### UNIVERSITY OF CALIFORNIA SAN DIEGO

BERKELEY • DAVIS • IRVINE • LOS ANGELES • MERCED • RIVERSIDE • SAN DIEGO • SAN FRANCISCO



OFFICE OF THE CHANCELLOR

9500 Gilman Drive # 0005 La Jolla, California 92093-0005 Tel: (858) 534-3135 Fax: (858) 534-6523 chancellor@ucsd.edu chancellor.ucsd.edu

January 17, 2023

SUBJECT: Scripps Institution of Oceanography Space Allocation Report

This report was commissioned as a result of concerns raised by faculty about how research and office space are allocated at UC San Diego's Scripps Institution of Oceanography. Together, Vice Chancellor for Marine Sciences and Scripps Director Margaret Leinen, Executive Vice Chancellor Elizabeth Simmons and I charged an ad hoc task force of faculty and staff to evaluate space allocations based on a variety of variables. The task force — chaired by Professor Victor Ferreira, Associate Vice Chancellor for Faculty Equity, Diversity and Inclusion — worked for several months on data analysis and review of existing policy. I appreciate and am very thankful for the task force members' extensive and diligent work. I am also very grateful to the faculty, staff and researchers who provided input to the task force, which helped in developing the recommendations.

The report concluded that women currently hold disproportionately less space than men regardless of group size, funding, discipline or research section, particularly at the full professor and researcher levels. These findings do not reflect the values of our university and our commitment to equity, diversity and inclusion. I have asked VC Leinen to chair a change management committee to implement the recommendations of this report. The committee will report their progress on a regular basis — initially monthly — to a group including me, EVC Simmons, Vice Chancellor for Equity, Diversity, and Inclusion Becky Petitt, Vice Chancellor and Chief Financial Officer Pierre Ouillet, and Vice Chancellor for Research Corinne Peek-Asa.

UC San Diego has a strong commitment to equity, diversity and inclusion, and is proud of progress in building gender equity into its faculty. Since 2014, the number of women ladder-ranked faculty and teaching professors has increased by 37%, outpacing the 17% total growth of ladder-ranked faculty and teaching professors.

Implementing the recommendations in this report is a top priority. This demonstrates our full commitment to identify areas for improvement, develop actionable plans, improve transparency and innovate meaningful solutions to continue to advance equity, diversity and inclusion.

Pradeep K. Khosla

Chancellor

### Scripps Institution of Oceanography

# AD HOC TASK FORCE ON SPACE ALLOCATION

### Final Report

### **RESPECTFULLY SUBMITTED BY:**

Sarah Aarons, SIO Faculty
Grant Deane, SIO Faculty
Julia Diaz, SIO Faculty
Victor Ferreira, Psychology Faculty, AVC-FEDI,
Task Force Chair
Cammie Ingram, SIO Staff
Deirdre Lyons, SIO Faculty
Robert Neuhard, Executive Director,
Operational Strategic Initiatives, Chancellor's Office
Susie Pike-Humphrey, SIO Staff
Stuart Sandin, SIO Faculty
Elizabeth Simmons, Executive Vice Chancellor
Janet Sprintall, SIO Faculty
Fiammetta Straneo, SIO Faculty

## TABLE OF CONTENTS

Executive Summary	2
Summary of Charge	7
Summary of Task Force Activities	8
Analyses of Space Assignments to Faculty at Scripps	11
Analyses of Survey Results	31
Space Allocation Landscape at Scripps	34
Analysis of SIO Space Policy, Procedures, and Practices	39
Recommendations	51
Conclusions	61
Appendices	62

### 1.EXECUTIVE SUMMARY

The SIO Ad Hoc Task Force on Space Allocation was formally charged on May 4, 2022, to better understand space allocations and space-allocation policies, processes, and procedures at the Scripps Institution of Oceanography at the University of California San Diego, with the goal of assessing possible gender inequities. The report that follows describes our charge, our methodology, data analyses and findings, the task force's understanding of the space-allocation landscape, and our recommendations for addressing identified imbalances and issues. We address equity, fairness, and transparency for Scripps faculty throughout.

The task force evaluated the allocation of three types of space (academic office, research and storage space) for 217 space holders comprising 99 Professors, 41 Researchers, 67 emeritus faculty, and 10 other spaceholders (project scientists, research staff). The task force's findings were derived from three complementary sources: analysis of space data pulled on May 19, 2022, 56 individual interviews, and 77 responses to a survey designed by the task force. The task force principal findings are the following:

- Women at Scripps hold disproportionately less space than men independent of length of time at Scripps, group size, funds spent, or discipline. Overall, women hold 17% of the total space even though they constitute 26% of space holders, including emeriti. None of the 16 space holders who occupy over 3,000 square feet are women.
- A significant amount of space (23%) at Scripps is held by emeritus faculty who
  constitute 31% of space holders, 86% of whom are men. Most analyses described in
  this report focus on non-retired faculty, though gender imbalances remain whether
  emeriti are included or not.
- Imbalances in space allocation exist for all three kinds of space (academic office, research and research-storage). Men have larger academic offices (mean for women is 155 sq ft compared to 180 sq ft for men) and the mean research space of men (1016 sq ft) is more than double that of women (498 sq ft). For research-storage space the imbalance is even larger.

- Gender imbalances are most evident at the full professor and researcher levels.
- The space disparity cannot be explained away on the basis of time at the institution, funding expenditures, or group size. On the contrary, the rate of increase in space held by women for any one of these categories is lower than that of men. The disparity also cannot be attributed to differences in the kind of research carried out by women versus men.
- Women view Scripps space policies, procedures, and practices as less fair, equitable, and transparent than men do, and alarmingly, 42% of surveyed women report that they do not have enough space to meet their research needs whereas only 6% of men do. Women also report finding the space-negotiation process less satisfactory than men do.
- Shortcomings in the SIO Space Policy have contributed to this gender imbalance by failing to provide adequate guidance and articulate clear and equitable processes for space assignment. This has been compounded by the fact that space decisions are made by different entities (leadership, institution-wide committees, section heads, and administrators) without a clear delineation of roles and coordination.
  Furthermore, members of these entities often lack training on space decision-making.
  As a result, space allocation at Scripps continues to rely on non-transparent, historically-based practices that have favored men.
- While deeply troubling, these findings are consistent with multiple reports of gender disparities in STEM academic institutions in the US and elsewhere, in a range of quantifiable parameters such as salary, access to resources, attrition rates, time to promotion, as well as space (e.g. MIT Faculty Newsletter, 1999; Holmes et al. 2008). These disparities, in turn, have been attributed to multiple causes, including lack of role models and networks, underrepresentation, academic climate, and implicit gender bias (Casad et al, 2020; Holmes et al. 2015; Valian, 1999).

Cumulatively, they contribute to the ongoing disproportionately low percentages of female faculty in the sciences, and in the geosciences in particular – the 'leaky pipeline' (Holmes et al. 2015; Popp and Lutz, 2019).

The task force recommends that the documented gender disparity in space allocation be quickly and actively addressed through multiple actions, including:

- Take immediate action to remedy the existing space inequity by identifying and re- assigning available and underutilized space.
- Implement leadership training, especially for higher-turnover positions that are very close to the space assignment process (e.g., section heads).
- Develop a strategic plan for space usage that embodies Scripps's priorities for its research, teaching, and service mission and that takes into account the production and engineering activities that take place at Scripps.

<sup>&</sup>lt;sup>1</sup> A Study on the Status of Women Faculty in Science at MIT. The MIT Faculty Newsletter Vol XI No. 4 [internet]. Published March, 1999. Available from http://web.mit.edu/fnl/women/women.html. Holmes, M. A., O'Connell, S., Frey, C., & Ongley, L. (2008). Gender imbalance in US geoscience academia. Nature Geoscience, 1(2), 79–82.

<sup>&</sup>lt;sup>2</sup>Casad, B. J., Franks, J. E., Garasky, C. E., Kittleman, M. M., Roesler, A. C., Hall, D. Y., & Petzel, Z. W. (2021). Gender inequality in academia: Problems and solutions for women faculty in STEM. Journal of Neuroscience Research, 99(1), 13–23.

Holmes, M. A., OConnell, S., & Dutt, K. (2015). Women in the Geosciences: Practical, Positive Practices Toward Parity. John Wiley & Sons.

Valian, V. (1999). Why So Slow?: The Advancement of Women. MIT Press.

<sup>&</sup>lt;sup>3</sup> Popp, A., Lutz, S., Khatami, S., van Emmerik, T., & Knoben, W. (n.d.). A global survey on the perceptions and impacts of gender inequality in the Earth and space sciences. https://doi.org/10.31223/osf.io/3jkcp

Expand the SIO Space Policy to include the events that most directly determine faculty space assignments, that is, how faculty are assigned space upon being recruited to Scripps and when they request a modification to their current space assignment.

- An important priority for such policy design, given the inherent power imbalance in space assignment, should be to minimize the need for "hard negotiation" in space assignment, as such negotiation inherently places those with less power at a disadvantage.
- The SIO Space Policy should require that when space is relinquished from a PI for any reason, it is returned to Institutional Reserve rather than inherited by another faculty member.
- The policy should include effective means for addressing the space assignments of retired faculty so as to better provide space for faculty who are not retired.
- Policy design should also build on the principles of shared governance that operate across UC San Diego, and which Scripps historically has strived to include as part of its organizational structure.

Implement a periodic space-review process of all space at Scripps. Ideally, this will include a physical walkthrough of all space at Scripps, perhaps in staggered fashion across years.

 This space review process should explicitly assess equity gaps, to ensure that the changes that are implemented to space policies and practices remediate existing gaps. If not, policies should continue to be modified until gaps close.

Space commitments that are made to faculty should be formally and transparently documented.

• Current space assignments should also be transparently available for all faculty to access.

- Align faculty requests and mentoring style with the type of space assigned to
  mentees. Such assignment should include providing collaborative research space to
  faculty (when requested), as well as office space that is assigned by the section.
- Avoid making commitments to space outside of the standard consultative, policyguided process, but when such commitments are made, they should be transparently reported to all faculty.
- Implement a more effective rescission process to recover underutilized space, likely linked to the recommended periodic space-review process.
- Define pathways for accommodating the needs for the growing number of interdisciplinary (cross-section) groups including Centers.

The task force stresses that our analysis points to the existence of widespread, institution-wide, cultural barriers to gender equity within Scripps and that the responsibility to address these falls on every member of the institution, irrespective of gender, rank, and academic position. We note, also, that even though the focus of this report was on space, these barriers are likely contributing to gender inequities beyond space. We therefore recommend a review of other possible gender inequities beyond space and that pro-active steps be undertaken to address the structural and cultural sources of any inequities found (e.g. Casad et al. 2020; Holmes et al. 2015). This is even more important given the notable steps taken by the institution to promote greater gender equity through hires and engagement in activities to support a more gender-balanced staff, faculty, and student population.

We credit the leadership for establishing this task force and empowering it to assess these problems, and express appreciation for the support we have received from those we have worked with, including members of the Scripps community and our leaders both within Scripps and outside of Scripps. This report is the first step to a fairer, more transparent, and more equitable Scripps Institution of Oceanography and today's members of the Scripps community, leadership and faculty alike, are well positioned to take responsibility for problems that have been inherited and continue to be tolerated, and to take action towards making a better institution for all that call Scripps their academic home.

### SUMMARY OF CHARGE

The SIO Ad Hoc Task Force on Space allocation was charged by Chancellor Pradeep Khosla, Executive Vice Chancellor Elizabeth Simmons, and Vice Chancellor of Marine Sciences Margaret Leinen with two tasks to achieve a better understanding of space allocation at Scripps Institution of Oceanography at University of California San Diego. The task force was brought into being in part due to the SIO Faculty Space Advisory Committee (FSAC), which observed the likely possibility of inequities in space assignment at Scripps.

First, the task force was asked to determine whether current allocations of space "have been equitable and appropriately support" all faculty at Scripps. (Note: Throughout this report, we use *faculty* to refer to both professors and researchers.) This aspect of the charge specified that all space should be considered, and to evaluate the role of shared space in such a determination. The charge also included specific potential moderator variables that were to be considered, enumerated below.

Second, the task force was asked to analyze policies, processes, and procedures that are in place at Scripps "to determine whether these are grounded in principles of equity, inclusion, and transparency." This aspect of the charge specified that the task force was to understand the discriminatory or exclusionary potential of SIO Space Policy, as well as whether the processes and procedures used at Scripps to implement policy are applied consistently or could lead to outcomes that are or could be perceived as discriminatory or exclusionary.

The official charge to the SIO Ad Hoc Task Force on Space Allocation is included, Appendix A.

### SUMMARY OF TASK FORCE ACTIVITIES

In support of fulfilling its charge, the task force carried out four types of activities.

First, an analysis of current space allocations required the task force to access the data of who at Scripps was assigned what type and amount of space, as well as a series of moderator variables (e.g., length of academic employment, size of research program) that, by our charge, were to be taken into account. An initial data set was provided to the task force, pulled from the campus space management system (Tririga) with space assignments effective May 19, 2022. That data set needed both to be checked for accuracy, as well as to be supplemented with additional data that were not originally provided to the task force. To assess the accuracy of space allocations, all Scripps faculty that were interviewed by the task force (see below) were asked if their space assignment was accurate. Their reports were then checked against information included in the space management database. To populate the data set with additional information needed to conduct the analyses within our charge, task force members contacted other offices at Scripps as well as faculty leaders, obtaining information about faculty hire dates, start dates in faculty's current appointment series, faculty gender identity, number of personnel assigned to work with the PI in the assigned space, the type of research activity conducted by the PI, and number of students advised. Note that the task force did not consider any impact of space at Scripps that may be about to become available. Finally, all Scripps faculty were given the opportunity to confirm their gender identity individually by email.

Second, the task force was provided with the version of the space policy that was current at the time the task force was convened, as well as an updated policy, approved May 23, 2022. All task force members carefully read the current space policy and discussed it as a group. Additionally, interviews with Scripps leadership and faculty (see below) provided key insights into the role, knowledge, and awareness of the space policy in day-to-day activities. These too were discussed among task force members. Finally, the task force was able to obtain the space policies of two other units at UC San Diego, the School of Biological Sciences and Jacobs School of Engineering. These were considered as comparisons with SIO Space Policy.

Third, the task force conducted a comprehensive set of interviews of faculty and leadership (the latter including faculty and non-faculty). Per our charge, the task force aimed to interview most faculty appointed since 2012, but others were interviewed as well. In total, 56 interviews were conducted, each lasting 30-60 minutes (with a few lasting longer). The distribution of these interviews by role at Scripps (faculty, leadership), career stage (early, not early) and gender (all interviewees identified as man or woman) is indicated in the table below:

	Gender			
		Men	Women	Total
Faculty	Early Career	8	19	27
	Not Early Career	7	3	10
Faculty Total		15	22	37
Leadership	Not Early Career	14	5	19
Grand Total		29	27	56

Note: One individual was interviewed twice.

For these interviews, task force members devised two sets of standard questions, one for faculty and one for leadership. Each interviewee received the set of relevant questions in advance of their interview. Typically, the interview adhered relatively closely to these questions, although follow-up questions were common and discussions sometimes moved to related topics that were not directly covered in the interview questions. At the request of the interviewee, a small number of interviews did not follow the questions at all (although even these interviewees received questions in advance). All interviewees were assured confidentiality, in that none would be identified, and no aspect of this report would permit an inference as to the identity of someone who provided particular input to the task force. The questions asked of faculty and leadership are included as Appendices B and C.

Fourth and finally, the task force designed, distributed, and analyzed results from an anonymous survey that was sent to all 149 non-retired faculty at Scripps. We received 77 responses (51.7%). The survey asked 29 questions, including questions regarding the respondent's nature of and satisfaction with their space assignment, satisfaction with the process of negotiating for space, whether the respondent requested a space modification and satisfaction with any such modification effort, knowledge of SIO space policy, and the respondent's impression of the fairness, equitability, and transparency of Scripps space policies, procedures, and practices, as well as the transparency of Scripps's current space allocations. (The survey text is included as Appendix D.) The survey asked about demographic information, both personal and professional. Finally, the survey provided an opportunity for the respondent to request an interview with the task force, leading 7 respondents to be interviewed (information about whom are included in the table above).

### ANALYSES OF SPACE ASSIGNMENTS TO FACULTY AT SCRIPPS

The task force was provided with space assignments for all space holders (including all faculty and non-faculty) as of May 19, 2022. Space assignments of individual holders of space were corrected when task-force interviews revealed an inaccuracy, which happened occasionally. The pulled report included expenditure, proposal, teaching, and advising information for all space holders. The financial and academic information included data from fiscal year 2020-2021 as well as 3-year averages. The task force secured information about group size from the UCPath Human Resources and Payroll system as of August 1, 2022. Type of research activity was determined by surveying division directors. Length of time at Scripps was obtained from the Scripps Academic Personnel office.

Additionally, although the task force was given gender identity information with the initial data set, anecdotal observations suggested the possibility of inaccuracies. The task force therefore sent a message to all Scripps faculty on September 15, 2022, individually reporting to faculty the gender identity included in our database and providing an opportunity for faculty to correct that identity. We gave faculty the option of declining to state their gender identity; a small number of faculty members did so. In total, the task force compiled data on 217 space holders. (This is larger than the number of faculty surveyed, reported below, due to the inclusion of 67 retired faculty and 10 other non-faculty space-holders who were not surveyed.) We note that all analyses reported below are based on the dataset that the task force assembled, and also that race/ethnicity data were not available to the task force for these analyses (but see the survey analyses below).

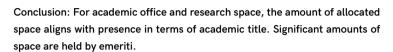
### **Demographics of Individuals Holding Space**

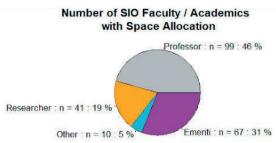
Of the 217 space holders at Scripps, 157 (72%) are men and 56 (26%) are women. For 150 non-emeriti space holders, 100 (67%) are men and 47 (31%) are women. A small number of faculty members either identified as nonbinary/other or declined to state their gender identity. Whenever overall data are presented – that is, not broken down by gender – space holders reporting as nonbinary/other and those who declined to state their gender identity are included in the reported values. When data broken down by gender are presented, nonbinary/other and decline-to-state space holders are omitted, to avoid possible identification. It should be noted that some faculty also use containers for research storage both in service yards and Seaweed Canyon, but this space was not included in the research storage figures presented here.

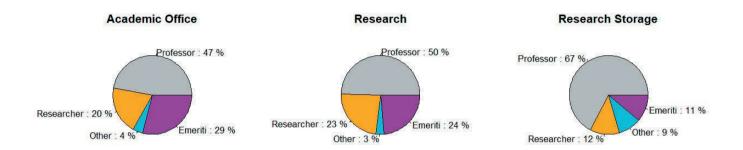
Before analyzing gender, Figure 1 shows space distribution broken down by appointment title, considering four different categories: Professor, Researcher, Emeritus and Other (which includes Project Scientists and other research staff). Space held is, in turn, separated into three different categories: academic office space (36,207 sq ft in total), research space (168,901 sq ft in total), including research labs and research offices, but not including storage (henceforth, just research space) and storage space (33,376 sq ft in total, at the Seaweed Canyon facility). Professors make up 46% of space holders at Scripps, and hold 47% of academic office space, 50% of research space, and 67% of research storage space.

