



April 25, 2023

Dear Members of the Brown Community,

Brown is committed to ensuring that all members of our community are provided with equal opportunities and support to advance their careers and meet their full potential. As national conversations continue across higher education concerning employment disparities among men and women faculty, we felt it was important to undertake efforts to examine the status of women faculty at Brown.

In September 2021, then-Provost Richard M. Locke and I charged a task force with conducting a thorough examination of factors that influence the recruitment, hiring, retention and promotion of the University's women faculty. The Task Force on the Status of Women Faculty convened for 18 months to develop recommendations based on their findings, and I am writing to share its final report and the next steps the University will take in response.

The creation of this Task Force was motivated, in part, by a report on the Diversity and Inclusion Action Plan (DIAP), which noted evidence that, at Brown, women tenure-track faculty remain a minority in several disciplines, even those in which the majority of those graduating with doctoral degrees are women. Although this is an issue seen nationwide, it is concerning given Brown's commitment to fostering a diverse academic community that will position the University to achieve the highest level of academic excellence.

I want to begin by thanking the members of the Task Force for their dedicated efforts. The Task Force, chaired by Diane Lipscombe, professor of neuroscience and director of the Carney Institute for Brain Science, has conducted a thoughtful and thorough data-driven analysis addressing issues of representation, equity and inclusion with respect to women faculty at Brown. The Task Force consulted with current and former faculty members and several University committees through interviews, focus groups and town hall meetings. This report reflects their views and experiences.

The report documents several areas in which no gender-based differences were found. These include access to research resources, tenure rates, assignment of research space, appointment of faculty to endowed chairs, faculty hiring across disciplines relative to the representation of women in candidate pools, and documented service loads, among other areas. The report also notes improvements that have occurred over time, including a narrowing of the gender gap since 2012 in time to promotion from associate to full professor, and the absence of a gender gap in compensation among faculty hired in the past decade.

Still, there are several important areas in which Brown can improve. These are reflected in the eight broad recommendations in the report that address expanding the number of women faculty

at all ranks; ensuring equity in compensation, promotion, retention and service loads; developing improved mechanisms to address bias, harassment and misconduct; providing better information and support to faculty on human-resources related issues and improving access to childcare; and enhancing training for department chairs. The Task Force paid special attention to the experiences of women faculty of color, and this is reflected in their recommendations.

In addition, the report found statistically significant salary differences between men and women faculty at Brown who started prior to July 1, 2012. These differences, in part, are attributable to the historic legacy of the time to promotion to full professor, as women rank at the associate professor level for two years longer than men, on average. While this gap has narrowed in the past decade, we must take active steps to ensure it does not reappear. The review of compensation data did not consider a number of other factors that could contribute to differences in compensation, such as home department. The report recommends further analysis in this area, to ensure that all faculty are compensated fairly for their work. This will be among one of the key areas of focus this fall.

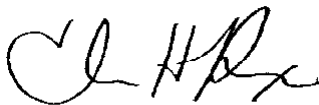
Addressing all of these areas will take time and resolve, but it is vitally important that we do so. I am committed to working with faculty and administrators to act on these recommendations. The first step will be to accept the last and perhaps most important recommendation, to “appoint an implementation team to develop an action plan to prioritize, spearhead and track implementation of the recommended actions” in coordination with the Faculty Executive Committee. The Committee on Faculty Equity and Diversity has long played an important role in issues related to gender equity at Brown, and I look forward to their partnership.

Our work going forward will be aided by several data-gathering efforts that are currently in progress. The Campus Climate Survey, which will provide critical data on community members’ experiences with opportunity, support and access, is currently underway, and results will be available in the fall. A faculty satisfaction survey (the COACHE survey) was recently completed, and a childcare needs assessment will be launched by early May. Provost Frank Doyle, who will begin his appointment at Brown in July, and I will share the results of these efforts in the fall, as well as plans to address the Task Force recommendations.

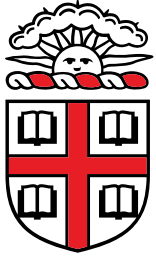
I am grateful for the time and care the members of the Task Force on the Status of Women Faculty devoted to this analysis. It provides important insights into the challenges of cultivating a diverse and talented faculty, which is central to Brown’s mission of education and research.

It is essential that all faculty members have access to the same resources and opportunities regardless of sex or gender identity. I look forward to the work we will do together to advance our mission.

Sincerely,

A handwritten signature in black ink, appearing to read 'C. H. Paxson', written in a cursive style.

Christina H. Paxson



BROWN

Brown University

TASK FORCE ON STATUS OF WOMEN FACULTY REPORT

Final report and recommendations to
PRESIDENT CHRISTINA H. PAXSON

Interim Provost Lawrence E. Lawson
Incoming Provost Francis J. Doyle III

April 2023

IN HONOR OF

Professor Meenakshi Narain

On January 1, 2023, the Brown community lost our friend and colleague Professor Meenakshi Narain. Professor Narain was a brilliant scientist, inspiring, and a force for good. She was a mentor and role model to hundreds of women in the physical sciences in the U.S., in India and across the world, and her efforts improved scientific research and innovation.

Professor Narain had a lasting impact on everyone she met. She filled discussions with energy and passion, and her constant efforts to improve diversity and inclusion at Brown and beyond made this world a better place. We are deeply saddened that Professor Narain is not here to see the release of the Task Force report, but her voice is present throughout and we are grateful for her friendship, advice and lasting contributions.



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ACKNOWLEDGMENT

The recommendations submitted by the Task Force on the Status of Women Faculty were informed by conversations and anonymous feedback from faculty members of Brown University as well as former members of the faculty who have left Brown. We reviewed many datasets provided by several administrative units. The work of the Task Force was facilitated greatly by the willingness of faculty to share their experiences with us. We acknowledge the following offices and organizations for their support throughout this process: Office of the Dean of the Faculty, the College, Office of the Vice President for Research, Vice President for Finance in the Office of the Provost, and Sheridan Center for Teaching and Learning. We are also grateful to many colleagues for creating new datasets and for re-analyzing existing data to include gender as a variable. In particular, the Task Force is grateful to Meghan Hall, faculty data manager in the Office of the Dean of the Faculty, who did extensive data analysis and generated the graphs and tables in this report. We are also grateful to Monisha Kallianpur and Brian Kimball in the Office of the Vice President for Finance who generated extensive information about facilities and space assignments by gender.

CRITICAL NOTES ON DATA, TERMINOLOGY AND FACULTY INCLUDED IN THESE ANALYSES

It is important to note that for the University data cited in this report, gender has been self-reported following federally mandated guidelines requiring a binary response — male or female. The Task Force recognizes that gender identity transcends the male and female binary definition. We understand that Brown is working on data collection and reporting processes that will reflect the chosen gender identity of individuals and will include nonbinary gender options.

Throughout this document, it is noted that data have been provided by the Office of the Dean of the Faculty. Unless otherwise noted, data provided by the Dean of the Faculty is University-wide data and encompasses all full-time Brown employed faculty including those in departments under the Dean of the Faculty as well as in the School of Public Health, School of Engineering and Division of Biology and Medicine. When possible, data pertaining to research faculty and lecturers were included.

The Task Force was given access to various datasets that were typically divided into four broad groupings. These groupings are frequently used by the University, including the Office of Institutional Research, in their reporting [1]. They are: Humanities, Life and Medical Sciences (which includes departments in the Division of Biology and Medicine, the School of Public Health and the Department of Cognitive, Linguistic, and Psychological Sciences), Physical Sciences (including the School of Engineering), and Social Sciences. The Life and Medical Sciences group includes a subset of Brown-employed, tenured/tenure-track faculty who have some clinical responsibilities, but this group does not include the large group of clinical faculty who are employed by the health care systems or the Providence VA Medical Center.

INTRODUCTION AND COMMITTEE CHARGE

In September 2021, Brown University President Christina H. Paxson and then-Provost Richard M. Locke appointed the Task Force on the Status of Women Faculty to thoroughly assess issues of representation, equity and inclusion with respect to women faculty at Brown.

The creation of the Task Force reflects the University's commitment to advance its mission of education, research and service by attracting and supporting diverse and talented faculty and providing the environment and resources for all members to contribute fully and be successful. More specifically, the review was prompted by data included in the most recent annual report on Brown's Diversity and Inclusion Action Plan (DIAP) indicating that women tenure-track faculty remain a minority in several fields, even in disciplines in which the majority of graduating Ph.D.s are women. And while in many cases these and other data, described in detail in this report, are consistent with national indicators with respect to women in the academy, they are inconsistent with Brown's stated values and the University community's standards and expectations, and undermine the University's commitment to excel in science and discovery, which requires a diversity of perspectives.

The work of the Task Force is rooted in Brown's past efforts to dismantle obstacles to gender equity among faculty, underscoring the necessity for systemic and sustainable actions and reforms to address persistent disparities affecting women faculty at Brown — and the entire University community.

Fifty-two years ago, Pembroke College was fully merged with the men's college of Brown University following the recommendation of the Majority Report of the Pembroke Study Committee (May 8, 1970; Chaired by Elizabeth H. Leduc, Professor of Biology) [2]. The report also recommended "that the number of women on the faculty be substantially increased," and noted that, "It is illogical for Brown to assure its women undergraduates and graduate students that their academic aspirations are valid and then to hesitate to hire similarly qualified women as professors."

Seven years later, in 1977, Brown entered into a consent decree "designed to achieve on behalf of women full representativeness with respect to faculty employment at Brown." (Louise Lamphere vs. Brown University, C.A. NO. 75-0140). The consent decree considered the percentage of women Ph.D. graduates in prior years as a quantifiable national metric for "representation."

In the intervening 45 years, while the representation of women on the faculty has increased from 8% (AY 1974-1975) to 36% (AY 2021-22), women continue to be underrepresented on the faculty compared to their representation in the national pool of earned Ph.D.s. And although the representation of women at undergraduate and graduate levels has been increasing steadily over several decades, and the percentage of women receiving Ph.D.s has increased in many disciplines — even becoming a majority of graduating Ph.D.s in some disciplines across the country for at least the last decade — within the science, technology, engineering, mathematics (STEM) and life and medical sciences fields at Brown there has been little change in the representation of women faculty in the past decade. In life and medical sciences, the percentage of women full professors has actually decreased during that period.

So, while there has been progress over time at Brown and nationally with respect to the representation of women faculty, this report underscores that inequities by gender persist both at Brown and nationally. Only by revealing gender disparities and the policies, systems and structures perpetuating these gaps will the University be positioned to rectify matters and reach its full and greatest potential.

It is from this perspective that the Task Force undertook its work in earnest to accomplish its charge.

TASK FORCE CHARGE

In a letter to the community announcing its formation [3], the Task Force on the Status of Women Faculty was charged with assessing any disparities in opportunities and outcomes between similarly situated women and men on the Brown faculty, and subsequently making recommendations to the President and Provost for changes that advance the University's mission of education and research. More specifically, the Task Force was directed to:

1. Document and analyze data on whether there are any gender differences in responsibilities, opportunities and outcomes available to Brown faculty. Responsibilities include, but are not limited to, commitments such as teaching, advising loads and service on various departmental and University committees. Outcomes include all aspects of recruitment, hiring, retention and promotion.
2. Conduct a benchmarking analysis with data from Brown and other major research universities in the United States.
3. Evaluate peer institutions' recruiting and hiring practices and recommend best practices for Brown to consider implementing.
4. Review results of a third-party consultant's review assessing whether there are any statistically significant gender differences in regular faculty compensation (tenure-track, tenured and lecturers).

5. Review results of an internal assessment of space allocation (e.g., research labs) to determine if there are any statistically significant differences in space assigned to regular faculty based on gender.
6. Update the Committee on Faculty Equity and Diversity and the Faculty Executive Committee periodically throughout the work of the Task Force.
7. Share and discuss data and preliminary conclusions at the chairs and directors meeting and the University faculty meeting prior to submitting final recommendations to the President and Provost.
8. Make recommendations on changes Brown could make to its policies, procedures and programs to achieve the goals of equal opportunity and affirmative action in faculty employment.

The charge instructed the Task Force to focus primarily on tenured/tenure-track faculty. It also indicated that, to the extent possible given sample sizes, data should be developed and analyzed for research faculty, lecturers, senior lecturers and distinguished senior lecturers to complement a review of non-tenure-track faculty taking place by the Committee on Faculty Equity and Diversity. The Task Force heard substantial feedback over the course of this review about the status of these categories of faculty, and summaries of these findings are included following the conclusion of this report. While the interests of clinical faculty emerged over the course of this review, per our charge, clinical faculty — who are hospital employees — were not included in the Task Force's scope of work.

The Task Force is grateful for the contributions of so many faculty and staff who supported this review, and for the many past and present efforts advocating for enhanced diversity, equity and inclusion at Brown. This report is intended to add to and strengthen — not detract from — actions ongoing across the Brown community to recruit faculty from historically underrepresented groups to enhance excellence.

The Task Force submits this report with the hope and expectation that members of the community will read the assessments and proposed recommendations outlined in the Executive Summary, and commit to being part of the overall solution.

Ultimately, excellence in research and education is only fully achievable with the contributions of diverse and exceptional faculty. For far too long, women have been underrepresented in academia in faculty ranks, including at Brown. Brown University has the opportunity to be a global leader in academic innovation and creativity in research and education through inclusive excellence. The findings and recommendations presented here contribute to achieving this vision.

EXECUTIVE SUMMARY

Brown University seeks to fulfill its mission at the very highest levels by excelling in innovative education, consequential research across disciplinary boundaries, and meaningful community engagement and impact. Achieving these aspirations requires attracting and supporting the most talented individuals who bring diverse backgrounds, identities, experiences and perspectives and providing an academic environment that values and benefits from the full contributions of all members. In fact, promoting diversity, equity and inclusion has been a strategy to achieving academic excellence at Brown for the last decade, and these are bedrock values to Brown's *Pathways to Diversity and Inclusion: An Action Plan for Brown* (known as the DIAP).

It is in this context that in September 2021, President Christina H. Paxson and then-Provost Richard M. Locke appointed the Task Force on the Status of Women Faculty. Recognizing that women have been historically underrepresented in academia in faculty ranks nationally and at Brown — and that data reported in the recent DIAP annual report underscore persistent gaps — the Task Force was charged with assessing any disparities in opportunities and outcomes between similarly situated women and men on the Brown faculty and making recommendations to the President and Provost for changes that advance the University's mission of education and research.

Over the course of more than a year, the Task Force collected, evaluated and deliberated over comprehensive quantitative and qualitative data related to numerous aspects of the faculty experience at Brown, such as research, teaching, service, mentoring, assigned research space and campus climate. Members analyzed datasets provided by several administrative units; solicited input from Brown faculty in a variety of forms, including conversations with and anonymous feedback from current faculty members as well as former members of the faculty who have left Brown; and incorporated feedback from several University committees to prepare this final report.

Members of the Task Force also considered past initiatives at Brown focused on many of the same questions being posed today, including issues of representation, equitable working terms and conditions, opportunities for career advancement and overall climate for women faculty (see [In Brief: Historical Context](#)). The Task Force acknowledges the academic leaders, faculty, staff and students who have devoted enormous effort, and sometimes entire careers, to hasten diversity, equity and inclusion at Brown. This report is intended to amplify these voices and contribute to actions taking place across the Brown community to recruit faculty from historically underrepresented groups to enhance excellence.

The report is organized by the following major categories of issues of significance to women faculty: [Representation of Women Faculty](#), [Conduct and Climate](#), [Faculty Salaries by Gender](#), [Human Resources Benefits and Information](#) and [Service Load](#). Each section includes general assessments, salient findings and key recommendations to promote change. There is also a section addressing additional resources to [Support for Chairs and Heads of Hiring Units](#) in these vital leadership roles.

What follows in this executive summary are highlights of just some of the major Task Force findings and recommendations for changes necessary to advance the University's mission of education and research.

HIGHLIGHTS OF FINDINGS

General: In several areas, the Task Force found no gender-based differences, including assignment of laboratory space, access to research resources, tenure rates, documented assignment of student advisees, selection of internal research awardees, salary for men and women lecturers, faculty hiring across disciplines relative to the representation of women in candidate pools, and appointment of faculty to endowed chairs in recent years. A summary of some of the datasets analyzed are in [Appendix A — Qualitative Data](#) and [Appendix B — Quantitative Data](#).

Disparities and deficiencies were found, however, in several critical areas, comprising the remainder of highlighted findings:

Representation: Women continue to be underrepresented on the Brown faculty across all ranks and in all disciplines relative to the national pool of Ph.D. candidates. This is especially the case in STEM and life and medical sciences fields. Only 36% of regular faculty (33% of tenured/tenure-track faculty, 27% full professors and 62% lecturers) are women. Regular faculty includes tenured/tenure-track faculty and lecturers. These percentages have changed little since the 2011-2012 academic year, and these data are similar to those of peer institutions.

Conduct and Climate: Some Brown faculty recounted instances of being subjected to behavior inconsistent with Brown's Code of Conduct, including perceived harassment on the basis of sex and/or race, disrespectful and dismissive language, and a lack of dignity and respect. Faculty also recounted forms of retaliation after they filed reports of harassment by faculty members who have power over their career advancement.

Salary by Gender: There are statistically significant salary differences between men and women faculty at Brown. A comparison of the FY21 median salaries by gender shows that the average median salaries for women at Brown are 88% of men's (461 men, 228 women). If analysis is restricted to faculty who started at Brown on or after July 1, 2012, there is no statistically significant gender-based difference in salaries (182 men, 121 women). Time in rank is a contributing factor (see below), but more analyses are needed to establish the other origins of the salary gap by gender. The current analysis was limited by the available information (e.g., home department information was removed to protect confidentiality). The analyses of salaries did not take into account teaching, scholarship or service merits.

Time in Rank: On average, women are in rank at associate professor level for two years longer than men (135 men, 60 women). If analysis is restricted to faculty who were promoted to full professor within the last 10 years, the time in rank gap narrows and is not statistically significant (51 men, 33 women). Across divisions, the humanities are characterized by the smallest difference in time at the rank of associate professor, and life and medical sciences, physical sciences and social sciences show the greatest gender differences. The longer time women are in rank at associate professor level on average, as compared to men, is a significant factor contributing to the gender pay gap.

Human Resources Benefits and Information: Faculty reported a lack of transparency and understanding of Brown employment-related policies and difficulty finding the right person to get accurate, timely information about benefits and other human resources matters. Depending on the issue (e.g., child birth/bonding or care of an elderly parent), this often has a disproportionate impact on women.

Service Load: Based on University-wide data provided by the Office of the Dean of the Faculty and the College, the Task Force found no systematic gender difference in the percentage of women and men faculty assigned to University committees or to undergraduate advising. However, senior women are underrepresented on the faculty and therefore, as a group, women faculty do more service on University committees than men. Further, women faculty reported feeling that they contribute substantially to undocumented and often unrecognized service, such as student mentorship. Accounting of faculty service at the department level is uneven and not systematic.

SUMMARY OF RECOMMENDATIONS

While the issues that the Task Force identified are not specific to Brown and, for the most part, are representative of the experiences of women nationally, Brown has the opportunity and the responsibility to lead by addressing documented inequities and removing barriers that disproportionately impact women faculty. To make Brown the University of choice for all faculty, the Task Force recommends the following:

1. Prioritize the recruitment and hiring of women faculty across all ranks. In collaboration with the Office of Institutional Equity and Diversity, provide data from the Affirmative Action Plan to all hiring units regularly on faculty composition at Brown benchmarked to the pool of earned Ph.D.s nationally by discipline, and offer support on proven strategies to promote equity in hiring practices.
2. Increase the retention of women pursuing academic careers. In collaboration with the Office of University Postdoctoral Affairs, build strategies to reduce the disproportionate attrition of women during postdoctoral training as one way to increase the representation of women in faculty job search applicant pools. Pay special attention to enhancing programs to retain women in STEM and life and medical sciences fields.
3. Eliminate the gender pay gap within five years. Target the main drivers of the pay differential between men and women faculty including, but not limited to, time in rank at the level of associate professor and the overall number of senior women on the faculty, especially in STEM and life science fields.
4. Create a faculty-focused human resources support mechanism for all faculty to access timely and accurate information. In collaboration with University Human Resources, the Office of the Dean of the Faculty, the Division of Biology and Medicine and the schools of Engineering and Public Health, this office/person(s) would also contribute to highlighting factors that have disproportionate, negative impact on women's careers, including family care responsibilities.
5. Underscore that adherence to Brown's Code of Conduct is a requirement of all faculty, staff and students. Elevate awareness of the Code and its purpose as well as policies and procedures related to bias, harassment and misconduct. Provide tools and resources to conduct and promote respectful discourse, including support for department chairs.
6. Improve Brown's system of documenting faculty service. In collaboration with the Dean of the Faculty, Division of Biology and Medicine and Schools of Engineering and Public Health, ensure that all significant service is recorded, accessible and reviewed at department, center, institute and dean levels.

7. Enhance resources provided to department chairs and center and institute directors. Offer additional professional development in areas that fall outside of the typical training and experience of an academic professor.
8. Appoint an implementation team to develop an action plan to prioritize, spearhead and track implementation of the recommended actions. Given the extensive, often structural issues identified in this report, the Task Force recommends that the administration partner with the Faculty Executive Committee to create a plan of action to ensure progress and accountability over the short and longer terms, and a team to oversee and report on implementation over time.

It is noteworthy that, per the original charge, this report focuses primarily on tenure-track and tenured faculty. However, over the course of its work the Task Force reviewed available data on and solicited input in various forms from lecturers, senior lecturers, distinguished senior lecturers and research faculty. Lecturers and research faculty are critical to achieving Brown's growth plans and to continued innovation in research and education. A summary of findings is included following the conclusion of this report and will be shared with the Committee on Faculty Equity and Diversity for their current review of the status of lecturers and research faculty at Brown.

CONCLUSION

Although this is not the first time in Brown's history the University has evaluated the status of women faculty, members of the Task Force pursued the charge with optimism that at this juncture, given evidence of progress to create a truly diverse, equitable and inclusive community, its work would prompt meaningful action in critical areas. After all, diversity, equity and inclusion are paramount to cultivating a robust scholarly environment, as is having systems, policies and procedures that promote and ensure equity across every dimension.

The Task Force looks forward to the actions that will result from this report.

REPRESENTATION OF WOMEN FACULTY

Representation matters. The importance and benefits of a diverse and inclusive academic community are numerous, and the continued underrepresentation of women and women of color in faculty positions across the U.S. negatively impacts retention of trainees [4, 5] and the quality of science produced by academic institutions [6-8]. In addition, the low number of women faculty has a compounding effect, with universities investing fewer resources overall in women compared to men — especially in STEM and life sciences fields — and limiting the number of peer mentors available to women in academia. (See also [Faculty Salaries by Gender](#).)

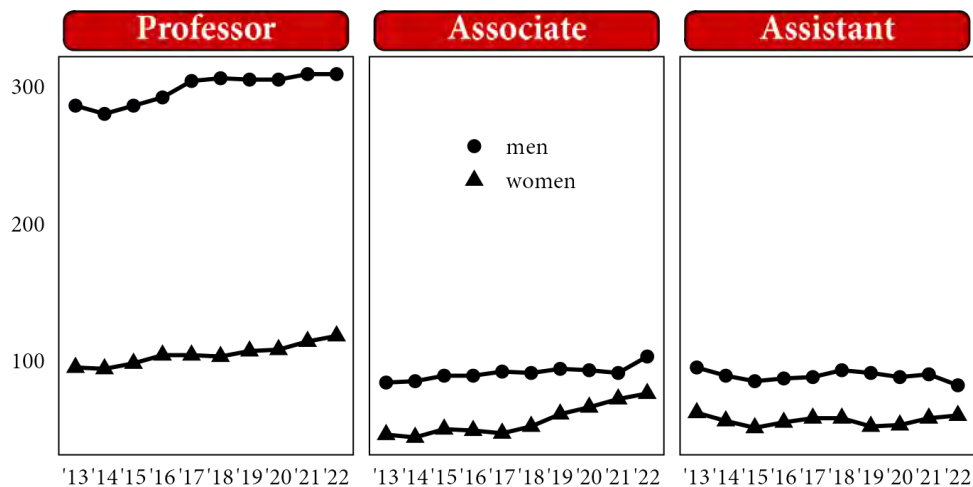


Fig 2: Faculty counts by gender and rank 2013-2022. Data for the University provided by the Dean of the Faculty.

Nationally, for all degree-granting institutions, women are 35% of the faculty at professor and associate professor ranks and, at these ranks, the gender salary gap is the greatest [9]. At Ph.D.-granting U.S. institutions, women's representation has risen slowly by ~0.5% or less per year (from 2011 to 2020). But, notably, the representation of women among new hires has remained flat during this time period and newly hired faculty are still more likely to be men in most fields [10]. Thus, without a change in hiring trends, women will remain underrepresented in academia — particularly in STEM fields — for the foreseeable future [10].

At Brown, similar to national data, women tenured/tenure-track faculty are underrepresented across all disciplines, and especially at full professor rank. In AY 2021-22, about 1 in 3 faculty were women (Fig 1-2) and their representation is even lower among full professors — which are the majority faculty rank at Brown. Women's representation among full professors varies by discipline: 1 in 2.5 in humanities; 1 in 3 in social sciences; 1 in 4 in life and medical sciences; and 1 in 10 in physical sciences. In AY 2021-22 more men were hired into tenured faculty positions at Brown compared to women. But nationally, since 2002, women have earned just over half of all doctorates awarded to U.S. citizens and permanent residents [11]. In 2021, women earned close to 60% of Ph.D.s nationally in non-science and engineering disciplines, and 43% of science and engineering disciplines.

