

## **Scripps Institution of Oceanography, UC San Diego**

### **Policy for Establishment and Oversight of Organized Research Units and non-Organized Research Unit Centers at Scripps Institution of Oceanography, effective 1 July 2016**

#### **I. Purpose**

The purpose of this policy is to establish guidelines for the establishment, designation, oversight, and review of Organized Research Units (ORUs) and non-Organized Research Unit (non-ORU) Centers either entirely within Scripps Institution of Oceanography (SIO) or joint with other VC areas of UCSD (hereafter referred to as SIO-UCSD joint research centers).

#### **II. Definition**

##### Organized Research Units (ORUs)

An ORU at UCSD promotes interdisciplinary research and provides a supportive infrastructure for interdisciplinary research that complements the academic goals of departments. The UCSD ORU Policy & Procedures outlined in Appendix A are the established guideline to follow when proposing a new ORU at Scripps Institution of Oceanography. ORUs are subject to a structured review process every 5 years to reassess their goals to ensure that they continue to be committed to an interdisciplinary research program.<sup>1</sup>

##### Non-Organized Research Unit (Non-ORU) Centers

There are many types of non-ORU entities at SIO, some of which are called centers, but are better thought of as facilities or data centers (see Appendix C). This document does not apply to such entities. This document applies to non-ORU research centers focused on some research problem – we shall call these “non-ORU research centers” in what follows. Non-ORU research centers at SIO or SIO-UCSD joint research centers are determined to be necessary to promote a compelling SIO research priority with

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<sup>1</sup> It is a historical anomaly that Scripps Institution of Oceanography is formally comprised of one Multicampus Research Unit (MRU) and six Organized Research Units (ORUs):

##### SIO MRU:

- Institute of Geophysics and Planetary Physics (IGPP)

##### SIO ORUs:

- Climate, Atmospheric Science, and Physical Oceanography (CASPO)
- Center for Marine Biotechnology and Biomedicine (CMBB)
- Geosciences Research Division (GRD)
- Integrative Oceanography Division (IOD)
- Marine Biology Research Division (MBRD)
- Marine Physical Laboratory (MPL)

These are the SIO Research Divisions and do not fit the mold of a standard ORU. They are better thought of as units of SIO that are reviewed when the research enterprise at SIO is reviewed. There are currently no other formal ORUs at SIO.

an interdisciplinary approach to collaborations within and outside SIO, UCSD, other universities, government, or industry. Unlike ORUs, these are not officially approved by UCSD. Centers may not represent themselves as an approved ORU in soliciting extramural funds.

SIO or SIO-UCSD non-ORU research centers fall into two categories, which have different implications for the establishment and review process. The first type is a “center” or “institute” created to respond to a particular funding initiative (a NSF Science and Technology Center would be an example). We believe that formal review by SIO of such centers is appropriate at their initiation for consideration of “affiliated” status with SIO, but establishment and review will be controlled by the appropriate funding agencies. We shall refer to these as “non-ORU external centers”. Non-ORU external centers are either 1) not officially affiliated with a SIO research division, or 2) established by an external organization (government/industry) and are funded, governed and reviewed by same external organization, or 3) providing a funding mechanism for interdisciplinary programs involving Principal Investigators at SIO. The Vice Chancellor of Marine Sciences (VCMS) retains authority to approve non-ORU external centers affiliation with SIO. The VCMS reserves the right to disestablish an external center’s affiliation, if determined to no longer be in the best interest of SIO. Approved affiliate external centers will be authorized to be included in website content.

The second type of non-ORU research center is one that is internal to SIO, and is reviewed only by SIO or one that is joint between SIO and other Vice Chancellor areas of UCSD, and is reviewed by SIO/UCSD.

Appendix C identifies the current existing research centers and external centers that have SIO personnel in their membership.

