Psych 199 Research Assistant Postings Spring 2018

Relationships and Social Cognition Lab Opportunity

Faculty Sponsor: Ozlem Ayduk

Supervisor: Ozge Ugurlu

Contact email: ozge.ugurlu@berkeley.edu

Webpage: https://rascl.berkeley.edu/

POSITION FOR SPRING 2018

Relationship and Social Cognition Lab (RASCL) is looking for computer science students and data analyst who have strong programming and statistic skills to investigate the development of children’s ability to recognize and understand other people’s emotions.

Objectives and goals of the project

The overarching goal of the current research is to better understand why delay of gratification is a powerful predictor of developmental outcomes and what aspects of the family environment function to cultivate this skill. We will measure delay of gratification ability in a sample of 5-to-8-year-old children and will evaluate whether performance on this task relates to an array of child competencies and parent-child dynamics.

Work procedures

New research assistants in the Relationships and Social Cognition Lab (RASCL) will be expected to apply design in programming languages and analyze them.

Research assistant should:

Should have strong programming skills in at least one of the programming languages. Be motivated to improve their experiment design skills. Should have strong R skills to analyze data.

Weekly 5-9 hours of dedication.

How to apply:

Email to ozge.ugurlu@berkeley.edu

Deadline: Until the position is filled
Leveraging Cognitive Science to Improve Psychotherapy Effectiveness

Faculty Sponsor: Allison Harvey
Supervisor: Garret Zieve
Main Contact: cara.woodworth@berkeley.edu
Position Available: Spring 2018

Description of Research
Emerging evidence suggests that psychotherapy clients show numerous difficulties learning, remembering, and applying the complex information presented during therapy sessions. Our team is currently conducting a number of studies examining strategies to improve psychotherapy clients’ learning of treatment information. We are in need of research assistants to assist with the coding of participants’ responses for these studies!

Description of Student Responsibilities
This position involves learning and applying a detailed coding method to participants' free responses. There will be regular in person meetings, but most of the work is remote. Applicants should have a GPA of 3.0 or above, be available to volunteer at least 5 hours per week, and have strong attention to detail. Previous research experience is not necessary. Psych 199 credit available upon request.

Interested applicants should send a CV/resume and a brief cover letter (~ one paragraph) explaining their interest in the position to Cara Woodworth at cara.woodworth@berkeley.edu.
Psych 199 Research Assistant Postings Spring 2018

Team Chemistry and Reputation in Baseball

Faculty Sponsor: Professor Dacher Keltner
Supervisor: Hooria Jazaieri
Contact Email: Hooria@berkeley.edu
Location: On campus and remotely
Position Available: Spring 2018, Summer 2018, Fall 2018

Description of Research:
The proposed research will examine personal reputation and team chemistry within baseball players and teams. The central goal is to understand the processes that underlie the formation and maintenance of personal reputation and team chemistry/team cohesion through a series of studies that implement a multi-method approach. Study designs include qualitative data collection, gathering video and narrative accounts (and subsequent qualitative data coding), watching interviews and games and coding based on set coding procedures, etc.

Description of student responsibilities:
Research assistants will be involved in several stages of this research including:

1. Reading empirical articles and performing literature searches and reviews to aid in study design and provide substantive background for designing studies and manuscript preparation.
2. Gathering video and narrative accounts of players and teams of interest.
4. Assisting with the organization and management of data.

No prior research experience is required - all research assistants will be given training. Psych 199 course credit is available (2 or 3 credits only).

Application process:
Interested applicants should email their interest in the baseball study and resume to the supervisor, Hooria Jazaieri (hooria@berkeley.edu). Interviews will be arranged with qualified applicants.

Application deadline:
Positions will remain open until filled.
Psych 199 Research Assistant Postings Spring 2018

Psychological and Neural Mechanisms of Perceptual Stability

Faculty Sponsor: David Whitney
Main Contact: ymurai@berkeley.edu (main contact)
Location: Tolman Hall
Position Available: Spring 2018
Website: https://whitneylab.berkeley.edu

Description
The Whitney Lab is looking for research assistants for a few projects. RAs can acquire various research skills and potentially give presentations on their scientific work.

Below is the list of projects
- Serial dependence: a psychophysical study about the stability of human’s visual perception
- An EEG study of serial dependence: studying the physiological basis of serial dependence using EEG
- Perceptual learning of position perception: how does human visual system code objects' position?