Researchers are 19% of space holders, and hold 20% of academic office space, 23% of research space, and 12% of research storage space. Other space holders hold about a quarter of space (in each space category) at Scripps.

Fig. 1. Total allocation of space across the SIO campus, separated by academic title. The figures sum space allocated to all individuals. The total assigned space that is reported here, by category, is 36,207 sq ft (Academic Office), 168,901 sq ft (Research), and 33,376 sq ft (Research Storage). Titles of space holders are included, with 'Other' represented by Teaching Professors (4), Professor of Practice (1), Project Scientists (2), Research Associate (1), Administrator (1), and Staff (1). A total of 217 individuals are represented.







Importantly, this figure also highlights that 31% of space holders are emeritus faculty, holding 29% of office space, 24% of research space, and 11% of research storage space. We discuss this further below, as we believe that this is an important factor underlying some of the space-allocation dynamics at Scripps. For sake of reference, the direct costs, indirect costs, and gift funds brought in by retired faculty, separately for whether Retired to Active Duty (RTAD) are:

	Direct Costs	Indirect Costs	Gifts
Emeriti	\$220,645	\$59,982	\$116,090
RTAD	\$15,784,976	\$4,249,754	\$283,250
Total	\$16,005,621	\$4,309,736	\$399,340

### Overall Space Assignments by Gender

One measure of imbalance by gender in space distribution is to evaluate whether the fraction of the total amount of space assigned to men (72% of space holders) and women (26% of space holders) is proportional to their respective numbers.

Figure 2 shows the proportion of space holders broken out by gender, and then space assignments for each type of space, including emeriti. In terms of academic office space, men make up 72% of space holders and hold 76% of academic office space, whereas women make up 26% of space holders and hold 24% of academic office space. While this difference seems relatively small, analysis of mean office space presented below shows that a significant gender imbalance exists even for office space.

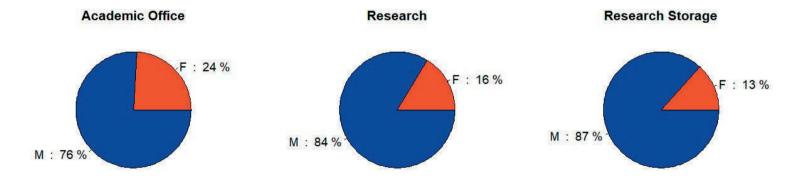
Fig. 2. Allocation of space across the SIO campus, considered by gender. The figures sum space allocated to all individuals, independent of title. Pie slices represent the proportion allocated to female (F, red) and male (M, blue) faculty, broken down into three space categories – academic office space, research space (including research labs and allocated research offices), and research storage space (i.e., space at Seaweed Canyon). To contextualize these total allocations, in the top right there is a parallel presentation of the number of individuals with any space; total of 217 individuals, 213 of which are reported in space figures. Specific numbers are not included for X and N so as to preclude identifiability.

Conclusion: For every category of space, men have more space than their proportion of individuals, and especially so for Research and Research Storage (i.e., Seaweed Canyon) space.

Number of SIO Faculty / Academics with Space Allocation

X:1%
F:26%

N:1%



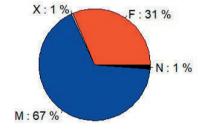
In research space, the 72% of space-holders identifying as men hold 84% of research space, whereas the 26% of space-holders identifying as women hold 16% of research space. For research-storage space, the 72% of space-holders identifying as men hold 87% of space, whereas the 26% of space-holders identifying as women hold 13% of space. This represents a large gender gap, with men holding greater than 10% more space than warranted by the overall proportion of space holders who identify as men. Containers were not included in the research storage space, but of the 32 containers in service yards, only one is assigned to a woman, and none of the 13 containers in Seaweed Canyon is assigned to a woman.

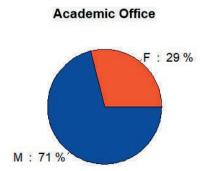
Figure 3 mirrors Figure 2, but excludes emeritus faculty. The conclusions here are similar, but with a somewhat larger gender gap: Men have 4% more academic office space, 14% more research space, and 19% more storage space in Seaweed Canyon than is warranted by the overall proportion of space holders who identify as men, with women showing gaps of the same size.

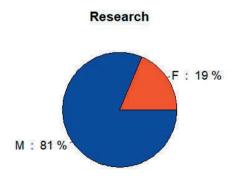
Fig. 3. Allocation of space across the SIO campus, considered by gender. The figures sum space allocated to all non-retired individuals, independent of title (but excluding emeriti SIO faculty). Pie slices represent the proportion allocated to (F, red) and male (M, blue), broken down into three space categories – academic office space, research space (including research labs and allocated research offices), and research storage space (i.e., space at Seaweed Canyon). To contextualize these total allocations, in the top right there is a parallel presentation of the number of individuals with any space (including X for non-binary and N for individuals who do not wish to report); total of 150 individuals, 147 of which are reported in space figures. Specific numbers are not included for X and N so as to preclude identifiability.

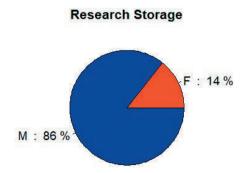
Conclusion: For every category of space, men have more space than their proportion of individuals, and especially so for Research and Research Storage (i.e., Seaweed Canyon) space.

Number of SIO Faculty / Academics with Space Allocation









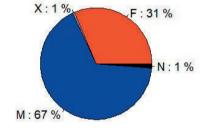
In research space, the 72% of space-holders identifying as men hold 84% of research space, whereas the 26% of space-holders identifying as women hold 16% of research space. For research-storage space, the 72% of space-holders identifying as men hold 87% of space, whereas the 26% of space-holders identifying as women hold 13% of space. This represents a large gender gap, with men holding greater than 10% more space than warranted by the overall proportion of space holders who identify as men. Containers were not included in the research storage space, but of the 32 containers in service yards, only one is assigned to a woman, and none of the 13 containers in Seaweed Canyon is assigned to a woman.

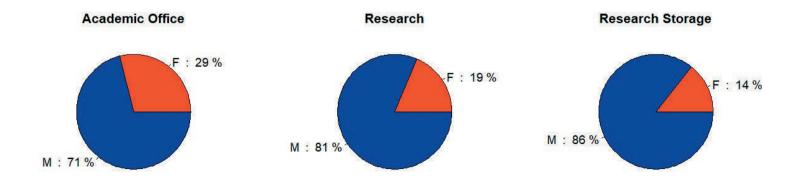
Figure 3 mirrors Figure 2, but excludes emeritus faculty. The conclusions here are similar, but with a somewhat larger gender gap: Men have 4% more academic office space, 14% more research space, and 19% more storage space in Seaweed Canyon than is warranted by the overall proportion of space holders who identify as men, with women showing gaps of the same size.

Fig. 3. Allocation of space across the SIO campus, considered by gender. The figures sum space allocated to all non-retired individuals, independent of title (but excluding emeriti SIO Number of SIO Faculty / Academics faculty). Pie slices represent the proportion allocated to (F, red) and male (M, blue), broken down into three space categories - academic office space, research space (including research labs and allocated research offices), and research storage space (i.e., space at Seaweed Canyon). To contextualize these total allocations, in the top right there is a parallel presentation of the number of individuals with any space (including X for non-binary and N for individuals who do not wish to report); total of 150 individuals, 147 of which are reported in space figures. Specific numbers are not included for X and N so as to preclude identifiability.

Conclusion: For every category of space, men have more space than their proportion of individuals, and especially so for Research and Research Storage (i.e., Seaweed Canyon) space.

### with Space Allocation





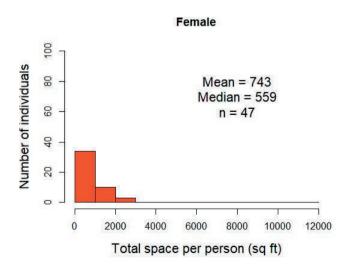
Our remaining analyses focus on space assignments excluding emeritus faculty, to focus on possible gender gaps among non-retired faculty.

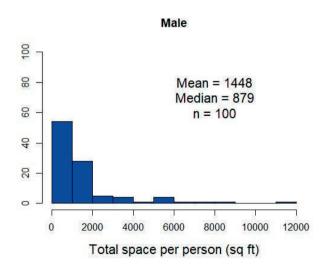
### **Distribution of Total Space Assignments**

Figure 4 shows histograms reporting the distribution of space holders' total space assignments (academic office, research, and research storage combined). These show that the mean total space assigned to men (1448 sq ft) is approximately double that assigned to women (743 sq ft). In addition, there is a long right tail for the total space assignments of space-holders identifying as men, whereas there is no long tail for space-holders identifying as women. That is, all 16 holders of very large amounts of total space – 3,000 square feet or more – are men.

Fig. 4. Total per capita allocation of space across the Scripps campus, comparing between female and male space holders. The histograms report the number of individuals in each bin of space allocation. Space allocation here is defined as the sum of (i) academic office, (ii) total research, and (iii) research storage space. Summary statistics of these distributions are presented by reported gender.

Conclusion: The per capita allocation of space differs by gender, notably with men having more space per individual than women. Note that the mean space allocation for an individual male space holder is approximately double that of an individual female space holder.





Many of those who hold more than 3,000 square feet of space attained that space through a process the task force came to call "inheritance," described further below. To understand the assignments of these large space holders better, the space held by those with more than 3,000 square feet, broken out by whether the space was inherited or not, and whether the space is on campus versus off campus or storage, is:

	On Campus	Off Campus or Storage	Total
Inherited	27,502	10,159	37,662
Not inherited	23,760	18,620	42,380
Total	51,262	28,779	80,042

Figure 5 shows histograms for the three space categories (academic office space, research and storage space) by gender. These show that for academic office space, the mean amount of space held by women is 25 square feet less than by men; for research space, women hold 518 square feet less space than men do; for research storage space, women hold 163 square feet less space than men do. Thus, notable differences exist in the mean office space allocated to men versus women, and men on average have two times more research space than women and three times more storage space.

Fig. 5. Total per capita allocation of space across the Scripps campus, comparing between women and men. The histograms report the number of individuals in each bin of space allocation. Space allocation here is presented individually for three categories of space: (i) academic office, (ii) total research, and (iii) research storage space. Summary statistics of these distributions are presented by reported gender.

Conclusion: Men hold more space than women in all categories of space assignment, including holding an average of double the research space than women do.

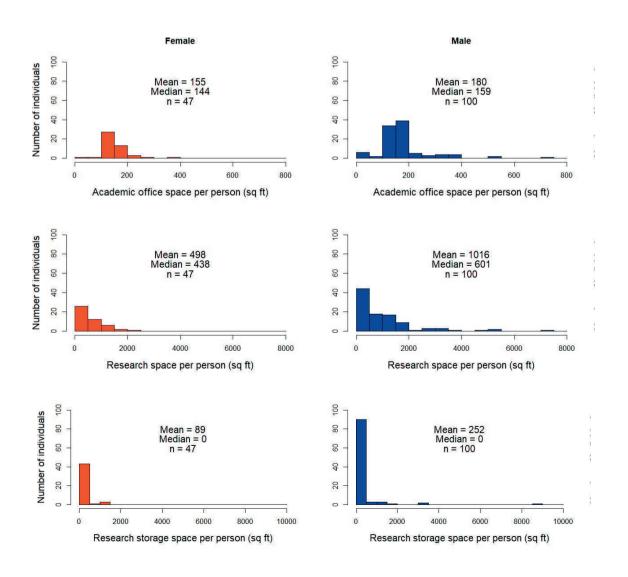
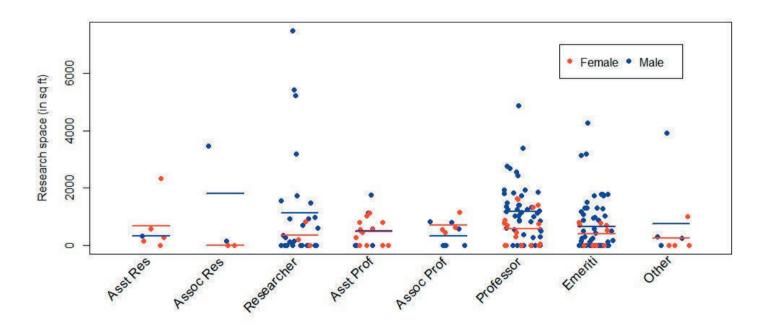


Figure 6 is a scatterplot showing total space assignment (academic office, research, but excluding research storage) broken out so that individual faculty by rank and series can be seen. (Note that we include emeriti in this figure because their impact can be seen separately.) This figure shows that for the most populous categories – full professors, full researchers, and emeriti – men have more space than women. The task force believes that these differences reflect the consequences of long-term gender-biased policies and practices at Scripps.

Fig. 6. Research space allocation by individual, organized by academic series and rank. 'Research space' is defined here as the sum of research laboratory, research office, and other research space, and does not include research storage space (i.e., space at Seaweed Canyon). Note that emeriti include individuals from both the professor and researcher series. 'Other' includes Teaching Professors (4), Professor of Practice (1), Project Scientists (2), Research Associate (1), Administrator (1), and Staff (1). Horizontal bars represent the mean by gender within series and rank. Points are horizontally jittered within title for visibility.

Conclusion: Across most academic categories, especially the ones with the most space holders, men are assigned more research space than women.



For associate researchers, there is a large gender gap, whereas for assistant researchers, there is a small reverse gender gap; it is worth noting that the numbers of faculty in these categories are very small, and extreme values distort the degree to which systematic conclusions can be understood from the mean differences (or whether there are any meaningful central tendencies for the means to reflect at all). For assistant and associate professors, where there is no gender gap or a small reverse gender gap respectively, the numbers of faculty in the categories are somewhat larger, but the existence of gender-skewed extreme values again distorts the degree to which systematic conclusions can be understood from the mean differences.

Although the task force is hopeful that this pattern of mean differences among the assistant and associate ranks is a positive sign for the longer term, discussions among the membership and our understanding of faculty sentiment (as revealed through interviews) suggests that the picture is more complicated. In particular, there are at least three factors operating for faculty at the assistant and associate ranks that create an important context for interpreting gender equity for these earlier-career faculty. First, the faculty perceive that there are individuals with more extreme space assignments (as evident in Figure 6), creating a sense that different faculty are treated inequitably with respect to space assignment. Second, as noted below, early-career faculty, especially women, report significant headwinds in terms of negotiating for space or attaining space modifications, leading to a sense that the overall pattern that has emerged resulted from sometimes difficult and even discouraging interactions that themselves incorporate a gender bias. Third, there is also a sense that there have been recent adjustments in space assignments, suggesting that advances in gender equity may unfold too slowly or with significant delays relative to initial appointment time. Taken together, these factors point to the fact that there remains a sound basis for the perception of early-career faculty (reported below) that a gender inequity exists, even if the differences between the means in some faculty categories show little or even reverse differences.

### Space Assignments as a Function of Direct Costs Expenditures

Figure 7 shows individual space holders' total space assignments (academic office, research office, and research laboratory) plotted as a function of total direct costs expended by that faculty member. The most important additional observation to take from this figure is the different slopes on the regression lines: Space assignments for space-holders identifying as men increase at a rate that is almost four times larger per dollar of direct costs spent than for space-holders identifying as women. Thus, it is not the case that the overall disproportionate assignment of space to space-holders identifying as women is due to men having more funding in terms of direct costs. (The task force notes that even if these two regression lines were parallel, the possibility of a gender inequity would remain as long as overall, men have a larger space assignment, under the assumption that having more space enables a faculty member to secure more funds.)

Fig. 7. Total per capita research space as a function of funding expenditures. 'Research space' is defined here as the sum of research laboratory, research office, and other research space, and does not include research storage space (i.e., space at Seaweed Canyon). Funding is defined as the average total spendable funds expended, including both direct costs and gifts, across 3 years (FY 18/19 through FY 21/22). For individuals who have been appointed at Scripps for less than 3 years, the annual average for the years since appointed is used. Note the logarithmic transformation of the x-axis and parameters of best-fit regression line in legend (by gender).

Conclusion: For men, there is a general trend of increasing research space allocation with increasing total expenditures; for women, research space allocation has a weaker positive relationship with total funds.

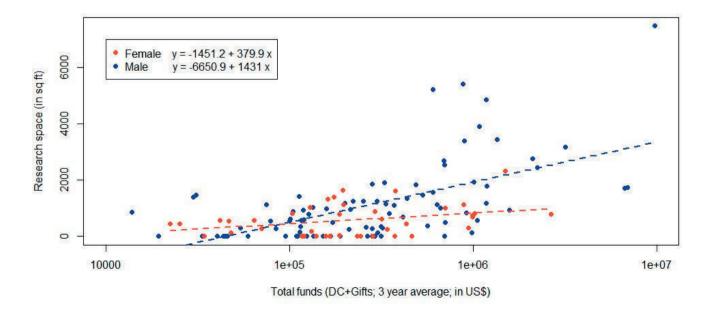


Figure 8 mirrors Figure 7, except that space is instead plotted as a function of indirect costs that a space-holder brings in. The conclusions are similar, but with space assignments increasing 6 times faster for men than for women.

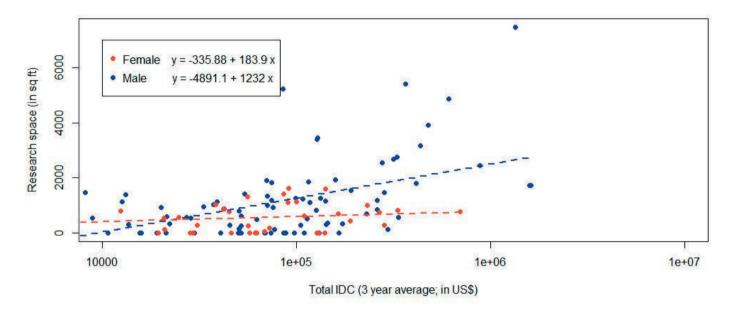


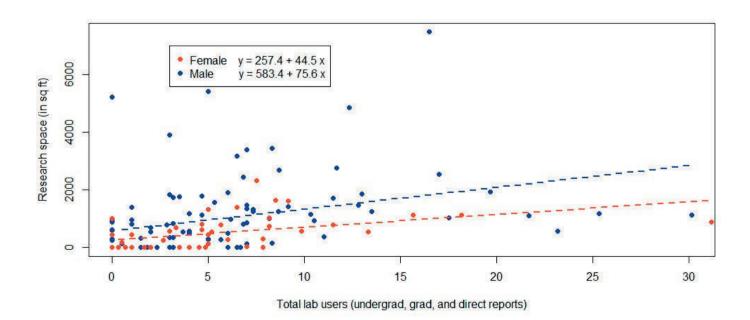
Fig 8. Relationship between total research space and indirect costs (IDC) generated, per capita. Note log-transformed axis for IDC.

### Space Assignment as a Function of Group Size

Figure 9 mirrors Figures 7 and 8, except research space assignment is plotted as a function of the size of the group of personnel assigned to the space holder (undergraduate, MS, and PhD students, postdoctoral researchers, other academic staff, and research volunteers). Again, the regression lines show that the space assignments of space holders identifying as men rise more quickly (almost double) with an increasing group size than space assignments of space holders identifying as women. This shows that the overall disproportionate space assignment cannot be explained by the possibility that men have more individuals assigned to them in their research groups. (Again, the task force notes the same caveat as noted with Figure 7.)