SIO will provide and keep current a list of approved SIO and SIO-UCSD joint research centers for the UCSD Office of Research Affairs and the SIO Website. The designations of “Center”, “Institute”, “Laboratory”, and “Station” shall not be used as formal labels for non-ORUs at SIO without the consent of the VCMS. [See UCSD ORU Policy & Procedure’s Appendix A for description of these designations]

### **III. Overall Governance of Research Centers**

The UCSD Office of Research Affairs published a “Reminder of Policy for Creation and Oversight of non-ORU Centers” which is included as Appendix B. This SIO policy clarifies the guidelines found in Appendix B. When a center is established jointly with the UCSD general campus or Health Sciences, the VCMS will coordinate with the relevant Vice Chancellor(s). In what follows, we shall use the term “governing VCs” to refer to the Vice Chancellors involved in the establishment and oversight of a research center, with the understanding that this refers to the VCMS for centers entirely within SIO.

#### SIO Research Centers/SIO-UCSD Joint Research Centers

##### Authorization

In accordance with the UCSD Office of Research Affairs, the governing VCs are authorized to establish, and disestablish centers.

#### Governance and Oversight

The governing VCs have primary oversight of research centers. Research centers shall notify the governing VCs of proposed changes to the approved organizational structure when determined necessary.

#### Academic Oversight

Each research center shall have an academic director(s). At the discretion of the governing VCs, a managing director or executive director may be designated, in conjunction with the academic director(s). The governing VCs should approve proposed changes to the academic director(s).

#### Internal Advisory Committee

Each research center shall have an internal SIO/UCSD Advisory Committee. The governing VCs shall approve committee membership with recommendations from the SIO Research & Academic (R&A) Committee.

#### External Advisory Committee

If appropriate, an external advisory committee shall be formed. The governing VCs shall approve committee membership with recommendations from the SIO Research & Academic (R&A) Committee.

#### Business Office Assignment

At the time of establishment, each research center must identify the business office that will provide business services for the center including proposal preparation, extramural fund management, human resources, space, purchasing, etc. If the business office is at SIO, supporting letters from the Division Director and the Section Head affirming their commitment must be included

#### External Centers

When an external center is established and proposes to be affiliated with SIO, a sub-proposal to SIO should be submitted for review and approval of affiliate status. The external center should refer to the Criteria for Research Center Creation and Proposal for Establishment of SIO Research Center/SIO-UCSD Joint Research Center included in this policy when preparing the sub-proposal.

#### Criteria for Research Center Creation

A new research center should be proposed when an opportunity arises that includes the criteria summarized below. A new research center should have an interdisciplinary research priority, education, or public service commitment. Criteria when establishing a research center may include the following:

- Whether it is supported by a SIO research division using their existing resources or has external funding to support its business office needs.

- Whether it supports a compelling research priority of SIO and does not duplicate another unit at SIO.
- Whether it augments and encourages academic synergy across disciplines and established research units.
- Whether it provides undergraduate and graduate student research and training opportunities.
- Whether it supports a compelling public service mission, and adheres to campus diversity goals.

#### Proposal for Establishment of SIO Research Center /SIO-UCSD Joint Research Center

Formal request for establishment of a research center shall be made to the governing VCs. Requests should allow for a 60-day review and approval process. The SIO Research and Academic (R&A) Committee will be responsible for providing a recommendation to the governing VCs.

Proposals for the establishment of a research center should include the following information:

#### Purpose and Mission of Proposed Research Center

Describe the purpose and mission of the proposed center as it pertains to research, education, and public service goals, objectives, and larger mission of Scripps Institution of Oceanography.

- Discuss the added value and capabilities that will be brought by the proposed center and an explanation of why these cannot be achieved within existing SIO units.
- Is the focal area critically important to the success of SIO?
- Will the proposed center allow SIO to become the leading program among peer institutions?
- Does the proposed center lead to new curricular development?
- Does the proposed center make an impact outside of SIO?
- Identify other units with similar interdisciplinary programs and discuss the distinction between these units and proposed center.