In the physical sciences at Brown, while there has been a marginal increase in women faculty representation since AY 2011-12, only 17% of tenured and tenure-track faculty are women (Fig 4). In life and medical sciences, the percentage of women at the rank of full professor at Brown decreased by 2.5% from AY 2013-22 (Fig 2). This decrease was not because of lack of hiring opportunity; for example, over the same time period, there was ~40% increase in total faculty in the life and medical sciences at Brown.

FINDINGS

The Task Force assessed potential factors contributing to the low representation of women faculty at Brown including hiring, retention and attrition data across all disciplines.

- Women continue to be underrepresented in tenured/tenure-track faculty ranks relative to the national pool of Ph.D. graduates across all ranks and in all disciplines. In AY 2021-2022, only 33% of tenured/tenure-track faculty (27% of full professors) are women. These percentages have changed little since the 2011-2012 academic year (Fig 1), and these data are similar to those of peer institutions. The representation of women faculty from historically underrepresented groups is even lower, and significantly so.
- Fewer women were hired into faculty positions at Brown as compared to men. Over the past 10 hiring cycles, an average of 43 regular faculty were hired each year (tenured/tenure-track and lecturers). Fewer women were hired into tenured/tenure-track positions compared to men (42% women). Of faculty hired into lecturer-track positions, 56% were women. The majority of all faculty (66%) are hired through open searches, with the remaining hired through various other hiring processes (Fig 5). For junior faculty, 77% were hired through searches compared to 55% of senior faculty.
- Based on hiring data and the gender demographics of applicant pools, we did not find evidence for systematic biases against hiring women into faculty positions at Brown. A selection of searches conducted over the last five years shows that of the 75 hires that resulted from them, 60 percent of the searches hired at least one woman. For this select set of searches, at each stage of the process, women represented a growing fraction of the pool of candidates under consideration (Figs 6-7). Except for the physical sciences, the percentage of women hired was at least the same as or larger than the percentage of women faculty who were extended an offer; offers in the physical sciences searches were thought to be competitive within the field.
- The representation of women at Brown declines along the academic career path from Ph.D. to junior faculty, and especially in STEM and life and medical sciences. Currently, across all disciplines at Brown, 52% of graduate students, 45% of postdocs, and 39% of junior faculty are women. The greater decline in the number of women pursuing academic careers post-Ph.D. relative to men contributes to the low representation of women in the pool of applicants applying for faculty positions. This is similar to national data.
- Women are slightly more likely to leave Brown compared to men. On average, 4% of tenured/tenure-track faculty leave the University each year (Fig 8). This figure is slightly higher for women (4.5%) compared to men (3.7%), and nearly twice as high for junior faculty compared to senior faculty (6.2% compared to 3.3%).
- Junior, tenure-track women faculty are slightly more likely to pursue counteroffers through the Office of the Dean of the Faculty. Most faculty retention through the Office of the Dean of the Faculty is successful. In the past eight years, only 15% (n=20) of attempts at retention were unsuccessful (Fig 9). In the same time period, 10% of senior faculty retention was unsuccessful, and 13% of retention for women was unsuccessful. Retention attempts are less common among senior faculty, and over this period women were more likely than men to pursue a counteroffer.
- Brown's support of spousal hiring has been used to recruit an approximately equal number of men and women. Among regular faculty hires, spousal hires are a subset of other hiring processes. The data below is only for spouses that were hired into tenure-track or lecturer-track positions. Over the past three hiring cycles, 43% of regular faculty recruits were hired through other hiring processes. Of those hires, 17% (n=10) were spousal hires. (Spousal hires were 7% of all hires during this period.) The majority of those faculty were hired into a) tenure-track positions, as opposed to lecturer-track positions; and b) humanities and social sciences departments. The 10 hires were evenly split between men and women.

RECOMMENDATIONS

To fulfill Brown's mission of teaching, research and service requires continuing to recruit from the greatest pool of talented scholars. Diversity enhances innovation and real-world solutions that impact society [8, 12].

- **Apply concerted hiring efforts using Affirmative Action strategies to maximize applicant pools and recruitment success.** The use of open faculty searches to increase the diversity of the applicant pool has been successful to recruit outstanding women into some physical science departments at Brown, and these efforts should continue in earnest. This hiring strategy, coordinated through the Office of the Dean of the Faculty, included a nationally advertised search for assistant professorships in any physical science field represented at Brown. Broad-scope searches, not necessarily coupled to one specific department, can help maximize applicant pools and attract candidates whose research often bridges departments and disciplines, which aligns well with Brown's distinctive approach to research and discovery [13]. Cluster hiring strategies are effective in accelerating faculty diversification as reported on a national scale [14] and promoted by funding agencies including through the National Institutes of Health Common Fund [15].

- **Seek to recruit leading senior women scholars to the faculty**, in parallel to broad adoption of effective hiring strategies described above. At Brown, 1 in 2 faculty are full professors, but within this group only 1 in 4 are women. The contributions of senior women will be essential to excel in education, scholarship and research, and to provide role models and mentors to junior faculty — the next generation of academic leaders.
- **Enhance postdoctoral fellowship programs** to retain the number of talented women pursuing academic careers. The disproportionate attrition of women from academic research careers, particularly at the postdoctoral stage, reduces the representation of women in faculty search applicant pools.
- **Provide multiyear discipline-specific demographic data** on faculty and Ph.D. graduates nationally to department faculty and to search committees at the start of a search. Also provide outcomes of prior faculty searches to ensure that search committee members and department faculty have a broader context within which to prioritize desired outcomes of a given faculty search.
- **Continue to apply detailed strategies developed by the Office of Institutional Equity and Diversity** to increase the pool of diverse candidates at the very start of faculty hiring discussions. In addition, all faculty, including those formally appointed to the search committee, should continue to discuss and mitigate implicit biases and structural barriers to hiring and recruiting women and faculty from historically underrepresented groups.
- **Maintain efforts to actively retain faculty at Brown** by preempting counteroffers. This is critical, together with focus on proven hiring strategies, for sustained increase in the representation of women faculty at Brown. (See also [Support for Chairs and Heads of Hiring Units](#).)
- **Enhance family-friendly benefits** and other human resources programs so that Brown leads in this domain. The competition for outstanding women faculty and all faculty from historically underrepresented groups is fierce — as it should be. By creating a supportive environment, Brown will ensure that all faculty have the potential to excel and accomplish their best research at Brown. (See also [Human Resources Benefits and Information](#)).
- **Continue to support spousal hiring**. Brown does significant work to accommodate dual-career couples by facilitating and supporting academic or other positions for partners. This is especially important in Providence given the relatively small number of employment opportunities in the area as compared to our peers in larger cities. Women faculty are more likely than men to be in an academic partnership, rates of dual hiring are higher among women respondents than men, and men are more likely than women to have stay-at-home partners. Nationally, about 70% of men with tenure have children compared to about 45% of women tenured professors [16]. Even though each situation is unique, at the time of the search, chairs, hiring heads and applicants should know Brown may be able to support dual-degree couples early in the process. For example, an early identification system, in which applicants' spouses may register their credentials and interests to an administrator — other than a member of the department or search committee — could be helpful to identify and begin to address spousal hiring early on.

CONDUCT AND CLIMATE

As vital as representation of women and faculty from historically underrepresented groups is to the academic excellence and mission of Brown, so, too, is the overall campus climate and ensuring that the environment is inclusive and upholds the rights and dignity of all members. And while attention has been devoted at Brown to underscoring standards of community behavior and conduct, substantial work remains to achieve this ideal. Unconscious and conscious bias and harassment of women in academia nationally is pervasive and has been documented extensively, and includes overt examples of sexual and gender harassment to microaggressions [17, 18].

Brown faculty recounted instances ranging from being subjected to language that was disrespectful and general hostility that included perceived harassment on the basis of sex and/or race to bullying. In some instances, unacceptable behavior was tolerated by department faculty and department chairs. While the examples of behaviors that women faculty at Brown described do not stand apart from the national data, as described, they could be a violation of Brown's values, policies and community standards, and hinder the University from achieving its aspirations.

FINDINGS

- Brown faculty recounted being subjected to repeated forms of hostility, including negative or dismissive comments, intimidating body language or other forms of bullying. These examples occurred across campus and were independent of race. Faculty also recounted forms of retaliation after filing reports of harassment by faculty members who have power over their career advancement. [Appendix A — Qualitative Data](#) includes a summary of examples from faculty that were expressed through multiple mechanisms including the anonymous portal, survey feedback from women who left Brown and multiple focus groups. Even a single incident of bias, discrimination or harassment can have major consequences on the careers of faculty.
- Intersectionality places a significant burden on women faculty of color ([Fig 10](#)) and these faculty have far fewer colleagues with similar lived experiences from whom to seek support. A particularly prominent concern relates to the ways in which faculty from historically underrepresented groups are often required to represent diversity and inclusion in the classroom or other public-facing events in ways that they can experience as tokenism. In addition, University and department committees require diversity for improved decision making, but the University has not yet achieved sufficient diversity in the faculty to distribute this service load. This places an additional and often enormous service burden on faculty from historically underrepresented groups that is not demanded of others. Women faculty reported receiving hostile responses after attempting to refuse service requests that were far beyond those asked of men colleagues. Some wondered if they were valued primarily for their work or simply for their representation, rather than their intellectual accomplishments and contributions.
- Issues that were frequently cited included instances of a lack of dignity and respect that are inconsistent with Brown's Code of Conduct and not covered by Title IX [19]. For example, individuals knew of the option to report harassment or discrimination by filing a complaint with the Office of Institutional Equity and Diversity at brown.edu/about/administration/institutional-diversity/incident-reporting, but we heard of instances of disrespectful language and a culture in departments of resigned acceptance of ongoing disruptive behavior carried out by one or two faculty members that may not rise to the level of a policy violation. Department chairs also raised their frustration with continuing behavior of some faculty in their departments that they felt ill equipped to address. Examples of behaviors included belittling comments at faculty meetings, and in one case overt hostility from the department chair. Faculty recounted situations that were painful and divisive, they did not know who to turn to, the disruption caused by individuals consumed time and energy, and there was a lack of leadership.
- Departmental cultures that tolerate behaviors that do not adhere to Brown's Code of Conduct, and unclear processes to address these behaviors, were cited as some of the reasons that senior women left Brown. Women faculty report being subjected to repeated forms of perceived harassment, including women faculty from historically underrepresented groups, and receiving no support to remediate their concerns.
- Objective data from the 2018 Brown Campus Climate Survey supports the Task Force findings. One in five women from historically underrepresented groups do not feel that they have supportive social networks in their departments at Brown compared with 15% of non-HUG women, and 8% of men ([Fig. 10-11](#)). Further, twice as many HUG women (15%) compared to HUG men (7%) feel that their departments are not a welcoming place for them.

RECOMMENDATIONS

- **Establish and promote consistent policies and procedures across the University** to mitigate, address, report and apply consequences regarding behaviors that are inconsistent with Brown's Code of Conduct, and to protect those who report from retaliation. Special emphasis should be placed on informing department chairs and senior faculty of their roles and responsibilities. Faculty-on-faculty and faculty-on-staff bullying, microaggression and harassment often take place at the level of the department where it was noted that some chairs and faculty tolerate such behavior. Although some faculty report instances of bullying and harassment to their department chairs, alternative reporting procedures and consequences for inappropriate behaviors should be more widely publicized and well known.
- **Introduce Code of Conduct training modules** individualized for department chairs, faculty, staff and graduate students so that standards are clear. Community standards of behavior and civil discourse should be public and easily accessible. Members of the community should also know how to "provide direction to others whose actions may be harmful or counterproductive to themselves or the community" (Brown's Code of Conduct, Section 3.3).
- **Hold faculty accountable for their actions** in order to achieve a culture of inclusivity and respect. Academia across the country is rife with examples of abuse of power by individuals who act with impunity by virtue of the "master-apprentice" model where one faculty member can yield control over the career trajectory of a student, postdoc or junior faculty member. Consequences for faculty who are found to have violated Brown's policies are necessary, as is culture change driven by members of the community, especially senior faculty and department chairs, who have access to the resources and opportunities they need to be successful teachers and scholars.
- **Create a University-wide mentorship program for faculty**, especially all junior faculty, to ensure consistent, high-quality mentoring by trusted, experienced faculty residing within and outside of their home department.
- **Release aggregate data to the Brown community** from climate surveys and on violations of Brown's Code of Conduct policies to raise awareness and to promote culture change.

FACULTY SALARIES BY GENDER

Women faculty in the United States are paid less than men, and this disparity remains when accounting for such factors as time in position (or “in rank”). Women in full-time faculty roles make roughly 82 cents for every dollar their men counterparts earn, according to the American Association of University Professors’ annual faculty compensation survey [20]. Based on data from over 2,000 higher education institutions, the Chronicle of Higher Education reported that the average U.S. professor’s income for the 2020-2021 academic year (nine-month salary) was \$95,159 for men and \$79,090 for women [21]. This trend holds when data are restricted just to full professors, with men earning, on average, \$131,160 compared to \$111,953 for women. Furthermore, positions dominated by women, including lecturers, are compensated at levels that are lower than positions held primarily by men (see also [National Level Structural Challenges and Issues in Brief](#)).

It is therefore not surprising that we heard many concerns about equity in compensation for women compared to their colleagues who are men, and this issue was the second most frequent comment from the anonymous comment solicitation launched by the Task Force at the start of the review process. This concern also came up frequently in focus groups and in the two town hall meetings. Many women faculty who felt they were compensated less than their men colleagues pointed to the logistical challenges faced by women in garnering outside offers of employment as a means to negotiate for a higher salary. For example, women said it was harder to negotiate outside offers because their spouses could not easily move positions.

Intersectionality was also raised, with concerns that women of color may be at an even greater disadvantage in terms of pay equity. It is important to note that given the relatively small number of women of color on the faculty at Brown, the Task Force was not able to explore this issue.

Faculty also expressed concern about the way equity reviews that have revealed gender-based salary differences were undertaken and the lack of transparency into the process by which adjustments were made. Of note, faculty commented on the several ad hoc salary equity adjustments over the past years made by the Office of the Dean of the Faculty to bring women’s salaries more in line with men’s salaries, pointing out that these adjustments were not made retroactively and therefore did not address past pay discrepancies. A targeted adjustment took place in FY21 for some full professors in humanities and social sciences after a review of salaries revealed significant differences in pay by gender. In FY22, the University engaged a consultant to study faculty salaries, including by gender.

FINDINGS

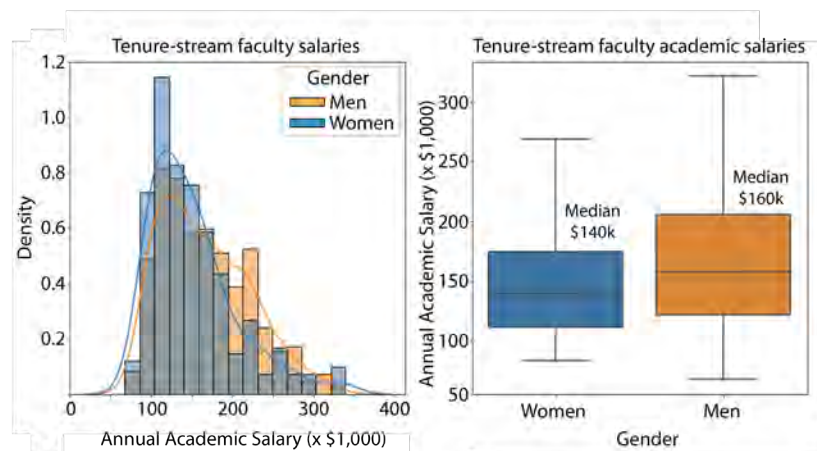


Figure 12. Distribution of faculty salaries by gender for all ranks. Data for 2022 (461 men, 228 women). See Figure 12 in Appendix for additional information. (Note: Individual data points are not shown in the graphical illustrations to protect confidentiality, but these data were included in the analyses.)

- There are statistically significant salary differences between men and women on the faculty at Brown. A comparison of the FY21 median salaries by gender shows that the median salaries for women at Brown are 88% of men’s (461 men, 228 women; 143 assistants, 154 associates and 392 full professors, [Fig 12](#)). If analysis is restricted to faculty who started Brown on or after July 1, 2012, there is no statistically significant gender-based difference in salaries (182 men, 121 women; 143 assistant professors, 83 associate professors, 77 full professors). Beyond time in rank (see below), further analyses should establish the origins of the salary gap by gender to inform actions going forward. Two factors combined to limit

the current analysis: (i) the task force had limited access to salary information to protect confidentiality (e.g., home department information was removed), and (ii) the number of potential contributing factors to salary, which would have required multiple testing and, as a result, a decrease in statistical power. The analyses of salaries did not take into account teaching, scholarship or service merits. For the purposes of the analyses mentioned here, all positions were normalized to a nine- or 10-month contract and did not include summer salary.

- A driver of the salary differential is the longer time women are in rank at associate professor level as compared to men. On average, women are in rank at associate professor level for two years longer than men (135 men, 60 women, [Fig 13](#)). Time to promotion to full professor together with time from tenure explain ~25-30% of the variation in salary between men and women. There was no statistically significant direct connection between gender and salary after considering time in rank, but this does not exclude the possibility that gender is linked indirectly, through other drivers beyond time in rank, to salary. The delayed promotion of women by about two years on average, and the fact that twice as many women as men were in associate rank for more than 10 years results in loss of earnings as well as the likelihood of delayed opportunities for career advancement such as academic journal/book editor positions, leadership positions, consideration for certain prizes and honors, and more.

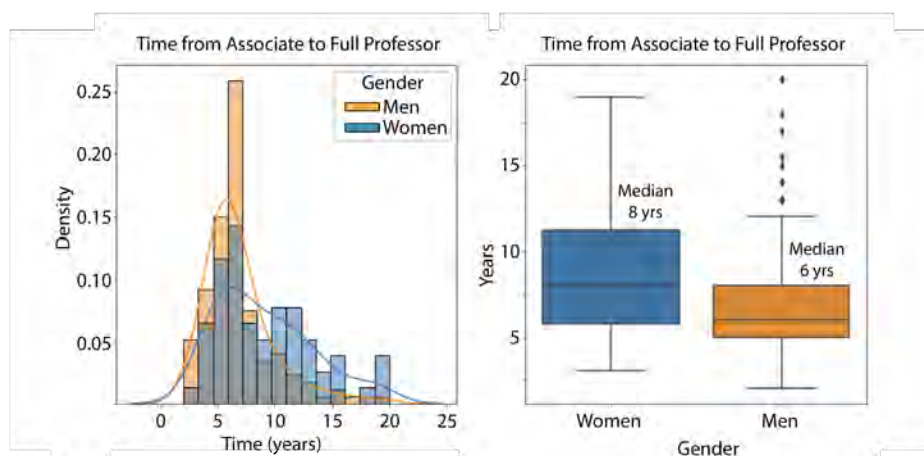


Figure 13. Distribution of time from associate to full professor (years) for tenure stream faculty by gender. Data for 135 men and 60 women (Data for 2022). See Figure 13 in Appendix for additional information.

- The smallest difference in time at the rank of associate professor occurred in the humanities, while the life and medical sciences, physical sciences and social sciences show the greatest gender differences. ([Fig 14](#)).
- Some women faculty would prefer having performance review mechanisms in place that would ensure competitive compensation rather than requiring solicitation of counteroffers.
- Based on available data, for the past eight years, similar numbers of women and men pursued a counteroffer, although the sample size is small. Most retention attempts at Brown are successful: Over the past eight years, only 15% (n=20) were unsuccessful. In the same time period, 10% of senior faculty retention attempts were unsuccessful, and 13% for women were unsuccessful. In any given year, we can examine what share of faculty pursue a counteroffer ([Fig 9](#)). Retention attempts are less common among senior faculty, and over this period women were more likely than men to pursue a counteroffer.

RECOMMENDATIONS

- **Eliminate the gender pay gap within five years.** This could be done using several different approaches reflecting the different factors that drive the gender pay gap, including the following:
 - Introduce a formal year-3 review of all associate professors at the department level to provide timely guidance and advice for promotion to full professor. This check-in point for associate professors could help mitigate a number of possible factors contributing to the longer time women spend at the rank of associate professor on average, compared to men. This formal review should be part of the faculty member's package for future promotion to full professor. The possibility of introducing a year-3 assessment would necessarily be considered by the full faculty, following standard processes for amending the Faculty Rules and Regulations and the Handbook of Academic Administration as necessary [22].

- Conduct reviews of all associate professors at the department level at regular three-year intervals from the previous review (or more frequently if requested by the faculty member) to ensure continued constructive, supportive feedback to meet the department's standards and criteria for promotion.
- Continue ongoing actions including biennial salary reviews by gender and for divisions and ranks at the dean's level. Regular reviews can identify potential systemic pay inequities early on and enable deans to take timely action. This should include tracking entry-level compensation as a critical factor in ensuring equity in compensation [23]. These actions should mitigate the need for periodic salary adjustments that have not addressed past salary differences.
- **Offer workshops organized by the Offices of the Dean of the Faculty and Provost** to provide information and guidance for associate professors on promotion to full professor, including emphasizing awareness of department standards and criteria.
- **Improve transparency around salary data by gender and the salary merit process.** Brown already publishes average annual salary data by rank and discipline through the Office of Institutional Research [24]. Pay transparency has been shown to promote equity and equality of pay [25]. We recommend that the administration work with the Committee on Faculty Equity and Diversity to increase transparency by considering the following:
 - Make salary data by gender available through the Office of Institutional Research website and include explanations of known factors, including time in rank, that contribute to gender differences in median salaries [24].
 - Communicate merit and equity raise percentages (rather than the aggregate).
 - Publish the median salaries by quartiles for each division and rank (this information is available to chairs, but not to the general faculty).
- **Develop a mechanism for department chairs to share best practices,** including communication about the compensation process (see [Support for Chairs and Heads of Hiring Units](#)).

HUMAN RESOURCES BENEFITS AND INFORMATION

To achieve inclusive excellence, Brown University must provide accurate and timely support for its faculty. Often, there is a narrow window of time when support is needed, and access to benefits and other human resources can be the difference between retaining or losing talented faculty. For example, the availability of timely human resources information is particularly important for women faculty at certain periods of their career, including for childbirth and child bonding, and other family care responsibilities that are disproportionate to their male colleagues [26].

The Task Force heard concerns from faculty about not knowing who to go to for information about benefits, as well as about receiving inaccurate information about benefits from their departments (chairs or department managers). These concerns were shared via focus group discussions, anonymous feedback, the 2018 Campus Climate Survey (Fig 15), Collaborative on Academic Careers in Higher Education (COACHE) survey data (Fig 16) and meetings with department chairs. The main issues raised were: i) The source of timely and accurate information on the availability of human resources and support; and ii) childcare and family policies, especially parental leave, but also the balancing of family and work responsibilities.

FINDINGS

- There is a lack of understanding of Brown human resources policies as well as difficulty identifying the human resources professional to get accurate, timely information about benefits. The Task Force heard of accounts of departments giving incorrect information to faculty seeking help or leave for personal or family-related medical reasons. In one case, a faculty member was asked for protected medical records for proof of medical illness. Moreover, department chairs report feeling underprepared around human resources-related Brown policies and faculty support mechanisms (see [Support for Chairs and Heads of Hiring Units](#)).
- Childcare and other family caregiving responsibilities were raised as a major challenge that disproportionately impacts women, and especially junior faculty — a challenge that is well documented nationally. Some members of focus groups also mentioned being assigned significant department service soon after giving birth. In the COACHE climate survey, women responded less positively to finding the right balance between professional/personal and childcare responsibilities relative to male faculty.
- The COVID-19 pandemic amplified challenges associated with childcare and family care that disproportionately impact women's careers. This was raised in particular by women who have childcare and family care responsibilities.

RECOMMENDATIONS

- **Review and develop a transparent and efficient process** for faculty to access timely and accurate information about human resources policies and benefits. The newly established system should include professional staff with knowledge of faculty affairs and human resources to ensure clear and consistent advice to faculty. Existing University Human Resources staff may not have sufficient knowledge about the specific challenges and policies affecting faculty, and department chairs and department managers are not equipped nor trained to address faculty needs in the human resource domain (nor should they be expected to take this on) (see also [Support for Chairs and Heads of Hiring Units](#)).
- **Improve access to high quality child-care facilities.** The logistical challenges of working full time and arranging for high-quality childcare are significant. Access to childcare is essential for faculty to fully engage in their teaching, scholarship and research. Brown has affiliations with the YMCA Mt. Hope Child Care Center and the Brown/Fox Point Early Childhood Education Center, and only one of these is licensed to serve children from the age of six weeks. This is a major issue that impacts parents across the University including staff, students, postdocs and faculty. The Task Force recognizes that there is a documented shortage of high-quality child care in Rhode Island, and that this is an especially challenging issue to address [27]. Exploring and identifying options to expand access to high-quality childcare facilities proximate to campus, including for infant care, would make a major difference in the lives and careers of Brown parents, and especially women.
- **Review paid parental leave and family care leave policies,** including for research faculty. The Family and Medical Leave Act entitles all employees to 12 weeks of paid or unpaid leave in a 12-month period. Brown's six-week paid parental leave is in the middle of the range of peers, which currently include eight weeks at Princeton, 12 weeks at Yale Medical School and four weeks at Johns Hopkins [28-30]. Tenured/tenure-track faculty also have the benefit of the option to apply for teaching relief for the birth or adoption of a child, but this benefit is not available to research faculty. Multiple women faculty noted that individual negotiations about service during parental teaching relief were not satisfactory, prompting the need to evaluate service requirements for faculty on family leave. These comments reinforce the concerns raised about undocumented service and the need to have a fair process for assignment and to improve accounting of service (see [Service Load](#)).

