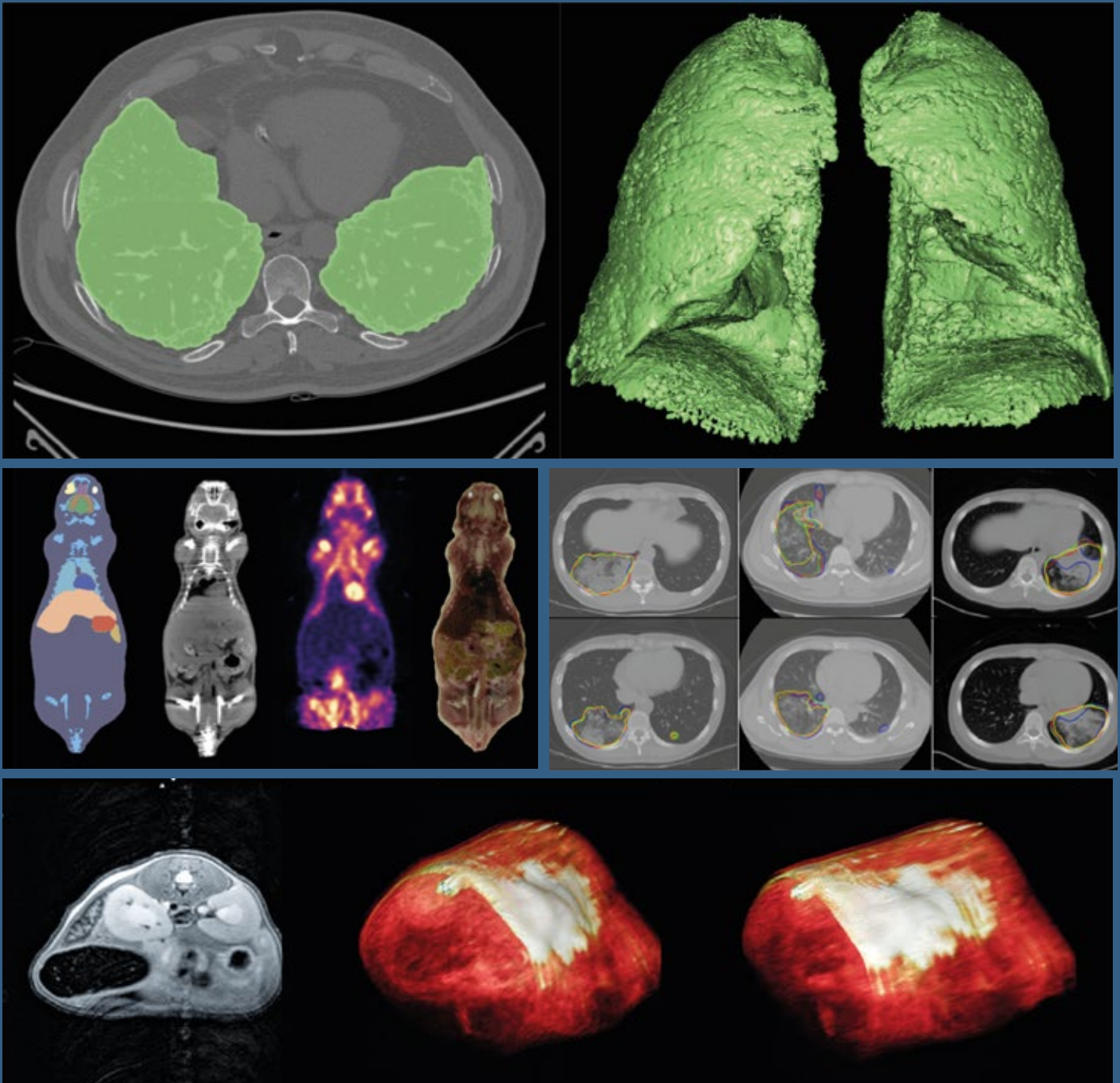# Imaging and Radiomics Group @ Ri.MED

Our multidisciplinary research is focused on the development of personalized predictive and/or prognostic artificial intelligence models to support the biomedical decision process.

Fondazione Ri.MED

🎯 FOCUS

- Artificial Intelligence in Precision Medicine

- Radiomics for the quantitative evaluation of the Efficacy of treatments

- *In Vitro* and *In Vivo* Theranostic studies: New Radiopharmaceuticals for Diagnosis and Therapy

- Radiobiology Studies for Dosimetry-Time Effectiveness of Radiopharmaceutical Therapy

💡 AIMS

- To develop Artificial Intelligence systems to support Biomedical decision-making

- To develop tools for target Detection, Segmentation and Classification in Biomedical Imaging

- To develop Radiomics tools for Preclinical Biodistribution analysis of Radiopharmaceuticals

- *In Vitro* Quantification of Radioactive compounds

📈 OUTCOME

- Novel algorithms and workflow to support precision medicine

- New biomarkers to be used in diagnostic and therapeutic procedures

- Active scientific collaborations with national and international partners

- In average, over 22 scientific papers per year in peer-reviewed journals and international conference proceedings

⚙️ EXPERTISE AND RESOURCES

- Imaging, Radiomics, Artificial Intelligence, Deep Learning, Machine Learning

- Biodistribution analysis of Radiopharmaceuticals: Preclinical Molecular Imaging

- *In Vitro* and *In Vivo* Radiobiology: Radiopharmaceuticals and Radio-labeled Chelators

- PET/CT, MRI, HRCT, IVIS, Gamma Counter

- Python, Matlab, CUDA

🔗 COLLABORATIONS

- The Mediterranean Institute for Transplantation and Advanced Specialized Therapies (ISMETT-IRCCS), Palermo, ITA
- Institute of Molecular Bioimaging and Physiology, National Research Council (IBFM-CNR), 90015 Cefalù, ITA
- University of Palermo, Palermo, ITA
- University of Catania, Catania, ITA
- University of Messina, Messina, ITA

- Biomedical Campus University of Rome, Rome, ITA
- Cannizzaro Hospital, Catania, ITA
- University Hospital, Palermo, ITA
- Experimental Zooprophylactic Institutes of Sicily (IZS Sicily), Palermo ITA
- Georgia Institute of Technology, Atlanta, GA 30332, USA

Fondazione Ri.MED

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