Undergraduate Research Opportunities in the Motivation and Cognition Neuroscience Lab

How do our goals, desires and needs shape how we perceive and respond to the physical and social world? For example, are we inherently biased to see what we want to see? Questions like this challenge the objectivity of our perceptual experience, and have been debated by psychologists for decades. In the lab, we leverage tools from cognitive neuroscience and social psychology to study these questions. More broadly, research in the lab examines the computational and neural mechanisms by which motivation (e.g., goals, desires and needs) affect various types of cognitive processes (e.g., perception, reasoning and decision-making).

RAs in our lab may be involved in all aspects of research on motivation and cognition, including designing research projects, running subjects, analyzing data, presenting at academic conferences, and preparing manuscripts for publication. RAs will be full lab members, and are expected to participate in lab activities, including attending lab meetings. For this reason, positions are limited, and we are interested in especially dedicated undergraduates who can devote 10 hours or more per week to research in the lab (30-40 hours/week during the summer).

Ideally, an RA in our lab would: (1) be excited about motivation and cognition, as well as psychology and neuroscience more broadly; (2) have some basic familiarity with research methods; (3) be interested in computational approaches. If you are interested in one of these positions, you should email Yuan Chang Leong (ycleong@uchicago.edu) with your academic transcript (unofficial version is fine) and answers to the following questions:

1. What is your class year and major (if you have one) at UChicago?
2. What are your long-term plans? Feel free to be as broad or as specific as you like.
3. When and how long would you be interested in working in the lab?
4. Why are you interested in getting research experience?
5. What interests you most about psychology and/or neuroscience? Broadly speaking, what would you like to study here in the lab? To answer this question, you could share a thought about recent papers you read, and/or even propose a new study!
6. What relevant coursework or research experience have you had? (It's OK if the answer amounts to "not much")
7. Do you have any experience with computer programming? If not, are you willing and eager to learn?
8. If you have a CV, please feel free to attach it (no need to make one if you don't already have one on hand).

Note that we are interested in having all sorts of students with different skills / backgrounds / experience. Even (or especially!) if you're a first-year student with no experience in a lab, we want to hear from you!

To learn more about the lab's work, you can:

- visit Yuan Chang's personal website: https://ycleong.github.io/
- take a look at this online talk that reviews the lab's recent work: https://youtu.be/FaPC2LpaiuY
- take a look at the two papers below:
    - Leong, Y. C., Chen, J., Willer, R., & Zaki, J. (2020). Conservative and liberal attitudes drive polarized neural responses to political content. *Proceedings of the National Academy of Sciences*, *117*(44), 27731-27739. (https://ycleong.github.io/files/papers/LeongPNAS2020.pdf)
    - Leong, Y. C., Hughes, B. L., Wang, Y., & Zaki, J. (2019). Neurocomputational mechanisms underlying motivated seeing. *Nature human behaviour*, *3*(9), 962-973. (https://ycleong.github.io/files/papers/LeongNHB2019.pdf)