

Sharing research imaging data in « Imageries du Vivant » An ongoing experience at Sorbonne Paris Cité University (SPC)

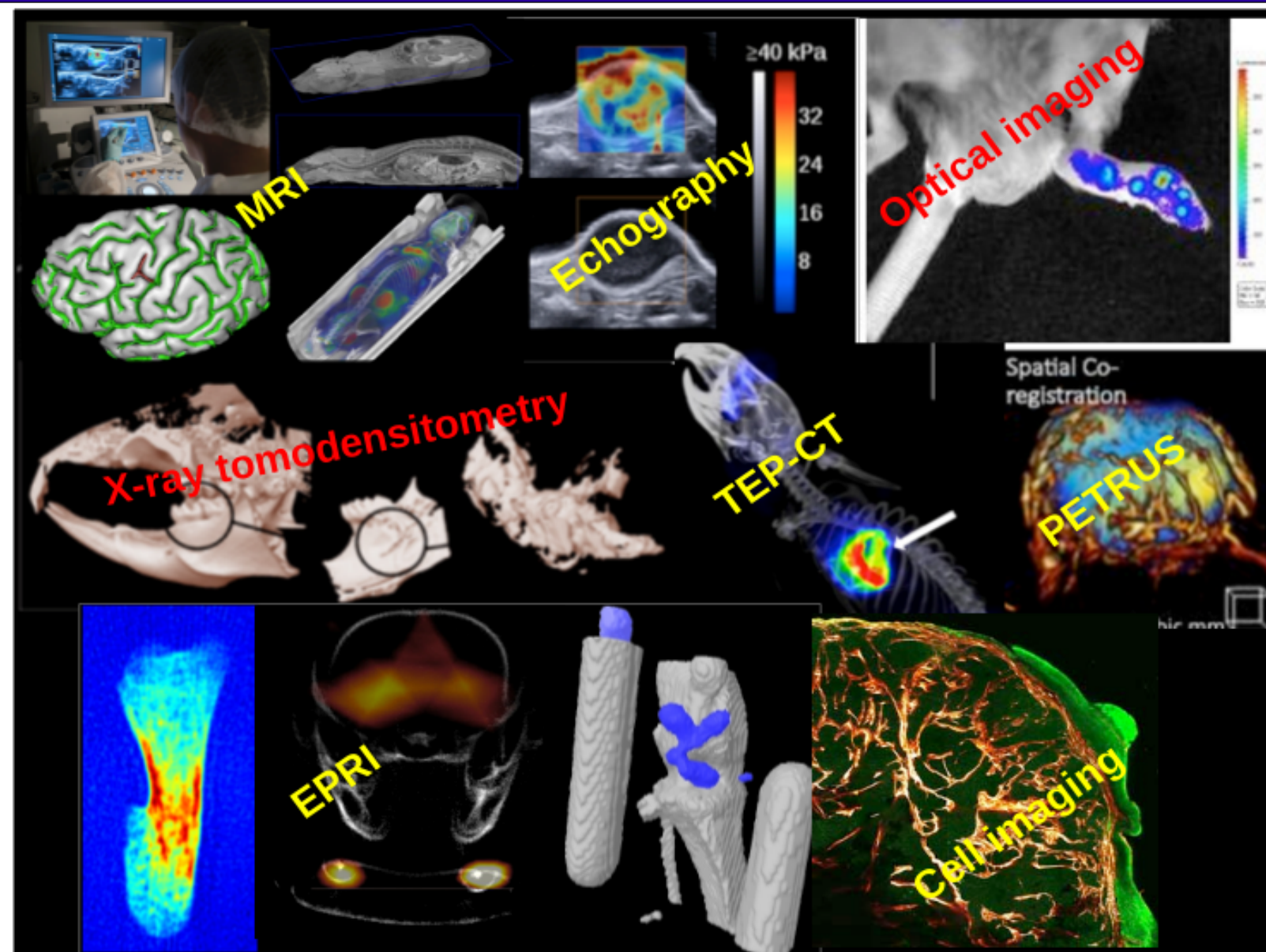
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Context

