Application of U.S. Strategic Roadmap ... and How the North American 3R's Collaborative May Help

SCIENTIFIC ADVISORY COMMITTEE ON ALTERNATIVE TOXICOLOGICAL METHODS

National Institutes of Health, Bethesda, MD

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Norman C Peterson, DVM, PhD, DACLAM

secratary@na3rsc.org

3Rs Organizations in NA Can Help – Refinement & Communication

- Roadmap is heavy on Reduction and Replacement, but what about Refinement?

INTERNATIONAL CONSORTIUM for INNOVATION & QUALITY in PHARMACEUTICAL DEVELOPMENT

- Strategic Road Map Outline - "Develop mechanisms to improve communication between end-users and researchers."

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INTERNATIONAL CONSORTIUM for INNOVATION & QUALITY in PHARMACEUTICAL DEVELOPMENT

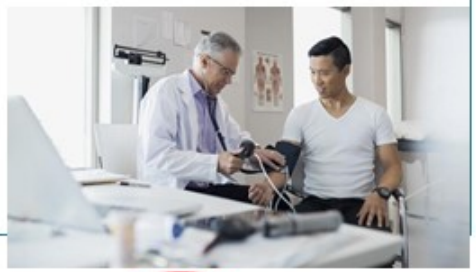
Microphysiologic Systems

Reproducibility, Endpoints, & Technology

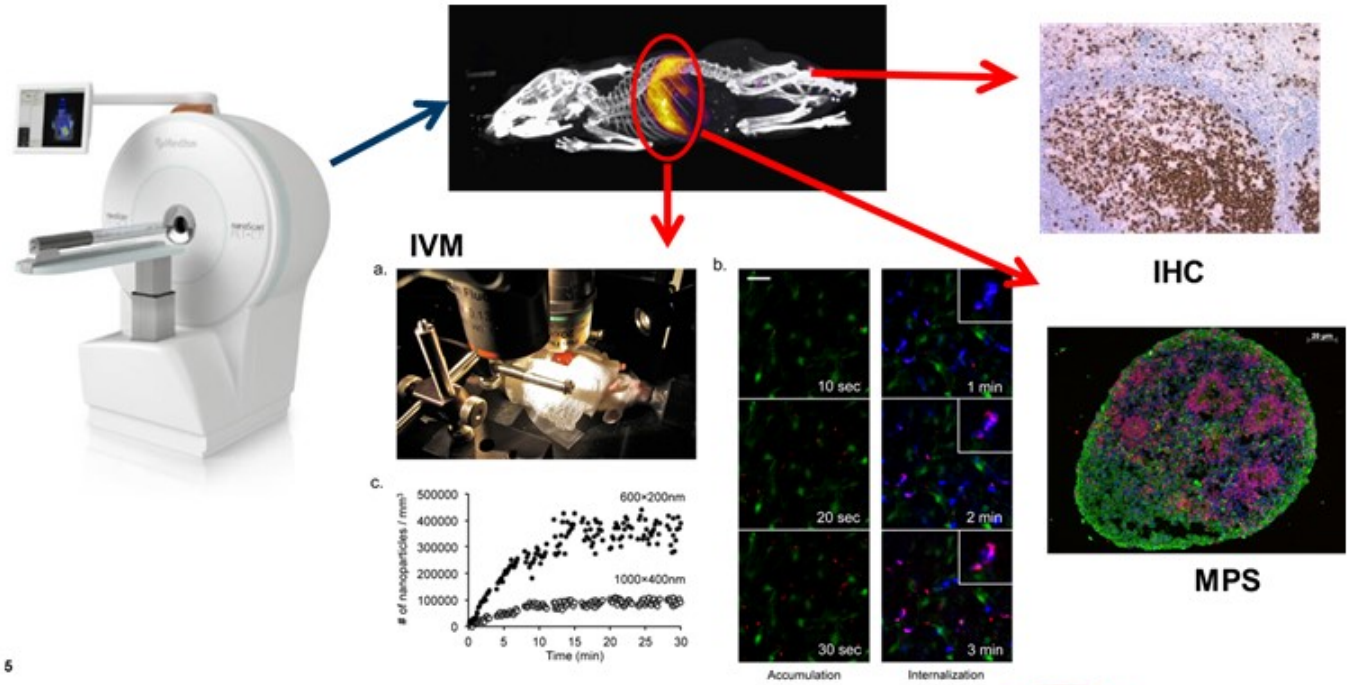
Refinement's Place in the Roadmap to New Approaches in Toxicology Research and Studies

- **Depression / Morbidity / Death**
- **Clinical Pathology (Liver Enzymes, Renal Chemistry, Hematology)**
- **Limited Physiologic Parameters (EKG, Ophthalmology)**

- **Better or Surrogate Endpoints = Refinement**
  - Biomarkers
  - Behavior
  - Physiology



New Approaches In Toxicology



Strategic Road Map Outline

"Develop mechanisms to improve communication between end-users and researchers."

