18 January 2016

To: Jess Zimmermann, PI, Luquillo LTER

From: Aaron M. Ellison, member of the LUQ advisory committee

Observations on the Luquillo LTER planning meeting, January 12-13, 2016

Dear Jess,

Thank you for inviting me to be on the Luquillo LTER advisory committee, and for the opportunity to attend the first annual planning meeting. I very much enjoyed learning about current projects at LUQ as well as the opportunity to reconnect with colleagues and the tropical forest.

Overall, I think LUQ is doing first-class research on tropical forests, and the LTER co-PIs and collaborators are very engaged in the site and in ensuring that it continues to be successful. Although the meeting and discussion started out a little defensively (with respect to the recent round of reviews and critiques by NSF) it rapidly moved on to focus on this season’s research as well as constructive thinking about how to frame the next proposal for LUQ-VI (due in 3 years’ time).

Based on the discussion in the meeting and in smaller groups over the two days, I note the following opportunities for LUQ (in no particular order):

1. The modeling work is very sophisticated, but as with many such models, the parameters (inputs) into the model could be better constrained. Like other LTER sites, LUQ has rich, long-term data collected at a variety of spatial scales that could be used to parameterize the models. More cross-talk between the empirical groups and the modelers would be useful. Field scientists would know that the data they are collecting would be relevant to the models, while modelers would know that the models are reflecting reality better.

2. The primary strength of LTER is the “long-term” element of the research. The temporal element of the research is often presented only implicitly. Keep in mind that the various audiences may not be as “in the know” as the LUQ researchers and need to be shown the time-series and now the temporal depth of the data has, and continues to, inform the research and the conclusions. For example, the “up the mountain” working group discussion was very spatially focused despite excellent temporal depth.

3. The CTE is a successful experiment that is generating interesting results. Discussion of a parallel stream manipulation experiment (anticipated for LUQ-VI) was excellent. Such an experiment could be the empirical anchor/centerpiece of LUQ-VI. It would be especially valuable if this experiment could lead to better integration of terrestrial and aquatic groups at LUQ.

4. The new El Verde Experimental Forest manager (Sharon Wallace) appears to be bringing a new spirit of openness to the interactions between LUQ and EVEF. There are great opportunities for outreach (e.g., cruise ships, schools) that could also lead to new funding opportunities. *Carpe Diem*!

5. The discussion about how to better bring together the LUQ graduate student community was really good, and I think that the site would greatly benefit from making the graduate students into a more cohesive group.

6. When the time comes to put together LUQ-VI, I think it’s more important to put together a proposal that tells a coherent narrative rather than one that tries to get all of the projects and sub-projects into the body of the proposal. This can be done while at the same time assuring all the co-PIs that their work will continue to be supported by the award. My own suggestion would be to focus on a combination of the “stream-CTE” and development of field-parameterized, stochastic models of tropical forests (with aquatic-terrestrial linkages), but I’m sure there are many other possibilities that will emerge over the next 18-24 months.

I look forward to continued engagement with LUQ, and to seeing all of you again at next January’s meeting (January 10-11, 2017).

//Aaron//