**ICA Communication Science & Biology**
**Problem Solving Session**

Session flow:

1. Welcome and background on the problem solving session
2. Goal to make ICA a more inclusive space and lower barriers to success from graduate school through faculty life:
    a. Sharing within the group of what has gotten in the way for people present of attending ICA, or participating in a research activity that they value
    b. Brainstorming of solution space/ clarification to take to ICA (e.g., ICA has recently started offering childcare at the conference to reduce barriers for parents)
3. Consideration of inclusion in relation to our two focal problems (inclusion as the PI when you are setting up a lab or getting into a research group; practice articulating why your research fits within communication/ how we can advocate for a wide range of scholarship in our own groups and departments)
4. Split up into sub-groups (setting up a lab; what is communication scholarship; research escalators)
5. Reconvene to share core resources and plan future work

**Section leaders: Richard Huskey, Chris Cascio**

Problem: So you want to set up a Communication Science and Biology lab?

Setting up a lab is like launching a start-up. Yet, many researchers aren't trained to run their own lab in grad school. The aim of this sub-group is to develop a resource that will make it easier to launch a lab, with particular focus on labs that involve biological measurement (though we imagine many of the same ideas will apply more broadly). For faculty participants, questions consider how to work with and train students who have minimal to no training in necessary methods [e.g., to do fMRI (e.g., programming, advanced statistics, neuroanotomy, cognitive/social neuroscience, asking comm neuro questions)]. For students, these new methods are exciting, but what does it take to meaningfully contribute to a project and what are some resources you might use to get up to speed? The question is, for faculty and students, how do you effectively communicate expectations, develop a training procedure, and set your research up for long-term success, and with a lens of recruiting and supporting people from a wide range of backgrounds?

For students and post-docs and junior faculty in this transition: How do you develop a lab? Do you borrow university computing infrastructure or buy your own? What are the pros and cons of each decision? How to get a codebase established (e.g., borrow from GitHub and other open science approaches)? How much does this all cost? How might you find collaborators on campus or within ICA? Do you find money to collect data from your own subjects, or do secondary analyses on available datasets (e.g., Human Connectome Project, Open fMRI)? For faculty who have already established a lab, what are some things that you know now that you wish you knew when you were first getting started? How did you build a scalable infrastructure? What are the tradeoffs between different operating systems? How do you support diversity and inclusiveness in your lab?

Output: The output of this session will include first an informal discussion of these issues amongst the group to prioritize which sub-questions to focus on (take part in part online in advance) and then developing a web resource that begins to address these questions for new faculty, with links to opinion pieces, code bases, etc.

Suggested Readings:

Students - Barres, 2013 *How to Pick a Graduate Advisor*

Faculty - Alon, 2009 *How to Choose a Good Scientific Problem*

Pay it forward guide to mentoring: https://www.issuelab.org/resource/pay-it-forward-guidance-for-mentoring-junior-scholars-updated-edition-september-2017.html

Some hard numbers on science's leadership problems: https://www.nature.com/articles/d41586-018-05143-8

**Section leaders: Jan Van den Bulck**

Problem: The Elephant in the Field, New Answers to "is this even communication scholarship?" and what the goals of communication scholarship should be

Anyone exploring the boundaries of our discipline will have had the "but is this even communication research?" -comment. When is eye-tracking communication research, and when not? Is accurately measuring sleep to studyit as a mediator of political learning media effects research or not? What about fMRI, skin conductance,hormonal changes, weight gain, and so much more? When does something become media and communication science and when does it become something else? Access to new measurement techniques is changing our discipline rapidly, and the move towards cheaper and more wearable technology is affecting the rate of change exponentially. These examples are drawn heavily from communication science and biology, but apply across nearly all spaces of communication research (what "counts" in the eyes of the majority). If you are working in a lab with like-minded people, it may be easy take what you do for granted, while the rest of the discipline may wonder what the connection to the mainstream is, likewise for scholars coming from backgrounds outside of the dominant majority, we face hurdles. Grad students, in particular, may find themselves in a bind when what is common practice in their own group or scholarly tradition turns out to raise eyebrows elsewhere. Communication scholars have always had to be in tune with the changes in the technologies they study. We are now at a point where that includes critical discussions about the boundaries of our discipline. Everyone who has dealt with biological approaches to communication phenomena (and many others) will have had to struggle with this question from others. We need to make our discussions about the boundaries of our discipline explicit, and we need to have this discussion regularly because both our eld and how we can study itare in constant ux. In parallel, some have raised the issue that while new media literature is often criticized for atheoretical research, scholars often overlook problems within the media effects field that contribute to this lack of theory. In this problem solving session, junior and senior scholars will come together to share their views on what gets called "communication scholarship", how it should be defined, and how this may be fruitfully discussed with colleagues and the public to achieve greatest impact.