#### Organizational structure

- Description of how proposed center will fit into current organizational structure
- Proposed organizational chart
- Proposed business office structure

#### Director(s) and Participating faculty and researchers

- Name of the proposed academic Director, co-Director, Associate Director, or Managing/Executive Director
- Names of participating faculty and researchers and brief summary of their anticipated contribution to the research, education, and service activities of the proposed center.

#### Internal and External Advisory Committees

- a) Names of the internal and external Advisory Committee members with supporting letters if applicable.
- b) Supporting letter from Section Head(s).

#### Research plan

- a) Goals and objectives in detail for Year 1
- b) Projection of Goals and objectives for Years 2-5

#### Resources

- a) Resource requirements for first year of operation and projections for the four years following. How will the center provide for the resources needed?
- b) Current and anticipated sources of extramural and philanthropic funding and plan to seek and obtain necessary funding.
- c) The extent to which the center will be self-sustaining.
- d) Identify business office responsible for business activity (including support letters from Division Director and Section Head for business offices at SIO).
- e) Immediate space needs and how they will be met for the first year; projections of future space needs.

### **IV. Review of Research Centers**

#### SIO Research Centers/SIO-UCSD Joint Research Centers

The research center review cycle is normally every 5 years. The governing VCs reserve the right to order a review of a research center at any time. A detailed description of the scope and nature of the review is given in Appendix D. Where appropriate, the center should provide documentation (such as a list of publications by center members, documentation of extramural funding, etc.) to demonstrate its performance in the areas covered by the review.

A list of those centers being reviewed will be published each fiscal year for the subsequent fiscal year review cycle, and shall include the following:

- a) Center to be reviewed
- b) Timing of review
- c) Review committee

The SIO Research and Academic (R&A) committee is responsible for overseeing the review process, including choosing members of the review committee and setting the timing of the review. In the case of SIO-UCSD joint research centers, the review would be coordinated with the other Vice Chancellor areas.

### External Affiliated Centers

External affiliated centers are subject to regular external review as a condition of their extramural funding or governance documents. SIO is not responsible for reviewing external centers. A copy of the external review shall be submitted to the VCMS. The case for continued affiliation with SIO can be considered at the time of review.

### Procedure for Closure or Discontinuation of a SIO Research Center/SIO-UCSD Joint Research Center

After the review process has been completed, and if a recommendation to disestablish the research center is made, the governing VCs will review comments from all the individuals involved in the center as well as the review committee report. If the governing VCs concur with the review committee determination that closure is the best course of action, then the governing VCs will formally close the center.

## **V. SIO Existing Research Centers Prior to the Adoption of this Policy.**

A review of existing SIO research centers will normally be accomplished within one year of the effective date of this policy or five years after the center's creation, whichever is later. The VCMS reserves the right to order a review of an existing SIO research center at any time.