Fig. 9. Total per capita research space as a function of number of lab users. 'Research space' is defined here as the sum of research laboratory, research office, and other research space, and does not include research storage space (i.e., space at Seaweed Canyon). Number of lab users is defined as the two-year average number of students and staff reporting to the individual, including undergraduates (one quarter of 199 enrollment accounting for 10 hours per week for 1/3 of a person-year), graduate students (including MS and PhD), and direct reports (including postdocs, other academic reports, academic staff, and research volunteers). For individuals who have been appointed at Scripps for less than 2 years, the annual average for the years since appointed is used. Regression lines describe different amounts of total variance, with R² values as follows: female, 0.19, and male, 0.10, with equations of best-fit lines presented in the legend.

Conclusion: Across the range of number of lab users, the rate at which space assigned to men increases with increasing group size is about double that for women.



### Space Assignment as a Function of Type of Research

Figure 10 shows total research space broken down by type of research conducted and the gender identity of the space holder. Many space holders at Scripps conduct more than one type of research, and so research type is grouped by combination (L = laboratory; S = seagoing; T = theoretical/computational; E = engineering; T = 24% of faculty; SL = 24%; L = 19%; STE = 17%; S = 8%; and ST = 8%). The figure shows that men have more space than women for every research type except theoretical/computational, for which men have a small amount more space, and seagoing-theoretical, for which women have a small amount more space than men. These trends are also evident when comparing gender representation and space allocation within each category. In the research category STE, women represent 24% of faculty but hold only 9% of the space assignment. The findings are similar for the categories S (women are 50% of faculty but hold 37% of space), L (35% v. 23%), and SL (32% v. 21%). In contrast, the two remaining research categories approach gender balance, with women representing 30% of the faculty and holding 27% of the space in the T category, and representing 24% of the faculty and holding 25% of space in the ST category. Most importantly, women are not overrepresented in the research categories with the smallest gender gaps in space assignments, showing that the overall gender gap cannot be explained by the type of research that women undertake.

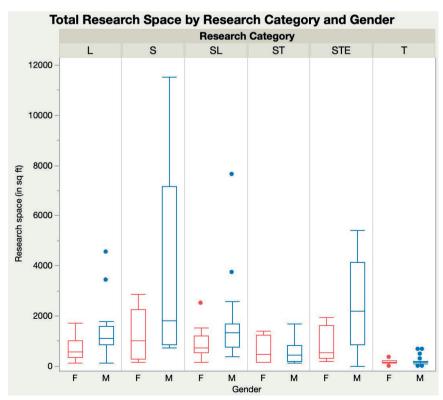


Fig. 10. Total research space allocation by research category and gender for non-RTAD faculty. Boxplots show the 25% and 75% percentiles (lower and upper box boundaries, respectively), median (line inside box), and +/- 1.5\*interquartile range (error bars). Total research space allocation here is defined as the sum of (i) academic office, (ii) total research, and (iii) research storage space. S=sea-going or field-going, L=laboratory, T=theoretical/computational, E=engineering

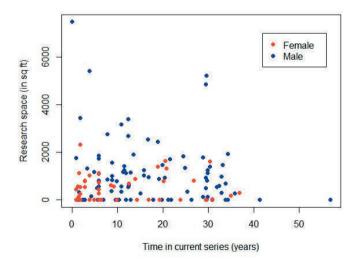
Conclusion: The per capita allocation of total research space differs by gender in four of the six research categories, notably with M having more space per individual than F (except for research categories ST and T).

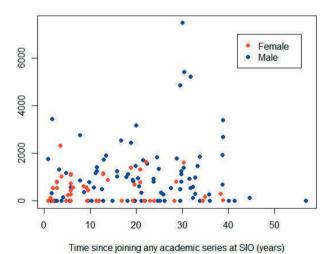
### Space Assignment as a Function of Time at Scripps

Figure 11 shows two graphs plotting total research space as a function of time that a space holder has been at Scripps. The left plot shows total space as a function of time in the space holder's current series, and the right plot shows total space as a function of time at Scripps in all academic series (postdoctoral researcher, faculty member, or other professional research title). There is not a strong relationship between the total amount of research space held by a space holder and their time in their series or at Scripps. It thus does not seem possible to explain away the gender gap as due to men having been appointed to their series or having served at Scripps for longer than women have.

Fig. 11. Total per capita research space as a function of time of academic service at SIO. Time of service is calculated in two ways – time of service within the individual's current series (left panel) and time of service since arrival at SIO (right panel). A number of SIO Faculty have shifted academic series since appointment. 'Research space' is defined here as the sum of research laboratory, research office, and other research space, and does not include research storage space (i.e., space at Seaweed Canyon).

Conclusion: There are no strong trends linking the time since an individual was appointed to their current series and the amount of research space allocated (all R<sup>2</sup> values are less than 0.025). Notably, the individuals with largest space allocation are male and have spent over 25 years at SIO, and comparison of the two panels suggests that a number of these individuals recently changed their series.





### **Shared Space**

The task force had difficulty undertaking any substantive quantitative analysis of space assignments in terms of shared space. Task force interviews, detailed below, suggests that space-sharing arrangements are not common, and are structured in heterogeneous ways. Quantitative documentation of shared space assignments is lacking. Given the small amount of space-sharing that happens at Scripps, the task force is confident that the above conclusions regarding space-assignment gender gaps are unlikely to be explained by the small number of space-sharing arrangements that exist at Scripps. That said, the survey described below did ask whether respondents used shared space. Overall, 22 of 39 (56%) of respondents identifying as men reported using shared space, whereas 15 of 21 respondents identifying as women (71%) reported using shared space. Given the wording in the survey, we are unable to determine how much of this reported sharing is formal versus ad hoc.

### Research Section and/or Building

Task force deliberation suggested that analysis of space assignments by building would be difficult, for multiple reasons including that there are space holders who hold space in more than one building, and analysis by research section should provide related insights.

The task force instead reports space assignment as a function of research section. Figure 12 shows the total amount of research space per section (i.e., excluding academic office and research storage space. Figure 13 shows space assignments for space holders identifying as men and women grouped by the research section to which that space-holder is assigned (excluding 3 space holders who are associated with units other than the three main sections at Scripps). Figure 14 breaks out the data in Figure 13 by academic rank and series (including emeriti, because their impact can be seen separately). In all three sections, space holders identifying as men hold more space than space holders identifying as women, showing that the overall gender gap in space assignment cannot be explained by the section membership of space holders.

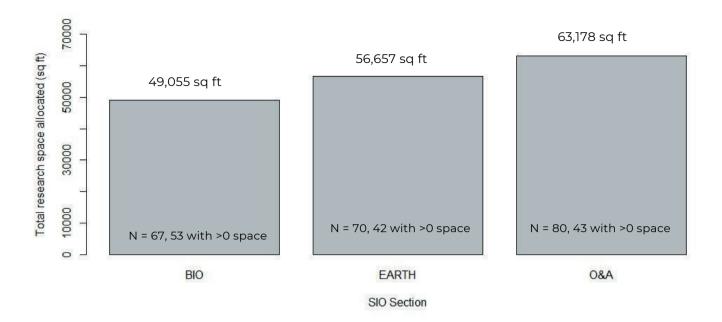
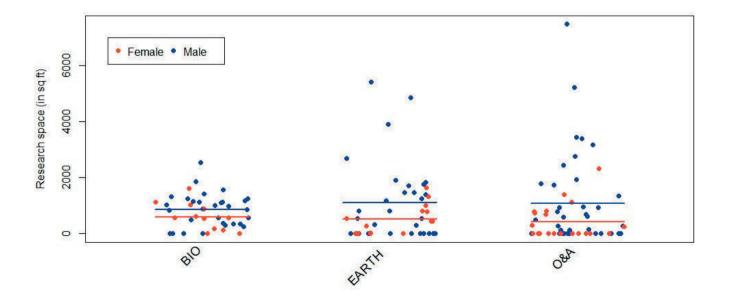


Fig 12. Total research space allocated by research section. Note that figure does not include allocations of academic office space or research storage space.

Fig. 13. Total *per capita* research space as a function of SIO research section (Biology [BIO], Earth, and Oceans & Atmosphere [O&A]). 'Research space' is defined here as the sum of research laboratory, research office, and other research space, and does not include research storage space (i.e., space at Seaweed Canyon).

Conclusion: In each of the three research sections, the mean per capita space allocation is greater for males relative to females and, notably, the individuals with the largest amounts of research space are male.



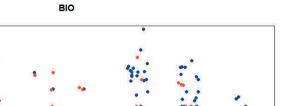
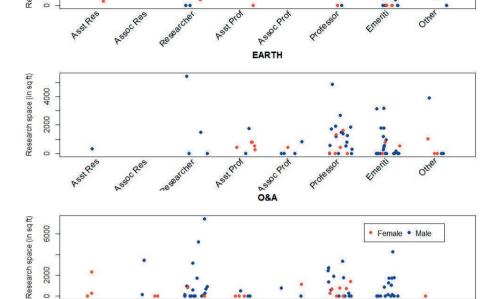


Fig 14. Total research space allocated *per capita* and by academic title, separated by research section. Note that the y-axes are on different scales. Red are female and blue are male.



### **Space Assigned Outside of Scripps**

Research space (in sqft)

1500

200

The task force charge included considering space assigned to Scripps faculty outside of Scripps, mainly, in other units at UC San Diego. Space assignment data that could inform such analyses proved very hard to attain. What is more, faculty who were interviewed who had space assignments at UC San Diego outside of Scripps (who in each case that the task force considered had joint appointments) often found such assignments either problematic (because they had to decide how to divide their activities or move personnel between distant locations) or a symptom of the space assignment challenges in the first place (because they believed that they had to resort to space outside of Scripps because of challenges attaining a satisfactory space assignment inside Scripps). Again, task force members are confident that assignment of space outside Scripps is unlikely to explain the gender space-assignment gaps identified above.

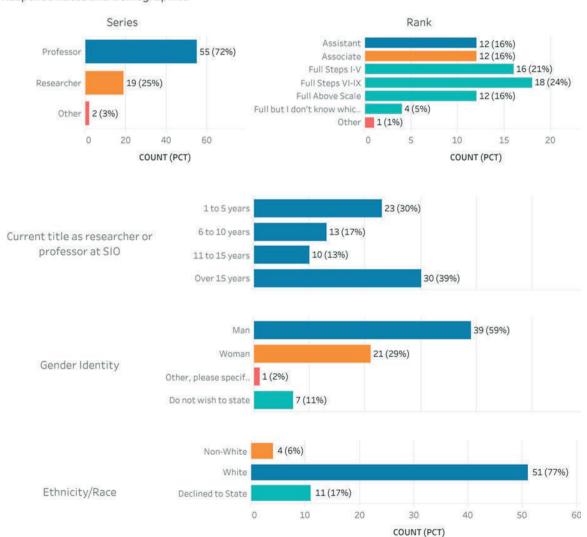
### Summary

There is overall a gender gap in space assignments at Scripps. Women make up 26% of all space holders, but hold only 24% of academic office space, 16% of research space, and 13% of research storage space. These gaps are somewhat larger when considering only nonemeriti space holders:The 31% of women space holders who are not emeriti hold just 29% of academic office space, 19% of research space, and 14% of research storage space. In terms of mean space assigned (and considering only non-emeritus space holders), men have larger offices (180 versus 155 sq ft), more than twice as much research space (1061 versus 498 sq ft) and over three times as much research-storage space (252 versus 89 sq ft). Task force analyses suggest that this gap cannot be explained by amount of direct cost expenditures, by the size of the group assigned to faculty, by the type of research activity that faculty undertake, by length of time at Scripps, or by patterns of use as a function of shared space, research section, or space assigned outside of Scripps. Considering quantitative factors (direct costs, group size, length of time), the amount of space assigned rises with increases in most of these dimensions, and when it does, it does so more steeply for men than for women. Additionally, the gender gap cannot be explained away in terms of qualitative factors (type of research activity, shared space, research section, space outside of Scripps). The bottom line is that women at Scripps have less space assigned to them than is warranted by the goal to be equitable with respect to gender.

### ANALYSES OF SURVEY RESULTS

The task force designed an online survey that was distributed on July 13, 2022 to all 149 (non-emeritus) faculty at Scripps.Responses were received from 77 faculty (51.7%), a healthy response rate during the relative quiet of summer. The personal and professional demographics of the faculty break down as shown here:

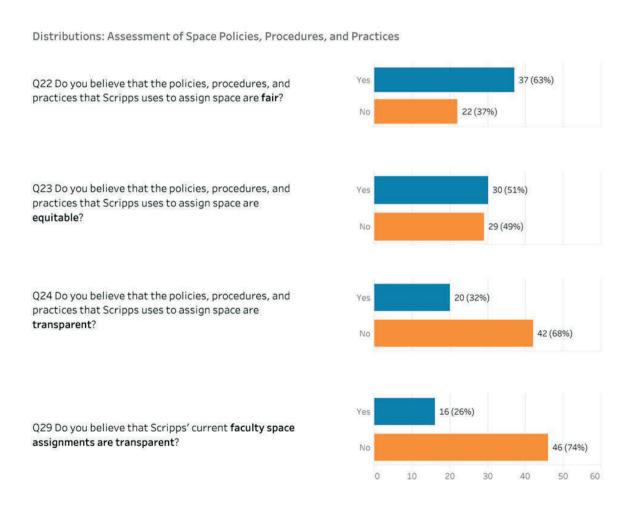
Response Rates and Demographics



Note that relative to their overall presence among non-retired faculty (67%), relatively fewer men responded to the survey (59%); for women, their presence (31%) aligns more closely to their response proportion (29%).

We include a comprehensive report of survey responses in Appendix E. Here, we focus on overall faculty perceptions of space-related issues at Scripps, and we break down perceptions of space-related issues by gender, as well as satisfaction with current space assignments and space negotiations broken down by gender. (Given the very small numbers in any breakdown by race/ethnicity, we do not discuss these numbers in this public report, to avoid any risk of identifiability.)

Overall faculty perceptions of the fairness, equitability, and transparency of space policies, procedures and practices are shown next, along with perceptions of the transparency of current space allocations:



As shown, overall, a majority of responding faculty (63%) view Scripps space policies, procedures, and practices as fair ("appropriate and non-discriminatory"); a very slender majority (51%) views these as equitable ("based on the needs of faculty using the space"), and a minority (32%) view them as transparent ("easy to learn and understand").

Even fewer responding faculty (26%) viewed current space assignments as transparent. In all, the task force views these perceptions as problematic, as most responding Scripps faculty view Scripps space issues as problematic in at least one respect.

These perceptions do skew by gender, however. For respondents, 9 of 21 women (43%) consider Scripps policies, procedures, and practices to be fair, compared to 23 of 33 or 70% of men; 5 of 21 women (24%) find these to be equitable, compared to 21 of 34 or 62% of men; 4 of 21 women (19%) find these to be transparent, compared to 14 out of 36 or 39% of men. Just 2 of 21 (10%) women perceived current space assignments to be transparent, compared to 10 of 36 (28%) men. In short, a large majority of women find Scripps space activities to be problematic in at least one respect, and women consistently find policies, procedures, and practices to be more problematic than men do.

Faculty were also asked "Do you have enough space to meet the research needs that you and your supervisees have?" Across all faculty, 51 of 63 respondents (81%) responded "yes." For respondents who identified as men, 33 of 35 (94%) responded "yes," whereas for respondents who identified as women, 10 of 17 (58%) responded "yes." This is an alarmingly large gender gap in satisfaction with current space assignments.

The survey also asked respondents how satisfied they were with their space negotiation process on a 5-point scale, from 1 being extremely dissatisfied to 5 being extremely satisfied. Faculty respondents who were men reported an average satisfaction score of 3.58, whereas faculty respondents who were women reported an average score of 2.67 – nearly a full-point difference on a 5-point scale. This is a large gender gap in satisfaction. It is noteworthy also that the mean satisfaction for women was below the neutral (3.0) point, showing that women are on average more dissatisfied than satisfied with their space negotiations.

In all, these analyses of the survey data suggest that Scripps policies, procedures, and practices are viewed as not transparent by a majority of all survey respondents, and that a majority of women found policies to be not fair, not equitable, and not transparent. A much smaller percentage of women respondents expressed that their current space assignment was sufficient for their research needs than men. Women were also on balance dissatisfied with their space negotiations, and reported less satisfaction than men with their spacenegotiation process, and to a large degree. These analyses suggest room for improvement in terms of how Scripps carries out space assignment, and that an important gender gap in perception deserves to be addressed.

# SPACE ALLOCATION LANDSCAPE AT SCRIPPS

Based on the task force's analyses and what it learned from interviews, the task force came to the following understanding of the space allocation landscape at Scripps, illustrated schematically in Figure 15 below. The landscape is a complex system involving space (blue elements), decision makers (gold elements), and space users (green elements). Space allocation is, at any given time, the accumulation of assignment decisions, which are initiated by space users and decided by decision makers. Assignment decisions impact space allocation over a wide range of time scales, from months to decades or more. The potentially long time scales involved and the multiple layers of decision makers complicate any 'cause and effect' interpretations of the relationship between policy and practice and the current space assignment landscape. Below, we further refine the main elements (space, decision makers, and space users) of the space landscape and discuss their complex interplay.

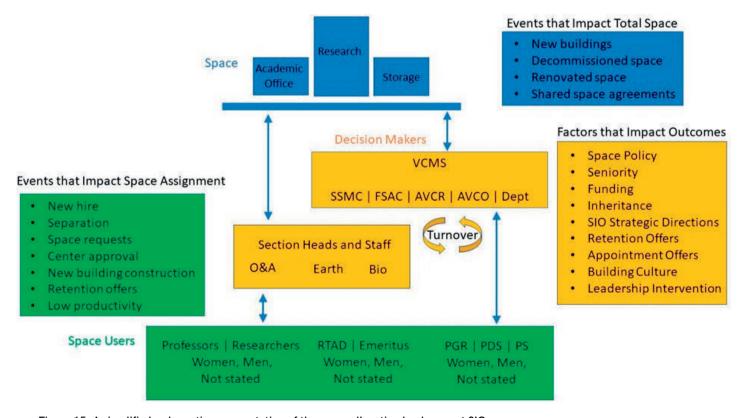


Figure 15. A simplified, schematic representation of the space allocation landscape at SIO.

#### Categories of Assignable Space and Events that Impact Total Space

Physical, assignable space is divided into 3 categories: (1) academic office space, (2) research space, and (3) research storage space. Any of these three categories can be utilized as a shared resource between two or more space users. There are four major events that impact the total amount of space: (1) the construction of new buildings, (2) the removal of old or damaged buildings, (3) the renovation of existing buildings, and (4) the creation of shared space agreements, which effectively increases the utility of existing space. Space categories and events that impact total space are shaded blue in Figure 12. Time scales for the construction and demolition of buildings are not frequent, but Scripps has on average added 4 new buildings or major renovations per decade for the past 60 years. Although infrequent, they tend to constitute major landscape disruptions because of the large amount of space added to or removed from the system when they occur. Building renovations are constantly occurring, but typically are undertaken to upgrade existing space.