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REFINE. REDUCE. REPLACE.

ADVANCING SCIENCE, INNOVATION AND WELFARE THROUGH SHARING

What is the NA3RsC?

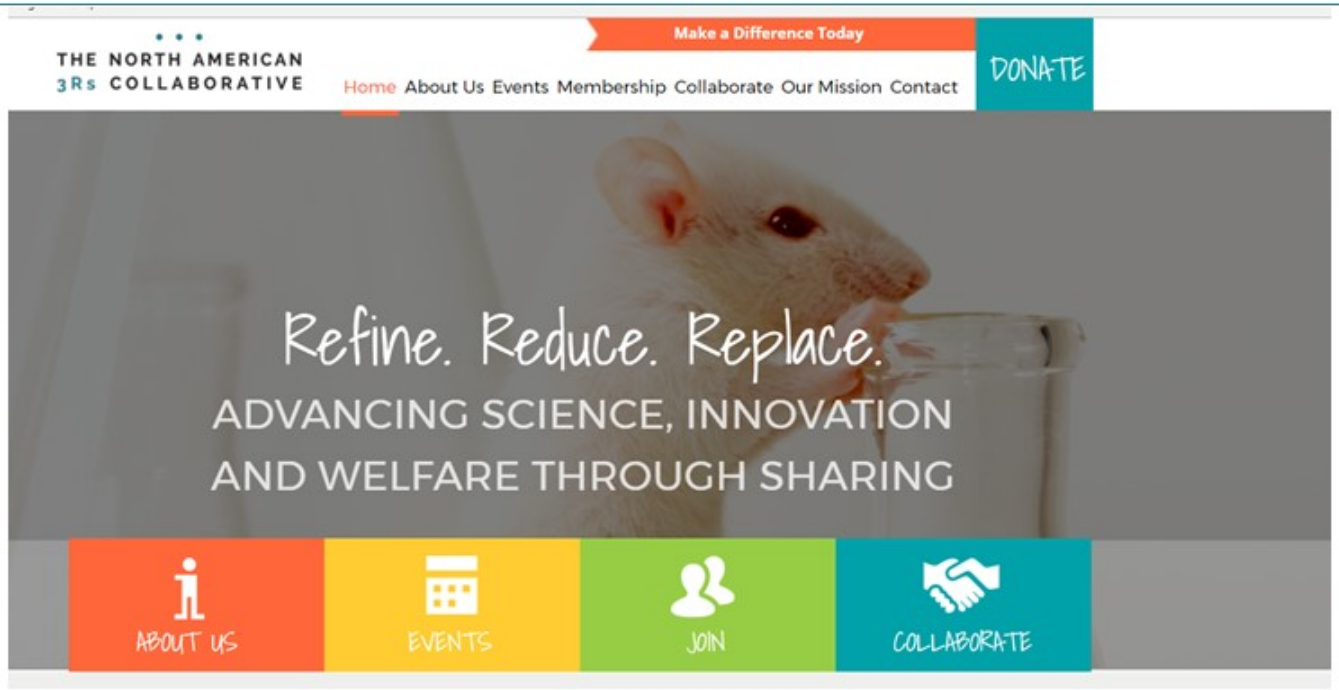
- **Mission/Statement of Purpose**
  - The mission of the NA3RsC is to advance the science of the 3Rs – replacing, reducing and refining the use of animals in research.
  - Our strategy includes:
    - Raising awareness of current 3Rs technologies and approaches
    - Fostering networks and collaborations focused on the 3Rs
    - Acting as a clearinghouse for information on the 3Rs
  - To do this we work across the scientific community with researchers from academia and industry, veterinarians and animal care staff, policy makers, regulators and funders.