Imageries du vivant

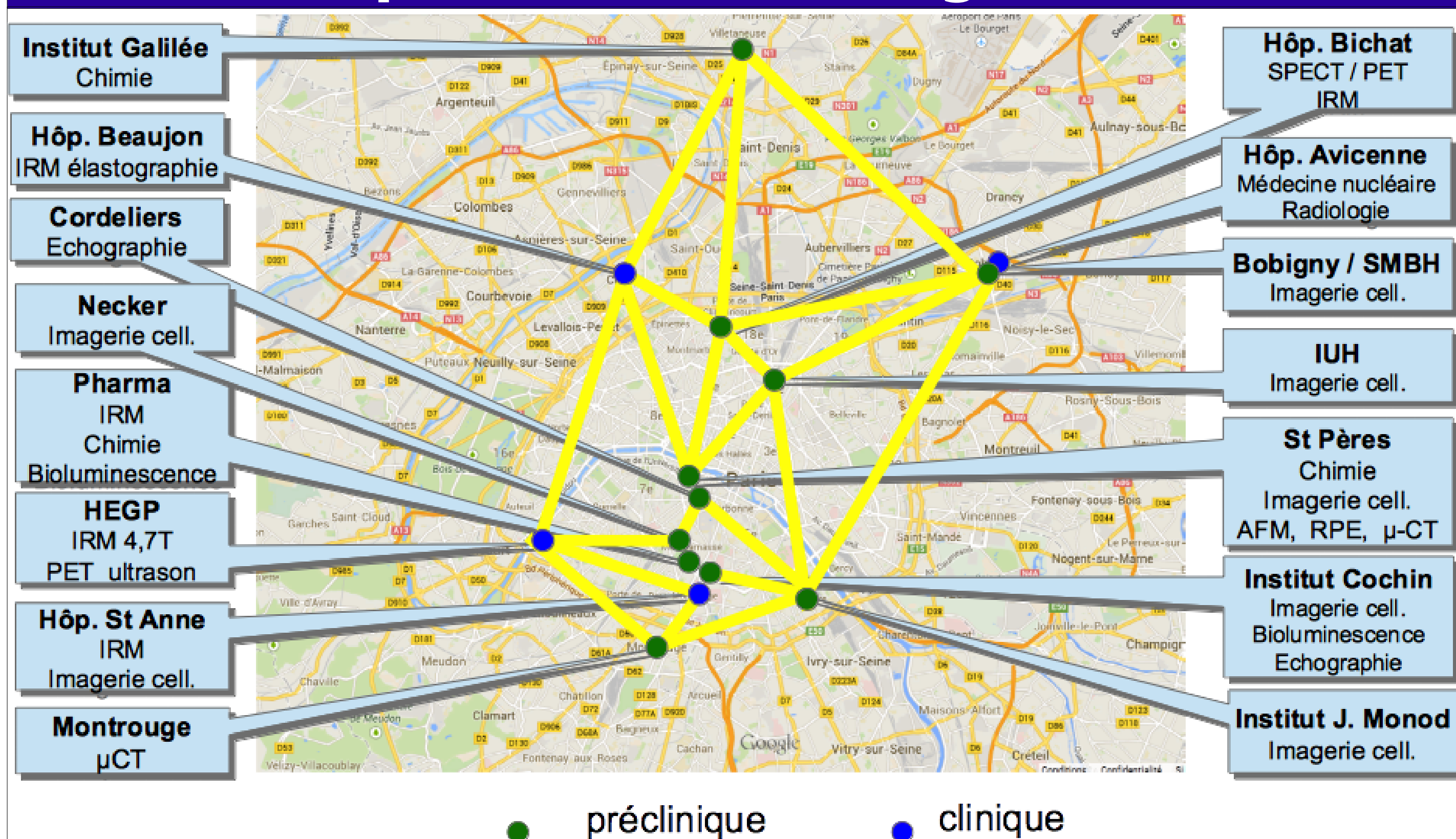
- A scientific **interdisciplinary** network in Paris
- Since 2008, it is creating an important synergy between scientists working on **living system imaging**
- Scientists from **30 teams** (clinicians, physicists, chemists, biologists, mathematicians, computer scientists, ethicists, linguists, documentalists...) aim to work together on common project