#### **Categories of Space User**

Research space users can be divided into 3 general categories: (1) faculty, which includes both professors and professional researchers, (2) Recall to Active Duty (RTAD) and Emeritus faculty, and (3) graduate students, postdoctoral scholars, and project scientists and other research staff. Each category can be further broken down by, for example, gender, age, and ethnicity. The ability to make space assignment requests, and procedures and practices for determining outcomes varies widely between space user categories. Policies and practices for requesting space and deciding outcomes within each space user category are discussed further below.

#### **Events that Impact Total Space**

The total space in the space landscape evolves on decadal timescales with the construction of new buildings or decommissioning of old ones. The utility of existing space changes year by year as office and laboratory spaces are renovated but this activity typically affects only a small percentage of the total space. Agreements between PIs to share space have the capacity to significantly increase the utility of existing space on campus and many faculty have established ad-hoc space sharing agreements between themselves.

These ad-hoc space sharing agreements are not systematically tracked at an institutional level so it is difficult to determine how much more space utilization could be achieved by encouraging and rewarding sharing arrangements.

#### **Events that Impact Space Assignment**

Space assignment requests (either explicit or implicit) are triggered by events associated with space users. Events include: (1) hiring new faculty and new researchers, (2) faculty retirement and recall to active duty (RTAD), (3) ad hoc space requests from principal investigators (PIs), including to accommodate newly awarded funding and expanding research programs (4) the creation of new centers, (5) the construction of new buildings, (6) retention offers, and (7) the identification of PIs with low direct costs per square foot of research space allocated (low utilization).

Some of these events, such as hiring new faculty, have customary practices that are more-or-less consistently followed. Other events, such as low utilization, have policies for identifying decision makers and managing outcomes. Finally others, such as center approval, retention offers, and ad hoc space requests, do not appear to have well-defined or any applicable policy and practice for management.

#### Categories of Space User

Research space users can be divided into 3 general categories: (1) faculty, which includes both professors and professional researchers, (2) Recall to Active Duty (RTAD) and Emeritus faculty, and (3) graduate students, postdoctoral scholars, and project scientists and other research staff. Each category can be further broken down by, for example, gender, age, and ethnicity. The ability to make space assignment requests, and procedures and practices for determining outcomes varies widely between space user categories. Policies and practices for requesting space and deciding outcomes within each space user category are discussed further below.

#### **Events that Impact Total Space**

The total space in the space landscape evolves on decadal timescales with the construction of new buildings or decommissioning of old ones. The utility of existing space changes year by year as office and laboratory spaces are renovated but this activity typically affects only a small percentage of the total space.

Agreements between PIs to share space have the capacity to significantly increase the utility of existing space on campus and many faculty have established ad-hoc space sharing agreements between themselves. These ad-hoc space sharing agreements are not systematically tracked at an institutional level so it is difficult to determine how much more space utilization could be achieved by encouraging and rewarding sharing arrangements.

#### **Events that Impact Space Assignment**

Space assignment requests (either explicit or implicit) are triggered by events associated with space users. Events include: (1) hiring new faculty and new researchers, (2) faculty retirement and recall to active duty (RTAD), (3) ad hoc space requests from principal investigators (PIs), including to accommodate newly awarded funding and expanding research programs (4) the creation of new centers, (5) the construction of new buildings, (6) retention offers, and (7) the identification of PIs with low direct costs per square foot of research space allocated (low utilization). Some of these events, such as hiring new faculty, have customary practices that are more-or-less consistently followed. Other events, such as low utilization, have policies for identifying decision makers and managing outcomes. Finally others, such as center approval, retention offers, and ad hoc space requests, do not appear to have well-defined or any applicable policy and practice for management.

#### **Decision Makers**

A space assignment event begins with a space user and an assignment event, such as a new hire, a space request, or the identification of low utilization. The policies and procedures for determining an outcome - the assignment or removal of space - depends on the category of user and the kind of assignment under consideration. Decision makers become involved depending on the event under consideration. For example, section heads and the SIO Department Chair are involved in the process to identify space for new hires whereas only section heads and staff determine space for graduate students, postdocs, or visitors. The gold section in Figure 12 shows decision makers: (1) The Vice Chancellor for Marine Sciences, (2) Assistant Vice Chancellor for Finance and Operations, (3) Associate Vice Chancellor for Marine Sciences/Deputy Director for Research, (4) SIO Space Management Committee (SSMC), (5) Faculty Space Advisory Committee (FSAC), and (6) The SIO Department Chair.

#### **Factors that Impact Outcomes**

There are many factors that impact the final outcome of a space allocation event. These include (but are not limited to) space policy, the seniority and funding of the space user, whether or not the space user is the identified inheritor of a research group, current strategic directions, and whether or not the event is a retention or appointment offer. In addition, since sections tend to cluster together within specific buildings, space allocation outcomes can depend on whether they are associated with specific buildings (sometimes reflecting different building cultures). Finally, there can be cases of leadership needing to intervene to enforce institutional commitments and policy, or pursue exceptional practices when required, or both (Leadership Interventions).

# ANALYSIS OF SIO SPACE POLICY, PROCEDURES, AND PRACTICES

The task force was charged with analyzing policies, procedures, and practices that are in place at Scripps "to determine whether these are grounded in principles of equity, inclusion, and transparency." This aspect of the charge specified that the task force was to identify the potential for discriminatory or exclusionary facets of the SIO Space Policy and whether the processes and procedures used to implement the policy and/or assign space are applied in an appropriate, nondiscriminatory, and consistent fashion. This effort involved a thorough review and assessment of the SIO Space Policy by the task force. In addition, the task force conducted interviews with faculty at various career stages, with leadership past and present, and heard a variety of perspectives on how the space allocation and rescission processes work and how the policy is applied. In addition, the task force was interested in the perceived and actual relationship between space allocation outcomes and gender as a result of the SIO Space Policy with a particular focus on the practices that have been used in assigning space to new faculty and researchers, as well as to those that have been at SIO for some time and need more space to expand their research.

Our review primarily focused on the current space policy, approved May 23, 2022, included as Appendix F. Changes in space policies appear to have been done largely to clarify perceived problems in the previous space policy, but no space policy has addressed how best to equitably assign space.

#### Analysis of the May 2022 SIO Space Policy

Governance. In our review of the SIO Space Policy and interviews with faculty and leadership, the task force determined a number of problematic issues with the policy itself, along with the structure of the governance, and the procedures and practices for implementation of that policy.

The SIO Space Policy provides criteria for who can assign space, some parameters for assigning space, procedures for rescinding space, and some precise rules that apply to the use of certain types of space. The delegations of authority and the establishment of both the Scripps Space Management Committee (SSMC), an administration-based committee, and the Faculty Space Advisory Committee (FSAC), an academic, faculty-based committee appointed by the elected members of the Faculty Executive Committee, follows the shared governance principles of the University. Since 2005, Scripps' research has been organized into three administrative sections: Biology, Earth, and Oceans & Atmosphere. Section heads are part of the SSMC and, as per the SIO Space Policy, play an integral role in the "day-to-day and local management of space" within each section.

As indicated in the SIO Space Policy, the assignment of space has been delegated from the Chancellor to the Vice Chancellor Marine Sciences (VCMS), who as of 2014 delegated it to the SSMC. The committee is chaired by the Deputy Director for Research (DDR) and voting membership includes the section heads and the Department Chair. The Assistant Vice Chancellor for Finance & Operations (AVC), the Chair of the FSAC and one additional FSAC member were added as voting members in May 2022 to balance out the section representation. While the SSMC had always included two members from the FSAC, the Space Policy indicates that the FSAC primarily served as an advisory body to the SSMC and VCMS; designating the two representatives from the FSAC as voting members has helped to reestablish administration-faculty joint governance. The SSMC also includes as non-voting advisors the Director of Space Management, the Director of Facilities Operations & Planning, the SIO Space Analyst, the Assistant Deputy Director for Research, and the Chief Administrative Officers (CAOs, also known as Management Services Officers or MSOs) representing the three sections and the SIO Department. The SSMC, as well as the FSAC members, typically attend and participate in the bi-monthly SSMC meetings.

Over the years, as chair and membership positions rotate, the role of the FSAC has changed in terms of involvement in the space allocation process, depending on who chairs the committee, as well as their relationship and involvement (or not) with the AVC, DDR or both. According to the Bylaws of the Faculty of Scripps, as part of their duties, the FSAC are charged with maintaining and disseminating the Space Policy and annually updating the SIO space database.

While new hires are provided with a link to a copy of the Space Policy in their recruitment letter, the task force found that the policy was typically only disseminated to the wider SIO community when revisions were implemented. A further charge of the FSAC is to annually review the space usage and utilization by faculty both within "Units at SIO and space issues that cut across Units" and provide an annual report to the Director and section heads based on that review and assessment, and subsequently in their role as a liaison between the faculty and the administration, report annually to the faculty detailing actions arising (or not) from their annual review. It is worth noting that the task force could not find any definitive evidence that many of these activities have indeed been executed by FSAC in recent years; for example, the most recent annual report that the task force could uncover from FSAC was from 2002.

The VCMS, who has been delegated space assignment authority by the Chancellor, gets involved in space decisions as needed, such as for retentions. The task force also heard of instances when the VCMS was directly approached by individuals regarding space matters. In these cases, the VCMS may consult with the DDR, AVC and relevant section heads in making decisions but, depending on the sensitivity of the situation, may decide not to consult with the SSMC. In some cases, these decisions can be viewed as discriminatory or exclusionary as they do not fall within the parameters described in the SIO Space Policy. While the task force appreciates that sometimes there is a need to act quickly, the task force also frequently heard from faculty the importance attached to acting transparently.

The task force observed that, in general practice, the SSMC seems to delegate implementation of the Space Policy to the section heads, who together with the section CAO and in some cases the section facilities managers, ultimately have most of the authority in terms of space assignments. Shortcomings in the Space Policy, lack of appropriate training for section heads and others who administer space, especially in matters of equity and inclusion, and the rotational nature of the section head position have resulted in inconsistent interpretations and implementations of space policy and has led to outcomes that are or could be perceived as discriminatory or exclusionary. In addition, although the section model was intended, and does in many cases, help to manage space needs, it poses a challenge to space demands that cross multiple sections, including interdisciplinary or cross-sectional research centers (discussed further below).

Sections are composed of smaller disciplinary and multidisciplinary divisions, each led by a division director. The Earth section comprises the Cecil H. and Ida M. Green Institute of Geophysics and Planetary Physics (IGPP) and the Geosciences Research Division (GRD). The Biology section includes the Integrative Oceanography Division (IOD), Marine Biology Research Division (MBRD) and the Center for Marine Biotechnology and Biomedicine (CMBB). The Oceans & Atmosphere section comprises the Marine Physical Laboratory (MPL) and the Climate, Atmospheric Science, and Physical Oceanography Research Division (CASPO). Division directors are not mentioned in the SIO Space Policy as having any role in the space allocation process. In practice, the task force came to understand that the current involvement of division directors in the decision processes varies. Some section heads and CAOs indicated that they consulted with the division directors on space decisions, while others did not. Some faculty suggested that the division directors have a better sense of the day-to-day operations in their areas and suggested they should be more involved in the space allocation process.

Section heads are involved in developing hiring plans in consultation with their section members before submitting them to the SIO Director for approval. At the time the hiring plans are submitted, the section head is meant to have identified space for new recruits. Ideally, the section head has several space options available, especially for broad searches, however they are often limited in the type or amount of space that is available at the time the search is initiated. Interviews revealed that section heads seldom asked about the availability of Institutional Reserve or that they avoided asking another section for space. Some new academic hires expressed frustration with the space negotiation process and the lack of suitable facilities they were offered in order to successfully conduct their research. Space allocation during the hiring process is discussed further below.

#### Annual Review, Rescission and Reassignment of Space

The main body of the space policy is devoted to the rescission of space. Because space at Scripps is a finite resource, it is important that underutilized space be identified and returned to the Institutional Reserve for potential reallocation to new recruits or redistribution to expanding programs. Despite the extensive process outlined in the SIO Space Policy, the task force found that minimal space is returned to the Institutional Reserve each year making it difficult to respond to new space requests in a timely manner.

Sections are composed of smaller disciplinary and multidisciplinary divisions, each led by a division director. The Earth section comprises the Cecil H. and Ida M. Green Institute of Geophysics and Planetary Physics (IGPP) and the Geosciences Research Division (GRD). The Biology section includes the Integrative Oceanography Division (IOD), Marine Biology Research Division (MBRD) and the Center for Marine Biotechnology and Biomedicine (CMBB). The Oceans & Atmosphere section comprises the Marine Physical Laboratory (MPL) and the Climate, Atmospheric Science, and Physical Oceanography Research Division (CASPO). Division directors are not mentioned in the SIO Space Policy as having any role in the space allocation process. In practice, the task force came to understand that the current involvement of division directors in the decision processes varies. Some section heads and CAOs indicated that they consulted with the division directors on space decisions, while others did not. Some faculty suggested that the division directors have a better sense of the day-to-day operations in their areas and suggested they should be more involved in the space allocation process.

Section heads are involved in developing hiring plans in consultation with their section members before submitting them to the SIO Director for approval. At the time the hiring plans are submitted, the section head is meant to have identified space for new recruits. Ideally, the section head has several space options available, especially for broad searches, however they are often limited in the type or amount of space that is available at the time the search is initiated. Interviews revealed that section heads seldom asked about the availability of Institutional Reserve or that they avoided asking another section for space. Some new academic hires expressed frustration with the space negotiation process and the lack of suitable facilities they were offered in order to successfully conduct their research. Space allocation during the hiring process is discussed further below.

#### Annual Review, Rescission and Reassignment of Space

The main body of the space policy is devoted to the rescission of space. Because space at Scripps is a finite resource, it is important that underutilized space be identified and returned to the Institutional Reserve for potential reallocation to new recruits or redistribution to expanding programs. Despite the extensive process outlined in the SIO Space Policy, the task force found that minimal space is returned to the Institutional Reserve each year making it difficult to respond to new space requests in a timely manner.

Following identification of those in the lowest quartile, the SSMC customarily identifies some PIs who have extenuating circumstances and should not be further considered for rescission (and indeed, the SIO Space Policy does note that while the DC/sq ft criteria are "designed to identify possible space inefficiencies, they are not intended to be a rigid formula for maintenance or reallocation of space"). For those remaining, the DDR (as chair of SSMC) sends a letter notifying them that their space has been identified as possibly being underutilized, with a request to provide further information on their prospects for future funding, as well as the number of people using the space, including students, employees, and postdocs. The SIO Space Policy indicates that the PI should be visited "by at least two members of the SSMC and one member of the FSAC". The task force learned that due to COVID restrictions this has not been the practice over the last several years but inspections should be resumed in the future. Once the faculty member responds, the information is assessed by the SSMC to determine if further action is required.

Task force interviews and analyses suggest that respondents have frequently been allowed to keep their space. Since 2014, only 17% of the underutilization notices resulted in space being rescinded with only 5,000 square feet of space (out of nearly 169,000 total sq ft of research space) reallocated to Institutional Reserve. The task force learned that there are various reasons that sections may be reluctant to rescind space, particularly when there is not an immediate need for that space. Some section heads indicated difficulty in dealing with the academic occupants and declined to act. In addition, although the annual review process is applied in the same way to retired academics, the task force found that there appears to be relatively little impetus for retirees to release their space or share with others. Indeed there are no explicit guidelines for the reasonable treatment of retired faculty in space policy. Regardless, the extensive annual review process appears to result in little to no rescission of space, which suggests that the space policy is being applied inconsistently. The end result is a shortage of available space in Institutional Reserve from which to offer to new recruits or expanding programs.

The annual review of space came up frequently in the interviews as a negative, not because interviewees objected to the review of space for efficiency of use and rescission, but because the review and the data it is based upon are not available for faculty to view or verify. Indeed, many interviewees reported not knowing how much space was ascribed to them as part of this review process. The task force repeatedly heard the need for increased transparency in the space assessment and rescission process that would go some ways to allay the fears and misconceptions surrounding this practice.

#### Space Allocation During the Hiring Process

Equity, transparency and inclusion of space allocation during the hiring process and the experience of new hires at SIO was of particular concern to the task force, especially since 50% of new faculty members hired since 2012 have been women. There are no guidelines for equitable allocation of space for new hires, only one sentence stating, "[a]s part of the recruitment process, new faculty usually are assigned their academic office, staff office(s), and laboratory areas in an offer letter."

The task force found that the experience of space allocation during the hiring process was quite distinct for professorial faculty than researcher faculty. Professor candidates are asked to provide their space needs to the SIO Department Chair during the interview and recruiting process. The prospective hire generally meets with the relevant section head to tour the space that was identified when the initial hiring plans were first submitted to the SIO Director. Ideally, that designated space can meet the candidate's needs. However, the task force heard that in some cases, the new hire's needs differed significantly from or exceeded what the section head had initially specified, and sometimes, had available at all. In those cases, further negotiations were required to come to an agreement on space that would appropriately support the productivity of the new hire in a reasonable amount of time. The task force heard of mixed success in this negotiation effort.

For new researcher hires, the process is very different. The SIO Department Chair is not involved, so the recruit deals directly with the Section Head on space matters. In fact, the task force learned that in most cases little or no space negotiations took place (see the section on mega groups and inheritance, discussed elsewhere in this report).

In interviews with early-career faculty, some indicated they would have negotiated differently (i.e., asked for different or more space) if they had been aware of this option. Others indicated they were unhappy with the spaces they were shown but were told by their section heads that they would be able to request or get more space when their programs expanded or when it became available. However, timelines or specifics are often not explicitly agreed to. It was often not clearly explained or evident to the new hires how, when, or even if that would happen.

Part of the difficulty is because Scripps does not currently have a central repository for recording space agreements. The task force found this issue also arose in instances where space is promised in retention agreements. The current process relies on the sections to track these agreements, however with the turnover of section heads, AVCs, the DDR, and others, the information can, and has, gotten lost.

A practice the task force heard not infrequently is that newly appointed academic faculty were told that they would get additional space upon the separation (usually retirement) of another more-senior faculty member. This happened sometimes when faculty were hired as successors to run larger research programs (see "mega groups," below), with both the section head and the recruit assuming the new hire will eventually acquire the space that the program currently occupies. This happened also occasionally when more traditional ("solo PI") faculty joined Scripps. This approach is problematic from two perspectives. First, the new recruit is placed in a holding pattern because they believe their situation will resolve, sometimes also involving instances where the dynamic between the new recruit and the more-senior faculty member were tense. Often, the promised space never materialized. Second, according to the SIO Space Policy, the space of those retirees no longer at Scripps should be returned to the Institutional Reserve.

On the leadership side, current and previous section heads indicated that they had limited space available to offer. They were especially challenged when searches resulted in candidates that had a different research focus than originally intended or when there were partner hires or joint hires with unanticipated space needs. They also indicated situations where they could be holding space for other current or planned recruitments. This practice resulted in frustration that "better" spaces were reserved for other hires, a practice that can result in being, or be perceived as, discriminatory and unfair.

Perhaps most troubling to the task force was the striking disconnect in the space allocation dialogue between the new hires and leadership. Many recent new recruits expressed that they were not consulted as to their space needs, while in contrast, most leadership cited consulting new recruits as the first step in the space-negotiation process. The task force does not believe that facts are being misrepresented; rather, the same situation can be perceived very differently by two parties at very different points of this stark power asymmetry. Since new recruits are also negotiating startup costs, relocation, and other employment terms simultaneously, negotiating space may be especially difficult at the time.

