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Towards Big Data in Medical Imaging

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** Local DB

Archiving

- No data exchange.
- No data enrichment.
- No data reuse.

Example of medical imaging analysis:
- Confocal Microscopy
- Western Blot
- Immunohistochemistry

Example of local data analysis:
- MRI
- X-Ray
- Ultrasound
- PET

No data exchange.
No data enrichment.
No data reuse.

Examples of image analysis:
- Diagnosis
- Scientific knowledge

Cell Imaging Platform

Department of Radiology

Objectives

Diagnosis improvement

Health professionals and scientists

Inter/intra-department medical imaging exchange

Semantic medical imaging enrichment

Medical imaging reuse

Multimodal medical imaging analysis

Linking medical imaging

Multiscale medical imaging analysis

Global data analysis

Scientific Knowledge sharing

RDF-ization of medical imaging

Discover new correlations

Persistent medical imaging archiving

IDV Virtual Datacenter

MAGI 2

CUMULUS

S-CAPAD

SPC Cloud and HPC infrastructures : CIRRUS