Research on

- **technological development** (PETRUS, Clinical EPR, PET MRI ...);
- **contrast agents** (nanoparticles, nanobubbles)
- **clinical and preclinical biomarkers**
- legal guidelines (privacy, anonymization in collaboration with Digital Ethics)
- **Ethical questions** (in collaboration with "Espace éthique Ile de France")
- **Open linked data**

A linked open data challenge



➡ Various scientific knowledge and langage Various security and privacy rules (hospital, university, INSERM, CNRS)

Achievements

- Scientific events:

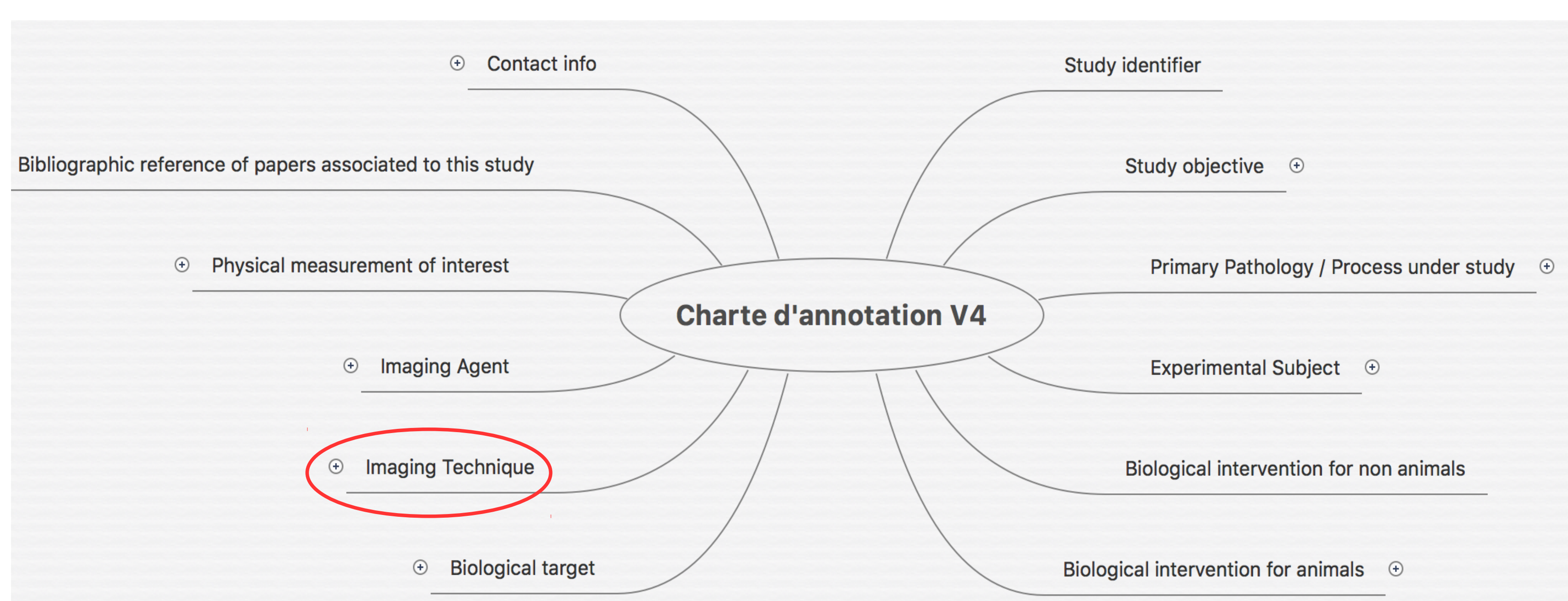
- "Biolmaging" Speciality in the "Biomedical Engineering" international **master**
- Indoor, outdoor symposium and seminars.
- Langage symposium "Regards Croisés sur l'Imagerie du Vivant, Concepts et Langages Interdisciplinaires. Vers la construction d'un glossaire partagé", which led to a **wiki glossary**
- Micro-school (Cloud IDV)
- **Research grants :**
- 30 M2, 2 PhD, post-doctoral, research engineers for pluridisciplinary research

- Example of Scientific Publications :

