Title of Research: Behavioral Analysis of Photoallodynia

Research Description: We are studying the neural, behavioral and molecular mechanisms of ocular pain in response to light. We are using genetic mouse mutants and drug treatment in a behavioral assay of light aversion to characterize genes involved in the association between light and discomfort/pain. The behavioral assay is a light/dark box exploration task, tested under increasing illumination and automated software for data analysis. The neural circuit that is activated in a light aversion mouse model is being determined using protein markers (c-fos) of neuronal activation. This analysis involves Image J analysis of photomicrographs. We have multiple clinically relevant models of light aversion including corneal (dry eye injury), retinal (photoreceptor dysfunction) and central (headache) models.

Qualifications: Any Life Science major/minor, particularly Psychobiology and Neuroscience. Students who have taken Psych 110 or Psych 111 are highly encouraged to apply. Training is provided and preference is given to students looking for long-term commitment.

Responsibilities: Assist with animal care, observation, training, & testing using various equipment.

Hours per week: Estimated 6-8 hours/week

Number of available positions: 6

Quarters recruiting: All quarters

PI: Dr. Michael Gorin, Dr. Anna Matynia
Dept of Ophthalmology, Jules Stein Eye Institute
Address DSERC 3-128

If interested, please send a cover letter and curriculum vita (CV) to:
Anna Matynia
Phone 310-825-7519
Email matynia@jsei.ucla.edu

*Important:* Please note that all candidates are required to submit a cover letter and CV. For help on getting started, please visit http://www.college.ucla.edu/urc%2Dcare/srpgetstarted.htm
Title of research: Improving the Continuum of Care for Homeless Veterans with Serious Mental Illness and Co-Occurring Disorders

Research description: This project explores the relationships between housing, employment, and integration into the community for Veterans who have experienced homelessness and who are diagnosed with a serious mental illness (schizophrenia, bipolar illness, depression, or post-traumatic stress disorder) and substance use disorders.

Qualifications: Interest and comfort with interviewing Veterans with serious mental illness and substance use disorders

Responsibilities: Contacting research subjects by mail and telephone, interviewing research subjects, data entry, data analysis if interested.

Hours per week: 6 hours/week

Number of Positions Available: 1

Quarters recruiting: Summer 2012
Fall 2012
Winter 2013
Spring 2013

Contact info:
PI: Alex Young, MD, MSHS
Dept: Psychiatry
Address: 11301 Wilshire Blvd, Bldg 210A
Phone: 310-268-3416
Email: ayoung@mednet.ucla.edu
Website:

If you are interested please contact:
Name: Sonya Gabrielian, MD, MPH
Phone: 310-478-3711 x49853
Email: sgabrielian@mednet.ucla.edu
Title of research: Brain Imaging and Cognition in Neurogenetic Disorders

Research description: The research focus is on structural brain abnormalities and cognitive function in children and young adults with specific genetic syndromes. The aims are: 1. To examine the contributions of specific genetic mutations on brain morphology, cognitive function and clinical symptoms. 2. To examine developmental changes over time, and how these changes differ from normal development.

Qualifications: Must be committed, highly motivated, and reliable. Neuroscience, Psychobiology, and Psychology majors preferred, but not required. Must have a GPA of at least 3.5.

Responsibilities: Will aid in ongoing investigations examining brain morphology and cognition in neurogenetic disorders. Will have to learn some basic unix skills, learn some neuroanatomy, and learn how to work with software used for image analysis. Will be trained on several steps involved in structural image analysis in order to apply them to one of the collected samples (the extent of training will depend on time commitment). If interested will learn how to read and interpret research papers on these topics.

Hours per week: 10 hours at least

Quarters recruiting: Summer 2012

PI: Professor Carrie Bearden
Dept: Department of Psychiatry, Biobehavioral Sciences and Psychology
Address: 300 Medical Plaza, Suite 3330
Phone: 310-206-2983
Email: cbearden@mednet.ucla.edu

If you are interested, please send a brief statement of interest along with your resume to:
Name: Carolyn Chow
Phone: 310-825-3458
Email: cchow@mednet.ucla.edu

Please include the following information in your email exactly as follows:
Name:
E-mail Address:
Major:
Expected Grad Year:
GPA:
Quarters you’d like to participate:
Number of hours you can participate:
Volunteer/SRP 99/Psych 196?
References (Optional):
Title of research: EEG-fMRI study of attention mechanisms.

