

REIMAGINING OCEANOGRAPHIC OUTREACH:

Engaging Public Interest In Oceanographic Biogeochemistry Through Virtual Reality Of An At-sea Experience

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TEXAS A&M UNIVERSITY
Oceanography



TEXAS A&M UNIVERSITY
School of Performance,
Visualization & Fine Arts

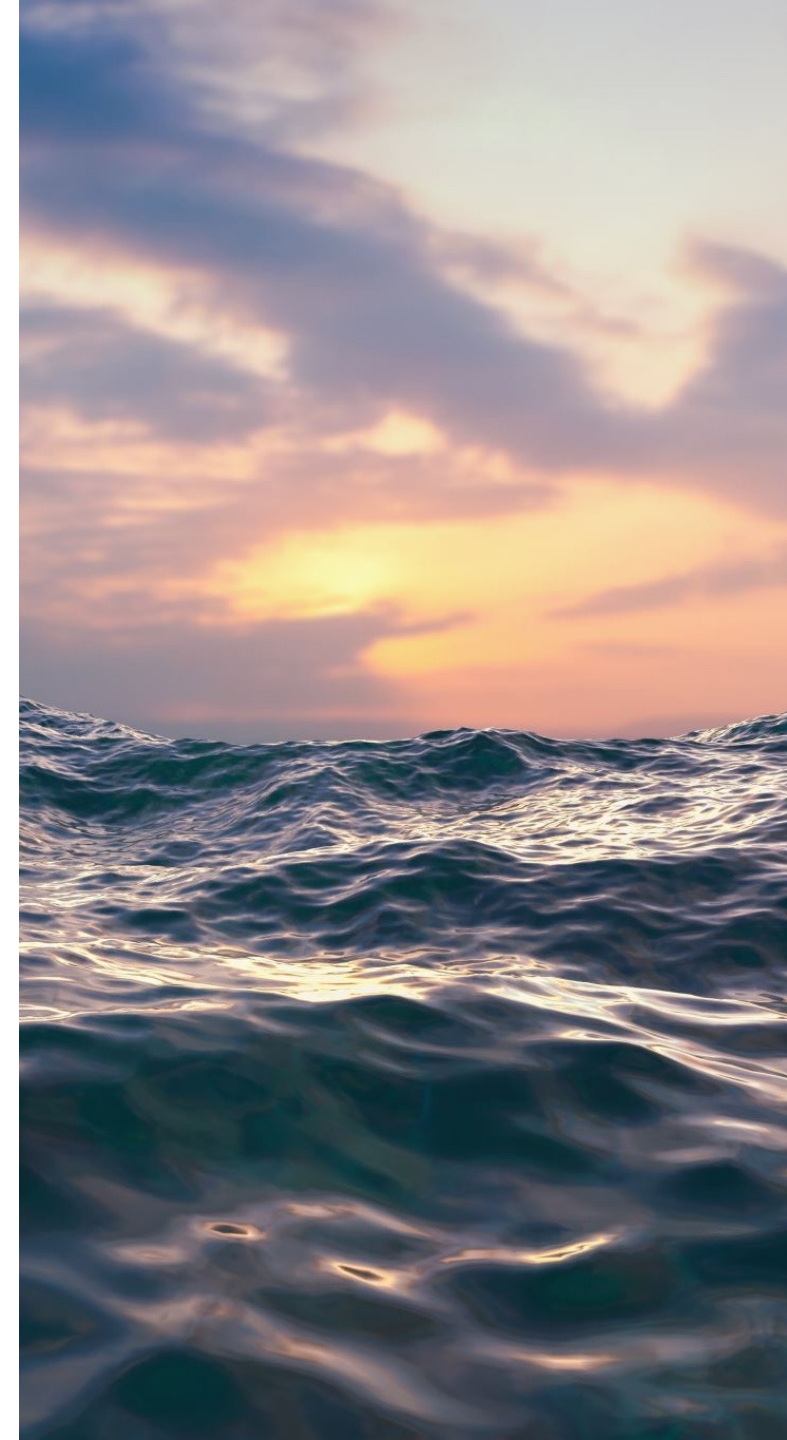
Bigelow | Laboratory for
Ocean Sciences

The logo for Old Dominion University, featuring a crown icon above the text "OLD DOMINION UNIVERSITY".