**Output:** In this sub-group, participants will actively practice developing an elevator pitch about their own work and why it is important to our field. We may role play a faculty meeting, and practice advocating on behalf of a partner who does something different from what we do. The goal will be to help attendees articulate the core of their work and its connections to communication, help prepare for job talks and faculty hiring discussions, and expanding the way we think about communication scholarship.

Suggested readings:
#CommunicationSoWhite: https://academic.oup.com/joc/article-abstract/68/2/254/4958972?redirectedFrom=fulltext

Research escalator:

1. **Conflicting Messages: Eye Tracking Participant Experiences of Empowerment and Objectification in Contemporary Advertising**
   **Summary of experimental design:** This experiment uses eye tracking methods to investigate the effect of message elements (visual and textual) on empowerment and self-objectification of women after viewing contemporary advertisements. Participants viewed combinations of empowering and objectifying text paired with empowering photographs while researchers recorded participant eye movements using eye tracking equipment. A control condition of image-only (no caption) was included to confirm the individual impact of each message element for a total of 3 conditions. The dependent

variables of interest included attention to text versus image, attention to the model's face versus body, and relationships of those variables to reported feelings of self-objectification and empowerment. Trait levels of self-objectification and appearance comparison were included as potential moderating variables

2. **Communicating Climate Change for Adaptation among Small Scale Farmers**
   **Full text:** Effective community-based adaptation to climate change requires not only the community learn and understand the threat of climate change but are motivated to take action to alleviate the risks. The way in which the concept of climate change and adaptation is communicated, perceived and understood by diverse stakeholders is therefore important for any long-term action towards mitigation and adaptation to climate change. This is the focal point for this investigation on the role of communication in developing and strengthening the adaptive capacity of small-scale farmers in Kenya. The aim of this study was to evaluate the communication strategies used to promote climate change adaptation options among small-scale farmers evaluate their effectiveness and recommend ways in which these strategies can be improved and to determine the factors that influence the adoption of climate change adaptation technologies. This study set out to investigate the level of awareness and understanding of climate change and climate change adaptation among the small scale farmers;the source of information on climate change and climate change adaptation for the small scale farmers;the perceptions and attitudes of the respondents on climate change adaptation options currently available; the factors that influence the adoption of climate change adaptation technologies among farmers in the study area and finally establish the most effective communication channel/methods that can be used to promote awareness on climate change and climate change adaptation and stimulate action. In this study the descriptive research design was used and it employed the use of both qualitative and qualitative methodology for data collection, sampling and data analysis. The population for this study was small scale farmers in selected areas of Kenya. The purposive sampling procedure was used.Questionnaires; interviews, Focus Group Discussions with small-scale farmer groups;Observation; Content analysis of local media content on climate change adaptation were the data collection tools.This study used the Diffusion of Innovation theory by Everett Rodgers. The major factors that influence the diffusion process are the innovation itself, how information about the innovation is communicated, time, and the nature of the social system into which the innovation is being introduced. This theory was used in this study to examine the factors influencing adoption of climate change adaptation strategies among small scale farmers. The expected findings will be the level of awareness and understanding of climate change and climate change adaptation among the small scale farmers; The sources of information on climate change and climate change adaptation for the small scale farmers;perceptions and attitudes of the respondents on climate change adaptation options currently available;factors that influence the adoption of climate change adaptation technologies among farmers and the most effective communication channel/methods that can be used to promote awareness on climate change and climate change adaptation and stimulate action.

Additional readings:
http://www.reed.edu/institutional_diversity/department-resources/index.html

https://www.washingtonpost.com/news/grade-point/wp/2016/09/26/an-ivy-league-professor-on-why-colleges-dont-hire-more-faculty-of-color-we-dont-want-them/?utm_term=.f8a9c627cffe

https://nicoleandmaggie.wordpress.com/2014/05/02/ask-the-grumpies-classroom-gender-resources/

https://medium.com/cxo-magazine/can-virtual-reality-undo-unconscious-bias-34f0b62101be

https://medium.com/@wocfaculty/a-collective-response-to-racism-in-academia-35dc725415c1