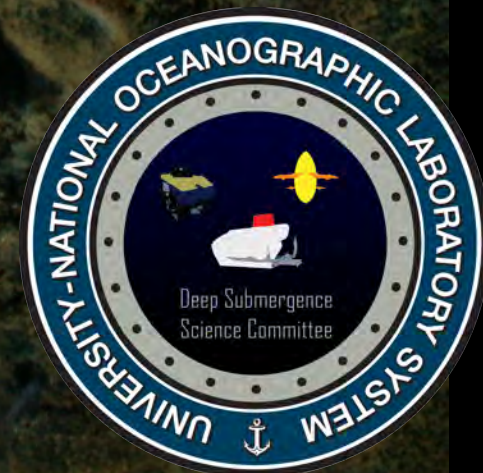


# DeSSC report March, 2019 UNOLS Meeting

- DeSSC membership update
- NDSF vehicle updates
- Other activities



# DeSSC Membership

## Current members

**Roxanne Beinart** (*URI*)

Amanda Demopoulos (*USGS*)

Dave Emerson (*Bigelow*), Vice Chair DeSSC

Brian Glazer (*Univ. Hawaii*)

**Leila Hamdan** (*Univ S Miss*)

Anna-Louise Reysenbach, Chair (*Portland State U*)

Andrew Thurber (*OSU*)

**Dorsey Wanless** (*Boise State U*)

Scott White (*Univ, SC*)

Peter Girguis, (*ex-officio, Harvard*)

Rob Munier (*ex-officio, WHOI*)

Tim Shank (*ex-officio, WHOI*)

Adam Soule (*ex-officio, WHOI*)



# *ROV Jason*



- A very successful year in 2018; approximately 90 dives (58 for OOI) off 4 ships.
- Other activities- 2018 reported on Cable Torque workshop success- facility led international workshop.
  - NDSF plan to use this same collaborative workshop model for exploring other shared technological issues such as imaging systems and/or concurrent missions.



# *ROV Jason*

- 2019 is busy- a total of 11 expeditions (3 of 4 OOI expeditions)
- This year just completed expedition on Revelle lead by the chief sci Evan Solomon (UW). One of the three legs effort to investigate the fluid flows within accretionary prism of Hikurangi subduction zone off New Zealand.
- Currently in transit to Cordes cruise on R/V Ron Brown (loading will start on April 5th).



# *HOV Alvin*

- Three major expeditions in 2018
- Early Scientist Cruise to EPR, December 2018 (Trish Gregg – Chief Sci)
- Open house, San Diego



# Early Scientist Training Cruise

## Early Career Scientists (ECS) – AT42-06

Name	Affiliation	Position
Karthik Anantharaman	Univ. Wisconsin-Madison	Assistant Professor
Rika Anderson	Carleton College	Assistant Professor
Alysia Cox	Montana Tech	Assistant Professor
Aida Farough	Kansas State Univ.	Assistant Professor
Heather Fullerton	College of Charleston	Assistant Professor
Dalton Hardisty	Michigan State Univ.	Assistant Professor
Santiago Herrera	Lehigh University	Assistant Professor
Ross Parnell-Turner	Scripps – <b>Co-Chief for ECS</b>	Assistant Professor
Drew Syverson	Yale Univ.	Postdoc
Carolyn Tepolt	WHOI	Assistant Scientist
Elizabeth Trembath-Reichert	WHOI – <b>Co-Chief for ECS</b>	Postdoc



## ECS Mentors

Trish Gregg – U. Illinois  
 Dan Fornari – WHOI  
 Mike Perfit – U. Florida  
 Dorsey Wanless – Boise State U.  
 Bobbie John – U. Wyoming  
 Ken Kostel - WHOI

## Outreach activities for ECS Participants included:

Classroom interactions  
 Live event at the 2018 AGU fall meeting  
 Social media & Blogging  
 Shore-based collaboration  
 Cruise documentation  
 Post-Cruise Event in San Diego (Dec. 22, 2018)



