Women are entering the sciences and receiving PhD’s in record numbers, close to 50% in some fields, but the percentage of women achieving professor rank or a leadership position lags well behind men (National Science Foundation, 2013). In the US, women make up approximately 15% of professors in all STEM fields—although this is highly field specific, ranging from a high of 22% in the biological/life sciences to a low of 8% in engineering. In terms of leadership positions, the overall percentage of women deans and department chairs in 4 year colleges and universities is 31% (National Science Foundation, 2013) and, although more detailed data are difficult to obtain, it would most likely mirror the data on women professors in each field and will vary depending on the academic standing of the institution. These are obvious gains to embrace and celebrate. Nonetheless, we have a long way to go even, sadly, at the professor rank.

We have invested significant resources in career development and mentoring for women (and men), have more robust research on gender equity (some funded by NIH) allowing us to educate and inform the scientific community and to design thoughtful and targeted interventions, and we continue to publish data and track the trends for women in science. Yet an inability to grow the ranks of women professors or leaders in science remains. An approach that appears to be successful in increasing women leaders in the business world, with supporting data and outcomes, is sponsorship (Hewlett, Peraino, Sherbin, & Sumberg, 2010). Based on these results, and the fact that the increase in women professors and leaders in science is progressing at glacial speed and is not keeping pace with the pool of available women, it could be worth adapting sponsorship programs for women in science.

Dr. Hal Shapiro, former president of MIT, is a role model for sponsorship in academia, he has sponsored at least five women university presidents (Hymowitz, 2012). Although usually focused on grooming women as leaders, sponsorship can significantly impact the careers of women faculty throughout the ranks particularly associate professors whose focus is less on establishing their credentials and more on enhancing their reputation and visibility, whether they aspire to leadership positions or not. And of course goals change as we progress throughout our careers.

**So what is sponsorship? Is it not the same or very similar to mentorship?**

Although there are many similarities between these two relationships, e.g., providing guidance, advise and feedback, two key differences are 1) sponsors publicly support you whereas mentors are usually behind the scenes and 2) sponsors are senior individuals with power and influence whereas mentors can be anywhere in the hierarchy of the organization, even assistant professors (Travis, Doty, & Helitzer, 2013). One illustration of both of these differences is that a mentor would advise you to become a member of the editorial board of a major professional journal in your field, but a sponsor would personally recommend you to the journal editor. If a mentor does the latter then she is acting as a sponsor. There are many opportunities for sponsoring associate professors both nationally and locally. Nationally we can suggest women as members of the program committee for the annual meeting of professional societies or as organizers of symposia which has the added advantage of increasing the number of women speakers on the program and reducing the likelihood of all male symposia (Casadevall & Handelsman, 2014). We can also sponsor associate professors to be speakers or organizers of Gordon Conferences or Keystone Conferences, or ask them to be a co-organizer if you are the organizer. Recommending them to serve on study sections if appropriate, providing them networking opportunities with other colleagues and enhanced visibility in the scientific world. Locally we can recommend them for appointment to key institutional committees that have power and groom them to be the chair. Finally all of our institutions have “hot jobs”-mission critical highly visible projects or global initiatives that spotlight the accomplishments of talented faculty. We as senior women can recommend our junior colleagues for these positions.

Make no mistake this is not an entitlement program, sponsors are earned (Hewlett et al., 2010). What are sponsors looking for in a protégé? Clearly the first requirement is scientific credentials in terms of publications and grant funding which remain the coins of the realm in the scientific world. But sponsors are looking for more than this; they are looking for individuals who have a reputation as a respected and collegial colleague. Your role as protégé is to develop and monitor your interactions for these qualities. The ability to communicate effectively is also important to sponsors, so always have your “elevator speech” up to date and ready to go for that chance meeting with a senior colleague who may ask you “what are you working on?” Be prepared to talk about the paper you just submitted to a high impact journal, the exciting new finding in your lab or the talk you have been asked to give at a major national...
meeting. And in only 3 minutes! If you are on a committee the first rule is show up, but more importantly be prepared, do your homework, participate, make suggestions on how things could be improved. This is an opportunity to be noticed, gain visibility and attract a sponsor. Be gender neutral when looking for a sponsor; just as women bring different perspectives to a relationship so do men. In addition, there are only so many senior women to go around!

Why should senior women be sponsors?
First senior women are role models for their junior female colleagues allowing them to envision a future for themselves as professors and leaders and encouraging them to stay in the field. Secondly women have unique interpersonal skills e.g. consensus builders and collaborators, traits required in modern science where a scarcity of resources (i.e., grant funding) combined with a culture of “team science” is critical to solving complex scientific problems to benefit human-kind. Finally and perhaps most importantly is that women who have “made it” into the upper echelons of the scientific world recognize marginalization and can help ensure that different voices and opinions are heard and acknowledged, fostering a culture of inclusion. They are aware, for example, of language that devalues women or their contributions, e.g. “she is a worker-bee”, a phrase that many others may not hear in the same context. So I encourage and challenge my senior women colleagues to be sponsors. As I stated in a letter to the editor in the NY Times “After all what do we have to lose? Not much else seems to be working!” (Travis, 2013).”

Dr. Travis, Associate Vice President, Women Faculty Programs and Mattie Allen Fair Professor in Cancer Research, is an advocate for women in science and medicine and a frequent speaker on women in leadership. She is the Chair-elect of the AAMC Group on Women in Medicine and Science and immediate past-Chair of Women Executives in Science and Healthcare (WESH), Women Executives in Healthcare and Science. She is a PI (multi PI grant) on one of the “causal factor grants” awarded by the NIH.

References: