

Alana Sherman

Week 53

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
- 901809 - Deep Sea Bioinspiration
- 901904.99 - Coral Camera System
- Overhead
- Out of Office
 - Vacation day 12/15

Week 52

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
- 901809 - Deep Sea Bioinspiration
- 901904.99 - Coral Camera System
- Overhead
- Out of Office
 - Vacation day 12/15

Week 51

- 300080 - DMO Support-Mini ROV
 - Got two NUCs running and updated with all the software. Bringing up the next Nuc for the MiniROV. Working through some LabView debugging. Getting set up with a workable system to test at home.
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
 - Purchasing components for Smith Macro camera
- 901809 - Deep Sea Bioinspiration
- 901904.99 - Coral Camera System
 - Looking at best way to disconnect USB via Raspberry Pi from Sony Camera.
 - Working on final schematics
- Overhead
 - Packed up projects to work on from home
- Out of Office
 - Vacation day 12/15

Week 50

- 300080 - DMO Support-Mini ROV
 - Brought up back up computers for the MiniROV. Loading all the LabView code and testing with spare Wago stack.
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
 - Processed Rover SCOC for the previous year Oct 2019-Oct 2020.
- 901809 - Deep Sea Bioinspiration

- 901904.99 - Coral Camera System
 - Ordering cables and parts
- Overhead
 - Reading applications for new PE and Seafloor Processes jobs.
- Out of Office
 - Vacation day 11/24

Week 49

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
- 901809 - Deep Sea Bioinspiration
- 901904.99 - Coral Camera System
- Overhead
- Out of Office
 - Vacation day 11/24

Week 48

- 300080 - DMO Support-Mini ROV
 - Ordering parts for spare GFI box.
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
- 901809 - Deep Sea Bioinspiration
- 901904.99 - Coral Camera System
 - Built up a DiSCO camera bench set up to practice with Steve L how to retrieve images via the ODI connection to the ROV. This was a good fire drill for remembering how the system worked and figuring out what documentation was missing. Thanks to Paul and Rich who helped me get a Raspberry pi set up to mimic what we have at sea.
 - Ordered strobes and returned loaner strobe to DSP&L
- Overhead
 - Attended review for new 4K camera
- Out of Office
 - Vacation day 11/24

Week 47

- 300080 - DMO Support-Mini ROV
 - REfamiliarizing myself with the system. Helped rewire some of the van. Trying to learn the software and video systems.
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
- 901809 - Deep Sea Bioinspiration
- 901904.99 - Coral Camera System
 - Finished testing of SeaStrobe (I hope) . The bug at startup was fixed by DSP&L, and after reflashing the firmware it was working well enough to do an overnight bench test. I also ran tests of system and component energy consumption, and Paul and I figured out how to get a guide number from Todd Walsh's light meter.
 - Ordered batteries
 - Reviewed mechanical designs with Aaron for camera and battery housings.
- Overhead
- Out of Office

Week 46

- 300080 - DMO Support-Mini ROV
 - Helped demob Fulmar after multi-week deployments
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
 - Helped demob Flyer after Sta. M cruise
 - Provided shore support as needed (not much this time)
- 901809 - Deep Sea Bioinspiration
- 901904.99 - Coral Camera System
 - Spent week testing new DSP&L SeaStrobe with our Snappy controller and Sony a7RIII. Good news is that our planned cap charging circuit worked well, but there were issues with the strobe. The manufactures were able to recreate our issue and are sending a firmware fix. Moving forward ...slowly
- Overhead
- Out of Office

Week 45

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
- 901809 - Deep Sea Bioinspiration
- 901904.99 - Coral Camera System
- Overhead
- Out of Office