Research description: Our research aims to characterize the brain mechanisms that allow one to attend to sights and sounds of interest and ignore distractors – especially under varying contexts (e.g., being tired, bored, excited). We utilize simultaneous recording of EEG and fMRI to achieve this aim.

Qualifications: familiarity with Matlab (related experience with programming is ok!) &/or interest in working in the Matlab environment & interest in application of neuroimaging technologies to cognitive neuroscience research

Responsibilities: collection of neuroimaging data (fMRI/EEG), data processing and analysis (Matlab/shell environments)

Hours per week: 6

Number of Positions Available: 1

Quarters recruiting: Summer 2012 & Fall 2012

Contact info:
PI: Cohen, M.S.
Dept: Semel Institute for Neuroscience and Human Behavior
Address: 760 Westwood Plaza, Suite 17-369, UCLA
Phone: 310.980.7453
Email: mscohen@ucla.edu
Website: http://www.brainmapping.org/MarkCohen/

If you are interested please contact:
Name: Agatha Lenartowicz
Phone: 609.439.2216
Email: alenarto@ucla.edu
Title of research: **Spinal Cord Injury Research**

Research description: Research work in our lab is aimed at enhancing the motor recovery in humans as well as in rodents with spinal cord injury using a combination of pharmacological and rehabilitation strategies.

Our projects involve collecting enormous data using 3D Video recordings for behavioral analysis and electrophysiological (example Electromyography) recordings to assess spinal cord physiology.

Qualifications: We are looking for student volunteers (preferably from the Bioengineering or Engineering Departments) to assist us with data collection and analysis using MatLab softwares. Preference will be given to students who have at the least some background with basic MatLab coding.

Responsibilities: Data analysis of electrophysiological data; interpretation of results; scientific discussions with supervisor.

Hours per week: 10-15 hrs

Number of Positions Available: 1

Quarters recruiting: **Summer 2012**

Contact info:
- PI: Dr. V. R. Edgerton
- Dept: Integrative Biology & Physiology
- Address: 1013E Terasaki Life Science
- Phone: (310) 825-4780
- Email: pwise@ucla.edu

If you are interested please contact:
- Name: Prithvi Shah, PhD
- Post-Doctoral Fellow, Dept of Integrative Biology & Physiology
- Email: pkshah@ucla.edu
Title of research: Cognitive changes in aging, mild cognitive impairment, and dementia

Research description: Our research is focused on detecting the earliest cognitive impairments in aging using methods from cognitive psychology and clinical neuropsychology.

Qualifications: Psychology, Psychobiology, or Neuroscience majors are preferred but not required. Students must commit to one year minimum (12 consecutive months, including summer). Previous research experience is preferred but not required. Students planning to apply for graduate school in the future are especially encouraged to apply.

Responsibilities: Data scoring and entry; test administration.

Days: Tuesdays, Wednesdays, and Thursdays are the days we are looking to fill so you must be available on at least once of those full days to apply. Additionally, please send your availability for the remainder of the week.

Hours per week: 8 minimum on one full day (8:30 – 5:00). Students need to commit to a minimum of one full year (12 consecutive months).

Quarters recruiting: All quarters

If you are interested please email Jennifer Ben-Ami your CV, along with the specific day(s) and number of hours per week you are able to commit to, and indicate your availability to commit for 12 consecutive months:

Name: Jennifer Ben-Ami, MA
Phone: 310-794-2619
Email: jbenami@mednet.ucla.edu

PI: Ellen Woo, PhD
Dept: Neurology
Address: 10911 Weyburn, Suite 200, Los Angeles, CA 90095
Phone: 310-794-2619
Email: ewoo@mednet.ucla.edu
Title of research: Bone macro- and micro-structure

Research description: I direct the only laboratory in the world that analyzes the human bone tissue through isolation and mechanical testing of microstructures. These unique data is then related to bone macro-structure. We study bone disease, fracture and implant-bone interface. One of our micro-structural images is on the cover of the March 2012 issue of the Journal of Bone and Mineral Research that features one of our papers.

Qualifications: Pre-med or math majors. Computer programming skills required. Laboratory/Research experience preferred. High GPA. Striving for excellence. Possibility to continue with upper division 199.

