

# SOC GEN RESEARCH OPPORTUNITIES

## FALL 2017

<http://socgen.ucla.edu/academics/undergraduate-research/>

<b>How to apply:</b>	<p>See projects below. Email your <b>resume</b> and a very brief project-specific <b>statement of interest</b> to:</p> <p style="text-align: center;">Cyndi Tando, Student Affairs Officer          UCLA Institute for Society and Genetics  <a href="mailto:ctando@socgen.ucla.edu">ctando@socgen.ucla.edu</a>          3360C Life Sciences Building          310-206-1890</p> <p>If applying to more than one project, send a statement of interest for each. In the end, you can enroll in only one project in quarter.</p> <p>Applicants will receive an email confirmation of receipt of application. Applications will be forwarded to the relevant project leader(s) for their consideration, along with a copy of your transcript (which Cyndi will supply). Project leaders decide whom to interview and hire. Once you decide to enroll, course contract must be submitted to Cyndi by Friday of WEEK 2.</p>
<b>When to apply:</b>	Apply as soon as the undergraduate research position is posted
<b>Who can apply:</b>	<ul style="list-style-type: none"> <li>• Either a Junior standing (90-134.9 cumulative units) with at least a 3.0 GPA in major</li> <li>• Or Senior standing (135.0 or more cumulative units)</li> </ul>
<b>Contract Course types:</b>	<p>SOCIETY AND GENETICS 196. 2 units; choose <u>letter grade</u> option, if you want Human Biology and Society major program credit. May be repeated <b>once</b> for credit. <u>No written work or final exam required.</u></p> <p>SOCIETY AND GENETICS 199. 2 to 4 units (2 unit contract is appropriate for 6 -10 hours/week project; 4 unit contract is appropriate for 12+ hours/week.) Choose <u>letter grade</u> option, if you want Human Biology and Society major program credit. <u>Student must write a research paper on topic related to research under guidance of project leader and submit completed paper to project leader AND Cyndi by end of Week 10.</u> May be repeated for credit.</p> <p>Also note the academic regulations for Independent Study Units here: <a href="http://www.ugeducation.ucla.edu/counseling/independent-study.html">http://www.ugeducation.ucla.edu/counseling/independent-study.html</a></p>

**PROJECT TITLE:**  
**MONOSODIUM GLUTAMATE (MSG): TOXIC OR DELICIOUS?**

Course Contract available:	196
Quarter(s) help is needed:	Fall 2017
Hours/week:	~6
Paid?	No
Work in Laboratory?	No
Project Supervisor(s) names):	Dr. Sarah Tracy
Project Description:	The flavor enhancer MSG has been the subject of enormous popular and scientific commentary since the late-1960s. The additive has become synonymous with the taste sensation umami in recent years, with the effect of 'gentrifying' MSG among some cosmopolitan foodies. If MSG's vilification was driven by a racist moral panic, why do reports of adverse symptoms persist? What methods and what politics have been involved in assembling the scientific basis of dietary glutamate metabolism?
Job description:	Working in collaboration with the project supervisor, the research assistant(s) will search, organize, and archive a comprehensive literature review of toxicology and metabolism research on glutamate in humans and non-human animals.
Job qualifications:	Experience using Zotero or other electronic citation management databases is highly desirable. Self-direction and strong organizational skills essential, as is an interest in food and health. Additional language skills (e.g. Japanese, Chinese, Korean) useful but not necessary.

**PROJECT TITLE:**  
**TRANSLATING UMAMI SCIENCE: JAPAN -> USA**

Course Contract available:	199
Quarter(s) help is needed:	Fall 2017
Hours/week:	~6 (2.0 units)
Paid?	No
Work in Laboratory?	No
Project Supervisor(s) names):	Dr. Sarah Tracy
Project Description:	The flavor enhancer MSG has been the subject of enormous popular and scientific commentary since the late-1960s. The additive's reported toxicity has fueled an enormous body of industry-led research into the taste sensation, umami (understood to be conferred by MSG), published in the English language. This project cross-references Japanese language publications since 1908 on the subjects of MSG and umami with their revisions/translations into English, as well as subsequent research published in English, in the wake of MSG controversy. How have linguistics, culture, and politics influenced the "facts" of MSG taste between 1908-2008?
Job description:	Working in collaboration with the project supervisor, research assistant(s) will perform literature reviews of historical Japanese language scientific publications, e.g. <i>Nippon kagaku zasshi [Journal of the Tokyo Chemical Society]</i> , on the topics of umami, glutamate, and MSG.
Job qualifications:	Seeking a fluent Japanese speaker with some life science, social science, and/or history research experience. A highly motivated individual with a strong interest in transnational science, identity and culture, and food – and complicating simple divisions of 'East' and 'West' – will have the opportunity to turn their final SOC GEN199 research paper into a co-authored publication with the project supervisor.