SERVICE LOAD

National data show that women faculty report spending more time, on average, in service, including undocumented (shadow) service to support their departments and universities, compared to their male colleagues, and that this can negatively impact compensation and time to promotion [31-33]. These national data mirror feedback from faculty at Brown, and faculty in the women of color focus group reported feeling disproportionately asked to perform service. In anonymous feedback and in all focus groups faculty commented on this issue and felt that disproportionate shadow service was a significant factor explaining the longer time at associate professor rank for women compared to men (Fig 17).

In addition to feeling that they do more total service than men, women faculty reported feeling that the quality of service they were asked to conduct was different than that of men, who were more likely to hold influential positions on University committees as compared to departmental service roles. Women faculty also noted that service does not seem to be as valued as other faculty responsibilities, and that this likely resulted in women receiving less recognition for their contributions during an annual departmental performance review. They also reported feeling that the student assignment number failed to capture the actual effort and quality of advising, i.e., students are not asked to evaluate the quality of the advising that they receive at the department level. Women faculty recounted that their student mentees often raised personal/emotional problems with them, which they do not necessarily share with men advisers.

A major challenge in assessing this issue is that there is no comprehensive central database at Brown that captures department-level service across the University and, by definition, undocumented service is not on record. This includes undergraduate advising that is not captured in the student's official record (see below), graduate student advising, service on various department committees including search committees, and preparation and writing of institutional proposals (e.g., predoctoral and postdoctoral training grant applications). Related to this last category of service, while institutional-level grant proposals that are funded are visible, there is no systematic mechanism to acknowledge or give credit to faculty who contribute effort to grant preparation regardless of funding outcome.

SERVICE ON UNIVERSITY COMMITTEES

Data recorded by the Office of the Dean of the Faculty documenting faculty service on University committees by gender show that: A higher percentage of senior faculty serve on University committees compared to junior faculty (for regular faculty, 72% are senior but they represent 83% of committee members of those who are regular faculty); and a higher percentage of women serve on University committees compared to their representation in the general senior faculty population. In the last few years, women have made up approximately 30% of the senior faculty but they represent 35% of University committee members (Fig 18).

UNDERGRADUATE ADVISING

We also reviewed data provided by the College on documented faculty advising for undergraduates from 2012 to 2021. These data show that an increasing percentage of the faculty are participating in undergraduate advising (~30% in 2012 to ~50% in 2021; Figs 19-20). During this same time period, a similar percentage of women and men across all faculty (tenured, tenure-track, lecturers), on average, advised at least one undergraduate (64%), and the same held for tenured/tenure-track faculty (Fig 21).

Lecturer-track faculty are more likely to advise first-year and sophomore students (no significant difference by gender). Concentration advising is shared equally between tenured/tenure-track and lecturer-track faculty, and there is no significant difference based on gender (Fig 22).

We also viewed data showing undergraduate advising by faculty by discipline (physical sciences, humanities, social sciences, life and medical sciences) and by gender (Fig 21). A greater percentage of faculty in the physical sciences advise first-year and sophomores, compared to the average across all disciplines, and a greater percentage of faculty in social sciences and the life and medical sciences advise concentrators. Women faculty in the humanities are somewhat more likely than men to advise sophomores (37% women, 32% men), and women faculty in the social sciences are somewhat more likely than men to advise concentrators (55% women, 49% men).

Of regular faculty who were assigned as undergraduate advisors, there is no systematic difference by gender when comparing the number of advisees. The median number of first-year and sophomore advisees per faculty member is 5 for both men and women, and for concentration advisees 8 (men) and 7 (women). Lecturers advise more concentrators compared to tenured/tenure-track faculty, and men lecturers (13) advise more students on average than women (10). The median numbers of concentrators assigned to tenured/tenure-track faculty based on gender was 7.5 (men) and 6 (women). There are no significant gender differences by broad disciplines or between junior and senior faculty.

FINDINGS

- We find no systematic gender difference in the percentage of women and men faculty assigned to University committees or to undergraduate advising based on data provided by the Office of the Dean of the Faculty and the College. However, senior women are underrepresented on the faculty and therefore, as a group, women faculty do more service on University committees than men (Fig 18).
- Women faculty reported feeling that they are contributing substantially to student mentorship and institutional service, but that this service is undocumented and, as a consequence, underappreciated. This was reported by tenured/tenure-track and lecturer-track faculty.
- Accounting of faculty service at the department level is uneven and not systematic. For example, there is no central accounting of graduate student faculty advising. This makes it difficult for department chairs, the Dean of the Faculty and relevant deans to identify trends and outliers.
- Undocumented service and overrepresentation on committees may undermine research productivity and contribute to the longer time women faculty spend at associate professor rank as compared to men (Fig 18).

RECOMMENDATIONS

- **Develop a University-wide system that captures significant faculty service, including in departments and at the University level.** Such activities are essential for students to thrive, for faculty to feel that their efforts are valued, to foster an inclusive community, and for Brown to excel. Such a system would also improve the University's ability to detect trends in service load by discipline, gender and HUG status.
- **Departments should ensure that service assignments and relative faculty loads are aligned with expectations of faculty based on their standards and criteria for reappointments and promotion.** It is particularly important that junior faculty and lecturers not be assigned service that is outside of the department's expectations and outside of their responsibility to mentor junior faculty toward promotion. It is also important to avoid overburdening associate professors given data showing that women faculty spend longer as associate professors on average compared to men as this may negatively impact salary and career advancement opportunities (Figs 12-13).
- **Review department standards and criteria at the level of the dean of the faculty and relevant deans to ensure service assignments and expectations are consistent within departments.** Deans and chairs should also consider heavy service roles such as director of graduate studies and director of undergraduate studies and recommend ways to compensate faculty for serving in these roles. For example, deans might consider added salary compensation and/or course reductions that directly support faculty research. The recent changes to compensate the director of graduate studies based on number of students and time served are meaningful and substantive and could be considered for director of undergraduate studies.
- **Explore ways to create more flexibility in teaching times to help support faculty retain blocks of time for research.** This would be beneficial and more possible with the increased use of the flipped classroom model. Classroom assignments and class enrollments can limit flexibility in teaching times and this can place an additional burden on faculty, especially those with young children or heavy service burdens. Guidance at the level of the Provost could help departments be more willing to consider various models. The new Brown policy that provides 100% of salary for faculty taking sabbatical is a positive change.

SUPPORT FOR CHAIRS AND HEADS OF HIRING UNITS

Department chairs are responsible for all aspects of their units: Financial, academic and operational. As supervisors of faculty members, chairs are charged with assigning service and teaching roles, prioritizing space and department resources and recommending faculty annual salary merit increases. They oversee hiring and retention processes and make recommendations to their deans on offer packages to new faculty. More broadly, they are responsible for running a department in a fair and equitable way and monitoring the overall climate.

Department chairs play an essential role in creating a cohesive community. They are expected to ensure equity in teaching and service assignments; resource allocation; and recognizing, rewarding and intervening in a timely way to retain faculty. Their actions have a direct impact on the working life and career advancement of faculty. However, the sheer volume and range of responsibilities assigned to department chairs can be extremely difficult to manage, even with exceptional support from department staff and University offices. Department chairs rarely have a background in operations, personnel management, financial planning or human resources. These tasks, in particular, can detract from high-priority academic responsibilities that draw on a chair's expertise and have a more direct impact on educational and research missions of the department.

FINDINGS

Department chairs typically do not have the experience or time to support all of the responsibilities with which they are tasked.

Department chairs conveyed that they often feel ill equipped to confront personnel issues in particular and/or to recognize and manage biased language and inappropriate actions that occur within the department or University. The Task Force heard these comments in focus group discussions and in the larger meeting of department chairs, institute and center directors.

Additional guidance is needed on other key issues. Chairs reported that they would benefit from additional guidance on a number of issues including strategies that would lead to greater success in hiring women faculty, which has been challenging even in broad and diverse searches; weighing service assignment loads as compared to teaching and research in merit increases; conducting annual performance reviews and compensation recommendations; and assessing the productivity of women colleagues after a parental leave and while on maternity leave, as faculty are still expected to do their service assignments while on parental teaching relief (Handbook of Academic Administration, 2022; Section 7.8.3) [22].

Reliable, accurate human resource information is needed. Some department chairs reported that they lacked specific knowledge of questions from faculty related to benefits and human resources, including Brown's medical leave policy, expectation of full-service task load while on parental leave, annual review process while on medical or parental leave, and more (also see [Human Resources Benefits and Information](#)).

RECOMMENDATIONS

- **Unburden department chairs of specific responsibilities that they are not equipped to address, most notably issues related to faculty human resources and benefits** (see [Human Resources Benefits and Information](#)). Review the quality and capacity of administrative support available to departments based on specific needs and mix of needs (teaching, training, faculty number, research facilities, research compliance, pre- and post-award grant support).
- **Assist department chairs in developing a faculty executive advisory group to distribute workload and for informed decision making, if one does not already exist.** This may be especially important for departments with a large number of faculty and could be challenging for small departments. Critically, this group should be diverse and have term limits. The involvement of multiple senior faculty in annual reviews and promotions increases the number of faculty who are informed of department processes and who can provide quality mentorship to faculty.
- **Improve training and support for chairs in areas that are critical for supporting education, scholarship and research,** including:
 - a formal peer to peer mentorship program for new department chairs;
 - an onboarding plan and readily accessible online information to include a concise summary of relevant policies and practices and a list of senior staff for accurate and timely information on frequently needed resources, including human resources, personnel challenges, disputes, research ethics and more;
 - guidance on identifying and attending to inequities in faculty compensation and service load for preemptive retention strategies. (This may help to reduce pursuit of outside offers as a strategy for salary increases.);
 - additional guidance in effective strategies to improve diversity, equity and inclusion, including in hiring and retention; and

- guidance on using the Faculty Annual Reporting system to document faculty service to capture “invisible” labor such as informal advising and mentoring roles. (This will provide more accurate information to department chairs about service load/effort of faculty for performance reviews, and, by centralizing this information from across departments, will allow the Dean of the Faculty and respective deans of schools to identify trends and potential inequities in service. See also [Service Load](#)).
- **The Dean of the Faculty and the respective deans of schools should consider the following support for chairs in annual merit recommendations.** This is a general challenge for chairs and one that is not gender specific.
 - Consider a set of recommendations for chairs in the assessment and allocation of merit increases beyond the average goal. This could include a workshop for chairs, held ahead of the annual evaluation process; a rubric that aligns to departmental standards and criteria; and the involvement of a senior faculty advisory group.
 - Provide guidance to chairs on how to assess faculty performance and merit increases during a year that a faculty member has taken an official leave (e.g., parental, family care, medical).
 - Develop timely communication to the faculty (annually ahead of the review process) that explains the annual merit review process. Baseline merit increases that do not include equity, promotion and retention adjustments have averaged 1.8% AY 2018-2022 (2%, 2%, 0%, 2%, 3%). An explanation of the process could help to remind faculty of the limitations within which chairs are making recommendations.
 - Provide chairs with discipline- and school-specific salary ranges and information about past annual distributions of salaries within the department if they do not already have access to such information.
 - Assist chairs in developing a mechanism for faculty to receive constructive feedback following their merit increase — especially when expectations and actual merit increase are misaligned.

LOOKING AHEAD: IMPLEMENTING THE RECOMMENDATIONS

The Task Force submits its findings and recommendations to President Paxson for assessment and evaluation by President Paxson, interim Provost Larson and incoming Provost Doyle, and with optimism that under their leadership there will be progress to advance the actions called for in this report.

Addressing the full range of recommendations will require a thoughtful and deliberate process that engages multiple governance bodies, University committees, administrative units and officers, as well as schools, institutes, centers and academic departments. There are policies, processes and practices to be enacted, modified and/or dismantled, and adequate financial and human resources will be required for necessary progress.

The Task Force, therefore, recommends that a critical next step — following campus-wide review and discussion of this report — is partnering with the Faculty Executive Committee to establish an implementation team to develop an operational action plan that prioritizes essential activities over short and longer terms. We further recommend that the faculty and entire campus community receive annual updates on the status of efforts underway to promote continued momentum and headway.

CONCLUSION

Brown University is a more diverse community than it was in 1975, and is stronger across every dimension as a result. Yet, disparities by gender persist, negatively impacting the potential and aspirations of scholars — especially those in their early careers — and undermining the University’s capacity to fulfill its mission with excellence and integrity.

Over the course of this review, the Task Force heard “... it’s just a matter of time” that women will achieve full representativeness with respect to faculty employment at Brown. Our belief is that now is that time, and that the University will take deliberate actions to address equity and create the very academic environment required for inclusive excellence. And while many actions called for require administrative approval and support, it is incumbent on every member of the extended Brown community to create the conditions and environment that make Brown University the University of choice, equally, for all faculty.

We would be wise to heed the words of one very prominent alumna, to whom we give the last word:

“... Evidence suggests that many women remain unable to achieve their goals. The gap in earnings between women and men, although smaller than it was years ago, is still significant; women continue to be underrepresented in certain industries and occupations; and too many women struggle to combine aspirations for work and family. Further advancement has been hampered by barriers to equal opportunity and workplace rules and norms that fail to support a reasonable work-life balance. If these obstacles persist, we will squander the potential of many of our citizens and incur a substantial loss to the productive capacity of our economy at a time when the aging of the population and weak productivity growth are already weighing on economic growth.” [34]. (Janet Yellen ’67 speaking at Brown University, 2017)

ADDITIONAL KEY FINDINGS: FACULTY LECTURERS AND (RESEARCH) FACULTY

Brown University’s Task Force on the Status of Women Faculty, formed in September 2021, was charged with assessing any disparities in opportunities and outcomes between similarly situated women and men on the Brown faculty, and subsequently making recommendations to the President and Provost for changes that advance the University’s mission of education and research. This charge also emphasized that the Task Force should focus its review primarily on tenured/tenure-track faculty, noting, however, that to the extent possible given sample sizes, data should be developed and analyzed for research faculty, lecturers, senior lecturers and distinguished senior lecturers. These materials would complement the review of non-tenure-track faculty that the Committee on Faculty Equity and Diversity is planning for the coming year.

The Task Force gathered substantial qualitative and quantitative information about the status of these categories of faculty that are not specifically gender-related but represent significant challenges to individuals in lecturer and (research) faculty ranks. Notably, lecturers and research faculty felt “lesser than” their colleagues who hold tenured/tenure track positions and this, together with other related issues, impedes their ability to excel at Brown. Lecturers and research faculty are critical to achieving Brown’s growth plans and to continued innovation in research and education. In addition to including findings as an addendum to the Task Force report, the materials will be shared with the Committee on Faculty Equity and Diversity to inform their work.

FACULTY LECTURERS

Women make up the majority of non-tenure-track lecturers across academic institutions in the U.S., and the same is true for Brown University [35]. Even though population data for Fall 2021 regarding the distribution of men and women faculty show that women comprise 36% of total faculty, women are the majority in the lecturer rank. From AY 2012-13 to 2020-21, the number of faculty on the lecturer track has grown 35%, with women now comprising 62% of the lecturer faculty body. Through this period, the share of women among lecturers hired into Brown’s regular faculty has decreased from 68% to 63% (Fig 23). In Fall 2022, Brown welcomed 62 new faculty members, 16 of whom were from the lecturer rank, with 10 women and six men [36].

In AY 2020-21, out of the 87 faculty in the ranks of lecturer, senior lecturer and distinguished senior lecturer across divisions, 54 were women. This included 29 women faculty in the humanities, five in life and medical sciences, five in the physical sciences and 15 in the social sciences. With the exception of physical sciences, where the ratio of women to men faculty was 5 to 9, in all other disciplines women lecturers outnumbered men [24].

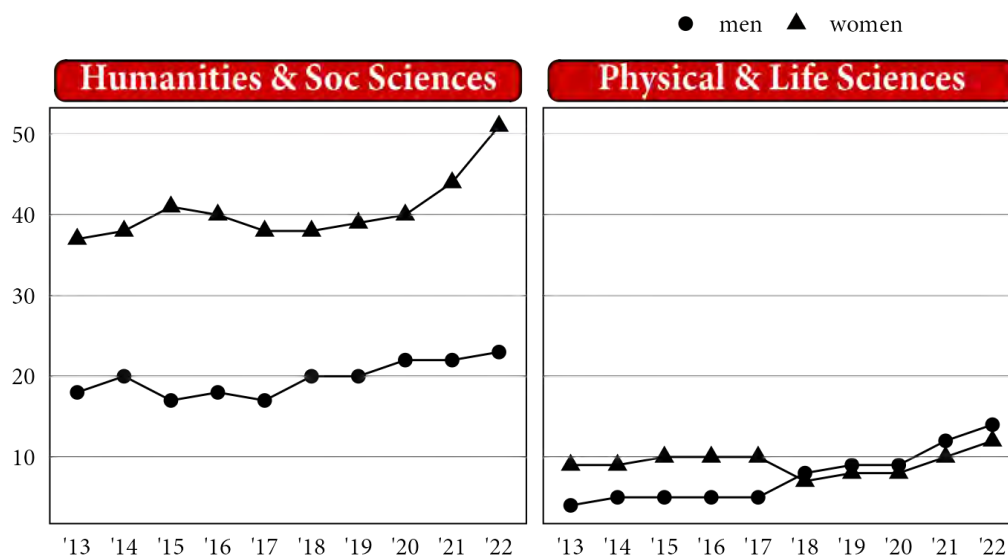


Figure 23. Lecturer track faculty counts 2013-2022 by gender and by broad disciplines. See Appendix for additional information.

The qualitative data and pressing themes that were identified during the Task Force's discovery phase emerged in responses to anonymous questionnaires and during the following three focus group discussions that took place in Spring 2022: Women in the humanities and social sciences, women in STEM, and a third reserved for women lecturers only. Of note: A 10-year gap intervened between the focus group discussions initiated by the task force and the listening sessions with lecturers that the Faculty Executive Committee, under the chairmanship of Mary Louise Gill, launched during AY 2012-13 and continued during AY 2013-14. Some of the issues identified then (for example, the way standards and criteria are vague or vary from department to department in a manner that does not safeguard equity) were prevalent in discussions with the Task Force.

The women lecturers who participated in focus groups and anonymous questionnaires felt that they were impacted by issues that are endemic to the rank — for example, a feeling of powerlessness and job insecurity, limited funding for research especially prior to promotion to senior lecturer, and the unsatisfactory articulation of departmental standards and criteria and of the Faculty Activity Report requirements. Many also spoke of issues that are gender-specific, for example, stereotypical perceptions of their role in academia, gendered language in evaluations and gender pay gaps.

Data provided showed no significant difference in pay between men and women across departments and ranks, but some participants in focus groups and respondents to the questionnaires expressed concern about recent equity pay increases not being retroactive to address the accumulated pay gaps of past years. Faculty pointed to cumbersome and opaque processes to request salary reviews, chairs being unresponsive to initiating such reviews, and lack of transparency regarding salaries among peers of similar rank and time at Brown. Feelings of gender-based inequity in compensation were frequent, and women faculty felt that their men colleagues were assigned less service and lighter teaching loads. Institutional data confirmed that women are more represented among committee members who are lecturers than they are in the general lecturer population (Fig 24).

Some respondents mentioned that they were reluctant to request a salary review because they lacked confidence or knowledge of departmental processes. The majority of comments pointed to the need for improved transparency of institutional data for lecture faculty by rank, time in rank, discipline, salary, gender and HUG status.

FINDINGS

- Faculty in the lecturer-track are more likely to have first-year and sophomore advisees compared to tenured/tenure-track faculty, with no significant differences by gender. Institutional data showed that over the time frame of the past 10 years, among lecturers, 80% of women participated in advising compared to 73% of men (Fig 25).
- The experience of being mentored varies among lecturers depending on division and department. In addition, it seems that the process of being assigned a mentor is either offered or executed inconsistently. Some recent hires expressed their enthusiasm about the formal mentorship plan in the Office of the Dean of the Faculty. There was support for being assigned mentors from outside home departments. Some faculty wished they could have benefited from this program when they were hired, but they embraced the opportunity to serve as mentors. There were mixed opinions about the effectiveness of the formal mentorship system, with some indicating it had not benefited them, and others noting they were not aware that the mentorship program existed and that they mostly relied on informal networks of mentoring and support from within their department or elsewhere in the University.
- A common concern among lecturers, and women lecturers in particular, is the way in which certain aspects of a lecturer's professional experience are not quantifiable or captured appropriately in lecturer reviews, annual or reappointment, and in the annual Faculty Activity Report. The report template relies on metrics for publications and participation in visible committees to inform salary reviews. Such a system disadvantages lecturers whose contribution to the University are measured by other responsibilities and activities. Similarly, departmental standards and criteria are often not helpful in knowing what the evaluation process actually entails, or they may be at odds with the University's guidelines for promotion as written in the Handbook of Academic Administration [22]. There are mixed messages about expectations for publications and the way the Faculty Activity Report is structured compounds the inequity. Some felt that the option to provide a narrative of one's accomplishments was in fact discouraging as it signaled that certain types of service, teaching and research were not deemed important enough to be part of the report template or the "points" system.
- The feeling of not being appreciated and valued for their contribution, less within their departments but more by the University at large, emerged as a common theme in the discussion of various issues among women lecturers. The feeling of marginalization was not always attributed to gender-specific reasons and was felt to be more of a class characteristic, compounded by gender, and a minority point of view was that conditions for lecturers had improved over the last 20 years at Brown. Some spoke of recent and inconsistently enforced rules about being excluded from voting in departmental affairs or for no longer being able to teach 1000-level courses that they had devised and had been teaching successfully for many years. Other respondents felt that the perception of lecturers as workhorses whose academic contributions are not on par with those of tenured and tenure-track faculty are exacerbated by the name "lecturer" and that the solution to this might be found in the renaming of the rank as "professors of the practice."

RECOMMENDATION

- **The Dean of the College and Dean of the Faculty, in collaboration with the Faculty Executive Committee, (and other deans of schools and related governance bodies as applicable) should consider the status of lecturers at Brown.** Issues could include mentorship and career development, clarifying department standards and criteria and annual reviews of lecturers, strengthening job descriptions, tracking data regarding shadow service and the mentorship process, and opportunities to better align the professional profile and contributions of non-tenure-track lecturers with the University's mission.

(RESEARCH) FACULTY

Research faculty at Brown devote their primary efforts to research and they are included in the group of non-regular faculty together with adjunct and visiting faculty. At the time of drafting this report, there are 85 paid research faculty, 43 men and 42 women, at Brown. They comprise about 10% of full-time faculty (regular and research-track). Research faculty hold 12-month appointments and contribute in critically important ways to the University. Many research faculty hold external awards as leads (principal investigators) or co-leads that support their research and salary. They are highly skilled and add invaluable expertise, and they contribute to the research mission of Brown.

Salaries for research faculty are typically provided by external funding sources (Faculty Handbook of Academic Administration, 2022, section 4.6.10) and hold so-called “soft money” positions. However, research faculty are often involved in teaching, mentoring and advising graduate, undergraduate and postdoctoral scholars, and contribute service to their hiring units and to the University more generally [22]. Service and teaching activities by research faculty are not documented systematically.

We have observed in our own departments, and heard accounts from research faculty at focus groups and through anonymous feedback, that they face consistent and ongoing challenges at Brown including job insecurity. In the focus groups conducted by the Task Force, research faculty across departments commented on feeling undervalued and underserved, and that they lacked clear processes and documentation about their responsibilities, expectations and accountability. Many did not know whom in the department they reported to, whom they could contact for help and questions related to benefits and human resources, or what research and mentorship resources were available to them. While the issues summarized below are not gender-based, and at the time of this writing the Office of the Dean of the Faculty is convening a committee to review the status of research faculty at Brown, the Task Force felt it critical to report the findings and to make recommendations.

The Task Force explored whether any prior reports or committees had dedicated time to detailing or improving pathways for research faculty success at Brown. The only report that came forward was a Faculty Executive Committee Ad-Hoc Committee on Leave Policy Regarding (Research) Faculty Findings and Recommendations from 2007. The recommendations in this report focused on equitable access to sabbatical leave funding for research faculty, based on their contributions to fringe benefits collected from external funding sources.

The Operational Plan for Investing in Research, released in October 2022, includes a proposal to increase the number of research faculty, which signals their critical role in growing and elevating research. Brown’s plans to develop and define the role of research faculty and invest in their success are particularly timely. Brown has an opportunity to lead in developing a set of processes and programs that acknowledge the importance of research faculty and that create the ideal environment for our faculty colleagues to excel.

FINDINGS

The following key issues were noted during the discovery phase of the Task Force work:

- Research faculty lack essential support mechanisms and clear pathways to career advancement. Few research faculty were able to describe expectations for promotion/reappointment and they had ill-defined roles within their academic departments or programs.
- Research faculty feel they are “lesser” members of the Brown faculty. Some research faculty have never met their department chairs in a one-on-one meeting and have never been invited to or attended a department faculty meeting. Those who did attend faculty meetings were unclear of their role in discussions and whether they should utilize their voting rights.
- The term “non-regular” faculty implies that research faculty are temporary members of the Brown faculty. This is not the case. Research faculty are voting members of the faculty.
- The route to attaining the rank of research faculty varies greatly. Some faculty were told they could not be postdocs for longer than five years and were moved into the rank of assistant professor (research) with little or no description of their new positions, and no information about expectations or resources. Others were recruited to Brown as research faculty to work in specific areas typically with support and sponsorship of a tenured/tenure-track faculty member.
- Research faculty contribute to student mentoring but these, and other services to the hiring unit, were often not captured in annual evaluations.

RECOMMENDATION

- **Initiate as planned a University-wide process to address the status of research faculty at Brown.** Items for review could include developing clear pathways for mentorship, evaluation, promotion and career advancement. Research faculty need to know that they are valued as members of the faculty, and their importance to Brown's research mission and to the Brown community should be acknowledged and their roles and expectations as Brown faculty more clearly defined.

The work of the Task Force on the Status of Women Faculty is the most recent effort in Brown's history aimed at advancing gender equity and the status of women at Brown.

