

CASE STUDY

# INSELSPITAL

## Universitätsspital Bern

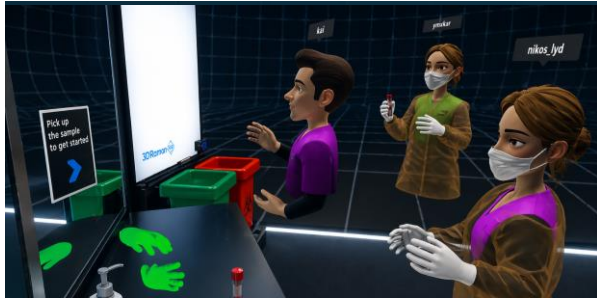
*Pioneering Immersive Learning for  
Pandemic Preparedness*

 **INSELSPITAL**  
UNIVERSITÄTSSPITAL BERN  
HÔPITAL UNIVERSITAIRE DE BERNE

**ORama** 

*"No patient should be anyone's first."*

# Challenge · Solution · Innovation



## THE CHALLENGE

### Effectiveness of VR for COVID-19 Diagnostics Education

- Costly, logistically challenging traditional OSCE exams
- Limited replication of real-life medical scenarios
- Virtual OSCEs are expensive to develop and maintain



## THE SOLUTION

### VR Co-op COVID-19 Testing Simulation

- Gamified skill transfer from virtual to real world
- Immersive procedure engaging the user's body
- Step-by-step instructions with errors and warnings



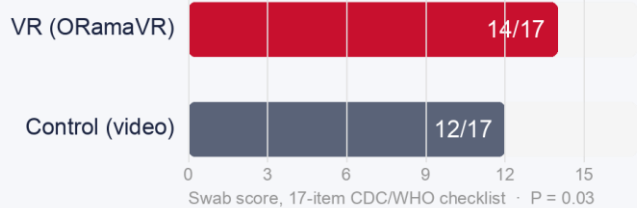
## THE INNOVATION

### Enhancing Learning Experience and Attainment

- Improves sensorimotor performance by 16%
- VR group swab score 14/17 vs 12/17 control (p=0.03)
- Published in JMIR Serious Games (2021)

# Clinical Trial: VR Improves COVID-19 Swab Performance

## Nasopharyngeal Swab Score



29 students (15 VR, 14 control). After training, the VR group scored 14/17 vs 12/17 for the video-trained control (P = 0.03) — with gains retained at 1-month follow-up.

## Performance & Satisfaction

# 16%

sensorimotor improvement over the control group

VR users reported significantly higher satisfaction (USEQ 27 vs 22, P = 0.011) and excellent tolerability (median Simulator Sickness score 1).

# Results That Matter



## ↑ 16% Performance

Sensorimotor improvement over control group

[Read the clinical trial →](#)



## ↑ Retention

Higher memory & skill acquisition



## Superior OSCE

14/17 median score vs 12/17 traditional



## Any Device

Hardware-agnostic XR training