Code of Conduct

Everyone is treated respectfully and collegially.
· Good practices for intercultural collaborations are utilized to ensure all participants are afforded respect.
· Participants are mindful of their surroundings and of their fellow participants.
· Everyone is accountable: When we as organizers or participants fail to meet these guidelines, we work together to identify problems and adjust policy and practice together.

Ground rules
· I will model the behavior I expect to see from others.
· I will speak from my own experience and no one else's.
· We will give credit appropriately.
· We will practice respectful communication.
· We will respect and include all voices.
· We will not interrupt.
· We will focus on listening as well as speaking.

Outlook for the Meeting

Trying something new: We often have good discussions that rarely go forward meaning we are not providing the guidance to NDSF that they would benefit from.

Repetitive – we just had a community meeting. Never enough time.

- Day 1: Series of discussions to get everyone's input. A plan but lots of space to bring things up.
- Day 2: DeSSC, Chief Sci of NDSF, NSF et al.
  - Lets make progress on the discussion points in day 1, including written output for input from NDSF.
  - Make the meeting and your time count.

Early Career Training programs for NDSF Users

- Re-cap of 2024 New User Program at OSM
- 2025 New User Program
- Early Career Deep Submergence Chief Scientist Training Cruise
  - Dedicated Cruise
  - Add on at the end of cruises or even before
- Alvin Boot-Camp in 2027?

DeSSC New User Program (NUP):
Facilitate the success of Deep-Submergence early career researchers

Program Goals:

1) Demystify the process (proposal through post cruise) of accessing and using the nations deep-submergence assets
2) Encourage new users to reach out to operators and programs early and often
3) Excite early career scientists about deep-sea research
4) Connect new users to the diversity of groups that can fund their research or support their research
5) Increase the efficiency of new PIs and Chief Scientists
6) Welcome all researchers into the best scientific community

2023 NUP – Non Meeting Linked

1.5 day workshop for advanced NUP

At WHOI/NDSF

NDSF and WHOI heavily involved

NSF, NOAA, OET, SOI

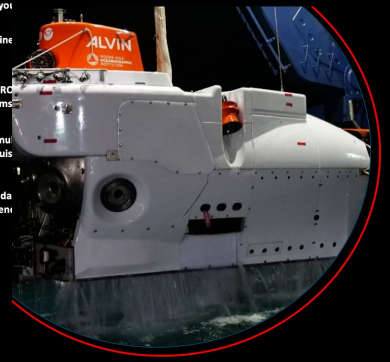
Lectures by Scientist and operators

10 things you need to know

Jason is a remotely operated vehicle (ROV) system designed and built by WHOI's Deep Submergence Laboratory and funded by the National Science Foundation to allow scientists to have access to the seafloor without leaving the deck of a ship.

Matt Heintz - ROV Jason Program Manager

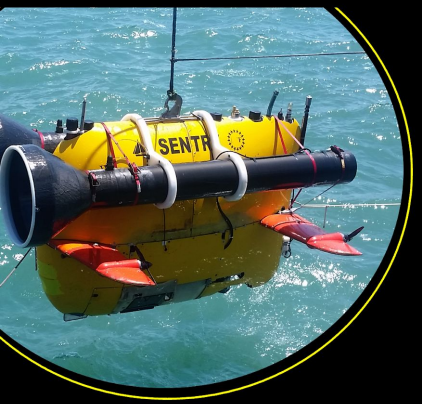
1. ROVs are dragging a ship along with them, making them slower moving than an untethered vehicle, this slower pace is more than made up for by working around the clock, i.e. longer dives are more efficient
2. ROV are more effective when they work 24-hour ops, use of elevators helps bring samples up while keeping the ROV down on long dives
3. Jason has done dives as long as 7 days and covered hundreds of km on a single dive
4. Jason brings 8-10 operators
5. Jason operators typicall joined by 3 scientists, w
6. When you learn that yo
7. Start with a brief outline meetings to discuss
8. Include ROV and non RO the ship in these comms
9. Make sure you have mu that time into your cruis
10. If integrating nonstanda requirements early, sen



6500m depth rated DSV, capable of large payloads with an extensive sensor and imaging suite. Missions last approx. 9 hours (avg 6 hrs on bottom).

Bruce Strickrott – DSV Alvin Program Manager

1. Connect with the Alvin Team to discuss your goals and objectives
2. Schedule multiple pre-cruise conversations with our team
3. Ask us for engineering guidance for new samplers or sensors
4. Every fifth dive of a voyage is a Pilot in Training dive (1 PIT seat)
5. Work with our team to obtain NAVY dive clearances
6. Deck test your samplers in sea water before the cruise
7. Work with our at-sea leads to prioritize your dive objectives
8. Maps for navigation need positional info (.grd or corner locations)
9. Equipment used in-hull needs special testing
10. External equipment housings need special testing



6000m depth rated AUV, capable of large payloads with an extensive sensor suite. Missions last from 20 to 30 hours depending on payloads and sensor package. AUV Sentry is designed for rough terrain and low altitude surveys.

Sean Kelley - AUV Sentry Program Manager

WOODS HOLE

Post NUP Survey Response

Do you feel the interaction with the Vehicle operators were a significant benefit for this workshop?

100% Yes

Meeting associated

1) 0.5 day workshop for New Users
2) Associated with Ocean Sciences or AGU (swap every year)
3) Followed by 1 day DeSSC Community Meeting
4) NDSF/Agency Reps/DeSSC
5) UNOLS/NSF covers travel costs
6) ~20 participants
7) Continue to interact throughout meeting week (informal)

“DeSSC has been one of the most welcoming and encouraging programs for early career scientists”

“You make new users feel very welcome + supported!”

