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DEPARTMENT OF COMMERCE
RESEARCH PERFORMANCE PROGRESS REPORT (RPPR)

For instructions, please visit
http://www.osec.doc.gov/oam/grants_management/policy/documents/RPPR%20Instructions%20and%20Privacy%20Statement.pdf

AWARD INFORMATION	
1. Federal Agency: Department of Commerce / NOAA	2. Federal Award Number: NA21SEC4810005
3. Project Title: NOAA Cooperative Science Center for Living Marine Resources-II	
4. Award Period of Performance Start Date: 09/01/2021	5. Award Period of Performance End Date: 08/31/2026
PRINCIPAL INVESTIGATOR/PROJECT DIRECTOR	
6. Last Name and Suffix: Sexton , null	7. First and Middle Name: Margaret , A
8. Title: Assistant Director LMRCSC	
9. Email: masexton@umes.edu	10. Phone Number: 410-621-1049
AUTHORIZING OFFICIAL	
11. Last Name and Suffix: Pitula , null	12. First and Middle Name: Joseph , S
13. Title: Director of Research	
14. Email: jspitula@umes.edu	15. Phone Number: 410-651-6128
REPORTING INFORMATION	
Signature of Submitting Official: Joseph S Pitula	
16. Submission Date and Time Stamp: 03/30/2022	17. Reporting Period End Date: 02/28/2022
18. Reporting Frequency: ○ Annual ◉ Semi-Annual ○ Quarterly	19. Report Type: ◉ Not Final ○ Final
RECIPIENT ORGANIZATION	
20. Recipient Name: UNIVERSITY OF MARYLAND EASTERN SHORE	
21. Recipient Address: 11868 ACADEMIC OVAL, PRINCESS ANNE, MD 21853-1295 USA	
22. Recipient UEI: LNUBJQ26R2M5	23. Recipient EIN: 526002033

ACCOMPLISHMENTS

24. What were the major goals and objectives of this project?

Education Goals:
1. Prepare the future workforce for marine and fisheries sciences.
2. Strengthen collaborations across universities and professional networks to enhance academic programs in marine and fisheries sciences

Research Goal:
1. Develop an exemplary capacity for scientific collaborations among partner institutions in the NOAA relevant fields of marine and fisheries sciences

Administration Goals:
1. Organizational excellence for effective and efficient management of the programs and activities of the Center
2. Effectively communicate the activities and accomplishments of the Center
3. Assess and evaluate the Center's goals and objectives

25. What was accomplished under these goals?

During this period, we composed and submitted the Education and Training, Science, Strategic, Student Recruitment, and Implementation Plans. Those plans continue to be reviewed and revised in collaboration with NOAA EPP/MSI. We have begun building materials and planning activities to improve the quality of training in the LMRCSC research areas by making it more continuous process. It will begin with the in-person Annual Fellow Assembly in Fall when new cohort students will be introduced to the research areas, and will continue through synchronous and asynchronous engagement throughout the year.

The Center engaged in Recruitment events to recruit students for Fall 2022.

The Center continues to hold monthly Executive Committee meetings during which plans to execute student development and professional activities were discussed. During this period, we also held our annual Board of Visitors meeting virtually using Google Meet on November 4, 2021.

Further details can be found in the attached document.

ACCOMPLISHMENTS *(cont'd)*

26. What opportunities for training and professional development has the project provided?

During this period, the Center has begun to plan for activities including the Annual Fellow Assembly, seminars, workshops, and asynchronous training for the first cohort of fellows who will begin receiving support from this award in Sept. 2022.

27. How were the results disseminated to communities of interest?

Nothing to report at this time.

ACCOMPLISHMENTS *(cont'd)*

28. What do you plan to do during the next reporting period to accomplish the goals and objectives?

Education Goals: As examples, the Center will:
• Continue efforts to recruit students to the Center
• Continue planning for educational activities that will be delivered in Fall 2022.
• Continue to engage NOAA Scientists in order to enhance research collaborations and identify scientists to serve on graduate student thesis and dissertation committees; work with students to identify sites for NERTO.
Research Goals: As examples the Center will:
• Continue to seek leveraged funds to support students
• Continue efforts to publish results from prior awards and present at scientific meetings.
• Continue planning to begin work on the Joint Collaborative Research Project (JCRP).
Administrative Goals: As examples, the Center will:
• Continue Executive Committee meetings monthly.