Even a brief review of Brown University's archival materials suggests that a number of the themes that have emerged in the course of the Task Force's work have been discussed over the course of the past several decades.

The merger of Pembroke College with the men's college of Brown University more than 50 years ago catalyzed priorities that included advocating for the adoption of an affirmative action plan to increase the representation of women faculty and the establishment of a women's center to support women students. By 1977, Brown was subject to a consent decree that led to a set of procedures for hiring and promotion of faculty and the Sarah Doyle Women's Center had been created; by the end of that decade, a Corporation committee on the status of women had released a report that included recommendations aimed at ensuring that Brown undergraduate women would receive an equal education to their male peers. Noting that only 13% of faculty were women, the report emphasized the importance of role models for women students. In 1981, the Pembroke Center was founded, and the faculty voted to establish a Committee on the Status of Women as a successor to previous committees whose work had been partially made redundant by the imposition of the consent decree and the creation of the Affirmative Action Monitoring Committee. The charge to the committee was:

To study and recommend for administrative action changes in University policies and procedures which could improve the status of women in the University. Toward this end, the Committee shall conduct periodic reviews of the status of women at Brown; consult with administrators, faculty, and students; encourage special programs; and issue periodic reports. The Committee is empowered to create special sub-committees consisting of faculty, students, administrators, and alumnae to assist with its work.

As documented in materials for faculty meetings over the course of the next 20 years, the Committee on the Status of Women delivered reports about its work on a regular basis, until it was disbanded and its charge folded into that of the Committee on Faculty Equity and Diversity. Based on these reports, the committee's work appears to have centered on the following issues:

Ensuring equal treatment for women students. Especially in the early years of coeducation, the focus was on trends in admission, the need to address women's concerns in first-year orientation, differential enrollment in (e.g.) sciences courses and concentration selection, and the experience of women students in the classroom.

Increasing the representation of women faculty. As early as 1985, the committee suggested that the representation of women in a field should be equal to their availability and that progress toward that goal should be reviewed annually. Special note was made of the relative lack of women in the sciences and of the need for attention to minority women faculty. The committee expressed support for continuation of the consent decree to ensure adequate attention to these issues.

Creating opportunities for networking and support. The relatively small numbers of women faculty led the committee to recommend measures for forging connections, including by disseminating information about their research interests to make their work more visible to colleagues and students. The committee also held regular events to convene women faculty and students and stressed the need to develop resources for information and support.

Redressing bias and sexual harassment. The committee issued a report in 1988 on sexism at Brown, based on a questionnaire that had been distributed in 1986. Noting in its introduction that the responses "bear eloquent testimony to the anguish experienced by many women at the University," the report described incidents of sexual harassment by instructors of a coercive quid pro quo nature, directed at women undergraduate and graduate students; detailed demeaning language and forms of address as well as sexist jokes and behavior, gendered stereotypes and low expectations for women students; noted the small number of women faculty, especially in the sciences, and the lack of role models for women students; and expressed concerns about differential advising and service loads for women faculty.

Expanding support for parenting and childcare. Throughout the two decades of the committee's work, the need for a maternity leave policy arose regularly — indeed, its last report (2001) mentioned efforts to work with the administration to develop a policy. The minutes of the faculty meeting at which the report was presented also note, "No progress has been made on the day care center" — an understated acknowledgment of the fact that a need for childcare facilities near campus had been reiterated at regular intervals (in the first report from the committee in 1984 and again in 1987, 1989, 1995, 1996, 1997 — and in the 25 years since).

As the report of the Task Force demonstrates, too many of these issues remain relevant today. And the conclusion to this document is in fact strikingly similar to that of the 1988 report, which encouraged all members of the Brown community to work together to create a more equitable and respectful environment. The 35 years that have passed between the two reports and the persistence of such similar concerns — about the representation of women on the faculty, reports of bias and inappropriate behavior, a lack of support for caregiving responsibilities and the need for better information and resources — only reinforces the point that redressing them is not “just a matter of time” but requires sustained attention, support and active engagement.

The Task Force focused on the Status of Women Faculty at Brown but, as noted in this report, the challenges identified reflect national structural issues that disproportionately impact women's careers and their earning potential. Women in the United States earn 82% of men (full-time wage and salary workers, 2020), and this disparity remains when such factors as education and time in position (or "at rank") are accounted [37-39]. In fields that are majority women, compensation is significantly less compared to fields that are majority men [40]. A study of 50 years of U.S. Census data concludes that when women enter a field and become a majority, pay in that field decreases and the field itself comes to be seen as less prestigious [41]. This suggests that fields in which women are better represented are devalued because that kind of work has come to be seen as "women's work" and there may be a pervasive bias, across fields, against research that is perceived as, in one way or another, being "feminine" [41, 42].

One factor in the gender pay gap is the so-called "motherhood penalty" [43, 44]. Women who are mothers are less likely to be hired than women who are not mothers, whereas no such penalty exists for fathers [45, 46]. Research has shown that this is due, at least in part, to cognitive biases: For example, the same resumé will be evaluated less positively if it indicates that the candidate is a mother, even if it already indicates that the candidate is a woman [47]. Moreover, some research indicates that the motherhood penalty is worse in high-status fields, such as academia [48].

The effects of such biases are additional to disproportionate burdens resulting from the fact that mothers tend to spend more time caring for children than men do [49]. Although this disparity is less extreme among highly educated parents, it persists nonetheless and appears to have been exacerbated by the pandemic [50, 51]. There is a similar disparity in other forms of caretaking as well, such as elder care, a disparity that has also been exacerbated by the pandemic [52, 53]. And, as caretaking, both formal and informal, is dominated by women, caretaking tends to be devalued even though it is critical infrastructure [54, 55].

There is evidence that "homophily" — people's tendency to prefer others like them — affects hiring practices in academia; search committees composed of women and chaired by women affects how many women apply and ultimately are hired into positions [56]. Moreover, women tend to be better represented, and better paid, in institutions that are led by women [57].

Some institutional policies, while well-intentioned, appear to have exacerbated some of the problems mentioned above. In particular, a study from 2018 suggests that gender-neutral parental leave policies disproportionately benefit men, at least in economics: Among 50 departments, the adoption of such policies decreased women's tenure rates by 19% while increasing men's tenure rates by 17%. Most of the effect was due to the fact that men who chose to "stop the clock" had more publications in top-tier journals, whereas women did not [58]. Factors more specific to academia that disproportionately affect women and the evaluation of their work include: Disproportionate service loads compared to their male colleagues, even when rank, field and other factors are accounted for [31]. For example, women faculty are significantly more likely to be approached by students who need extensions and other accommodations, and women who decline such requests are more likely to be evaluated negatively than are men [59, 60]; and more work managing the emotional environment in their academic units, such as responding to and defusing inappropriate comments by colleagues, as well as simply absorbing them [61]. And although consuming of time and energy, such work is devalued [62].

In many fields, publications by women tend to be cited less often than that of men [63, 64], which may in part be influenced by people's preference to interact with and prefer others like them, and by gender differences in self-promotion [65, 66]. Student evaluations are also impacted by gender biases [67-72].

Women are subject to larger and smaller forms of explicit bias in academia, including sexual objectification and silencing or marginalization [73]; problems that are likely worse in fields and departments dominated by men [74]. Simply witnessing (as opposed to experiencing) such bias adversely affects women's experience and job performance [75], and, if tolerated, gender stereotypes can have significant effects on the behavior of all members of the group: Expressions of explicit gender bias by even one member of a group can lead other members to display implicit bias [76].

While each of these effects may be small on its own, their cumulative effect can be large over years [77, 78]. These phenomena cannot but affect women faculty, including those at Brown.

LETTER APPOINTING AND CHARGING THE TASK FORCE

To: All faculty, staff

From: President Christina H. Paxson and Provost Richard M. Locke (via Today@Brown Priority)

Date: Monday, September 13, 2021

Subject: Task Force on the Status of Women Faculty

Cultivating a diverse and talented faculty is central to Brown's mission of education and research. It is also essential that all faculty members have access to the same resources and opportunities regardless of sex or gender identity. With these goals in mind, we are writing to share that we have formed a Task Force on the Status of Women Faculty.

Nationally and at Brown, women faculty continue to be underrepresented in numerous fields, though they represent half of the scholars awarded doctoral degrees in most fields. At Brown, this was documented in the most recent annual report on the Diversity and Inclusion Action Plan (DIAP), which noted that in some fields, the percentage of women faculty has remained constant or even declined since the DIAP was launched in 2016. It is important that Brown assess what factors might be contributing to this specific outcome.

The University regularly engages in practices to ensure fair compensation of all employees, including a review that is currently underway assessing whether there are any gender differences in faculty compensation. While we have made measurable and meaningful progress toward the goals in the DIAP, we recognize that much more needs to be done as we strive to fulfill the aspirations we have set as an institution of higher education devoted to excellence.

The Task Force is charged with conducting a thorough study of factors that influence the recruitment, hiring, retention and promotion of women faculty at Brown, as well as making recommendations for improvement by the end of the 2021-22 academic year. The Task Force's analysis will be conducted with data from Brown and other major research universities in the United States. Diane Lipscombe, professor of neuroscience and director of the Carney Institute for Brain Science, will chair this Task Force, which will be composed of the following faculty and staff members:

- Anna Aizer, Professor of Economics
- Elissavet Amanatidou, Distinguished Senior Lecturer in Classics and Director of Modern Greek Studies
- Laurel Bestock, Associate Professor of Archaeology and the Ancient World and Egyptology and Assyriology, Associate Professor of History of Art and Architecture
- Janet Blume, Deputy Dean of the Faculty, Chair of Sociology and Associate Professor of Engineering,
- Prudence Carter, Sarah and Joseph Jr. Dowling Professor of Sociology
- Beth Doherty, Deputy Provost for Academic Affairs
- Meredith Hastings, Professor of Environment and Society and Earth, Environmental, and Planetary Sciences and Deputy Director of the Institute at Brown for Environment and Society
- Richard Heck, Professor of Philosophy
- Rose McDermott, David and Marianna Fisher University Professor of International Relations
- Jill Pipher, Vice President for Research and Elisha Benjamin Professor of Mathematics
- Björn Sandstede, Chair of Applied Mathematics and Professor of Applied Mathematics

The Task Force will be staffed by Research Associate Kristin Webster.

Appointing this Task Force on the Status of Women Faculty is part of our continued effort to build and sustain a campus environment where all members are supported and can thrive.

Sincerely,

Christina H. Paxson, President

Richard M. Locke, Provost

DISCOVERY PHASE

The Task Force examined quantitative and qualitative data related to numerous aspects of the faculty experience at Brown including the following: historical context, research, teaching, service, mentoring, assigned research space and campus climate. As charged, this report focuses primarily on tenure-track and tenured faculty. However, we reviewed data on lecturers, senior lecturers and distinguished senior lecturers where available, and we solicited input from research faculty and lecturers, senior lecturers and distinguished senior lecturers. A summary of data made available to the Task Force and the various forms of feedback that the Task Force gathered can be found in [Appendix A — Qualitative Data](#) and [Appendix B – Quantitative Data](#).

APPENDIX A — QUALITATIVE DATA

Feedback from members of the Brown community were communicated to the Task Force by:

- email, women-faculty-task-force@brown.edu (nine comments);
- an anonymous Google form that was shared broadly using faculty listservs and hosted on the Office of the Provost [website](#) (83 responses);
- an all-faculty Town Hall held twice in February 2022;
- nine small faculty focus groups that were held virtually; and
- an anonymous survey sent to faculty who left Brown during the last 10 years — only faculty who identified as women, and who were tenured or senior lecturers at the time of leaving Brown (12 responses were received from 21 requests).

DATA MADE AVAILABLE TO THE TASK FORCE

The Task Force gathered quantitative and qualitative data on faculty by gender (only binary is currently collected by Brown), discipline, rank and appointment type. We limited most analyses of data from the 2011-12 academic year to present. All analyses are cataloged in this appendix and referenced throughout the report.

Certain data were not available; for example, not all service carried out by faculty is collected by departments or by other University offices. In some cases, we have recommended certain data start to be collected so that all significant service is captured and recognized. Unless noted, University-wide data pertaining to faculty were supplied by the Office of the Dean of the Faculty. Data related to faculty holding clinical appointments were not included in these analyses because they are hospital employees and not Brown employees.

The following units provided data to the Task Force:

- The Office of the Dean of the Faculty, and in particular Senior Associate Dean Joel Reville and Data Manager Meghan Hall, provided data on faculty including:
 - gender (binary), HUG status and discipline;
 - salary and length of time in rank;
 - counteroffers and retention rates;
 - committee service;
 - course enrollment numbers;
 - responses from the 2016 COACHE survey; and
 - climate and environment.
- The College provided numbers of faculty undergraduate advisors and number of assigned advisees per faculty member, which were then grouped by gender by the Office of the Dean of the Faculty.
- The Office of the Vice President for Finance created an anonymized dataset detailing the assignment of laboratory space by square foot based on faculty type, rank, department, discipline and gender.
- The Office of the Vice President for Research created a list of those who applied to and were awarded internal research funding.
- The Sheridan Center for Teaching and Learning provided programs from annual University awards ceremonies and from these we determined information about mentoring and teaching awards.

DATA UNAVAILABLE TO THE TASK FORCE

It is important to note that for the University data cited in this report, gender has been self-reported following federally mandated guidelines requiring a binary response — male or female. The Task Force recognizes that gender identity transcends the male and female binary definition. We understand that Brown is working on a process for collecting nonbinary data information that will be used for future internal reporting to reflect the chosen gender identity of individuals.

The Task Force requested information about faculty who have served as a director of undergraduate and graduate studies, which were unavailable as a compiled dataset. In addition, there was no centralized source of information about a range of faculty service including graduate student mentorship, mentorship of students not officially assigned to the faculty member, and more.

INPUT FROM FACULTY

ANONYMOUS FEEDBACK

We received 83 individual anonymous responses and nine personal testimonials sent to the Task Force email account. These responses were sorted into 14 categories (in order of most frequently cited to least): Family care; pay equity; sexism, racism and harassment; service and student mentoring; tenure and promotion; (research) faculty; COVID-19 concerns; University administration; retention; teaching; spousal hires; research resources; community climate; and other. All of the email responses were related to family care, service and department culture and harassment.

FACULTY FOCUS GROUPS

Seventy-five faculty volunteered to participate in at least one of nine focus groups. The group identities were chosen based on anonymous feedback as well as comments raised during the two faculty Town Hall events. All faculty self-selected for specific focus groups of interest, and the Task Force used rank and appointment type for group assignments. All focus group participants identify as women based on their Workday responses. In advance of the meetings, participants were emailed the following instructions:

With the exception of mandatory reporting that is required by University policy or applicable law, by participating in these sessions you are agreeing to adhere to the Chatham House Rule. “When a meeting, or part thereof, is held under the Chatham House Rule, participants are free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed.” We ask that everyone abide by these rules. Do not reveal identifying information about other participants.

At least two (and typically three) Task Force members attended each group meeting, with one acting as facilitator and the other(s) taking unattributed notes. No identifiable information was recorded and the notes from these meetings will be destroyed upon the publication of the final report of the Task Force. Focus groups included: assistant professors, associate professors, full professors, lecturers, research faculty, women of color, women in STEM, women in social sciences and humanities, and caregivers. The same set of questions was used to guide feedback in focus group sessions. However, not all questions were discussed in all focus groups.

Questions posed to focus groups and the order in which they were asked:

1. Does your department offer any formal or informal mentorship? Is it sufficient for you?
2. What kind of resources, if any, were you offered to help with research? Was it sufficient?
3. What kind of resources were you offered to help with teaching? Is it sufficient for you? Do you feel it is equitable?
4. What has been your experience of service at department, school or University levels? How is service assigned? Is the process of assigning service responsibilities in the department in particular, collective or assigned by the chair?
5. Have you experienced any inequities as they relate to gender and or race and ethnicity and have you experienced any barriers to your career advancement? What were they?
6. How would you characterize dynamics between you and your department colleagues? Do you feel valued and supported by your department? If yes, can you give examples of how you feel valued? If not, can you say what makes you feel like they don't?
7. Have you ever considered leaving Brown? What made you want to leave or, if you had an offer and stayed, what made you stay?
8. Have you experienced challenges meeting personal and professional responsibilities? If yes, did you receive support and from where?
9. Would you share with us a bit about your hiring process at Brown?
10. Were you offered any support during your transition to Brown?
11. Would you change the department's approach to support or keep it the same?
12. Is there anything else you would like to tell us or that you think we should know?

A summary of the common themes from these discussions, as well as concerns unique to specific populations can be found below.

WOMEN WHO LEFT BROWN

The Task Force solicited feedback from women who chose to leave Brown. Contact with and responses from faculty who left Brown was handled by only one member of the Task Force to preserve anonymity of the respondents. We contacted 21 faculty who left Brown within the last decade and for whom we could identify verified email contact information. Only faculty who had received tenure or who were senior lecturers at the time they left Brown were contacted. We sent invitations to reply to 12 questions via an anonymous Google form and stressed responses were voluntary and anonymized. Survey questions were developed through an interactive process that allowed the Office of Institutional Equity and Diversity along with members of the Task Force to give input.

1. What is your discipline?
2. How long were you at Brown?
3. Why did you decide to leave?
4. Was this a decision that has been better for your career?
5. What was your experience at Brown with regard to teaching?
6. What was your experience at Brown with regard to research?
7. What was your experience at Brown with regard to service?
8. What was your experience at Brown in your academic home?
9. What was your experience at Brown with regard to work-life balance?
10. Did you encounter any challenges during your time at Brown that you felt were due to your gender/ethnicity/sexual orientation or any other aspect of your identity?
11. Do you have any recommendations that you would like to share with the Task Force that you feel would improve the environment at Brown?
12. Is there anything else you would like us to know about your experience at Brown?

Responses were only reviewed by only one Task Force member, Sylvia Carey-Butler, who presented aggregated responses summarized below.

ANONYMOUS FEEDBACK

Responses from 83 individual anonymous responses and nine personal testimonials sent to the Task Force email account are summarized below. We sorted responses into 14 categories: Family care; pay equity; sexism, racism and harassment; service and student mentoring; tenure and promotion; (research) faculty; COVID-19 concerns; University administration; retention; teaching; spousal hires; research resources; community climate; and other. All of the email responses were related to family care, service and department culture and harassment.

The top three categories which were mentioned by at least 10 respondents were family care, pay equity and sexism, racism and harassment. Summarized responses for each of the categories are listed below.

Family care — the short length of paid parental leave; lack of lactation support; lack of support for dependents when attending work events and teaching obligations out of normal “working hours”; parenting-related teaching releases not extending to service/mentoring obligations; the lack of coordination of teaching times for co-parenting faculty

Pay equity — a lack of information about departmental norms; requests for an annual report on salaries; requests for insight into how the University plans to change the processes to eliminate the repeated need for equity adjustments

Sexism, racism and harassment — frequency of micro- and macroaggressions; a lack of clear reporting protocol; feelings of being failed by the system; gendered language use by University support staff, such as “honey” and “sweetie”

Five categories mentioned by five to seven respondents were as follows:

Service and student mentoring — confusion around how to quantify and document nonformal mentoring assignments; unequal service distribution; feigned or strategic incompetence by colleagues to avoid service and mentoring

Tenure and promotion — difference in negotiation skills and frequency of counteroffers between genders; “Tenure and promotion evaluations in many fields rely heavily on metrics, including publications, citations and grant funding, that have well-established gender and racial biases”; discrimination in teaching evaluations and how this affects tenure and promotion

(Research) faculty — questioned whether the gender ratio is different for (research) faculty compared to tenured/tenure-track faculty; (research) faculty cannot negotiate for startup and space

COVID-19 concerns — balancing childcare and work obligations impacted their productivity during the pandemic; having unvaccinated children affected their ability to return to in-person operations

University administration — asked for a longer-term (not ad hoc) committee to monitor progress in the status of women faculty at Brown; expressed concerns about the sabbatical system; noted the gendered effects of inflation and cost of living increases

Retention — not everyone has the option to move, which made seeking external offers pointless; retention is extra-complicated for dual-academic couples; getting external offers is time away from research and teaching

Other categories were mentioned by one or two respondents.

FEEDBACK FROM FACULTY FOCUS GROUPS

To protect the anonymity of the respondents, the Task Force summarized the feedback received during focus groups here. The Task Force has provided a report to President Paxson, Provost Doyle and Interim Provost Larson that contains more detailed feedback including unattributed individual comments.

CULTURE

This was one of the most common concerns raised among focus groups related to departmental culture and is consistent with climate survey responses from faculty to the 2018 Brown Campus Climate and COACHE surveys. The discussants often raised structural issues first, including that department meetings were often organized around the lives of men. For example, meetings were held at times that were challenging to coordinate with childcare.

Women spoke of the myriad ways that they felt denigrated, ignored and otherwise devalued by their male colleagues. Faculty were unclear about avenues to address such behaviors that are inconsistent with Brown’s Code of Conduct. Faculty felt there was a lack of redress, and that department chairs should be given more training in areas that disproportionately impact women including addressing departmental culture and intervening to address inappropriate comments.

MENTORSHIP

A lack of appropriate mentorship was a frequently raised issue. Mentorship programs differed across departments and faculty recommended a more consistent, University-wide set of guidelines and programs. Faculty said they relied heavily on former mentors outside of Brown at other institutions and there was a lack of sufficient career support at Brown. The number of senior women faculty mentors was low and insufficient to address mentorship needs.

RESEARCH AND TEACHING AND SUPPORT

Faculty expressed frustrations about access to basic office needs and research facilities and challenges with visa and immigration status. Concerns about insufficient lab space assignment were also raised. Many faculty commented that teaching assignments were inequitable, including in the timing of classes. In addition, perceived gender biases in student evaluations were demoralizing.

SERVICE

Service was considered to be inequitable for women faculty, hindering productivity and performance. Women said that they were tasked with high-cost, low-status service and overburdened because they were fewer in number compared to men but in higher demand as every committee has to have women on it. Women of color were especially impacted by service responsibilities. Additional comments related to greater service responsibilities for those with appointments that span more than one department.

Women spoke of the disproportionate emotional labor born by women faculty and said that there was no downside for colleagues who displayed disregard and incompetence in fulfilling departmental and departmental service. Many women noted that there is an emotional cost in saying “no” to service requests and that they undertook substantial undocumented (shadow) service.

FAMILY CAREGIVING

Family caregiving, including faculty who care for children, the elderly or other family, was frequently raised as disproportionately impacting women. Faculty wanted more family-friendly human resource benefits, quality childcare close to or on the Brown campus, and a point person for faculty for information about human resource benefits. Faculty felt pressure related to the timing of childbirth, lack of flexibility in teaching and other University duties to accommodate childcare obligations, frustration about the expectation of having to get an outside offer for salary increase, and lack of representation on University committees to speak to the unique needs of caregivers.

INTERSECTIONALITY

Women of color discussed several themes: Disproportionate service burden, the pressure to accept service assignments to help departments and the University to meet their diversity goals, the impact of service burden on teaching and research progress, inhospitable department culture and frequent microaggressions, feeling isolated, not having specific DEI support mechanisms/programs for women of color, and the importance of women support and networks. There was acknowledgment that there is still a long way to go but also that Brown is improving, and faculty women of color felt empowered.

FACULTY RANK

Assistant professors were concerned with fairness related to research startup packages and access to research resources. Some were concerned about issues unrelated to gender, including visa and immigration status, covering their summer salary, maintaining their research program and getting information about promotion and retention.

Associate professors were concerned about the substantial service that they do relative to men. This is a particular issue for women of color. There are few mechanisms in place to protect women associate professors from being overburdened by service, a fact that makes it difficult to prepare for promotion. More general concerns included wanting more research funding, administrative support and the spousal hiring policy.

Full professors felt that the status of women faculty at Brown has improved over time, but that the rate of change was slow and challenges continue. Some women noted that they felt isolated at Brown as junior faculty and that they did not benefit from a formal maternity leave policy. They expressed frustration about salary compensation and the need to get outside offers to get raises, but also that these were sometimes not taken seriously.

Lecturers conveyed many concerns, several of which were not specific to gender, but — as women are the majority of lecturers — it was hard to separate the issues raised. Lecturers noted the lack of mentorship programs unique to the lectureship track, little department-level support for research for lecturers, lack of recognition for research into pedagogical practices and innovation, feeling like “second-class citizens,” shadow advising and not receiving credit.

(Research) faculty conveyed many concerns that were also not specific to gender. Their comments were wide ranging and included lack of private offices, little research startup funds, being treated like a postdoc, undocumented administrative and teaching service, position insecurity (soft money), unclear maternity leave or medical leave benefits, lack of mentorship for promotion or professional development, and lack of equivalent of sabbatical leave.

In sum, we heard of perceived inequalities that are not reflected in the quantitative data, but which reflect the lived experiences of women faculty.

WOMEN WHO LEFT BROWN

The Task Force solicited feedback from women who chose to leave Brown. To preserve anonymity of the respondents, contact with and responses from faculty who left Brown were handled by only one member of the Task Force.

We contacted 21 faculty who left Brown within the last decade and for whom we could identify verified email contact information. Only faculty who had received tenure or who were senior lecturers at the time they left Brown were contacted. We sent invitations to reply to 12 questions via an anonymous Google form and stressed responses were voluntary and anonymized. Survey questions were developed through an interactive process that allowed the Office of Institutional Equity and Diversity along with members of the Task Force to give input.

We asked the following questions:

- Why did you decide to leave?
- Was this a decision that has been better for your career?
- Do you have any recommendations that you would like to share with the Task Force that you feel would improve the environment at Brown?