Responsibilities: To help with various phases of research: literature searches, microscopy investigations of bone specimens, data analysis, simulations.

Hours per week: 6 hours per week

Quarters recruiting: Summer 2012

Contact info:

PI: Maria-Grazia Ascenzi, PhD, Professor of Research
Dept: Orthopaedic Surgery
Address: Rehab Bldg 22-69 (Westwood Village)
Phone: 310/825-6341
Email: mgascenzi@mednet.ucla.edu

If you are interested please contact:

Name: Maria-Grazia Ascenzi, PhD
Phone: 310/825-6341
Email: mgascenzi@mednet.ucla.edu
Title of research: Profiling DNA methylation and Histone Modifications in Arabidopsis thaliana

Research description: Our laboratory investigates genome function in the model plant Arabidopsis thaliana. We are broadly interested in how histone modification and DNA methylation regulate genes. We utilize ultra-high-throughput sequencing, in addition to a variety of genetic and biochemical approaches to understand this mechanism in detail.

Qualifications: Prior research experience is desirable, though not essential. LS3

Responsibilities: The student will assist in genetic experiments by performing crosses and PCR-genotyping lots of mutant backgrounds. These mutants will be analyzed using methods such as RT-PCR, Western blotting and RNA sequencing.

Hours per week: 15 hours per week

Number of Positions Available: 1

Quarters recruiting: Summer 2012

Contact info: Professor Steve Jacobsen
Dept MCD Biology
Address Life Sciences 3218

If you are interested please email your CV along with the number of hours you are able to commit:

Name Hume Stroud
Email humestroud@gmail.com

Date Posted: May 23, 2012
Title of research: **Repeat concussions in juvenile brain**

Research description: Determine the effects of repeat traumatic brain injury on juvenile memory and learning.

Qualifications: UCLA undergraduate, responsible, hardworking, self-motivated, able to work independently. Ability to work with animals after training.

Responsibilities: Students will be responsible for learning and conducting behavioral tasks on animals after brain injury. The task will be the Novel Object recognition task which requires three consecutive days of animal work (1hr per day). Video tape analysis of the behavior is also required as is data analysis.

Hours per week: 6-10 hrs per week

Number of Positions Available: 1

Quarters recruiting: Fall 2012
Summer 2012

Contact info:
PI: Mayumi Prins
Dept: Neurosurgery
Address: NPI 18-218
Phone: 310-825-8646
Email: mprins@mednet.ucla.edu

If you are interested please contact:

Name: Dr Tiffany Greco
Email: tgreco@mednet.ucla.edu

Date Posted: May 23, 2012
Title of research: RNAi guiding DNA methylation and gene silencing

Research description: Our laboratory investigates genome function in the model plant *Arabidopsis thaliana*. We are broadly interested in how the genome silences repetitive genetic elements such as transposons and viruses through DNA and histone methylation. These processes have important implications for both cancer and viral defense. Recently, we have discovered that small RNAs generated by the RNA-interference (RNAi) pathway play a key role in guiding the gene silencing machinery to repetitive sequences. We are currently taking a variety of genetic and biochemical approaches to understand this mechanism in more details.

Qualifications: Prior research experience is desirable, though not essential. Ideally the student is planning to attend a PhD program in graduate school.

Responsibilities: The student will assist in genetic experiments by screening for mutant plants impaired in DNA methylation using UV-coupled microscope. The project will involve some extractions of genomic DNA and PCR-based genotyping of mutant backgrounds. These mutants will be analyzed by Reverse Transcription coupled to Real-Time PCR to determine RNA expression pattern. DNA methylation will be assayed using bisulfite-treated DNA sequencing technology. The student will also help in plant work.

Hours per week: 12 hours per week as a minimum

Quarters recruiting: Now until Spring 2013.