OLD DOMINION
UNIVERSITY

CHALLENGES IN COMMUNICATING OCEAN SCIENCE TO THE GREATER COMMUNITY

- Public understanding and buy-in drives funding
- Scientific jargon can be overwhelming and lost quickly
- Many people assume "oceanography" is mostly large biology (whales and dolphins)
- Research cruises are not pleasure cruises
- Retention of young kids interested in STEM careers can wane

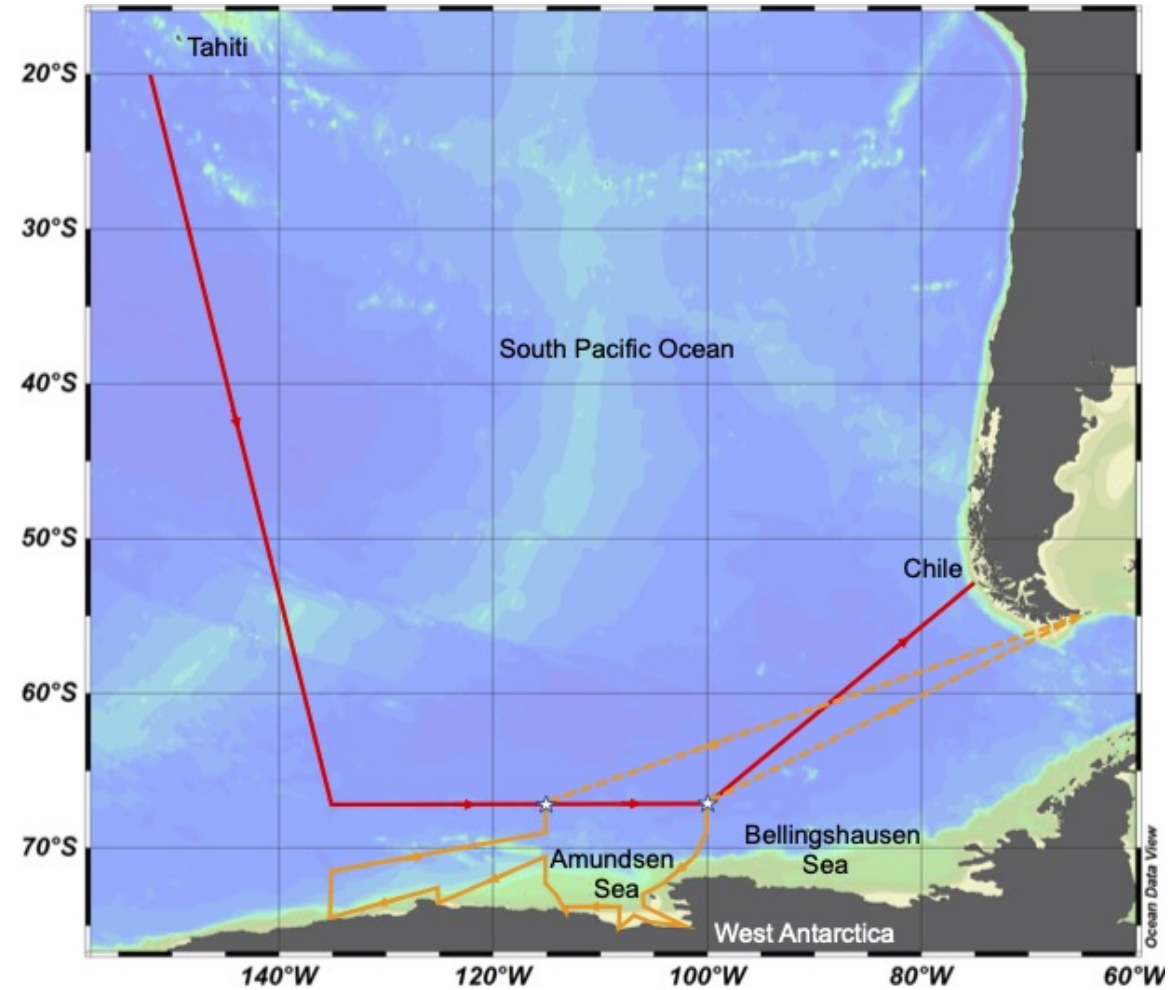


Sailing with GEOTRACES

360° VR Experience



R/V Roger Revelle - SIO



US GEOTRACES GP17-OCE (red)

Vision behind “Sailing with GEOTRACES”

- Multiple different VR and 2D products that can be stand alone, but are also be tied together via an isometric view of ship that you can explore
- “rooms” will light up with interviews
- 360° videos, time lapse videos
- short games to allow participants to “become GEOTRACES scientist for a day”
- Target audience: general public
- Final product housed on Texas A&M website and linked on GEOTRACES site.



Vision behind “Sailing with GEOTRACES?”



Reality behind “Sailing with GEOTRACES?”





Welcome Aboard!

[About GEOTRACES](#)

Learn more about GEOTRACES...