Week 44

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
 - Packed for Flyer cruise
 - Loaded Flyer
 - Updated procedures for instrument turn around
- 901809 - Deep Sea Bioinspiration
 - Still working on motor spec for pump
- 901904.99 - Coral Camera System
 - Working on schematics for camera housing
 - Made up test setups for current limited circuit to power new strobes
 - Made expense spreadsheet for the rest of the Macro project, reviewed spending tradeoffs
 - Ordered all connectors and cable assemblies
- Overhead
- Out of Office

Week 43

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
- 901809 - Deep Sea Bioinspiration
- 901904.99 - Coral Camera System
- Overhead
- Out of Office

- Back in the office this week :)

Week 42

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
- 901809 - Deep Sea Bioinspiration
- 901904.99 - Coral Camera System
 - Had Teleconference between Electrochem and Paul M and I to discuss battery pack design.
 - Planned with Paul how to tackle current limiting, looking into an available solutions that I can test with a strobe I am borrowing.
 - Started testing new Sony a7r3, battery error message does not seem to be an issue, I am modifying our Snappy code to allow for a more graceful shutdown
 - Making test cable from SeaStrobe
- Overhead
- Out of Office
 - Back in the office this week :)

Week 41

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
 - Attended and took notes for Paul's design review this week.
- 901618 - Pelagic-Benthic Coupling
- 901809 - Deep Sea Bioinspiration
 - The dye injector continues to be a problem were spin around but dont land somewhere. We have two ideas and will see what works.
- 901904.99 - Coral Camera System
 - Going down the rabbit hole on this project. Discovered an issue with the camera using a "dummy" battery. My first solution (using an earlier model) has a big issue in that it has less memory. The second solution requires lots of testing,
 - Second issue is the battery pack design. Our new strobes have a higher current draw despite requiring orders of magnitude less energy. This creates issues with the pack design we have planned but the lead time is long. We are trying to figure out how many answers are enough.
- Overhead
- Out of Office
 - Working from home for this week.

Week 40

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
 - Reviewed slides for review.
- 901618 - Pelagic-Benthic Coupling
 - Set up software for larval pump before Mondays deployment
 - Talked to the SES from shore and ran missions to test the instrument after we cleared the clogged funnel.
 - Tested our newest version of Snappy, our camera controller, and found some software issues.
- 901809 - Deep Sea Bioinspiration
- 901904.99 - Coral Camera System
 - Had great success and great trouble testing the sony a7r4 with Snappy. Turns out their "smart batteries" are too smart for our design. Trying to figure out my options for working around a error

message that comes up with our “fake” battery. All the other functionality (shutter control, strobe sync, remote computer control, power) worked fine.

- Overhead
 - Attended meeting on the design of the new bldg G.
- Out of Office

Week 39

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
 - Talked over plans for the next design review with Paul
- 901618 - Pelagic-Benthic Coupling
 - Trained with Rich on how to set up the larval pump and how to test the SES for next week's ROV dives.
- 901809 - Deep Sea Bioinspiration
- 901904.99 - Coral Camera System
 - Working on specifying new battery pack, which has led me to realize that my new strobe/lighting plan is not quite as plug-and-play as I hoped. Trying to work through these details.
 - Started testing out remote shutter triggering (hardware not software) for the sony a7r3. After a little fiddling this is working and works when the Sony control software is running. Then discovered a few gotchas using the dummy battery to power the camera.
- Overhead
- Out of Office

Week 38

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
- 901809 - Deep Sea Bioinspiration
 - Updated all the software and fixed the last couple bugs (for now) for DeepPIV4
 - Debugged a problem with our new laptops and DeepPIV3, turned out to be a driver issue with a serial server. There is still one mystery left which seems to be a network issue to resolve.
 - Looking into a motor controller for a new dye injector.
- 901904.99 - Coral Camera System
 - Working on the schematics for the system
 - Ordered all the interface cables for the sony to bench test with Snappy
- Overhead
- Out of Office

Week 37

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
- 901809 - Deep Sea Bioinspiration
 - Revisited code for DeepPIV4 fixed the following:
 - Update rate of camera data
 - Changed zoom speed and added zoom reset
 - Tried to fix initialize issue with labjack
 - Debugged issue with Iris
- 901904.99 - Coral Camera System
 - Reviewed comments from design review
 - Investigating strobe options

