COACH periodically sponsors career development workshops for chemists serving as post-doctoral fellows. A major goal of these workshops is to help participants develop skills to enhance their interest in and ability to obtain and prosper in academic faculty positions. In 2015 a short internet-based survey was sent to women chemists who had participated in these workshops. The survey asked about their current employment status, ways in which their workshops experiences had helped them, and suggestions for other ways in which COACH might assist them or other post-docs. Current addresses were found for 200 attendees and 22 women responded to the survey, for a response rate of 11%. Their answers are summarized below.

**Current Employment Status**

The vast majority of the women had entered faculty posts, and 18 of the 22 women held faculty positions in chemistry or related fields. Two worked in academe but not in faculty posts, one was employed in another STEM field, and one described herself as in a “career change” and currently searching for a job. When asked “how much did the COACH workshop influence you or help you to pursue a faculty position?” half of the women currently in faculty posts said “quite a lot” and three more said “a moderate amount.” Only two of the 18 women indicated that COACH had no influence on their decision and did not help them. Ten of the women included explanations of how the workshops did or did not help. Nine of the 10 comments described beneficial aspects of the workshops. The other comment noted that the respondents’ current post was such that the skills learned had not been needed. Table 1 provides the full text of these comments.

The respondents were also specifically asked about the use of skills taught in COACH in the hiring process, specifically “when you negotiated for your current position.” A little more than half of the women (13 of 22) indicated that the skills had been at least moderately important, about a third (n=7) said that they had helped “a small amount,” and only 2 said that they weren’t at all important. Nine of the respondents gave additional details. While one woman indicated that there were few areas about which she could negotiate, all of the others described ways in which the information about negotiation skills had been helpful. There was, however, variability in their comments regarding use of the skills, reflecting the variation in the ranking of the strategies in the closed ended responses. All of the comments given regarding use of negotiation are in Table 2.
**Using Skills Taught by COACH in Current Positions**

The respondents were then asked to indicate which skills taught at the workshops had helped in their current professional positions. Seven skills were included in the list, and all of the respondents indicated that they used at least one of them. On average, they reported using slightly over three skills, most often negotiation followed by those related to communication. When asked to indicate additional skills that were used one respondent added that the skills had “helped me learn how to better communicate with coworkers in situations that were high stress.”

**Using COACH Workshop Strategies to Help Work-Life Balance**

While a majority of respondents reported that strategies learned through COACH had helped them obtain and cope with their jobs, somewhat fewer indicated that strategies learned in the workshop had helped work-life balance. A majority indicated that the workshops had helped either not at all (n=6) or a small amount (n=8) in this area. Only one respondent said that the strategies had helped "quite a lot." The open-ended comments, given in Table 4, indicate this variability. They also indicate the extent to which discussion of this area was perceived to be a relatively minor part of the workshop as well as the difficulties inherent in dealing with the issue.

**Other Professional Impacts**

About three-fourths of the respondents indicated that the COACH workshop had other impacts on their professional lives, and their responses are listed in Table 5. The descriptions were varied. Three respondents explained actions they had taken to encourage other women, four mentioned skills they had learned and used, and four others mentioned the networks they had developed with other women chemists.

**Other Ways COACH Could Provide Support for Current Professional Needs**

Half of the respondents said that COACH could provide workshops or other supports that would be useful in their current professional position. Their explanations are given in Table 6. Almost all of the comments involved help with issues faced at mid-career including the promotion and tenure process, grant writing, networking, and time management.

**Ways COACH Could Help Other Post-Docs**

Seven respondents provided comments regarding ways that COACH could help post-doctoral fellows as they transition to other positions. Responses, which are in Table 7, were quite varied, ranging from the provision of general support and teaching of skills to dealing with specific issues such as a difficult job market and decisions regarding child bearing.
Comments on Why Made Career Choices

Finally, because COACH was interested in how to encourage more women to enter faculty positions, the respondents were asked to explain why they had chosen their current career path. Their responses are given in Table 8. Seventeen women responded, and 10 of them gave answers that reflected their love of the profession and their work. One person specifically mentioned the role of an advisor’s encouragement and role models. Two people indicated that their choice reflected compromises to reduce stress or accommodate two careers in the family. Finally, three people indicated that they were still pursuing opportunities, although two of these hoped to enter the faculty ranks.

