

**Welcome to the Rhode Island Consortium for Coastal Ecology Assessment,
Innovation, and Modeling (RI C-AIM)**

University of Rhode Island

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<https://web.uri.edu/rinsfepscor/>

RII Track-1: National Science Foundation Established Program to Stimulate Competitive Research (NSF EPSCoR)
Cooperative Agreement Award No. OIA-1655221
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Executive Committee:

Principal Investigator and Project Director: Geoffrey Bothun, University of Rhode Island (URI)

Co-Principal Investigators: Bethany Jenkins, University of Rhode Island (URI), Jeffrey Morgan, Brown University, Neal Overstrom, Rhode Island School of Design (RISD) and Lewis Rothstein (URI).

Program Staff:

Project Administrator: Sally J. Beaman, URI, (sbeaman@uri.edu, 401.874.6880)

Communication and Outreach Coordinator: Shaun Kirby, URI (skirby@uri.edu, 401.874.6888)

Scientific Research Grant Assistant: Bj Carangia, URI (bcarangia@uri.edu, 401.874.6234)

Leadership Team:

The Executive Committee program staff, Christopher Reid (Institution Lead, Bryant University), Joseph DeGiorgis (Institution Lead, Providence College), Baylor Fox-Kemper (Thrust Lead, Brown University), Lauren Rossi (Institution Lead, Roger Williams University), Jim Lemire (Summer Undergraduate Research Fellowship (SURF/SURF+) Program, Roger Williams University), Bernard Munge (Institution Lead, Salve Regina University), Jason Dwyer (Thrust Lead, URI), Bethany Jenkins, (Thrust Lead, URI), Charles Watson (Diversity Action Committee, URI), Sunshine Menezes (Science Communication, URI), Katharine Hazard Flynn (Business and Stakeholder Engagement, URI), and Christine Smith (Rhode Island Commerce Corporation, Executive Director of the Rhode Island Science & Technology Advisory Council (STAC)). **The Leadership Team is responsible for overseeing the execution of, and measuring progress towards, our strategic plan.**

Diversity Action Committee:

Charles (Chuck) Watson, Assistant Director, Diversity, College of Engineering Fellow Minority Student Recruitment and Retention/Senior Louis Stokes Alliance for Minority Participation Coordinator (Lead, URI), Alycia Mosley Austin, Asst. Dean Graduate Recruitment and Diversity Initiatives (URI), Shontay Delaloe, VP for Institutional Equity and Diversity (Brown University), Marlina Duncan, Asst. VP Academic Diversity, Office of Institutional Equity and Diversity, Assoc. Dean of Diversity Initiatives, Graduate School (Brown University), Michelle Fontes-Barros, Asst. Director, Diversity Recruitment and Retention (College of Environment and Life Sciences, URI). Kevin Martins, Special Asst. to the President for Inclusive Excellence, Director for the PwC Center for Diversity & Inclusion (Bryant University), Zoila Quezada, Director of Institutional Diversity, Equity and Inclusion (Roger Williams University), Sunshine Menezes, Executive Director, Metcalf Institute (URI), Rhode Island College (TBA), Sami Nassim, Asst. VP for Student Success, Director of Multicultural Programs (Salve Regina University), Ralph Tavares, Director of Multicultural Student Success (Providence College), Matthew Shenoda, VP of Social Equity and Inclusion (RISD). **The Diversity Action Committee is responsible for providing guidance on and helping coordinate diversity initiatives across RI C-AIM institutions.**

External Advisory Board:

Christopher Edwards, Professor of Ocean Sciences, University of California Santa Cruz, Jason Kelly, Executive Vice President / Chief Information Officer, Moran Shipping, Providence RI, Steven Lohrenz, Dean and Professor, School for Marine Science & Technology, University of Massachusetts Dartmouth, Amy Moses, Vice President and Director, Conservation Law Foundation Rhode Island, Peter Vikesland, Professor of Civil and Environmental

Engineering, Virginia Tech, Virginia Booth Womack, Director of Minority Engineering Programs, Purdue University. **The External Advisory Board provides subject matter expertise and advisement to the Executive Committee.**