SUMMARY OF AGGREGATE RESPONSES

In summary, these former members of the Brown faculty reported leaving Brown for better opportunities, access to resources not at Brown, toxic department culture, and family-related challenges. Most felt that leaving Brown was better for their career. The following suggestions were offered in response to soliciting recommendations:

- hire/promote more women faculty
- ensure there is equity in salaries for women
- provide more resources for research;
- ensure that service and teaching are universal and not just expected of women and minorities; and
- make work-life balance a priority for all.

APPENDIX B - QUANTITATIVE DATA

See [Critical Notes on Data, Terminology and Faculty Included in these Analyses](#).

REPRESENTATION OF WOMEN FACULTY

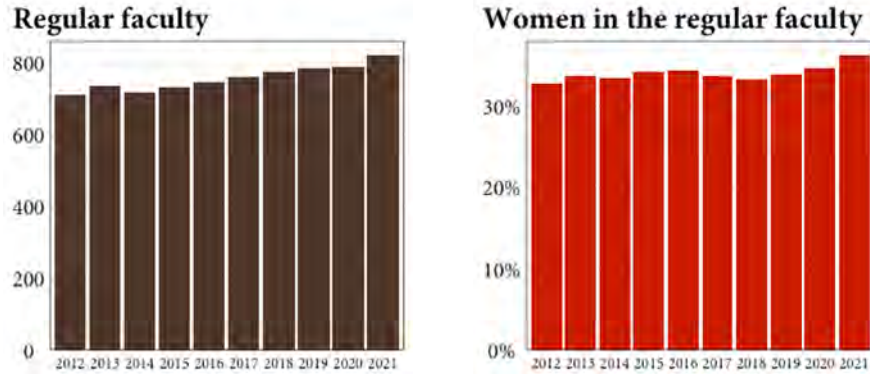


Figure 1. Total Regular Faculty and Percentage of Women in the Regular Faculty, 2012-2021 (Data provided by the Office of the Dean of the Faculty, 2022)

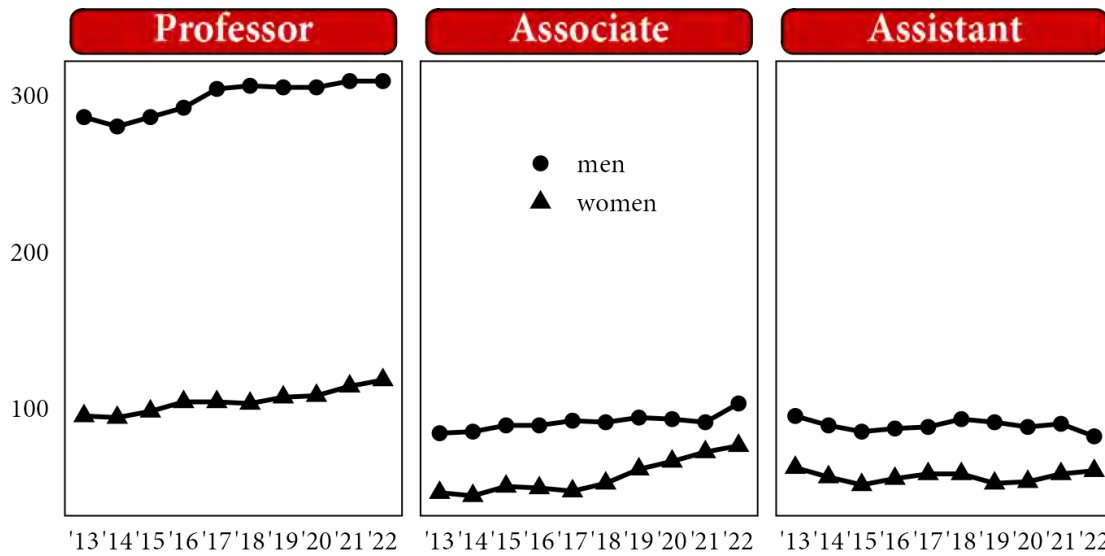


Figure 2. Brown Tenured and Tenure-Track Faculty by Gender and Rank, 2013-2022 (Data provided by the Office of the Dean of the Faculty, 2022)

Distribution Over Last 5 Years: **Women** | **Men** | **X/Not Reported**

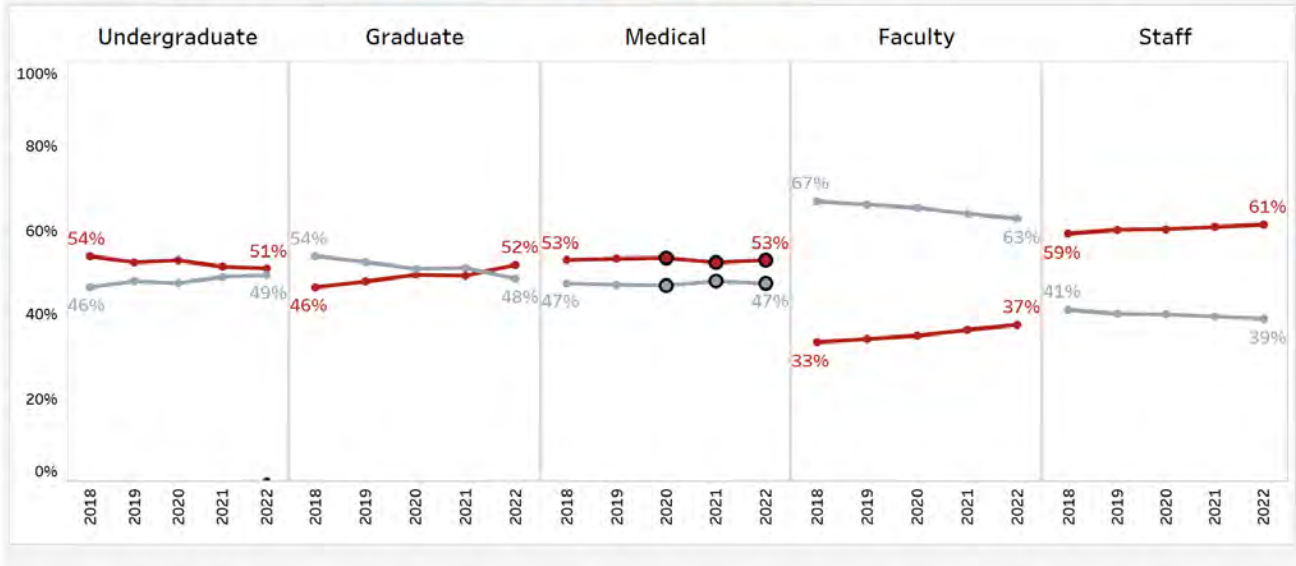


Figure 3. Brown University Populations by Gender (Data provided by the Office of Institutional Research, 2021)

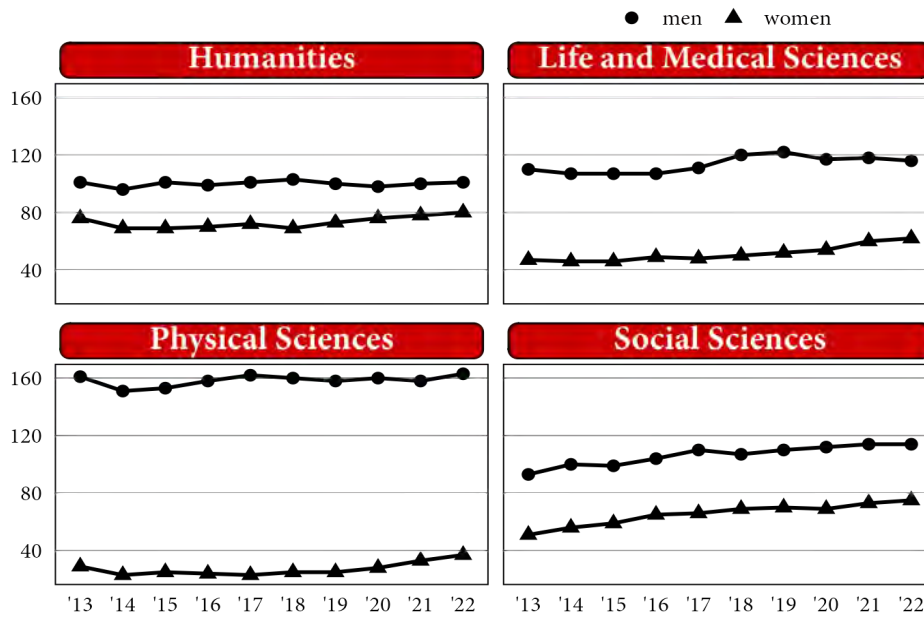


Figure 4. Tenured and Tenure-Track Faculty, by Gender and Division, 2013-2022 (Data provided by the Office of the Dean of the Faculty, 2022)

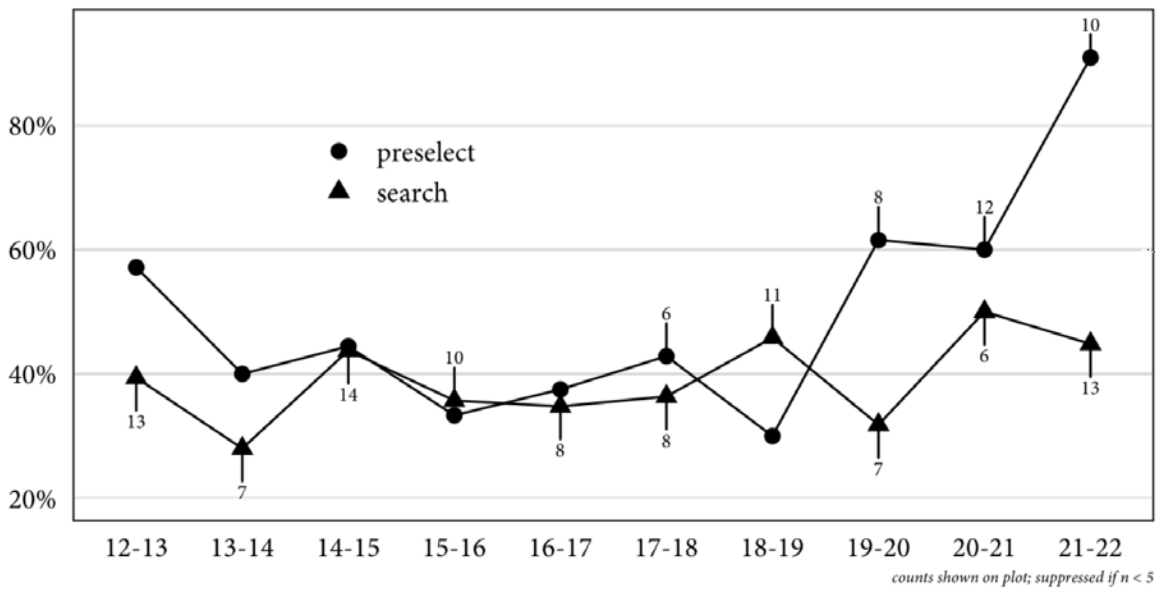


Figure 5. Share of Women Among Tenure-Track Hires (Data provided by the Office of the Dean of the Faculty, 2022)

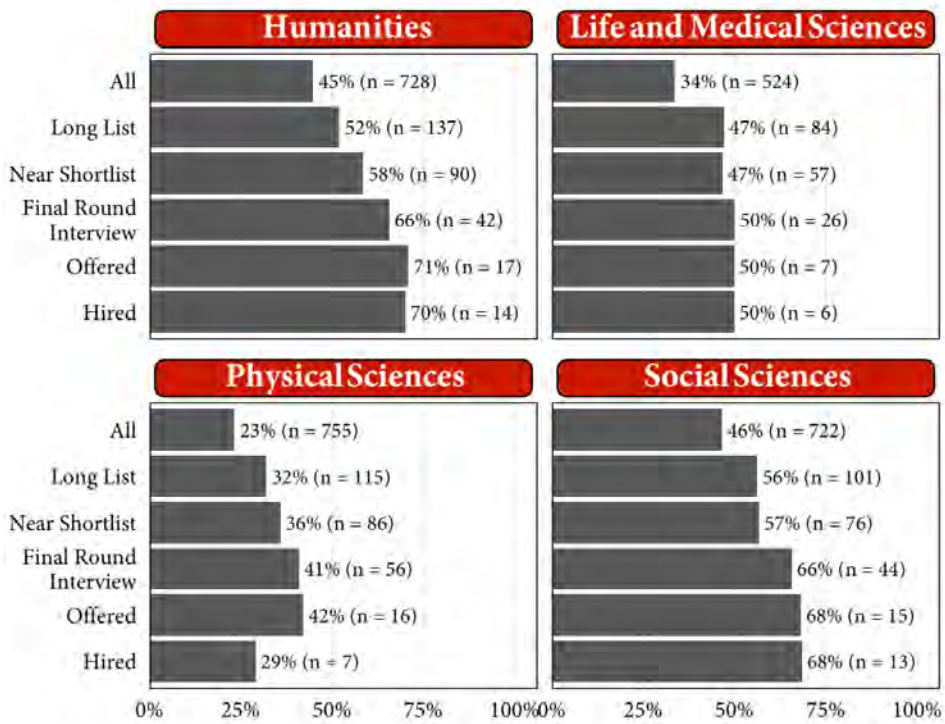


Figure 6. Share of Women by Applicant Stage, per Division, (69 Searches in the last 5 years) (Data provided by the Office of the Dean of the Faculty, 2022)

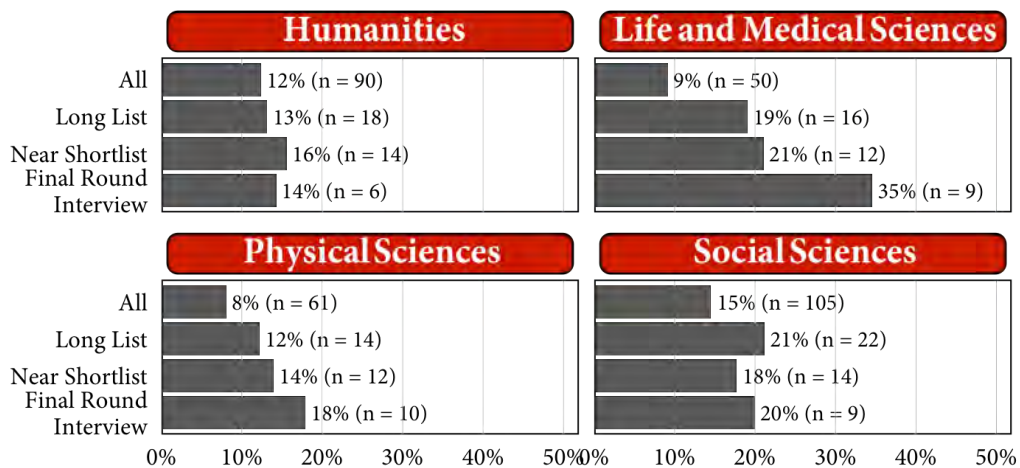


Figure 7. Share of HUG Women by Applicant Stage, per Division, (69 Searches in the last 5 years) (Data provided by the Office of the Dean of the Faculty, 2022)

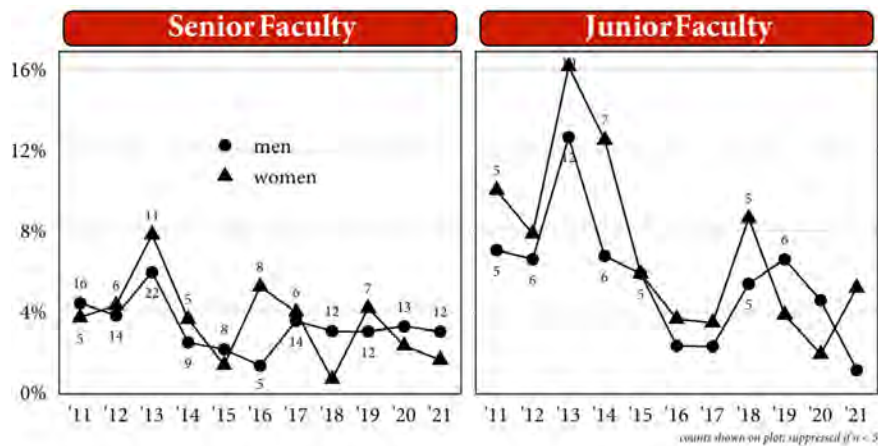


Figure 8. Number of Faculty who Left the University by Gender and Rank, 2011-2021 (Data provided by the Office of the Dean of the Faculty, 2022)

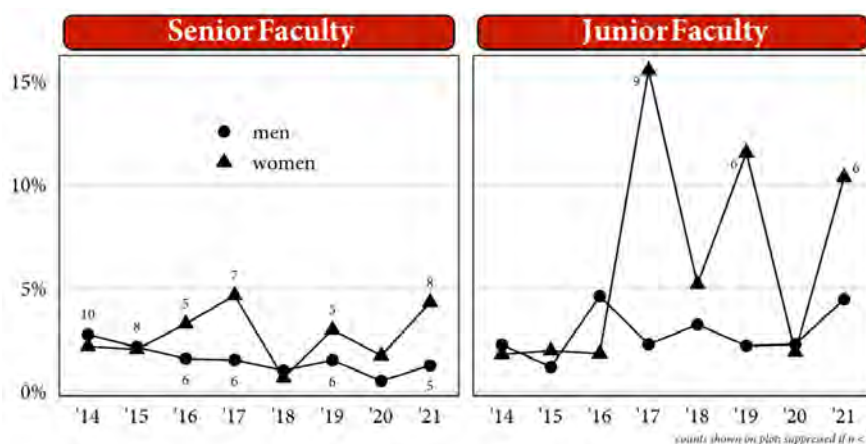


Figure 9. Number of Counteroffers Made to Junior and Senior Faculty by Gender 2014-2021 (Data provided by the Office of the Dean of the Faculty, 2022)

CONDUCT AND CLIMATE

I have access to supportive social networks within my department.

	Women, HUG		Women, Non-HUG		Men, HUG		Men, Non-HUG		Grand Total	
	%	n	%	n	%	n	%	n	%	n
Total	100.0%	39	100.0%	235	100.0%	39	100.0%	343	100.0%	656
Strongly agree	25.6%	10	28.1%	66	41.0%	16	28.9%	99	29.1%	191
Agree	41.0%	16	34.0%	80	30.8%	12	40.8%	140	37.8%	248
Neither disagree nor agree	12.8%	5	22.6%	53	20.5%	8	19.5%	67	20.3%	133
Disagree	20.5%	8	11.5%	27	5.1%	2	7.9%	27	9.8%	64
Strongly disagree			3.8%	9	2.6%	1	2.9%	10	3.0%	20

My department is a welcoming place for faculty from historically underrepresented groups (HUG).

	Women, HUG		Women, Non-HUG		Men, HUG		Men, Non-HUG		Grand Total	
	%	n	%	n	%	n	%	n	%	n
Total	100.0%	39	100.0%	237	100.0%	43	100.0%	351	100.0%	670
Strongly agree	38.5%	15	33.3%	79	44.2%	19	39.0%	137	37.3%	250
Agree	23.1%	9	36.7%	87	34.9%	15	39.0%	137	37.0%	248
Neither disagree nor agree	23.1%	9	20.3%	48	14.0%	6	16.5%	58	18.1%	121
Disagree	12.8%	5	7.2%	17	4.7%	2	4.3%	15	5.8%	39
Strongly disagree	2.6%	1	2.5%	6	2.3%	1	1.1%	4	1.8%	12

Note: Unknown gender and HUG data were excluded. Gender data for nonbinary, multiple selections, questioning, and other were excluded.

Figure 10. Faculty Responses to Selected Questions from the 2018 Campus Climate Survey by Gender and HUG Status

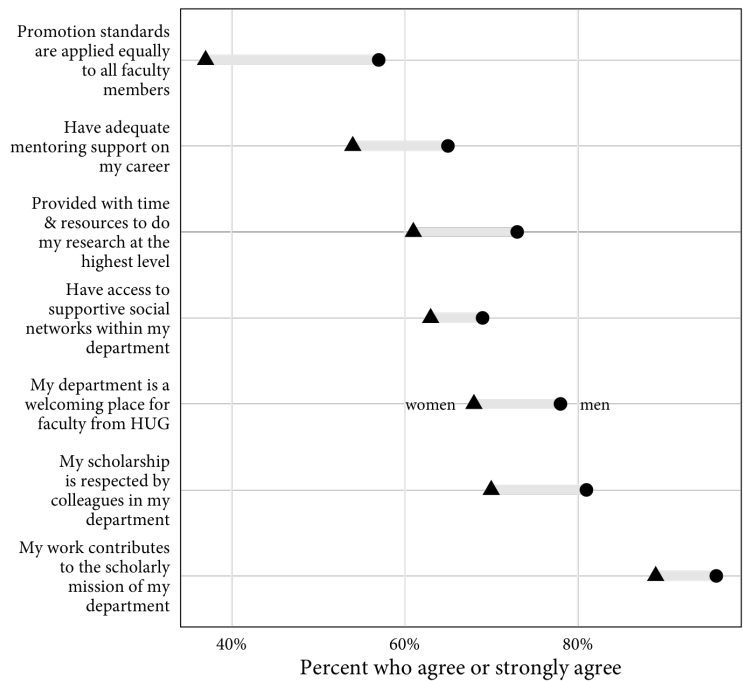


Figure 11. Faculty Responses to Selected Questions from the 2018 Campus Climate Survey by Gender; Respondents: n = 425 men, 303 women.

FACULTY SALARIES BY GENDER

Tenure-stream faculty
 N=689; #Male=461; #Female=228
 Median PayRtAnn for Male: 160,000.00
 Median PayRtAnn for Female: 140,000.00
 Mean PayRtAnn for Male: 171,832.55
 Mean PayRtAnn for Female: 153,780.98
 t-test: statistic=-3.5080, p-value=0.0005
 Kolmogorov-Smirnov: statistic=0.1749, p-value=0.0001
 Mann-Whitney U Test: statistic=42945.0000, p-value=0.0000

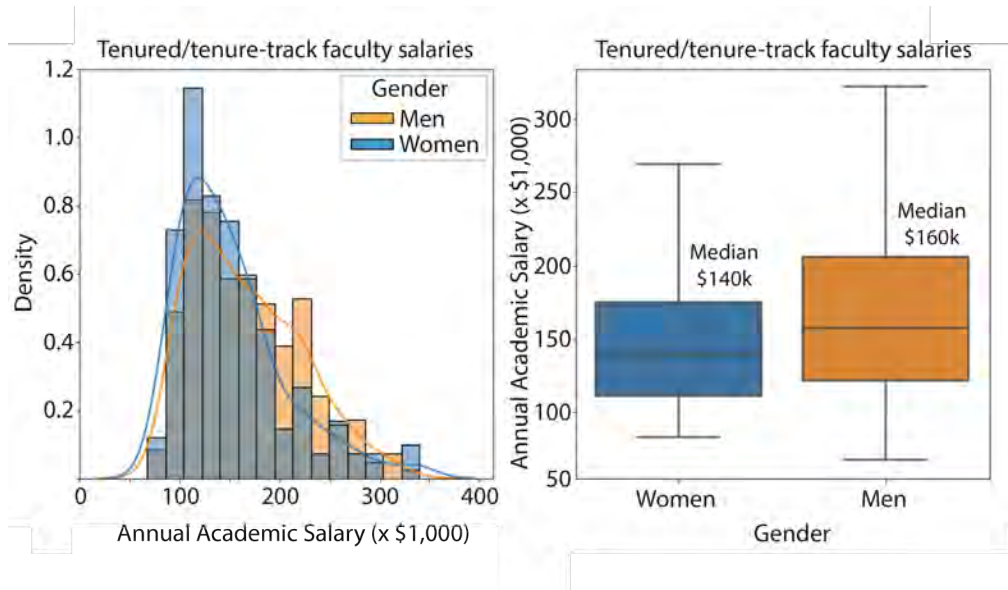


Figure 12. Distribution of faculty salaries by gender for all ranks. Data for 2022 (461 men, 228 women). (Note: Individual data points are not shown in the graphical illustrations to protect confidentiality, but these data were included in the analyses.)

Time from Associate to Full Professor
 N=195; #Male=135; #Female=60
 Median TimeToFull for Male: 6.00
 Median TimeToFull for Female: 8.00
 Mean TimeToFull for Male: 6.83
 Mean TimeToFull for Female: 9.10
 t-test: statistic=4.1841, p-value=0.0000
 Kolmogorov-Smirnov: statistic=0.2907, p-value=0.0014
 Mann-Whitney U Test: statistic=2758.0000, p-value=0.0002

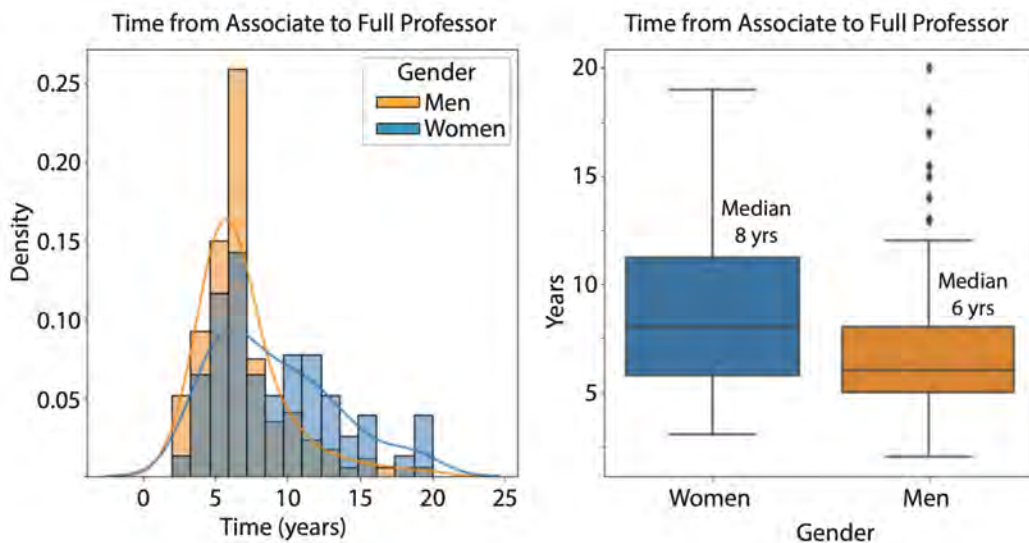


Figure 13. Distribution of time from associate to full professor (years) for tenure stream faculty by gender. Data for 135 men and 60 women (Data for 2022).