The task force believes that these negotiation-based dynamics create outcomes that are or could be perceived as discriminatory or exclusionary. For many reasons, assertive negotiation attempts by women are frequently judged more harshly than by men. This can make it more difficult for women to attain favorable space outcomes. Moreover, this not only produces a major obstacle in the equitable assignment of space but is also detrimental to the new women faculty whom the Scripps community would like to see succeed, expand, and flourish in their research endeavors.

#### Modifications and Allocations of Space

Up until the most recent revision of space policy, requests for modifications of space assignments were not handled consistently or transparently, with the process ranging widely between sections and divisions. Task force interviews and analyses suggest that this lack of transparency for attaining space modifications favored requests from those who were more senior, were better connected to leadership, or were more aware of the space that was available. Task force members believe that this was an important source of gender inequity. The May 2022 Space Policy defines a procedure for faculty to request space, "via e-mail to the relevant section head with a copy to the chair of the SSMC (i.e. the DDR), who then forwards the request to the other section heads and the chair of the FSAC for discussion at a SSMC meeting." This addition is a positive step to increase the transparency of the allocation process and should lead to more equitable space assignment.

The following highlights areas of particular concern in the processes associated with modifications and allocations of space that the task force uncovered during their review of the Space Policy document and through faculty and leadership interviews.

Inheritance of Space. According to the Space Policy, all space belonging to an individual no longer at Scripps should be reassigned to Institutional Reserve. The Space Policy contains this directive so that there is a discussion of the future assignment of the space by both the SSMC and the FSAC to ensure its best future use. However, the task force found that sometimes space is not returned to the Institutional Reserve, but instead re-assigned directly to an individual PI who is designated to inherit the program. Many individuals with the largest amounts of space inherited the space when their mentor died or retired and left the university. Typically there has not been a critical analysis of the functional usage and need for that space, thus large amounts of space are not put back into circulation.

Up until recently, inheritance of space at SIO has been heavily weighted towards male recipients, thus leading to inequity and gender imbalance in space allocation.

Mega Group Space. Scripps has several long-standing, large research programs ("megagroups") that involve multiple PIs, engineers and staff, such as the Instrument Development Group (IDG), the Coastal Data Information Program (CDIP) and others, that present a particular challenge to the space allocation process. The typical practice has been that the space occupied by these programs, often a significant amount, has been passed from a lead PI to their successor without review by the SSMC, that is, inheritance of the space as described above. Since these programs generate sufficient direct and indirect costs to exceed the threshold for review during the annual space utilization process, the space can remain within the program for decades, never being subject to reevaluation to be reassigned for other institutional needs. This transfer of space without SSMC review is problematic since it can be a challenge to younger faculty hired to take over these programs, as they may not be allocated the space until their predecessor is willing to relinquish it. This can also be limiting for the early career scientists in developing their own research programs. The dynamics of space assignment within these mega groups can therefore lack inclusion and transparency and potentially be a source of gender inequity in space assignment.

Familiarity with the Assessment and Allocation Process. A common theme that the task force came to understand is that because the SIO Space Policy is so limited, much of the dynamics of space assignment operate without full transparency and sometimes outside the limited guidelines of space policy. When combined with historical gender asymmetries that have led most senior and influential faculty to be men, these dynamics have perpetuated gender inequities in space, leading to the space-assignment allocations that are disproportionate with respect to the gender distribution of faculty. With more awareness by faculty of the SIO Space Policy, where the formal request process is spelled out, it is expected that in the future, individuals requesting more space will be more mindful of the procedure so that a true evaluation of the need can be made via the proper channels for SSMC and FSAC assessment.

Shared Space. The issue of shared space can be complicated in academia, but the task force observed optimism and positive attitudes toward the sharing of space. Most faculty who were asked about sharing space believed it could be a valuable way to make very efficient use of space, especially for expensive facilities. Leadership felt similarly. That said, interviews revealed that many of the current sharing arrangements at Scripps were mostly informal.

Some shared space involved stark seniority asymmetries that were sometimes seen as problematic by earlier-career faculty who were less likely to assert themselves when faced with inequity in their shared arrangements. Faculty also expressed the concern that with shared arrangements for high-value facilities, challenges may arise in getting institutional support for care and maintenance of the expensive equipment housed in such facilities. In all, the task force believes that space-sharing could be well received at Scripps, if implemented thoughtfully and with adequate investment of resources.

Scripps Centers. Centers of research have been established, especially in the past decade or so, to promote an interdisciplinary approach to collaborations within and outside Scripps, UC San Diego, other universities, government agencies, or industry. These centers contribute to Scripps' purpose and mission in research, education, and public service, and adhere to campus diversity goals. However, they also represent a challenge to the space allocation process as they grow and expand. Determining how to provide contiguous space to co-locate individual scientists as part of the centers is very difficult. Treating space assignments as something that are fluid can be exacerbated due to traditional uses of certain buildings while other buildings are designed for specific uses. The interviews revealed a mixed response as to the access and allocation of space from faculty who were in leadership roles of centers. However, it was agreed that this is likely to be an on-going issue for Scripps centers of the future and that it would be helpful to develop an institutional plan for the process of modification of space assignments for centers. The SIO Space Policy contains no guidelines of how to provide collaborative space for these frequently cross-Sectional centers. Nonetheless, it is worth noting that the FSAC is charged to annually review "space issues that cut across Units" and report annually to the Director, section heads and faculty based on that review and assessment, thus providing a potential avenue for discussion and action on space allocation issues for centers.

#### Summary

Despite recent efforts by Scripps leadership to distribute copies of the SIO Space Policy to new faculty hires and the greater community, interviews revealed many faculty were not aware of the policy, or they perceived the policy, annual review and allocation processes as not transparent.

The task force found that the SIO Space Policy, per se, is not grounded in principles of equity or inclusion, and the procedures and practices used to execute the policy are inconsistent. Collectively this leads to outcomes that are, or can be perceived as, discriminatory or exclusionary. The task force noted that those PIs or groups with large space allocations were frequently able to attract more funds and expand their research projects and request allocation of even more space, without a thorough review of the efficient use of existing space. While we recognize that Scripps is a global leader in these large and innovative research projects, this action preserves an ongoing cycle that can be detrimental and at the expense of space availability to more individual PIs, early career scientists and new recruits.

The general sources of space policy, procedure, and practice that in the task force's view led to inequities are:

- The absence of a strategic vision for space distribution at SIO and identification of the criteria that would lead to such vision, including a consistent, nondiscriminatory, and equitable space distribution.
- Focus of the Space Policy primarily on rescission.
- The inconsistencies in the assessment and implementation of the rescission process.
- The unavailability of the data for review by all faculty that are assessed as part of the rescission process.
- Whether retired faculty space is returned to Institutional Reserve or passed to a more recently hired member of the group.
- When recruitments or retentions are subject to time-pressure, so that customary spaceassignment procedures cannot be followed.
- Some faculty going directly to SIO Leadership to request modifications and assignment of additional space allocations.
- Inheritance of space that does not follow SIO Space Policy procedures.
- The absence of policy or practices that encourage allocation of space for centers.

Exacerbating all of these potential sources of inequity is that, because space is so constrained at Scripps, in part because of the ineffectiveness of the rescission process and the reluctance to reduce the space assignment of senior and retired faculty (who are mostly men), there is very little in terms of space resources available to assign to new recruits. Since 50% of Scripps new faculty hires since 2012 have been women, this acts to perpetuate a gender imbalance in terms of space assignment as there is little space available to be allocated to them.

# RECOMMENDATIONS

The task force, having used quantitative and qualitative analyses to identify actual space inequities, negative perceptions concerning space policies, procedures, and practices, and shortcomings in how space policies, procedures, and practices have been designed and are executed, makes the following recommendations<sup>4</sup>:

#### Remedy the Space Inequity

As documented above, women faculty at Scripps have less space than men, even when taking into account time at Scripps, research area, funding, number of assigned personnel, or any other factor the task force could think to analyze. Although the recommendations for policy and practice below (as well as any other equity-minded changes that are made) could in the long term lead to equity of space assignment at Scripps, the nature of the existing disparity warrants more direct action. The analyses that were conducted in support of this report can be used to identify individual faculty, especially women, who have less space than they should. A process should begin as soon as possible to take action to even the gender gap in space distribution in ways that are consistent across ranks, types of research, and group size. Of course, the flexibility to follow through on this recommendation will require a robust review process for all space, resulting in recovering additional space through an effective rescission process, including from retired faculty.

#### Leadership Training

The task force is aware that everyone, especially faculty, have "training fatigue," and the effectiveness of many training programs is uncertain. Even so, Scripps has a unique challenge with many who serve in leadership roles, and some steps should be taken to manage those challenges. For better or for worse, Scripps leadership has many interlocking components.

<sup>&</sup>lt;sup>4</sup>These recommendations are included in bulleted form in Appendix G.

In addition to the Vice Chancellor for Marine Sciences and the Assistant Vice Chancellor for Finance and Operations, who occupy their roles for longer periods of time, there is the Scripps Department Chair and Vice Chair, the Deputy Director for Research, Section Heads, and Division Directors (who are sometimes consulted in space-assignment situations) who generally serve 2-3 year terms and receive little or no training.

To manage the potential lack of experience that leaders may have, the task force recommends a more formal program of training for leaders, especially section heads. This training can equip leaders with knowledge not only of any systems that are implemented as a result of the recommendations documented here (e.g., an enhanced SIO Space Policy, the need to record space decisions so they are reported annually, the system by which upcoming space commitments are ticketed), but also with decision making principles and strategies that can advance the goals of equity, diversity, and inclusion. The training could also emphasize the need to act not only in the interests of individual sections, but in the interests of the institution as a whole.

#### Develop a Strategic Plan for Space Usage

Scripps needs to develop and document a strategic vision for how its space is to be allocated. Right now, there is no such vision, and so the space policy is carried out through procedures and practices that are ad hoc and affected almost entirely by the immediate set of actors and pressures involved in a situation. This not only has great potential for the types of inequities this task force was charged with understanding, but harms the ability of the institution to truly fulfill its academic mission. It is worth noting that the task force did uncover relatively recent reports from physical planning studies that may prove useful for this process, but these reports did not address academic or research goals, nor gender equity.

This strategic space planning vision should lay out Scripps's goals and priorities for its research and educational activities, for example, fostering the growth of its newly recruited faculty, fostering interdisciplinary research, how to advance scholarly and academic activity at the same time as engineering new products and instruments, how to advance its teaching and mentorship mission, and how to pursue the core mission of advancing equity, diversity, and inclusion at the institution. With its goals and priorities in hand, a plan for how space can be best utilized to serve those goals and priorities can be developed.

The task force believes that a thoughtful and collaborative strategic planning process will allow for the more efficient deployment of both short-term space allocation activities (e.g., assigning or modifying space for individual faculty) and longer-term activities. As part of this strategic planning process, direct attention should be paid to how to effectively allow for interdisciplinary centers that are hampered by the current strong sectional structure, how best to use off-site storage space, and how to effectively use research office and lab space off-campus that has the potential to add flexibility, but does not offer the proximity that many at Scripps value to be able to have close interactions.

#### **Expand the SIO Space Policy**

Right now, the SIO Space Policy focuses almost exclusively, yet ineffectively, on rescission (concerns about which are discussed below). This leaves the allocation process as a vacuum into which less formal procedures and practices can rush, becoming the most important determinants of Scripps faculty's space allocations: How space is assigned to newly recruited faculty, and how faculty can attain modifications to their space assignments. At least these two aspects of space assignment should be comprehensively described by SIO Space Policy, for the benefit of all Scripps faculty.

SIO Space Policy should scrupulously describe how space is to be assigned to newly recruited faculty, as this is the point at which the task force believes the greatest potential for inequity arises. As described above, when being recruited, many faculty were shown space that was a poor fit for their needs, at the same time as they were told that no other space was available, and they were made to feel as though they were lucky to get any space at all. Yet, it became very clear to task force members through all of our interviews that recruits' experiences varied widely in how successfully they attained space to conduct their research. The capriciousness of this process clearly allows for large inequities. A promising remedy for this is to document principles that are to guide the process of space assignment for new recruits at the beginning of the process that are explicit and transparent, that empower recruits so they can make clear their space needs, and that diminishes as much as possible the role for "hard negotiation" in the process. This policy should, for example, determine that new recruits should provide through a formalized and documented process what their space needs are; that a well-defined pool of available space should be described to new recruits (and not just one space that a chair or head deems right for that recruit); principles that leadership and recruits can use to agree to space commitments, and more.

Scripps may also consider instituting as part of this policy a mentorship mechanism that avails new recruits of guidance for identifying their space needs, as well as providing local "inside" information from a genuinely impartial confidant that can help with the space assignment process. Finally, because the process of space assignment for new recruits can be complex and fast-moving, the outcomes of the process of assigning space to new recruits should specifically be compiled for inclusion as part of the periodic space-review process that is recommended next, so that fairness and equity considerations can be evaluated even once assignments are complete.

The task force also strongly recommends that just as with professors, when researchers are recruited to Scripps, space discussions should take place, and commitments should be documented instead of being left to unfold implicitly, for example, as part of an inheritance process.

SIO Space Policy should also comprehensively describe how current Scripps faculty should request a modification to their space assignment. The most recent policy takes a step in the right direction by documenting who and how faculty should request a modification. But more is needed. Ideally, space should be thought of as fluid - that faculty can request additional space when needed, but also return it when a particular grant or project has ended. The principles that are used as part of assigning space to new recruits could be adapted for the case of current faculty, for example, requiring formal documentation of a faculty member's current space and usage and the request for new space, and describing principles that can be used to decide how requests are to be handled (e.g., how costs for renovations are to be handled). The task force also strongly recommends that SIO Space Policy require that a periodic communication be sent to all Scripps faculty informing them of the space modification process, perhaps soliciting modifications to their space assignments, based on functional needs, noting where faculty can learn what space might be available for modification.

As documented above, Scripps currently has a disproportionate amount of space assigned to retired faculty members. SIO Space Policy should describe principles for addressing retired faculty space assignments explicitly and directly, including academic offices that may be better assigned to non-retired faculty (including sharing academic offices to free up space that may be better utilized by non-retired faculty, a possibility task force members perceived as being amenable to faculty). The task force is mindful that this is tricky territory.

#### **Institute a Periodic Space-Evaluation Process**

Right now, the only regular activity that assesses space utilization at Scripps is the annual rescission process, about which this report will make recommendations below. The task force believes that this process is too narrow to allow Scripps to be able to monitor its ongoing space commitments and adapt to the changing needs of faculty and faculty groups.

Scripps should instead institute a regular, comprehensive process of evaluating current commitments to space on a periodic schedule. This process should assess utilization of space not only as a function of funding (as is done now via the rescission process), but also as a function of personnel assigned to PIs, academic productivity, teaching and mentoring activity, and any other factor deemed relevant to how space is to be efficiently utilized to fulfill Scripps's academic mission. This periodic process should also involve a physical walk-through of space, to assess human activity and best use of space for storage or other non-academic activities. (In its interviews, the task force was shown pictures of rooms in clear disarray; any simple walk-through process would identify such space as in need of being addressed). Of course, the Scripps campus is large, and includes remote sites as well; as such, the periodic process could be instituted in staggered fashion, with, for example, one-third of space being evaluated each year such that all space at Scripps will be evaluated every three years.

This evaluation process should not only consider efficiency of space use. Most importantly, this process should be used to assess potential inequities in space assignment along relevant demographic lines, including with respect to gender (as is the core of the charge of this task force). Such an equity-accountability process will inform Scripps leadership whether the changes they make to Scripps policies, procedures, and practices are helping to redress the inequities in space allocation uncovered by this task force.

Additionally, this space-evaluation process should involve shared governance, in particular by ensuring that the policy that describes the evaluation process should delineate a clear role for FSAC.

The results of the periodic review process should be assembled into a report and made available to all Scripps faculty, ideally annually. This will ensure that assessments of the efficient use of space, along with the other accountability measures recommended here (including the equity-accountability analysis just noted, the commitments made to new recruits and to space modifications described above, and the leadership interventions noted below) are available for any interested faculty to learn about.

Below, we will note shortcomings of the rescission process. One of these is that only the lowest-quartile of faculty along a particular dimension (direct cost expenditures per square foot) are evaluated for the efficiency of their space use. This leaves three quarters of faculty – those who are already best off with respect to space allocation – fully unscrutinized with respect to their space utilization. A comprehensive periodic evaluation process should remedy this inequity.

Finally, the task force came to understand that the database used to document current space commitments had numerous inaccuracies. A part of this evaluation process could involve checking or spot-checking space data for their accuracy.

#### Formally and Transparently Document Space Commitments

The fast-paced and sometimes chaotic nature of space-allocation dynamics can lead to misunderstandings with respect to what was committed exactly by whom to whom. Additionally, as documented above, Scripps has an unusually complex space-allocation landscape, with multiple levels of decision-making, and with many roles turning over frequently. Together, these factors seem to have led to space commitments being misprioritized, with later or less crucial commitments being implemented before earlier or more crucial commitments, or, too commonly, space commitments being forgotten altogether.

To manage this, the task force strongly recommends Scripps institute a process of formally and transparently documenting or ticketing space commitments. All Scripps faculty should understand that a space commitment is only "real" if it is ticketed in this system.

Space-assignment bodies should be strictly forbidden from making any space commitments unless they have been entered into the ticketing system. Commitments in the system should be accessible (at least through some process) to all faculty at Scripps. And before any space commitment is made – even during the leadership interventions described below – all existing ticketed commitments should be consulted to ensure that any new commitment is not foreclosing an otherwise equitable or important existing commitment.

Relatedly, Scripps should implement an institution-wide means by which all current space allocations are transparently made available to all Scripps faculty. The task force understands that the Biology Section already makes current space allocations available for any faculty member to learn, and task force inquiries about this practice suggest that all to whom it applies (who were aware of it) appreciate this transparency, including leadership and faculty.

#### Scripps Needs Greater Space Flexibility

The narrowness of SIO Space Policy, along with the migration of de facto space-assignment authority to section heads, has created a very rigid ecosystem within which faculty – both individually and as groups and centers – are able to attain space. This problem is further exacerbated by the ineffectiveness of the rescission process and the failure to in-practice reassign space from groups or individual faculty to Institutional Reserve.

This rigidity will be difficult to overcome. Section heads naturally want to, and given current dynamics, need to hold on to the space they currently have authority over, as section heads must manage space allocations to new recruits and modifications to current faculty. When allocations and modifications for one section require space from other sections, the relevant section head must transfer space to the prospective recruit's section. Resistance to a section "losing" space creates significant challenges for providing adequate space to centers, which are almost always interdisciplinary and so include faculty from different sections.

The task force believes that more effective use of Institutional Reserve will help overcome some of this rigidity.

If upon separation of a faculty member or group, the space by default reverts to Institutional Reserve, and then when sections need to allocate space to a new recruit or modify space for a current faculty member, they understand that they will do so by pulling space from Institutional Reserve, then the hoarding of space that currently exists may be alleviated. The task force also believes that effective use of Institutional Reserve, along with direct and effective action of higher levels of space management (e.g., SSMC), will make the assignment of space for centers a lower-friction process.

Naturally, an effective periodic review process that frees underutilized space and assigns it to Institutional Reserve will also help overcome the rigidity of the space allocation ecosystem.

