



Virtual Reality Laboratories



About the Speakers



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To see full speaker biographies, visit <https://www.cdc.gov/labtraining/onelab/onelab-summit-2022.html>

Laboratory Training: Virtual Reality (VR)

2022 OneLab Summit

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Division of Laboratory Systems

Santiago Junca

Health Communication Specialist
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Timeline of DLS VR Training Development

2019

- Began developing VR training
- Pilot-tested VR training with internal staff

2020

- Released CDC's first VR laboratory training course, LabTrainingVR: Biosafety Cabinet Edition

2021

- Released new VR training course focused on PPE
- Developed multiplayer VR programming
- Created proof-of-concept for LabTrainingVR: OneLab Edition – a virtual, multiplayer environment

2022

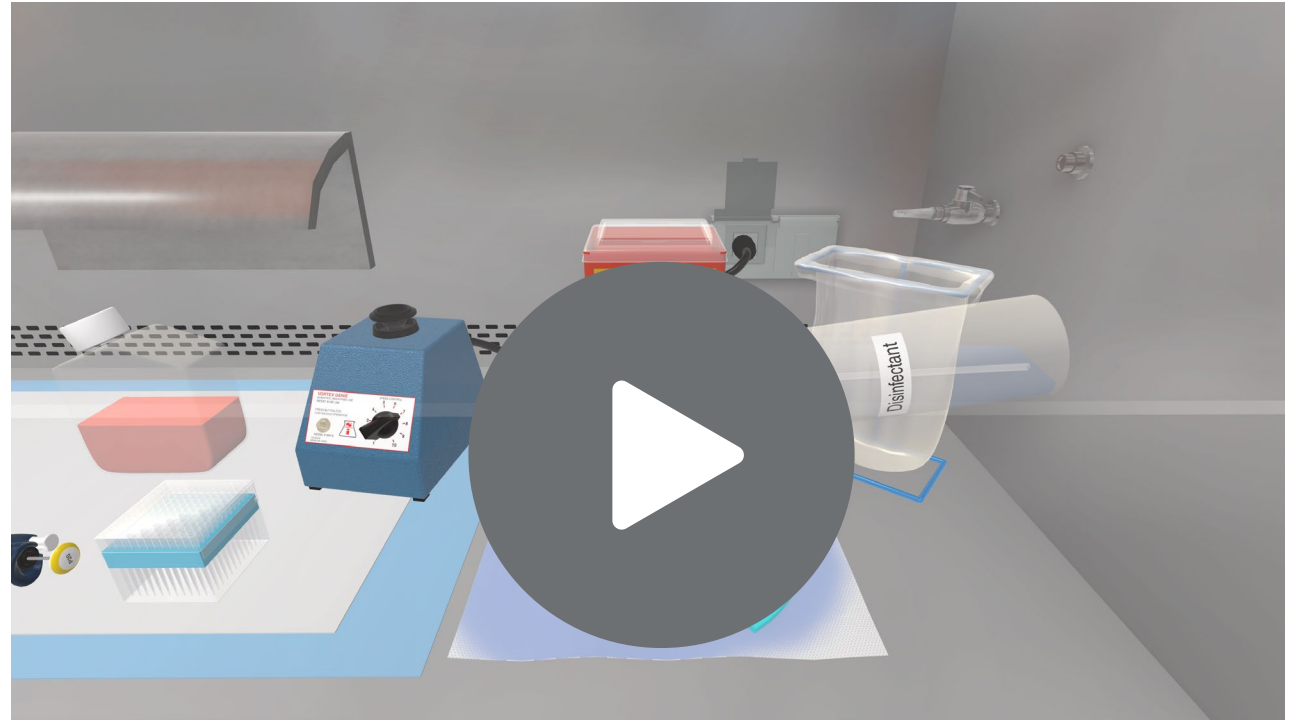
- VR-ready laboratories (“pushpack” program)
- Topic-specific, multiplayer laboratory training



