Finished Slides:

Finn Morrison, WHOI

Sarah Kaye, C4IT USCG

Sam Richards, OSU

Kevin Jerram, UNH Multibeam Advisory Committee Nick Benz, UCSD Shipboard Instrumentation Group

Royhon Agostine, UCSD ResTech

REMOTE Aaron Mau, UCSD Specialized Services

Lance Frymier, UH

Emmett Dixon, UW

Don Cucchiara MIAMI RSMAS

Don Cucchiara, MIAMI RSMAS

Andrew Goulart, UHDAS Morgan Hudgins, UGA

Lucas Merlo, Stony Brook

Ethan Roth, UAF

Bonny Clark, URI

REMOTE Cody Bahlau, LDEO

REMOTE Stian Alesandrini, SOI

REMOTE Doug Ricketts, Minnesota



U.S. Coast Guard C5I Polar IT

Rajendra (Raj) Patel Branch Chief



Tom Gomez
Deputy Chief









Jeff Hardwick Network Administrator



TES COLUMN COLUM

Brian Nuttall Network Administrator



Thomas Donovan Network Administrator





Andrew Woogen, Brandon D'Andrea, Emily Shimada, Michael Tepper~Rasmussen, Sam Richards, Tyler Peterson



- Supporting science throughout the UNOLS fleet, including ROV Jason and USCGC Healy
- Sailed R/V Oceanus to Mexico
- Getting up to speed on tech for R/V Taani!

Multibeam Advisory Committee (MAC)







Vicki Ferrini^{2,1} Kevin Jerram¹



mac-help@unols.org

¹ Center for Coastal & Ocean Mapping, University of New Hampshire ² Lamont-Doherty Earth Observatory, Columbia University

Supported under NSF Grants: 1933720, 1933776





mac.unols.org

Multibeam Sonar Systems

	Ship Info	Sonar System Info	MAC Resources
0	Atlantis (WHOI)	Kongsberg EM124 (12 kHz, 150°, 1×1° beams)	MAC Technical Docs
	Blue Heron (UMN)	Reson SeaBat 8101 (240 kHz, 150°)	Coming Soon!
	Healy (USCG)	Kongsberg EM122 (12 kHz, 150°)	MAC Technical Does
T.	Hugh R. Sharp (UDEL)	Reson SeaBat 7125 (200 kHz, 400kHz, 150 °)	MAC Technical Docs
	Kilo Moana (UH)	Kongsberg EM122 (12 kHz, 150°) Kongsberg EM710	MAC Technical Docs
	Knorr (retired) (WHOI)	SeaBeam 2112 (12 kHz, 120°)	
	Marcus G. Langseth (LDEO)	Kongsberg EM122 (12 kHz, 150° swath, 1×1° beams)	MAC Technical Docs

STS Shipboard Instrumentation Group

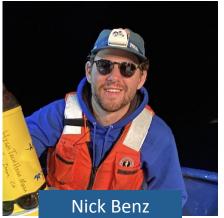


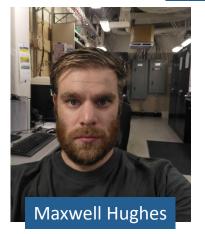
















STS Research Technicians

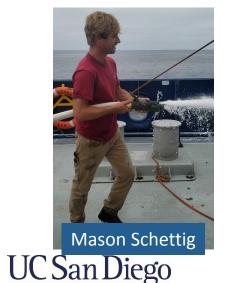




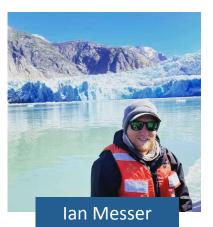














Scripps Specialized Services



sts-sio-odf@ucsd.edu | odf.ucsd.edu

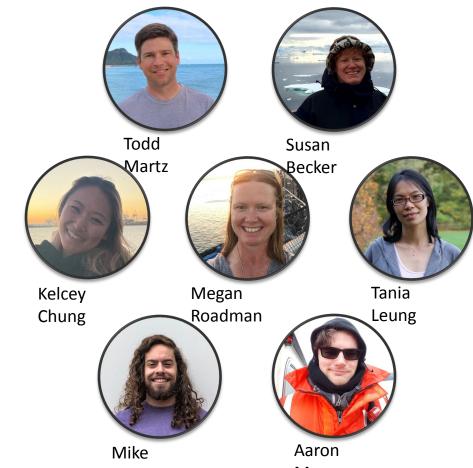
ODF is a specialized services group comprised of data analysts and chemistry technicians