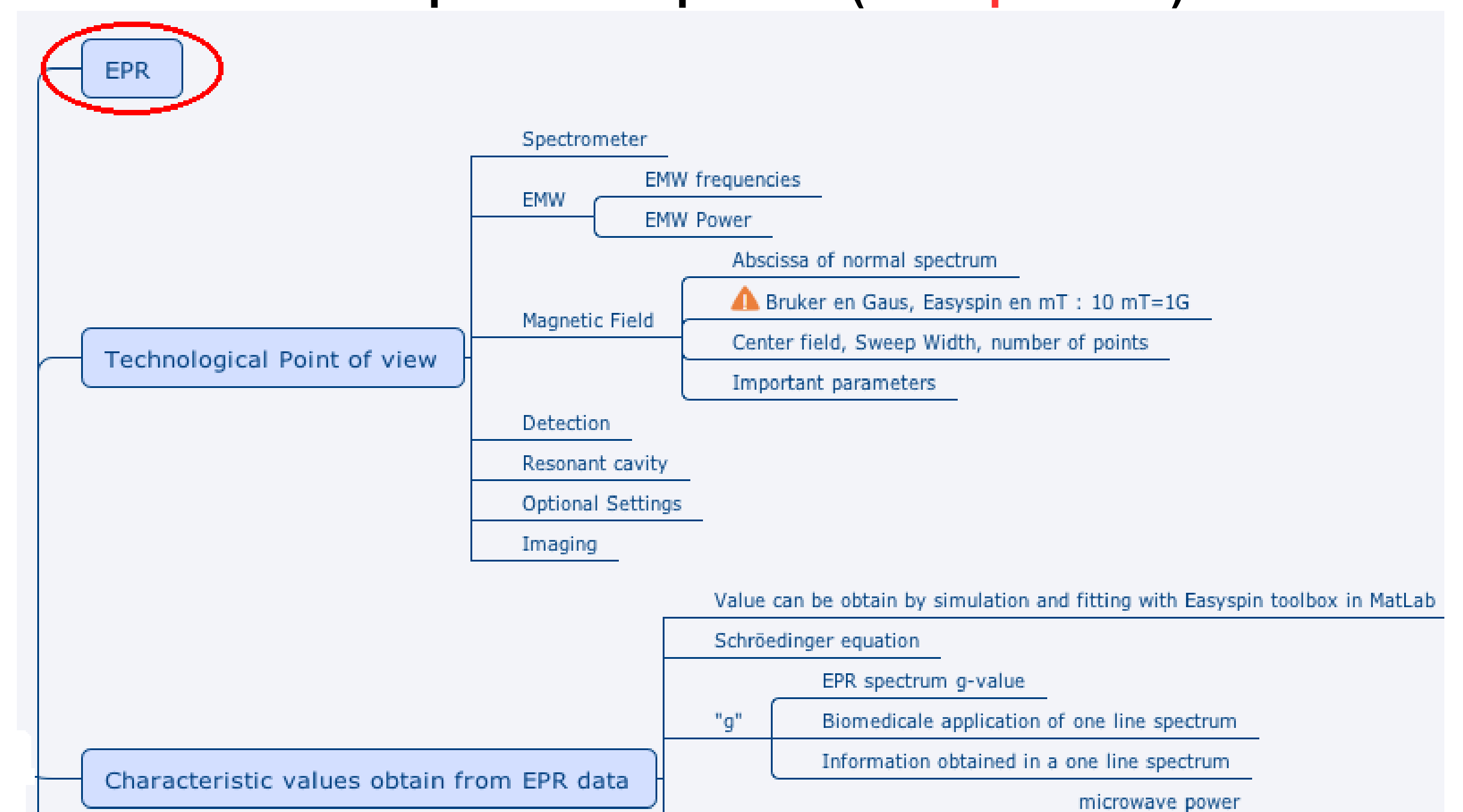
- **White book** « Approches contemporaines en hébergement et gestion de données »
- **Book chapter** in « Utilizing Big Data Paradigms for Business Intelligence »