Space for Postdoctoral Scholars, Graduate Students, and Visitors

Task force interviews suggested that mostly (but not entirely), postdoctoral scholars and graduate students who work with faculty are assigned desk space by sections. There was wide variation in faculty satisfaction as to this practice. Some faculty felt it worked well. But many faculty expressed deep frustration trying to co-locate mentees, or when trying to build a sense of academic community among researchers in their lab that they felt was needed for good work to be done. Once again, this factor seemed to create inequities. Better-positioned faculty or faculty with more space were better able to accommodate their own preferences in how these scholars were to be assigned to space, whereas earlier-career faculty, faculty with joint appointments, or others with less institutional standing felt powerless to build a cohesive lab culture.

The task force urges greater flexibility on this general issue. First, some faculty are assigned office spaces for their mentees (sometimes called a "research office"), but it didn't appear to the task force to happen consistently. Minimally, this policy should be clarified and applied equally across all faculty (as it currently is not). Better, the task force recommends policy-guided flexibility be introduced in this area, so that faculty whose research requires mentees to be assigned to a common space can request such an assignment as part of their recruitment or space-modification process.

#### **Leadership Interventions**

When possible, best practices are to allow the SSMC and FSAC to discuss and vote on space decisions. However, the task force understands that sometimes, a lengthy consultative process that ensures collaborative and transparent decision-making can unfold too slowly or problematically, for example, in a short-timeline recruitment or retention situation.

To strike a balance between the need to sometimes act quickly and the need for consultation and transparency, the task force strongly recommends that anytime leadership must act outside the regular collaborative and transparent process, it must report the outcome of that action in a manner that is documented in the subsequent cycle of the above-recommended space-evaluation process. Post-reporting actions of this type serve not only to allow (after-the-fact) transparency to the Scripps community, but can also act as a check on the decisions that leadership makes, if it is known that the details of such decisions will be reported across the Scripps faculty community in the very near future.

#### **Modify the Existing Rescission Process**

As noted already, despite occupying nearly all of the SIO Space Policy, the existing rescission process is ineffective. Even more, the process introduces major opportunities for inequity, as it scrutinizes for rescission only one quarter of space users, beginning with a dimension that itself raises equity concerns (direct cost expenditures per square foot), as it does not take into account other factors that may be relevant to space usage, such as number of supervisees or nature of academic activity (although these do come in to the process later, to halt a potential rescission action). Finally, the process itself is poorly understood by Scripps faculty, who do not understand its details (in part because it is not executed transparently), and feel that it could be used as leverage in negotiations for space even when inappropriate, for example, when a faculty member is within the early-career window (because new faculty space is not evaluated for at least four years).

Instead, a more holistic approach to rescission is warranted. The task force hopes that the above-recommended periodic-review process along with an annual report could serve as a sound basis for rescission that is more comprehensive and therefore more fair, equitable, and transparent.

Such a rescission process should consider not just a single dimension such as direct cost expenditures per square foot, which as a policy prioritizes only a certain type of academic activity (those that bring in funding to spend), but instead should take into account all factors that pertain to Scripps's academic mission, including basic research, teaching and mentoring, service, and equity, diversity, and inclusion.

#### Requesting Additional Space During the Proposal Process ("The Box")

The task force spent a surprising amount of time discussing "the box" – a box that faculty can check as part of the proposal preparation process to indicate that if funded, a project would require changes to the Principal Investigator's current space assignment. There was a sense that this box was important, but there was no consensus among anyone (faculty, leadership and even task-force members) as to how it is used, what it means, whether it was a good or bad idea to check it, or even if it is still used. Going forward, the task force suggests that all faculty should be made aware of this mechanism to request additional space, thus potentially alleviating the reluctance to submit proposals due to lack of space.

#### Other Potential Gender Inequities

The task force is mindful that our charge included addressing gender inequities only in the space domain. Even so, we feel that it is important to acknowledge that gender inequities very likely hold in other aspects of academic standing. Indeed, space being so important to the success of academic activity at Scripps, it is very likely that space allocation inequities act as part of a feedback loop with other dimensions of professional standing, reinforcing or widening inequities in all these dimensions. The task force does not go so far as to recommend the appointment of additional task forces, but as part of our shared governance model, all members of the Scripps community should consider all possible dimensions of gender inequity as it develops policies and practices that apply to every aspect of academic life.

Indeed, gender is one of a number of other dimensions along which systematic inequities can arise. As Scripps works to modify its policies using an anti-bias approach, the task force urges that administration and faculty leaders carefully consider other dimensions along which individuals can be marginalized, especially race and ethnicity.

## **Conclusions**

The Scripps Institution of Oceanography has demonstrable inequity in the assignment of space to its women faculty. This space inequity is consistent with, and may be partly responsible for, a large gender gap in perceptions of the fairness, equity, and transparency of space policies, procedures, and practices, as well as in the transparency of space allocations themselves. There is also a large gender gap in the belief that faculty's current space assignments are adequate for their needs. The task force believes that it is likely these inequities in space allocations and perceptions of space-assignment processes stem from the same factors that have been identified in the literature as causes of gender imbalances in space, salary, and other measurable parameters across academic institutions, including absence of role models, lack of networks, academic climate and implicit gender bias. Deficiencies in the space policy and procedures in space assignment at Scripps have allowed these inequities to persist. Direct action as well as changes to training, strategic planning, and policy is warranted to address these gender gaps with all due haste.

## **APPENDIX A**

# Charge to the Ad hoc Task Force to review Scripps Institution of Oceanography research space allocation

Research space is one of the most precious resources a university makes available to its faculty, and researchers. Space is always in high demand, particularly the kinds of specialized space required to conduct advanced research. As part of a public research institution, it is essential that the Scripps Institution of Oceanography (SIO) allocate research space in a manner that is grounded in principles of equity, inclusion and transparency, and that appropriately supports the productivity of all faculty and researchers.

A question has arisen as to whether the SIO research space allocation and space policy meet these high standards. This task force is intended to answer that question through review of the existing policy and of the data on space allocations that have been made under the implementation and decision-making processes/protocols. Particular attention should be paid to the relationship between space allocation outcomes and the gender of the individual to whom the space has been allocated. The outcomes should include both the amount of space allocated and the timeliness of making it operational; in the latter it may be possible to distinguish where timeline has been impacted by areas outside of SIO.

The ad hoc Task Force to Review SIO Space Allocation is charged with:

- Reviewing the SIO Space Policy and space allocation processes/procedures to determine whether these are grounded in principles of equity, inclusion and transparency:
  - a. Are there elements of the policy that may lead to outcomes that are, or could be perceived as, discriminatory or exclusionary? Is the policy designed to be actively equitable, inclusive, and transparent? Is the policy interpreted/implemented consistently both within a section/division and across all sections/divisions of SIO?

- b. Are the procedures/processes used to execute the policy (by the SIO Space Committee or other administrators) being followed consistently for all? Are these procedures/processes designed to be transparent and to mitigate biases in the allocation of space? (e.g., the rapidity of response to space requests/allocations). Are there elements of the implementation procedures/protocols that may lead to outcomes that are, or could be perceived as, discriminatory or exclusionary?
- 2. Analyzing the data on how research space has been allocated to see whether the current outcomes have been equitable and appropriately support the productivity of all faculty and Researchers. Research space should include all space (lab space, office space for students/postdocs, and other paid technical or support staff). While it is difficult to quantitatively "allocate" all types of shared space, it is important that the committee talk to faculty members and Researchers to evaluate if they have "reasonable and equitable" access to shared space to pursue their research. We suggest that the committee talk to all faculty and Researchers who have joined SIO since 2012, and to others as feasible.
- 3. Evaluating outcomes of the space allocation policy/implementation should include, but not be limited to:
  - a. size of the individual's research programs by direct cost attributable to grants, contracts and gifts (e.g., total direct cost/sq foot),
  - b. size of the individual's research program by number of people using the space (including technical and scientific personnel, and students),
  - c. other circumstances of the faculty or Researcher's type of research that would affect space allocation (e.g., theoretical work vs experimental work),
  - d. amount of time that the individual has been a faculty member or Researcher at SIO,
  - e. space used on a continuing basis in shared use facilities (e.g., shared geochemistry labs, shared engineering facilities, experimental aquaria, H-Lab, etc.),
  - f. the research Section and/or building to which the individual has been assigned, g. research space assigned to the individual in other Schools of the University (e.g., faculty with partial SIO appointments may have space in the other department(s) in which they have an appointment).
- 4. Preparing a report for Chancellor Khosla, Executive Vice Chancellor Simmons and Vice Chancellor Leinen on the results of the ad hoc Task Force's review. The report should be submitted by July 5, 2022.

### APPENDIX B

#### **Interview Questions for Faculty**

Preface: We've included the questions below to facilitate this discussion and our interview. However, we are eager to talk about any topic that you feel would be useful for you to talk about. Questions that are not relevant to you or for which you have little or no insight can be skipped, as time for this interview is short.

#### About you and your space:

- When did you start at Scripps?
- What space do you believe you have assigned to you?
- Does the list of space assigned to you match what you believe is assigned to you?
- What is your understanding of how Scripps tracks the space you have? If you
  wanted to check your "official" space assignment, how would you do so?
- When you were being recruited to Scripps:
  - With whom did you negotiate space?
  - Was space specified in the offer letter?
  - Did you ultimately receive the space that negotiations settled on and in the condition specified?
    - If received entirely, how long did it take?
    - If not, what happened and how long has it taken?
  - Please describe how this process affected your research and ability to progress (including toward tenure, if applicable).
- Do you consider that you have sufficient space to meet the research requirements of yourself and those who work with you (e.g. students, postdocs, technicians)?
  - Do you have your own laboratory, or do you share a facility? If you do not have your own laboratory, would your research benefit if you did?

About Scripps and its space and space policies:

- Are you aware that SIO has a space policy? Has it been provided to you? Has it been explained to you in any way? If so, when?
- Are you aware of how you can ask for modifications to your space assignment in the future?
  - Have you ever requested a modification to your space assignment?
    - If so, when?
      - Why? (For example, because of the start of a new project?)
      - How long did it take for the new space to become available for your research, and did that align with any project timelines the space was needed for?
    - If not, why not?
- Have you or anyone you've heard of asked for or received space because of a request or the action of someone above a section head?
- Do you believe that access to space at Scripps is a fair, equitable, and transparent process?
  - o If yes, why?
  - o If not, why?
- What suggestions do you have for making the policies and processes used to assign space more equitable?
- Do you have any questions for us?

## **APPENDIX C**

#### **Interview Questions for Leadership**

#### High-priority questions:

- What do you understand to be the protocol for negotiating space for new hires to Scripps? How does that protocol fit with what is described in the space policy document?
- Who do you understand to make space-assignment decisions and how are those decisions communicated to the different committees and leadership bodies?
- Describe the process that you follow (or that you understand is followed) when a
  faculty member contacts you regarding changing their space assignment and
  allocation.
- What do you understand to be the criteria leaders use to determine the amount of space a faculty member needs, the location of that space, or any other features relevant to a space allocation?

#### Additional questions:

- How do you believe that leaders verify if a space request is reasonable, and how do
  they handle the possibility that there are conflicting requests from multiple faculty?
- How does SIO manage requests for new centers or new shared facilities?
- Please provide any comments you have regarding Scripps' community members' perceptions of how equitable, inclusive and transparent current space policy is.
- Do you believe that the existing SIO Space Policy clear in how space should be requested and how decisions are made?
- Do you have questions for us?

#### SIO Ad Hoc Task Force - Space Allocation Survey

- Q1. How long have you held your current title as researcher or professor at SIO?
- Less than one year (4)
- 1 to 5 years (7)
- 6 to 10 years (8)
- 11 to 15 years (9)
- Over 15 years (10)
- Q2. What is your gender identity?
  - Man (1)
  - Woman (8)
  - Trans Man (6)
  - Trans Woman (7)
  - Non-binary (5)
  - Other, please specify: (10)
  - Do not wish to state (9)
- Q3. What is your ethnicity/race?
- American Indian or Alaskan Native (33)
- Asian Chinese/Chinese-American (38)
- Asian East Indian (39)
- Asian Filipino/Filipino-American (41)
- Asian Japanese/Japanese-American (42)
- Asian Korean/Korean- American (43)
- Asian Pakistani (53)
- Asian Vietnamese/Vietnamese-American (55)
- Other Asian, please specify: (34)
- Biracial or Multiracial (35)
- Black/African-American (not of Hispanic origin) (36)
- Cambodian (37)
- East Indian (40)
- Latino/Latinx Afro Latino (44)

#### SIO Ad Hoc Task Force - Space Allocation Survey

- Latino/Latinx Hispanic (45)
- Latino/Latinx Latin America (46)
- Latino/Latinx Mexican/Mexican-American/Chicano (47)
- Latino/Latinx Other Spanish/Spanish American (54)
- Middle Eastern (48)
- North African (49)
- Pacific Islander (Fijian, Hawaiian, Malaysian, etc.) (52)
- White (not of Hispanic origin) (56)
- Other ethnicity/race, please specify: (32)
- Do not wish to state (50)

#### Q4. What series are you in?

- Professor (1)
- Researcher (2)
- Other (3)

#### Q5. What is your rank?

- Assistant (1)
- Associate (2)
- Full Steps I-V (3)
- Full Steps VI-IX (4)
- Full Above Scale (5)
- Full but I don't know which step (6)
- Other (7)

#### Q6. Have you or are you scheduled to be interviewed by the task force?

- Yes (1)
- No (2)
- Q7. Scripps includes a number of "large research groups," which include multiple faculty-level researchers in an explicit or de facto hierarchical relationship.

#### SIO Ad Hoc Task Force - Space Allocation Survey

Are most of your professional activities at Scripps done within such a large research group?

- Yes, I am part of a large research group (1)
- No, I am a solo PI (2)
- Other (elaborate if you wish) (3)

Q8. Were you already at Scripps when you started as a faculty member (e.g., as a postdoc or project scientist) or were you recruited as faculty to Scripps from elsewhere?

- Was already at Scripps in a non-faculty series (1)
- Was recruited to Scripps from outside of Scripps or outside of UCSD (2)
- Other (3)

Q9. Do you have space assigned to you at Scripps?

- Yes (1)
- No (2)

If Do you have space assigned to you at Scripps? = Yes

Q10. Please describe this space any way you wish to (e.g., "one general lab room and one room for technician desks"; "one clean lab space and one dirty lab space"; if you feel comfortable doing so, you can name individual rooms)

Q11. Do you have enough space to meet the research needs that you and your supervisees have?

- Yes (1)
- No (2)

Q12. Do you use what you believe is shared space?

- Yes (1)
- No (2)

Q13. Please describe this sharing arrangement.

#### SIO Ad Hoc Task Force - Space Allocation Survey

$\sim$ 1 4	1 4 /1 4				
/ \ 7 /I	11/12	10 1	- ~~~	ペロヘベ	+~'/
(J 14.	vviiai	15 1	4551	וואט	1()!
<b>∽</b>	What			5	

- Campus Unit (1)
- Individual faculty member (3)
- Not sure (4)

#### Q15. How many people use the space?

- 1-5(1)
- 6-15(2)
- 16-25 (3)
- 26-50 (4)
- 51-100 (5)
- 101+(6)

Q16. When you first negotiated space for your current position, please rate how satisfied you were with the process.

- Extremely dissatisfied (1)
- Somewhat dissatisfied (2)
- Neither satisfied nor dissatisfied (3)
- Somewhat satisfied (4)
- Extremely satisfied (5)

Q17. Have you experienced difficulties with negotiating and attaining space?

- Yes (1)
- No (2)

Q17a. Do you believe these difficulties have had a direct impact on slowing progress toward promotion and/or tenure?

- Yes (1)
- No (2)
- Not sure (3)

# **APPENDIX D**

### SIO Ad Hoc Task Force - Space Allocation Survey

Q18. Please describe any aspect of the negotiation process that you feel comfortable disclosing:

Q19. Have you ever tried to modify your space assignment?

- Yes (1)
- No (2)

Q20. Please rate how satisfied you were with the process of having your space modified?

- Extremely dissatisfied (1)
- Somewhat dissatisfied (2)
- Neither satisfied nor dissatisfied (3)
- Somewhat satisfied (4)
- Extremely satisfied (5)

Q21. Before the Ad Hoc Task Force on Space Allocation was formed in May, 2022, how familiar were you with the SIO Space Policy?

- Not familiar at all (1)
- Slightly familiar (2)
- Moderately familiar (3)
- Very familiar (4)

Q22. Do you believe that the policies, procedures, and practices that Scripps uses to assign space are fair (Note: we are defining "fair" as appropriate and non-discriminatory)?

- Yes (1)
- No (2)

# **APPENDIX D**

### SIO Ad Hoc Task Force - Space Allocation Survey

Q23. Do you believe that the policies, procedures, and practices that Scripps uses to assign space are equitable? (Note: we are defining "equitable" as based on the needs of faculty using the space)

- Yes (1)
- No (2)

Q24. Do you believe that the policies, procedures, and practices that Scripps uses to assign space are transparent? (Note: we are defining "transparent" as easy to learn and understand)

- Yes (1)
- No (2)

Q25. Do you believe that Scripps' current faculty space assignments are transparent? (Note: we are defining "transparent" as easy to learn and understand)

- Yes (1)
- No (2)

Q25. Please use the space provided to make suggestions for making space policies, procedures, and practices more fair, equitable, and transparent.

Q26. Would you like to have a confidential interview with the Ad Hoc Task Force on Space Allocation?

- Yes (1)
- No (2)

Q27. How would you like to proceed with the interview?