RA tasks include
- recruiting and scheduling experiment participants
- data collection for psychological and neuroimaging experiment
- (potentially) data analysis using softwares such as MATLAB, EEGLAB, BrainVoyager

The abilities necessary for RA include
- managing time and multiple tasks
- maintaining effective communications with lab members and participants

Application Deadline
Open until filled

If you are interested, please contact Yuki Murai at ymurai@berkeley.edu.
Thank you!
Neural Mechanisms of Working Memory

Faculty Sponsor: Mark D’Esposito
Supervisor: Jason Scimeca
Contact email: jason_scimeca@berkeley.edu
Location: Giannini
Position Available: Spring 2018, Summer 2018

Description of Research:
Short-term working memory (WM) refers to our ability to mentally maintain and manipulate information that is no longer present in the external environment. WM is a core cognitive function and is associated with reasoning, intelligence, and academic success. However, there is a severe limit on the amount of information that we can hold in WM, and this capacity limit has been considered a primary constraint on human cognition. Likewise, lower WM capacity is associated with clinical conditions like schizophrenia, ADHD, and traumatic brain injury. Although WM is essential to many facets of cognition, there is little consensus on the psychological and neural mechanisms that support successful memory. The goal of this research program is to characterize the neurocognitive mechanisms that support the maintenance and manipulation of information in WM in humans. This is accomplished through a combination of computer-based behavioral studies, neuroimaging (functional magnetic resonance imaging, fMRI), and noninvasive brain stimulation (transcranial magnetic stimulation, TMS).

Research Assistants will primarily be responsible for:
(1) training volunteer participants on computer-based memory tasks and collecting data,
(2) performing analyses and quality control assessment on data, and
(3) assisting with fMRI and TMS data collection.

The student will be trained in all relevant procedures, including basic fMRI and TMS techniques, and will develop an understanding of how cutting-edge research methods are used to investigate questions about human memory. Additional opportunities are available for advanced students depending on specific skills and interests. In addition, the student will be encouraged to attend weekly lab meetings and monthly journal club meetings in lab, where they will have the opportunity to interact with Dr. D’Esposito and other lab members. Day-to-day work in the lab will be supervised by a postdoctoral fellow or graduate student involved in this project.

Applicants should email jason_scimeca@berkeley.edu with your name, (intended) major, and expected graduation date. We will reply to all emails with a short questionnaire to collect additional details about your availability, background, interests, etc. A strong interest in psychology and cognitive neuroscience is necessary. Strong organizational skills, interpersonal skills, and conscientiousness are essential. There is a preference for students that have completed (or are enrolled in) psychology, cognitive science, and/or cognitive neuroscience courses. Previous research experience is desirable, but not essential. Proficiency with MATLAB, Excel, SPSS, or other statistics/programming skills are a plus, but not required. Time commitment: Approximately 5-10 hours total per week; schedule must allow at least 2 days each week with a block of 2-3 consecutive hours to collect data in the lab. Position open until filled.
Golden Bear Sleep and Mood Research Clinic (Depression Treatment and Transdiagnostic Sleep Intervention Study)

Faculty Sponsor: Allison Harvey
Supervisor: Melanie Tran
Contact email: m.tran@berkeley.edu
Location: Tolman Hall
Position Available: Spring 2018

Description of Research
The Golden Bear Sleep and Mood Research Clinic is currently working on two studies. While treatments for depression have improved over the years, a need exists to improve treatments for Major Depressive Disorder (MDD) because a proportion of patients do not respond to existing treatments. Of those who do, the majority relapse. Meta-analyses confirm Cognitive Therapy (CT) as a frontline treatment, with patients less likely to relapse than those on antidepressant medications alone. Despite these impressive outcomes, there is room for improvement, as only one third of all patients respond to treatment and last a year without relapse. The purpose of our Depression Treatment Study is to improve treatment in order to provide lasting benefits for people with depression. Our ‘TranS-C’ study is testing the effectiveness of a transdiagnostic sleep intervention for adults with severe mental illness in community mental health clinics throughout Alameda County. This study investigates an intervention to improve sleep and seeks to ensure that the findings are generalizable to the real world.

