Connecting, Engaging, and Training HQP
Session Date: May 26 2025
Session Host: Valerie Miller, Future Energy Systems, University of Alberta
Attendance: 13 people

Part 1: *Share the FES HQP training experience as a prompt for two guided discussion periods, where other Round 1-2 CFREFs can share their experience and Round 3 CFREFs can share their plans and questions.*

Who are our HQP?
- CFREFs define HQP different so variable between groups
  - Highly variable number of HQP
- Variable in how HQP are recruited and funded
  - Some CFREFs directly hire HQP (easier to connect with for training if direct hire) whereas others provide funding to PIs who hire HQP (more challenging to connect with for training)
- How do we connect with them? (see Challenges below)

What kind of training is needed?
- Highly variable CFREF to CFREF
- Consider what support exists within your institution
  - What can you use that already exists?
  - Finding gaps in the universities and filling them
- Future Energy Systems focused on research communication training as HQP receive research specific training from supervisors
  - Gave us the ability to meet many of the soft skill competencies that students should develop in graduate school
- Is the training required or voluntary?
  - In most cases, it is voluntary which can make it more challenging

Challenges:
- Capacity of CFREF teams - often few staff to support training
  - How can we maximize the staff we do have available?
- Developing good connections with HQP
  - How are we contacting them?
  - Often HQP do not know that they are part of these grants so it is challenging to connect to them
- Difficulty tracking HQP but also difficulty tracking their training
- How do we engage with PIs?
  - Without PI engagement, there is little buy in for HQP training
  - PI buy in is essential
  - May require outreach and data collection to identify stakeholders and specific skills to focus on
- In most cases training is voluntary so there is little interaction so how can we maximize?

<u>Lessons Learned from Future Energy Systems (and Discussion with other members)</u>
- Building a community of people supports training and new members
  - Great support within the group
  - Creation of cohorts can be helpful
- Highlighting success encourages PI support
  - Make sure successes are shared
- Immediate opportunity to practice and continued expectation was essential
  - Training must be more than a one off, must be followed by immediate opportunity to use skills AND encourage opportunities to return for future opportunities to use skills
- Opportunity to connect to different audiences expanded skills
  - Connect widely rather than focusing on one audience
  - We start with kids because if you can explain simply you can explain to anyone and then expand
- Creating incentives to get registration is a benefit
  - Incentives can be wide ranging - opportunities to connect to industry, financial, professional development hours, etc
- Work with partners
  - Could be academic, industry, community
  - Provides HQP connection opportunities but also maximizes what you can do with limited resources

<u>What Future Energy Systems Wishes We'd Known</u>
- Start early: In the first few years, HQP and Investigators were much more enthusiastic about participating — but we didn't have our program organized.
  - Early on the communication team consisted of one person, there was no capacity to run large scale training.
  - Value was not seen internally early on by senior leadership.
  - Successes by volunteer team and single staff demonstrated the importance of soft skills training
  - Due to this, HQP training and community engagement has now been incorporated as a major strategic priority of the program.
- Consolidate training goals: separate sessions for each competency meant some were undersubscribed, so bundling 'unpopular' competencies with popular ones was important.
  - Instead on focusing on one skill, we brought many together
- Use the skills: training was only really effective when we ensured there were immediate opportunities to practice with the competencies in the real world.

Part 2: *Brainstorm HQP training plan ideas for Round 3 CFREFs and future CFREFs based on their specific needs and contexts.*
- Common approach to a database for tracking HQP, training, publications, etc.
  - Must be adaptable so that it works for all organizations and assesses the matrices that are best suited for each group

- To have a successful training program, you need to connect with the PIs to ensure that you have buy in
- Students are the biggest resource/benefit of these CFREFs
  - Should assess impact of CFREF on students - transformative effects beyond publications
  - Measure point zero and see how they change
- The best programs likely have a combination of top down (using what already exists as well) and bottom up (including creating what is needed new) strategies
- Is there a potential for CFREF level of training for HQP
  - Could we create a passport program to support training across CFREFs?
  - Could national organization run training?