Summary

In general, the responses to this survey replicate findings from other long-term follow-ups of women who have attended COACH workshops. The attendees remember and use skills that they learned, believe they are helpful in their work, have positive attitudes regarding the workshops and would encourage others to attend.
Table 1

*Respondents’ Explanations of How COACH influenced them or helped them pursue a faculty position*

- The workshop was very well put together and addressed key issues that normally are determining factors when debating between academia and industry. The workshop provided very good examples and case scenarios of both worlds (academia and industry), which helped me make a definite decision in regards to which endeavor I was more comfortable with.
- Gave me confidence to apply for tenure-track positions after seeing success of current female faculty/mentors/role models.
- The COACH workshop involved detailed and hands-on activities regarding negotiations. I knew that negotiating was important, and even understood why, but this was the first workshop where I had the opportunity to enact negotiating and it's quite challenging. Even knowing "what to do" and "what to say", in the moment nothing really prepares you for negotiating. I often think of the workshop when I try to persuade colleagues or an administrator to support a cause.
- I have wanted to be a faculty member since I was 13 and was already planning on pursuing that path, but I had become a single mother shortly before my COACH workshop and was experiencing significant insecurity regarding whether or not I could still pursue this dream given my family situation. Being able to discuss that fear and the realities of pursuing a faculty position (both trying to get and holding down the job) at COACH significantly helped bolster my confidence going into my job search.
- I was already quite decided to pursue a faculty position. COACH helped me to prepare my applications and understand the "non-written" part of the selection process.
- COACH gave me the confidence to apply for faculty jobs. It was excellent to hear about negotiation skills but also to establish a network of other female scientists from a wide range of chemistry. By comparing notes with others, I realized that I was well poised to apply for academic positions.
- Was SO EXCELLENT for negotiating skills and speaking skills, and networking
- I knew I would be applying for a faculty position and part of my reasoning for attending a COACH workshop was to be a stronger candidate when I applied. The workshop was really helpful in helping me see be more assertive/aggressive in my actions and establishing a better presence in my interviews.
- I was already pretty convinced I wanted to obtain a faculty position, but the workshop helped me acquire further skills to make it happen.
- I did not need to negotiate any terms because of limitations of funding for my current position.
Respondents’ Explanations of Ways in Which Negotiation Strategies Helped in Obtaining Current Position

• The workshop stressed a lot of times the importance of the negotiation process and I believe this was very helpful to me when I was negotiating my salary and start-up package before formally accepting the offer.

• I think the biggest thing was that the workshop made me aware that my tendency was to avoid negotiation, so that I could try to overcome that hesitation!

• I was not extremely successful in my negotiations, but I utilized the skills I learned through the COACH workshop.

• I did ask for a raise, and even though I knew how important it was, I still found it difficult. Having been in my position a few years now, I definitely regret not pushing for more. But as we learned in the workshop, salary is not the only bargaining chip.

• I was able to negotiate a lot! I was not afraid to ask for things. One tip given was to ask for something that has no consequences in life -- such as a lower room at a hotel. I practiced this and it paid off with negotiations in jobs. I was able to get more start-up money, slightly higher salary, summer salary, graduate student stipends, and facility fees waved. I don't think I would have even known that I could have asked for these things if it weren't for COACH.

• Negotiating, networking, career development, mentoring other women

• I applied some of what I learned in the workshop when I negotiated, but I should have done more.

• The strategies (and suggested readings) definitely made me aware of things I could/should ask for, and how to do so.

• My position does not involve many negotiable aspects.
Table 3

*Percentage of Respondents Indicating that a Specific Skill Taught in COACH Workshops Had Helped in Current Professional Position*

<table>
<thead>
<tr>
<th>Skill</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>68%</td>
</tr>
<tr>
<td>Negotiation</td>
<td>82%</td>
</tr>
<tr>
<td>Effective interview and CV review</td>
<td>32%</td>
</tr>
<tr>
<td>Building a strong CV</td>
<td>32%</td>
</tr>
<tr>
<td>Views of faculty who attend the workshop</td>
<td>32%</td>
</tr>
<tr>
<td>Professional presentations</td>
<td>36%</td>
</tr>
<tr>
<td>Career Advice</td>
<td>36%</td>
</tr>
</tbody>
</table>

N = 22

Table 4

*Explanations of Ways in which COACH Strategies Helped Work-Life Balance*

- I have learned to maximize benefits I need for day-to-day operations of my household!
- I don't recall this being an aspect of the workshop I attended.
- I don't remember the specific strategies discussed, but I did appreciate the discussion that I was allowed to have a work-life balance!!
- It was nice to hear from the faculty panel about maintaining work/life balance. I am currently an assistant professor with many active research grants and a small child. Both aspects of my life are rewarding.
- I didn't ever do anything with COACH relating to work life balance that I can recall....
- We didn't cover as much work-life balance and focused more on the negotiating aspect.
- HATE HATE questions to women about work-life balance.
- This is a constant battle; one at which I know I should be better, but is very difficult to achieve.
Table 5

*Other Impacts of COACH on Respondents’ Professional Lives by Type of Response*

**Actions**

- I have made it a point to be a positive female role model for women on campus.
- It has been inspirational for me to also encourage other women and help empower them with useful tools to succeed.
- Time management, hiring postdoc and students

**Skills**

- Professionally, it has been excellent.
- It made me aware of pitfalls that women sometimes encounter, I doubt I would have thought about these on my own early in my faculty career
- I can tactfully get a schedule and do the research I want to do with full support from my program director and dean. I learned how to sit at the table to negotiate terms that will benefit my school and program while giving me the career boost that I need.
- I realized that professional groups built on "minorities" (here, women) do have a strong role to play on the job market.