Description of Student Responsibilities
Students will be assigned to various lab crews based on interest and demonstrated skills. There may be opportunities in the future to be involved in more advanced projects with direct clinical exposure. Students must be able to commit to around 10 hours of work per week for a minimum of one school year. Some weeks will be lighter than others, but having the flexibility to work 10 hours a week is required. Research assistants have the opportunity to support the study in the following ways: Data Crew Duties will include data entry of a variety of study information. Data entry experience is preferred, but not required. Working knowledge of Excel and Google Sheets, MS Access and R is preferred and would be helpful in fulfilling the role. Coding Crew Students that demonstrate excellent attention to detail and dedication to the project may be eligible to participate in the Coding Crew in which they will code CT treatment videos. This involves watching treatment videos to identify specific microanalytic components. Familiarity with CBT and behavioral coding experience is a plus, but not required. There will be a coding task to determine eligibility for joining the coding team. Recruitment and Administrative Crew Students will help project coordinators with aspects of the study including collecting sleep diaries (calling participants daily to collect sleep data over a week-long period), assisting with recruitment, preparing for sessions and assessments, and various administrative tasks. They may have the opportunity to accompany staff to psychological assessments and treatment sessions at participants’ homes (though this happens less frequently and will depend on performance in the lab and scheduling). RA Meetings RAs will attend biweekly meetings to gain a greater understanding of the research process, gain professional development skills (e.g., CV workshops, graduate school workshops, etc.), get to know one another, and experience being a part of a research team!

Please send a brief cover letter detailing your interest in the study, relevant experiences, and expected graduation date. Please also attach a resume or CV, and send it to m.tran@berkeley.edu. You will be asked to fill out a brief application.
Biased Priors or Inference in Depressed and Anxious Individuals

Faculty Sponsor: Sonia Bishop  
Main Contact: cgagne@berkeley.edu  
Location: Tolman Hall  
Position Available: Spring 2018  
Webpage: http://bishoplab.berkeley.edu/

Description of Research
Computational models have been a powerful tool for studying decision-making in both psychology and neuroscience. They have recently become popular in psychiatry as well (Adams 2015; Browning 2016; Huys 2015; Huys 2016). Part of the appeal has been that computational approaches delineate individual differences in decision-making that can explain why anxious and depressed individuals often make poor decisions. Study Objective: This study aims to investigate potential decision-making biases exhibited by anxious and depressed individuals. Specifically, we will look at whether anxious and/or depressive disposition (trait anhedonia, trait anxiety etc.) are associated with (1) excessively negative prior beliefs, (2) asymmetric updating of these beliefs for positive or negative feedback, and/or (3) different updating for beliefs about the self v.s others. Teasing apart the contribution of these potential biases will require the use of computational models. Details: 100 RPP participants will initially complete a short online profile consisting of their grades, and a short description of themselves. They will then anonymously rate how much they would like to work with the participants in a hypothetical internship. Roughly 60 participants will then be invited to come into the lab and receive feedback on how often they were chosen to work with. During this feedback, participants will make judgments about the likelihood that they were chosen. We will computationally model how participants update their belief during feedback.

Description of Student Responsibilities
The RA will assist with all stages of experimental research including: (i) design of the task, (ii) recruiting participants, (iii) collecting behavioral data, (iv) analyzing preliminary results in python. The RA will attend lab meetings and be a full part of the lab. Specific Commitment: Given our commitment to mentoring, a strong commitment on applicants' behalf to the lab's research including a minimum time commitment of 12 hours per week is requested. Lab work can be for credit (6-9 hours), with arrangements for payment and work-study for additional hours. Potential Extensions: The lab only takes a few RAs each year and makes a strong commitment to their learning experience and career development. Opportunities are available for senior thesis supervision, attendance of graduate seminars, and co-authorship on conference proceedings / posters. Desirable Skills Some experience running participants in psychology experiments Basic programming ability (preferably in python)

Application Process
Please email cgagne@berkeley.edu, cc'ing sbishop@berkeley.edu with interest. Please attach resume/cv and list of relevant classes.

Application Deadline: Open until filled
Psych 199 Research Assistant Postings Spring 2018

Representation of Science in the Media

Faculty Sponsor: Tom Griffiths
Supervisor: Rachel Jansen
Main Contact: racheljansen@berkeley.edu
Location: On Campus
Position Available: Spring 2018 and Summer 2018

Description of Research
The goal of this research project is to understand how scientific findings - beginning with but not limited to psychology and cognitive science - are reported and understood by laypeople, journalists, and researchers. Through online studies, we will test what participants can remember about findings they have read about, what kinds of sources are deemed credible, and if there are findings more frequently mentioned than others.

