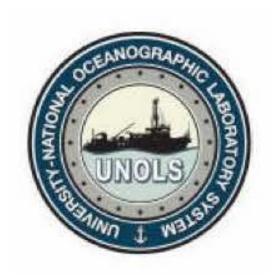
### UNOLS Overview



Doug Russell
UNOLS Executive Secretary



# What is UNOLS?



# University-National Oceanographic Laboratory System (UNOLS)

- Established 1972
- Consortium of 58 research institutions
- Coordinates the US Academic Research Fleet (ARF) schedules and research facilities



https://www.unols.org

UNOLS Member Institutions

Supporting Federal Agencies NSF, Navy/ONR, NOAA, USGS, BOEM

**UNOLS Office** 

UNOLS Ship &
Facility Operators
& Tech Staff
RVs, Aircraft,
Submersibles

The UNOLS Community

**UNOLS Council** 

The Sea-going Science Community

# UNOLS Chair & Office

Hosted by the University of Washington School of Oceanography



Dr. Deborah Bronk
Bigelow Laboratory
UNOLS Chair



Doug Russell Exec Secretary



Alice Doyle Deputy Exec Secretary



Jonathan Gutoff Risk Manager



Meegan Corcoran Crewing Support



Brandi Murphy Technical Support Manager



Bridget Harrell-Donze Program Operations Specialist

### UNOLS **Standing** Committees

Report to UNOLS Council

Ship Scheduling Committee (SSC)

RV Operators' Committee (RVOC)

**RV Technical Enhancement** Committee (RVTEC)

Fleet Improvement Committee (FIC)

**Arctic Icebreaker Coordinating** Committee (AICC)

Deep Submergence Science Committee (DESSC)

Scientific Comm. for Oceanographic Aircraft Research (SCOAR)

Marine Seismic Research Oversight Committee (MSROC)

Maintaining an Environment of Respect at Sea (MERAS) Committee Safety Committee

U.S. Coast Guard Polar Icebreakers (Healy, Polar Star)

Nat'l Deep Submergence Facility – Alvin, Jason, Sentry (WHOI)

**Naval Postgraduate School** (NPS)Twin Otter

Ocean Bottom Seismometer Instrument Center -**Operations Sub-Committee** 

### Academic Research Fleet

- 17 oceanographic vessels
- Size range Global class to Coastal/Local class
- Vessels owned by NSF, the Office of Naval Research (ONR), and U.S. universities and laboratories
- Operated by 14 different institutions
- UNOLS coordinates access to ARF vessels and vehicles
- Adhere to the UNOLS Research Vessel Safety Standards (see:
  - https://www.unols.org/document/research-vessel-safety-standards-rvss)



## Global Class Vessels



R/V Atlantis / WHOI



R/V Thomas G. Thompson / UW



RV Sikuliaq / UAF



R/V Roger Revelle / SIO



R/V Marcus G. Langseth / LDEO



### Ocean/ Intermediate Class Vessels



R/V Atlantic Explorer / BIOS



R/V Kilo Moana / UH



R/V Endeavor / URI



R/V Neil Armstrong / WHOI



R/V Sally Ride / SIO



### Regional Class Vessels



R/V Hugh R. Sharp / University of Delaware



The RCRVs (in progress)
R/V Taani/ Oregon State University
R/V Narragansett Dawn / East Coast Oceanographic Consortium
R/V Gilbert R. Mason / Gulf-Caribbean Oceanographic Consortium



### Coastal/ Local Class Vessels



R/V Pelican / LUMCON



R/V R.G Sproul / SIO



University of MN, Duluth



R/V Blue Heron /



Institute of Oceanography



R/V F.G. Walton Smith / University of Miami



R/V Rachel Carson / UW

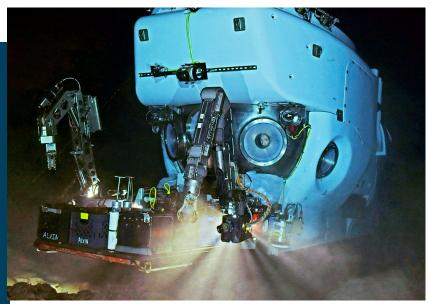


# Pooled Equipment & Technical Support

- NSF/UNOLS Laboratory Van Pools
- NSF/UNOLS Winch Pools
- NSF/UNOLS Wire Pool
- UNOLS Technician Pool
- Ocean Bottom Seismic Instrument Center (OBSIC)
- OSU Marine Sediment Sampling Group (MARSSAM)
- WHOI Mooring Facilities & Services
- Multidisciplinary Instrumentation in Support of Oceanography (MISO) and Potential Fields Pool Equipment (PFPE)