**Networks**

- I've kept in good contact with several other attendees and we have a nice ongoing support network.
- I networked with other women in scientific disciplines and would be able to contact them if needed.
- It’s hard to quantify, but the intangible support through COACH and similar formal and informal structures has a huge cumulative impact.
- Networking
Table 6

*Ways in Which COACH Could Support Respondents in Current Professional Positions*

- What happens after tenure.
- Grant writing workshops. Time management.
- This may be offered, but a midcareer workshop would be helpful.
- Something for mid-career faculty would be nice! It is a different set of issues that we face. Also revisiting some of the things we did in the first workshop would be good.
- I want to change from academic career to a viable career as a small-business owner.
- I think this workshop is extremely powerful and important at multiple career stages... following up with alumna and others to have workshops for women who are farther along in their careers as well would still have significant value in a support, education, and networking capacity. (e.g., workshops geared towards non-tenured, tenure-track faculty, midlevel women in industry, workshops discussion issues related to transitioning to leadership roles/management/administration could help bolster the proportions of women in higher ranking positions)
- Negotiation, career opportunities, leadership opportunities
- A pre-tenure workshop would be very useful
- Probably, but I need to review what is offered... something for after tenure would be great. If nothing else just to promote networking among tenured early-to-mid career females in chemistry!
- The process of tenure, promotion, outreach etc.
- grant writing
Table 7

Open-Ended Comments Regarding Ways to Help Post-Doctoral Fellows

- How to deal with rejection how to deal with a competitive and saturated job market
- Invite recently-hired faculties that could share their experiences with post-doc fellows
- I participated in the Coach workshop more than a decade ago. In all honesty, after this passage of time, it is rather difficult to unravel the details of how Coach was beneficial, although I do think it was.
- As a postdoc, I did not understand how cushy it was to be part of a lab with other students. In a faculty position, I often feel more alone and it is critical to get in touch with other female professors at other universities to stay motivated and grounded.
- Getting the word out about these great workshops!
- Remember that if you want to have a family, do not be afraid to do so. If you are not at a family friendly place, do not let those individuals ruin your plans. You have a right to be in the workforce as well as have a family!
- What might be helpful is to have more efficient programs that are aimed at advancing communication skills and effective oral presentation skills for postdocs. I attended a workshop on effective negotiation, and I had learned a few tricks, but what I found (and what turned out to be) the most useful was actually communication/presentation part. I think many upper level graduate students and especially postdocs could benefit from such professionally developed and academia-tuned programs.
Table 8

_Why Respondents Chose Their Career Path_

**Love of the Field and Work**

- I have always wanted to teach at a PUI and work with undergraduates. I have my dream job and could not be happier!
- I enjoy research at the academia level because it provides me with limitless opportunities to research whatever I want. I am not constrained to a particular goal. I am the captain of my research ship and I can steer the ship to any direction I want.
- I love the academic setting and I love the research I do!
- I love chemistry and I love teaching. My job gives me the best of both worlds.
- I enjoy teaching, speaking about chemistry, and working with college students. I also love working in the lab and sharing my skills and knowledge with undergraduate students.
- I love this job!! I have wanted to be a professor since my father made a transition from industry scientist to a non-tenure track academic position when I was in junior high. I worked towards this goal for twenty years before landing a tenure-track position at a Top 10 (in my field), R1 university.... I love my interactions with students, I love having amazing conversations with my colleagues, I am grateful for the way I am able to work independently-- this helps with my work-life balance dramatically (the old saw that an assistant professor has ultimate freedom-- she can work any 80 hours a week she wants! is not far off base, although the hours aren't quite that bad). Life is good.
- The choice is a result of my passion for Chemistry and the opportunity to do research full-time.
- Academics has given me the freedom to investigate questions that I think are interesting and the flexibility to have a family.
- I always knew I wanted to teach, but wasn't sure at what level. As I pursued my Ph.D., I found I particularly enjoyed working with undergraduate students. Therefore, it made a lot of sense to pursue a faculty position at a liberal arts college because it incorporated both aspects.
- My career path found me. I knew I wanted to go into graduate school and beyond so I did! Mathematics was very challenging to me and I enjoyed the challenge.

**Influence of Advisors/Mentors**

- My Ph.D. adviser was the primary reason I went into academia rather then pursue an industrial position. The female role models available at my institution was a significant reason I took my current position.
Compromise

- I chose a non-tenure track position even though I was offered a tenure-track position. I decided that I did not want the stress of recruiting graduate students and constantly writing grants. I've realized that being teaching faculty has its own downsides. The main downside is that I have very little time for independent research, and I feel that I am no longer part of the vibrant community in which I completed my doctoral and postdoctoral research. As I transition from my initial years as a new faculty member, though, I see opportunities to better manage my time so that I can prioritize independent research.

- Independent research, a solution to the two-body problem, to help women in the STEM field

Not Yet Settled

- I'm currently in a postdoc position, with the aim of gaining a faculty position.
- I plan to go to an industry or government job.
- Faculty position, if not possible industry