

SOC GEN RESEARCH OPPORTUNITIES

SPRING 2017

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

| | |
|-------------------------------|--|
| How to apply: | <p>See projects below. Email your resume and a very brief project-specific statement of interest to:</p> <p style="text-align: center;">Cyndi Tando, Student Affairs Officer UCLA Institute for Society and Genetics ctando@socgen.ucla.edu 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> |
| When to apply: | Apply as soon as the undergraduate research position is posted |
| Who can apply: | <ul style="list-style-type: none"> • Either a Junior standing (90-134.9 cumulative units) with at least a 3.0 GPA in major • Or Senior standing (135.0 or more cumulative units) |
| Contract Course types: | <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 once 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 department by end of Week 10.</u> May be repeated for credit.</p> <p>Also note the academic regulations for Independent Study Units here: http://www.ugeducation.ucla.edu/counseling/independent-study.html</p> |

PROJECT TITLE:

War and Antibiotics: Sociology and Microbiology of Multiple Drug Resistant *Acinetobacter Baumannii* in Conflict Zones

| | |
|----------------------------|--|
| Course Contract available: | SOCIETY AND GENETICS 196 or 199 |
| Quarter(s) help is needed: | Spring 2017 |
| Hours/week: | 2.0 units – 6 hours, 4.0 units 199 can be 12 hours |
| Paid? | No |
| Work in Laboratory? | No |
| Project Supervisor(s): | Dr. Hannah Landecker |
| Project Description: | Antibiotics were discovered in the context of World War II. Now, conflict zones in the Middle East are seeing alarming incidence of multi-drug resistance <i>A. Baumannii</i> , colloquially known as “Iraqibacter.” This microbe is unique in its rapid evolution from soil microbe to human pathogen, as most other drug resistant bacteria were already human pathogens such as tuberculosis. Together with anthropologists, doctors, and international health organizations working in Iraq, Jordan, and Lebanon, Dr. Landecker is participating in a collaborative project to understand how the social landscape of war and medical refugees are impacting the molecular epidemiology and evolution of <i>A. Baumannii</i> . |
| Job description: | Students may (a) choose a research internship and assist in designing and building a comprehensive literature database to support this project. This will include learning and applying research skills to find, organize, annotate, and analyze the relevant scholarly and medical literature within an online collaborative bibliographic software program (Zotero). Or (b) they may choose to research and write their own paper on this topic as part of a 2-4 credit 199 course. This will include contributing to the bibliographic database but will also involve the production of an independent research paper from this literature. |
| Job qualifications: | Students who have taken SocGen 5 will be better prepared to work on this project, but it is not mandatory. Reading ability in any languages other than English is an asset but is also not required (particularly Arabic, Farsi & French). |

PROJECT TITLE:
UNDIAGNOSED DISEASES NETWORK

| | |
|-------------------------------|---|
| Course Contract available: | 196 |
| Quarter(s) help is needed: | Spring 2017 |
| Hours/week: | 6-10 hours/week |
| Paid? | No |
| Work in Laboratory? | No work in wet lab |
| Project Supervisor(s) names): | Professor Christina Palmer |
| Project Description: | The Undiagnosed Diseases Network (UDN) is a multidisciplinary research clinic using a team science approach to identify the etiology of rare and undiagnosed diseases using state of the art genomic approaches. |
| Job description: | Duties will include assisting project personnel with tasks related to identifying etiology of disorder (e.g., genetic variant interpretation, using PhenomeCentral database) and tasks related to collecting and managing data on outcomes of UDN experience (e.g., survey administration, medical record review and data abstraction). |
| Job qualifications: | Motivated, reliable, conscientious, and eager to learn new skills are essential qualifications for this position. Human subjects training (CITI) is required for this position, and we preferably want the completed CITI certificate before week 1 spring quarter. |

PROJECT TITLE: **CHEMICAL ENTANGLEMENTS**

| | |
|----------------------------|---|
| Course Contract available: | 196 |
| Quarter(s) help is needed: | Spring 2017 |
| Hours/week: | 6 – 10 hours/week |
| Paid? | No |
| Work in Laboratory? | No |
| Project Supervisor: | Dr. Rachel C. Lee |
| Project Description: | <p>Exposure to environmental toxicants and endocrine-disrupting chemicals have been proven to have negative impacts on human reproductive health. Because products containing such substances (cleaning products, cosmetics, etc.), are overwhelmingly marketed to women, and because environmental pollution is often concentrated near the places where people of lower economic status or people of color live; gender, race, and class can determine level of exposure and health outcomes. CSW's Chemical Entanglements initiative is a response to this dynamic. The goal of this research project is to illuminate the way in which women have been enrolled, both as scientists and nonscientists, in chemical experiments since WWII, and to increase the chemical literacy of scholars in gender/sexuality studies. We will also reveal the gendered patterns of exposure that lead to illnesses such as Toxicant-Induced Loss of Tolerance (TILT) and Multiple Chemical Sensitivity (MCS). In so doing, we will engage activists, policymakers, physicians, and community members in efforts to develop new tools and strategies that will help identify the gendered impacts of environmental toxicants and reduce the harm that toxic exposure can cause to the health of people of all genders.</p> |
| Job description: | <p>Students enrolled in research credit with Professor Rachel Lee will contribute to the Center for the Study of Women's Chemical Entanglements research project. Students will develop and hone independent research skills and the ability to communicate research findings to diverse audiences. Students will complete the following activities:</p> <ul style="list-style-type: none"> • Locate, read, summarize, and evaluate articles, reports, and book chapters from a variety of scholarly disciplines that address the topic of gender, chemical exposure, corporate advertising practices, and toxic products • Drawing on this research, assist in creating scripts and storyboards for a series of short videos on toxic exposure and household products; assist in filming and editing said videos |
| Job qualifications: | <ul style="list-style-type: none"> • UCLA undergraduate • Strong time-management skills • Ability and willingness to read texts from a variety of scientific and humanistic disciplines • Ability to collaborate and participate in team meetings and discussions • Video production experience a plus |

