

Small Business Innovation Research and Workforce Development


Fall 2023 WTP Workshop

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Cell Podium



The WTP Ecosystem

An aerial photograph of a large, modern university campus. The buildings are multi-story, light-colored structures with flat roofs and numerous windows. The campus is surrounded by lush green trees and a body of water is visible in the foreground. The overall scene is bright and clear.

“NIEHS encourages applicants to ... pursue partnerships and collaboration with NIEHS WTP awardees,

and to design new technology-enhanced training methods or e-Learning products that can enhance the existing NIEHS-supported curricula and training” (RFA-ES-23-005)

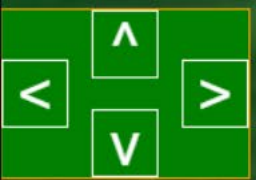
Sensor Sim

PID 28.2
LEL 0.0

Inspector Back Video

Players

Cesar, x:-1.11 z:20.21, Idle
Daniel, x:-0.89 z:16.80, Idle
Domiana, x:3.01 z:21.98, Idle
Peter, x:4.17 z:20.02, Idle



Team-Based & Web-Based Virtual Field Exercises for HAZMAT Training

(SBIR Ø | 1R43ES035276-01)

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LEL 0.0

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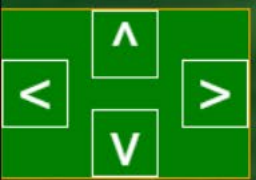
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Partnered with schools for requirements assessment and prototype testing.

- Atlantic Center for Occupational Health and Safety Training; Rutgers
- Western Region Universities Consortium; UCLA
- Midwest Consortium; Environmental Management Institute and Green Door Initiative



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Beyond Traditional SBIR Collaboration: Workforce Development During Prototype Development

- Cell Podium and Green Door Initiative collaborate beyond the SBIR grant initial statement of work:

Provide technical training in Detroit to their future workforce at Green Door Initiative

- Example training activities:
 - Color 3D models of assets
 - responders, hazards, buildings, fences, landscape, etc.
 - Animate 3D models
 - Situate assets in a HAZMAT training scenario.



Workforce Development Collaboration Builds Skills Needed in Many Industries

Technical Skills:

- Web Development
- Picture Editing
- 3D Modelling
- Web Animations

Needed in:

- Marketing and Sales
- Commercial Signs
- Website providers
- Freelancing

Don't forget the all-important soft skills!

- Motivation to develop initiative
- Skills in helping yourself: ChatGPT, Grammarly, Google Search, ...
- Teach how to learn!

Next Steps

- Add 3D design and graphics design into the computer skills component (6 weeks @ 4 hours/week) of the existing Green Door Initiative environmental training program (12 weeks).
- Identify interested learners for co-curricular activities; funded throughout SBIR period of performance.
- Create a dedicated Computer Graphics training module as a new class in the Green Door Initiative environmental training program (12 weeks).

Peter at GDI computer lab





Department of Education



Department of Energy



Department of Health and Human Services

WTP



Department of Homeland Security



Department of Transportation



Environmental Protection Agency



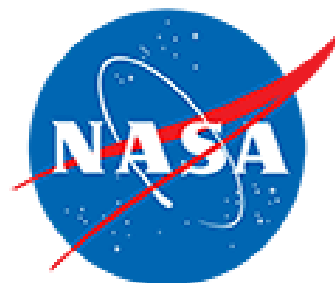
Department of Commerce



National Science Foundation



Department of Agriculture



National Aeronautics and Space Administration



Department of Defense