



# MARSSAM

MArine Rock and Sediment SAMpling group

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**Oregon State University**

College of Earth, Ocean,  
and Atmospheric Sciences



## What is MARSSAM

Provides expert advice to scientists seeking to sample the seafloor. This expertise is provided before and after the proposal writing phase.

Maintains and repairs new coring and dredging equipment for use on ARF vessels.

Provides shipboard support for sampling operations and facilitates coordination with shipboard technical groups and operators regarding winch capabilities, weak link systems, overboarding requirements, and compliance with UNOLS Appendix A safety guidelines.

Provide archival materials and related pooled equipment (e.g. extruders for multicores, rock saw for dredge samples, etc.), shipboard instrumentation (e.g. multi-sensor track for shipboard logging of sediment physical properties, core CT-scanner) and training in the operation of those instruments

Provides logistical support involved in shipping and staging sampling equipment, and returning and archiving samples to an NSF repository of the PI's choosing

# 2024 Operations

## Provided Service for 18 Cruises

8 Cruises with onboard Technician Support

205 Sailing Days

### Included Equipment Supplies, operation and expertise in:

- Jumbo Piston Coring (x2)
- 2.5" Piston Coring (x2)
- Multicoring (x7)
- Gravity Coring (x5)
- Dredging (x1)
- CT and MST Van (x3)
- Rock Corer (x1)

### Supplied Equipment (w/o technicians) for:

- 2.5" Piston Coring (x2)
- Multicoring (x4)
- Gravity Coring (x1)
- Rock Corer (x1)
- Grabs (x2)

# 2024 Operations

## Provided Service for 18 Cruises

8 Cruises with onboard Technician Support  
205 Sailing Days

## Supported Operations on

- *R/V Atlantis*
- *R/V Nathaniel B. Palmer*
- *R/V Sikuliaq*
- *R/V Langseth*
- *USCGC Healy*
- *R/V Adolf Jensen*

# 2024 Growth

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- Hired a new marine technician, **Sarah Gisler**
- **B.S. in Marine Science and M.S. in Mechanical Engineering**
- Started Aug, 2024



# 2024 Growth

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- Hired a new co-Director, **Kevin Konrad**
- **Marine Geologist**
  - **Seafloor rock sampling enthusiast**
  - **Dredging, ROV and riser-less drilling experience**
- Started July, 2024



# A facility in transition

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- **Mo Walczak** has accepted a new position at the University of Washington (09/14) and resigned as director on 10/09



# A facility in transition

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- **Mo Walczak** was the director of MARSSAM from 2018 to 2024, and grew the facility significantly in size, scope and capabilities during her tenure