Collaborative not Competitive!

Building a virtual 3Rs community…

- **A Dynamic, Interactive, and Evolving Community**
  - Theater to present educational symposiums live
  - 3Rs community pavilion
    - (a resource hub / portal to all North American 3Rs communities who participate)
    - Links to useful information
  - Platform to discuss and solve topical issues

Website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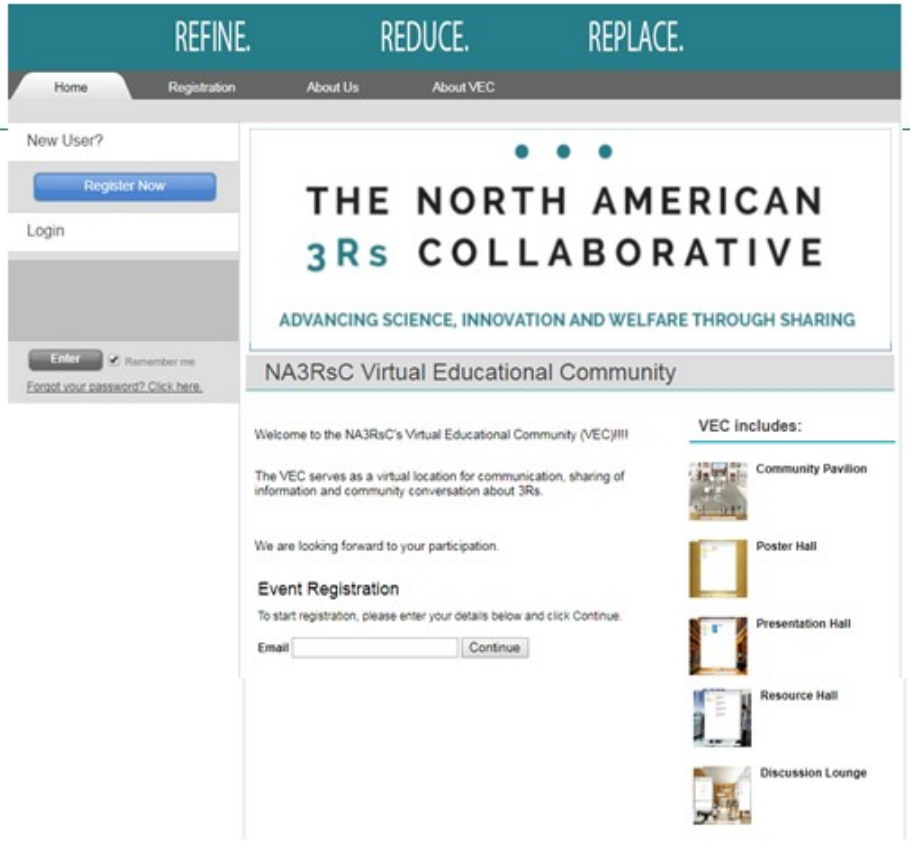
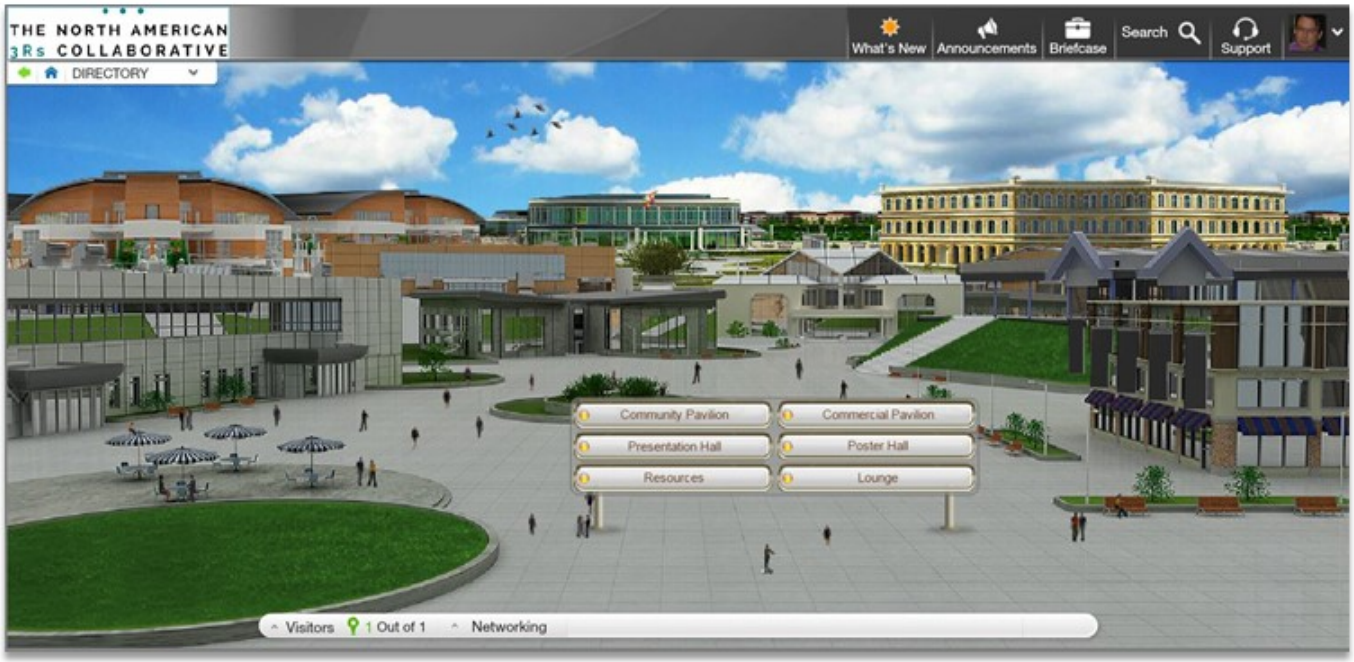
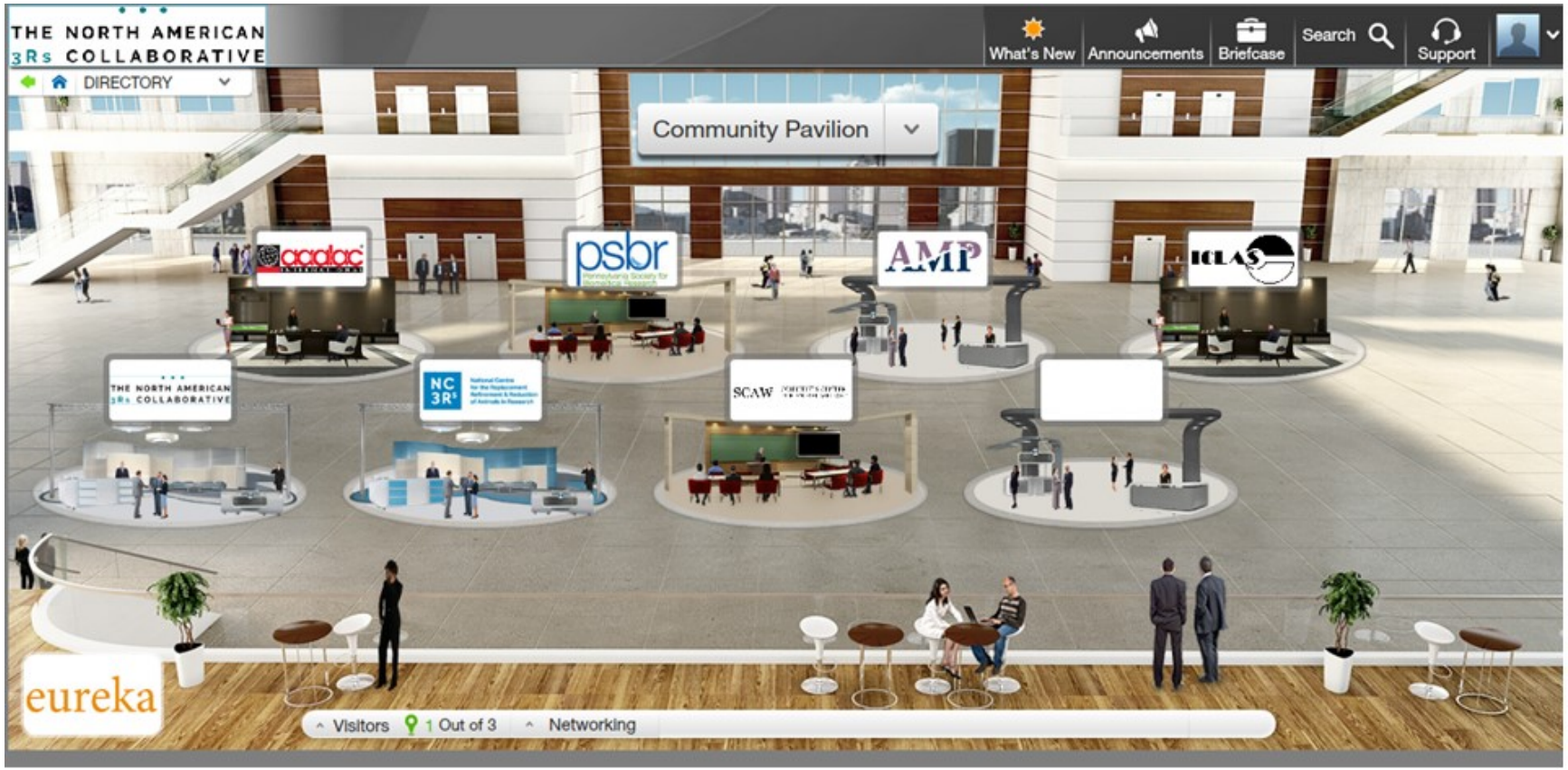
Virtual Education Community



