



# Workshop on semantic interoperability prerequisites for efficient e-health systems.

*How to coordinate terminology standards and ontology  
:case study ANATOMY.*

A cross fertilisation approach

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# CONVERGENCE or DIVERGENCE

1 From GALEN CCAM to CEN 1828 2002



2 FROM FMA to CEN Cata anat

3 GALEN FMA ALIGNEMENT

4 RESEARCH CHALLENGES

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# 1 FROM GALEN CCAM TO CEN EN 1828

## 11 GALEN R&D and CEN standards

- **Categorial structure/reference terminology model**

- **generic concepts (categories)**

- **semantic links and characterising**

**categories**

- **minimal list of domain constraints**

- **EN 1828**

**12 EN 1828 and Procedures coding systems (UK)**



## 2 FROM FMA TO CEN CAT ANAT

### 2.1 FMA

From enhancement of UMLS to a domain ontology of the concepts and relationships...human body

(Cornelius Rosse)

### 2.2 CATEGORIAL STRUCTURE FOR ANATOMY

Only prescribing to use class names and not

The granularity

Initial work based on GALEN

## 3 ALIGNMENT GALEN FMA

## 4 RESEARCH CHALLENGES

to what extent **existing applications and tools** can be improved and at what cost to come useful for specific purposes.

OR

to what extent **ideal solutions** can be operationalized and at what cost to be practically implemented to be useful for specific purposes.

## **5 RESEARCH CHALLENGES (1)**

**1 TOOLS AND METHODS TO ALIGN ONTOLOGIES**  
Ex GALEN FMA for ANATOMY



**2 TOOLS TO SUPPORT THE KNOWLEDGE  
REPRESENTATION OF TERMINOLOGIES**

**3 TOOLS TO SUPPORT KNOWLEDGE  
EXTRACTION FROM THE REPRESENTATION**

## 5 RESEARCH CHALLENGES (2)



4 TO EXTEND MULTILINGUALISM of NLP TOOLS

5 TOOLS TO INSTALL ON THE SAME OPEN  
PLATFORM THE MAIN EXISTING ONTOLOGIES  
and ALIGNING them

FMA,GALEN,GENE ONTOLOGY,SNOMED



**END**

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