See website : <http://idv.parisdescartes.fr/>

Annotation Chart : creation of a common annotation standard

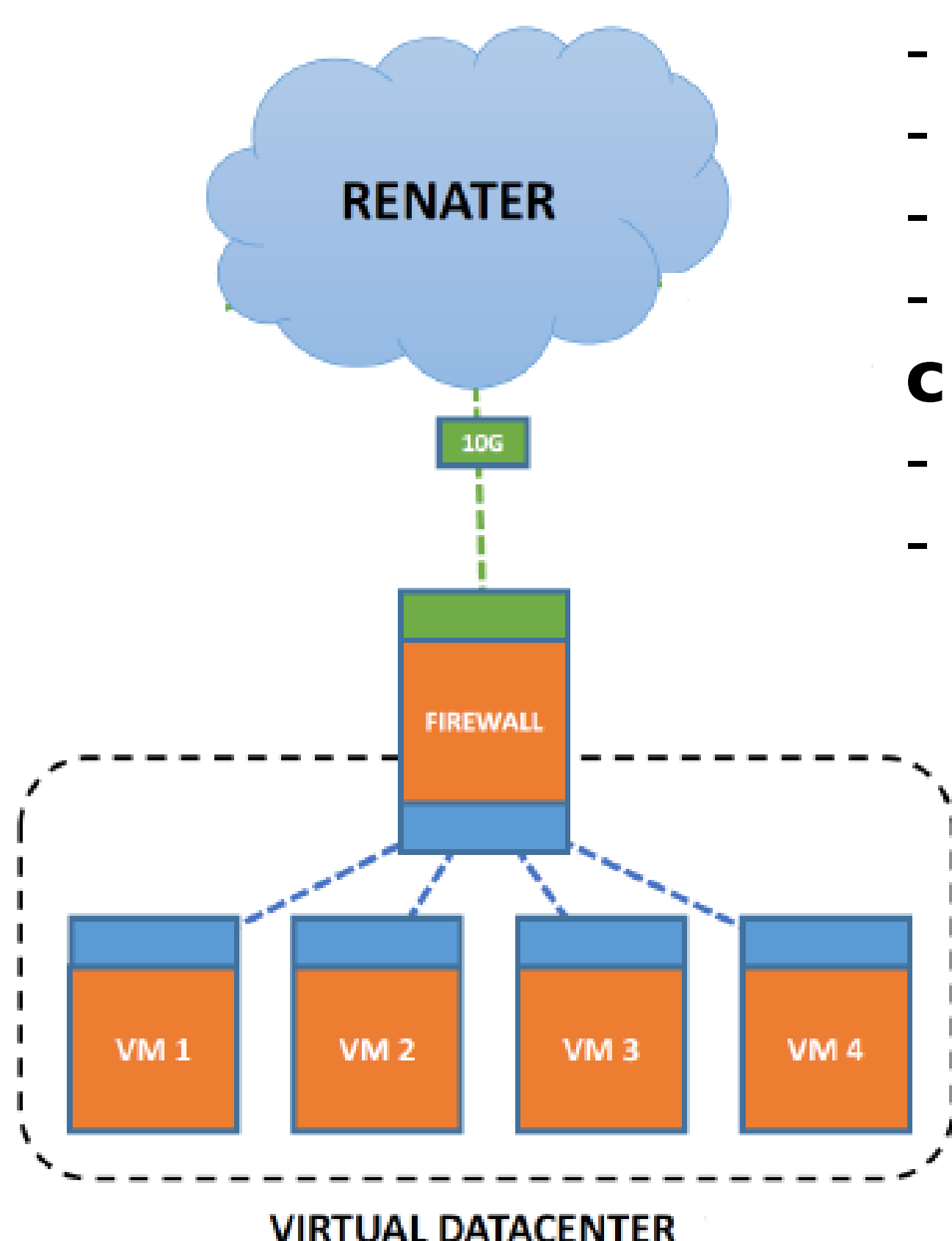


Domain specific adaptation (example EPR)



Cloud-IDV

- Based on virtualisation
- More than **150 Virtual Machines** (VM)
- Different **Operating Systems** (OS)
- VM configuration **extensible** and **customisable**
- **100 users** from different institutions
- hosting multiple **imaging applications**



Example : the EPR VM template

