

# VISCERAL

Visual Concept Extraction Challenge in Radiology.

#### Realization

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#### Information

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## **Keywords**

- Information extraction and retrieval
- Medical image analysis
- Large scale data processing

#### **Our skills**

Creation of the infrastructure for participants and for making data available

## **Valorization**

Benchmark of state of the art and definition of the next challenges in big data

#### **Partnership**

- Vienna University of Technology (AT)
- Medical University of Vienna (AT)
- ETH Zürich (CH)
- University Hospital Heidelberg (DE)
- Catalan Agency for Health Information, Assessment and Quality (ES)

#### **Funding**

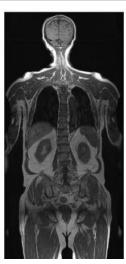
European commission

### Schedule

11/2012 - 04/2015









VISCERAL is a support action that will organize **two competitions on information extraction and retrieval** involving medical image data and associated text that will benchmark the state of the art and define the next big challenges in large scale data processing in medical image analysis.

The first competition will focus on **automatic identification**, **localization and segmentation** of anatomical structures in medical imaging data, the second competition will comprise retrieval tasks that aim at **identifying similar cases** relevant for diagnosis.

The task of the Institute of Information Systems within this project concerns the **evaluation infrastructure**, particularly:

- Create the infrastructure for participants to register and take part in the competition
- Create the cloud-based infrastructure for making data available and accepting submission of copyright agreements to follow copyright and ethics requirements for the data sets
- Create the software to handle the submissions and apply the developed evaluation measures to the submissions, handling the ground truth data
- Adapt the tools to make the very large scale data sources available to participants via cloud computing infrastructures
- Create software for manual annotation and for judgment of the correctness of returned results