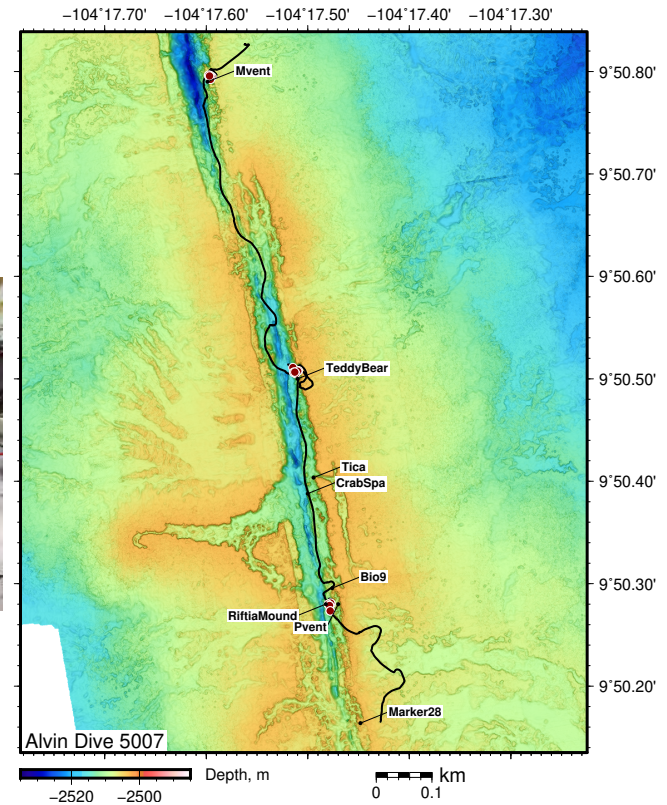
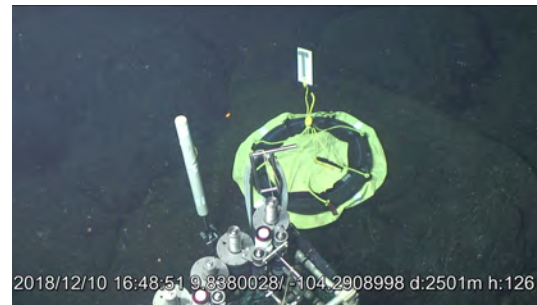
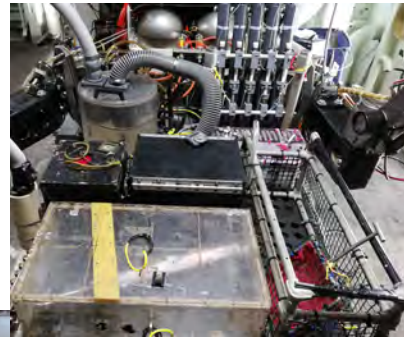
# Early Scientist Training Cruise

## Early Career Scientist Dives at EPR 9 50'N – AT42-06

Latitude	Longitude	Pilot	Port Observer	Starboard Observer	Dive start time (UTC)	Dive end time (UTC)	Max depth (m)	Reason to surface
9.840283	-104.294347	Jefferson Grau	Santiago Herrera	Aida Farough	13:53	23:22	2518	Science complete
9.847627	-104.292675	Danik Forsman	Elizabeth Trembath-Reichert	Alysia Cox	13:59	23:02	2522	Science complete
9.842032	-104.290879	Mike Skowronski	Karthik Anantharaman	Dalton Hardisty	14:00	23:42	2516	Science complete
9.834956	-104.290622	Jefferson Grau	Heather Fullerton	Drew Syverson	13:57	23:04	2516	Science complete

## Early Career Scientist Alvin Dive Sites

Location	Lat.	Lon.	Dive Number(s)
Riftia Mound	9° 50.29	-104° 17.48	5006, 5009
Bio9	9° 50.32	-104° 17.48	5006, 5008, 5009
M Vent	9° 50.79	-104° 17.60	5007
Teddy Bear	9° 50.51	-104° 17.50	5007, 5008
P Vent	9° 50.28	-104° 17.47	5007, 5008, 5009
Tica	9° 50.41	-104° 17.51	5008, 5009
Marker 28	9° 50.17	-104° 17.45	5009