**PROJECT TITLE:**  
**ASSISTED OUTPATIENT TREATMENT IN LOS ANGELES COUNTY**

Course Contract available:	SOCIETY AND GENETICS 196
Quarter(s) help is needed:	All quarters
Hours/week:	8-10 hours/week
Paid?	No
Work in Laboratory?	No
Project Supervisor(s):	Marcia Meldrum, PhD
Project Description:	Long-term evaluation of program to provide outreach and engagement services to seriously mentally ill individuals in LA County who are not now receiving services
Job description:	Observe outreach and service activities; assist in data entry and transcription of field notes and interviews
Job qualifications:	Good English and typing skills; knowledge of basic computer software; good observer and attention to detail; interest in mental health

**PROJECT TITLE:**  
**MAPPING THE MARKET FOR**  
**'RECREATIONAL/DIRECT TO CONSUMER'**  
**GENETIC TESTING**

Course Contract available:	SOCIETY AND GENETICS 196
Quarter(s) help is needed:	Fall 2017
Hours/week:	8 hours/week
Paid?	No
Work in Laboratory?	No
Project Supervisor(s):	Dr. Vanessa Nurock
Project Description:	Have you ever thought about taking a genetic test 'for fun'? The first step of this project aims at providing a critical review of the market of 'recreational genetic' testing (also coined 'direct to consumer 'or DTC testing) – genetic testing that is not administered by health professionals for medical reasons or professional health research. In the second step, we would like to analyze ethical and legal issues raised by this market.
Job description:	You will be working on the first step of the project: investigating the market of recreational/DTC testing companies.  The duties are twofold: (i) To map the market for recreational genetic testing, including reviewing ads, marketing procedures, products offered, company ownership and country of origin, applicable laws, whether the companies offer forums for discussion, the nature of the forums and main discussion threads, information required by the companies for participation etc.  (ii) To analyze critical and scientific reviews of each company and products offered.
Job qualifications:	None required except good knowledge of search engines -- internet, scientific research, and library.

**PROJECT TITLE:**  
**INVESTIGATING CORTICOSTERONE METABOLISM  
AND REGENERATION AS MEANS TO LOCALLY  
REGULATE STRESS HORMONE ACTION IN THE  
SONGBIRD BRAIN**

Course Contract available:	196 or 199
Quarter(s) help is needed:	Fall 2017, Possibly Winter/Spring
Hours/week:	8 hours/week minimum (12 hrs/week minimum for 4.0 units of 199)
Paid?	No
Work in Laboratory?	No
Project Supervisor(s) names):	Dr. Michelle Rensel
Project Description:	The stress hormone corticosterone (CORT) has both positive and negative effects on the brain and rest of the body, although little is known about how the brain modulates these effects, particularly in birds. This project examines the role of the 11 beta hydroxysteroid dehydrogenases (enzymes that deactivate and regenerate CORT), in protecting CORT-sensitive regions from overexposure during stress. Additional studies focus on the ability of the brain to produce CORT <i>de novo</i> (outside of peripheral production) and the role of peripheral CORT metabolism in regulating the stress response. Future work will apply the results of these investigations to studies on stress and cognition, including assessments of CORT's effect on spatial memory.
Job description:	Assist Dr. Rensel in conducting lab work, which may include: RNA extraction, PCR, hormone sample extraction and ELISA, weekly meetings to discuss primary research articles and hypotheses.
Job qualifications:	<ul style="list-style-type: none"> <li>• Ability to work at least 6 hours per week - must be able to be in lab for at least 3-4 hour blocks at a time on Tuesdays, Thursdays, or Fridays (not Mondays or Wednesdays)</li> <li>• Must take Lab Safety Fundamentals course and receive lab-specific safety training <ul style="list-style-type: none"> <li>○ Visit <a href="http://worksafe.ucla.edu">worksafe.ucla.edu</a> and click on Course Catalog to complete training.</li> <li>○ You must submit a copy of the training certificate along with signed contract to Cyndi to complete enrollment</li> </ul> </li> <li>• Self-motivated and eager to learn about stress physiology</li> <li>• Preferred qualifications: <ul style="list-style-type: none"> <li>○ Experience pipetting and performing standard laboratory work such as PCR</li> </ul> </li> </ul>