- Please contact me (provide full name and e-mail address) (1)
- I will email Brandi Bangle (bbangle@ucsd.edu) to schedule (2)



### 2022 SIO Space Alocation Survey Survey Dates: July 13 - August 30, 2022

### Scripps Institute of Oceanography - Space Alocation Survey - 2022

#### Table of Contents

- P.2 Response Rates and Demographics
- P.3 Distributions: Space Items
- P.4 Distributions: Space Requests and Satisfaction
- P.5 Distributions: Assessment of Space Policies, Procedures, and Practices
- P.6 PPP assessments by Series and Gender
- P.7 Satisfaction Comparisons: First Negotiated Space and Process for Modified Space









### 2022 SIO Space Alocation Survey

Survey Dates: July 13 - August 30, 2022

Response Rate

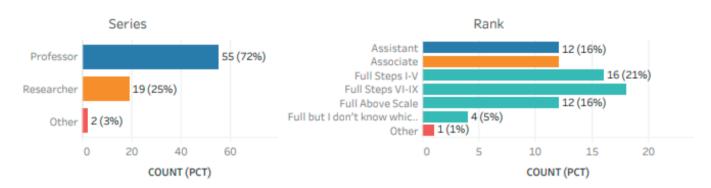
51.7%

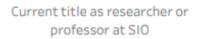
77 respondents / 149 invites

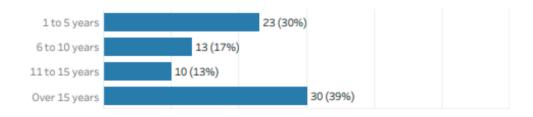
Summary:

- 51.7% reponse rate (77/149 responded)
- 72% identified as Professors, with 61% as Full rank
- 52% have over 10 years at SIO in their current title
- 57% identify as Male; 77% identify as White
- Overall Satisfaction: First Negotiated Space 3.31, Modified Space 3.28
- Significant differences between Men and Women with satisfaction with First Negotiated Space

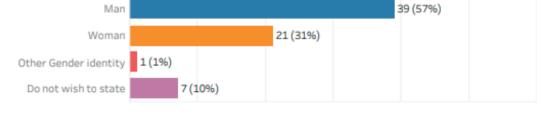
### Response Rates and Demographics



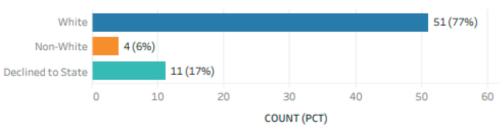








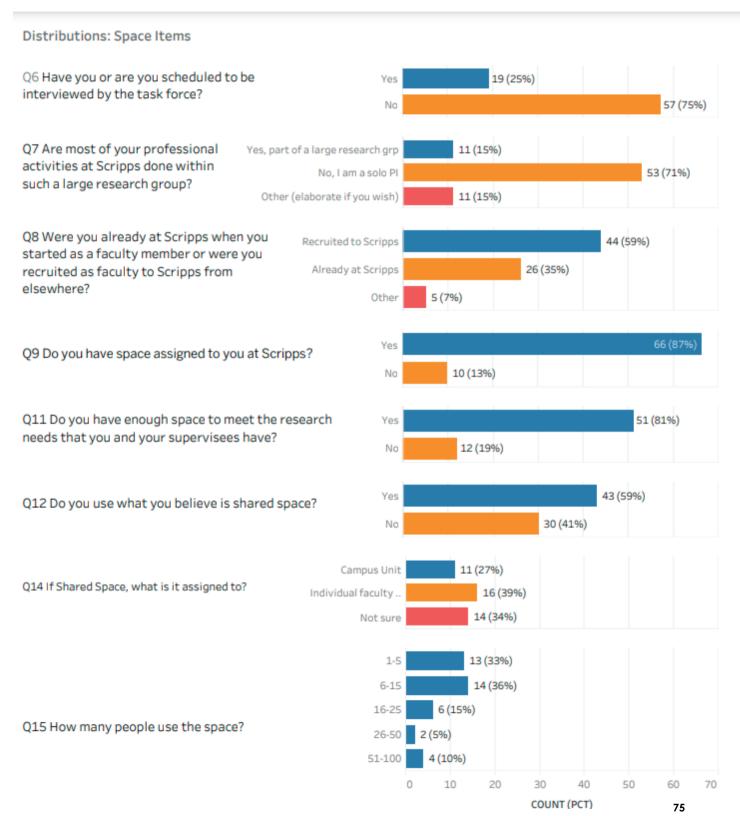
Ethnicity





### 2022 SIO Space Alocation Survey

Survey Dates: July 13 - August 30, 2022





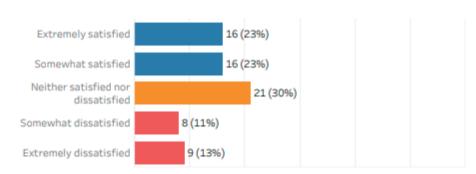


### 2022 SIO Space Alocation Survey

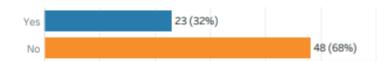
Survey Dates: July 13 - August 30, 2022

Distributions: Space Requests and Satisfaction

Q16 When you first negotiated space for your current position, please rate how satisfied you were with the process.



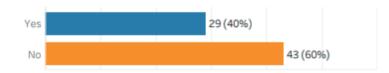
Q17.1 Have you experienced difficulties with negotiating and attaining space?



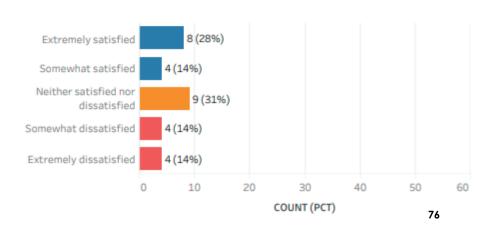
Q17.2 If yes, do you believe these difficulties have had a direct impact on slowing progress toward promotion and/or tenure?



Q19 Have you ever tried to modify your space assignment?



Q20 If Yes, rate how satisfied you were with the process of having your space modified?



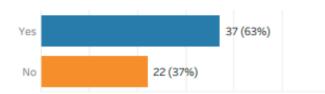


### 2022 SIO Space Alocation Survey

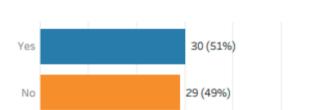
Survey Dates: July 13 - August 30, 2022

Distributions: Assessment of Space Policies, Procedures, and Practices

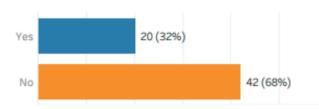
Q22 Do you believe that the policies, procedures, and practices that Scripps uses to assign space are **fair**?



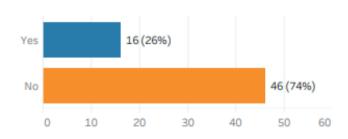
Q23 Do you believe that the policies, procedures, and practices that Scripps uses to assign space are equitable?



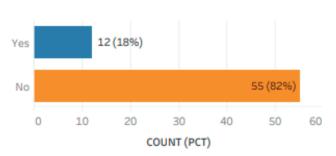
Q24 Do you believe that the policies, procedures, and practices that Scripps uses to assign space are transparent?



Q29 Do you believe that Scripps' current **faculty space** assignments are transparent?



Q26 Would you like to have a confidential interview with the Ad Hoc Task Force on Space Allocation?







### 2022 SIO Space Alocation Survey

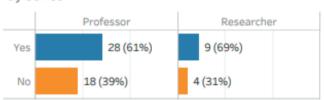
Survey Dates: July 13 - August 30, 2022

PPP Assessments by Series and Gender

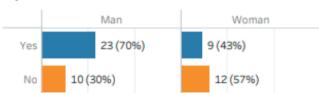
Note: PPP assessments are not reported for Other Gender Identity or Decline to State, nor are they broken down by race/ethnicity, to avoid the possibility of identifiability.

Q22 Do you believe that the policies, procedures, and practices that Scripps uses to assign space are fair?

#### by Series

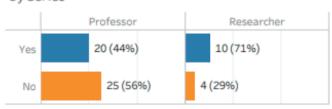




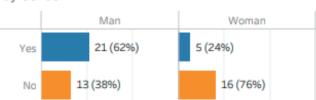


Q23 Do you believe that the policies, procedures, and practices that Scripps uses to assign space are equitable?

#### by Series

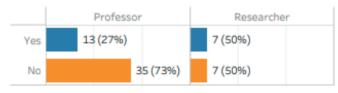


by Gender

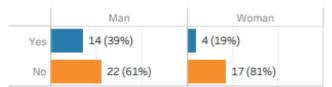


Q24 Do you believe that the policies, procedures, and practices that Scripps uses to assign space are transparent?

### by Series

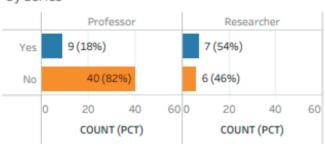


by Gender

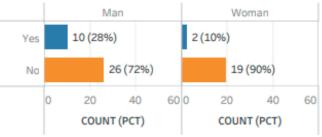


Q29 Do you believe that Scripps' current faculty space assignments are transparent?

#### by Series



#### by Gender





### 2022 SIO Space Alocation Survey

Survey Dates: July 13 - August 30, 2022

Q16 Average Satisfaction with First Negotiated Space // OVERALL AVERAGE = 3.31

5-Point Scale: 1 = extremely dissatisfied // 3 = neither satisfied nor dissatisfied // 5 = extremely satisfied

Series		Gender*		
Professor	3.31	Woman	2.67	
Researcher	3.22	Man	3.58	

<sup>\*</sup> significant difference found between women and men at p<.05 level

### Gender x Series

	Professor	Researcher
Woman	2.71	2.50
Man	3.71	3.20

### Q20 Average Satisfaction with the process of having Space Modified // OVERALL AVERAGE = 3.28

5-Point Scale: 1 = extremely dissatisfied // 3 = neither satisfied nor dissatisfied // 5 = extremely satisfied

Series		Gender		
Professor	3.41	Woman	3.14	
Researcher	2.86	Man	3.44	

### Gender x Series

	Professor	Researcher
Woman	3.17	3.00
Man	3.64	2.75

### Scripps Institution of Oceanography Space Policy By the Scripps Space Management Committee Approved: May 23, 2022

### I. Authority

Space assignment authority within the Scripps Institution of Oceanography (SIO), including those spaces allocated for use by University of California, San Diego (UCSD) and system-wide units, has been delegated<sup>1</sup> to the Vice Chancellor of Marine Sciences<sup>2</sup> by the Chancellor of UCSD.

The SIO Director, in turn, delegates the responsibility of allotting space to the Scripps Space Management Committee (SSMC). The SIO Faculty, through its executive committee, may choose to appoint and maintain the Faculty Space Advisory Committee (FSAC), as a standing committee and consultative body whose charge it is to advise the Director and the SSMC on the space policy and the resolution of space-related disputes.

The SSMC is composed of the following voting members:

- a. the Deputy Director for Research (DDR, Chair)
- b. the three Section heads
- c. the SIO Department Chair.
- d. the Assistant Vice Chancellor for Finance and Operations and
- e. two additional members from within the FSAC, one being the FSAC Chair, and another person chosen by the FSAC to balance out section representation.

The Director of Space Management, Director of Facilities Operations & Planning, SIO Space Analyst, Assistant Deputy Director for Research, and the Chief Administrative Officers (CAOs) representing the three Sections and the SIO Department shall serve on the Committee as non-voting advisors.

### II. Assignment of Space

Space at SIO is allocated to the following units:

Unit	Unit Head
Biology Section	Section Head
Earth Sciences Section	Section Head
Ocean & Atmosphere Section	Section Head
Scripps Academic Department	Chair of the SIO Department
Ship Operations & MarFac	Associate Director, Ship Operations
Birch Aquarium at Scripps	Director, Birch Aquarium
Scripps Institutional	Assistant Vice Chancellor for Finance & Operations

Scripps Institutional space includes (but may not be limited to) the Director's Office, historic cottages, including the Martin Johnson House, Seaweed Canyon, Mount Soledad, Elliott Field Station, space occupied by the Geological & Biological Collections, the Marine Sciences Development Center and other

.

<sup>&</sup>lt;sup>1</sup> Exceptions include Coast Apartments, the SIO Archives and FM controlled spaces.

<sup>&</sup>lt;sup>2</sup> Referred to here as the "SIO Director".

Scripps Institution of Oceanography Space Policy

Approved: 23 May 2022

recharge facilities. The Chair of the SIO Department controls classroom and instructional space. The remaining SIO space is controlled and managed by the section heads and others.

The SSMC, in consultation with the FSAC, assigns space to members of the Professorial and Research<sup>3</sup> Series ("Faculty") at SIO. Faculty are entitled to the assignment of space appropriate to their functions as educators and scientists. Space assigned to a faculty member falls into three categories:

- a. a personal academic office
- b. office space for employees<sup>4</sup>
- c. laboratory areas assigned to the faculty member

Space for new faculty: As part of the recruitment process, new faculty usually are assigned their academic office, staff office(s), and laboratory areas in an offer letter. This assignment is not permanent. All SIO space assigned to faculty is ultimately subject to the annual review process (below). However, new faculty space will not normally be reviewed until the faculty member has been at SIO for at least four years.

The three Section Heads also provide space to administrative staff associated with the Section and to post- doctoral scientists, official visitors, and graduate students. The Section Head is responsible for the day-to- day and local management of space within the Section. Underutilized or poorly used space must be returned to the Section Head and, with the advice of the SSMC, reallocated in conformance with this policy and guidelines. In normal circumstances, office and laboratory space vacated by a faculty member, reverts to Scripps Institutional space for review and reallocation.

When new space is being planned, such as the construction of a new building, or the remodeling of an existing structure, the SSMC will assess proposed space assignments early in the design process, so that any changes in space allocation causes as little disruption and cost as possible. Generally, new construction or major renovation projects will not include laboratory or engineering or single occupancy office space for retired faculty who lack vigorous research programs, or whose research programs are not expected to be consistent with such space allocations in the near future. New building space should include consideration of unassigned space for one or more future faculty hires.

All requests for new or additional space should be made via email to the relevant section head with a copy to the chair of the SSMC (the Deputy Director of Research at <a href="mailto:ddr@ucsd.edu">ddr@ucsd.edu</a>). To ensure transparency, the DDR will forward copies of requests for laboratory space or shared space to the other section heads and the Chair of the Faculty Space Advisory Committee (FSAC) for discussion at a SSMC meeting.

### III. Annual Review, Rescission and Reassignment of Space

The determination that space is underutilized is made on an annual basis by the SSMC in consultation with the FSAC. The purpose of the policy described here is to encourage and allow a reasonably efficient use of space at SIO. It recognizes that space can never be perfectly allocated and that there are costs associated with its under-utilization:

<sup>&</sup>lt;sup>3</sup> Faculty here is used in the same sense as in the Bylaws of the Faculty of SIO (A) Members of the San Diego Division of the Academic Senate who hold appointments in the Graduate School of SIO; (B) Associate Faculty, comprising all individuals who hold Academic titles in the Professional Research Series at the SIO.

<sup>&</sup>lt;sup>4</sup> Employees include engineers, technicians, project scientists, programmer analysts, specialists, and administrative assistants. Postdoctoral researchers, official visitors and graduate students are not considered employees for this purpose.

Scripps Institution of Oceanography Space Policy

Approved: 23 May 2022

- a. An opportunity cost if the space could be more beneficially used by someone other than the person to whom it is presently allocated, e.g., more research performed, and more students trained (likely by bringing in more contract and grant funds).
- b. A cost associated with any reallocation of space (that necessarily offsets this opportunity cost), which will be borne (at least in part) by those affected, which means that reallocation should be reserved for cases of serious under-utilization and well-defined need, e.g., new faculty hires or proven need by existing faculty for additional space.

To efficiently look at space utilization, the following shall be compiled annually for each SIO faculty member. Ideally this will be available by August 1 of each year:

- a. An average, over the past three years of the annual amount of extramural funding (expenditures and number of proposals submitted).
- b. The current space allocation, with the total broken down into academic office, and all other spaces allocated for employees and research.

From these numbers, the 3-year average of direct costs generated per square foot will be computed for each faculty member. Faculty who have been allocated office and laboratory space, but who show little to no research activity over the previous three years, may have their space allocation reviewed by the SSMC. The numbers and ratios described above are designed to identify possible space inefficiencies, they are not intended to be a rigid formula for maintenance or reallocation of space.

A faculty member whose assigned space is considered by the SSMC to be underutilized will be informed via hand-delivered notice and provided the opportunity to document in writing any special circumstances as well as their plans and funding prospects. In the meantime, additional data will be collected for these individuals, including:

- a. The number of graduate and undergraduate students the faculty member mentored over the past 3 years, and the extent of their involvement in research in the faculty member's research space.
- b. A yearly average, over the past three years of the number of employees and postdocs supervised, directly or indirectly, and the extent of their involvement in research in the faculty member's space.

Once the information on student and postdoc mentoring and employee supervision is available, and after the faculty member has (if he/she chooses) submitted a response to the initial review, he/she will be visited by at least two members of the SSMC and one member of the FSAC. They will jointly conduct a walk-through of the faculty member's space and provide another opportunity for the faculty member to present additional factors for consideration.

This subcommittee will report back to the SSMC and FSAC, which will consider these and any other relevant factors before deciding about the reallocation of space.<sup>5</sup>

The SSMC may, by majority vote, recommend a re-allocation of space, to take place no sooner than two months after the rescission letter is delivered (laboratory reassignment is likely to take longer). Such a recommendation is subject to review by the relevant Section Head and can be appealed to the SIO Director. If the recommended re-allocation is approved, the relevant Section Head will inform the faculty member. The timeline for vacating space will depend on circumstances, including when the space is

<sup>&</sup>lt;sup>5</sup> Any member of SSMC or FSAC whose own space is under review for re-assignment should be recused from the review process.

Scripps Institution of Oceanography Space Policy

Approved: 23 May 2022

needed for another purpose, and the amount of time required to make the space available for the next occupant.

The recommended timeline for space review and rescission is as follows:

Space Review and Rescission				
Action	Recommended Timeline	Possible Month	Responsible Party	Comments
Draft faculty Funding/ Space Report is compiled and distributed to Section Heads and CAOs for review.	0	August	Finance/Business Systems Analyst	The draft is very sensitive and confidential and needs to be reviewed for errors.
Draft faculty Funding/Space Report to be discussed at SSMC meeting(s).	1 month	September	SSMC/FSAC subcommittee	Faculty members that warrant further review are identified.
Review letters are prepared, and hand delivered.	1.25 months	2 <sup>nd</sup> week in September	Section Head	Template letter provided by DDR.
Additional Information gathering	2 months	October	Faculty member CAOs/Business Office	Faculty feedback Number and duration of people in lab assessed.
Subcommittee - Faculty member meeting and space walk through	2.5 months	Mid- October	SSMC/FSAC subcommittee	Last opportunity for additional feedback from faculty member.
Conversation with faculty member is reported to SSMC & FSAC.	3 months	November	SSMC / FSAC	Decision is made to move forward with rescission or not.
Rescission Letter is delivered by hand.	4 months	December	Section Head	Rescission Letter states that space could be reallocated if necessary.

### IV. Other

The Section Head, may, at his or her discretion, use Section funds to aid faculty members who have a substantial move, or a reduction in space, e.g., by covering the cost of more compact storage or labor costs associated with the move.

### V. Maintenance of this Policy

It is the responsibility of the SSMC, in consultation with the FSAC, to revise this document periodically so that the SIO Space Policy addresses current demands.

Scripps Institution of Oceanography Space Policy

Approved: 23 May 2022

#### APPENDIX A – Guidelines and Rules for Space Allocation and Use in Buildings

Section Heads are responsible for the day-to-day and local management of space within each Section. Underutilized or poorly used space must be returned to the Section Head for reallocation, with the advice of the Scripps Space Management Committee (SSMC), in conformance with the SIO Space Policy and guidelines. In normal circumstances, office and laboratory space vacated by faculty who move to new space or because of retirement, resignation, termination, or death reverts to Scripps Institutional space for review and reallocation. Requests for new or additional space should be made via email to the relevant section head with a copy to the chair of the SSMC (the Deputy Director of Research at ddr@ucsd.edu). To ensure transparency, the DDR will forward copies of requests for laboratory space or shared space to the other section heads and the Chair of the Faculty Space Advisory Committee (FSAC) for discussion at a SSMC meeting.

#### 1. Guidelines and rules for laboratory space

Formulating quantitative guidelines for the assignment of laboratory space at SIO is complex because of the diversity of disciplines. Some investigators require bench space and fume hoods for chemical experiments. Others need service yards and high-bay construction facilities for the testing and deployment of moorings. Thus, this document does not attempt to formulate quantitative guidelines for laboratory space. Sections can ask faculty to share laboratory space based on collaborations as well as occasional or reduced need, i.e., faculty who only occasionally need laboratory space or a small amount of laboratory space can be asked to share a laboratory. Each Section is responsible for the efficient allocation of laboratory space based upon justified need and reasonable use.