At Sea

- Acquire and process high-resolution open ocean CTD data
- Water sample collection and high-accuracy chemical analysis for salinity, oxygen, and nutrients

On Shore

- Analyze nutrients, dissolved oxygen, salinity, and chlorophyll for PIs through the oceanography community
- Continued development of in-house CTD/Python software <u>ctdcal</u>







Scripps Specialized Services



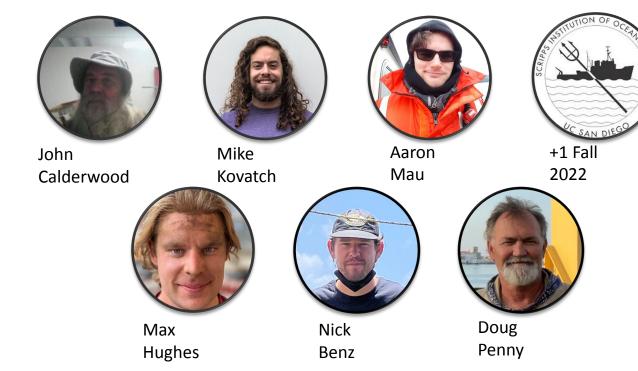
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Calibration Lab

- Calibrate, troubleshoot, and maintain sensors for SIO
- CTD, meteorological, and more

Shipboard Geophysical Group

- Seismic services
- Provide tech and operational support for researchers







UNIVERSITY OF HAWAII OCEAN TECHNOLOGY GROUP



Kilo Moana



Lance Frymire



Jeff Koch



Trevor Young

Marine Technicians aboard the Kilo Moana pictured above.

