OSCARS

Open Science Clusters' Action for Research & Society

Funded Project

SHARE : Synchrotron x-ray analysis of Heritage Accessible to and Reusable by Everyone

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Implemented by

ESRF The European Synchrotron

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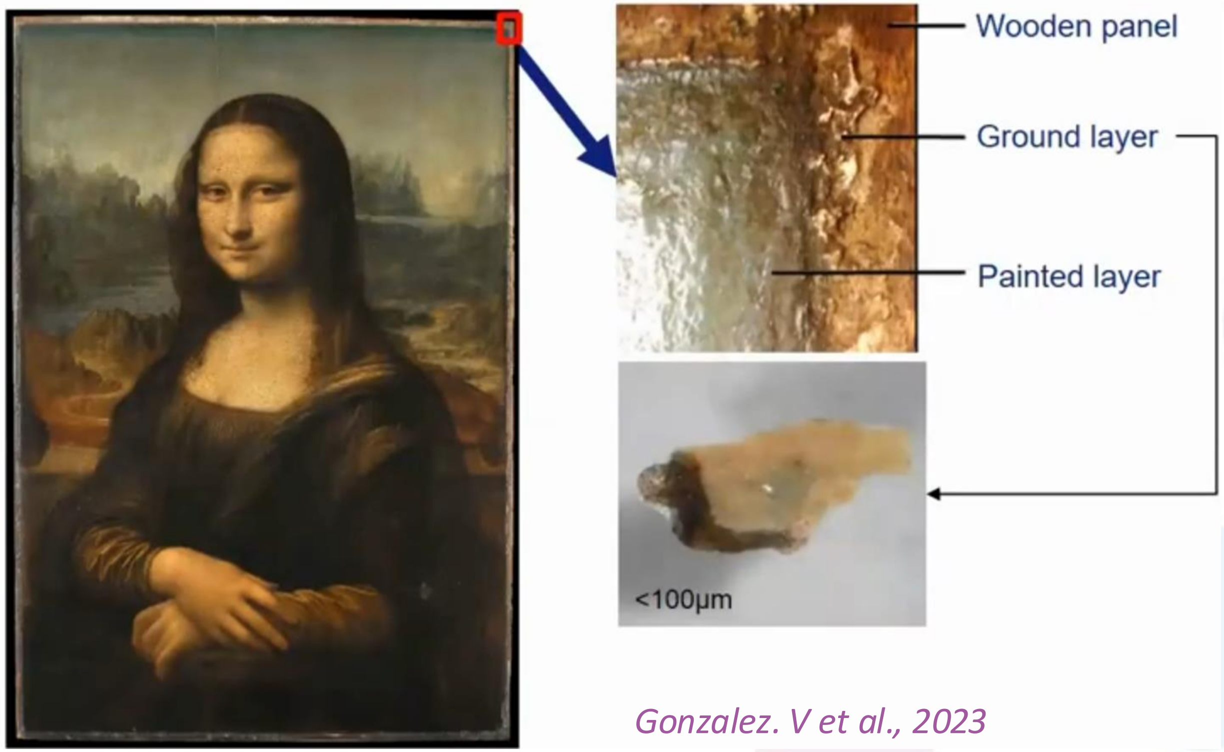
SCITEC ISTITUTO DI SCIENZE E TECNOLOGIE CHIMICHE GIULIO NATTA

RIJKS MUSEUM

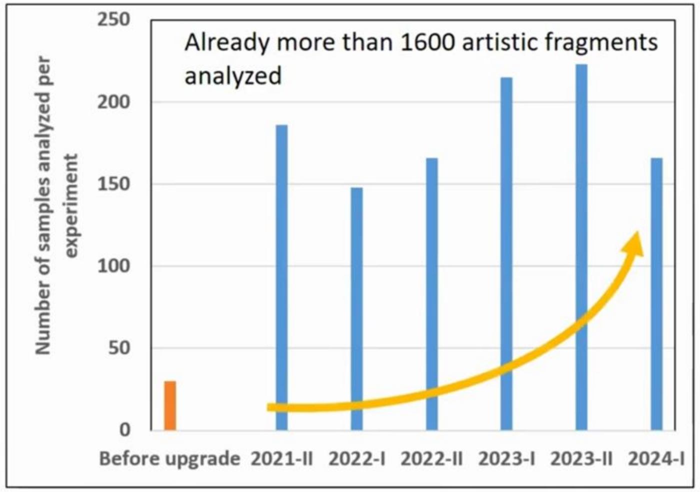
Funded by the European Union

- **Cultural Heritage** at the European Synchrotron Radiation Facility (ESRF): understanding the **manufacturing processes** and the **conservation state** of **art objects**