PRODUCTS

29. Publications, conference papers, and presentations

Nothing to Report

PRODUCTS *(cont'd)*

30. Technologies or techniques

Nothing to Report

31. Inventions, patent applications, and/or licenses

Nothing to Report

Attach a separate document if more space is needed for #6-10, or #24-50.

PRODUCTS *(cont'd)*

32. Other products

Nothing to Report

PARTICIPANTS & OTHER COLLABORATING ORGANIZATIONS

33. What individuals have worked on this project?

Fifteen (15) individuals have worked on the project, including scientists (12) and professional staff (4). Their details can be found in Table 33.1 of the attached document.

PARTICIPANTS & OTHER COLLABORATING ORGANIZATIONS *(cont'd)*

34. Has there been a change in the active other support of the PD/PI(s) or senior/key personnel since the last reporting period?

Nothing to Report

35. What other organizations have been involved as partners?

Nothing to Report

PARTICIPANTS & OTHER COLLABORATING ORGANIZATIONS *(cont'd)*

36. Have other collaborators or contacts been involved?

Ten (10) NOAA Scientists and eight (8) scientists from other institutions have been involved in the project as collaborators during this period. Their names and involvement are listed in tables 36.1 and 36.2 in the attached document.

IMPACT

37. What was the impact on the development of the principal discipline(s) of the project?

Nothing to Report

IMPACT *(cont'd)*

38. What was the impact on other disciplines?

Nothing to Report

39. What was the impact on the development of human resources?

Nothing to Report

Attach a separate document if more space is needed for #6-10, or #24-50.

IMPACT *(cont'd)*

40. What was the impact on teaching and educational experiences?

Students across the Center have access to courses at other Center institutions. This access broadens the diversity of courses available to our students. During this period, we have begun building materials and planning activities to improve the quality of training in the LMRCSC research areas by making it more continuous process. It will begin with the in-person Annual Fellow Assembly in Fall when new cohort students will be introduced to the research areas, and will continue through synchronous and asynchronous engagement throughout the year. These activities will make the experience of LMRCSC Fellows more relevant to future NOAA mission careers.

41. What was the impact on physical, institutional, and information resources that form infrastructure?

Nothing to Report

Attach a separate document if more space is needed for #6-10, or #24-50.

IMPACT *(cont'd)*

42. What was the impact on technology transfer?

Nothing to Report

43. What was the impact on society beyond science and technology?

Nothing to Report

Attach a separate document if more space is needed for #6-10, or #24-50.

IMPACT *(cont'd)*

44. What percentage of the award's budget was spent in foreign country(ies)?

0 , None

CHANGES/PROBLEMS

45. Changes in approach and reasons for change

Nothing to Report

Attach a separate document if more space is needed for #6-10, or #24-50.

CHANGES/PROBLEMS *(cont'd)*

46. Actual or anticipated problems or delays and actions or plans to resolve them

Nothing to Report

47. Changes that had a significant impact on expenditures

Nothing to Report

Attach a separate document if more space is needed for #6-10, or #24-50.

CHANGES/PROBLEMS *(cont'd)*

48. Significant changes in use or care of human subjects, vertebrate animals, biohazards, and/or select agents

Nothing to Report

49. Change of primary performance site location from that originally proposed

Nothing to Report

Attach a separate document if more space is needed for #6-10, or #24-50.

PROJECT OUTCOMES

50. What were the outcomes of the award?

Nothing to report at this time.

DEMOGRAPHIC INFORMATION FOR SIGNIFICANT CONTRIBUTORS (VOLUNTARY)

Gender:

- ◯ Male
- ◯ Female
- ◯ Do not wish to provide

Ethnicity:

- ◯ Hispanic or Latina/o Not
- ◯ Hispanic or Latina/o Do not
- ◯ wish to provide

Race:

- ◯ American Indian or Alaska Native Asian
- ◯ Black or African American
- ◯ Native Hawaiian or other Pacific Islander
- ◯ White
- ◯ Do not wish to provide

Disability Status:

- ◯ Yes
  - [ ] Deaf or serious difficulty hearing
  - [ ] Blind or serious difficulty seeing even when wearing glasses
  - [ ] Serious difficulty walking or climbing stairs
  - [ ] Other serious disability related to a physical, mental, or emotional condition
- ◯ No
- ◯ Do not wish to provide

Attach a separate document if more space is needed for #6-10, or #24-50.