RI C-AIM is a collaborative project supported through a Cooperative Agreement with NSF EPSCoR (<https://www.nsf.gov/od/oa/programs/epscor/index.jsp>) and state match from the Rhode Island Science & Technology Advisory Council (<https://stac.ri.gov/>). A Cooperative Agreement differs from a standard grant as it provides for substantial involvement between the Federal awarding agency (NSF) and the non-Federal entity (RI Institutions) carrying out the project. The University of Rhode Island is the lead institution, and partner institutions are Brown University, Bryant University, Providence College, Rhode Island College, Rhode Island School of Design, Roger Williams University, and Salve Regina University.

RI C-AIM Faculty, Students, and Staff:

We welcome you to RI C-AIM and value your contributions to this collaborative, state-wide consortium. This document is meant to provide an overview of RI C-AIM; the opportunities and resources provided for research, education, and outreach; and the expectations of all RI C-AIM participants.

The **vision** of RI C-AIM is that it will position the State of Rhode Island as a Center of Excellence for assessing, predicting, and responding to the effects of climate variability on coastal ecosystems. To achieve this vision, the **mission** of RI C-AIM is to catalyze innovative, interdisciplinary research and workforce development that will support sustainable economic growth in RI's blue economy by enhancing human and physical infrastructure, supporting cutting-edge research, promoting diversity, and enabling research translation by partnering with industry and community stakeholders. The **goal** of RI C-AIM is to identify novel mechanisms for understanding how anthropogenic stressors impact biological interactions and responses within coastal ecosystems, and to develop innovative models that integrate biocomplexity to predict complete ecological changes. This will be achieved by building a networked sensor array to facilitate state-of-the-art, high-throughput biological and ecological studies in RI. Implementation of this network, coupled with a new [RI Data Discovery Center](#), will enable us to transition temporal/spatial observations and hypotheses from the laboratory to the field.

Major research activities are organized as Research Thrusts from which collaborative projects are pursued. Inter-Thrusts are cross-cutting efforts that transcend and enrich all Research Thrusts. Project, Thrust, and all-hands meetings facilitate coordination across RI C-AIM. The Leadership Team helps coordinate and facilitate collaborative activities guided by our strategic plan, which can be found on our website.

NSF, and hence RI C-AIM, considers you a **participant** if you are (1) receiving funds directly or indirectly from RI C-AIM or from a matching grant (e.g. a RI STAC Collaborative Grant), (2) utilizing an affiliated core facility, (3) strongly involved in a project element independent of the funding source, and/or (4) participating in an internship program or a career development activity. This applies to faculty, postdoctoral fellows, students, and staff.

Your participation within RI C-AIM falls within one or more of the Research Thrusts (RT) and/or Cross-Cutting Inter-Thrusts (IT). Thrusts are pursued by interdisciplinary teams and are comprised of multiple projects.

RI C-AIM Research Thrusts

- **RT1.** Assessing Biological and Ecosystem Impacts (RT1 Leads: Bethany Jenkins)
- **RT2.** Predicting Ecosystem Response through Integration (RT2 Leads: Baylor Fox-Kemper & Lew Rothstein)
- **RT3.** Enabling Technologies for Improved Detection (RT3 Leads: Jason Dwyer & Jeff Morgan)

RI C-AIM Inter-Thrusts

- **IT1.** Visualization and Imaging (IT1 Leads: Neal Overstrom & Joe DeGeorgis)
- **IT2.** Workforce Development (IT2 Leads: Jim Lemire, Sunshine Menezes, Chuck Watson)
- **IT3.** Stakeholder Engagement and Sustainability (IT3 Leads: Jason Dwyer, Katharine Hazard Flynn, Sally J. Beaman)
- **IT4.** RIDDC Data Management (IT4 Leads: Jeff Morgan)

For Research Thrust and Inter-Thrust descriptions, associated faculty/students, and projects, visit <https://web.uri.edu/rinsfepscor/research/>

You have access to the following affiliated core facilities, which are open to internal and external users from academic, government, and industry.