Description of Student Responsibilities
Student researchers will work closely with one graduate student in Cognition and two postdoctoral researchers. For this project, applicants should be either already proficient or interested in the design of semi-automated online experiments using Qualtrics and Amazon's Mechanical Turk. Responsibilities will also include searching for, reading, and coding academic papers and news articles about various scientific findings. Qualifications: FIVE REQUIRED SKILLS: 1) A strong computational background. 2) Experience programming in Python or R (preferably using jupyter notebooks). 3) Experience with statistics and/or machine learning. 4) A strong interest in cognitive science or scientific communication. 5) Strong attention to detail. In your application, please also specify whether you are able to continue working in the fall and/or the following spring or summer. ADDITIONAL PREFERRED EXPERIENCE (NOT REQUIRED): 1) Experience in another scientific domain. 2) Having taken "Computational Models of Cognition". 3) Experience with Adobe InDesign, LaTeX, and data visualization.

Application Process
Please send an email to Rachel Jansen (racheljansen@berkeley.edu) containing a CV and cover letter describing your relevant experience and interest in this topic.

Application Deadline: Open until filled
Applied Interventions in Schools and Criminal Justice Settings

Faculty Sponsor: Jason Okonofua  
Supervisor: Shoshana Jarvis  
Main Contact: sjarvis@berkeley.edu  
Location: Tolman  
Position Available: Spring 2018, Summer 2018

Description of Research
The intervention is designed to increase empathic responses to behaviors in disciplinary contexts. As a result of these modules, we predict that administration of discipline will decrease in general as well as a reduction in racial disparities in discipline.

Description of Student Responsibilities
Research assistants will transcribe data, track participation in interventions, test materials, and other assorted tasks as needed.

Application Process
Interested applicants will send resumes to supervisor's email address. A subset of interested applicants will be interviewed the week of 1/29.

Application Deadline: January 24th, 2018
Emotion Regulation and Social Interaction

**Faculty Sponsor:** Ozlem Ayduk  
**Supervisor:** Craig L. Anderson  
**Contact email:** clanderson@berkeley.edu  
**Location:** Tolman Hall  
**Position Available:** Spring 2018, Summer 2018

**Description of Research**
The goal of this project is to examine how different emotion regulation strategies impact real-life social interactions that people have. In this project, participants come to the lab and talk to research assistants about emotionally-evocative experiences they've had.

**Description of Student Responsibilities**
The project is suitable for people who do not have previous research experience, and affords students the ability to work fairly independently. Researchers will be responsible for scheduling participants, coming to scheduled sessions early to set up equipment, running participants through the protocol, and crediting the participants afterward. *Note* this study involves real-life interactions with people talking about potentially sensitive subjects. Successful applicants will be comfortable having a conversation in English as well as maintaining a high degree of respect for the confidentiality of participants.

**Application Process**
Applicants should send a letter of intent as well as a CV or resume to clanderson@berkeley.edu. CITI certification in human research is required to work on the project, but not necessary at the time of application. Applicants should indicate whether they have obtained certification.

**Application Deadline:** 02/02/2018
Psych 199 Research Assistant Postings Spring 2018

The Effect of Oxytocin on Cohesion and Teambuilding

Faculty Sponsor: Dacher Keltner  
Supervisor: Craig L. Anderson  
Contact email: clanderson@berkeley.edu  
Location: Tolman Hall  
Position Available: Spring 2018, Summer 2018

Description of Research
The goal of this project is to investigate how the administration of the neuropeptide oxytocin affects team cooperation and cohesion in small groups of three. Under research assistant supervision, groups will participate in state-of-the art computer simulations designed by cognitive scientists designed to objectively assess cooperation and team performance.

Description of Student Responsibilities
Experience on this project will be ideal for students interested in pursuing graduate-level studies or medical school. This research will involve running college-aged participants through a series of computer tasks, properly administering oxytocin using a nasal spray device, collecting physiological data (e.g. ECG), entering data into computer databases, and cleaning data in preparation for analysis. Successful candidates may also have the opportunity to assist in data analysis and help in the preparation of scientific presentations.

Application Process
APPLICANT QUALIFICATIONS 1. Applicants are expected to be able to dedicate at least 10 hours to the lab per week consisting of at least two 4-hour blocks. It is possible to gain course credit for working on this project. 2. Excellent communication and organizational skills. 3. The ability to actively contribute as a team player, manage details, track participant progress, think creatively, work independently, and meet deadlines. 4. Previous research experience is preferred, but not required. Applicants should email a resume and a short statement of purpose to Dr. Craig Anderson at clanderson@berkeley.edu to receive a link for an application survey.

Application Deadline: Open until filled