OneLab™
A Unified Response to Training Needs

Laboratory Training: Virtual Reality (VR)

Joe Rothschild

December 16, 2022

Agenda

- Introduction
  - *New and relevant OneLab™ Resources*
  - *Today's Presenters*
- Laboratory Training: Virtual Reality (VR)
- Q&A
- Upcoming Events

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INTRODUCING OneLab™ REACH

A Learning Management System for Clinical and Public Health Laboratory Professionals

Give your learners access to the newest and most relevant CDC-developed COVID-19 education and training.

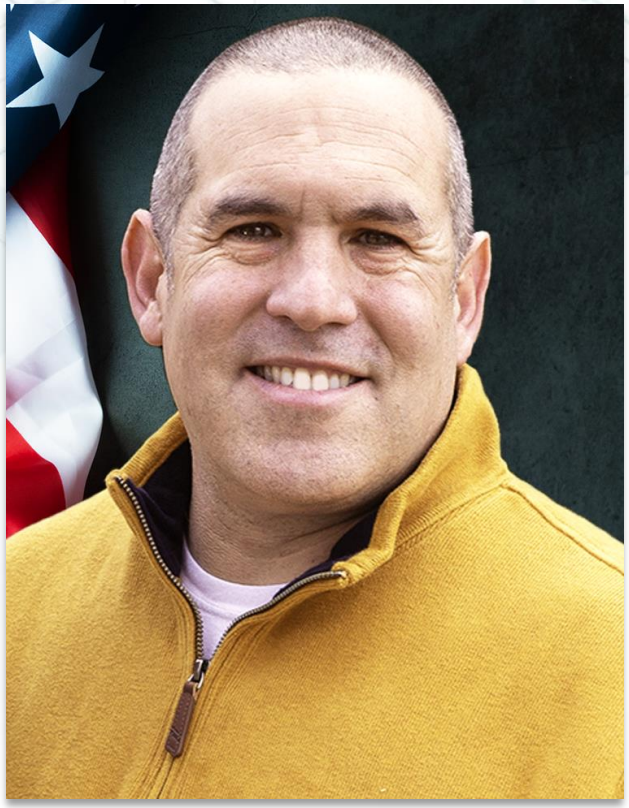
- Download free materials
- Earn Continuing Education Units (Including P.A.C.E.®)
- Access OneLab REACH on your mobile device

Register Today!

OneLab REACH™ is part of the CDC OneLab initiative. OneLab's mission is to strengthen interconnections between clinical, public health, and CDC laboratory education and training professionals to collectively support rapid, large-scale responses to public health emergencies.

Learn more at www.cdc.gov/onelab

Presenter



Joe Rothschild

Health Communication Specialist
Training Workforce Development Branch (TWDB)
Division of Laboratory Systems (DLS)
Center for Surveillance, Epidemiology and Laboratory Services (CSELS)
Centers for Disease Control and Prevention (CDC)

Laboratory Training: Virtual Reality (VR)

December 2022 OneLab Network Event

Joe Rothschild
Health Communication Specialist
Training and Workforce Development Branch
Division of Laboratory Systems

Benefits of VR Training

Built-in Instructor

- One-on-one attention from a digital instructor who resp
individual actions and gives specific feedback, teaching
across every learner experience

Mobility

- Headsets can be stored and transported to any location
small enough to fit into a backpack. All you need is an ir
connection and a small space to be able to learn from a

Knowledge Retention

- VR training delivers 3-4x higher information retention cc
traditional learning methods such as lectures, videos, or
Learners build confidence that translates over to real jol

Accuracy of Content

- VR training is built in collaboration with SMEs, giving lea
true sense of the tasks and ensuring they're ready to wo
one.

Cost Effective

- Perform real-world training without an expensive physic
purchasing supplies for a training lab. CDC training simu
updated with the latest equipment, regulations, and prc
are used on-the-job.