- Rhode Island Genomics and Sequencing Center (<http://web.uri.edu/gsc/>, University of Rhode Island)
- Molecular Characterization Facility (<http://web.uri.edu/pharmacy/mcf/>, University of Rhode Island)
- RI Center for Nanoscience and Nanotechnology (<https://web.uri.edu/nano/>, University of Rhode Island)
- Marine Science Research Facility (<http://web.uri.edu/marinefacility/>, University of Rhode Island)
- Center for Computation and Visualization (<https://web1.ccv.brown.edu>, Brown University)
- Leduc Bioimaging Facility (<https://www.brown.edu/research/facilities/bioimaging/>, Brown University)
- The Nature Lab (<http://naturelab.risd.edu>, Rhode Island School of Design)
- The PC Aquatic Studio (Joe DeGiorgis, jdegiorg@providence.edu / Providence College)

Core Facilities/Service Centers: RI C-AIM research expenses associated with the previously listed RI C-AIM affiliated core facilities/supported facilities are paid in full by the EPSCoR office through a purchase order. Researchers should notify the lab manager and Sally J. Beauman to coordinate the payment process. Researchers who request EPSCoR access at the Center for Computation and Visualization, Brown University, should complete the application form found at <https://web.uri.edu/rinsfepscor/files/RICAIM-Usage-App-CCV.pdf>.

You will have the opportunity to participate in the following research and professional development activities.

- Research and/or equipment seed funding
- Novel approaches for data visualization and image acquisition
- Senior capstone design projects (faculty mentors and students)
- Science communication workshops and exchanges
- Career development for postdocs and early-career faculty
- Graduate mentoring
- Regular project, Thrust, and all-hands meetings, and annual RI C-AIM symposia
- Undergraduate (Summer Undergraduate Research Fellowship, SURF) and graduate training

Participant Expectations

- Commitment to professional development and RI C-AIM diversity initiatives
- Promptly informing the Communications and Outreach Coordinator about outside press inquiries and publications
- Participation in communication activities, such as interviews and media creation
- Attendance at all Thrust meetings and RI C-AIM symposia
- Regular updates to ER-Core to assist with NSF reporting requirements (additional details below)
- Regular Thrust updates coordinated through Thrust Leads
- Compliance with “Responsible Conduct of Research” or RCR training
- Acknowledging RI C-AIM and NSF EPSCoR support in publications and presentations (see below)

For projects (with or without core facility usage):

“This material is based in (part or full) upon work supported by the National Science Foundation Established Program to Stimulate Competitive Research under Cooperative Agreement Number OIA-1655221. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.”

For core facility usage:

“The authors gratefully acknowledge use of the (insert EPSCoR supported facility name(s) here) supported in part by the National Science Foundation Established Program to Stimulate Competitive Research under Cooperative Agreement Number OIA-1655221.”

Additional expectations of Research Thrust, Inter-thrust, and Institution Leads:

- Serve as management lead and key point of contact between Leadership Team and applicable thrust, inter-thrust and/or institution members. Articulate research and overall program objectives to new participants, institution administrators, stakeholders and the general public. Work with the PIPD, PA, Communications Coordinator, and colleagues on reporting, press releases, budget and other research administration matters associated with the Cooperative Agreement. Represent applicable team/institution for evaluation purposes, Program Officer visits, etc.

as needed.

- Act as critical nexus for information and communication relay. Keep faculty up-to-date by sharing Leadership and other applicable meeting minutes. Facilitate knowledge and experience-sharing through clear, multi-directional communication pathways and the use of established and newly created, collaborative networked connections. Contribute to overall strength of the program through development of networks that support the overall research and program objectives, and promote inclusive, diverse, and sustainable partnerships.
- Advise and support thrust, inter-thrust, institution, students and/or the overall program through proactive situational leadership and mentorship.