Supplemental Text to the LMRCSC-II Semiannual Report (September 1, 2021 – February 28, 2022)

Text and tables are arranged using the same numbering system in the RPPR form:

25. What was accomplished under these goals?

a. Major Activities:

i. Education Activities:

Student Recruitment Activities: During this period, the Center worked to recruit new students for this award. Activities included an exhibit at the American Fisheries Society meeting held in Baltimore, MD November 6-10, 2021; a virtual recruitment event on Dec. 16, which was advertised broadly online as well as targeted to undergraduate students at minority serving institutions through relevant program offices; and institutional recruitment by Program Directors. A selection of activities that took place during this period include:

HU: We advertised 3 M.S. opportunities through several networks, interviewed 5 potential candidates, and plan to accept 3 M.S. students for Fall 2022.
OSU: Advertisements went out on Texas A&M job board, website with application details; interviewed 5 potential students.
RSMAS: Held a recruitment event for Fall 2022 students in Feb 2022; 2 PhD students have been identified for Cohort 1; several existing RSMAS students are being considered for Cohort 2.

Additionally, the Center is preparing to request to transfer 25 students currently supported by FY16 funds to FY21 funding. They include 5 Ph.D., 9 M.S., and 11 B.S. students.

ii. Administrative activities:
1. The Center conducted its monthly Executive Committee, and Education Committee meetings.
2. The Center held its annual BOV meeting virtually Nov. 4, 2021

b. Specific Objectives

i. **Education Goal 1.** Prepare the future workforce for marine and fisheries sciences
1. Objective 1.1: Recruit students from under-represented groups into marine and fisheries science disciplines
2. Objective 1.2: Increase retention and degree completion rates for students in marine and fisheries sciences programs
3. Objective 1.3: Assess the value-added outcomes of degree programs in marine and fisheries sciences at the partner institutions

ii. **Education Goal 2.** Strengthen collaborations across universities and professional networks to enhance academic programs in marine and fisheries sciences
1. Objective 2.1: Use relevant research-based curricula to provide students with the highest quality education in marine and fisheries sciences

2. Objective 2.2: Use Virtual Campus technology to provide students with the opportunity to learn from some of the nation's leading scholars in marine and fisheries sciences
3. Objective 2.3: Ensure that curricula of degree programs at partner institutions address current challenges and emergent needs within the profession
4. Objective 2.4: Link students to professional networks and employment opportunities in marine and fisheries sciences

iii. **Scientific Research Goal 3.** Develop an exemplary capacity for scientific collaborations among partner institutions in the NOAA relevant fields of marine and fisheries sciences
1. Objective 3.1: Integrate the Center's research agenda with NOAA Fisheries research priorities in four key thematic areas: ecosystem change and prediction, stock assessment support, habitat research and protection, and safe seafood and aquaculture
2. Objective 3.2: Foster collaborative research programs to strengthen the research capacities of partner institutions by leveraging the significant strengths and resources of research universities as infrastructure for capacity building
3. Objective 3.3: Develop faculty recruitment and retention practices that ensure that the collective capacity of scholars affiliated with the Center represents significant concentrations of strength in the four key research thematic areas

iv. **Administration Goal 4.** Organizational excellence for effective and efficient management of the programs and activities of the Center
1. Objective 4.1: Establish an Administrative Structure to enhance center operations and provide supportive environment for training and mentoring of students, and for research in marine and fisheries sciences
2. Objective 4.2: Monitor and ensure compliance with Center Award Conditions

v. **Administration Goal 5.** Effectively communicate the activities and accomplishments of the center
1. Objective 5.1: Develop infrastructure for effective and efficient internal and external communication
2. Objective 5.2: Develop an effective strategy for communication with students, faculty and administrators within the center, and increase visibility of the center through enhanced communication of its accomplishments to external stakeholders

vi. **Administration Goal 6.** Assess and evaluate the center's goals and objectives
1. Objective 6.1: Assess and evaluate center educational programs
2. Objective 6.2: Assess and evaluate center research
3. Objective 6.3: Assess and evaluate center administration

c. Significant results:

i. During this period, the Center staff engaged in efforts to create and submit plans listed below. These plans are still undergoing review and further revisions
1. Education and Training Plan
2. Leadership Plan

3. Scientific Research Plan
4. Strategic Plan
5. Student Recruitment Plan
6. Implementation Plan

ii. We have begun building materials and planning activities to improve the quality of training in the LMRCSC research areas by making it more continuous process. It will begin with the in-person Annual Fellow Assembly in Fall when new cohort students will be introduced to the research areas, and will continue through synchronous and asynchronous engagement throughout the year.

