Date: May 10, 2024

RE: Comments on FFAR Workforce Development Strategy

Answers to the following questions were provided through an online survey.

Please let us know your initial impressions and reactions to FFAR's Scientific Workforce Development Strategy:

We agree this is a critical issue that needs to be addressed to face the food and agriculture challenges of tomorrow. We also agree with the proposed themes that focus on attracting adjacent disciplines to expand the talent pool, attracting new talent, and retaining existing talent. IFT is also committed to training and developing the next generation of talent and several of these areas are discussed below as well as opportunities to partner.

We do encourage FFAR to consider food scientists and food technologists as part of the food and ag workforce. In several places the development strategy focuses on the “Ag workforce” and we would encourage inclusion of Food and Ag workforce (as noted on the desired impacts slide).

Do you have any feedback on Theme 4.1: Expanding the Talent Pool?

With the current focus on "ag research(ers)," we would encourage FFAR to be more inclusive of food in this area. This will expand the number of adjacent disciplines that may be included. For example, nutrition, sensory science and behavioral science may not be seen as adjacent disciplines to agriculture, but are adjacent to food science & technology.

We also believe this theme could potentially be expanded beyond mid-career and early-career to include students as well. Perhaps by providing training and education opportunities that integrate disciplines (e.g., food science majors that provide different areas of emphasis, such as nutrition or agronomy)

Do you have any feedback on Theme 4.2: Attracting New Talent?

We agree with FFAR that it will be important to identify gaps, but like the other themes, we think this should go beyond identifying gaps and should involve developing opportunities. We think it may also look different to attract talent for areas aging out versus emerging areas of the future. In areas such as data science and AI it is likely that there will be much new talent in these areas as they are rapidly growing and job opportunities will abound. The key will be attracting the talent to focus on data science and AI for food and agriculture. This is where some of the strategies in the previous theme (expanding the talent pool) may also work.
However, the challenges for older disciplines will likely require different methods to attract and retain talent.

**Do you have any feedback on Theme 4.3: Retaining Existing Talent?**
We agree that retaining existing talent is also critical to continue the development of the talent pipeline. However, we would encourage something similar to theme 4.2 that would identify the gaps and needs in this area. Is there indeed a loss of existing talent? Are they leaving the workforce, changing roles in the workforce, etc.? It would be a good idea to understand the dynamics of what is going on with existing talent to understand what solutions would be the most effective.

**Is anything missing from the strategy that FFAR should consider?**
Most of the workforce development strategy is focused from early-career to senior researchers and professionals in food and ag. However, we would encourage FFAR to also consider younger individuals, such as university students or even high school students that are just starting to plan their future careers. This may require partnerships with other organizations if this is not FFAR's strength or focus area, but it seems that this is an ideal time of life to begin exposing young adults to opportunities in food and ag science.

**In your opinion, what are the biggest challenges related to agriculture scientific workforce development?**
We believe one of the biggest challenges is the stagnant public funding of food science and agriculture research for many years. Without increases in public funding, there are more researchers coming into the field and competing for the same amount of funds. This is considerably challenging for young researchers who often do not have the collaborations and extensive experience needed to secure large grants for their research programs. Additionally, many grants require matching funds which adds another hurdle that is difficult for early to mid-career researchers to overcome. Knowledge of these challenges is likely discouraging young scientists possibly leading them to pursue research areas with less competition and greater opportunity for success.
We believe there are also several other challenges, and we would love to partner with FFAR to help better understand these challenges as well as opportunity areas for food science & technology.

**Supporting Documents**
If available, please include links or citations to any relevant research, evidence or publications to support your comments:
Food Science funding white paper

**Would your organization be interested in potentially collaborating with FFAR on any of the themes mentioned in the strategy?**
If yes, please elaborate below:
We would be very interested in partnering with FFAR on several of their objectives, such as evaluating and addressing gaps in workforce training, identifying needs, and creating training opportunities, particularly as these relate to food science and technology. We believe IFT is uniquely positioned to provide meaningful input to these areas, particularly as it related to food science & technology. We organize a Committee of Food Science Administrators (CFSA) which includes the heads of university food science departments that could be a tremendous source of knowledge on education and training challenges and opportunities for food science students, staff and faculty. We also have a thriving and highly engaged student association that can also help identify needs and opportunities. We also offer many training opportunities for existing scientists, such as short courses on specific topics, as well as trainings intended to expand knowledge and the talent pool, such as “Food Science for the Non-Food Scientist”.