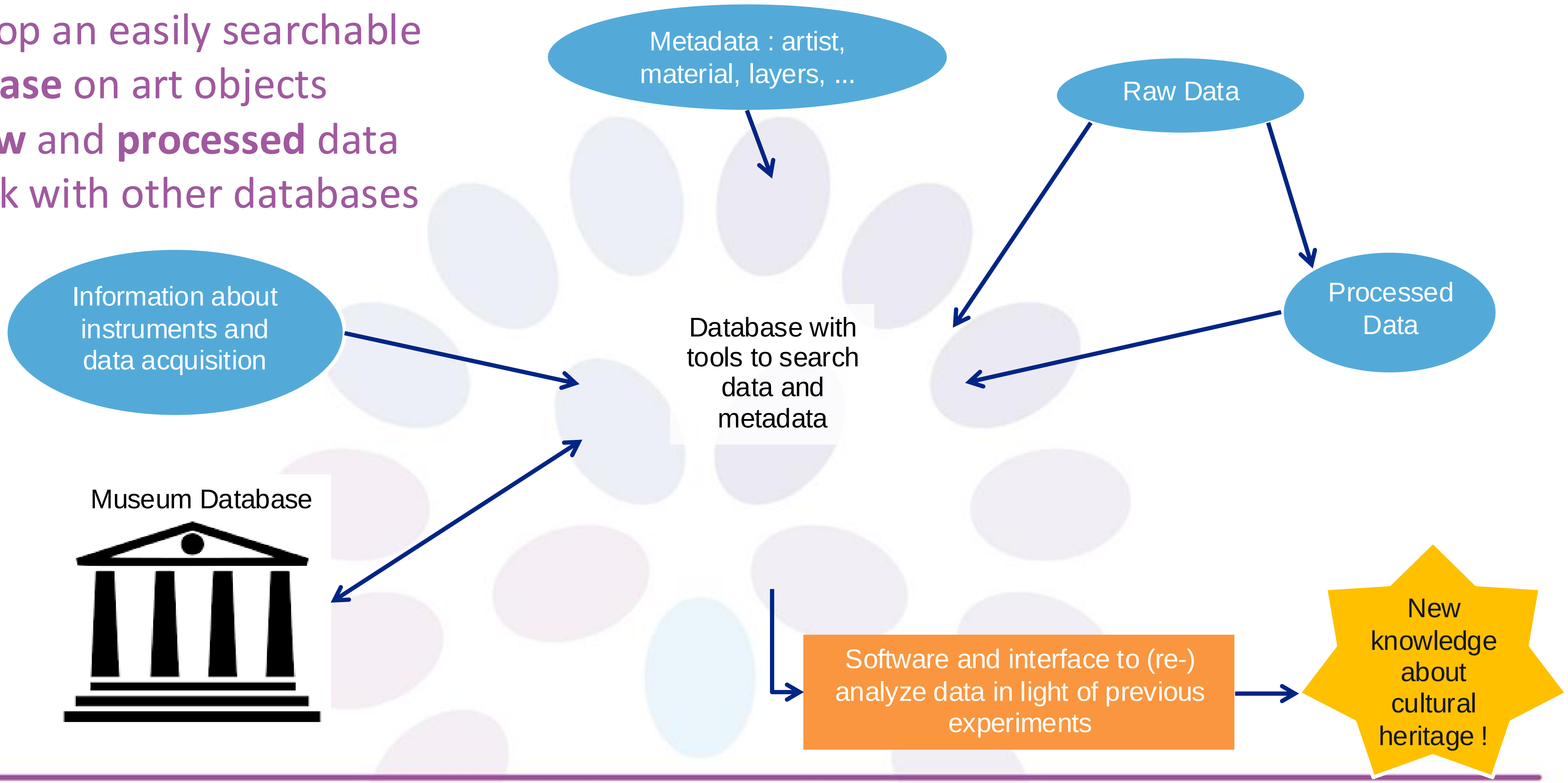
Gonzalez. V et al., 2023

- Upgrade of the ESRF
  - **Large increase** of **data** generated (x10)
  - **Inaccessible** and **difficult to reuse** by non-ESRF expert users
  - **Precious data**, only one experiment per sample

