

Welcome to the deep sea

*A brief introduction to the past, present and
future of deep sea research*

Peter Girguis, Harvard University

Deep sea research has been a part of oceanography since its inception

- Took place aboard a military corvette
- Funded by the Royal Society
- 6 scientists, 21 officers, 200 seamen
- Sailed ~68,000 nautical miles over 4 years
- 362 sampling sites



HMS Challenger

The 20th century was a watershed for deep sea research



John Lethbridge's diving machine, ca 1715 (NOAA)



William Beebe and the Bathysphere



DSV Alvin, ca. 1969



HMS Challenger trawl



SS Albatross trawl



MOCNESS trawl

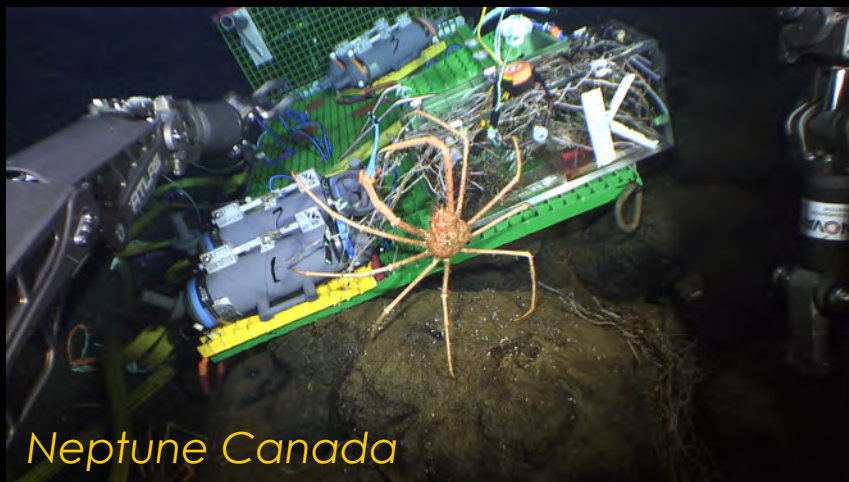
Today, advanced submersibles and robots are ever-present in the deep sea



the new DSV Alvin



ROV Hercules



Neptune Canada



AUV Sea Explorer

How is deep sea research conducted today?

THEN:

- Deep sea research support was “haphazard”
- Not open to all
- Women were not allowed on board
- Samples were not deposited in open repositories
- Training was on the job

NOW:

- Deep sea research support is far more consistent
- Largely open to all
- Samples and data are supposed to be broadly available
- Training programs exist
- Efforts are both governmental and private

How can you get involved?

- You're here...that's a great start!
- Reach out to the agencies and operators
 - NSF, NOAA, SOI, OET and all the insitutions
- Volunteer or, better yet, apply for jobs
 - **CONSIDER WORKING WITH THE OPERATORS!**
- Apply for funding !!!



Remember this...

“The real voyage of discovery consists not [just] in seeking new landscapes, but in having new eyes.”

— Marcel Proust