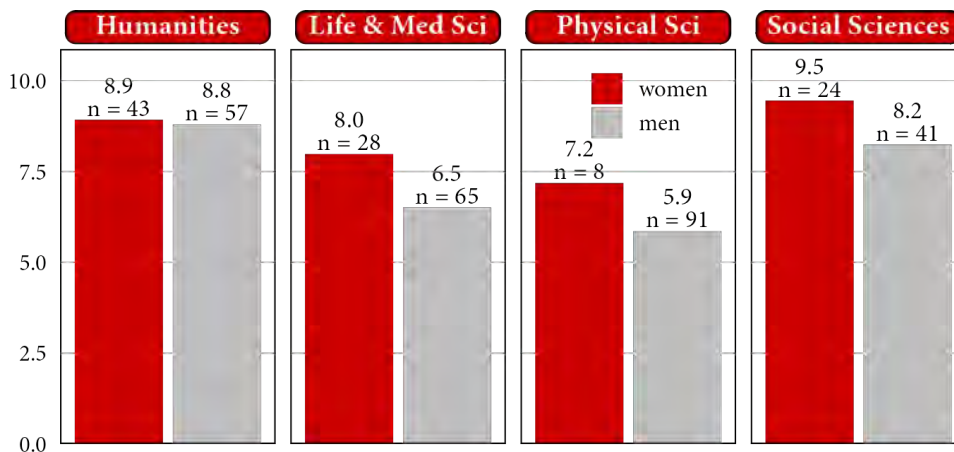


Figure 14. Average Years to Promotion to Professor from Associate Professor (Among Faculty who Started as Assistant Professors) by Broad Disciplines (Data provided by the Office of the Dean of the Faculty, 2022)

HUMAN RESOURCE BENEFITS AND INFORMATION

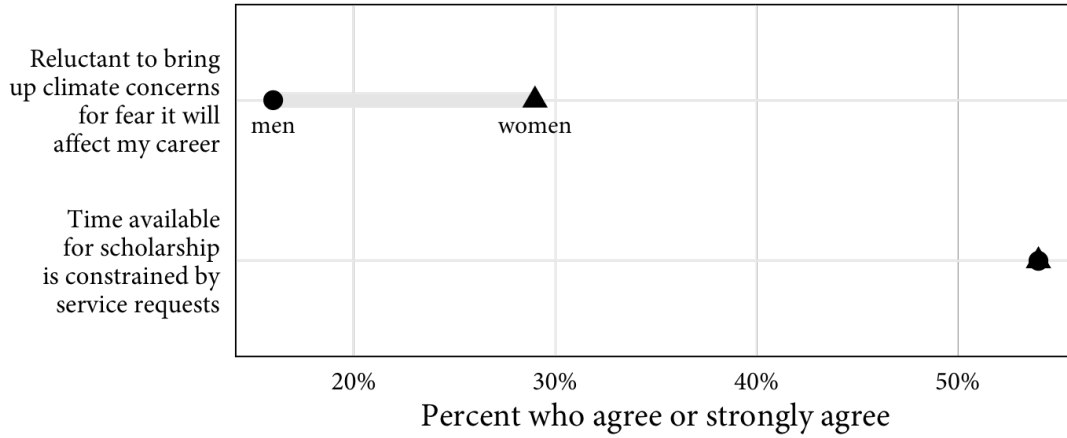
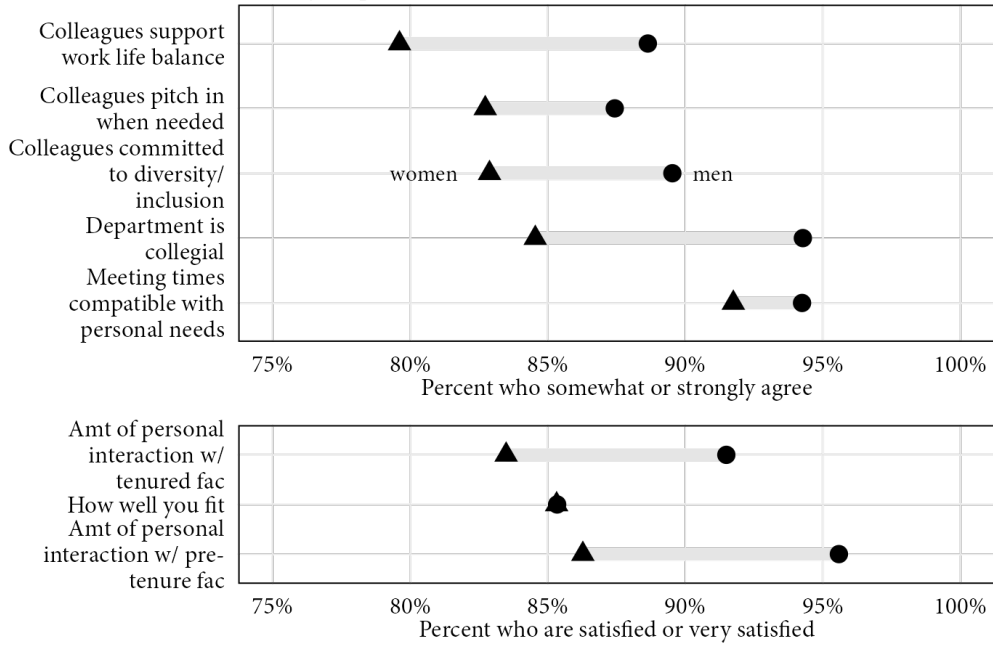


Figure 15. Faculty Responses to Selected Questions from the 2018 Campus Climate Survey by Gender (Respondents = 425 men

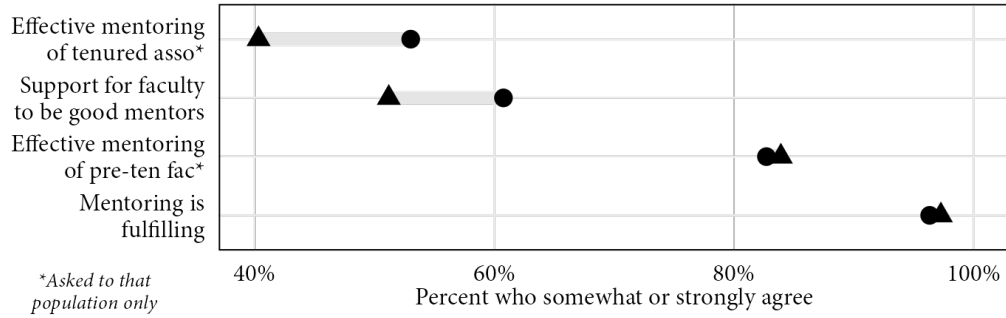
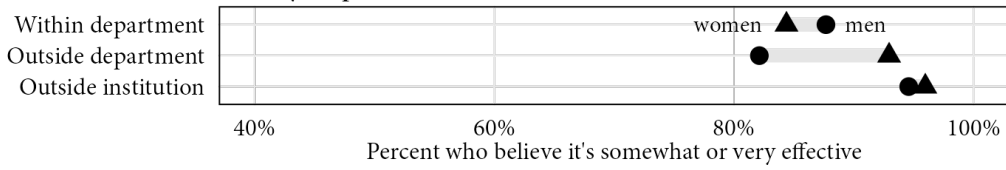
Department collegiality, 2016 COACHE survey

Faculty respondents (n = 192 men, 111 women)



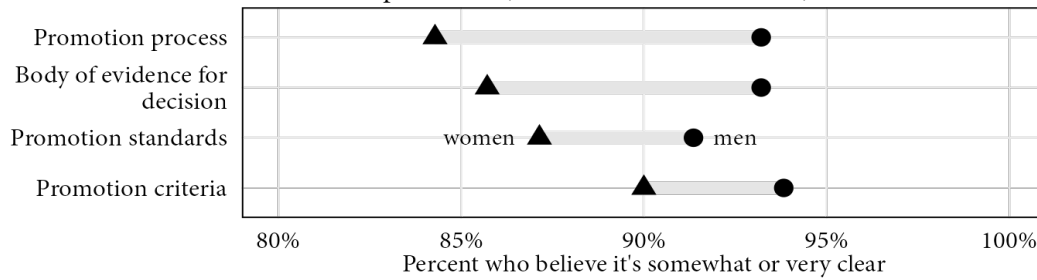
Mentoring, 2016 COACHE survey

Faculty respondents (n = 185 men, 99 women)



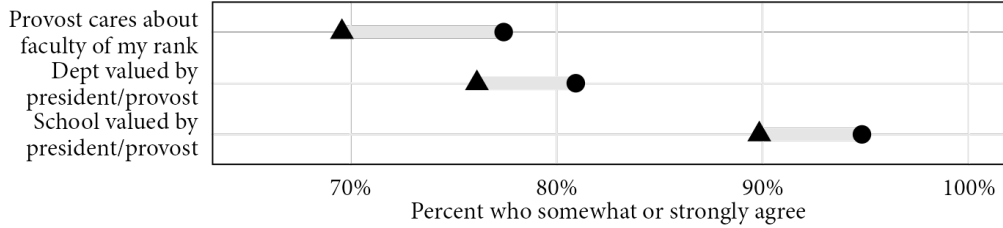
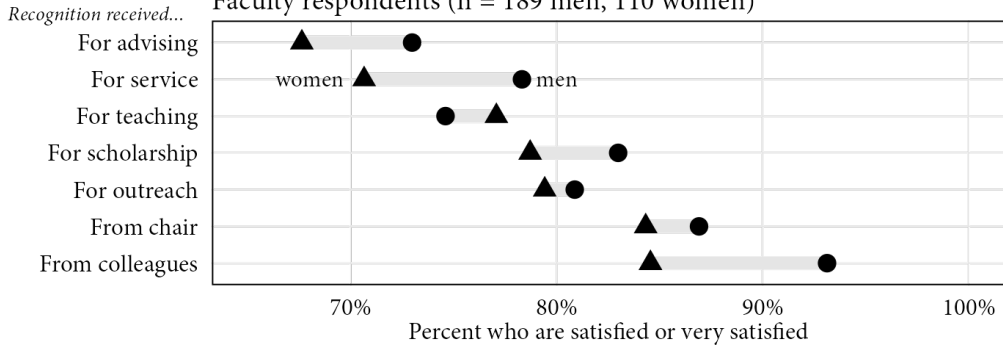
Promotion to full, 2016 COACHE survey

Tenured respondents (n = 162 men, 70 women)



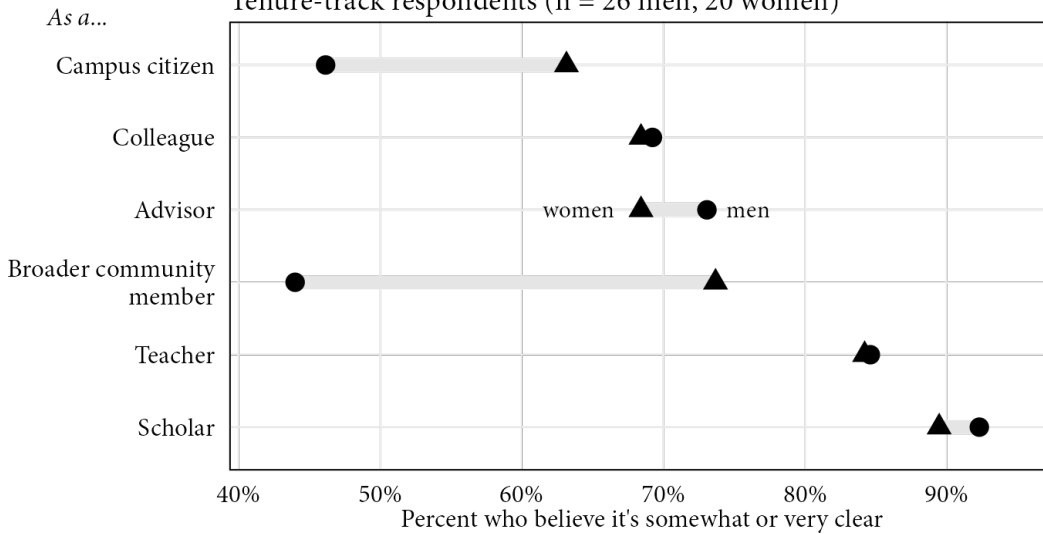
Appreciation and recognition, 2016 COACHE survey

Faculty respondents (n = 189 men, 110 women)



Tenure expectations, 2016 COACHE survey

Tenure-track respondents (n = 26 men, 20 women)



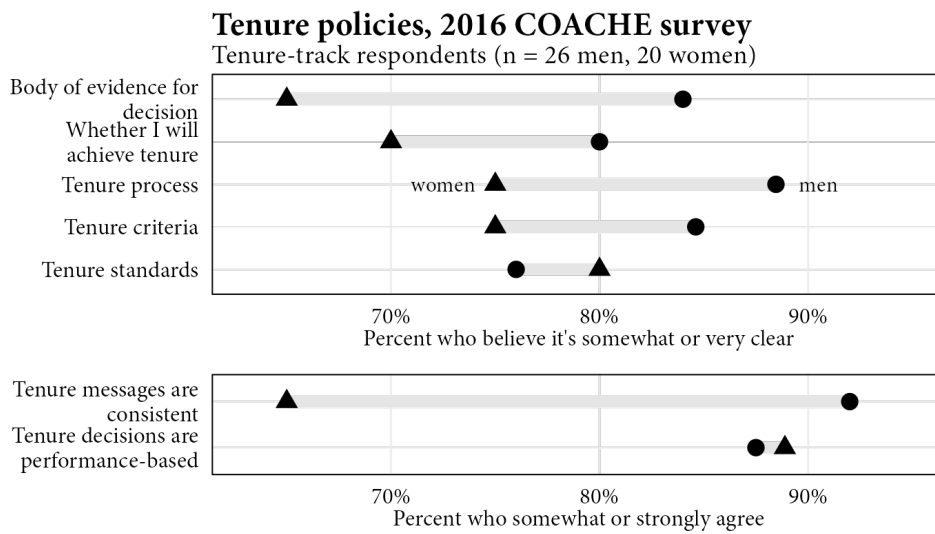


Figure 16. Faculty Responses to Selected Questions from the 2016 COACHE Survey by Category

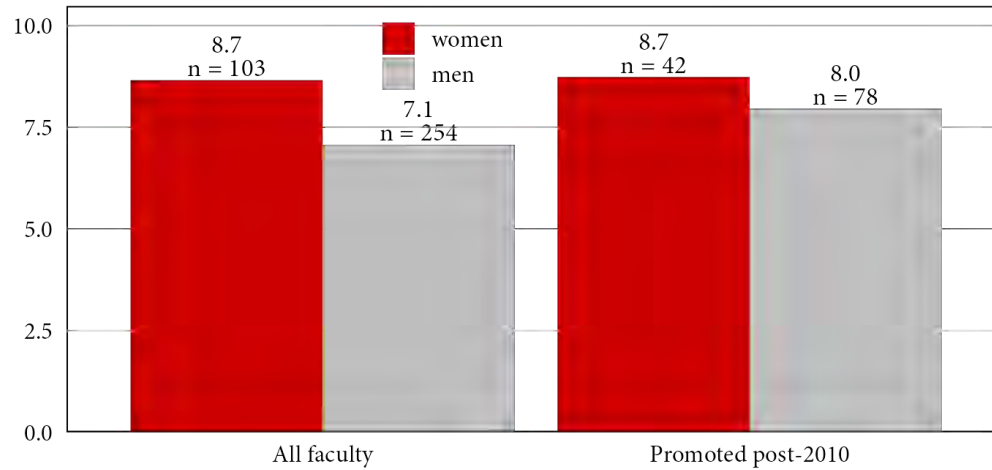


Figure 17. Average Years to Promotion to Professor from Associate Professor (Among Faculty who Started as Assistant Professors)
(Data provided by the Office of the Dean of the Faculty, 2022)

SERVICE LOAD

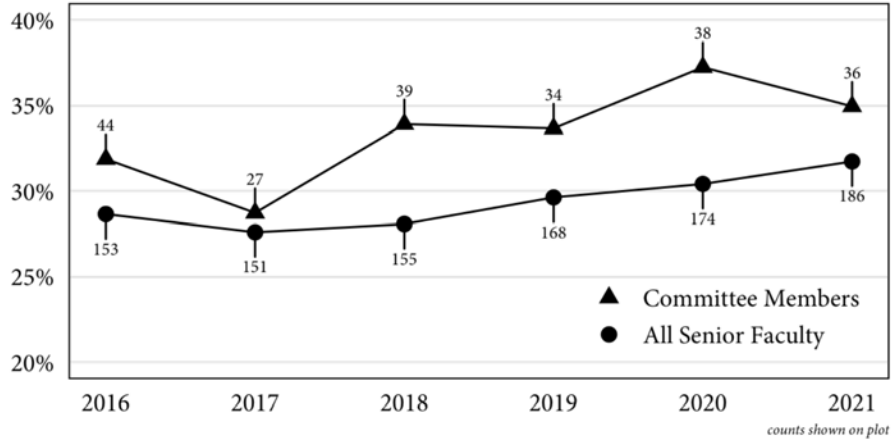


Figure 18. Percent of Women Faculty Serving on University Committees (Data provided by the Office of the Dean of the Faculty, 2022)

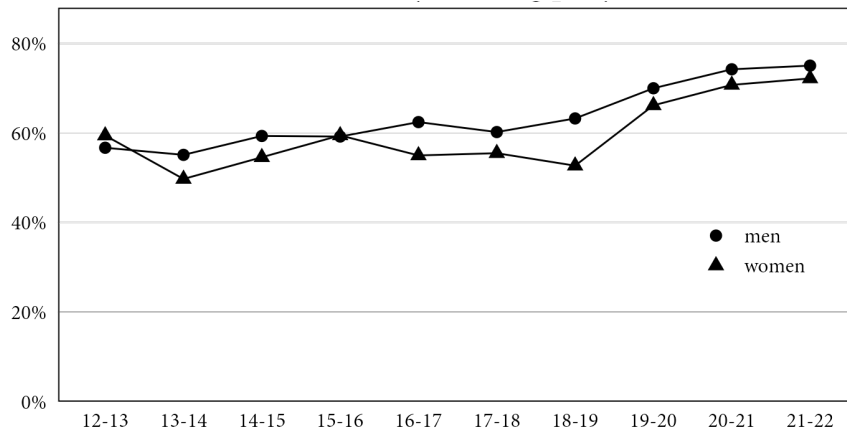


Figure 19. Percentage of Tenured/Tenure-Track Faculty with at Least One Advisee, 2012-2022 (Data provided by the College, 2022)

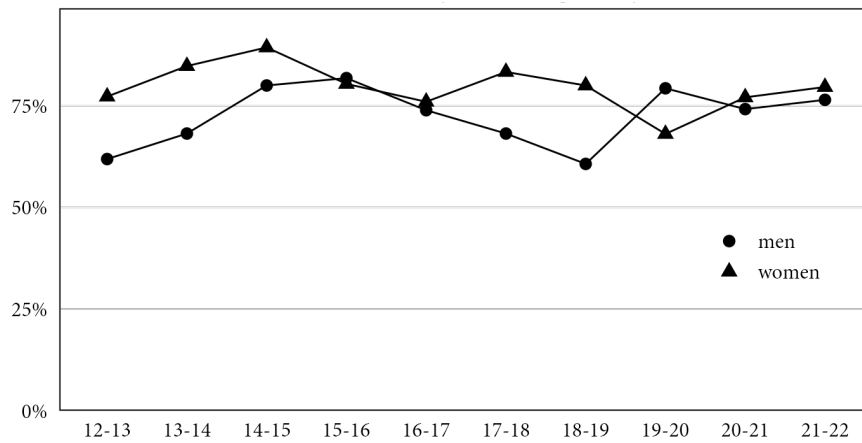


Figure 20. Percentage of Lecturers with at Least One Advisee, 2012-2022 (Data provided by the College, 2022)

Share of faculty with any advisees, 2012-2021 combined

CATEGORY	WOMEN	MEN
ALL REGULAR FACULTY	63.7%	64.2%
TENURE-TRACK FACULTY	59.9%	63.7%
BY DIVISION		
HUMANITIES	60.3%	59.3%
LIFE & MEDICAL SCIENCES	64.3%	66.0%
PHYSICAL SCIENCES	68.9%	64.5%
SOCIAL SCIENCES	65.7%	67.4%
BY RANK		
JUNIOR FACULTY	58.6%	61.7%
SENIOR FACULTY	60.3%	64.2%

Figure 21. Share of Tenured/Tenure-Track Faculty with at Least One Advisee, 2012-2021 Combined (Data provided by the College, 2022)

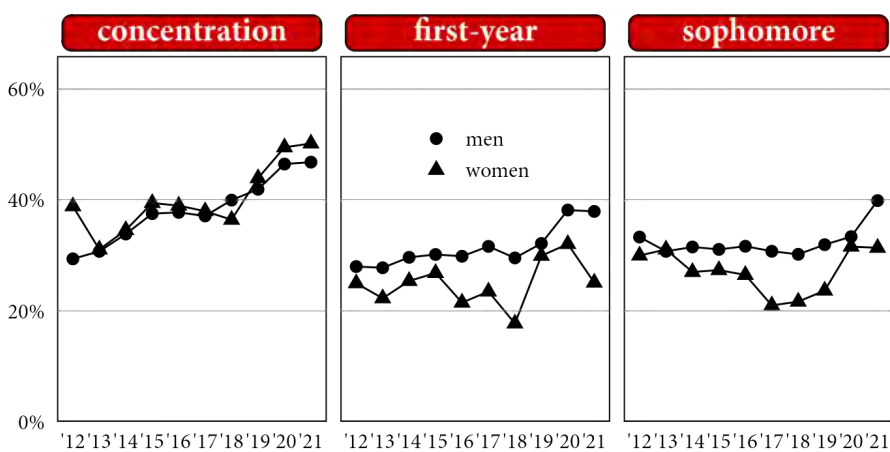


Figure 22. Percentage of Tenured/Tenure-Track Faculty Advising 2012-2021 (Data provided by the College, 2022)

FACULTY LECTURERS

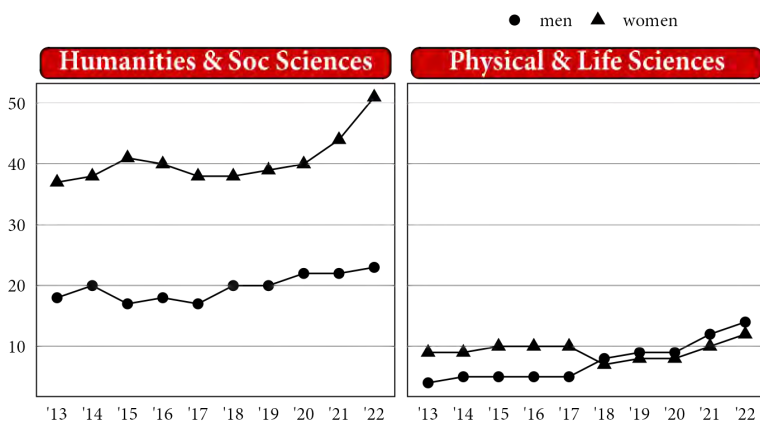


Figure 23. Faculty Lecturers by Gender and Discipline, 2013-2022 (Data provided by the Office of the Dean of the Faculty, 2022)

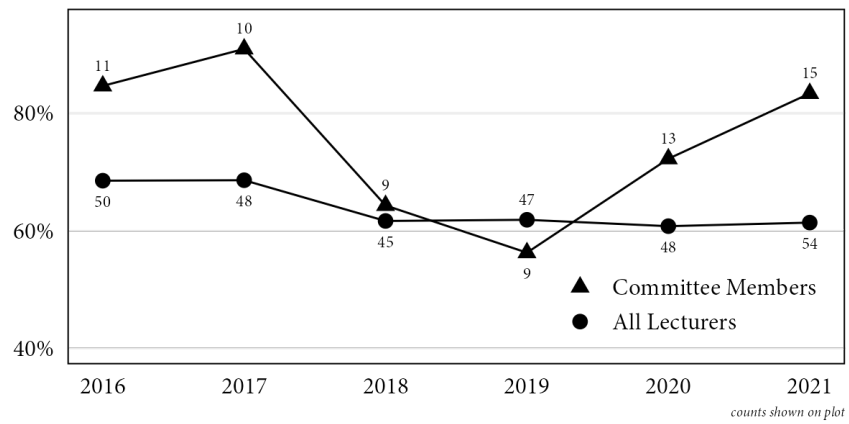


Figure 24. Share of Women Lecturers Serving on University Committees (Data provided by the Office of the Dean of the Faculty, 2022)

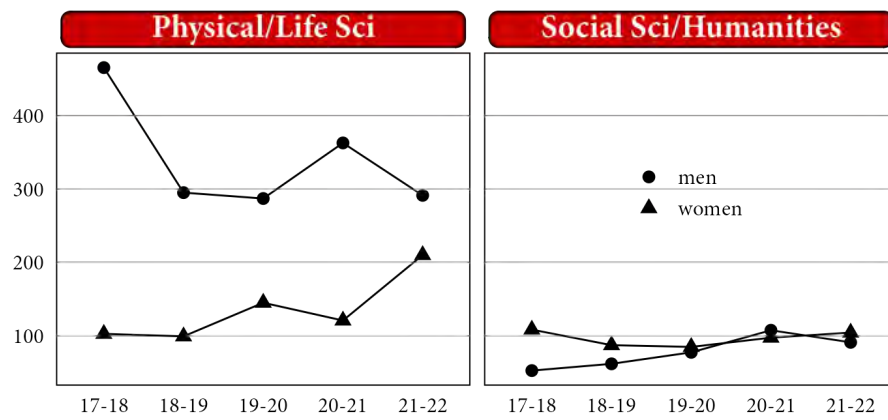


Figure 25. Average Enrollment per year in Lecturer Taught Courses by Gender and Discipline (Data provided by the College, 2022).