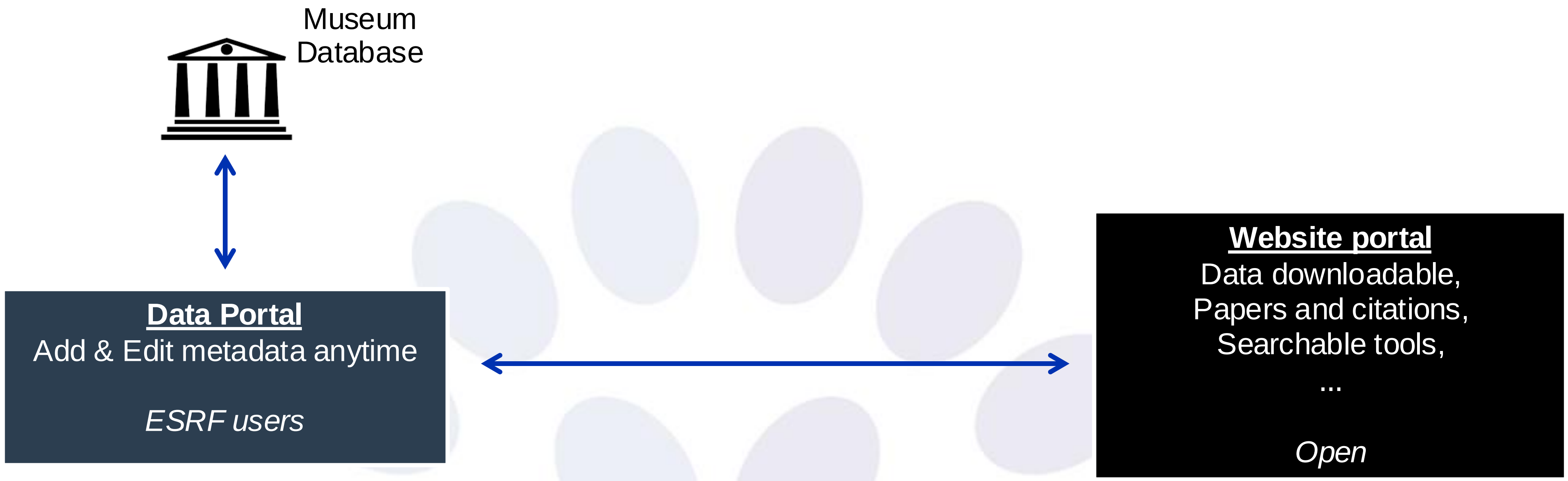


SOLUTION: A global database for Cultural Heritage

- Develop an easily searchable **database** on art objects
  - ➢ **Raw** and **processed** data
  - ➢ Link with other databases