- Working on system schematics
- Overhead
- Out of Office

Week 36

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
- 901809 - Deep Sea Bioinspiration
- 901904.99 - Coral Camera System
 - Held a concept design review
 - Worked on system block diagram and sorted out some details on remote communications
 - Looking into alternate lighting options
- Overhead
 - Still refining allocations for 2021, this was a hard year to balance labor requests but we are almost there.
- Out of Office
 - Friday Aug 21- Tuesday Aug 25

Week 35

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
- 901809 - Deep Sea Bioinspiration
 - Fixed a couple bugs in the code
- 901904.99 - Coral Camera System
 - Working on system block diagram
- Overhead
- Out of Office
 - Friday Aug 21- Tuesday Aug 25

Week 34

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
 - Helped team with deployments on Tuesday
 - Was trained on telepresence Monday, and controlling the SES
 - Was shore contact and pinch-hit for Rich who was at sea with no microwave. We were able to communicate to the SES through the MARS node.
- 901809 - Deep Sea Bioinspiration
 - Fixed several issues with the Coherent GUI
 - Focus slider reset
 - Added zoom reset button
 - Fixed bug with lens parameters reporting
- 901904.99 - Coral Camera System
- Overhead
 - Trying to sort out staffing issues for 2021 projects, have been contact EEs to work through hours individually
- Out of Office

Week 33

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
- 901809 - Deep Sea Bioinspiration
 - Cruise prep and some demob for cancelled Flyer cruise
- 901904.99 - Coral Camera System
 - Determined storage capabilities for the year long deployment of a7RIII
 - Looked into compression options
 - Looking into communications options through ROV that are smaller than having an ODI connector.
 - Beginning to work on system block diagram
- Overhead
- Out of Office

Week 32

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
- 901809 - Deep Sea Bioinspiration
- 901904.99 - Coral Camera System
- Overhead
- Out of Office

Week 31

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
- 901809 - Deep Sea Bioinspiration
- 901904.99 - Coral Camera System
- Overhead
- Out of Office

Week 30

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
- 901809 - Deep Sea Bioinspiration
 - Pulled all the pieces together to set up ROV-emulating interface can to test DPV4 and DPV3
 - Began documenting interface can
 - Got software for DPV4 working on two laptops
- 901904.99 - Coral Camera System
- Overhead
 - Reading proposals
- Out of Office

Week 29

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS

- 901618 - Pelagic-Benthic Coupling
- 901809 - Deep Sea Bioinspiration
 - Worked on proposal
- 901904.99 - Coral Camera System
 - Continued testing sony cameras in lab, hopefully got as far as necessary
- Overhead
 - Worked on proposal for TAUV
- Out of Office

Week 28

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
- 901809 - Deep Sea Bioinspiration
- 901904.99 - Coral Camera System
- Overhead
- Out of Office

Week 26

- 300080 - DMO Support-Mini ROV
 - Ordered parts to supply power to new wireless bellypack.
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
 - Reviewed proposal draft and battery spreadsheet for October's cruise
 - Tested son-of-snappy, Rich updated the software. Still have a list of things to test with actual hardware but only discovered one issue with reading the battery voltage.
- 901809 - Deep Sea Bioinspiration
 - Fixed a couple bugs in the laser control software in both the old and new versions of the code.
- 901904.99 - Coral Camera System
 - Collected pieces to do comparative camera tests between the sony a7s and a7r. Took a while to find the right connectors, software, etc. but have everything ready for my next visit to the lab.
- Overhead
- Out of Office

