# **CINAR PROVIDES GREAT VALUE TO NOAA**

- NOAA receives high quality scientific products beyond what NOAA could produce alone
  - CINAR leverages other grants the investigators receive and unique university resources
- Continuity beyond what NOAA gets from typical extramural grants
- Research that is particularly relevant to NOAA
  - The close connection between CINAR and NOAA staff ensures the work stays on point
  - NOAA makes better management decisions as a result of this work
- CINAR is training scientists relevant to NOAA's mission
  - CINAR students understand more than typical students the tapestry into which their work fits

# **EXAMPLES OF CINAR'S VALUE**

#### Argo float program

- Produces NOAA's most reliable data for ocean warming and other physical measurements
- Foundational for validating the models that are at the core of NOAA's ocean management
- Close collaborative relationships with platform/sensor suppliers facilitates introduction of new technologies into the global array

#### Fisheries in a changing climate

- Strong collaboration between NOAA and CINAR scientists, and with industry
- Leverages expertise and bandwidth not available in NOAA
- National model for "Climate Ready Nation" and "Blue Economy" strategies

#### North Atlantic Right Whale management

- CINAR provides whale distribution information from buoys and gliders in near real-time
- Drives NOAA's Slow Zones for Right Whales Program, which reduces ship strikes
- Mission critical as the Northern Right Whale declines to extinction (projected by 2035)

# **OPPORTUNITIES FOR IMPROVEMENT**

- There are untapped resources at CINAR institutions
- The research is mostly reactive and responding to immediate NOAA needs
- Tracking and promotion of diversity can be improved

## **UNTAPPED RESOURCES**

- The percentage of scientists at the partner institutions participating in CINAR is small
  - There are skill sets available to NOAA they are not making use of
- Many NOAA program managers are unaware of CINAR and the scientists they have access to
  - Similarly, many scientists at CINAR institutions have little feel for NOAA needs and how they may participate
- Connections between the ocean observations and fisheries/ecosystem themes is limited
  - There aren't many all-hands get togethers, which lessens opportunity for innovation

## RESEARCH IS TOO REACTIVE

- CINAR is largely a soft-money entity
  - There are almost no unrestricted funds associated with the agreement
  - CINAR Investigators have individual "licenses to hunt" for programmatic funds
- As a result, CINAR's research focuses on low-risk short-term needs
  - Relationship would be enhanced by longer-term vision
- Cooperative Institutes should be tapping into new ideas that are being generated at the universities
  - A higher percentage of the NOAA investment should be allocated to high risk-high reward trend-setting projects
  - CINAR should have a stronger voice in identifying those opportunities

## TRACKING AND PROMOTING DIVERSITY

#### CINAR has several diversity promoting programs

- InFish
- Summer internships

#### However, they are disjointed

- They also focus on students, not on how to enhance PI diversity
- They have a minority serving institution, but don't use it to the extent they could

## CINAR does not have a process for tracking diversity participation

- In fairness, this is difficult because of privacy rules
- It was also not part of the grant requirements
- Still there are opportunities to raise the profile

# RECOMMENDATION: BROADEN PARTICIPATION IN CINAR

- Develop ways to inform faculty at CINAR institutions about the CI, it's mandate, and opportunities for funding
  - Webinars for partner institutions
  - On-site presentations at each institution
  - inform new faculty about CINAR opportunities during the onboarding process
- Better inform NOAA program managers about CINAR opportunities
  - Could be accomplished by holding a "CINAR day" at OAR, NMFS, and NOS offices

# RECOMMENDATION: TRANSITION CINAR CULTURE FROM REACTIVE TO PROACTIVE

- NOAA: Get CINAR more involved in your research planning
- CINAR: Hold workshops in selected emerging topic areas
  - Use these to create forward-looking multidisciplinary initiatives
  - Integrate your fellowship programs into these initiatives
- Both: Find unencumbered funds to invigorate the planning process
  - CINAR: Leverage partner institutions' unrestricted funds and/or modify IDC policies to provide workshop/seed money
  - NOAA: Enhance the level of Task 1 funding to allow for more planning

## **RECOMMENDATION: PROMOTE DIVERSITY**

#### Take advantage of DEI opportunities

- Expand In Fish example to OAR
- Integrate Cooperative Science Center into CINAR
- Promote engagement of UMES faculty and students in CINAR projects

#### Establish mechanisms for tracking diversity

- Maintain communication with CINAR educational alumni, sustain mentoring and support, and track career paths
- Add a section in annual reports that tabulate demographics for each CINAR partner institution