# National Deep Submergence Facility (NDSF)



**HOV Alvin** 

Operated by Woods Hole Oceanographic Institution (WHOI)

https://ndsf.whoi.edu/



**AUV Sentry** 



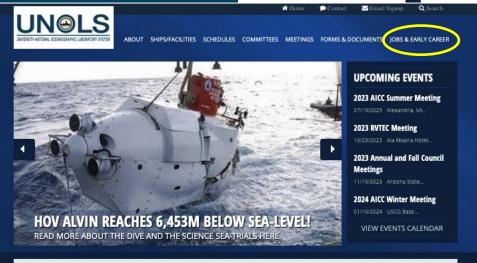
**ROV Jason** 

# Instrumentation & Data Support

- Multibeam Advisory Committee (MAC)
- Ocean Data Facility (ODF)
- Operation SWAB Enhanced Isotope Testing
- Rolling Deck to Repository Program (R2R) / Underway Data Support
- University of Hawaii Currents Group / ADCP Support
- UNOLS Satellite Network Advisory Group (SatNAG)



# **Early Career Opportunities**





#### FEATURED INFORMATION

Our Early Career Programs aim to nuture the next generation of sea going scientists.

#### Jobs & Early Career UNOLS coordinates and hosts several Early Career Scientist Programs each year, on both land and sea!

If you'd like to be notified of upcoming Early Career Opportunities, sign up for our Early Career Listsery!

#### Our Early Career Programs include:

- NSF-UNOLS Chief Scientist Training Cruises
  - The Chief Scientist Training Cruise program instructs early career marine scientists, including PhD students, on how to effectively plan for, acquire, and utilize time at sea for multi-disciplinary research and education.
- UNOLS Cruise Opportunity Program
  - The primary goal of the UNOLS Cruise Opportunity Program is to provide graduate students currently completing a degree in a field of oceanographic research with the opportunity to participate in a research cruise. The participant will be a member of the scientific party and be involved in data collection and all other activities at sea.
- MATE Program
  - At-Sea Technical Internship Program. Interns work as marine technicians aboard sea-going research vessels that are part of U.S. Academic Research Fleet and the United States Coast Guard.
- STEMSEAS Program
  - The STEMSEAS project is an NSF-funded initiative aimed at addressing these issues, coordinated by the U.S. Science Support Program. STEMSEAS takes advantage of unused berthing capacity available during transits between expeditions on the federally funded research vessel network, the University National Oceanographic Laboratory System (UNOLS). These short (~5-12 day) transits offer a mobile classroom setting where undergraduate non-STEM, undecided-STEM, and geoscience majors can be exposed to geoscience professional practice and career exploration. Click here to learn more!
- DESSC Early Career Activities
  - Learn about the capabilities of the National Deep Submergence Facility assets (including HOV Alvin!) and how to request use of these vehicles. Meet with senior scientists and hear about emerging technologies in the exciting field of deep sea research.
  - The DESSC Ocean Policy Interest Group hosts webinars with international leaders in the field of marine science, conservation, and policy. Past presenters have included Dr. Syvlia Earle and professor Craig Allen, Director of the University of Washington Arctic Law and Policy Institute.