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 "LabTrainingVR: Personal Protective Equipment Edition"
- Developed multiplayer VR programming
- Created proof-of-concept for "OneLabVR" – a virtual, multiplayer environment

2022

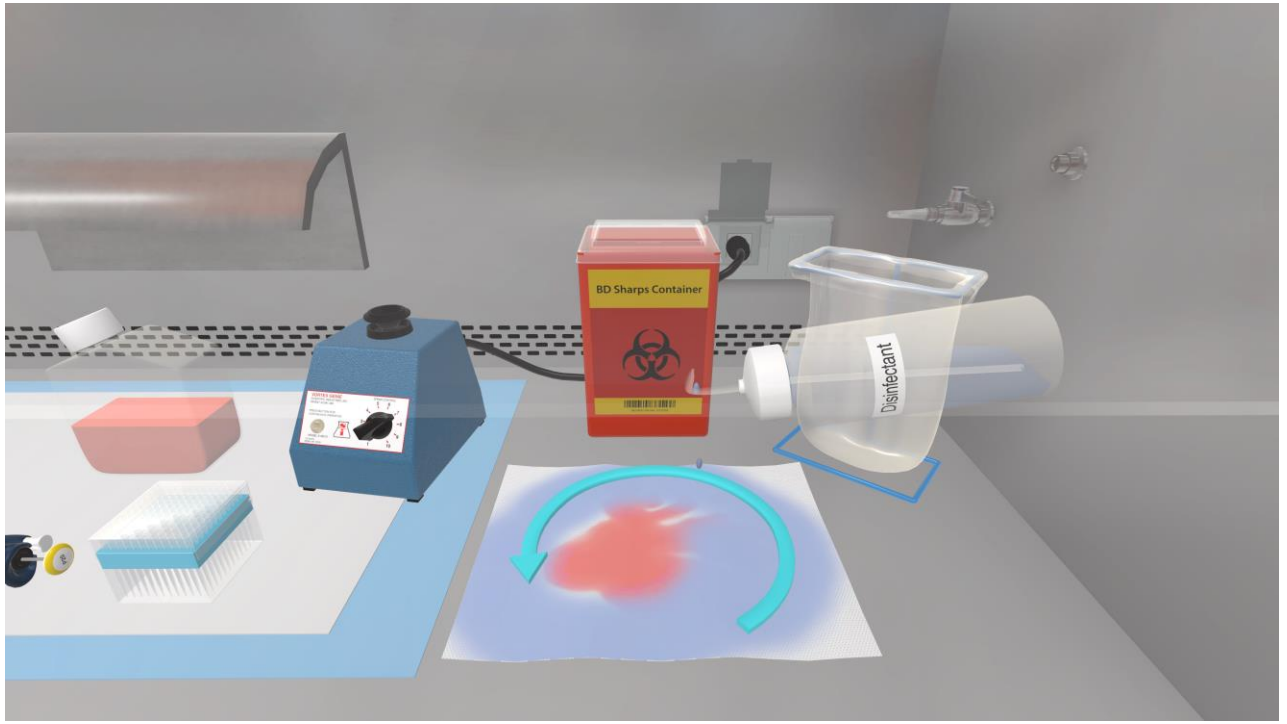
- Ported and released "LabTrainingVR: Biosafety Cabinet Edition" on OculusQuest
- VR-ready laboratories ("pushpack" program)
- Expanded "OneLabVR"
- Topic-specific, multiplayer laboratory training