Additional expectations of faculty, postdocs, and graduate students

- Active participation in SURF program as mentor and SURF conference attendee
- Co-advising of undergraduate and, when applicable, postdocs and graduate students
- Assistance with student and faculty recruiting
- Full participation in the annual report process including use of the ER-Core database, external evaluations and surveys associated with the program, site visits, program officer visits, all-hands meetings, and annual symposia

Additional expectations of undergraduate students

- Active participation in SURF program and SURF conference
- Participation in the annual report process including use of the ER-Core database
- Participation in surveys related to external evaluation
- Participation in meetings, video conferences and phone calls with RI C-AIM students and faculty working at other institutions to support the collaborative research process

ER-Core: Our reporting tool

ER-Core is the online database we use to keep track of the contribution of each participant involved in RI C-AIM. We rely on this database to support our annual report, our external evaluation (including site visits, reverse site visits, and Program Officer visits), and various presentations and publications made throughout the life of the award. We also use this tool for internal communication purposes, such as sharing meeting notes with the group at large. Please contact Sally J. Beaman, Project Administrator (sbeaman@uri.edu) for questions regarding ER-Core.

ER-Core is a very important and useful tool if everyone pitches in! Each year in our annual report, NSF requires us to report our collaborations and partnerships, as well as outputs such as scientific papers, presentations, proposals submitted, proposals funded, graduations, patents, web pages developed, etc. The NSF also requires us to report the number of participants involved and the demographics related to those participants (in aggregate) as part of the annual report process. **Our annual report is due to the NSF on June 1. The group work associated with the annual report process begins at least 8-10 weeks prior to the June 1 due date.**

With eight institutions involved over a five year period, hundreds of people will be involved in the RI C-AIM project. All participants are asked to please ensure that their reporting data is kept current and reflects their RI C-AIM work contribution accurately.

ER-Core accounts are established by sending an email to Sally J. Beaman, Project Administrator (sbeaman@uri.edu). Accounts for summer SURF students are established by Jim Lemire and Sally J. Beaman just prior to the start of the SURF [program](#). [Accounts](#) for any new RI C-AIM SURF mentors will also be established as part of that process.

All student and postdoc accounts require the upload of the Responsible Conduct of Research (RCR) training certificate. Postdoc accounts require the upload of the postdoc mentoring plan (to be obtained from advisors/mentors). If there are any questions, please contact Sally J. Beaman (sbeaman@uri.edu/401.874.6880).

NSF definitions related to our reporting

Participant: A participant is an individual in the EPSCoR jurisdiction (State of Rhode Island) who is strongly involved in the project, whether or not they receive funding. All project members who receive funding are by definition participants, although not all participants are funded.

External Participant An external participant is an individual outside the jurisdiction (State of Rhode Island) who is strongly involved in the project.

Faculty or Equivalent: Faculty or equivalent are defined as faculty or senior staff members at any participating university, college, or community college who devote part of their professional activities to one or more of the research areas of the RII Track-1/RI C-AIM project, or to tasks related to the project's education, outreach, or knowledge transfer missions. This may include senior professional or research staff as appropriate.

Graduate Student: Graduate students are defined as students enrolled in a graduate degree program at one of the RII Track-1 project's participating universities or colleges, who devote part of their research and educational activities to one or more of the research areas of the program under the supervision of an RI C-AIM faculty or staff member. This category includes both students who are financially supported by the RII Track-1 funds and those without direct support but who contribute to the RI C-AIM project.

Primary RII Track-1 Support: Primary support means that RII Track-1 funds were largely used to support the project and related outcomes and are within or closely related to the intellectual scope of the RII Track-1/RI C-AIM proposal.

Partial RII Track-1 Support: Partial RII Track-1 support may include projects and related outcomes, use of equipment acquired by the RII Track-1 award, or other similar activities that are related to the intellectual scope of the RII Track-1 project, but that were also supported through other funds.

RII Track-1 Undergraduate Student: Undergraduate students are defined as students enrolled in an undergraduate degree program at one of the RII Track-1 project's participating universities, colleges, or community colleges, who are participating in one or more of the research areas of the RII Track-1 project under the supervision of a RII Track-1 faculty member. This category includes both students who are financially supported by the RII Track-1 funds and those without direct support but who contribute to the RII Track-1 project.