Week 25

- 300080 - DMO Support-Mini ROV
 - Ordering components for new belly pack
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
- 901809 - Deep Sea Bioinspiration
 - Tested DPV4 with both old and new software versions, I have a couple bugs to fix on both
- 901904.99 - Coral Camera System
 - Collected components for camera comparison testing
 - Calculated energy budget and battery pack size for macro camera
- Overhead
 - Abstract presentations and lots of meetings....
- Out of Office

Week 24

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
- 901809 - Deep Sea Bioinspiration
- 901904.99 - Coral Camera System
- Overhead
- Out of Office

Week 23

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
 - Weekly meeting
- 901618 - Pelagic-Benthic Coupling
 - Weekly meeting
- 901809 - Deep Sea Bioinspiration
 - Fixed bug with manual focus setting in GUI
 - Integrated dye injector but need motor to test
 -
- 901904.99 - Coral Camera System
 - Looking into available options
- Overhead
- Out of Office

Week 22

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
- 901809 - Deep Sea Bioinspiration
- 901904.99 - Coral Camera System
- Overhead
- Out of Office

Week 21

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
 - Internal draft proposal review
 - Weekly meeting
- 901809 - Deep Sea Bioinspiration
 - Weekly meeting
 - GUI work: cleaned up some of the reading of camera data, trying to track down new bug I created. Finally got it all loaded on bit bucket. Adding ability to control elmo motor controller.
- 901904.99 - Coral Camera System
 - Started looking into what cameras are out there that might work for the macro and are smaller than what we have.
- Overhead
- Out of Office

Week 20

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
 - Watched Paul's lens controller demo
- 901618 - Pelagic-Benthic Coupling
 - Meeting with Yui regarding putting a CO2 sensor on the Rover
 - Weekly meeting
- 901809 - Deep Sea Bioinspiration
 - Weekly meeting
 - Looked into motor control options
 - DeepPIV 4 GUI:
 - Added focus slider control for better step resolution
 - Improved reading of camera parameters
 - Working on setting initial conditions and control values after transitions between modes (ie. auto to manual transitions)
- 901904.99 - Coral Camera System
- Overhead
- Out of Office

Week 19

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
 - Zoom meeting to review projects
- 901809 - Deep Sea Bioinspiration
 - Zoom meeting update, demo'd new GUI
 - Working on gui:
 - Logging almost all complete
 - Working on changing focus control
 - Still debugging a read error
- 901904.99 - Coral Camera System
 - Group discussion of macro camera needs over email
- Overhead
 - Discussed reopening plans with all group members either over email or video conference
 - Supervisor meetings
- Out of Office

Week 18

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
- 901809 - Deep Sea Bioinspiration
 - Continued work on GUI, working on logging of camera data. Debugged some issue with reading the iris values and with focus commands. Getting there but lots of time spent on administrative tasks.
- 901904.99 - Coral Camera System
- Overhead
 - Working on MBARI reopening issues, group lead zooms, etc.
- Out of Office

Week 17

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
- 901809 - Deep Sea Bioinspiration
 - Got Sony labview GUI working with LV 2018 then merged with the DeepPIV GUI. Now working through all the bugs left over.
 - Have to add features to gray-out buttons that are not active
 - Still need to do work on focus
 - Hoping to merge the logging code this week as well
- 901904.99 - Coral Camera System
 - Starting to discuss the macro camera system requirements and learning about the challenges facing us.
- Overhead
- Out of Office

Week 16

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
- 901809 - Deep Sea Bioinspiration
 - Spent a lot of time trying to add what I thought would be a simple feature to display the zoom ratio of the sony camera. I have that working now.
 - Working on initial settings for the camera on start up, and disabling features when in auto vs. manual conditions.
 - Working on adding focus speed control and an indicator, also need to integrate logging.
- 901904.99 - Coral Camera System
 - Zoom meeting to discuss project
- Overhead
 - zoom meetings and telecon with my LabView guru.
- Out of Office