Welcome to our community…

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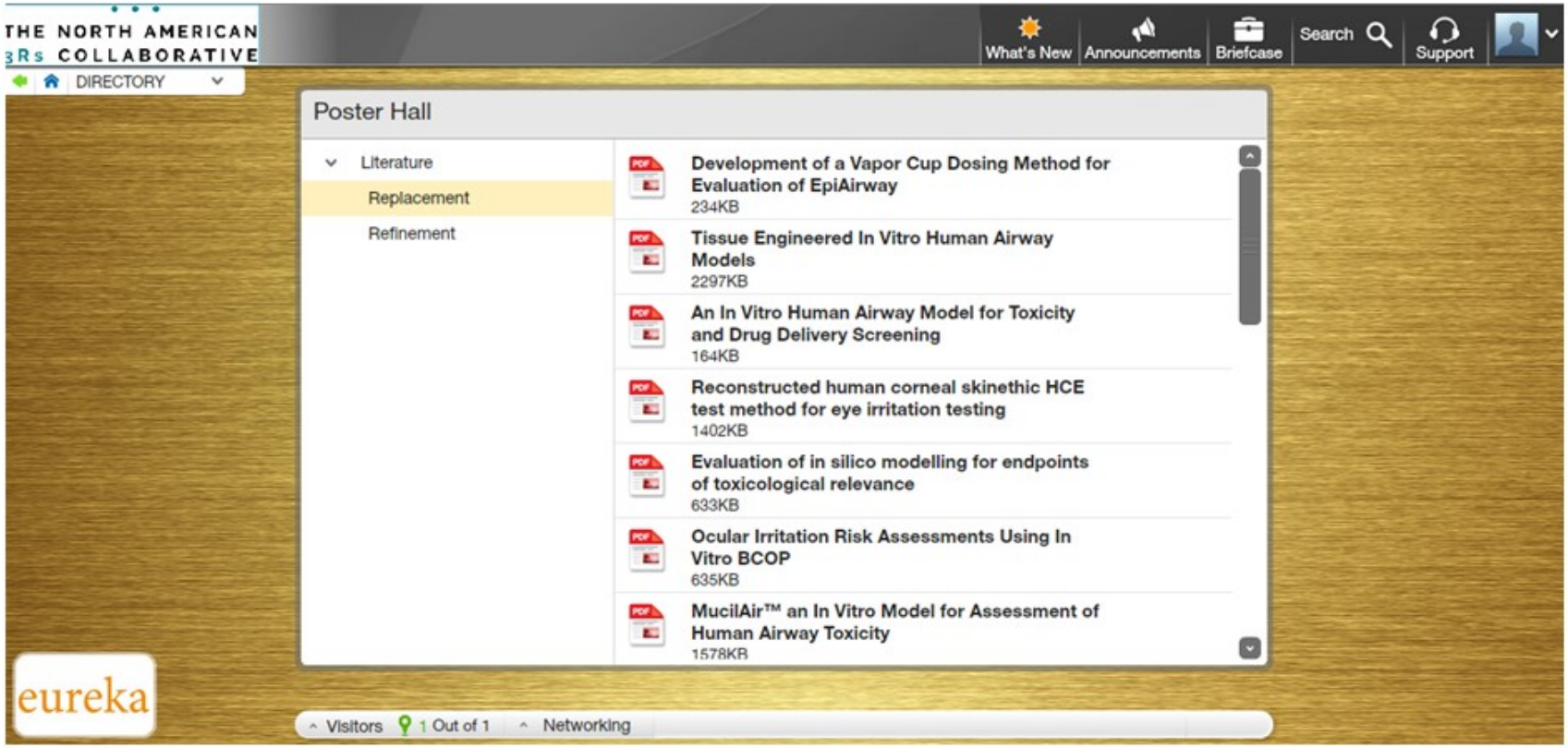