## **VI. Appendices**

**Appendix A:** UCSD Organized Research Unit Policy & Procedures

**Appendix B:** UCSD Policy for Creation and Oversight of non-ORU Centers

**Appendix C:** List of Non-ORU SIO Research Centers/SIO-UCSD Joint Research Centers

**Appendix D:** Research Center Review Criteria

**Appendix C**  
**Non-ORU SIO Research Centers**  
**(as of 6/25/17)**

Name	Director	Established	Governance	Website
<b>SIO Research Centers (Subject to SIO Center Policy - SIO Reviewed)</b>				
Center for Climate Change Impacts and Adaptation (CCCIA)		2015	New-Review TBD	<a href="https://scripps.ucsd.edu/centers/adaptation/">https://scripps.ucsd.edu/centers/adaptation/</a>
Center for Marine Biodiversity and Conservation (CMBC)	Levin, Lisa	2001	MBRD	<a href="https://scripps.ucsd.edu/centers/cmbc/">https://scripps.ucsd.edu/centers/cmbc/</a>
Center for Western Weather and Water Extremes (CW3E)	Ralph, F. Martin	2013	CASPO	<a href="http://cw3e.ucsd.edu/">http://cw3e.ucsd.edu/</a>
Scripps Center for Marine Archaeology (SCMA)	Hildebrand, John/Levy, Tom	2015	SIO/UCSD Dept of Anthropology	<a href="http://scma.ucsd.edu/">http://scma.ucsd.edu/</a>
<b>External Affiliated Centers (SIO PI Involvement only - externally reviewed)</b>				
Center for Aerosol Impacts on Climate and the Environment (CAICE)	Prather, Kimberly	2010	NSF	<a href="http://caice.ucsd.edu/">http://caice.ucsd.edu/</a>
California Center for Algal Biotechnology (Cal-CAB)	Mayfield, Stephen, UCSD		Campus ORU – Food & Fuel for the 21st Century	<a href="http://algae.ucsd.edu/">http://algae.ucsd.edu/</a>
Cooperative Institute for Marine Ecosystems and Climate (CIMEC)	Cornuelle, Bruce	2010	CASPO/MPL Multi-campus NOAA Initiative	<a href="https://scripps.ucsd.edu/cimec">https://scripps.ucsd.edu/cimec</a>
Scripps Center for Oceans & Human Health (SCOHH)	Moore, Bradley	2013	NSF/NIH	<a href="https://scripps.ucsd.edu/scohh/news">https://scripps.ucsd.edu/scohh/news</a>
California Nevada Applications Program (CNAP)	Cayan, Daniel	1999	NOAA	<a href="http://cnap.ucsd.edu/">http://cnap.ucsd.edu/</a>
California Cooperative Oceanic Fisheries Investigation (CalCOFI)	Checkley, David	1920	IOD	<a href="http://www.calcofi.org/">http://www.calcofi.org/</a>
California Current Ecosystem – Long Term Ecological Research (CCE-LTER)	Ohman, Mark	2004	IOD	<a href="http://ccelter.sio.ucsd.edu/">http://ccelter.sio.ucsd.edu/</a>

**Facilities (not subject to SIO Center Policy – not reviewed)**

Coastal Observing Research and Development Center (CORDC)	Terrill, Eric	2003	MPL	<a href="http://cordc.ucsd.edu/">http://cordc.ucsd.edu/</a>
California Spatial Reference Center (CSRC)	Bock, Yehuda	1997	NGS, Caltrans	<a href="http://csrc.ucsd.edu/">http://csrc.ucsd.edu/</a>
Center for Observations, Modeling and Prediction at Scripps (COMPAS)	Cornuelle, Bruce		CASPO	<a href="http://www.compas.ucsd.edu/">http://www.compas.ucsd.edu/</a>
Instrument Development Group (IDG)	Davis, Russ E.	1972	CASPO	<a href="http://idg.ucsd.edu/">http://idg.ucsd.edu/</a>
Ocean Bottom Seismograph Instrument Pool (OBS Facility)	OBSIP: Evers, Brent SIO PI: Orcutt, John	1999	OBSIP–Inc. Res. Institutions for Seismology (IRIS)	<a href="http://www.obsip.org/index.php/">http://www.obsip.org/index.php/</a>
Hydraulics Laboratory	Deane, Grant	1964	MSDC	<a href="https://scripps.ucsd.edu/hlab/staff">https://scripps.ucsd.edu/hlab/staff</a>

