



Fall 2010 STEM Women Full Professor Focus Group: Summary Results

Purpose

The general purpose of this focus group was to examine STEM women full professors' views on pursuing leadership opportunities and to identify needed support for faculty to assume such roles. We undertook this evaluation to explore further issues raised during a March 2010 [focus group](#) of STEM women associate professors, which examined perceptions of ADVANCE leadership programs including the [Administrator Shadowing Program](#) and the [Leadership Support Fund](#). Participants of the previous focus group stated that, in their view, it is inappropriate for mid-career faculty to pursue administrative leadership. The general question of appropriate timing for leadership roles was a guiding topic for the focus group of senior-level women, who have achieved the highest promotional ranking in academia and can now reflect on their time as associate professors.

Method

On November 15, 2010, ADVANCE at Brown convened a focus group of four STEM women full professors (17%). Internal evaluator, Dr. Carrie Spearin of the Sociology Department, led a one-hour discussion on leadership issues and opportunities. The faculty were informed that their participation was entirely voluntary, their comments would remain strictly confidential, and that no identifying information would be contained in any reporting.

Summary of Results

Cultivating Appropriate Leadership Opportunities

The members of the previous associate professor focus group indicated that at this stage in their careers, participation in the ADVANCE administrative leadership programs would limit their research productivity. Promotion to full professor is their primary goal and the mid-career faculty identified the achievement of scientific excellence and professional recognition within their scientific communities as the clearest path towards their career objective. They stated that participation in the Administrator Shadowing Program or the Leadership Support Fund would take them "out of the research arena" and further drain their time. With this perspective in mind, the senior-level STEM women faculty were asked whether they viewed mid-career as the wrong time to cultivate leadership opportunities. They initially responded "yes." The top priority of STEM women associate professors is to "maintain and excel in your science." They agreed that the ADVANCE programs were inappropriate for mid-career faculty and unrelated to leadership within one's own field of study. They would expect associate professors to find these programs neither "appealing" nor a "great opportunity." In the full professors' opinion, the leadership programs had the wrong focus.

After further discussion, however, there was consensus that there are certain kinds of leadership opportunities that should be slowly cultivated during this post-tenure period. The senior women explained that there are opportunities inherent to one's science, such as those supported by ADVANCE [Career Development Awards](#) or [Scientific Leadership Awards](#), which "lead you towards leadership positions, and they need to be started at the associate level." Such opportunities include "organizing a conference or being an editor of a journal, rather than just doing ad hoc reviews or an NSF proposal panel." With support, STEM women associate professors "could also be regular members of NIH study sections, which convene 3 times a year for 4 years." As stressed by the focus group participants, pursuing leadership opportunities within one's own field provides recognition amongst peers and builds one's national and international reputation. This reputation then aids in obtaining research funding and subsequently producing scholarly publications. Based on this reasoning, pursuing leadership opportunities within one's field of study will increase the likelihood and pace of promotion to full professor.

It appears that pursuing administrative or university-wide leadership is more appropriate for senior-level faculty. As one focus group member explained, this is the time when one is "interested [in] where [the] institution is going, can take a step back, and see more of the bigger picture." As full professors, they can be a "little braver" and "maybe feel like they can be effective at changing university policy." They agreed that as full professor, one is "able to speak [her] mind on a panel or argue about an agenda" and has "a better feeling about what people want, how to manage people, [and] how to work the system."

Department Chair as a Route to Leadership

Focus group participants expressed mixed opinions about the position of department chair as a stepping-stone towards future leadership roles. While it differs per field, most focus group participants indicated that departmental leadership only occurs after one achieves prominence within one's own scientific field. Again, the senior women stressed the importance for mid-career faculty to have a dual focus: research excellence combined with leadership roles such as a conference organizer or national society case officer.

