

At a glance

Partners

- University of Applied Sciences Western Switzerland (CH),
- Vienna University of Technology (AT),
- Atos Origin (ES),
- ELDA (FR),
- Ontotext (BG),
- Dublin City University (IE),
- University of Duisburg-Essen (DE),
- Charles University in Prague (CZ),
- The University of Sheffield (UK),
- Health on the Net (CH),
- Medical University of Vienna (AT),
- Society of Physicians in Vienna (AT)

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<http://khresmoi.eu>

A multi-lingual,
multi-modal search
and access system
for biomedical information
and documents

<http://khresmoi.eu>



Khresmoi Overview

KHRESMOI is developing a multilingual, multimodal search and access system for biomedical information and documents. This includes:

- **Automated information extraction** from biomedical documents
- **Semantic search** adapted to user requirements
- Automated analysis and indexing of **medical images** in 2D (X-Rays), 3D (MRI, CT), and 4D (MRI with a time component)
- **Linking information** extracted from biomedical texts and images to structured information in knowledge bases
- Support of **cross-language search**, including multilingual queries, and returning machine-translated pertinent excerpts
- Adaptive **user interfaces** to assist in formulating queries and interacting with results

The research results are implemented in several open source components, including:

- **GATE** (General Architecture for Text Engineering)
- **Mimir** (Multiparadigm Indexing and Retrieval)
- **ezDL** (Easy Access to Digital Libraries)
- **ParaDISE** (Parallel Distributed Image Search Engine)

These components are integrated into an innovative open architecture for robust and scalable biomedical information search.



Khresmoi for...

Medical practitioners: Take advantage of the **semantic search**, **machine translation**, and **collaborative tools** to search and to analyse the search results more effectively

Radiologists: Search the hospital PACS archives and the medical literature using **visual queries** and **share the results with others**

Industry: Adopt the **open source components** developed in Khresmoi to add innovative search capabilities to your products

Researchers: Build on the Khresmoi research results; use the extensive **manually-annotated corpora** for improving research systems; and adopt the **search engine evaluation methodology** for obtaining a clear understanding of what works best in this domain

User experience designers: Use the **end user requirement analyses** and **system tests with users** to better adapt search systems to user groups in the medical domain

Everyone: Use the Khresmoi technology as it improves online search for medical information, first in the Health on the Net search engine

