A Skills Course on Female Leadership
We've learned to be excellent scientists through years of training and keen observation. However, few if any scientists have been directly and professionally trained in leadership. In 2018, Bonnie Bassler, chair of the Department of Molecular Biology at Princeton University, organized a one-day skills course on female leadership for the female faculty in our department. The course was conducted by hfp Consulting, which is well known for organizing management courses sponsored by EMBO. Bassler had participated in a similar event at Harvard that had motivated the female faculty to organize a leadership group and thought that we could similarly benefit. The course accompanied the 2018 Kuggie Vallee Distinguished Lecture at Princeton University by Geraldine Seydoux.¹

How the Course Worked
We were a room full of accomplished women who had mastered running a lab and being at the forefront of science, yet our job for the day was to talk about our difficulties and weaknesses in front of our colleagues, including our department chair and vice versa—not an easy task! After the first exercises we quickly learned 1) that we would benefit from letting down our guard; 2) that everyone was facing at least one difficult professional situation; 3) that finding solutions for these seemingly unsolvable problems can be accomplished in small teams and group exercises using tools and leadership skills; and 4) possibly the biggest lesson, that we could help one another. Most importantly, the course was inspirational and was a bonding experience that brought the whole group together. At the end of the day, everyone was beaming with excitement and it seemed like we could change the world immediately by improving conditions for women in science locally and globally.

Getting a Female Leadership Group Started
Building on the excitement with which we finished the course, we formed a female leadership group, based on the Harvard example, supported by our department chair and manager (both women). We quickly realized that our group did not have an organized program, and that it was up to us to decide what our group could do. Two goals emerged: to first assess how female faculty feel regarding equality, and then to use this information to improve conditions. An informal survey provided us with an excellent list of issues that female faculty face.

What Have We Learned?
So far through the process of launching our group, we have learned that it's important to start small by focusing on local issues that are not only relevant to the group but can realistically be tackled. After discussion, the group chose a few key issues to address. In doing so, we learned that some problems are not as easy to address as others because they are unexpectedly broad. For example, we learned that an issue like child/elder care is relevant to almost everyone, but it really is different for each person and does not have one easy fix.

An example of a tangible issue we targeted was how to achieve gender equality in awards. To receive an award, one needs to be nominated, and evidence has shown that besides simply not being chosen for awards women either receive fewer nominations or ask to be nominated less often than men. Our solution...
was to form a nomination committee (essentially our group) and to identify awards we would like to be nominated for and submit nominations on behalf of our colleagues. This process will be repeated regularly, and requests can be submitted at any time.

The second tangible issue on our list is visibility. Evidence suggests that female faculty do not promote themselves or their labs enough, which disadvantages them, especially in attracting students, postdocs, and prizes. Yet easy forms of publicity are constantly created via the social media revolution. To get more information, our department manager invited the university Office of Communications to inform us about new modes of publicity for our whole department. At our group’s next meeting we will discuss how we can best use these new modes to put us more in the spotlight and to support one another. Success in testing the effectiveness of strategies has given our group confidence.

**Other Positive Impacts of the Group**

Besides targeting specific topics, members benefited in unexpected ways. “We promote each other’s science and celebrate each other’s successes. Plus, these inspiring and talented women are just plain fun to be around!” said Danelle Devenport. Indeed, we realized how important and fun it is to simply communicate and started to go out in small groups independently of the official meetings. More senior members of the group benefitted from being active mentors to young female faculty, and as expected the younger women greatly benefitted from this, too. The impact on both generations is really positive. And because of the candid group discussions, according to Jean Schwarzbauer, “we hear about topics and issues that wouldn’t necessarily come up in individual mentoring sessions. Diverse viewpoints, brainstorming, and teamwork can spawn innovative solutions.” Finally, by forming this group, everyone also learns more about how the university and departments work, and new synergies between labs have been discovered that led to collaborations.

**From Local to Global**

Research has shown that simply by meeting and talking, female faculty support and mentor one another \(^1\) and this has surely been the case for us. Yet to address global issues that affect all women irrespective of the department or institution, more help is required. Global action requires a big network, time, and energy, which are challenging to come by.

We did benefit from publicly accessible surveys that other universities had conducted on equality. Perhaps one strategy to tackle global issues for women in science would be to start with many local groups that could then connect to make a difference on a broader scale, e.g., in a region or country.

In this sense, we hope that this article can serve as an encouragement to develop your own group within your department or within STEM subjects at your institution. We are happy to share everything we learned and would love to create a support network that could move larger mountains in the future. So if you feel inspired by this article and want to connect with us, please send us an email at mol-femaleleaders@princeton.edu.

**Footnotes and References**

1. This event in our department in 2018 was supported by the Vallee Foundation in honor of Kuggie Vallee, a supporter of women in science.


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