The "department chair" as the definition of leadership "does not work; it's just one of many options." Someone who may be interested in a national society may become more involved in getting Congress excited about science. Someone who wants to be a leader in science education may take a different path. Someone who is motivated to be a department chair may be someone who is interested in "keeping house within Brown." The senior-level STEM women faculty members agreed that they would get involved with leadership positions that take time away from their science if they were committed to the cause. For example, one faculty member indicated that she became involved in leadership activities during the tenure discussions among faculty last spring (2010). She believed she was at a point in her career where she wanted "to shape things or make a difference." It was an opportunity to "have a say."

While participants acknowledged the value of having a woman department chair, they viewed this role as potentially detrimental to a woman's scientific career. As one faculty member noted, being chair is the "kiss of death" due to the administrative burden many department chairs face with little to no time to do research when having to put out fires and massage egos. Focus group members identified guilt as a contributing factor in their decisions to assume certain leadership positions. For example, one participant explained that there are certain departments in which no one is willing to serve as chair and as she noted, you "feel guilty and you do it."

Issues Specific to Senior STEM Women Faculty

Participants of the mid-career focus group stated that their top issues included decreasing feelings of isolation, increasing opportunities for collaboration, and raising the awareness of work-life balance issues. The senior women faculty indicated that they face similar issues as well as additional challenges.

The first of these challenges is the burden of service work. Women currently comprise only 15% of full professors in STEM fields at Brown University.¹ As a result, STEM women full professors serve on a large number of committees, including search committees that require a full professor. Focus group participants reported that in addition to serving on a large number of committees, they are frequently the only woman sitting on a committee, and often take on a disproportionate amount of responsibility for note taking and administrative tasks. Participants suggested that making committee assignments public knowledge or more transparent through regular surveying may help with this overuse. Additionally, having more women promoted to full professor is an important way to address these issues. As one participant remarked, the promotion of STEM women faculty is fundamentally the purpose of the ADVANCE Program.

An additional challenge is the lack of mentoring and support for full professors. When faculty members are assistant professors, "everyone is helping you, keeping an eye on you. As you move through to associate professor, the attention diminishes, but is still there because promotion is looming ahead. By full professor level, there really isn't a benchmark." One faculty member indicated that some departmental cultures promote an atmosphere where the faculty nominate each other for awards within their disciplinary societies. However, other departments lack formal mechanisms for recognizing good work. As one faculty member states, one "could be doing phenomenal work for 15 years, but no one in the department really notices." One solution suggested by the focus group participants was to have department chairs write specific letters for each faculty member that looked much like a letter of recommendation, possibly to be included in their report to the Dean of the Faculty or the Dean of Biology & Medicine as part of the annual review process.

¹ Data Source: Office of the Dean of the Faculty, Academic Year 2009-10

Support for Tenured Women Faculty

The senior STEM women faculty stated that there is a “continual impetus to focus on research, to get papers out, and grants renewed” at all levels of academia. Given this continual pressure, the focus group members pointed to several different ways that ADVANCE could support women science faculty. This includes funding support for a part-time technician or graduate student, supplies or general lab support, and broadly defined money to help facilitate one’s research. Full professors would welcome, for example, funding for a part-time research assistant. “Grant funds are continually too tight,” and such support could provide some breathing room in which to explore administrative positions and new avenues of research.

Conference Support: Faculty would welcome funding support for conferences and scientific group meetings, particularly those in which graduate program directors from peer institutions convene to share different educational models and best practices. Often, participants are inspired to bring information and ideas back to their departments, but in the past, there has been no funding for meeting attendance. Departmental graduate program budgets are often sparse and have minimal conference funds for program directors. As one faculty member indicated, “having the funds to participate in something that can lead to leadership will have big payoffs—will impact [future] activities.”

Teaching Support: Focus group participants identified teaching relief as the most beneficial support for assuming leadership roles. They acknowledged that departments cannot always cover the cost of hiring an adjunct or outside lecturer, though one faculty member indicated that her department relied on guilt to avoid granting teaching relief. She felt that she could not take teaching relief that was due to her because she “couldn’t have colleagues in my department do double teaching just because I was taking more of my salary from my grant.” One solution suggested by a participant was to hire more faculty as senior lecturers throughout the college to ease the strain felt by those faculty who shoulder both a heavy research and teaching load.