LabTrainingVR: Biosafety Cabinet Edition

LAB TRAINING

VR

BIOSAFETY CABINET EDITION



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

https://www.youtube.com/watch?v=m92OQCAvQcs

LabTrainingVR: PPE Edition

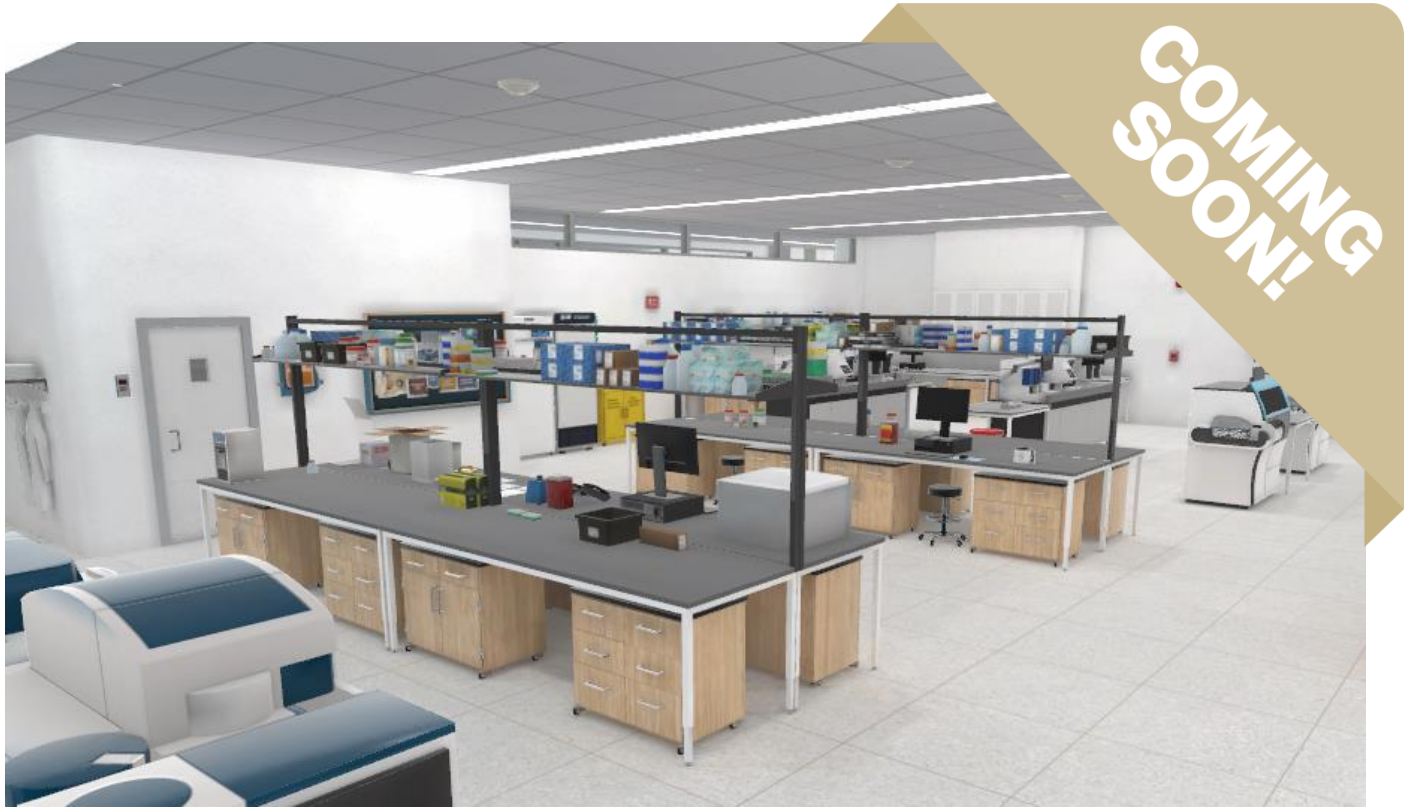
https://www.cdc.gov/labtraining/training-courses/vr/labtrainingVR_PPE.html