ADDITIONAL DATA

FACULTY SALARIES BY GENDER

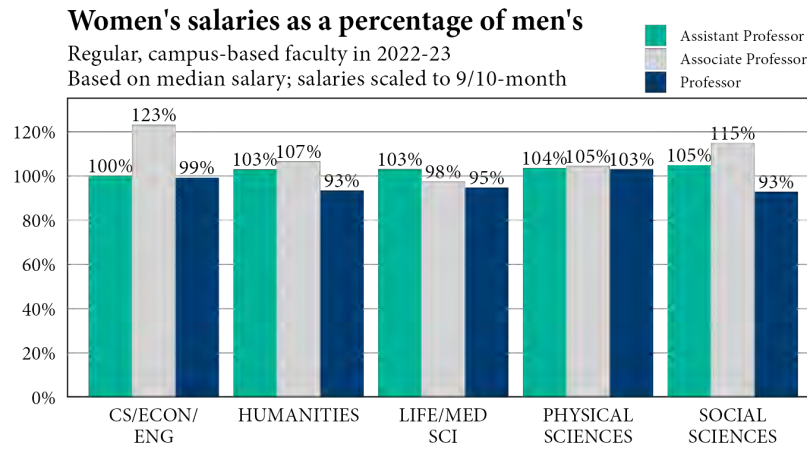


Figure 26. Women's Salaries as a Percentage of Men's, 2022-23 (Data provided by the Office of the Dean of the Faculty, 2022). Data are for regular, campus-based faculty. Median 9/10-month salaries are shown.

FACULTY REPRESENTATION

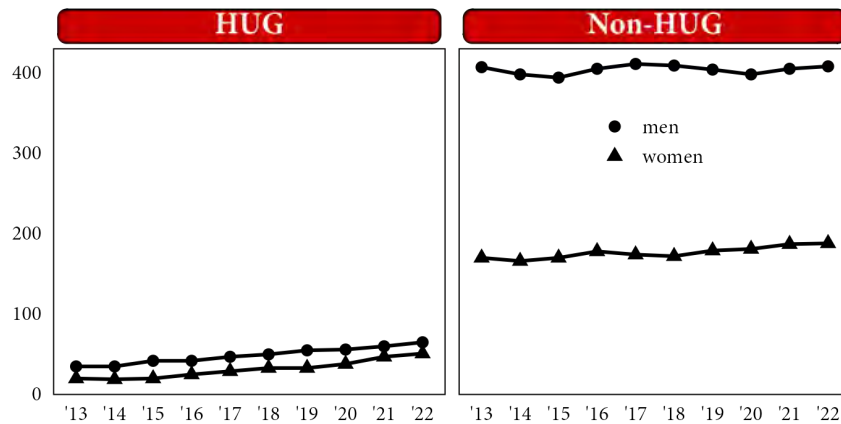


Figure 27. Tenured and Tenure-Track Faculty, by Gender and HUG Status, 2013-2022 (Data provided by the Office of the Dean of the Faculty, 2022)

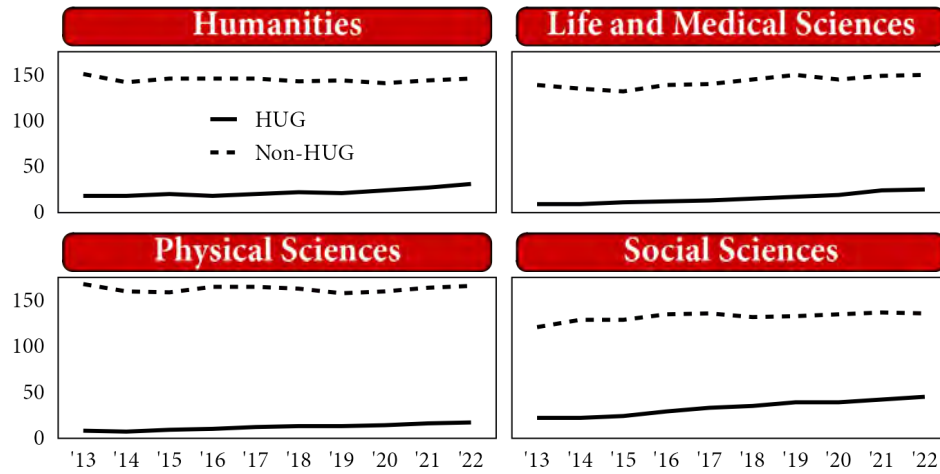
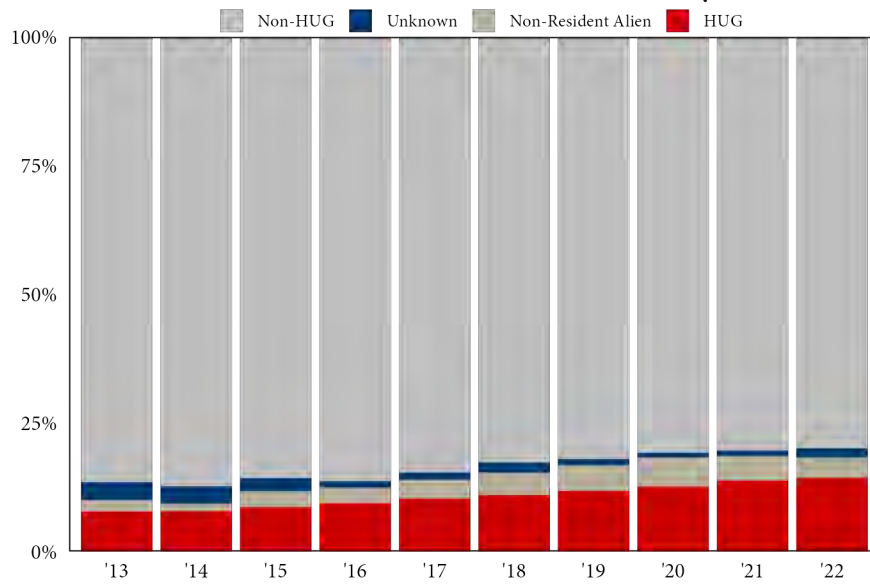


Figure 28. Tenured and Tenure-Track Faculty, by HUG Status and Division, 2013-2022 (Data provided by the Office of the Dean of the Faculty, 2022)



The gray bars represent the percentage of tenured and tenure-track positions held by women.

Figure 29. Tenured, Tenure-Track and Lecturer-Track Faculty, by HUG Status, 2013-2022 (Data provided by the Office of Institutional Research, 2022)

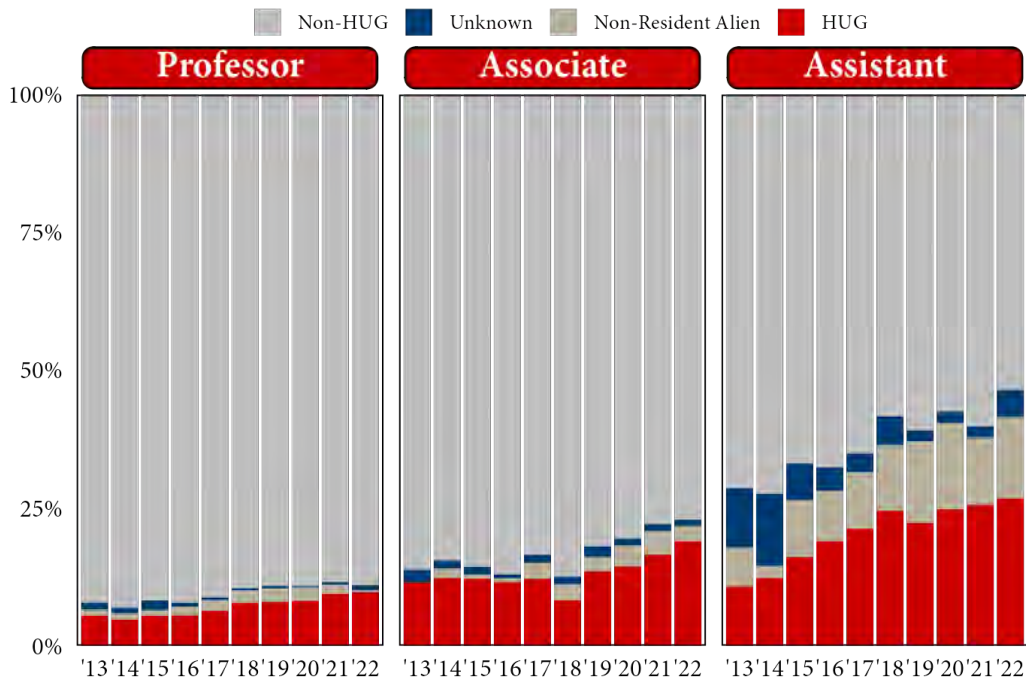


Figure 30. Tenured and Tenure-Track Faculty, by HUG Status and Rank, 2013-2022 (Data provided by the Office of Institutional Research, 2022)

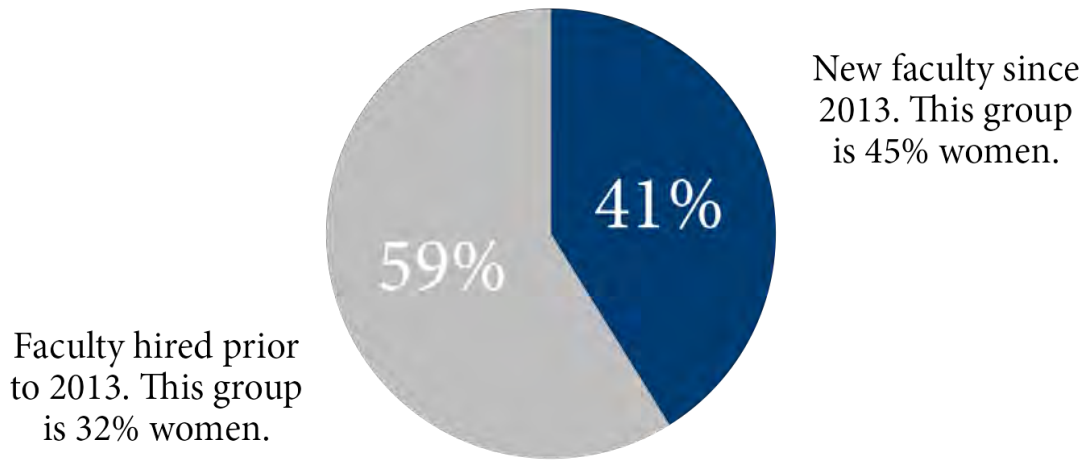


Figure 31. 41% of All Regular Faculty in 2022 Have Been Hired in the Past 10 Years

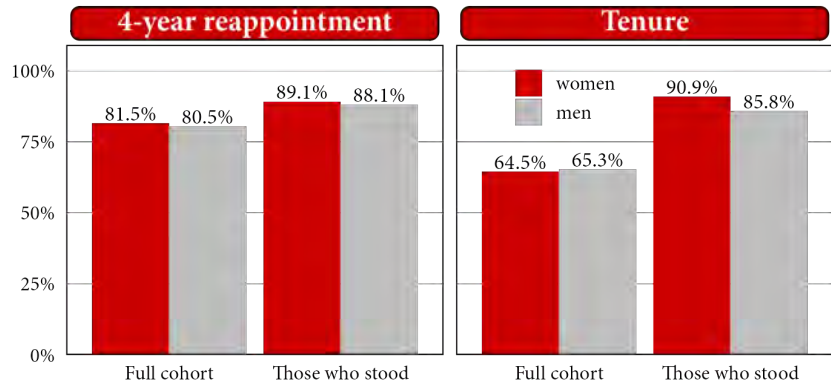


Figure 32. Four-Year Reappointment and Tenure Rates for Faculty Hired in 2000 or Later (Data provided by the Office of the Dean of the Faculty, 2022)

COURSE ENROLLMENT

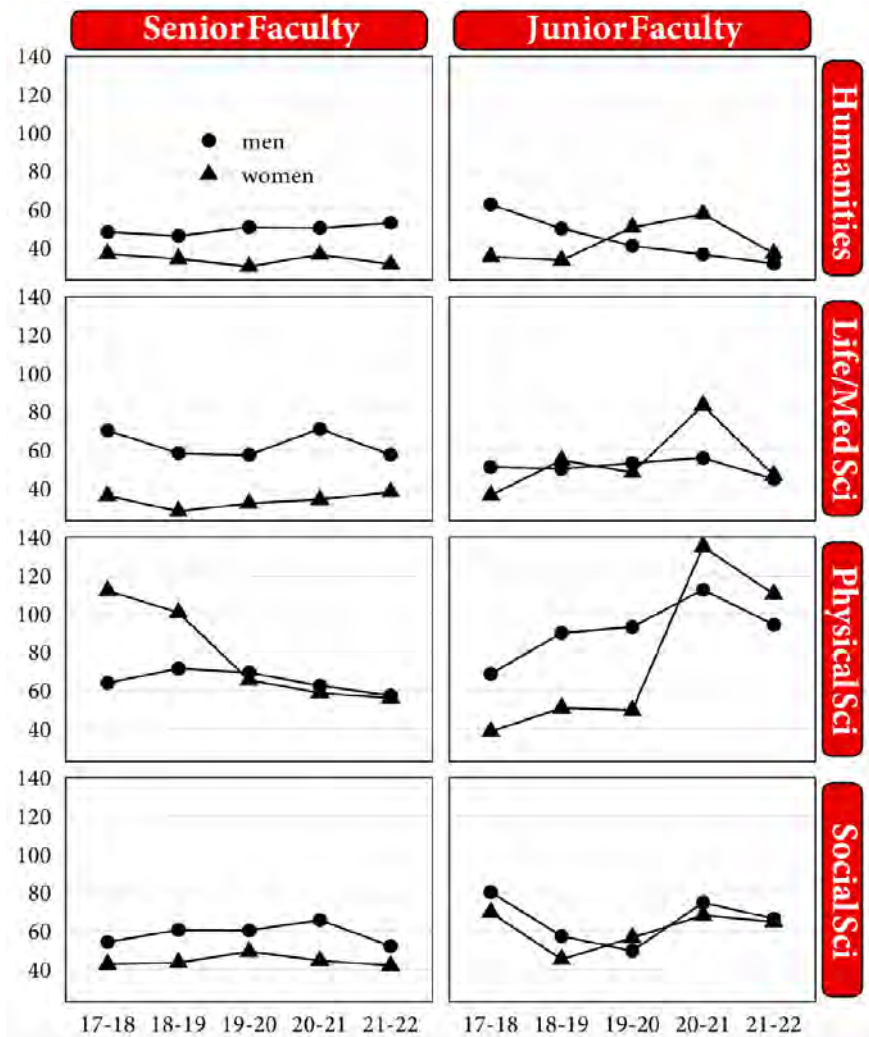


Figure 33. Average Enrollment in Primary Courses by Gender, 2017-2022 (Data provided by the College, 2022) The spike in enrollment in 2021 reflects enrollment in summer courses.

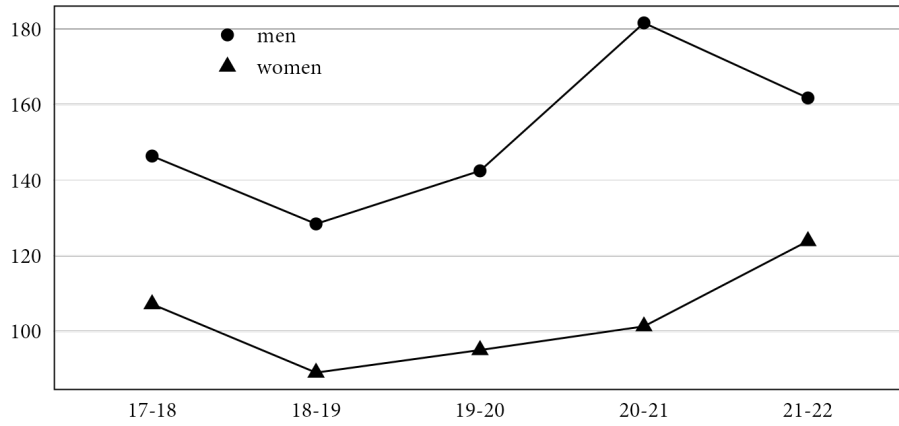


Figure 34. Average Enrollment in Primary Courses Taught by Lecturers by Gender, 2017-2022

UNIVERSITY AWARDS

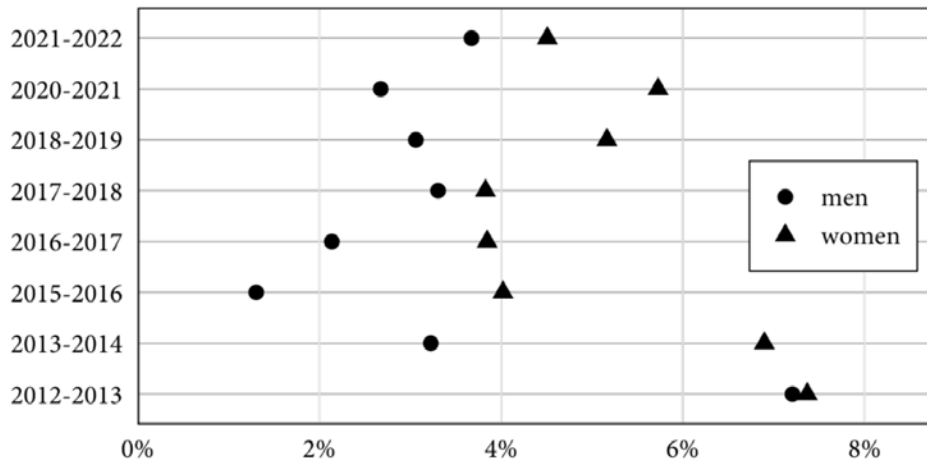


Figure 35. Share of Tenure-Track Faculty with a Major University Award, 2012-2022 (Data provided by the Office of the Vice President for Research, 2022)

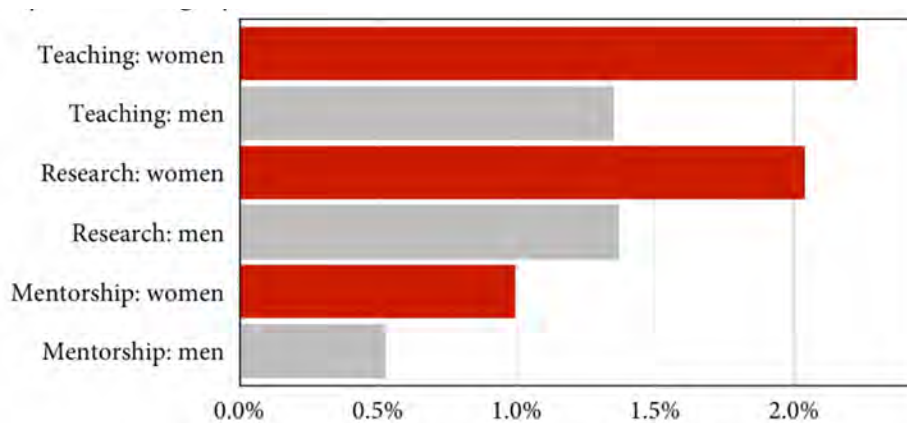


Figure 36. Share of Tenure-Track Faculty with a Major University Award by Category, 2012-2022 (Data provided by the Office of the Vice President for Research, 2022)

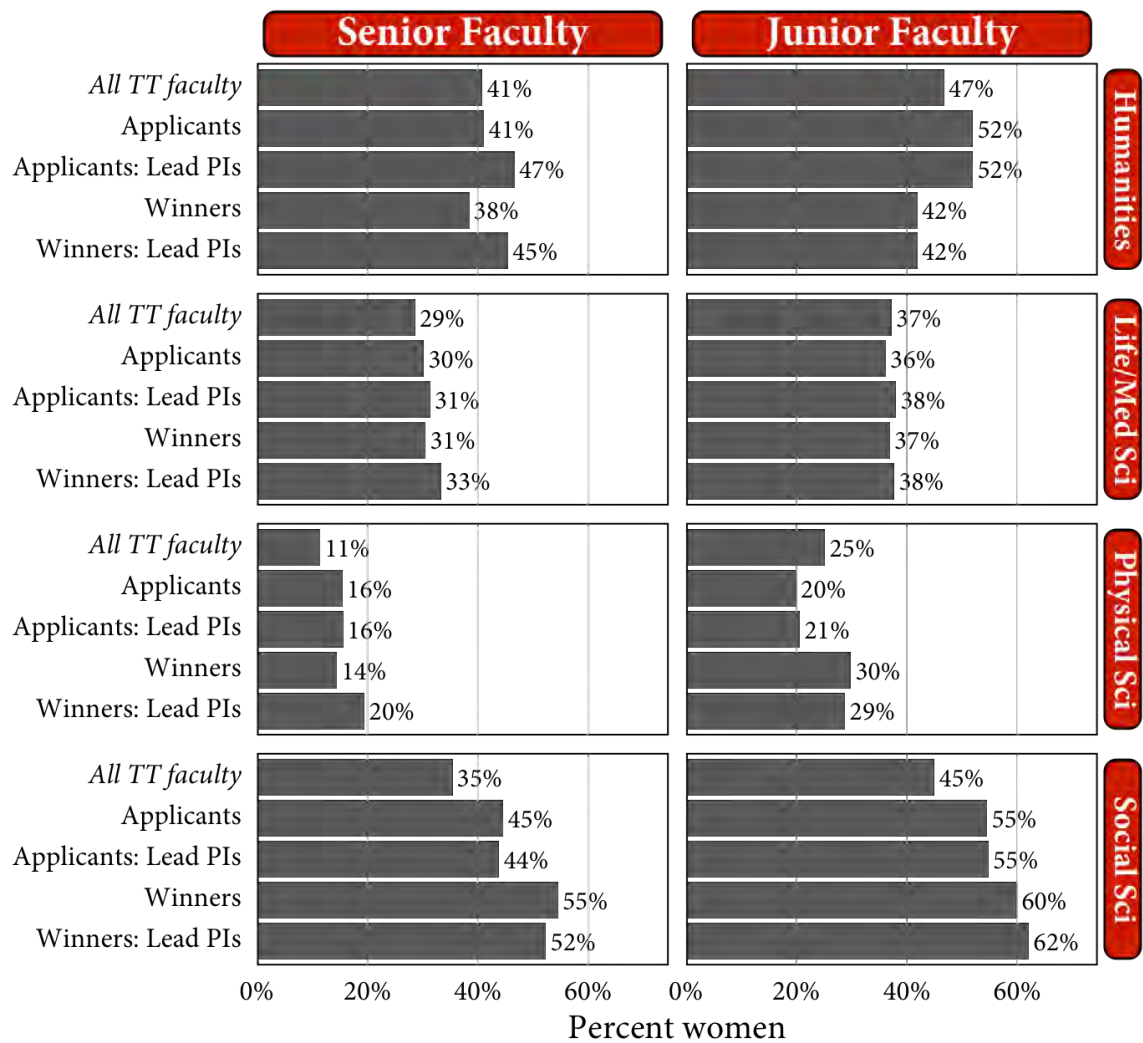


Figure 37. University Research Seed and Salomon Award Populations, 2012-2022 (Data provided by the Office of the Vice President for Research, 2022)
 Analysis includes regular faculty only, co-PIs included unless specified.