**Data Centers (not subject to SIO Center Policy – not reviewed)**

Broadband Seismic Data Collection Center	Vernon, Frank		IGPP	<a href="http://eqinfo.ucsd.edu/">http://eqinfo.ucsd.edu/</a>
CLIVAR and Carbon Hydrographic Data Office	Swift, James		NSF/NOAA	<a href="http://cchdo.ucsd.edu/">http://cchdo.ucsd.edu/</a>
Coastal Data Information Program (CDIP)	Terrill, Eric/Thomas, Julie/Guza, Bob/Feddersen, Falk		IOD	<a href="http://eqinfo.ucsd.edu/">http://eqinfo.ucsd.edu/</a>
Geological Data Center (GDC)	Stocks, Karen	1970	GRD	<a href="http://gdc.ucsd.edu/">http://gdc.ucsd.edu/</a>
Oceanographic Data Facility	Swift, James	1972	SOMTS	<a href="https://scripps.ucsd.edu/ships/shipboard-technical-support/odf">https://scripps.ucsd.edu/ships/shipboard-technical-support/odf</a>
Scripps Orbit and Permanent Array Center (SOPAC)	Bock, Yehuda	1990	IGPP	<a href="http://sopac.ucsd.edu/">http://sopac.ucsd.edu/</a>
Shore Station Program	McGowan, John/Terrill, Eric/Flick, Ron			<a href="http://shorestations.ucsd.edu/">http://shorestations.ucsd.edu/</a>
High Resolution XBT/XCTD Network Site	Roemmich, Dean			<a href="http://www-hrx.ucsd.edu/index.html">http://www-hrx.ucsd.edu/index.html</a>

Appendix D  
Research Center Review Criteria

Research Center review committees are asked to submit a report to the governing VCs. The review committee will respond to these questions in order to ensure completeness of the review report:

1. Introduction and Executive Summary.
  - a. Mission. A concise statement detailing any projected changes to the mission and objectives of the center.
  - b. An evaluation of the overall scholarly quality of the center.
  - c. Evaluation of the center's stated objectives and activities? Its strengths and weaknesses?
  - d. Assessment of the Director's performance.
  
2. Evidence of Accomplishment. What are the center's major accomplishments over the preceding review period in the following areas?
  - a. Research. What is the committee's evaluation of the quality and productivity of research? Is there compelling evidence the center has contributed to outstanding research in the disciplinary and interdisciplinary areas in which it specializes? If appropriate, to what extent is the center attracting graduate students, postdoctoral scholars and/or faculty to SIO? What external connections have been established?
  - b. Undergraduate and Graduate Research Training. What is the committee's assessment of the direct and indirect contributions of the center to graduate and undergraduate research training at SIO? What contributions does the center make to enhance undergraduate and graduate research training associated with the teaching programs of academic departments and programs?
  - c. Recognition for Excellence beyond SIO. Does the center have a national and international reputation for excellence? Are there national and international collaborations that have been established?
  - d. Diversity. How has the center contributed to the campus's diversity goals? Contributions to diversity and equal opportunity can take a variety of forms, including efforts to advance equitable access to education, public service that addresses the needs of California's diverse population, or research in a scholar's area of expertise that highlights inequities.
  - e. Public Service and Outreach. Has the center made significant contributions to the public and the community beyond SIO/UCSD? Have there been benefits to the citizens of California? Measures of success can include, for example, intellectual property that is brought to market; research that improves the quality of life for citizens; and events hosted by the center that engage the public's interest.
  
3. Financial. If appropriate, has the center been successful in obtaining extramural funds? What needs are regarded as most critical to further effectiveness of the center?

4. Space and Resources. Is there space assigned? Is it adequate, appropriate and reasonable? What specific changes, if any, are recommended?
  
5. Governance and Administration. Does the administrative structure meet the needs of the center? The report should separately address the following administrative issues:
  - a. Governance. Comment on the center's governance, its structure and effectiveness, including the leadership qualities of the Director and the ability of the Advisory and Executive Committees to provide guidance to the Director. Is there evidence of succession planning?
  - b. Faculty Participation. Is there adequate participation of faculty/researchers from diverse disciplines in the center? Is there evidence that the center is a factor in attracting faculty to SIO and retaining them?
  - c. Comparisons with Other Units. What are the center's unique contributions to the SIO/UCSD that distinguish it from other similar academic entities? Is the center's continuance as a separate entity justified? What would be lost if the unit did not exist? Does the center affect other units at SIO?
  
6. Conclusion and Recommendations. The committee should summarize its recommendations for the future of the center, including, but not limited to, a recommendation about its continuance, directorship, and any changes involving administration, governance and funding. In making its recommendations, the committee should particularly consider whether the current center structure would continue to advance the goals of SIO.