Number of Positions Available: 1

Contact info: If you are interested please contact:

Name Guillaume Moissiard
Phone 310 206 3336
Email gmoissiard@ucla.edu

PI Professor Steve Jacobsen
Dept MCD Biology
Address Terasaki Life Sciences Building Room 4045
       610 Charles Young Dr. East
Phone 310 206 3336
Email jacobsen@ucla.edu
Title of research: Effect of Nell-1 on articular cartilage development and regeneration

Research description: Arthritis is the leading cause of disability among Americans. The most common form of arthritis is osteoarthritis (OA), with over 27 million Americans suffering from this degenerative condition. Our research focuses on tissue engineering and regenerative medicine approaches for articular cartilage repair. Our goal is to understand the role of Nell-1 in articular cartilage development and regeneration. In addition, we are developing therapeutic strategies using Nell-1 protein to enhance tissue engineered articular cartilage grafts for the treatment of cartilage defects. The applicant will have the opportunity to design experiments using primary cells from rabbit, dog, mouse and human to examine the role of Nell-1 in chondrogenesis.

Qualifications: Undergraduate with minimal GPA of 3.5. Experiences with molecular biology techniques such as PCR, DNA isolation, western blot are preferred.

Responsibilities: Maintaining in vitro cell culture, RNA isolation, DNA isolation, western blot, PCR, general histology, immunohistochemistry and histology sectioning

Hours per week: 10 hrs/week

Number of Positions Available: 3

Quarters recruiting: All quarters including summer

Contact info:
PI: Dr. Chia Soo
Dept: Orthopedics
Address: 675 Charles E Young Dr. South
Phone:

If you are interested please contact:
Name: Jay Jiang
Phone: (408) 505-1319
Email: jjjiang25@ucla.edu

Date Posted: May 17, 2012
Title of research: Understanding mechanisms of reactive astrogliosis and confirming new biomarkers of traumatic brain injury using a “scar in a dish”

Research description: The research of our lab is focused on understanding how the brain and spinal cord responds to traumatic injuries. We are studying the mechanisms how glial cells, the astrocytes protect the central nervous system after injury and how they form a scar around a wound. We also work on identifying injury-related proteins that could be used as biomarkers to diagnose traumatic brain injury in patient’s body fluids in the future.

We work with a new cell culture injury model that recapitulates early steps of glial scar formation after spinal cord injury or brain trauma (Wanner et al., 2008). The astrocytes are mechanically traumatized and we monitor their responses to the trauma using cell death, damage and marker stains, time-lapse video imaging and protein analyses including western blotting and immunocytochemistry as well as fluorescence microscopy, state of the art imaging and quantitative image analysis.

Qualifications: You should bring enthusiasm, patience, thoroughness and perseverance. You should have basics in cellular and molecular Neuroscience, Major in Neuroscience, Biology or Biochemistry or molecular Genetics, MCDB is desired; Basic knowledge in CNS development, injury and regeneration are helpful.

Responsibilities: You are going to be involved in ongoing research projects and will conduct or assist in experiments and you will analyze results. You will contribute to general lab organizational tasks, including preparation of solutions and tools for laboratory daily praxis. You may also be involved in literature research.

Hours per week: Work hours will be handled flexible to accommodate lecture schedule and lab experiments, but a minimum availability of being able to maintain 15 hours per week is expected to apply for this position.

Number of Positions Available: 2

Quarters recruiting: Spring 2012, ongoing for 2 or 3 consecutive semesters
Contact info:

PI: Dr. Ina Wanner

Dept: IDDRC, Psychiatry and Biobehavioral Neuroscience, Semel Institute for Neuroscience
Address: Neuroscience Research Bld Rm 260 A+J.
       635 Charles E.Young Drive South LA, CA, 90095-7332
Phone:  310 825 8847 OR 310 463 8493

Date Posted; April 9, 2012
<table>
<thead>
<tr>
<th><strong>Title of research:</strong></th>
<th>The effect of methamphetamine and nicotine dependence on neurocognition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research description:</strong></td>
<td>We assess the brain structure and function and cognitive performance of individuals who are nicotine or methamphetamine dependent. We are particularly interested in the relationship between impulsivity and addictive disorders.</td>
</tr>
<tr>
<td><strong>Qualifications:</strong></td>
<td>A desire to learn about the inner workings of a research project, flexibility in working with individuals with diverse backgrounds, communication skills, and personal reliability</td>
</tr>
<tr>
<td><strong>Responsibilities:</strong></td>
<td>Phone screening, administering questionnaires to research participants, possibly administering neurocognitive tests</td>
</tr>
<tr>
<td><strong>Hours per week:</strong></td>
<td>12 Hours</td>
</tr>
<tr>
<td><strong>Number of Positions Available:</strong></td>
<td>4</td>
</tr>
</tbody>
</table>
| **Quarters recruiting:** | Fall 2011  
Summer 2012 |
| **Contact info:** | Andrew Dean, Ph.D.  
Psychiatry  
760 Westwood Plaza, C8-620, Semel Institute, Box 951759, Los Angeles, CA 90095-1759  
310-825-5839  
acdean@mednet.ucla.edu |