## Open House:

San Diego, December 22, 2018,

- RV Atlantis, HOV Alvin, AUV Sentry
- Nearly 750 people toured Atlantis in groups of 10, led by ECS participants
- Booths set-up on shore





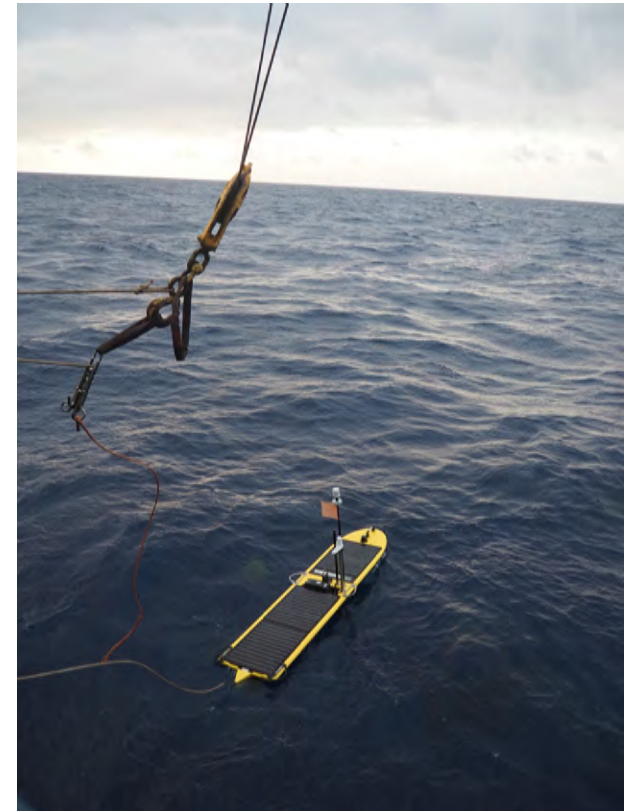
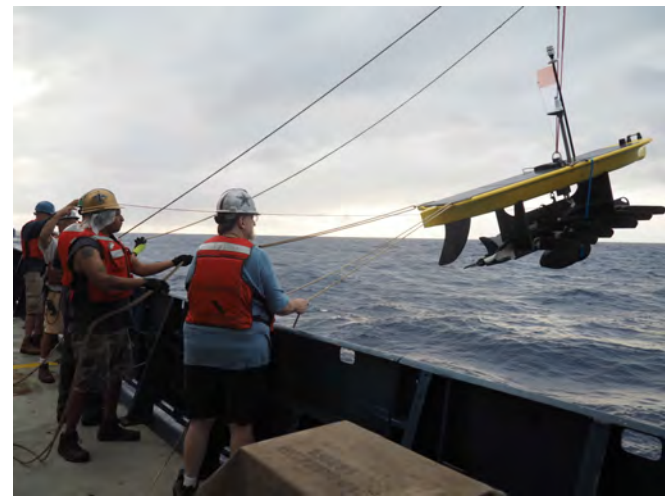
# *Alvin*: Coming up

- Jason Sylvan (Texas A&M) to explore changes of microbial communities associated with hydrothermal deposits over time
  - First time PI, 'alumnus' of Alvin boot camp
  - Fall, Colleen Hansel to lead an Alvin expedition, she too is an alum from the boot camp
- Alvin going into overhaul 2020
  - Alvin Science Verification Expedition workshop
  - Plans to be pre-emptive and develop a workshop for the community to consider what applications are needed for hadal research.



# AUV Sentry

- In 2018--successfully tested use of Waveglider that will allow 'far from ship' ops with other vehicles in the water.
- about to finish its first cruise of the year lead by Henry Dick (WHOI) on R/V Thomas G. Thompson
  - Very challenging weather conditions
  - Able to move Thompson away to dredge while Sentry worked
- Major maintenance summer 2019
  - installation of new sonar system.



# Other activities:

- DeSSC Dec 2018 and New User meeting
  - Another successful meeting (Annette to elaborate)
- AGU-DeSSC meeting discussions
  - Plan an RCN for deep submergence work and develop a proposal this year for submission to NSF.
- Plan for EOS Alvin capability paper, prep community for Alvin coming out of rebuild.
- Planning development of a “Guide to taking good images/video”
- Thanks