PROJECT TITLE:
WHAT IS EPIGENETICS?

| | |
|----------------------------|---|
| Course Contract available: | SOCIETY AND GENETICS 199 |
| Quarter(s) help is needed: | Spring 2017 and following quarters |
| Hours/week: | Around 8-9 hours/week, 3.0 units of 199 |
| Paid? | No |
| Work in Laboratory? | No |
| Project Supervisor(s): | Dr. Patrick Allard and EpiDapo (http://epidapo.ucla.edu/) |
| Project Description: | Together with a team of scientists and social scientists, the students will explore the evolution of the perception of what constitutes "Epigenetics" |
| Job description: | Under supervision, the students will work in a small group to mine the scientific literature (via pubmed, Web of Science, Google scholar, others) to identify the well-accepted and emerging definitions of "Epigenetics" and "Environmental Epigenetics". Part of this work will entail researching how those definitions have evolved over time, discussing the findings with classmates and participating in regular meetings where the findings will be discussed. The product of the research will entail the building of a literature database. |
| Job qualifications: | Understanding of genetics and epigenetics. Ability to use literature search engines such as pubmed, web of science and others. |

PROJECT TITLE:
**PERSONALIZED MEDICINE AND GENOMICS: NEW
PERSONS, DIAGNOSIS, AND INSTITUTIONS**

| | |
|----------------------------|---|
| Course Contract available: | SOCIETY AND GENETICS 196 |
| Quarter(s) help is needed: | Spring 2017 |
| Hours/week: | 6 hours/week |
| Paid? | No |
| Work in Laboratory? | No |
| Project Supervisor(s): | Damien Cartron |
| Project Description: | <p>“Personalized medicine” is a catchword. It designates the high medical expectations triggered by genomics, but it remains very vague. The project aims at giving this a more precise meaning.</p> <p>For this, we will be studying sociologically the “Undiagnosed Disease Network” (UDN). A network that consists of seven research universities (among them UCLA), two sequencing cores, and many more entities. It uses cutting edge methods of genomic sequencing, and aims at providing a diagnosis to patients who have been through a diagnosis odyssey that might have lasted several years, but remain not diagnosed. We want to understand how this network will give a shape to personalized medicine, in transforming the concept of the “person” that is sick, in changing the process of diagnosis, and in creating a new institutional setting coherent with this new kind of medicine.</p> |
| Job description: | The job will consist of treating qualitative interviews with people from the UDN. Students will transcribe interviews that have already been performed, discuss a coding system with the supervisor, and code the interviews. They will learn the basic skills in interviewing techniques and handling. |
| Job qualifications: | None, an interest in social science methods is necessary. |

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

| | |
|----------------------------|---|
| Course Contract available: | SOCIETY AND GENETICS 196 |
| Quarter(s) help is needed: | Spring 2017 |
| Hours/week: | 10 hours/week |
| Paid? | No |
| Work in Laboratory? | No |
| Project Supervisor(s): | Dr. Marcia Meldrum |
| Project Description: | Evaluation and study of new LA County program involving outreach and services to seriously mentally ill individuals who have not previously received services |
| Job description: | Assist with data entry and maintenance of database; some opportunity for field observations |
| Job qualifications: | Excellent computer skills, good English skills, and attention to detail Ability to speak/read a language other than English an asset |

Wildlife & Public Health Research Assistants Wanted



Conduct local wildlife research with UCLA wildlife veterinarians & ecologists!

We are looking for responsible, motivated individuals to help with our research. Our projects focus on detecting pathogens of zoonotic & conservation concern in local wildlife, and creating a mammalian biodiversity atlas for L.A. County. Course credit is available for research assistants in various majors (Biology/EBE/HBS/Anthro/PhySci).

Note: *Must be willing to dedicate at least 6 hours per week for a minimum of 2 quarters. Candidates able to commit for longer periods will be given priority.*

Responsibilities (may include some or all of the following):

- 1) Wildlife necropsies & sample collection
- 2) Bacterial culture monitoring using dark-field microscopy
- 3) Wildlife carcass retrieval from local animal care centers (gas reimbursed)
- 4) Citizen science outreach and mammal distribution estimates
- 5) Data & sample management (terrestrial & marine mammal)
- 6) Small mammal trapping & camera trap analysis

Interested?

To apply for a research position, please send your résumé to the mammal team (MammalsLAC@gmail.com), and visit the website below to fill out a questionnaire:

<https://mammalslac.wixsite.com/mysite/volunteer>