Date Posted; April 9, 2012
Title of research: National Institute of Drug Abuse QUIT (Quit Using Drugs Intervention Trial) for Casual Users of All Drugs

Research description: Recruit, interview and conduct assessments of patients at some of the largest free clinics in the country for a trial to reduce drug use. The Quit Using Drugs Intervention Trial (QUIT) will be the first randomized controlled trial in the U.S. that is powered to detect the effect of a primary care clinician delivered brief intervention protocol for reducing 'at risk' drug use and drug-related harm among low-income adult patients (ages 18 and older) at 2 safety net clinics in Los Angeles County. For this small trial, we will sample patients with 'at risk' use of drugs (marijuana, opioids, cocaine or amphetamines), the most commonly used serious drugs among patients at our clinic sites. "At risk" drug use is defined in this study as current use (past 90 days) of drugs measured as a self-reported total score of 4 to 26 on the WHO Alcohol Substance Involvement Screening Test (ASSIST). A total of 8,000 patients will be approached for screening to yield a 3-month effective sample size of 200 eligible patients per condition (1) an intervention condition or (2) a control condition involving an attention control on preventing cancer. In the intervention condition, very brief (less than 5 minutes) clinician advice regarding quitting drug use will be followed by two 2 and 6 week post-visit drug health education sessions on quitting drug use and cautioning against use of other 'at risk' substance use such as alcohol and tobacco. Patients assigned to the control condition will receive standard care for drug use and a attention control cancer prevention program at the baseline visit with their clinician, which will be followed by two post-visit telephone health education sessions that will be of equal duration as the intervention sessions but will address healthy eating, physical activity, and seat belt use. Follow-up assessments will be conducted at 3 months post-randomization.

Qualifications: Interest in Health/Prevention/Drug/Social Science Research. Students with interest in public policy, sociology, public health or pre med. Bilingual Spanish speakers is a requirement for this position. We will only consider students for this position that are fluent Bilingual Spanish speakers.

Responsibilities: Recruit, interview and conduct assessments of patients in clinic based settings.

Hours per week: (Please note that students can work up to 6 hours per week)

Quarters recruiting: ALL QUARTERS -
Spring 2012  
Summer 2012  
Fall 2012

Contact info:
PI: Lillian Gelberg  
Dept: Family Medicine  
Address: 10880 Wilshire Blvd Suite 1800  
Phone: 310-794-6092  

If you are interested please contact:  
Name: Lisa Arangua  
Phone: 310-963-8869  
Email: larangua@mednet.ucla.edu

Date Posted: March 26, 2012
Title of research: Genetics of Brain Structure

Research description: Our lab is now recruiting undergraduate research assistants to participate in a project to study the genetic basis of brain structure. We use innovative neuroimaging analysis techniques to extract structural phenotypes from magnetic resonance images (MRIs). We work with multiple systems including human and animal models, with the overall goal of identifying genes that influence brain and behavioral phenotypes. Research assistants will develop an expertise in neuroanatomy during the first year in the laboratory. Motivated students who continue beyond the first year will be encouraged to develop statistical analysis skills to be involved in downstream data analysis.

Qualifications: No specific qualifications.

Responsibilities: Research assistants will be responsible for manual delineation of anatomical structures on neuroimages and cortical meshes.

Hours per week: 6 h minimum (2 SRP units)

Number of Positions Available: 5

Quarters recruiting: Spring 2012
Summer 2012

Contact info:

PI: Dr. Scott Fears
Dept: Psychiatry
Address: 300 Medical Plaza, suite 2339
Email: sfears@mednet.ucla.edu

If you are interested please contact:

Name: Noor Sharif
Email: heritability@gmail.com

Date Posted: March 26, 2012
Title of research: Parenting and Children’s Friendship Program

Research description: Children’s Friendship Training is a 12 session manualized intervention to help children who have trouble making and keeping friends. Children are taught successful steps to making friends and parents are taught how to help promote their child’s friendships. Randomized controlled trials on children with autism spectrum disorders and children with attention deficits hyperactivity disorder have established the program’s effectiveness.