Networking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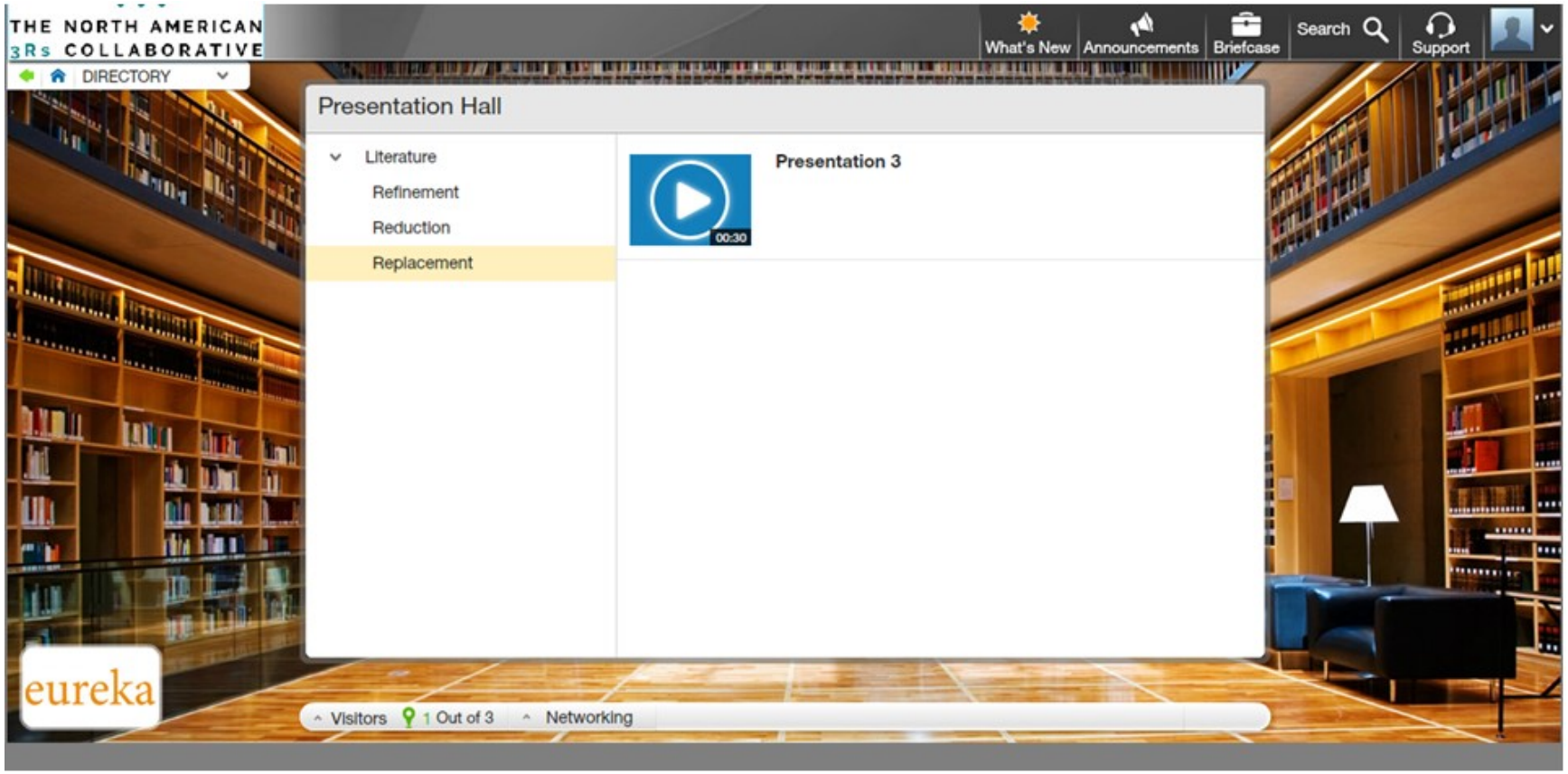
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