

HAMAM

Highly Accurate Breast Cancer Diagnosis through Integration of Biological Knowledge, Novel Imaging Modalities, and Modelling

Project

Despite tremendous advances in modern imaging technology, both early detection and accurate diagnosis of breast cancer are still unresolved challenges. Unnecessary biopsies are taken and tumours frequently go undetected until a stage where therapy is costly or unsuccessful. **HAMAM** will tackle this challenge by providing a means to seamlessly integrate the available multi-modal images and the patient information on a single clinical workstation.

The project **HAMAM** is funded by the European Commission within the 7th Framework Programme with €3m. The 3-year project started in September 2008 and consists of 9 international scientific partners from seven countries, with **EIBIR** as coordinating partner.

Objectives

Based on knowledge gained from a large multi-disciplinary database, populated within the scope of this project, suspicious breast tissue will be characterised and classified. **HAMAM** will achieve this by:

- Building the tools needed to integrate datasets/modalities into a single interface.
- Providing pre-processing/standardisation tools that will allow for optimal comparison of disparate data
- Building spatial correlation methodology to allow for anatomical cross-linking between modalities and examinations to enhance both multimodal reading and analysis.
- Building in adaptability that allows for the integration of other sources of knowledge such as tumour models, genetic data, genotype, phenotype and standardised imaging.

A goal of the project is to compare and evaluate imaging protocols for specific clinical situations. The workstation thus guides the clinician in establishing an optimal patient-specific imaging procedure. With **HAMAM**, Europe has the potential to strengthen its leadership in the whole area of image-based breast cancer diagnoses.

To learn more about the project visit www.hamam-project.org

Project Partners:

- European Institute for Biomedical Imaging Research (AT)
- University College London (UK)
- Fraunhofer MEVIS Research (DE)
- MEVIS Medical Solutions (DE)
- Swiss Federal Institute of Technology (CH)
- Radboud University Medical Centre (NL)
- University of Dundee (UK)
- Charité Medical University Berlin (DE)
- Boca Raton Community Hospital (USA)