The Section-based guidelines contained herein are to be enforced during the annual review of space conducted by the SSMC in consultation with the Faculty Space Advisory Committee (FSAC). In other words, although laboratory space allocations are determined by local custom and needs within the Sections, enforcement of the guidelines is ultimately via the SSMC and is therefore uniform across SIO. This enables the SSMC to provide informed advice to the SIO Director on space issues which cut across the Sections.

#### 2. Guidelines and rules for office space

Table 1 indicates the office space appropriate for different positions at SIO. Visiting scholars without appointment as an "official visitor", undergraduates, Master's students, volunteers, research associates, the faculty of other UCSD Departments, and short-term personnel are excluded from the formula in Table 1; it is expected that the Section Heads will retain, where possible, a reserve of space for these exigencies.

<u>Sole-occupancy offices</u>: Faculty are entitled to an office for their exclusive use. It is also a priority to provide sole-occupancy offices for senior personnel. Scope of job, retention and seniority are mechanisms for determining which senior personnel are assigned sole occupancy offices. A guiding principle, superseding seniority, is that employees with a supervisory function need a private office to deal with management issues.

<u>The size of offices</u>: Faculty currently occupy personal offices ranging in size from 110ASF to 300ASF. To a large extent, variations in office size reflect variations in the way different buildings were designed. Seniority and recruitment inducements also factor into office assignments within buildings. The base rule is that faculty are entitled to a sole-occupancy office with at least 120 ASF.

Scripps Institution of Oceanography Space Policy

Approved: 22 May 2022

Space for postdoctoral scientists, graduate students (PhD) and official visitors: Office space for these scientists is provided by an allotment of offices assigned to the Section Heads and known as "Section Space". This reserve is not to be assigned to faculty members. The Section Head provides these offices as needed to graduate students, post-docs, and visitors, with generally two or three people per office. To the extent possible, the Section Head manages this assignment so that students, post-docs, and visitors are located close to their advisors and collaborators. Faculty should discuss the availability of office space with the Section Head before making a commitment to hire a new post-doc or invite an official visitor.

Space for MAS students: The SIO Department allocates designated study space for MAS students.

<u>Space for MS students:</u> MS students are not formally allocated SIO offices. If space is available, then access to a shared SIO office or common space may be provided as a temporary courtesy by the Section Head to enable students to be located near their research spaces or their advisors or near PhD students enrolled in their classes. If section space is not available, the SIO Department will provide study space for MS students.

Position	People per	UCOP ASF	Assignment
	Office	per Person	
Faculty = Professors + Researchers	1	120 – 150	Faculty
Specialist or Project Scientist	1 to 2	120 – 150	Faculty PI
Post Doc or Visitor	2 to 3	75	Section, not counted under PI
Grad Student (PhD)	2 to 3	50	Section, not counted under PI
Technical	1 to 3	75	Faculty PI
Administrative & Management staff	1 to 2	75	Faculty PI or Section Head

Table 1: Assumes a 110 square foot office minimum. Individuals per office are determined by the actual size of the available office, by the seniority of the employee and by the job function. Senior technical, scientific, and administrative staff and academic coordinators should be assigned a single office, space permitting.

SIO faculty occasionally serve as the primary advisor of PhD graduate students from other UCSD Departments. If these students do not have an office in the other UCSD Department, then the Section Head should, if possible, provide office space at SIO.

Scripps strives to support the continued scholarly and creative activities of retired faculty, and their service to the University, while recognizing the need to make space available for new hires. Faculty with RTAD status will be subject to the annual review process described in Section III. Faculty not having RTAD status will have their space requirements reviewed by the SSMC and the SIO Director at the time of retirement (or shift from RTAD status), considering their plans for research, teaching, or service. Subsequent assignment of space would then continue at the discretion of the Section Head and the SSMC; such assignments will be reviewed annually. Space formerly held by, but no longer assigned to retired faculty, is returned to the Scripps Institutional pool, not to a Section.

<u>Common space</u>: In addition to a personal office, faculty might have access to common or utility space associated with office functions shared with other researchers. Common spaces include reading rooms, conference rooms, collaboration rooms, shared research laboratories, research support laboratories, and kitchenettes. Office equipment rooms containing copy machines, printers and other shared office equipment are common space. Common space is held by the Section Heads and not assigned to the individual faculty members.

Scripps Institution of Oceanography Space Policy

Approved: 23 May 2022

<u>Large rooms</u>, <u>open-plan offices</u>, <u>and collaboration spaces</u>: Large rooms (other than labs) are defined as those greater than 200ASF, may be used for multiple people or purposes, but need to be classified as academic, research, other office, or conference rooms, depending upon their use. These spaces can exist as an open area without being fully enclosed. Large rooms might be used as open-plan office space for several employees. To justify exclusive assignment of a large room to a single faculty member, e.g., as an open-plan office, the average occupancy must conform to the recommendations above. Example: a 260ASF room would house at least 3 people – a post-doc, an administrative assistant, and a programmer analyst IV.

<u>Sabbaticals, sea-time, and other long absences</u>: Faculty absent from SIO for longer than six months are required to notify the Section Head, clear their desk, and make a reasonable amount of office space available for the use of visiting scholars.

<u>SIO offices for research associates and adjunct faculty</u>: Adjunct faculty and research associates are not entitled to SIO offices. If space is available, then access to an SIO office (possibly shared) may be provided as a temporary courtesy by the Section Head.

<u>Space for long-term storage</u>: The use of office and laboratory space for long-term storage is not appropriate. Faculty needing long-term storage space should consult with the SIO Space Management Officer for access to this resource from Scripps Institutional space at Elliott Field Station or Trade Street facilities.

Scripps Institution of Oceanography Space Policy

Approved: 23 May 2022

#### APPENDIX B - Guidelines and Rules for Use of Service Yards

The purpose of guidelines for the use of service yards is to facilitate access to these desirable shared use locations for all who need them.

- 1. The primary use of service yards is to provide access for:
  - a. Staging sea-going or other expeditions (preparation and demobilization) or containers needed temporarily to service other large projects
  - b. Maintaining and supplying the buildings
  - c. Emergency access
- Parking in service yards is only permitted for emergency vehicles, vehicles maintaining or supplying the buildings, vehicles with service yard or official business permit, or in spots marked clearly for short-term loading/unloading.
- 3. All items occupying space in the service yard for more than 24 hours must be clearly labeled with the name of the principal investigator (PI), a telephone number, and the date placed in the yard.
- 4. Service yards are explicitly not to be used for long-term storage of equipment, seagoing or other containers. Long term is defined as more than one month. If longer-term storage is needed, consult with the SIO Space Management Officer<sup>6</sup> to determine the proper location, either Seaweed Canyon or Camp Elliott or Trade Street.
- 5. Ocean-going or other expedition containers that are being loaded for or unloaded after a cruise, can be parked in a service yard for up to 2 weeks. This maximal time frame should only be used if constant access to the container is required during this time.
- 6. Sea labs If equipment is being permanently installed in a van or container prior to being shipped for use on shipboard or in a remote location, then a request can be made to have this container located in the service yard for up to two months.
- 7. Semi-permanent storage containers in service yards Any containers or trailers that are needed on an ongoing basis, due to lack of space for the materials in the PI's lab, must be approved by the SSMC with a defined time limit, but no more than 3-years, and may be subject to approval by the Marine Science Physical Planning Committee. Efforts must be made to provide the needed space within the laboratories of the adjacent building(s) or in Seaweed Canyon or Elliott Field Station.
- Containers that are owned by a Section, PI or other SIO entity must have a permanent container ID
  assigned by SIO Space Management regardless of location. Per UCOP directive, all space is to be
  identified and tracked. The square footage of containers will be assigned to a PI, the Section, or SIO
  Institutional.

<sup>&</sup>lt;sup>6</sup> Currently Camilla Ingram cingram@ucsd.edu

Scripps Institution of Oceanography Space Policy

### Approved: 23 May 2022

## APPENDIX C – Guidelines and Rules for Space Allocation and Use in Seaweed Canyon

Research support facilities in Seaweed Canyon are intended primarily for faculty at Scripps who have active field programs and need to prepare and test field equipment frequently. The facilities can also provide storage for field samples, equipment, or other materials, but frequency of use should be the primary criteria for assignment of space within any of the buildings.

Space in Seaweed Canyon must be actively used for staging and testing of equipment or storage between cruises, on an average monthly frequency. If the equipment, instruments, or other materials are rarely used (not accessed for 6 months), they must be stored at Elliott Field Station.

The Scripps Institution of Oceanography Space Policy defines space in Seaweed Canyon and Elliott Field Station as Institutional Space, assignable to researchers for defined time periods, either directly or through the Sections. Thus, faculty may apply to their Section Head or the SIO Space Manager for space at either Seaweed Canyon or Elliott Field Station. Use of space at either of these locations by any person or group that is not part of Scripps must be approved by the SSMC on a case-by-case basis.

Application for space at Seaweed Canyon will consist of the following:

- a. A short written justification of need
- b. An inventory of the equipment to be stored, including volume. The inventory must be of sufficient detail to accurately describe the stored items, i.e., a one-phrase description of "geological sampling gear" is unacceptable. Conversely, a detailed description of each item in every box is not expected.

Note: All equipment and materials stored at Seaweed Canyon must comply with EH&S and UCSD Fire Marshal regulations.

<u>Staffing</u>: Use of Seaweed Canyon is overseen by the facility manager<sup>7</sup>, who can provide assistance or guidance on logistical needs. Ocean-going or other expedition containers that are being loaded for or unloaded after a cruise can be located at Seaweed Canyon for up to 4 weeks with advance approval of the facility manager.

<u>Containers</u>: Must follow the same rules and guidance as laid out for placement and use in Service Yards. Seaweed Canyon is not to be used for long-term container storage (longer than one month). All containers that are owned by a Section, PI or other SIO entity must have a permanent container ID assigned by SIO Space Management.

In accordance with EH&S and Fire Marshall regulations, walkways and access to fire extinguishers and electrical breaker boxes in buildings at Seaweed Canyon and Elliot Field Station must be kept clear and accessible at all times. Forklifts, cranes, and other heavy equipment to be operated by certified personnel only. Please contact the facility manager to arrange training / certification.

88

<sup>&</sup>lt;sup>7</sup> Currently José Hernandez jlh001@ucsd.edu



Scripps Institution of Oceanography Space Policy

Approved: 23 May 2022

### Appendix D – Guidelines and Rules for Space Allocation and Use at Elliott Field Station

Scripps space at Elliott Field Station (EFS) is designated for long-term storage of equipment and supplies. EFS has a combination of prefabricated steel buildings and areas organized for the storage of boats, 20- and 40-foot containers, palletized equipment, disposable anchors, and large gear that can be stored outside. Some specific areas at EFS have been designated for these purposes per an approved master plan created for the purpose of improving the organization of Scripps storage.

Scripps space at EFS is defined as Institutional Space, assignable to researchers for defined time periods, directly by the SIO Space Manager or by Section Head request. Use of EFS space by any person or group that is not part of Scripps will have to be approved by the SSMC on a case by case basis.

Application for space will consist of the following:

- a. A short written justification of need
- b. An inventory of equipment to be stored, including volume. The inventory must be of sufficient detail to accurately describe the stored items, i.e. a one-phrase description of "geological sampling gear" is unacceptable. Conversely, a detailed description of each item in every box is not expected.
- c. All containers must have a permanent container ID assigned by SIO Space Management.

  Note: All equipment and materials stored at Elliott field Station must comply with EH&S and UCSD Fire Marshal regulations.

The Scripps Facilities Group manages Elliott Field Station and use of Elliot Field Station is overseen by José Hernandez, the manager for these facilities. He will be able to provide guidance on how to store equipment and other materials. In general, all items must be labeled clearly with the owner's name and contact information. Also, all items stored outside must be prepared in accordance with current guidelines to prevent soil and stormwater contamination due to substances leaking or oxidizing from the equipment.

Even though Elliott Field Station is designated for long-term storage, items are not meant to be stored in perpetuity. If it appears that items have been abandoned or are not being utilized in any way, the EFS manager will attempt to contact the owner and determine if he or she needs the item(s) any longer. If not, the SIO Facilities or Space Manager will assess if the item(s) should be saved for the use of others at Scripps. If no scientific use can be determined, then the manager will dispose of the item(s) through the best means possible.

Forklifts, cranes, and other heavy equipment to be operated by certified personnel only. Please contact the EFS manager to arrange training / certification.

#### **Bulleted Recommendations**

Please see Section 8 for the full context and understanding of the recommendations.

- 1. Remedy the Space Inequity
- Identify individual faculty, especially women, who have less space than they should.
- A process should begin to even the gender gap in space distribution in ways that are consistent across ranks, types of research, and group size.
- A robust review process for all space, resulting in recovering additional space through an effective rescission process, including from retired faculty.

### 2. Leadership Training

- Institute a more formal program of training for leaders, especially section heads.
- Equip leaders with knowledge of any systems that are implemented.
- Impart decision making principles and strategies that can advance the goals of equity, diversity, and inclusion.
- Emphasize the need to act not only in the interests of individual sections, but in the interests of the institution as a whole.

### 3. Develop a Strategic Plan for Space Usage

- Develop and document a strategic vision for how SIO's space is to be allocated.
- The strategic space planning vision should lay out Scripps's goals and priorities for its research and educational activities.
- Foster the growth of its newly recruited faculty
- Foster interdisciplinary research
- Advance scholarly and academic activity at the same time as engineering new products and instruments.
- Advance its teaching and mentorship mission
- Further SIO's core mission of advancing equity, diversity, and inclusion.

#### **Bulleted Recommendations**

- 4. Expand the SIO Space Policy
- Provide explicit directions for assigning space to new faculty.
  - Document explicit and transparent principles to guide the process of space assignment for new recruits at the beginning of the process. These principals should empower recruits so they can make clear their space needs, and thus diminish the role of "hard negotiation" in the process.
  - Document the new recruit's functional space needs.
  - A well-defined pool of available space should be described to new recruits.
  - Consider instituting a mentorship mechanism for new recruits to provide impartial, confidential guidance to help with the space assignment process.
- Formalize space commitments for all recruits, both professor and research scientists.
- Assessing the fairness and equity of space assignments to new recruits should be included in the periodic space reviews (see below).
- Provide explicit directions for how existing faculty can modify their space assignments.
  - Ideally, space should be thought of as fluid that faculty can request additional space when needed, but also return it when a particular grant has ended.
  - Institute a periodic solicitation to determine if faculty need modifications to their space assignments based on functional needs.
- Retired faculty space assignments should be addressed explicitly and directly, including academic offices. When possible, retirees should share academic offices to free up space that may be better utilized by non-retired faculty.
- SIO Space Policy should expressly and strictly forbid transferring space from one faculty member to another, as currently happens in mega groups.
- Such space should be returned to Institutional Reserve so that a policy-guided process can determine its reallocation.
- The role of shared governance in the space allocation process has been strongly diminished in recent years. This should be reversed.
- Staff support specifically dedicated to prompting and helping to execute FSAC's responsibilities should be provided.

#### **Bulleted Recommendations**

- FSAC membership should structured to ensure all voices across SIO are involved in space-assignment practices and reviews.
- Space policies, practices and procedures should be uniform and applied equally to all academic, as well as administrative units and non-academic units.

### 5. Institute a Periodic Space-Evaluation Process

- Scripps should institute a regular, comprehensive process of evaluating current space assignments on a periodic schedule.
  - Assess utilization of space as a function of personnel assigned to PIs, academic productivity, teaching and mentoring activity, as well as a function of funding.
  - This process should involve a physical walk-through of space, to assess human activity and best use of space for research and mentoring activities.
  - Space reviews could be instituted in staggered fashion, e.g., one-third of space being evaluated each year so all space at Scripps will be evaluated every three years.
  - Use this process to assess potential inequities in space assignment along relevant demographic lines, including gender, thus informing leadership if changes made to
  - Ensure shared governance is clear in the space-evaluation process, by delineating a clear role for FSAC.
    - Produce an annual report of the space review, available to all SIO Faculty, including:
    - Assessments of the efficient use of space
    - Include equity-accountability analysis
    - Assess fulfillment of commitments to new recruits and others
    - Document leadership interventions
    - The space assignment database (Tririga) needs to be spot-checked for accuracy.

#### **Bulleted Recommendations**

- 6. Formally and Transparently Document Space Commitments
- Institute a process to formally and transparently document or ticket space commitments, so they are implemented in order and not forgotten altogether.
  - All Scripps faculty should understand that a space commitment is only "real" if it is ticketed in this system.
  - Space-assignment bodies should be strictly forbidden from making any space commitments unless they have been entered into the ticketing system.
  - Commitments in the system should be accessible to all faculty at Scripps.
  - Before any space commitment is made including leadership interventions all
    existing ticketed commitments should be consulted to ensure a new
    commitment is not foreclosing an otherwise equitable or important existing
    commitment.
- Implement an institution-wide means by which all current space allocations are transparently made available to all Scripps faculty.
- 7. Scripps Needs Greater Space Flexibility
  - Reduce / eliminate factors in the Space Policy that have created a ridged ecosystem within which faculty - individually and as groups and centers - attempt to attain space.
  - Instituting an effective periodic review process, freeing underutilized space, and assigning it to Institutional Reserve will help overcome the rigidity.
  - Upon separation of a faculty member or group, their space, by default, should revert to Institutional Reserve.
  - Effective use of Institutional Reserve, along with direct and effective action of higher levels of space management (e.g., SSMC), will facilitate assignment of space for centers, new hires, and existing faculty.

#### **Bulleted Recommendations**

### 8. Space for Postdoctoral Scholars, Graduate Students, and Visitors

- When sections are assigning desk space for postdoctoral scholars and graduate students, the guiding principle should be to provide proximity to the mentor, without preference toward better positioned faculty, which has created inequities in the ability to build a cohesive lab culture.
- The task force recommends policy-guided flexibility be introduced, so that faculty whose research requires mentees to be assigned to a common space can request such an assignment as part of their recruitment or space-modification process.

### 9. Leadership Interventions

- To strike a balance between the need to sometimes act quickly and the need for consultation and transparency, the task force strongly recommends that anytime leadership must act outside the regular collaborative and transparent process, it should act within policy, and must report the outcome of that action, to the SSMC and FSAC.
- Report all leadership interventions to the Scripps community, to provide transparency and to act as a check on the decisions that leadership makes.

#### 10. Modify the Existing Rescission Process

- Change the existing rescission process, because it is ineffective, introduces major opportunities for inequity, only scrutinizes one quarter of space users, uses a tool that itself raises equity concerns (direct cost expenditures per square foot), does not take into account factors, such as number of supervisees or nature of academic activity.
- Rescission should include all factors that pertain to Scripps's academic mission, i.e., basic research, teaching and mentoring, service, and equity, diversity, and inclusion.
- Implement a periodic-review process along with an annual report.
- The entire process should be transparent.

#### **Bulleted Recommendations**

- 11. Requesting Additional Space During the Proposal Process ("The Box")
- The task force suggests that all faculty should be made aware of the box to check during the proposal process to request additional space, thus potentially alleviating the reluctance to submit proposals due to lack of space, and providing time to find space.

### 12. Other Potential Gender Inequities

- Space being so important to the success of academic activity at Scripps, it is very likely that space allocation inequities act as part of a feedback loop with other dimensions of professional standing, reinforcing or widening inequities in all these dimensions.
- As part of our shared governance model, all members of the Scripps community should consider all possible dimensions of gender inequity as it develops policies and practices that apply to every aspect of academic life.