Responsible Conduct of Research (RCR): All undergraduate students, graduate students and postdoctoral scholars involved with RI C-AIM work are required to complete the RCR training course offered online and/or through successful completion of an approved ethics course: <https://web.uri.edu/researchcondev/responsible-conduct-of-research-rcr-training-requirements/>. The training is to be completed within the first pay period or first two week period of involvement and prior to access of RI C-AIM data.

Collaborator: A RII Track-1 collaborator is an individual affiliated with the RII program that does not meet the involvement level of a RII Track-1 participant.

External Collaborator: An external collaborator refers to a member of an institution or organization outside of the jurisdiction that is involved with RII Track-1 project activities and events but that has no contractual relationship.

Underrepresented Groups: Underrepresented groups in Science, Technology, Engineering, and Mathematics (STEM) include all individuals from underrepresented minority groups (described below) as well as women and persons with disabilities. It is also acceptable to use this term somewhat more broadly to include, for example, first-generation college students, or persons from rural or economically depressed areas.

Underrepresented Minorities: Underrepresented minorities are individuals whose representation in STEM fields is less than their representation in the population: Blacks or African Americans; Hispanics; and Native Americans, including American Indians, Alaskan Natives, Native Hawaiians and other Pacific Islanders.

Workforce Development: Workforce development may include activities targeted to students at all levels, teachers, and the general public to increase the jurisdiction workforce capacity in STEM fields, and especially in the research focus areas of the RII Track-1 project. Examples of professional workforce development include student participation in conferences, internships, entrepreneurship courses, intellectual development activities outside of the students' main research area, teacher training, and other activities.

For URI Participants

Ordering Materials and Supplies at URI: The EPSCoR office handles the procurement of all research materials and supplies needed by RI C-AIM participants at URI. URI faculty participants receive their resource allocations from Thrust Leads as needed in support of the strategic objectives and milestones. Purchases must be made through the University's Purchasing Department via Purchase Order to an authorized vendor. Researchers are asked to please send their quotations (**excluding state sales tax and including shipping and handling costs to a URI shipping address**) to Barbara "Bj" Carangia, SRGA (bcarangia@uri.edu) with a cc: to Sally J. Beaman, Project Administrator (sbeaman@uri.edu).

When a purchase order is requested, please indicate the following in your email to Bj Carangia: how the request is related to RI C-AIM work, under which thrust the work is being conducted, and/or the lab in which work is being done. **Please CC your principal investigator and/or mentor in any email requesting a purchase order.**

Orders approved for processing are usually placed into the queue on a first come, first served basis. If additional information is required (i.e. sole source justification, clarification about the purchase, etc.), the order may be held outside of the queue until approved. In some circumstances, comparison quotes will be necessary. You can familiarize yourself with the Purchasing Procedures of the University at <https://web.uri.edu/purchasing/>.

Most supplies for labs located at the URI Kingston Campus will be delivered to the RI C-AIM/RI NSF EPSCoR office (418, Fascitelli Center for Advanced Engineering). When supplies are delivered elsewhere, it is essential that the recipient sends all receiving/packing slip(s) to Bj Carangia after the shipment is verified. **If your shipment does not contain a packing slip, please make a copy (or take a photo) of the shipping label.**

It is understood that situations arise in the field that may require the purchase of necessary supplies to repair or protect equipment or ensure worker safety. Faculty and staff technicians are asked to please adhere to the URI purchasing and PCard policies, and send details and copies of PCard receipts to Sally J. Beaman as soon as possible.

URI Student Employment: All students working at URI for RI C-AIM will be hired by the EPSCoR office. To begin this process, students and faculty supervisors must email Barbara "Bj" Carangia, SRGA (bcarangia@uri.edu) in order to complete the required documents. **Make sure to fill out** the I-9, Drug-Free Workplace Acknowledgment and Bar of Claims forms, and bring the same identification you use on the I-9 to the EPSCoR office (418, Fascitelli Center for Advanced Engineering, URI) when completing the hiring process.

Student employment cannot begin unless all required documents are completed and entered into URI's employment system.