Focus group participants proposed a solution to the difficulty of obtaining (or granting) teaching relief by means of STEM post-doctoral teaching fellowships. One participant stated that 60% of post-doctoral fellows in biology and medical sciences receive their training through medical schools. While many of them desire academic positions, STEM post-docs receive little or no practical teaching experience. Teaching fellows could potentially spend 10-20% of their time teaching and 80-90% of their time pursuing research in collaboration with a faculty member. Fellows would provide some teaching relief by conducting lectures, convening office hours, and grading exams under the guidance of the faculty member, but also strengthen their research portfolio by engaging in research. One focus group participant described this as a “win-win” for postdoctoral fellows and faculty members. While some departments currently have such opportunities, the focus group identified a need for greater university support for these kinds of resources.

Additional Findings

In addition to the leadership issues explored during the session, focus group participants expressed the following additional concerns and recommendations for ADVANCE.

ADVANCE Peer-Mentoring Groups

The focus group participants described mixed experiences with [peer-mentoring groups](#) sponsored by ADVANCE. In general, they believed the groups would be more beneficial and better attended if sessions were moderated with a specific topic. One faculty member indicated that she prefers having an ADVANCE facilitator lead the meetings by providing the topic, background information, and talking points. For example, two peer-mentoring meetings focused on [Nancy Hopkins'](#) lecture on balancing career and life. One faculty member stated, "These were great! [There was a] defined topic that everyone was interested in." Topics they would like to explore through peer-mentoring include mechanisms for getting relief from departmental duties, managing lab personnel, negotiating with your chair, and diversity issues. One participant also suggested inviting a department chair to a session to talk about the expectations and responsibilities of this role. Overall, these topics would be specific enough but also broad enough that everyone would get something out of them.

Department Chairs Training

The focus group participants perceive that women are more likely to see new leadership opportunities as good for their careers but are also less likely to request relief or support from ongoing responsibilities in order to assume these roles. There was consensus that there should be better communication between department chairs and faculty regarding the value of professional service. As one faculty member explained, "One might say [that] it is the responsibility of women faculty members to advocate for themselves, but departmental climates vary a lot." Faculty would like to hear "a strong message...from the chair that 'yes' we value you doing this type of service related work outside the university, and if you get one of these challenging positions, come and talk to me about it." While participants acknowledge that most chairs are probably open to such a discussion, they agreed that chairs and faculty alike would benefit from some guidance or training on how to begin the dialogue.

Dissemination of National Award Nominations

Participants do not perceive that department chairs are regularly nominating women or suggesting they apply to national or international awards for excellence within their scientific fields. One faculty member suggested that ADVANCE generate a list of such awards with deadlines and guidelines for writing nomination letters, distribute these materials to department chairs, and encourage them to nominate their [women] faculty. She affirmed that this process would benefit not only the individual scientist, but the department and university as well.

Work-Life Balance

A major issue derived from the focus group of associate women faculty was the imbalance they felt regarding work and family life. As a result, the senior level women were asked if work-life balance was still an issue at this stage in their careers. Overall, the answer was “yes,” though they identified the issue as a “lack of time” rather than an imbalance between work and family life. One faculty member noted that asking for monetary funds would not cure this “lack of time” issue, though increased funds to hire personnel may ease some of this pressure. While the basic need for more time is similar for women associate and full professors, the sources of this strain are different for senior level women. Junior and mid-career faculty receive support and advice on all aspects of their careers, including lab management, scholarly publishing, grant proposal writing, etc. Full professors rarely receive career advice, though as one focus group member stated, “But you still need it!” Senior faculty are assumed to “know how to do everything.” Mentoring is a second source of time strain for full professors. They generally mentor many more people than mid-career faculty, which takes a “huge amount of time.” While the time committed to formal mentoring can be onerous, it is the informal mentoring that becomes more burdensome and time consuming for senior-level women (i.e. “I need your wisdom to make decisions”).