Welcome to UNOLS

Arctic ECS Workshop - 5

hop - 5 June 2023

Job Opportunities

Volunteer Program

Apply to the Fleet

**UNOLS Cruise** 

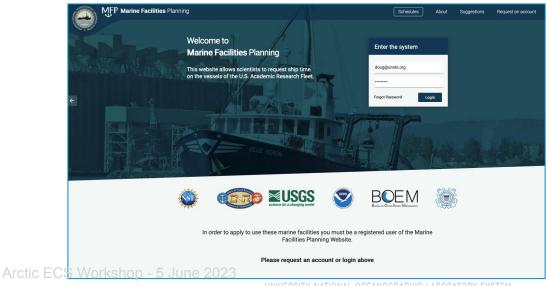
## Ship Scheduling Process

https://mfp.us

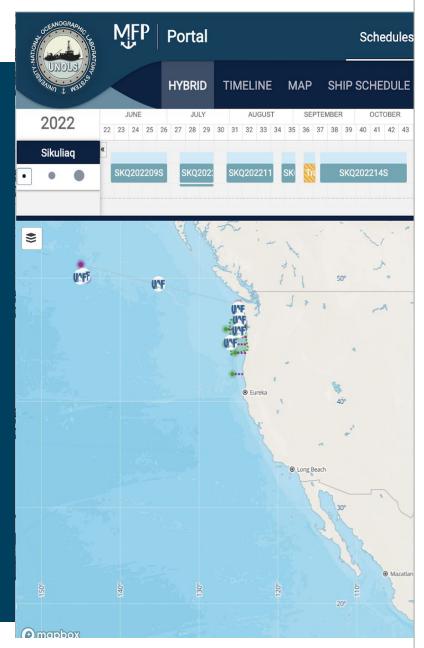
- Starts with Shiptime & Marine Equipment (SME) requests
- Ship Scheduling Committee works to develop ship schedules with funded projects
- Process starts early in the Calendar Year for the following year (i.e. Feb 2023 for 2024 scheduling)
- Regular scheduler meetings / reviews
- Schedules generally start to firm up in the summer
- Notify Pis for early in year cruises so clearance requests can be prepared
- Publish schedules in September for the next year
- Key points:
  - Communications with ship schedulers
  - Prioritization (deferred projects, time series, multiple cruise projects, major integrated projects (OOI, GO-SHIP, GEOTRACES)
  - Submit requests at least 18 months in advance of desired time for Global and Ocean class ships

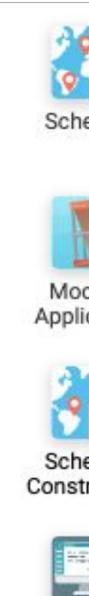
# Marine Facilities Planning

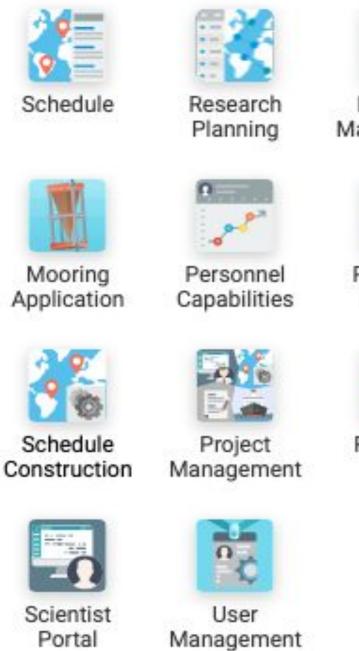
- https://mfp.us
- Multi-Module system for requesting ship time, scheduling, cruise planning, personnel and inventory management.
- Developed in the Netherlands for NIOZ and NERC
- Now used by ~11 other countries + more
- Integrated ship time/marine equipment requests, ship schedules, cruise planning, inventory management, personnel management, & reporting
- Coming: "supply agreements" or "contracts" for cruises