Qualifications: Psychology major with coursework relevant to the area of investigation. Previous experience working with children is recommended.

Responsibilities: Code baseline and outcome measures, assist with gathering materials for group interventions and provide assistance during the group sessions.

Hours per week: 6 hours (must be available Wednesdays 5:15 pm - 8:15 pm)

Number of Positions Available: 1-2

Quarters recruiting: Summer 2012 (2 quarter commitment minimum)
                  Fall 2012 (2 quarter commitment minimum)

Contact info:
PI: Fred Frankel, Ph.D
Dept: Psychiatry and Biobehavioral Sciences
Address: 300 Medical Plaza
Email: ffrankel@mednet.ucla.edu
Website: www.semel.ucla.edu/socialskills

If you are interested please contact:
Name: Sarah Foster
Phone: (310) 794-4794
Email: sfoster@mednet.ucla.edu

Date Posted: March 19, 2012
Title of research: **Evaluation of Family-Focused Treatment for Childhood-Onset Depression**

Research description: Childhood-onset depression is an impairing and frequently recurrent and persistent disorder that impacts development resulting in high social and economic costs. There are currently no psychosocial treatment strategies with a strong evidence-base supporting efficacy. Building on our prior work in which we developed a manualized Family Focused Treatment (FFT), we propose a two-site randomized controlled trial to evaluate the efficacy of FFT for childhood depressive disorders, as compared to an individual psychotherapy approach similar to standard community care.

Qualifications: Prior experience working with children and adolescents is desirable, though not essential. Training is provided and preference is given to students who are responsible and organized. This is an excellent opportunity for students interested in applying to graduate or medical schools.

Responsibilities: Students will have the opportunity to learn and gain experience in research involving youth and adolescents. Students will assist in screening potential subjects, preparation of study materials, and data entry/analysis.

Hours per week: Estimated 6-8 hours/week

Number of Positions Available: 1-2

Quarters recruiting: **Spring 2012 and onward. A two-quarter commitment is required.**

Contact info:

PI: Joan R. Asarnow, PhD  
Dept: Child and Adolescent Psychiatry, NPI

If interested, please contact:  
**Name:** Talin Arslanian  
**Phone:** (310) 794-4962  
**Email:** teens@ucla.edu 

Date Posted: March 16, 2012
<table>
<thead>
<tr>
<th><strong>Title of research:</strong></th>
<th><strong>Probabilistic representations of neural coding</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research description:</strong></td>
<td>Develop computational models of conditional probability density functions from recorded neural activity.</td>
</tr>
<tr>
<td><strong>Qualifications:</strong></td>
<td>Upper division standing with interests and background in applied mathematics and/or biomathematics.</td>
</tr>
<tr>
<td><strong>Responsibilities:</strong></td>
<td>Work closely with PI and international colleague in developing pdf models in Matlab.</td>
</tr>
<tr>
<td><strong>Hours per week:</strong></td>
<td>6</td>
</tr>
<tr>
<td><strong>Number of Positions Available:</strong></td>
<td>1</td>
</tr>
</tbody>
</table>
| **Quarters recruiting:** | **Spring 2012**  
**Summer 2012** |

**Contact info:**
- **PI:** Larry Hoffman  
- **Dept:** Head & Neck Surgery  
- **Address:** CHS 62-119  
- **Phone:** x59823  
- **Email:** lfh@ucla.edu

**Date Posted:** March 16, 2012
Title of research: **University-Community Partnerships to Decrease Health Disparities in Child Obesity: Physical Education Professional Development for the Improvement of Physical Activity among Youth**

Research description: In an effort to decrease the rates of children who are overweight or morbidly obese, the purpose of this study is to promote a healthier school environment through the provision of a nutritional and physical activity intervention during after school programs at middle schools within the Los Angeles Unified School District. The goals of this intervention are to improve health behaviors and to improve the daily physical activity of the youth participants.

Qualifications: Must have own transportation. Must enjoy working with kids! Preference is given to students who are able to make a long-term commitment and who possess an enthusiasm for working with underserved communities.