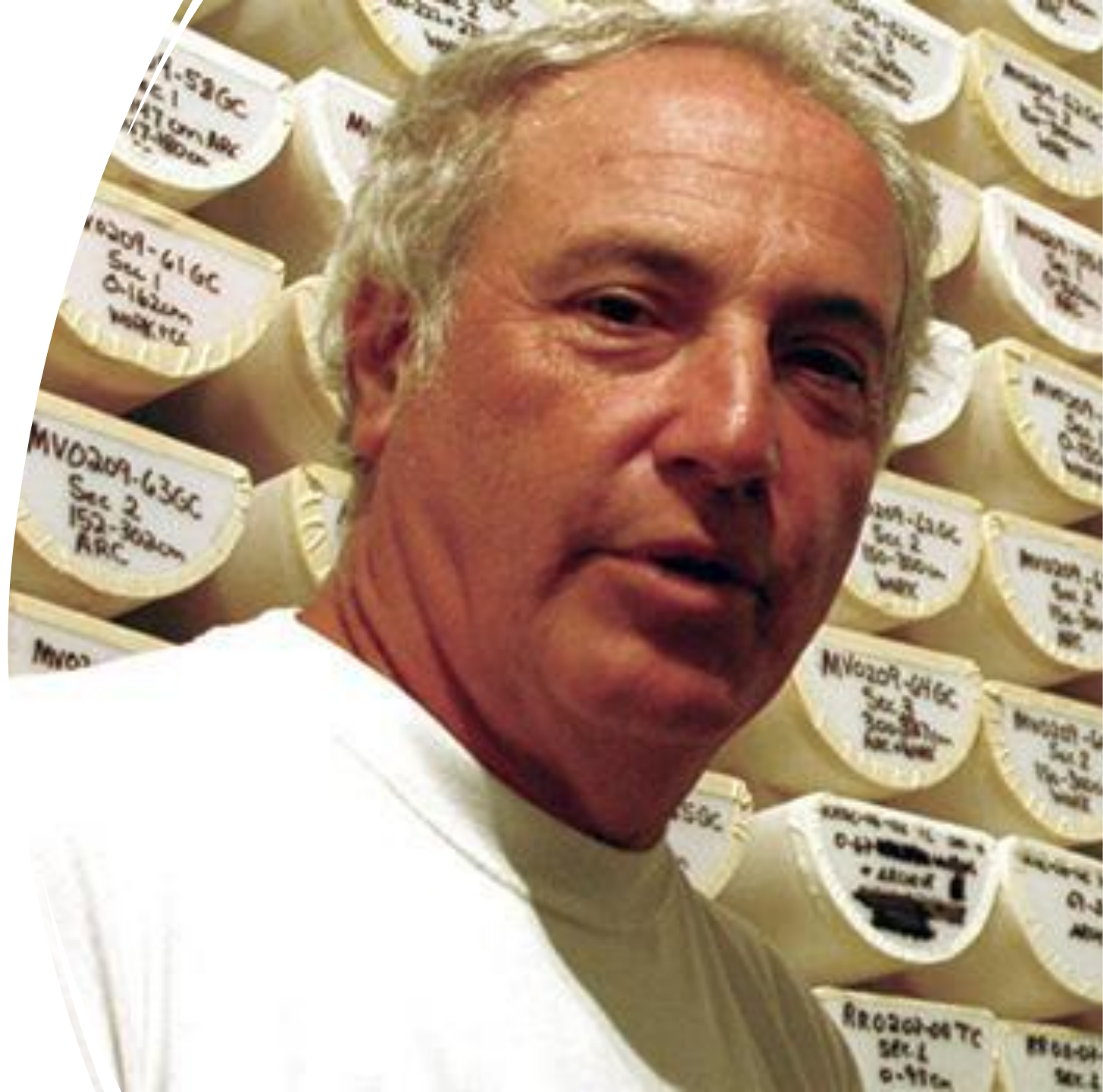




# A facility in transition

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- **Nick Pias** returned to action to help co-direct through the transition period
- Nick is a highly experienced seafloor coring expert who ran the predecessor program Norcor



# A facility in transition

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- **Mitch Lyle (top)** and **Chris Goldfinger (bottom)** are co-PIs focused on providing their significant experience and expertise to the science community



# Operational Direction

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- **Maziet Cheseby** was hired as a full time Project Manager. She has decades of experience working with MARSSAM and provides a wealth of logistical and managerial support



# Operational Direction

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- **Paul Walczak** is the technical lead for the facility. Still the best in the business for overboarding logistics, operations and PI to Ship Ops communication
- Imminently leaving



# Technicians - The core of MARSSAM

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- We have a diverse range of expertise and experience to support UNOLS expeditions



**Dale  
Hubbard**



**Chris  
Fanshier**



**Ben  
Freiberg**



**Dan  
Wildrick**



**Sarah  
Cislak**

# A facility in transition

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- **Current structure:**

**MARSSAM Advisory Committee:**

Jeff Donnelly (WHOI)  
Dan Fornari (WHOI)  
Anthony Koppers (OSU)  
Alan Mix (OSU)  
Brendan Reilly (Lamont)  
Elizabeth Sikes (Rutgers)  
Joe Stoner (OSU)

**Dean of CEOAS**

Dr. Tuba Ozkan-Haller

**MARSSAM Management and Scientific Direction**

co-Director: Dr. Kevin Konrad  
co-Director: Dr. Nicklas Pias  
co-PI: Dr. Chris Goldfinger  
co-PI: Dr. Mitch Lyle