James

UW Technician Team

Stephen Jalickee



Jennifer Nomura



Camera Shy: Ken Feldman Mike Foy

Loren Tuttle





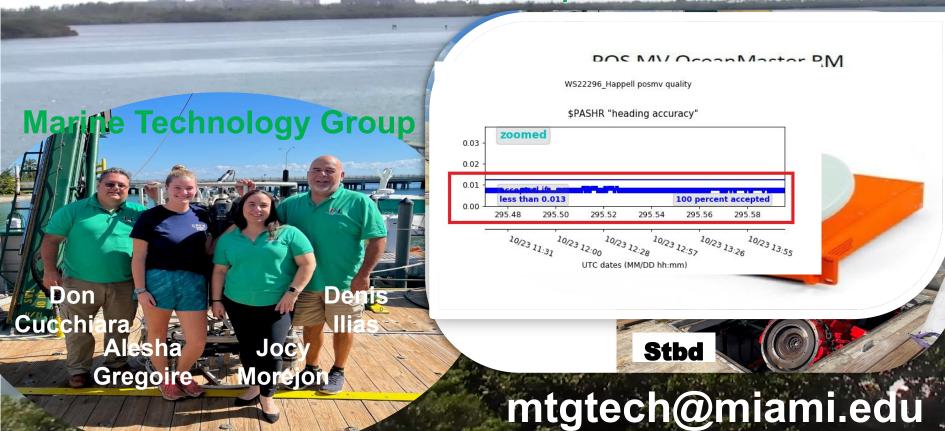
Adam Stenseth



Liz Ricci



University of Miami Rosenstiel School of Marine, Atmospheric & Earth Science



arth.miami.edu/about-us/administration/marine-operations

UHDAS ERIC

TOBY

ANTONIO











JOSEPH

DREW

JULES

ADCP



R/V SAVANNAH

About Me

Morgan Hudgins

• CFCC Marine Technology Graduate

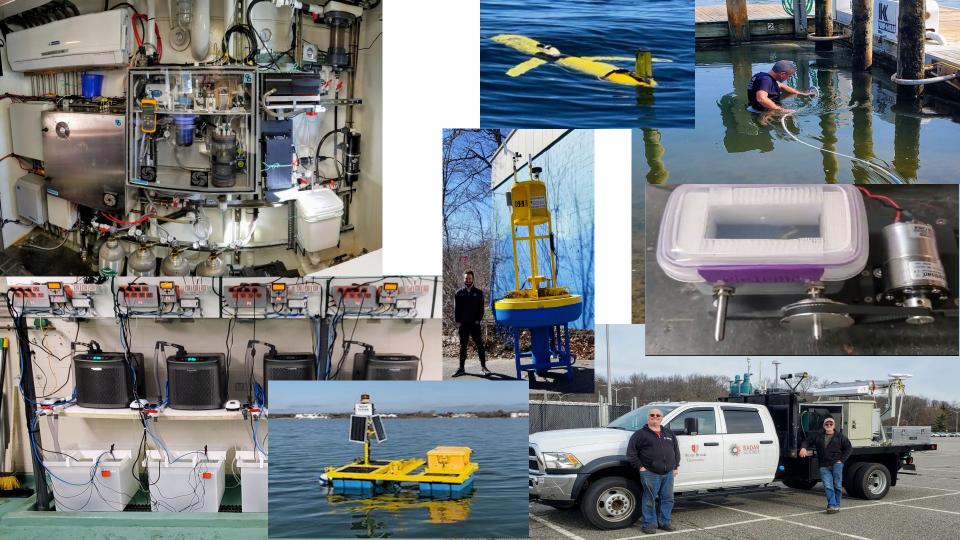
MATE Intern- RVAE

Ship Operations

- 135 Days for 2022
- Two 30-day cruises in the Gulf









Lynne Butler





Erich Gruebel

Manager,
Marine Technical Services



RV Endeavor

University of Rhode Island



Bonny Clarke
Marine Technician



RV MARCUS G LANGSETH LAMONT DOHERTY EARTH OBSERVATORY



Sean Higgins OMO Director



Jesus Gaytan Tech Services Manager Joined 2020





Science Officer (onshore) Joined 2008, retiring 2020



Alan Thompson Science Officer (onshore) Joined 2014



Todd Jensvold Chief Science Officer Joined 2016



Gilles Guerin Instrument Technician Joined 2000



Cody Bahlau Instrument Technician Joined 2020



Joshua Kasinger Source/Deck Technician Joined 2014



Brian Agee Source/Deck Technician Joined 2020

HTTPS://OPPORTUNITIES.COLUMBIA.FDU/JOBS/SFARCH?PAGE=1&QUERY=LAMONT-DOHERTY+EARTH+OBSERVATORY





RV Blue Heron – Marine Technical Services – Jason Agnich

• Big year for us – 90 days on the water – on Lakes Superior, Huron, Michigan and Erie.

• Had help from Scripps (Maya Thompson) and the Tech pool (Laurie Roy) this year.

Deployed new/clean McLane RAS, PPS, and sed traps in August of 2021, but western Lake

Erie decided that they were too clean.

 Lots of standard multicoring, CTD/Carousel casts, deploying and recovering meteorological buoys and scientific moorings but also got to recover piston cores, which we hadn't done in a number of years.

 Ended the year with class cruises and helping the MNDNR.





Photos: Lisa Sundberg

Mackenzie Smith, LUMCON Christian Kernisan, UDEL Katie Watkins Brandt, NOAA



UNOLS RYTEC MEETING

2022

Icebreakers



University of Delaware



Jon Swallow: Director of Marine Operations

Tech Coordinator: Tim Deering

Senior Tech: Christian Kernisan

Junior Tech: Hunter Tipton







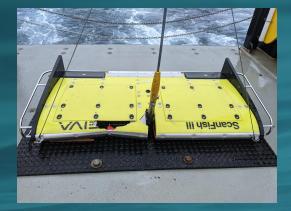


RV Hugh R. Sharp

BEFORE



AFTER













NOAA Technicians at RVTEC



Elysha Agne Reuben Lasker



Benjamin Barbee Nancy Foster



Heather Rippman Relief Pool



Jaclyn Mazzella Reuben Lasker



Colin Schmidt Relief Pool



Christina Brooks Rainer

Jonathan Witmer, Shimada Kathyrn Huchton, Shimada Bailey Shrader, Fairweather Matthew Luka, Fairweather Iogen Flem, Fairweather Katherine McGinnis, Bigelow Justin DaSilva, Bigelow Samantha Martin, Foster Charlie Wilkins, Okeanos Andrea Stoneman, Dyson Megan Shapiro, Dyson Ben Bagwell, Dyson Nich Sucher, Sette Todd Walsh, Pisces James Jacobson, Rainier Barry Jackson, Rainier Melissa Weber, Rainier Thomas Murphy, Rainier Lane Daigle, Rainier Franco Pilone, Rainier Brian Mershon, Rainier Jody Stecher, Brown Joan Binilla-Pagan, Brown Heather Spiliane, Brown Erin Cziraki, Thomas Jefferson Chloe Arboleda, Thomas Jefferson Audrey Jerauld, Thomas Jefferson Sarah Thompson, Thomas Jefferson Sophie Cardadine-Taber, Thomas Jefferson Kevin Suarez, Thomas Jefferson Danielle Powers-Warren, Relief Pool Stephanie Stabile, Relief Pool Shane Mallory, Relief Pool Bryce Dewees, Relief Pool