Expending Potential Seed Proposal: Launching the Unconscious Bias Project

Project Rational. Through the work of many activists, STEM fields have experienced promising diversification over the last few years. For example, in certain biology fields, half of the undergraduate population now consists of women[i]. And yet, women and ethnic minorities leave STEM at alarming rates the further they would otherwise travel up the academic ladder. Today, despite increased diversity at the undergraduate level, the overwhelming majority of individuals in STEM leadership positions are white males.

Though laws and university policies have eliminated most explicit racism and sexism from day-to-day academic life, a large and growing body of research reveals almost everyone possesses implicit, or unconscious, biases. A person can hold *unconscious* biases against certain groups even when they *consciously* believe that all people possess equal intelligence and ability, regardless of gender, skin color, sexual orientation, income level, etc. Researchers have documented widespread unconscious bias against women, academic mothers, people of color, LGBTQ, and overweight people, to name a few[ii].

Unconscious bias (UB) against a group can drive group members from STEM in both direct and indirect ways. Women and People of Color can be directly driven from STEM by being denied jobs: in one study, potential employers rated individuals from resumes with male or typically Caucasian sounding names as more hirable than individuals from resumes with female or names of typically African American origin, even when all other resume information was held constant[iii]. More indirectly, a STEM researcher with unconscious bias against, for example, gay people, may inadvertently offend gays in the form of microaggressions, or minor slights and insults. These small insults create an unwelcoming environment that can eventually drive a person to leave STEM.

We at the Unconscious Bias Project (UBP) believe most STEM researchers would want to learn to correct their unconscious biases, *if* they knew more about how to do so. A growing body of research is identifying practical interventions[iv]. However, these results tend to be confined to academic journals, and few social activists have even begun to widely disseminate or implement these ideas. The STEM community, and Academia as a whole, would greatly benefit from an online source that consolidates research about UB and how UB curbs diversity, using clear and concise language that academics from any field could understand. Such a website would serve as a nucleation point for organizations at any University to begin their own activist project to raise awareness about UB and how we can work to correct our hidden biases.

Overview of Project. Aim 1: Launch UB website

The first goal of the Unconscious Bias Initiative is to create an engaging, modern website to explain both what UB is and how it hurts people from a variety of backgrounds. This website will encourage readers to identify their personal unconscious biases using the Implicit Association Test, developed by researchers at Harvard University. The Implicit Association Test records the speed with which a user associates different descriptive words (e.g. 'good' or 'bad') with images of different groups of people. The faster a user associates negative words with individuals of a group, the more biased the user is against that group.

The website will also consolidate and explain effective exercises that individuals can perform to correct their biases. For example, one effective strategy is to consciously change one's 'media diet,' and so the website will consolidate blogs, Twitter users, movies, TV shows, etc, that portray different groups in a positive light. Lastly, the website will host downloadable flyers with eye-catching cartoons and graphs about UB, microaggressions, and tactics to correct bias. We have already consolidated and written text for much of this material, including the flyers.

Aim 2: Promote awareness of UBP website on UC Berkeley campus

We will launch the website prior to the beginning of the fall 2015 term, print all the flyers, and hang them around campus to direct Berkeley members to the website and begin an online discussion. For this discussion, we will set up a website forum on which Berkeley members can anonymously submit text. We will encourage students, professors, and staff to share their experiences as victims of UB, submit their ideas to expand and improve the website, and offer solutions and suggestions for how the University can help combat UB.

Aim 3: Host 'Listening Events' with Berkeley STEM/diversity organizations

Getting to know members of a group one is biased against can help correct that bias. With this in mind, we plan to host monthly 'Listening Events' to bring together UC Berkeley members working to correct their biases, to Listen to a different Guest Group each month. The first event could feature Guests from, for example, UC Berkeley's Queer People of Color, to speak about their experiences as victims of UB and suggest how the Listeners can help promote equality. Together, all attendees will engage in melodramas and trust-building exercises, to help the Listeners associate the Guests as allies. On alternate months, Berkeley members working to correct their biases can watch a movie together that portrays the minority group in a positive light, with a discussion group before and after the movie.

Aim 4: Incorporate UC Berkeley community feedback

After the academic year, UBP members will incorporate feedback from the UC Berkeley community, creating more flyers, and editing the website content to ensure all the diverse voices at Berkeley are represented in the website and its flyers. We will also generate content to help other institutions launch their own Awareness Campaigns. Then, we will promote the website on Facebook, Twitter, and other social media avenues so that colleges and Universities around the world can learn about UB and begin correcting their biases to promote diversity in STEM and beyond.

The UB Team. Cat Adams is a 1st year PhD student in Plant and Microbial Biology, studying the invasive Death Cap mushroom. She is a freelance science journalist, with work featured in Slate and BBC Earth, making her well poised to translate primary literature on UB into clear and concise English. Cat was on the Executive Board of the Harvard University Graduate Women in Science and Engineering organization during her Master's program, when she began the work for UBP. She is the twice-elected Communication Chair of the Mycological Society of America Student Section, and has experience coordinating teams from multiple organizations and time zones. As Communication chair, Cat established and maintained group Facebook and Twitter accounts, as well.

The professional graphic designer, web developers, and cartoonist that Cat would like to hire for their involvement in UBP are all experts in their respective fields who have agreed to work for non-profit rates (see Budget). They each have a documented history of producing quality work on time. Their contribution will bring a level of professionalism and quality, to both the website content and to the Listening Event flyers, that has been difficult to find from volunteers in STEM fields.

Cat is also lucky enough to have found collaborators at Berkeley, some through SYNBERC(!), to help generate material for the website, free of cost. Mitchell Thompson is a fellow 1st year PhD student in PMB, studying synthetic biology. For UBP, he is generating graphics related to primary research on unconscious bias. Leigh Martin is in his 2nd year and studies nanoscale quantum systems in the Physics Department. As a UBP member, he works to find and interpret primary literature on UB and generate website and flyer content. Another content generator, Solene Lejosne, is a postdoc at the Space Sciences Laboratory, researching near-Earth space and a possible explanation for the Aurora lights. She has experience in science education in France.

[i] Olson, R. (2014). Percentage of Bachelor's degrees conferred to women, by major (1970-2012). http://www.randalolson.com/2014/06/14/percentage-of-bachelors-degrees-conferred-to-women-by-major-1970-2012/

[ii] http://projectimplicit.org/index.html

[iii] Moss-Racusin, C. A. *et. Al.* (2012). Science faculty's subtle gender biases favor male students. Proceedings of the National Academy of Sciences.

[iv] Lai, C. K. *et. al*. (2014). Reducing implicit racial preferences: I. A comparative investigation of 17 interventions. Journal of Experimental Psychology: General, Advance Online Publication.