[Play Game](#)

Experience our interactable replica of the Geotraces ship and learn about life as a scientist onboard a research vessel! VR and online options available.

[Take Tour](#)

Explore the ship level by level in our isometric tour...



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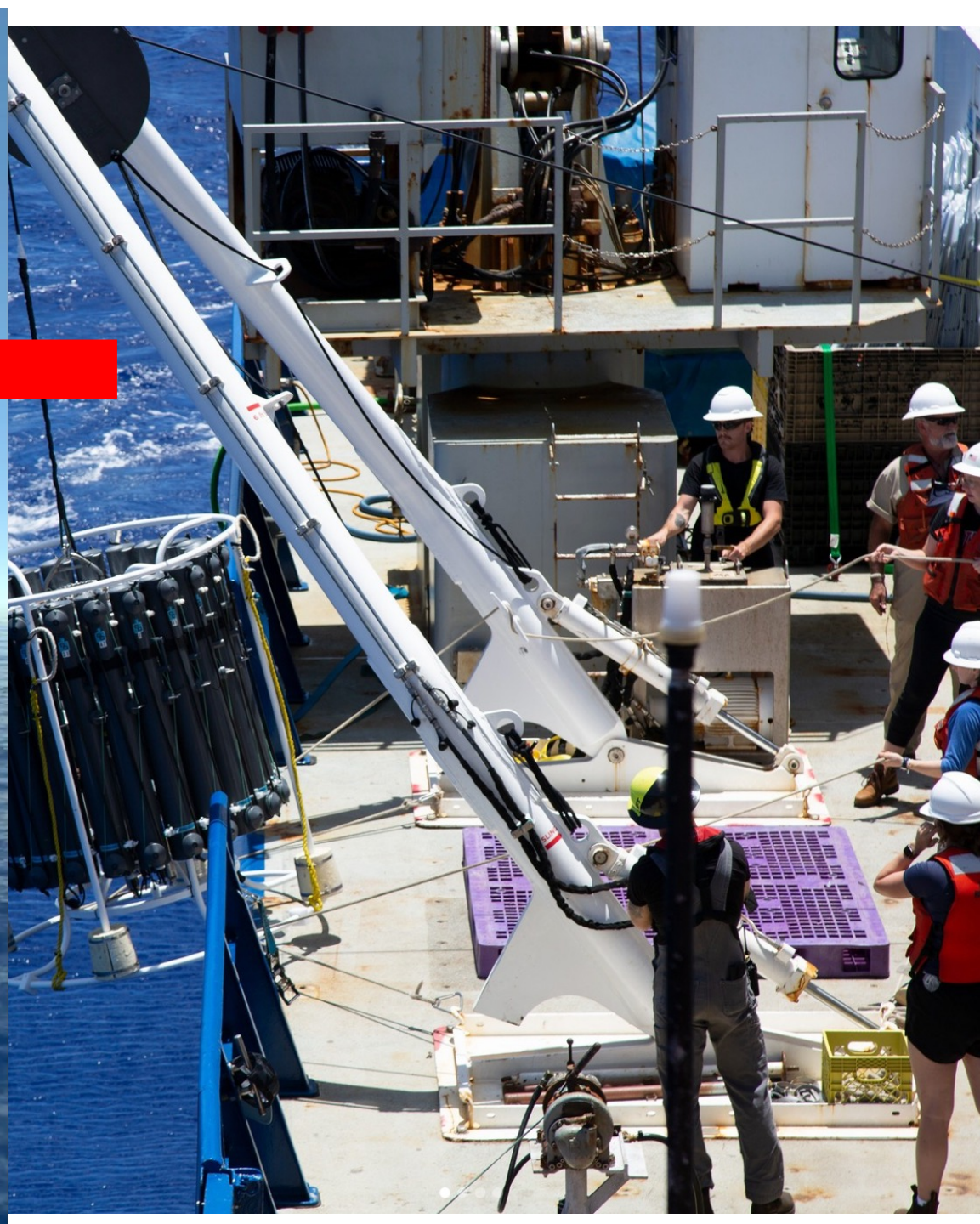
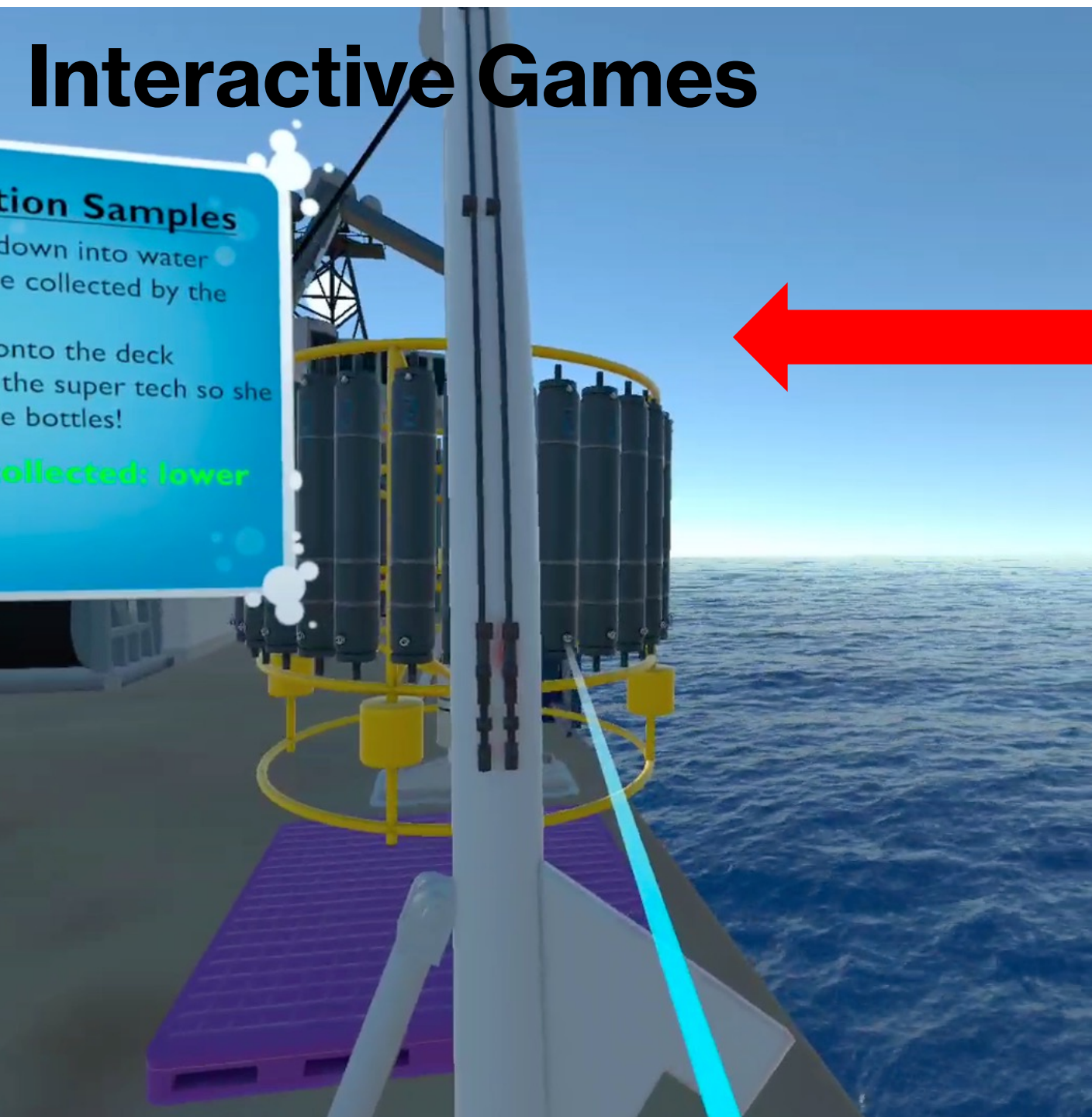
Explore the ship level by level in our isometric tour...

Interactive Games

Water Samples
down into water
e collected by the

onto the deck
the super tech so she
e bottles!

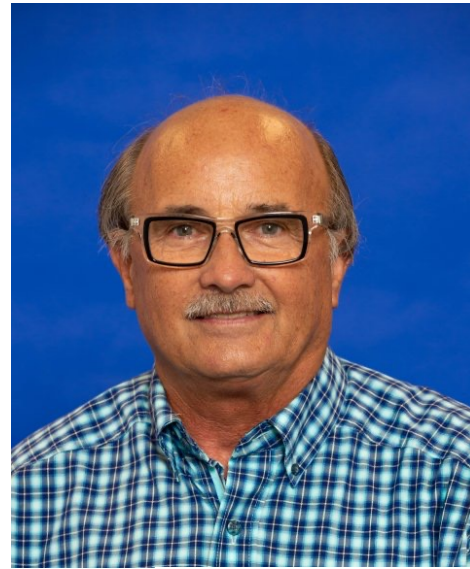
collected: lower



Other features

- Science experiments:
 - Biomass
 - Ocean Acidification
 - Nutrients
- Securing gear on deck
- Ability to experience different sea-states

Acknowledgements



at-sea.artsci.tamu.edu