CENTRE FOR TREATMENT AND RESEARCH IN GASTROENTEROLOGY BASED ON IMAGING METHODS AND MOLECULAR TECHNIQUES – TARGET

National Strategy for Research, Development and Innovation 2007 – 2013 (NS II)

Program: Capacities

Beneficiary: University of Medicine and Pharmacy of Craiova

Duration of the contract: **2010 - 2013 (finished)**Project value: **47.760.428,20 RON (~ 10.613.500 euro)**

General Objective: Implementation of a new standard for research and development within the University of Medicine and Pharmacy of Craiova for early diagnosis and treatment of digestive cancers.

Specific Objectives:

- The execution of the IMAGING DEPARTMENT BUILDING;
- Improvement of existing facilities from B locations (basement and ground floor, the southern side) to enable optimal running of research activities;
- Rigging the TARGET Module with specific equipment for the IMAGISTIC DEPARTMENT.

Research directions:

- Real-time evaluation of tumor microenvironment and of the interactions between malignant cells and stroma (including angiogenesis and malignant stem cells);
- Improving patients prognosis and treatment response based on imaging methods validated through state-of-the art pathology and immunology methods, as well as molecular biology:
 - This will include cancers frequently diagnosed in Romania (based on GLOBOCAN 2008), e.g. colorectal cancer, esophageal and gastric cancer, liver cancer, pancreatic and billiary carcinoma etc.
- Development of real-time imaging techniques (PET-CT, contrast enhanced endoscopic ultrasonography, confocal laser endomicroscopy, etc);
- Describing novel markers for tumoral progression and therapeutic targets through molecular biology techniques (real-time PCR, microarray, etc.).

Beneficiaries:

- The newly developed infrastructure will enable the training of researchers/medical doctors from Romania and EU, with emphasis on diseases specific for this area;
- Students and PhD students who will use TARGET infrastructure;
- The development of a state-of-the-art center for Gastroenterology and Digestive Imaging techniques will lay the grounds for European exchanges during postgraduate training;
- Training medical doctors through Continuous Medical Education programs;
- The people who will benefit from high-performance medical assistance in Gastroenterology;
- The community, considering the possibility of early cancer detection.

Social and economic impact:

- The project will have a significant impact for both the University of Medicine and Pharmacy of Craiova and for the population, being the only major infrastructure project in Health care which will enable early diagnosis, and consequently will lead to a reduction of medical assistance costs and to increased quality of life;
- The development of this Excellence Center will meat the needs of the research-innovation and educational system, and also of the health-care system. An increase in the quality of research at the University of Medicine and Pharmacy of Craiova is expected, including the number of scientific papers published in indexed journals;
- The project will provide the necessary infrastructure for participating in international projects;
- Newly created positions: 28;
- Maintained positions: 15;
- Number of young researchers: 10;
- Number of women researchers involved: 8.