

THE MOLECULAR IMAGING INTEGRATED PROJECT

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The goal of the Molecular Imaging Integrated Project is to generate and apply novel advanced technology for non-invasive imaging of biomolecular function in living systems ranging from single cells to whole animals. Main areas for technological innovation are:

- * Generation of new biosensors enabling novel ways of functional contrast
- *Improving resolution of microscopic and tomographic imaging systems, and
- *Creating new multimodal imaging setups combining different contrast modes.

It is expected that our combined effort will provide spectacular new opportunities for phenotyping functional (molecular) analysis in cells and animal models. To achieve this goal we bring together a unique consortium of leading research groups in Europe combining:

*Engineers, experimental and theoretical physicists (who design new and improved, tomographic and microscopic imaging devices for in vivo-imaging)

*Bioorganic chemists and molecular biologists (for the design of new chemical and genetic encoded molecular probes and biosensors)

*Biologists examining fundamental questions at the cell, organ and whole animal level (thereby providing the above research the appropriate and relevant goals for the technological innovation)

The Molecular Imaging project has been running since the 1st of January 2004. The main results of this project will be presented, together with an overview of its structure and composition.