

## March 22, 2021 DEI Working Group Call

Attendees: Anna Sjodin, Nievita Bueno Watts, Alyssa Willson, Tracy Bibelnieks, Jason McLachlan, Jody Peters, Diana Dalbotten

Regrets: Ethan White

### Agenda/Notes:

1. March 25 panel at 1pm US EST - final confirmation of who will lead what section
  - a. Jody (or anyone else who wants to) provide welcome and general overview of EFI and point people to Why Forecasting video, invite people to apply for Inclusive Pedagogy Meeting and Education Workshops in June, and set up PolLEV
    - i. Alyssa offered to insert relevant links during the welcome
  - b. Poll EV Opening Question: Set the stage by saying that EFI is collating online educational resources related to the process of ecological forecasting such as videos, tutorials, modules, online books, etc.
    - i. Question: Are there online educational resources you have found work well for any topic? Or are there specific formats that you find work well (e.g., videos, tutorials, modules, code repositories, online textbooks)?
  - c. Diana - introduce panelists and moderate transitions between panelists
  - d. Alyssa - moderate Q&A
  
2. Go through [the Strategic Plan](#) - we have new people in the group, so want to look at it with them and will be good to assess what we have done and what we want to focus on next
  - a. Step 1 Identify and clarify the problem: Background reading and IPEDS data to get actual data for students in specific majors
    - i. The group had been working on using the IPEDS to do the analyses of background of people
    - ii. What fields feed into EFI
      1. Are we more or less diverse than the majors we are associated with
  - b. Step 2 What are the barriers for students
    - i. Still working on this, but Nievita's students working with Alyssa are working on this to see how well the educational materials
  - c. Step 3: Identify possible solutions
    - i. Seminars, book club
  - d. Step 4: Identify solutions from Step 3 to work on
  - e. Step 5 - Identify who else needs to be involved in the process and make a plan to bring them in. This is cross-cutting - should be done all across the working groups/EFI
  - f. Step 6 - Seek funding
    - i. Recently heard that we received new funding from the Sloan Foundation

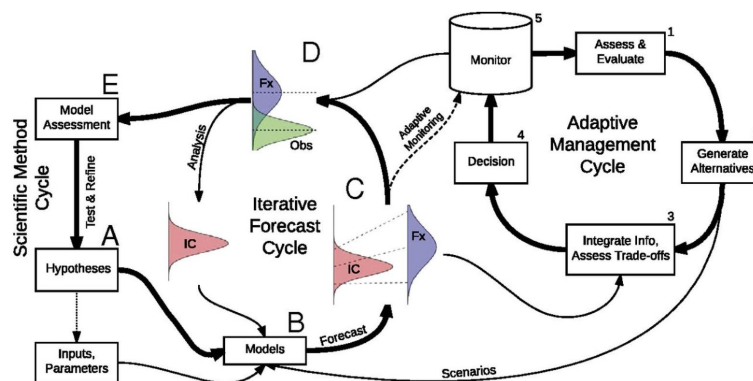
1. 2 major things that will be funded
  - a. Keep EFI running - with funding for Jody
  - b. Education and diversity efforts - funds for Alyssa's work with HSU to assess educational efforts
  - c. Funds for HSU, Salish Kootenai College, University of New Mexico, Gallup to make connections between EFI and these groups
- g. Seminar series - has helped to identify the problem and the barriers to students
- h. As we move forward with grants/projects - how do we keep making sure that the whole DEI group can keep driving diversity within EFI and within the different projects. What do people feel like working on? Do we need more committee initiatives?
- i. Want to optimize opportunities across the group (REUs, RCN meetings in June, GA meeting prep). If there is something along the lines that a lot are working on.
  - i. June 7 - Inclusive Pedagogy Workshop
  - ii. June 28-29 - Developing Educational Materials for Ecological Forecasting
  - iii. Diana's REU - still working on the format. Have a weird hybrid model of in person and virtual participation. Workshop format worked well last year. Had people come in to give special topic talks. Wonder if we could have 3 week, 1 hour workshop with all the students that would be EFI led. Or 1 hour a week for 4 weeks. 1 hour a night for 4 days in a row. Something early on that would help the students in their research.
    1. Jason will participate in this with whatever time works
    2. Shorter more focused time would work well for Jason
    3. Have a good set of experiences teaching a more concentrated data science work group. ND has done it a number of ways at a number of different levels. This could grow/shrink to what fits.
    4. Diana is planning to have all the students do the Story Mapping
    5. Having it early is good because students will be using those in their research
  - iv. Diana proposed that Nievita be a PI on EFI-focused REU to be put in August. Jason and Nievita to talk about it.
  - v. Tracy - tapping into the REUs that are happening.
    1. How can this group take the best of what we have learned from the seminars and move it into the hands of students or faculty?
      - a. REUs is a perfect place to do that. Talking about ethics and data and specific analytic techniques
      - b. Maybe this is an avenue for the next round of what we can contribute. Take what we have learned and encapsulate it to get it into the hands of students
    2. For Tracy - curriculum change moves at a snail's pace. So how can we tap into the other opportunities (research, kaggle, etc). Propose EFI clubs on campuses? Weave it into clubs that already exist?