**PROJECT TITLE:**  
**URBAN ECOLOGY OF LOS ANGELES MAMMALS:  
 AN ETHNOGRAPHIC APPROACH**

Course Contract available:	196 or 199
Quarter(s) help is needed:	Fall, Winter, and Spring (Prefer students who can commit to the year if possible)
Hours/week:	Up to 12+
Paid?	No, but some travel reimbursement for working around LA
Work in Laboratory?	No
Project Supervisor(s) names):	Dr. Jessica Lynch Alfaro, Dr. Chris Kelty
Project Description:	<p>In cultural anthropology, a novel approach to studying how humans and animals co-shape the ecologies they inhabit has been termed "Multispecies ethnography." A focal example has been the changing ecological status of avian influenza, which has changed cultural practices, urban regulations and global health response strategies around human-animal interactions. Less attention has been focused on human-mammal relations concerning disease management, and no study has been done in the LA area. Here we will focus on diverse actors in LA: veterinarians, animal control professionals, private pest control services, urban gardeners, animal advocacy groups and others who are interacting with animals on a regular basis.</p> <p>This research involves both interviews and ethnographic participation; it will target diverse sites in urban LA with different socio-economic, biogeographic, and cultural characteristics. Informants will be chosen through existing contacts with animal professionals, and by participatory engagement with professionals, community members and other groups who take animals as a key focus of their daily activity.</p> <p>Through this research we hope: (1) to generate better LA-specific knowledge of the kinds of activities, problems or cultural orientations to mammals, including concerns about danger, risk and disease; (2) to examine assumptions about the relationships between humans and other animals on which current and past strategies of research, management or response are based; and (3) to explore the evolving responses that governmental and private organizations are engaged in around wild mammals in LA. Which animals are of concern and for whom? How is responsibility for different species distributed between public organizations and private citizens? What roles, if any, do diverse cultural or socio-economic characteristics of humans play and how are animals similarly characterized? Can animals be said to have socio-</p>

	<p>economic determinants of health just as humans do? What ecosystem services do animals provide in the city? Through this project, we hope to establish baseline knowledge of public attitudes towards mammalian diversity, coexistence/conflicts, benefits of mammalian ecosystem services, and concerns for disease transmission.</p>
<p>Job description:</p>	<p>Familiarizing self with literature and current events around urban wildlife and human-animal conflict in Los Angeles; fulfilling IRB training requirements; Contacting potential interviewees through phone calls; conducting and recording in-person interviews with local wildlife experts; shadowing experts in the 'field'; transcribing interviews; working with faculty mentors to interpret and write up findings from interviews</p>
<p>Job qualifications:</p>	<p>Background in Cultural Anthropology and ethnography, and in Human Biology and Society 'interdisciplinary frameworks', useful but not required</p>

**PROJECT TITLE:**  
**UNDER PRESSURE: RESPONDING TO CRISES IN  
 BIOMEDICAL AND BEHAVIORAL SCIENCE WITH NEW  
 MODELS OF PRACTICE AND ORGANIZATION**

Course Contract available:	196 (potential 199 in subsequent quarters, for students who continue)
Quarter(s) help is needed:	Fall, Winter, Spring – Prefer students who are interested in the whole year
Hours/week:	~10
Paid?	No
Work in Laboratory?	No
Project Supervisor(s):	Dr. Christopher Kelty, Dr. Aaron Panofsky, and Dr. Alexandra Lippman
Project Description:	A study of the crisis of scientific authority focusing on issues such as replication crises, scientific “watchdogs”, piracy and predatory journal publishing, with a special focus on the status of science in the non-US settings (e.g. Latin America, India, Turkey). The main focus of this year’s research will be to investigate how institutions and individuals involved in the publication or circulation of scientific research evaluate and measure the impact of publications, how publishers’ strategies with respect to data and metrics are evolving and how piracy plays a role in scientific production and oversight. The research is qualitative and anthropological (interviews and reading), and will focus on issues of value and valuation by individual scientists, libraries and universities.
Job description:	Students will be expected to find and read scholarly literature regarding piracy, open access, scientific metrics, so-called predatory journals. Identifying and researching potential interviewees, transcribing and potentially conducting interviews.
Job qualifications:	Background in Cultural Anthropology and ethnography, and in Human Biology and Society ‘interdisciplinary frameworks’ useful but not required

**PROJECT TITLE:**  
**CENTER FOR STUDY OF WOMEN**  
**CHEMICAL ENTANGLEMENTS RESEARCH PROJECT**

Course Contract available:	99, 196, 199
Quarter(s) help is needed:	Fall 2017, Winter 2018, Spring 2018
Hours/week:	3- (depending on number of units enrolled)
Paid?	No
Work in Laboratory?	No
Project Supervisor(s) names):	Professor Rachel Lee
Project Description:	For more information and the application, visit <a href="https://csw.ucla.edu/ucla-students-join-chemical-entanglements-undergraduate-research-group">https://csw.ucla.edu/ucla-students-join-chemical-entanglements-undergraduate-research-group</a>
Job description:	For more information and the application, visit <a href="https://csw.ucla.edu/ucla-students-join-chemical-entanglements-undergraduate-research-group">https://csw.ucla.edu/ucla-students-join-chemical-entanglements-undergraduate-research-group</a>
Job qualifications:	For more information and the application, visit <a href="https://csw.ucla.edu/ucla-students-join-chemical-entanglements-undergraduate-research-group">https://csw.ucla.edu/ucla-students-join-chemical-entanglements-undergraduate-research-group</a>

NOTE: For this research project, please apply directly through the website instead of sending materials to Cyndi