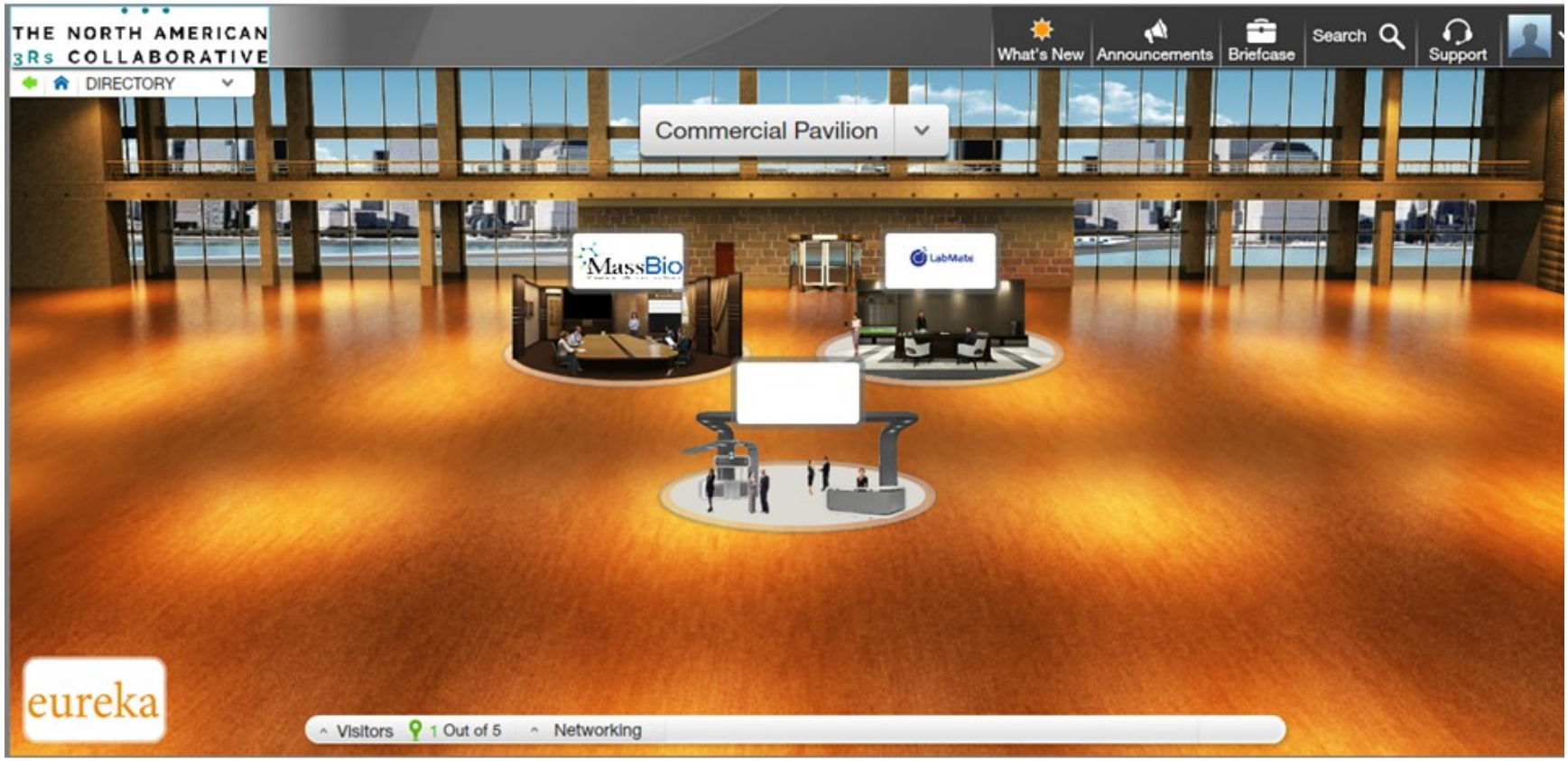
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secretary@na3rsc.org