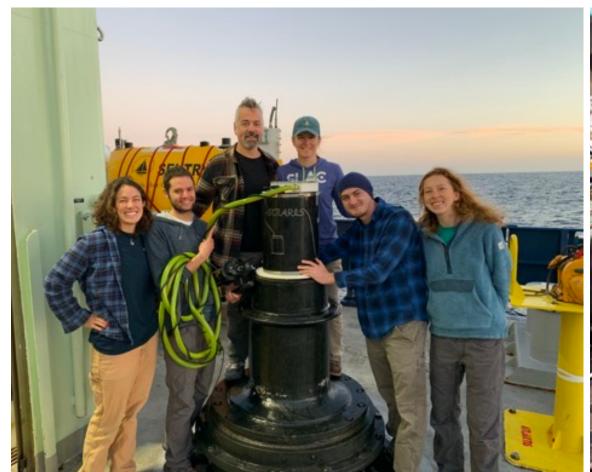
AT42-18 R/V Atlantis, HOV Alvin October 2019



Cruise Objectives

- 1. Validate a new submersible sensor for measuring a short lived oxygen radical (superoxide; $O_2^{\bullet -}$)
- 2. Measure superoxide associated with deep-sea corals





Cruise Plan

16 October – 23 October Monterey Bay to San Diego, CA

6 Dives

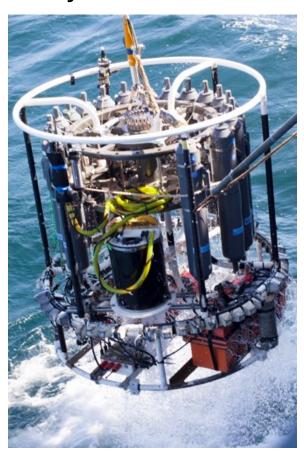
Monterey Bay National Marine Sanctuary (MBNMS) (4)

Rodriguez Seamount (2)

CTD operations

MBNMS

Santa Barbara Basin



Cruise Outcome

The good:

- 1. Successful SOLARIS validation/calibration trials
- 2. One successful dive in MBNMS; one in Channel Islands providing exciting coral superoxide data

The bad:

- 1. Bad weather inhibited further dives in MBNMS.
- 2. Difficulty with clearances in Channel Is.; finding alternative sites.
- 3. Remaining dives at Catalina Island sparse biological targets to allow for biogenic superoxide measurements