33. What individuals worked on this project?

Last name	First Name	Total number of months worked during this time period	Project Role	Contribution to project (briefly describe)	State, U.S. territory, and/or country of residence	Collaborated with individual in a foreign country	Country(ies) of foreign collaborator	Travelled to foreign country	if traveled to foreign country(ies), duration of stay
Smith	Stacy	6	PD/PI	Worked with students/did research	Dover, DE	no		no	
Gibson	Deidre	6	PD/PI	Dr. Gibson is the Program Director of the LMRCSC at HU; advised Sierra Hildebrand, Derrick Richardson, Jonathan Nash, and co-advised Amani Tolin	Virginia, USA	no		no	
Babcock	Elizabeth	0.6	PD/PI	PD for UM-RSMAS	Florida, USA	yes	Belize, Brazil, Canada, Guatemala	no	NA
Die	David	0.3	Co-PD/PI	Co PI for UM-RSMAS	Florida, USA	yes	Australia, Spain, France, Brazil	no	NA
Hoskins-Brown	Dionne	6	PD/PI	Performed research on oyster habitat, blue crabs, Sea Level Rise, and LEK	Georgia, USA	no		no	

Young	Victoria	6	Faculty	She has led student development, taught courses, and led education program development and assessment	Georgia, USA	no		no	
Miller	Jessica	1.5	PD/PI	Programmatic and fiscal management of award, facilitation of student progress, recruiting and retention activities	Oregon, USA				
Jagus	Rosemary	1.5	PD/PI	Supervised students and staff, written proposals, performed research	Maryland, USA			no	
Schott	Eric	1	Faculty	Mentor to Pares, research, outreach	Maryland, USA	Yes	Brazil	no	
Chigbu	Paulinus	3	PD/PI	Supervised center activities, written proposals, trained students	Maryland, USA			no	
Sexton	Margaret	6	Faculty	Supervised center activities, student development activities	Maryland, USA	no		no	
Hankerson	Tanesha	4.5	Other Professional	Communications activities	Maryland, USA	no		no	
Kessie	Alex	6	Other Professional	Budget and data management	Maryland, USA	no		no	
Tilghman	Ida	6	Other Professional	Administrative activities	Maryland, USA	no		no	

36. Have other collaborators or contacts been involved?

Table 36.1: NOAA scientists who have collaborated with the Center during this reporting period. (JCRP=Joint Collaborative Research Program with NOAA CCME)

Last Name	First Name	Title/Affiliation	Description of Involvement
Zapfe	Glenn	NOAA SEFSC Pascagoula, MS	Involved in the planning of the JCRP
Hoffmayer	Eric	NOAA SEFSC Pascagoula, MS	Involved in the planning of the JCRP
Barnett	Beverly	NOAA SEFSC Panama City, FL	Involved in the planning of the JCRP

Osborne	Emily	NOAA AOML, FL	Involved in the planning of the JCRP
Wells	Brian	NOAA SWFSC, CA	Involved in the planning of the JCRP
Davis	Jeanette	NOAA Headquarters	Engaged in discussion about the JCRP, and will assist with identifying subject matter experts in the area of omics.
Chasco	Brandon	NOAA NWFSC, WA	Involved in the planning of the JCRP
Allman	Robert	NOAA SEFSC, Panama City, FL	Involved in the planning of the JCRP

Table 36.2: Other collaborators involved in planning Joint Center Research Project activities with NOAA CCME during this reporting period.

Last Name	First Name	Title/Affiliation	Description of Involvement
Martinez-Colon	Michael	CCME-FAMU	JCRP Objective 1.1, 1.2
Stunz	Greg	CCME-TAMUCC	JCRP Objective 1.2, 3
Cintra-Buenrostro	Carlos	CCME-UTRGV	JCRP Objective 1.2, 2
Morey	Steve	CCME-FAMU	Co-led the planning of the JCRP
Thoma	Brent	CCME-JSU	JCRP Objective 2.1
Jue	Nathaniel	CCME-CSUMB	JCRP Objective 2
Long	Richard	CCME-FAMU	JCRP Objective 3
Sawicky	Thomas	CCME-FAMU	JCRP Objective 3