Week 15

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
 - Attended design review for strobe lights last week
- 901618 - Pelagic-Benthic Coupling
- 901809 - Deep Sea Bioinspiration
 - Continuing my work on the sony camera labview gui, this week I was able to get gain, shutter, and reading the exposure settings working. Next I have to integrate logging into the system and setting a specific focus position. Progress!
- 901904.99 - Coral Camera System
- Overhead
 - Department and group zoom meetings
- Out of Office

Week 14

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS

- Reviewed Paul's slides for upcoming concept design review
- 901618 - Pelagic-Benthic Coupling
- 901809 - Deep Sea Bioinspiration
 - Continuing working on my labview gui to interface with the Sony camera for DPIV 3 and 4. In the past week I have manual focus and iris control working and began working on querying the camera for zoom/focus position information.
- 901904.99 - Coral Camera System
 - Put together a document to start formulating the requirements for the macro coral camera
- Overhead
 - Engineering meeting and group lead meeting
- Out of Office

Week 13

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
- 901809 - Deep Sea Bioinspiration
 - Got iris working on my GUI for the sony block camera
 - Starting to work on logging data from the camera
- 901904.99 - Coral Camera System
 - Started to put together a doc to capture requirements of a macro scale coral cam, this initial document is more a list of questions that need to be answered to guide the requirements.
- Overhead
 - Zoom meetings all Thurs morning and one on Tuesday.
 - Post doc applications
- Out of Office

Week 12

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
- 901809 - Deep Sea Bioinspiration
 - Revisiting the labview gui I started for the sony block camera. Working on adding focus control.
- 901904.99 - Coral Camera System
- Overhead
 - Gathering work plans
- Out of Office

Week 11

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
- 901809 - Deep Sea Bioinspiration
 - Replacing water damaged labjack in DeepPIV v 4.
 - Cleaning up DeepPIV v4 software
- 901904.99 - Coral Camera System
 - Deployed Coral Cam last Friday for a 9-month deployment, after a couple hiccups it all seemed to work great.
 - Moving on to planning a macro scale camera for close up imaging of coral.
- Overhead

- Out of Office
 - Vacation day 3/10

Week 10

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
- 901809 - Deep Sea Bioinspiration
- 901904.99 - Coral Camera System
 - Finished tank tests of the system
 - Packed for cruise to Sur Ridge
 - Loaded ship and prepped Camera for deployment
 - Going to sea Friday to plug it in and set up for 9 month run
- Overhead
 - Finished external review!!!
- Out of Office
 - Out sick 3/4

Week 9

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
- 901809 - Deep Sea Bioinspiration
- 901904.99 - Coral Camera System
- Overhead
- Out of Office

Week 8

- 300080 - DMO Support-Mini ROV
 - finished OS talk which Brett kindly presented for me.
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
- 901809 - Deep Sea Bioinspiration
- 901904.99 - Coral Camera System
 - putting pieces together for tank testing, did calculations for various file size, memory cards, and deployment length options.
- Overhead
 - external review talk prep
- Out of Office

Week 7

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
- 901809 - Deep Sea Bioinspiration
- 901904.99 - Coral Camera System
 - Tested extended ODI cable, and works well. Now being potted
 - Tested the rewired tilt motor on the bench and through the camera electronics and that is working reliably

- Still need to test new cable for tilt motor and waiting for final decision on f-stop, then all housings will be closed up
- Overhead
 - Working on talk for Ocean Sciences on MiniROV
 - Working on talk for ER
- Out of Office

Week 6

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
- 901809 - Deep Sea Bioinspiration
 - Order parts for tilt motor
 - Testing extended ODI pair
- 901904.99 - Coral Camera System
- Overhead
 - Two days out with sick kid
 - Working on ER presentation
- Out of Office

Week 5

- 300080 - DMO Support-Mini ROV
- 800139 - EyeRIS
- 901618 - Pelagic-Benthic Coupling
- 901809 - Deep Sea Bioinspiration
- 901904.99 - Coral Camera System
- Overhead
 - working on reviews all week plus prepping for external review.
- Out of Office