3. Something proposed for the STC -
  - a. pre-REU experience. Just focused on skill building for students for computational work.
  - b. Workshop before students go to REUs. Or in the STC they students take it one summer and then EFI helps them get REUs the second summer
  - c. Get Data Carpentry into the schools and
  - d. Tracy loves: pre-REU experience to help make students competitive. How to write a successful REU application. Could be useful for students who come to the table late or who are freshman or sophomore students.
  - e. It can be a way for students to see the opportunities and bring them into the field.
  - f. Students don't know how to move beyond the curriculum that is offered.
  - g. Bridge program to REU.
  - h. Diana has worked with Fond du Lac and Leach Lake and does it at ACES. 1 day workshop on what is an REU and help to develop those for faculty to put those on.
  - i. Offer for this group to do a Zoom colloquium. Use the expertise to look at the strategic plan and goals. We have info and umph behind ideas.
    - i. Give talks on EFI around the schools
    - ii. Need that personal connection
4. From Alyssa: I think something to think about simultaneously to students participating in EFI is how to get faculty/instructors involved in EFI or at least aware of ecological forecasting
  - a. Some of what we are doing is pointing in this direction.
  - b. Collating educational resources and identifying gaps we are putting together a road map and support on line that has the pieces in a modular way
  - c. Would help to have funding to do this.
  - d. Putting together funding for a Synthesis Center that can help a lot
  - e. As we finish pulling together the education resources, would be an effective proposal to say we have all these pieces and this new way of doing science. The proposal would be to streamline it and make the tools available.
  - f. To get faculty involved, you need to make it easy for them to pick it up. There are a lot of people interested, but it is hard to initiate
  - g. Get faculty involved and aware - having the forecasting workshop at ESA and conference to make people aware of what is going on. ESA is a no brainer. But if there are

options to do it at other conferences or regional conferences.

- i. Think about a couple of conferences focused on minority institutions and Native American programs.
  - ii. If we had the curriculum
5. Need for broad based reaching out to students at minority institutions for training. The more we can build the resources and some faculty training and student clubs.
  - a. What can a professional society/consortium vs individuals do in terms of writing proposals?
    - i. Could put people together to write proposals
  - b. Nievita - interested in hearing how do we make it easy for faculty to get involved?
    - i. Alyssa's experience at undergrad - make people aware of how their research fits into the scope of forecasting
    - ii. The trick is to get it general enough so faculty can see that it will work for them
    - iii. One place to start - highlight the [examples of forecasts](#) on the website and the [forecasting highlights blog posts](#)
6. If we can make something work well for HSU that template will work for a lot of people
  - a. Mix of academic ecology and natural resource management. These problems translate well across the world
  - b. This is also a smaller college with less resources than an R1
- vi. How to get young faculty interested in forecasting?
- vii. Summer institute funding
- viii. Consensus so far:
  1. If we have something concrete that develops, there will be enough interest across the group to try things out.
  2. If we hear back from HSU, can use that as a test bed
  3. There will also be things that will come out of the RCN working group and meeting
- ix. Start collecting ideas
  1. Teaching training
  2. Student training
  3. Young instructor training
  4. Then put it out to the EFI community to have people start putting in proposals and offer that we can help put people in touch. We won't write the proposals for you, but can help support your ideas.
- x. In MN the data programs are reaching down to the high school level.

1. Also should think about reaching down to create interest and support
  2. NSF Computational Thinking - great for K-12 and lower undergrad
  - xi. Map ideas, potential partners, potential RFPs
3. Next call - flesh out some of these ideas. Moving to steps 4-6 in the Strategic Plan. Brainstorm ideas and how to make connections
  4. HSU is going through restructuring and may become a polytech program. Have to bring in additional majors and one thing they are pushing forward are to develop a data science program and hope to have an ecological forecasting component in that program
  5. Come back to this on the call in April: McLachlan lab has been going through the [Dietze 2018 PNAS](#) Fig 1 (see below) to identify barriers to inclusion at each of the forecasting and management steps. Discuss what they have come up with so far with this group.



Idea: Use the online seminars to add to Jason's work in his lab with respect to barriers in the EFI cycle diagram?