LabTrainingVR: Biosafety Cabinet Edition



https://www.cdc.gov/labtraining/training-courses/vr/labtrainingVR_BSC.html

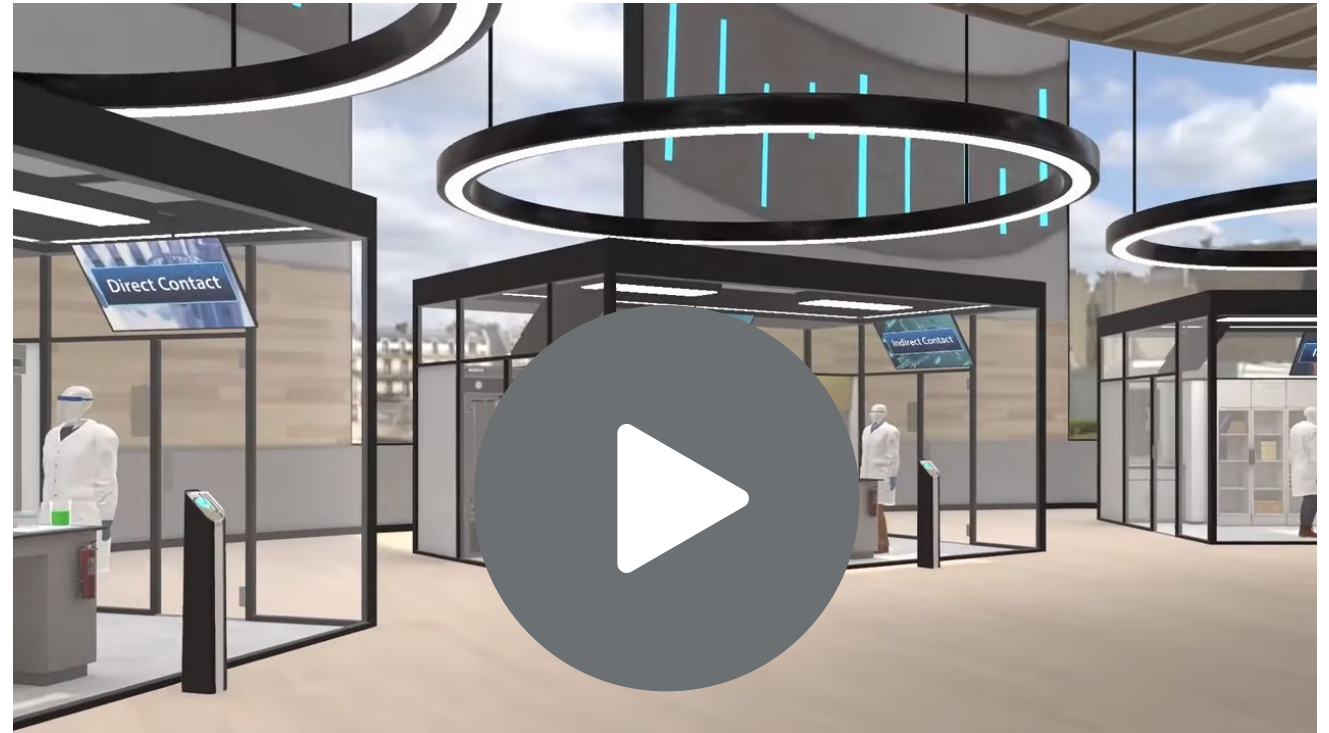


<https://www.youtube.com/watch?v=m92OQCavQcs>

LabTrainingVR: PPE Edition



https://www.cdc.gov/labtraining/training-courses/vr/labtrainingVR_PPE.html



https://www.youtube.com/watch?v=FuX9_cNrZ0w

LabTraining VR: OneLabVR Edition

- 50,000+ square feet of laboratory space with 100+ custom-built pieces of laboratory equipment including:
 - Rotary microtome, tissue processor
 - Dark field microscope
 - Incubators, refrigerators, freezers
 - Real-Time PCR machines
 - Centrifuges, microfuges
 - Biosafety cabinets / fume hoods
 - Chemistry analyzers
 - Microbial identification systems



Sneak Peek



VR-ready Laboratories

2022 pilot:

- 40 VR-ready laboratories
(~20 clinical, ~20 public health)
- Sites will receive:
 - 2-3 Oculus Quest headsets, controllers, and cords
 - Job aids (handouts and video) to assist with setup
 - Evaluation questionnaire



CDC VR Laboratory Training Website

CDC Laboratory Training

CDC > CDC Laboratory Training



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Virtual Reality Laboratory Training

Virtual Reality Laboratory Training Partner Toolkit

External Training Links

FAQs

Continuing Education Units (CEU)

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Virtual Reality Laboratory Training

Public health emergencies demand the availability of diverse and effective distance-based education and training options for public health and clinical laboratory professionals. To keep pace with the evolving training needs, DLS has blended innovative technology and instructional design principles by adding Virtual Reality, or VR, to its laboratory training and workforce development toolbox.

VR offers laboratory professionals the opportunity to apply, assess, and improve their skills in a safe and controlled learning environment. In other words, VR simulations allow learners to make costly mistakes while learning new skills with no real-world consequences.



[View Transcript](#) [Low Resolution Video](#)

www.cdc.gov/labtraining/VR.html



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1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

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