Deep-Sea Exploration Collaborative Design Study

Interview Questions

Welcome (5 min)

Confirm consent/non-consent to record video for documentation purposes only.

Your Interests & Community (15 min)

- 1. What are some of the major scientific / research questions you care about? OR, What is your organization working on in the ocean space?
- 2. What methods and techniques do you currently use to answer these research questions? / What does your organization do?
- 3. What hardware and software do you use in your work?
- 4. Where does the funding for your work typically come from? (If you are able to share)
- 5. Tell me about your collaborator network who do you usually work with? (e.g. other researchers, students, community groups)?
- 6. How do you generally communicate about your work? (e.g. Academic papers, Twitter, Community conversations, etc.?)

Participating in MakaNiu (15 min)

- 7. Have you had time to read about Maka Niu? [if not, share I slide on project]
- 8. Would something like the MakaNiu system be useful for your work? Why or why not?
- 9. If so, where might you be interested in deploying MakaNiu cameras? How would you want to deploy them (e.g. on a boat, lander, drifter, moored, diver, ROV, other?)
 - a. What kinds of future modules would be useful? New sensors, etc.
 - b. In what kinds of operating scenarios would you use this system?
- 10. Based on your research or education work, what would be the most exciting thing about having access to low-cost imaging technology?
- 11. How would you involve your local community in a project involving low-cost cameras?

Participating in online Al-driven video analysis (15 min)

- 12. Have you had time to read about AI video analysis tools? [if not, share I slide on project]
- 13. If there were a platform that enabled easy identification of the species seen within your captured video, would that be useful to your work? Why or why not?
- 14. Beyond just identification of species in videos, what other features would be useful in a digital video-analysis platform? Would it need to be usable by non-experts and technologically adept users?
- 15. How would the identification of species within any video captured impact your ability to connect your work with your local community? With local governments and regulations? (species discovery, previously unidentified species, locally important, etc).
- 16. What is the general level of connectivity (WiFi, satellite, internet, etc) in your area to support a digital analysis solution?

Follow-up (5 min)

- 17. Is there anything else you'd like to share?
- 18. We may have systems available for user testing in the next 6-12 months. Would you be interested in participating/testing MakaNiu and/or AI video analysis tools? And providing feedback on systems? Would funding enable you to participate?