https://www.youtube.com/watch?v=ikq5-AUDrFQ

OneLabVR

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



VR-ready Laboratories

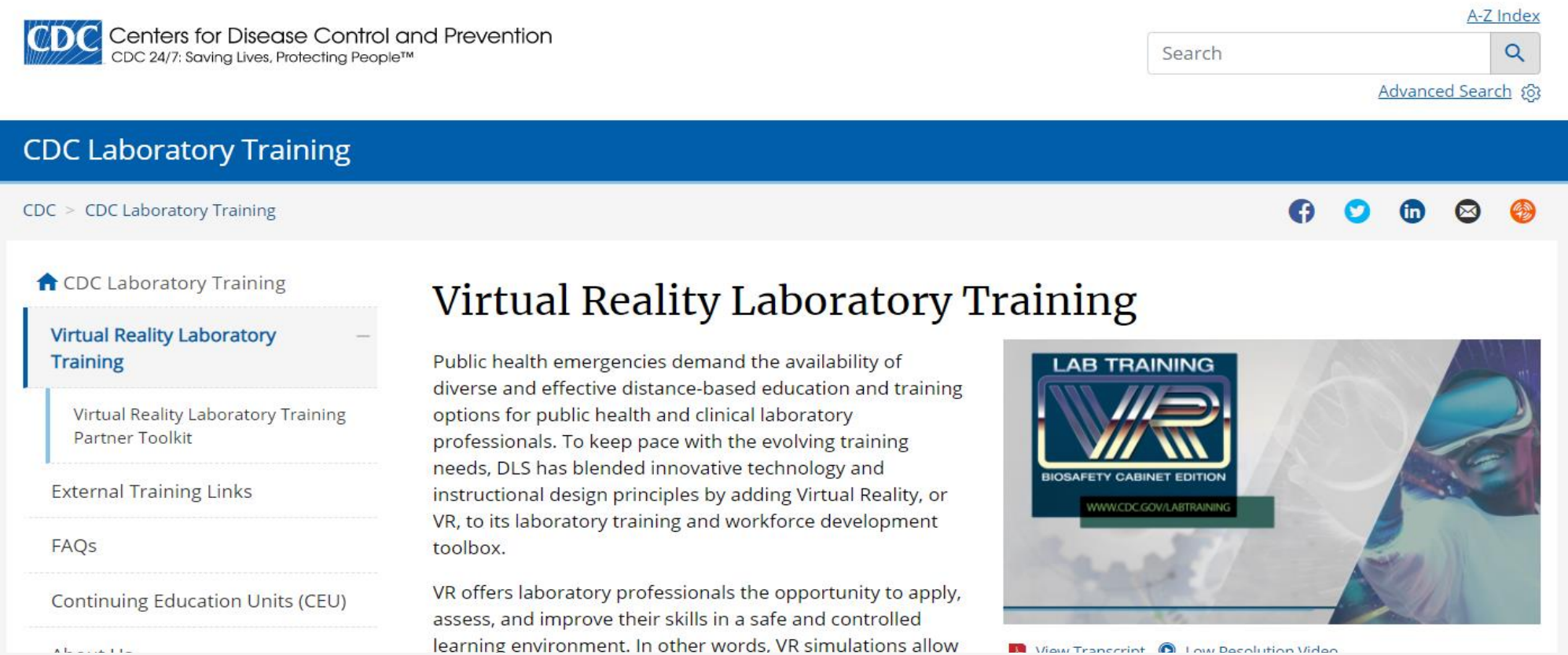
2022 pilot (Phase 1):

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

2022 pilot (Phase 2):

- 120+ headsets sent out

CDC VR Laboratory Training Website



www.cdc.gov/labtraining/VR.html

Questions?

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

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VR@CDC.GOV

Upcoming OneLab Network Events

OneLab™
A Unified Response to Training Needs

Build Your Laboratory Onboarding Template

January 19, 2023, 1-2PM ET

This webinar is designed to guide participants through using the Laboratory Operations Template (LOT) a fully customizable template for laboratory managers and staff who want to provide new/surge staff with a centralized orientation manual and Standard Operating Procedure (SOP) resources.

Register Now!

https://cdc.zoomgov.com/webinar/register/WN_5a0W5896TNmn5q3UzRS0MQ