

CASE STUDY

# UNIVERSITY HOSPITAL OF COLOGNE

Uniklinik Köln

---

*The Most Detailed VR Collection of  
Abdominal Surgery*



# Challenge · Solution · Innovation



## THE CHALLENGE

### Deformities and Rigidity in Cadaveric Anatomy

- Pursuing effectiveness beyond textbooks & cadavers
- Challenges in understanding OB anatomy (collapse, dehydration)
- Cost & time efficiency over cadaver-based training



## THE SOLUTION

### XR-Generated Human Anatomy & Exploration Options

- Interact with 7 VR abdominal surgery simulations
- Comprehensive explorative XR simulations for learning
- 10+ realistic errors and complications modeled



## THE INNOVATION

### Unique XR Representation of the Omental Bursa Region

- Novel immersion inside abdominal anatomy via ORamaVR Creator
- 10+ distinct errors, cognitive & psychomotor sets
- Comprehensive understanding of OB morphology

# Results That Matter



**7 Simulations**

VR abdominal surgery collection



**10+ Errors Modeled**

Realistic complication scenarios



**↑ Understanding**

Comprehensive OB morphology grasp



**Cost-Efficient**

Versus cadaver-based training