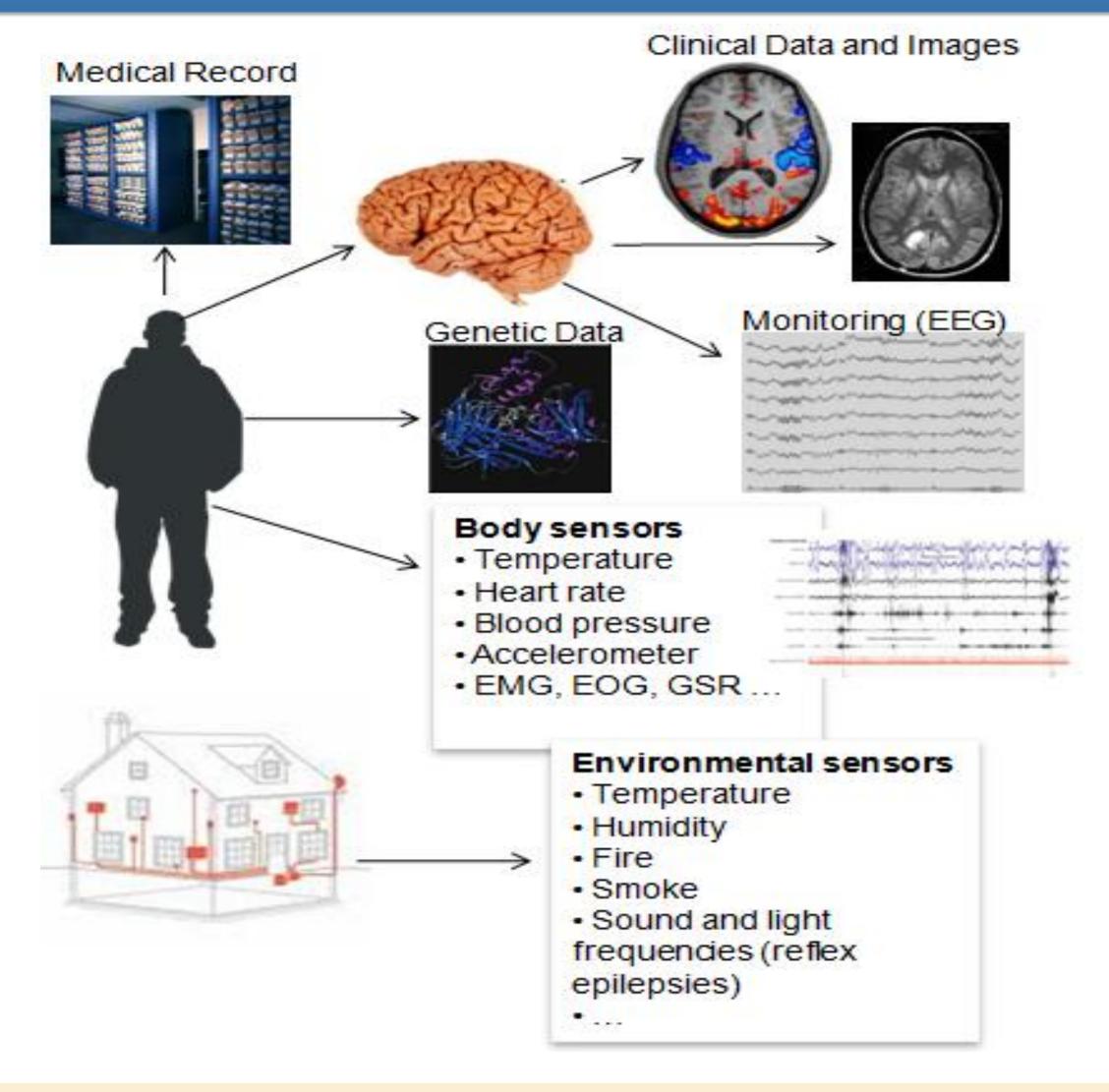
Medical / Theoretical

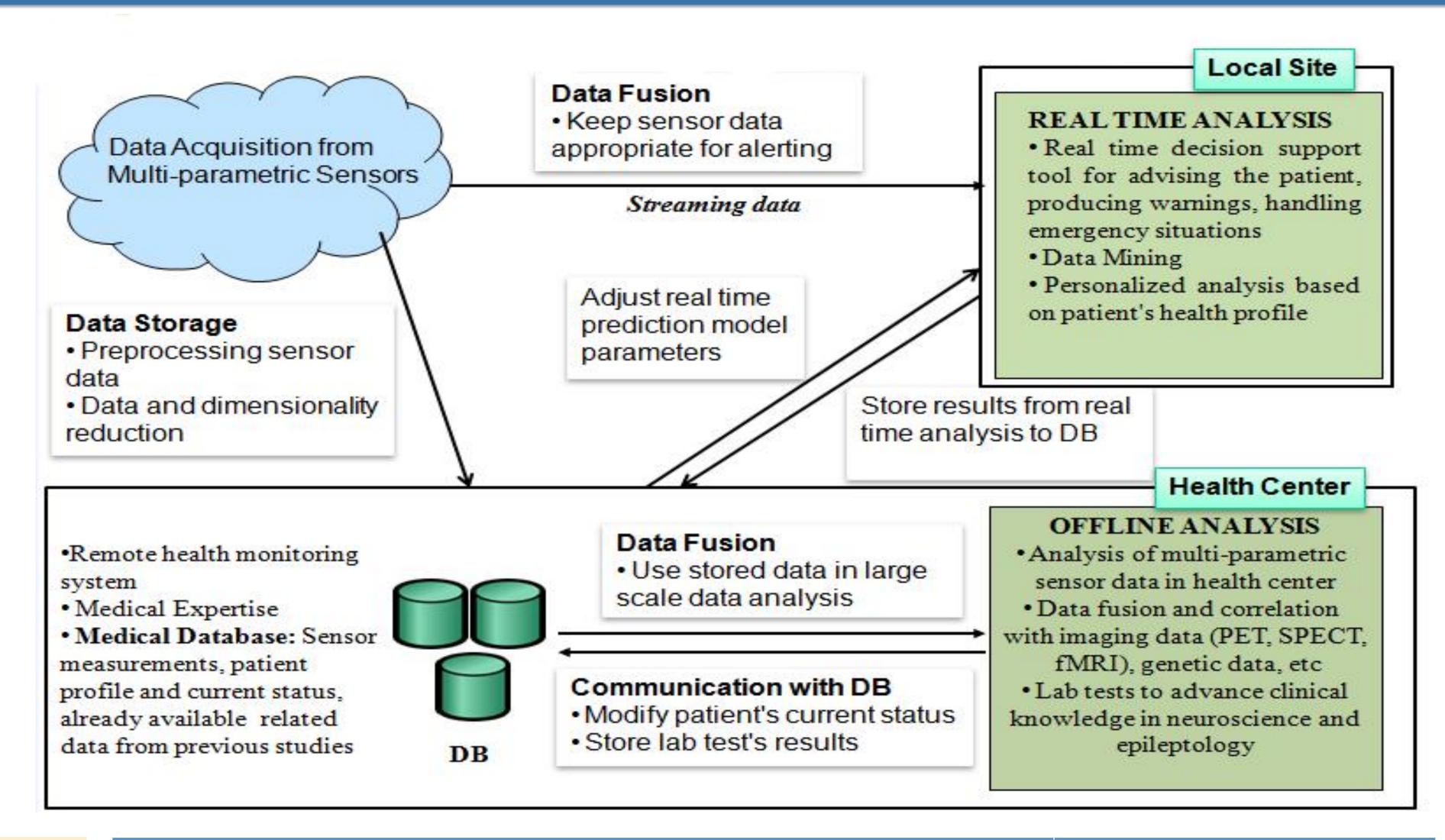
- ✓ Increase our understanding of the epileptic seizure and eventually of epilepsy
- ✓ Increase our understanding of the other non-epileptic paroxysmal events (NEPE) and their underlying mechanisms that is currently poor
- ✓ Understand possible relationships between epilepsies and the various types of NEPE

ICT

- ✓ Design and develop adequate measuring/monitoring methodologies and systems facilitating the respective medical objectives.
- ✓ Develop multi-parametric data processing, management and analysis tools, both real time and off-line, to better understand epilepsy
- ✓ Adopt and adapt prominent coordination/communication platforms providing robust and flexible end-to-end communication and assure security and privacy on sensitive medical data

The approach of ARMOR





Project coordinator: Sensing & Control Systems

Funding budget: 3,186,935 €
Starting date: 01/11/2011

Duration: 36 months

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Project website

http://www.armor-project.eu

Project partners	Country
Sensing & Control Systems S.L.	Spain
Technological Educational Institute of	Greece
Mesolonghi	
University of Patras	Greece
King's College London	United Kingdom
AAI Scientific Cultural Services Ltd	Cyprus
Intracom SA Telecom Solutions	Greece
SYSTEMA Technologies S.A.	Greece
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