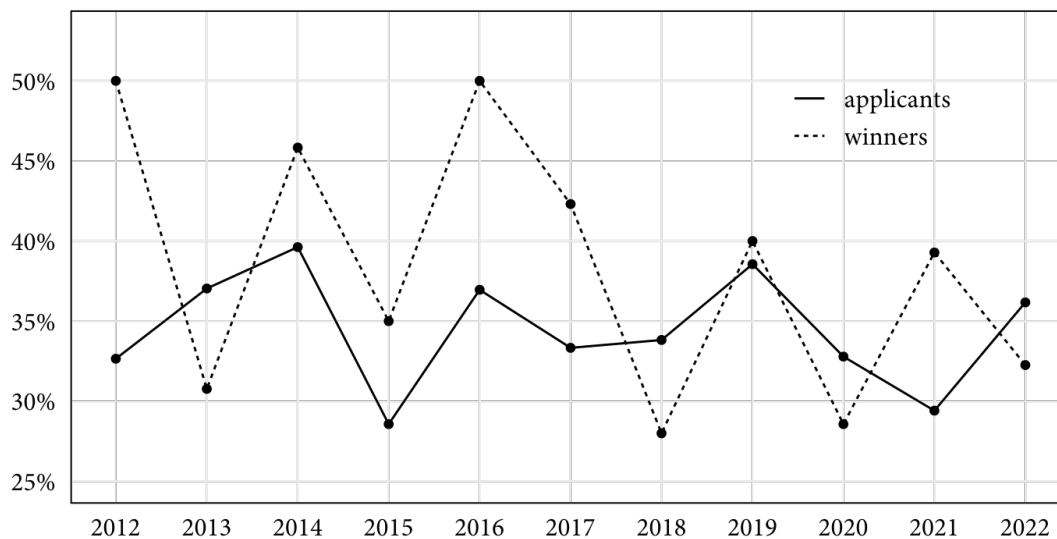


Figure 38. Share of Women Among Lead PIs for Research and Salomon Awards 2012-2022 (Data provided by the Office of the Vice President for Research, 2022)

UNIVERSITY NAMED PROFESSORSHIPS

	2016					2020				
	Total	HUG	%	Women	%	Total	HUG	%	Women	%
Senior chairs	125	8	6.4	18	14.4	145	13	9.0	31	21.4
Junior chairs	20	3	15.0	9	45.0	37	10	27.0	16	43.2
All chairs	145	11	7.6	27	18.6	182	23	12.6	47	25.8
Faculty count	622	60	9.7	188	30.2	662	90	13.6	212	32.0

Figure 39. Distribution of Named Professorships in 2016 vs. 2020 (Data provided by the Office of the Provost 2022)

Appointments since 2016

	Total	HUG	%	Women	%
Senior chairs	60	6	10.0	20	33.3
Junior chairs	55	15	27.3	24	43.6
All chairs	115	21	18.3	44	38.3

Figure 40. Distribution of Named Professorships in Appointments Since 2016 (Data provided by the Office of the Provost, 2022)

	HUG		women	
	2016	2020	2016	2020
Humanities	9.1	9.1	24.2	33.3
Life & Medical Sciences	9.4	13.3	18.8	28.9
Physical Sciences	0	5.0	5.6	20.0
Social Sciences	11.4	18.8	25.0	23.4

Figure 41. Distribution of Named Professorships by Division in 2016 vs. 2020 (Data provided by the Office of the Provost, 2022)

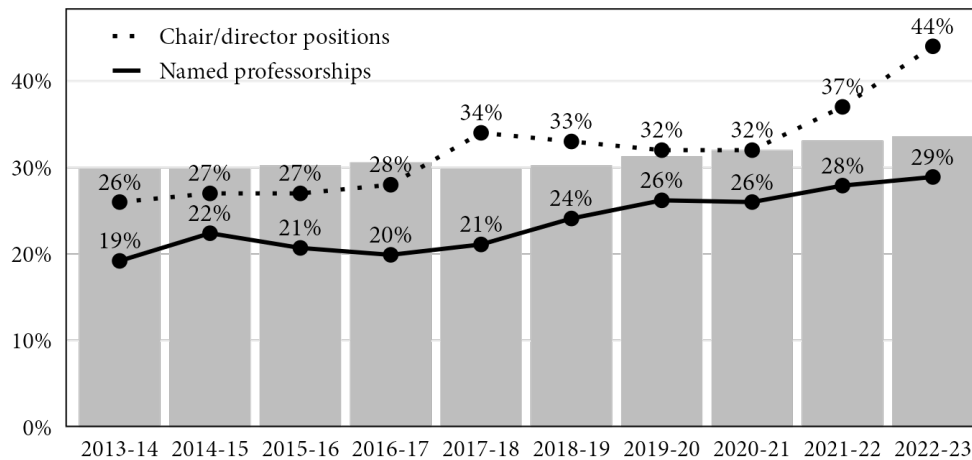


Figure 42. Percentage of Named Chairs and Director Positions Held by Women 2013-2023 (Data provided by the offices of the Provost and Dean of the Faculty, 2022)

RESEARCH RESOURCES

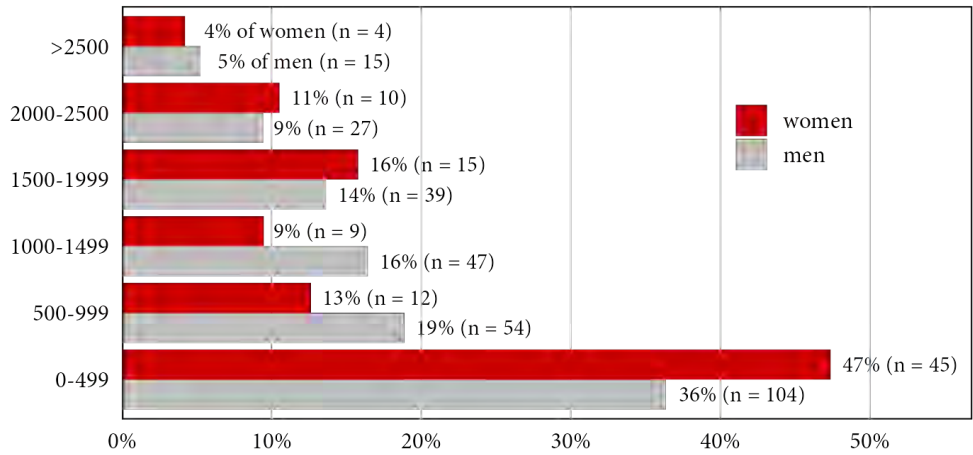


Figure 43. Research Space Allocation (in Square Feet) to All Regular Faculty by Gender (Data provided by the Office of the Vice President for Finance and the Chief Financial Officer, 2022)

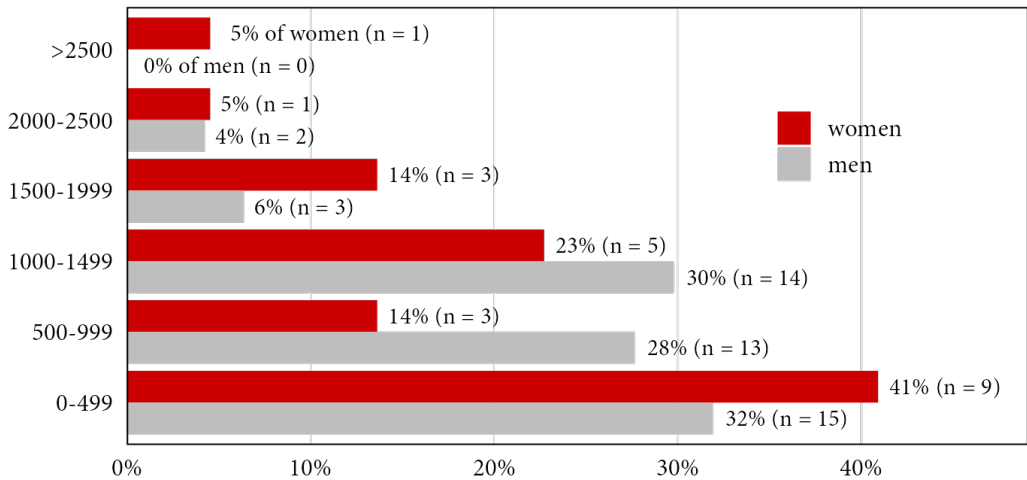


Figure 44. Research Space Allocation (in Square Feet) to All Regular Tenure-Track Faculty by Gender (Data provided by the Office of the Vice President for Finance and the Chief Financial Officer, 2022)

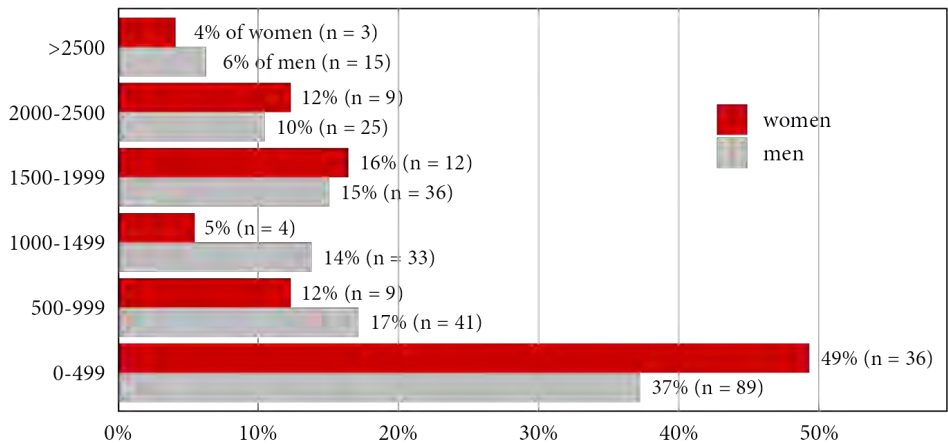


Figure 45. Research Space Allocation (in Square Feet) to All Regular Tenured Faculty by Gender (Data provided by the Office of the Vice President for Finance and the Chief Financial Officer, 2022)

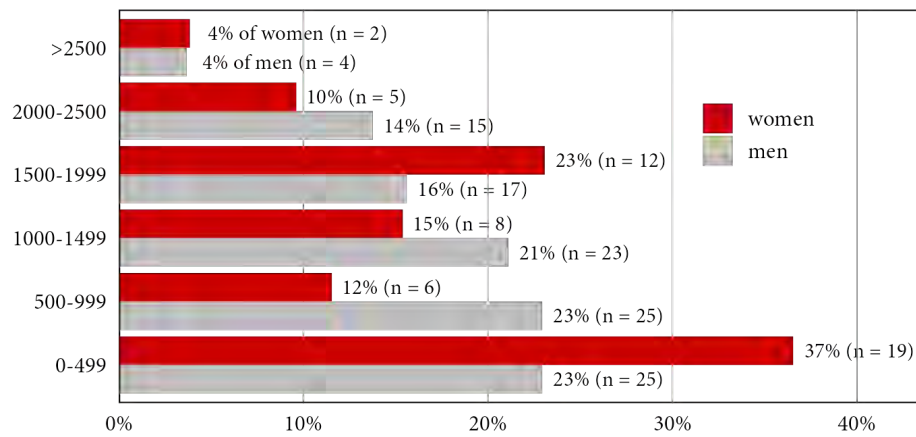


Figure 46. Research Space Allocation (in Square Feet) to All Regular Faculty in Life and Medical Sciences by Gender (Data provided by the Office of the Vice President for Finance and the Chief Financial Officer, 2022)

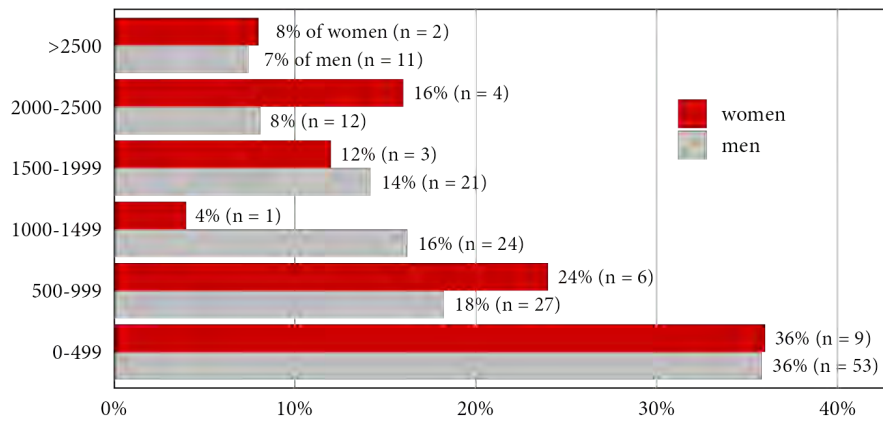


Figure 47. Research Space Allocation (in Square Feet) to All Regular Faculty in Physical Sciences by Gender (Data provided by the Office of the Vice President for Finance and the Chief Financial Officer, 2022)

REFERENCES

1. Research, O.o.I. Climate, Diversity, and Inclusion. [cited July 6, 2022]; Available from: <https://oir.brown.edu/institutional-data/surveys/climate-diversity-inclusion>.
2. Committee, P.S., Majority Report. 1970, Pembroke College: Providence, RI.
3. Locke, P.C.H.P.P.R.M. Task Force on the Status of Women Faculty. Today@Brown September 13 2021 [cited March 1 2023]; Available from: https://today.brown.edu/announcements/141668?utm_source=todayAtBrown&utm_medium=email&utm_campaign=Campus%20Faculty.
4. Lambert, W.M., et al., Career choices of underrepresented and female postdocs in the biomedical sciences. *Elife*, 2020. 9.
5. Xierali, I.M.F., M. A.; Nivet, M. A.; , Faculty Diversity in U.S. Medical Schools: Progress and Gaps Coexist, in *Analysis in Brief*. Association of Medical Colleges: Washington, D.C.
6. Antonio, A.L., et al., Effects of Racial Diversity on Complex Thinking in College Students. *Psychological Science*, 2004. 15(8): p. 507-510.
7. Campbell, L.G., et al., Gender-heterogeneous working groups produce higher quality science. *PLoS One*, 2013. 8(10): p. e79147.
8. Hofstra, B., et al., The Diversity-Innovation Paradox in Science. *Proceedings of the National Academy of Sciences*, 2020. 117(17): p. 9284.
9. Statistics, N.C.f.E. Characteristics of Postsecondary Faculty. *Condition of Education 2022* [cited November 9, 2022]; Available from: <https://nces.ed.gov/programs/coe/indicator/csc>.
10. Wapman, K.H., et al., Quantifying hierarchy and dynamics in U.S. faculty hiring and retention. *Nature*, 2022. 610(7930): p. 120-127.
11. Statistics, N.C.f.S.a.E., *Doctorate Recipients from U.S. Universities: 2021. 2022*: Alexandria, VA.
12. Page, S.E., *The diversity bonus: how great teams pay off in the knowledge economy*. 2017, Recorded Books, Inc: Prince Frederick.
13. Nguyen, K.H., et al., Proactive strategies for an inclusive faculty search process. *Commun Biol*, 2022. 5(1): p. 592.
14. Freeman, C. The Case for Cluster Hiring to Diversify Your Faculty. October 9, 2019 [cited October 28, 2022]; Available from: <https://www.chronicle.com/article/the-case-for-cluster-hiring-to-diversify-your-faculty/>.
15. Fund, O.o.S.C.-T.C. Faculty Institutional Recruitment for Sustainable Transformation (FIRST). October 20, 2022 [cited November 9, 2022]; Available from: <https://commonfund.nih.gov/FIRST>.
16. Mason, M.A., et al., *Do Babies Matter? : Gender and Family in the Ivory Tower*. Families in Focus. 2013, New Brunswick, NJ: Rutgers University Press.
17. Partnership, A. What is Harassment, Bullying and Discrimination? October 28, 2022 [cited October 28, 2022]; Available from: <https://serc.carleton.edu/204552>.
18. ADVANCEGeo Partnership; Lsoto, D. Microaggressions. September 30, 2022 [cited October 28, 2022]; Available from: <https://serc.carleton.edu/259438>.
19. Brown University. University Code of Conduct. October 19, 2022 [cited October 28, 2022]; Available from: <https://policy.brown.edu/policy/code-conduct>.
20. Evaluation of Compensation Data Collected Through the EEO-1 Form. 2022.
21. O'Leary, B. How Much Has Faculty Pay Changed Over Time? March 3, 2022 [cited October 28, 2022]; Available from: https://www.chronicle.com/article/explore-faculty-salaries-at-3-500-colleges-2012-20?utm_source=Iterable&utm_medium=email&utm_campaign=campaign_3479660_nl_Academe-Today_date_20220105&cid=at&source=&sourceid=.
22. Brown University. Handbook of Academic Administration. August 1, 2022 [cited October 28, 2022]; Available from: <http://www.brown.edu/about/administration/dean-of-faculty/handbook-academic-administration>.
23. Freund, K.M., et al., Inequities in Academic Compensation by Gender: A Follow-up to the National Faculty Survey Cohort Study. *Acad Med*, 2016. 91(8): p. 1068-73.
24. Office of Institutional Research. Employees Factbook. [cited October 28, 2022]; Available from: <https://oir.brown.edu/institutional-data/factbooks/employees>.

25. Obloj, T. and T. Zenger, The influence of pay transparency on (gender) inequity, inequality and the performance basis of pay. *Nat Hum Behav*, 2022. 6(5): p. 646-655.
26. Sallee, M., K. Ward, and L. Wolf-Wendel, Can Anyone Have it All? Gendered Views on Parenting and Academic Careers. *Innovative Higher Education*, 2015. 41(3): p. 187-202.
27. Rhode Island Early Learning Facilities Needs Assessment. November 2019 [cited March 1, 2023]; Available from: http://kids.ri.gov/cabinet/documents/PDG%20Facilities%20Needs%20Assessment%2011_19.pdf.
28. Office of the Dean of the Faculty. Paid Family Leave. [cited October 28, 2022]; Available from: <https://dof.princeton.edu/working-princeton/benefits/paid-family-leave-for-academic-professionals>.
29. Office of Academic and Professional Development (OAPD). Leaves. [cited October 28, 2022]; Available from: <https://medicine.yale.edu/oapd/academicaffairs/leaves/leaves/?tab=Child+Rearing>.
30. Johns Hopkins University. Parental Leave. [cited October 28, 2022]; Available from: <https://hr.jhu.edu/benefits-worklife/time-off/leave-for-new-parents/parental-leave/>.
31. Guarino, C.M. and V.M.H. Borden, Faculty Service Loads and Gender: Are Women Taking Care of the Academic Family? *Research in Higher Education*, 2017. 58(6): p. 672-694.
32. Babcock, L., et al., Gender Differences in Accepting and Receiving Requests for Tasks with Low Promotability. *American Economic Review*, 2017. 107(3): p. 714-747.
33. Misra, J., et al., The Ivory Ceiling of Service Work. *Academe*, 2011. 97(1): p. 22-26.
34. Yellen, J.L. So We All Can Succeed: 125 Years of Women's Participation in the Economy. May 5, 2017 [cited November 9, 2022]; Speech at "125 Years of Women at Brown Conference," sponsored by Brown University, Providence, RI]. Available from: <https://www.federalreserve.gov/newsevents/speech/yellen20170505a.htm>.
35. Statistics, N.C.f.E. Race/ethnicity of college faculty. [cited October 28, 2022]; Available from: <https://nces.ed.gov/fastfacts/display.asp?id=61>.
36. Pikul, C. Brown welcomes talented group of 62 new faculty members. September 6, 2022 [cited October 28, 2022]; Available from: <https://www.brown.edu/news/2022-09-06/newfaculty2022>.
37. Aragão, C. Gender pay gap in U.S. hasn't changed much in two decades. 2023; Available from: <https://www.pewresearch.org/?p=257386>.
38. The simple truth about the gender pay gap. 2022; Available from: https://www.aauw.org/app/uploads/2022/12/SimpleTruth_12.22_2.1-002.pdf.
39. Highlights of women's earnings in 2020. 2021; Available from: <https://www.bls.gov/opub/reports/womens-earnings/2020/pdf/home.pdf>.
40. Liner, E. A Dollar Short: What's Holding Women Back from Equal Pay? March 18, 2016, September 13, 2017; Available from: <https://www.thirdway.org/report/a-dollar-short-whats-holding-women-back-from-equal-pay>.
41. Levanon, A., P. England, and P. Allison, Occupational Feminization and Pay: Assessing Causal Dynamics Using 1950–2000 U.S. Census Data. *Social Forces*, 2009. 88(2): p. 865-891.
42. Kim, L., et al., Gendered knowledge in fields and academic careers. *Research Policy*, 2022. 51(1).
43. The Motherhood Penalty. Available from: <https://www.aauw.org/issues/equity/motherhood/>.
44. YoonKyung Chung, B.D., Danielle H. Sandler, Robert Sienkiewicz. The Parental Gender Earnings Gap in the United States. 2017; Available from: <https://www2.census.gov/ces/wp/2017/CES-WP-17-68.pdf>.
45. Shelley J. Correll, Stephen Benard, and In Paik, Getting a Job: Is There a Motherhood Penalty? *American Journal of Sociology*, 2007. 112(5): p. 1297-1339.
46. Hipp, L., Do Hiring Practices Penalize Women and Benefit Men for Having Children? *Experimental Evidence from Germany*. *European Sociological Review*, 2019. 36(2): p. 250-264.
47. Stephen Benard, I.P., Shelley J. Correll, Cognitive Bias and the Motherhood Penalty. *Hastings Law Journal*, 2008. 59(6): p. 1359-88
48. Bütikofer, A., S. Jensen, and K.G. Salvanes, The role of parenthood on the gender gap among top earners. *European Economic Review*, 2018. 109: p. 103-123.

49. Kamp Dush, C.M., J.E. Yavorsky, and S.J. Schoppe-Sullivan, What Are Men Doing while Women Perform Extra Unpaid Labor? Leisure and Specialization at the Transitions to Parenthood. *Sex Roles*, 2018. 78(11): p. 715-730.
50. Yoshida, A., Dads Who Do Diapers: Factors Affecting Care of Young Children by Fathers. *Journal of Family Issues*, 2012. 33(4): p. 451-477.
51. London, K.s.C. Women doing more childcare under lockdown but men more likely to feel their jobs are suffering. 2020; Available from: <https://phys.org/news/2020-07-women-childcare-lockdown-men-jobs.html>.
52. Caregiving, N.C.o. Women and Caregiving: Facts and Figures. Available from: <https://www.caregiver.org/resource/women-and-caregiving-facts-and-figures/>.
53. Garijo, B. COVID-19 highlights how caregiving fuels gender inequality. 2020; Available from: <https://www.weforum.org/agenda/2020/04/covid-19-highlights-how-caregiving-fuels-gender-inequality/>.
54. Modigliani, K., BUT WHO WILL TAKE CARE OF THE CHILDREN? CHILDCARE, WOMEN, AND DEVALUED LABOR. *The Journal of Education*, 1986. 168(3): p. 46-69.
55. Slaughter, A.-M. The Work That Makes Work Possible. 2016; Available from: <https://www.theatlantic.com/business/archive/2016/03/unpaid-caregivers/474894/>.
56. Kazmi, M.A., et al., Search committee diversity and applicant pool representation of women and underrepresented minorities: A quasi-experimental field study. *J Appl Psychol*, 2022. 107(8): p. 1414-1427.
57. Melissa Fuesting, J.B., Anthony Schmidt, Women in the Leadership Pipeline in Higher Education Have Better Representation and Pay in Institutions with Female Presidents and Provosts. 2022; Available from: <https://www.cupahr.org/surveys/research-briefs/women-executives-in-higher-ed/>.
58. Antecol, H., K. Bedard, and J. Stearns, Equal but Inequitable: Who Benefits from Gender-Neutral Tenure Clock Stopping Policies? *American Economic Review*, 2018. 108(9): p. 2420-41.
59. Tunguz, S. Emotional Labor in Academia: Accommodate If You Are Female. 2020; Available from: <https://www.psychologytoday.com/us/blog/emotional-labor-in-the-workplace/202008/emotional-labor-in-academia-accommodate-if-you-are>.
60. El-Alayli, A., A.A. Hansen-Brown, and M. Ceynar, Dancing Backwards in High Heels: Female Professors Experience More Work Demands and Special Favor Requests, Particularly from Academically Entitled Students. *Sex Roles*, 2018. 79(3): p. 136-150.
61. Emotional Labor in the Workplace: The Disproportionate Burden on Women. 2022; Available from: <https://www.stkate.edu/academics/women-in-leadership-degrees/empowering-women/emotional-labor-in-the-workplace>.
62. Bellas, M.L., Emotional Labor in Academia: The Case of Professors. *The Annals of the American Academy of Political and Social Science*, 1999. 561: p. 96-110.
63. Dworkin, J.D., et al., The extent and drivers of gender imbalance in neuroscience reference lists. *Nature Neuroscience*, 2020. 23(8): p. 918-926.
64. Caplar, N., S. Tacchella, and S. Birrer, Quantitative evaluation of gender bias in astronomical publications from citation counts. *Nature Astronomy*, 2017. 1(6): p. 0141.
65. Stiso, J., et al., Modeling observed gender imbalances in academic citation practices. arXiv preprint arXiv:2204.12555, 2022.
66. DeJesus, J.M., V.A. Umscheid, and S.A. Gelman, When Gender Matters in Scientific Communication: The Role of Generic Language. *Sex Roles*, 2021. 85(9-10): p. 577-586.
67. Mitchell, K.M.W. and J. Martin, Gender Bias in Student Evaluations. *PS: Political Science & Politics*, 2018. 51(03): p. 648-652.
68. Kreitzer, R.J. and J. Sweet-Cushman, Evaluating Student Evaluations of Teaching: a Review of Measurement and Equity Bias in SETs and Recommendations for Ethical Reform. *Journal of Academic Ethics*, 2022. 20(1): p. 73-84.
69. Teaching, C.f.R.o.L.a. Gender and Student Evaluations: An Annotated Bibliography. Available from: https://crlt.umich.edu/sites/default/files/resource_files/gsebibliography.pdf.
70. MacNell, L., A. Driscoll, and A.N. Hunt, What's in a Name: Exposing Gender Bias in Student Ratings of Teaching. *Innovative Higher Education*, 2015. 40(4): p. 291-303.

71. Anne Boring, K.O., Philip B. Stark, Student evaluations of teaching (mostly) do not measure teaching effectiveness. *ScienceOpen Research*, 2016. 0(0): p. 1-11.
72. Pease, J., Professor Mom: Woman's Work in a Man's World. *Sociological Forum*, 1993. 8(1): p. 133-139.
73. Yang Yang, D.W.C., Gendered Microaggressions in Science, Technology, Engineering, and Mathematics. *Leadership and Research in Education*, 2018: p. 28-45.
74. Sekaquaptewa, D., Gender-Based Microaggressions in STEM Settings. *Currents*, 2019. 1.
75. LaCosse, J., D. Sekaquaptewa, and J. Bennett, STEM Stereotypic Attribution Bias Among Women in an Unwelcoming Science Setting. *Psychology of Women Quarterly*, 2016. 40(3): p. 378-397.
76. Chen, M. and J.A. Bargh, Nonconscious Behavioral Confirmation Processes: The Self-Fulfilling Consequences of Automatic Stereotype Activation. *Journal of Experimental Social Psychology*, 1997. 33(5): p. 541-560.
77. Du, Y., J. Nordell, and K. Joseph, Insidious nonetheless: How small effects and hierarchical norms create and maintain gender disparities in organizations. *Socius*, 2022. 8: p. 23780231221117888.
78. Nordell, J. This Is How Everyday Sexism Could Stop You From Getting That Promotion. 2021; Available from: <https://www.nytimes.com/interactive/2021/10/14/opinion/gender-bias.html>.