**MARSSAM Operational Direction**

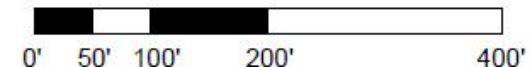
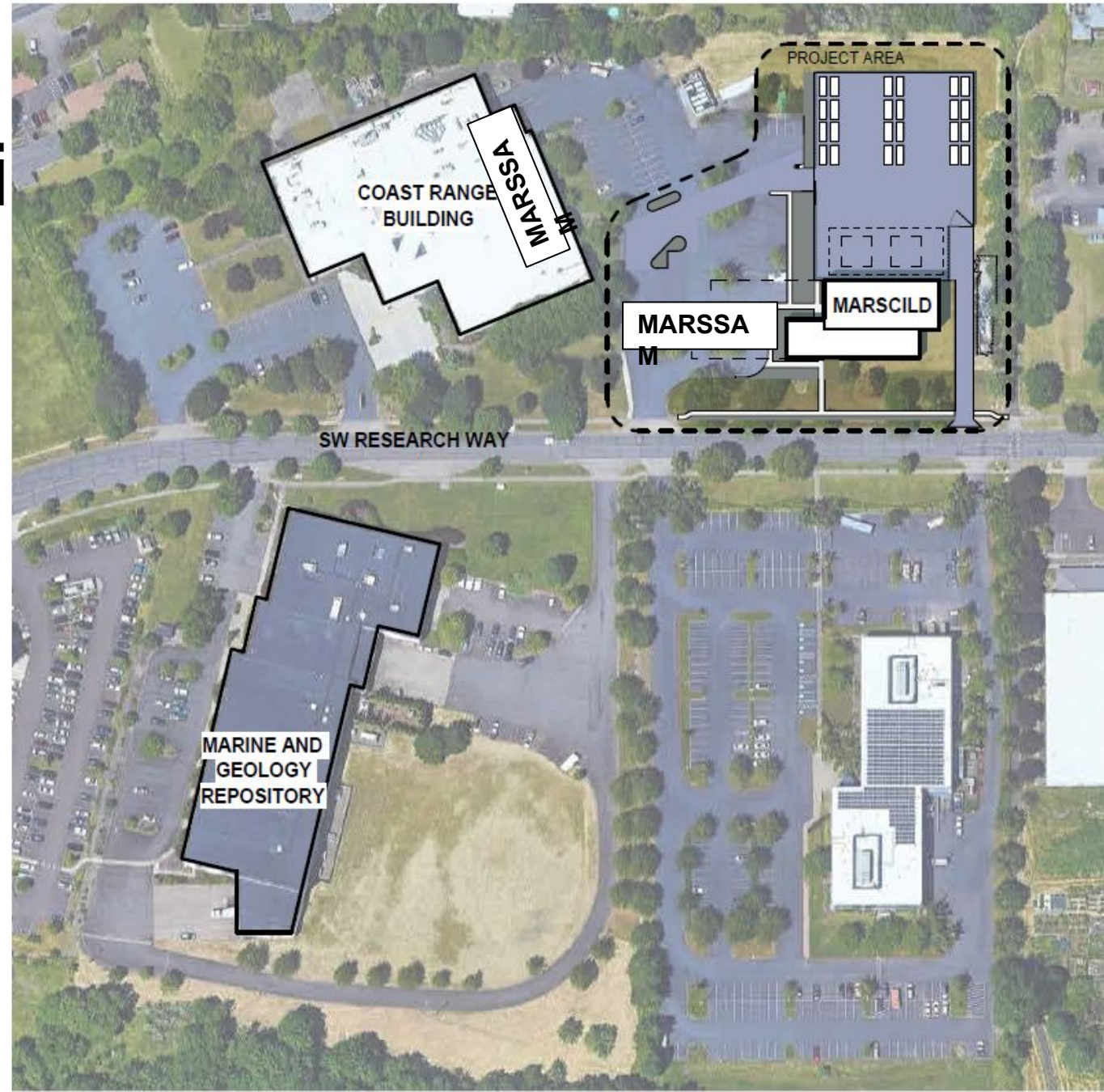
Project Manager: Maziet Cheseby  
Technical Manager: Paul Walczak

**MARSSAM Technical Pool**

Senior FRA: Chris Fanshier  
Senior FRA: Dale Hubbard  
FRA: Ben Freiberg  
FRA: Dan Wildrick  
FRA: Sarah Gisler

# A facility in transit

- Moving out of the current staging bay yard
- OSU has invested resources in improving facility space for MARSSAM
  - This includes temporarily moving into a temperature controlled building while the current marine staging yard is repaired/improved
  - Awaiting zoning confirmation on whether we can build a warehouse on the new property. If so, we will move there permanently



# A facility in transition

- Hirings at OSU-CEOAS
- We are onboarding a new early-career PI sedimentologist to MARSSAM
- We are hiring paleo-oceanographers with the hope to get at least one experienced jumbo piston coring PI
- We are also hiring geophysicists with the hope of getting some sedimentary seismic reflection profile experts



# Mud in pipes, rocks in bags, smiles on scientists

- Importantly. All operations will continue as they have been for the past few years



# 2025 – Looking Ahead

- 2025 schedule is filling out and will include multiple coring and dredging expeditions
  - Some experiments planned with dredging using USBL systems instead of pingers
  - USBL pool??
- We have a new pore water processing ‘mudvan’ ready to be inspected and picked up from Geotek
- Continued close collaboration with MISO to enhance seafloor imaging before, during and after coring