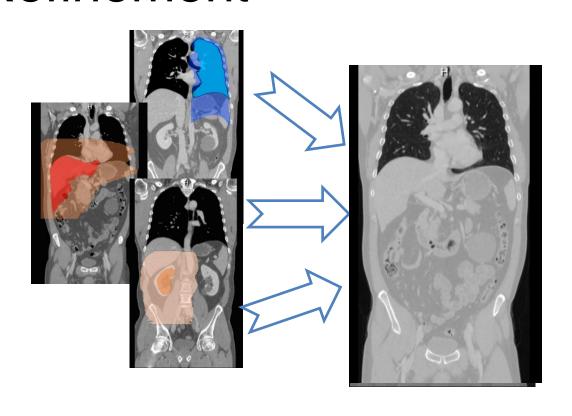
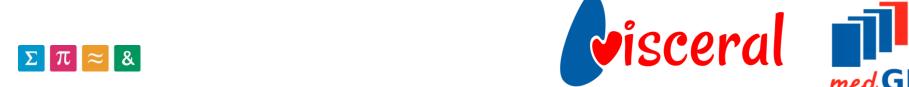


## Multi Atlas-Based Segmentation with Data Driven Refinement

# Oscar A. Jiménez-del-Toro and Henning Müller

University of Applied Sciences Western Switzerland (HES-SO)





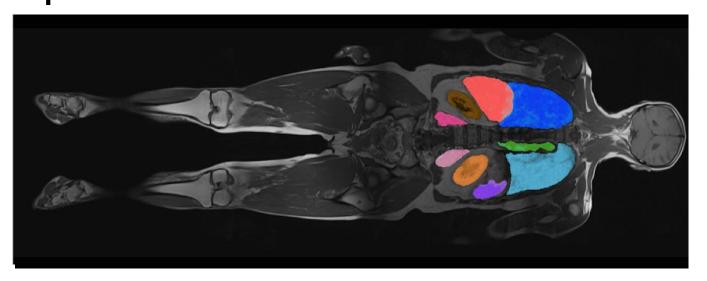






# Research Setup

- VISCERAL project: organ segmentation
- Multiple anatomical structures in multiple medical imaging modalities (CT, MR ...)
- Accurate large scale data analysis techniques are needed





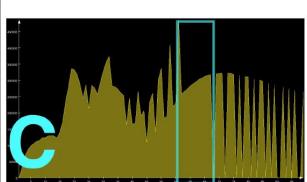


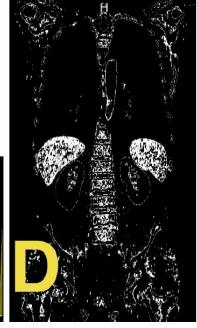


#### Method

- Image registration
  - Increases spatial correlation between two images
- Data-driven label refinement



















### Results

 Quantitative improvement in contrast-enhanced CT for 4 organs

 Qualitative results in multiple imaging modalities:

– whole-body CT

- whole-body MR
- contrast-enhanced MR

Thank you for your attention!