RESULTS: A web portal accessible anywhere

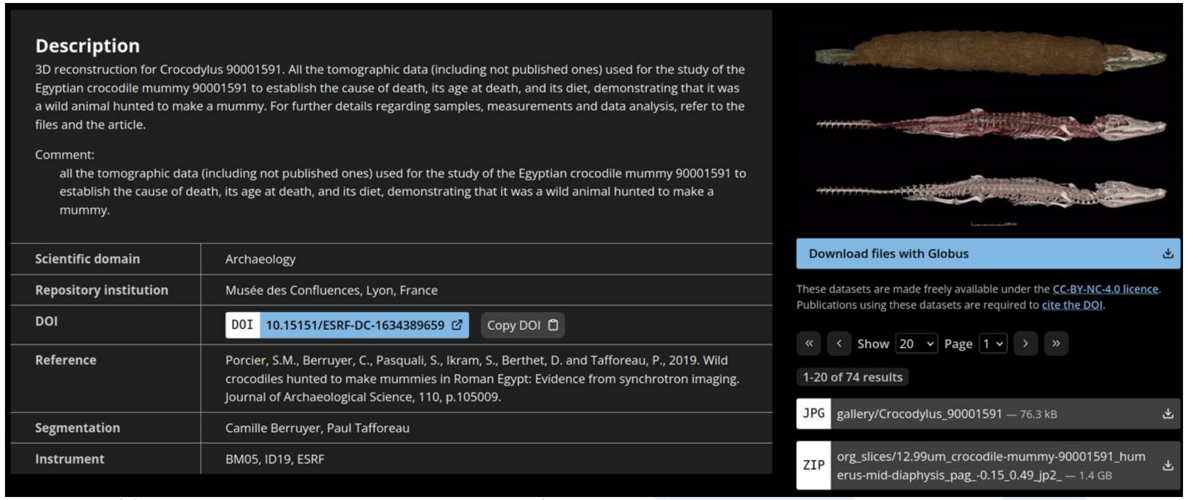


- Easy to use **tools to add metadata** for ESRF users when coming for experiments

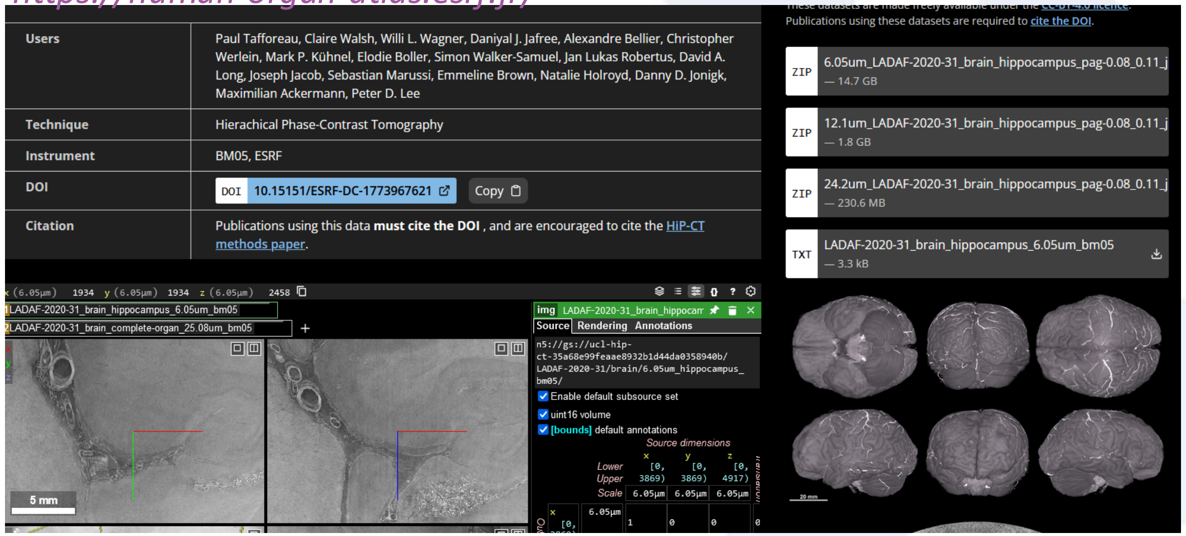
- Web portal with **downloadable data and metadata**

RISKS: Tools and FAIRness advantages unknown by users

https://paleo.esrf.fr/



https://human-organ-atlas.esrf.fr/



Users may **hesitate** to share processed data

- ➢ 2 data portals (paleontology and human organ atlas) with FAIRness principles
- ➢ **~15%** increase in publications from outside if data available for download

Users could **not know the tools** we'll develop nor **how to use** them

- ➢ Prepare "how-to" video and tutorials
- ➢ Organize hands-on sessions

TEAM

- Marine COTTE
  (PI)

- Andrew GOETZ
  (Team Manager)

- Marjolaine BODIN
  (Data Manager)

- Guillaume GAISNE
  (Collaborator)

Picture of the ESRF and surrounding (Grenoble, France)