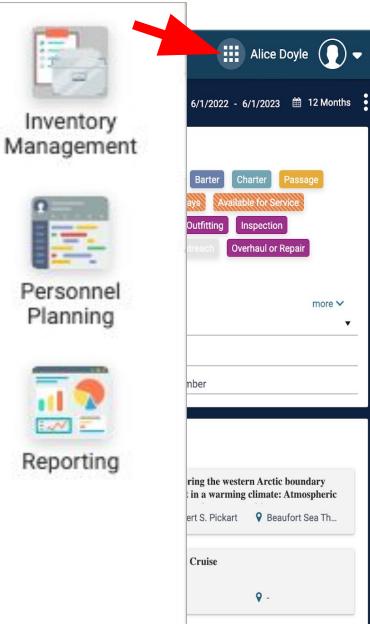


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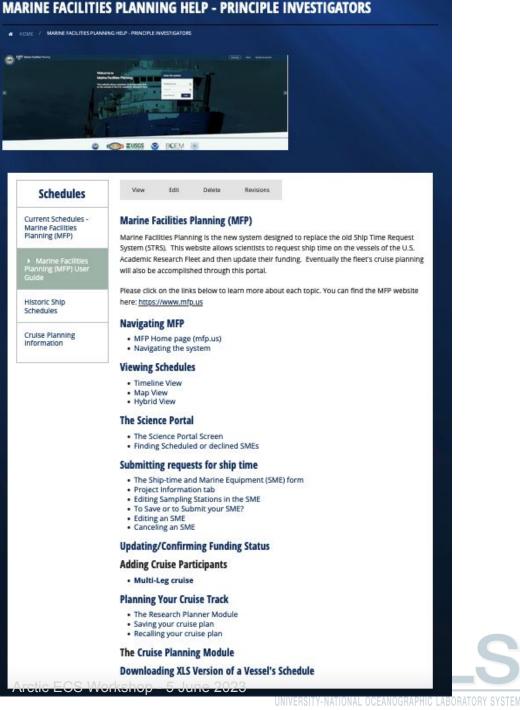


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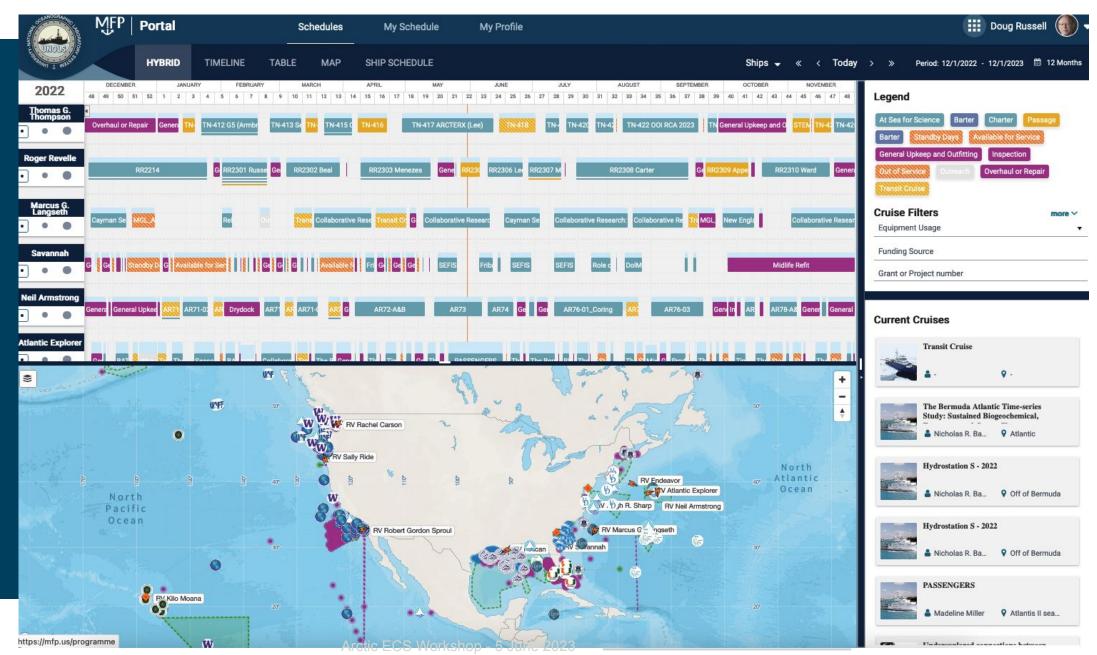
Where do you go to get help with MFP?



### MFP User Guides







## DEMO

- Schedule Module -
  - Click on a cruise
    - see the Cruise Planning info
    - Go to the workflow



If you have additional questions, please contact:

Doug Russell – <u>doug@unols.org</u> Alice Doyle – <u>alice@unols.org</u>