“Thank you sooo much for this workshop, as a new user it has been empowering”

“I feel it is wonderful you are so open to new explorers/researchers & providing opportunities for their voices to be heard”

Looking forward... NUPs

- Spring 2025 - In Person at WHOI, 2.5 days with 1.5 NUP + Hybrid Community meeting
  - Post-doc and up
  - 12 NUP
  - Februarish?
- Fall 2025, associated with AGU 0.5 day. (Ocean Sciences is international in Feb 2026)
  - More open including grad students.

Moving to “use scenarios.”

- Chief Scientist Training Cruises
  - A few days at the end of a cruise instead of a cruise.
  - Or a dedicated cruise

- Alvin boot camp? (2027?)
  - There was one a decade ago – and almost everyone is now an active user of the vehicle.

2015 Alvin Mini-course

Mini-courses:
• Alvin Mobility (Dive and field program planning)
• Alvin Observations (Video documentation)
• Alvin Sampling Strategies (Pushcores, Grabs, & Slurps, oh my)
• Customizing Alvin (Interfacing with Alvin comms & power) • Alvin Proposal Strategies

Adams, Diane Rutgers
Arellano, Shawn W. Washington U
Dekas, Anne Stanford
Glass, Jen Georgia Tech
Hansel, Colleen WHOI
Michel, Anna WHOI
Reese, Brandi Texas A&M CC
Sylvan, Jason Texas A&M
Wanless, Dorsey Boise State U

Suggested revisits of Data Policy

- Explicitly identifying the role of a data management plan at the time of funding taking precedence
- Unclear about sharing NDSF images and videos on Social (lack of branding and communication of the discoveries)
- Divergence between biological and water samples
  - Biological samples are more than type specimens
- Specifying that unfunded discoveries are not under the purview of the cruise participants

- **Non-commercia**l - Non-commercial uses of data and imagery include, but are not limited to, science purposes (i.e. posters, scientific journals, presentations); news coverage about the scientific results and products (press conferences, accompanying press releases, news coverage of the research); free educational resources (in-classroom uses, open access text books, presentations, museum exhibits); and outreach and engagement through social media (with either approval by the chief scientist or following a pre-agreed upon outreach and engagement plan for the cruise). Data will be made available for non-commercial uses without cost, unless requests would result in a cost of reproduction and distribution, through which this nominal cost would be required to be covered.

- […]

When sharing imagery or video via Social Media, appropriate hashtags/tags (or equivalents) will be used to credit the source of the imagery including the funding agency and agreed upon prior to the onset of the cruise. Including #NDSF@WHOI and #NSFfunded

Biological and Water Samples

These samples will be stored under the direction of the Chief Scientist or those to whom they delegate this responsibility, and the distribution of these samples to scientists not participating in the expedition will be under their direction.

Type specimens will be offered to a recognized repository, such as the U.S. National Museum (Smithsonian Institution) within three years of collection. In general, all specimens should be made available to the greater research community via central repository or sharing from individual labs, following the original data management plan.

Distribution of Incidental or Accidental Samples

These are samples collected by NDSF vehicles which do not fall within the scope of research for which the Principal Investigators are funded. As science is serendipitous, and the deep-sea is filled with unknown discoveries, the Chief Scientist is responsible for sample disposition and/or analysis. In the event that it falls outside of the interests of the Chief scientist or those identified by the Chief Scientist, the samples will be provided to a central repository (defaulting to WHOI for Geological Samples and the National Museum for biological samples). Whether collected as predicted by the original data management plan, or serendipitously, they still fall under the NDSF or Funders Data policy.

DESCEND2 report key findings

Keep these in mind as you consider the topics that are put before you today during the breakout.

Key Findings

1) Federal agencies should promote joint programs that bring different communities together to advance technologies and address transdisciplinary questions, e.g. NASA astrobiology and NSF Ocean Sciences.

1A) Support advances and initiatives in robotics, automation, sensor development, and big data management/analyses that will foster new avenues for exploration and advance our understanding of geological, geochemical, and ecological processes in the ocean, on the seafloor, and within the Earth's interior.

1B) Increase attention to, and support for, exploring and studying underserved habitats such as the shallow shelf, midwater, sub-ice ocean, abyssal plains, and trenches. Including these regions will help us better understand the biotic and abiotic evolution of our ocean system, and assess its sensitivity to natural and anthropogenic change.

2) Federal agencies, philanthropic entities, and academic institutions that support Earth-Ocean research should actively collaborate to promote effective communication among all parties. Special attention should be paid to developing programs that incentivize established investigators to engage and mentor early career scientists. Agencies and entities should place a greater emphasis and recognition for public service and engagement.

2A) Enhance cooperation among governmental and philanthropic foundations to enable scientific pursuits that leverage public/private resources to greater effect than can be achieved through any one means of support.

2B) Develop programs to promote inclusivity and increase diversity in the ocean sciences. Studies have shown that diversity writ large improves the quality of research.

2C) Engage and train early-career scientists as a key to maintain a vigorous research community.

Plan for Future DeSSC Meetings

Winter 2026 –Community w/1.5 day NUP – Hybrid @WHOI

Summer 2026 – Buisiness Meeting @WHOI

Fall 2026 Community With NUPlite - @AGU

Summer 2027 Business @ WHOI