Responsibilities: Students will assist in implementing a nutritional and physical activity program at multiple elementary schools (off UCLA campus); assist with general research duties including recruitment, scheduling and focus groups; conduct literature reviews; data entry; library searches; descriptive statistics; prepare presentations, posters, manuscripts and grants. We will provide training on quantitative and qualitative methods.

Hours per week: We are interested in students who are able to commit to 8-10 hours per week on Monday, Tuesday, Wednesday, and/or Friday.

Number of Positions Available: 2

Quarters recruiting: **Summer 2012**  
**Fall 2012**

Contact info:

**PI:** Dr. Kynna Wright-Volel  
**Dept:** School of Nursing  
**Address:** 5-157 Factor Building  
**Email:** kwright@sonnet.ucla.edu

If you are interested please email your interest and resume to:

**Name:** Dr. Kynna Wright-Volel  
**Phone** Please no phone calls  
**Email** kwright@sonnet.ucla.edu

Please note: While we have research offices on the on the UCLA campus, most of our research will be conducted at middle schools within the Los Angeles Unified School District.
Title of research: Assaying Demyelination and Functional Remyelination in mouse models of Multiple Sclerosis

Research description: Our lab is involved in investigating mechanisms (i) leading to axon degeneration, (ii) neuroprotection against neurodegeneration in 2 different mouse models of demyelination, and (iii) sex hormone and sex chromosome-induced differences in myelination. We will evaluate clinical scores, behavioral (motor and spatial memory) tasks, immune cytokines from splenocytes, electrophysiological callosal axon conduction, callosal tracts, corticospinal tract dye tracing, and Immunohistological changes in brain and spinal cord. An opportunity for independent research projects available as progress with technique improves.

Qualifications: Must have working knowledge of neurophysiology, action potentials, and ion channels. The candidates have knowledge of Physics and interest in learning electrophysiology techniques (electricity and magnetism, basic circuit diagrams, concepts of resistance, capacitance, current, and voltage). Good dexterity and fine motor skills are preferred. Neuroscience major preferred. You must commit at least two years to our lab, including summer 2012.

Responsibilities: Assist in the following tasks: 1, animal care; 2, assist and then perform electrophysiology recording from brain slices.

Hours per week: 12-15 hours per week

Number of Positions Available: 3

Quarters recruiting: Summer 2012
Fall 2012

Contact info:
PI: Seema Tiwari-Woodruff
Dept: Department of Neurology, NRB1
Dept: UCLA Multiple Sclerosis Program
Email: seemaw@ucla.edu

Date Posted: March 15, 2012
Title of research: Bone macro- and micro-structure

Research description: I direct the only laboratory in the world that analyzes the human bone tissue through isolation and mechanical testing of microstructures. These unique data is then related to bone macro-structure. We study bone disease, fracture and implant-bone interface. One of our micro-structural images is on the cover of the March 2012 issue of the Journal of Bone and Mineral Research that features one of our papers.

Qualifications: Pre-med or math majors. Laboratory/Research experience preferred. High GPA. Striving for excellence. Possibility to continue with upper division 199.

Responsibilities: To help with various phases of research: literature searches, microscopy investigations of bone specimens, data analysis, simulations.

Hours per week: 6 hours per week

Number of Positions Available: 2 or 3

Quarters recruiting: Summer 2012

Contact info:

PI Maria-Grazia Ascenzi, PhD, Professor of Research
Dept Orthopaedic Surgery
Address Rehab Bldg 22-69 (Westwood Village)
Phone 310/825-6341
Email mgascenzi@mednet.ucla.edu

If you are interested please contact:

Name Maria-Grazia Ascenzi, PhD
Phone 310/825-6341
Email mgascenzi@mednet.ucla.edu

Date Posted: March 15, 2012
Title of research: Dynamics of cross-species influenza transmission: an international collaboration

Research description: Research investigates the dynamics of influenza between and among domestic and wild birds in several countries. Data on influenza infection in wild and domestic species is being collected and surveys to determine the degree of contact between species are being conducted. Correlations between infection rates and contact rates will be assessed.

Qualifications: Basic computer literacy, 3.0 GPA, all specific skills needed will be taught.

Responsibilities: DATA ENTRY - Scan survey sheets to create jpeg files, measure coordinates of each species group or individual using a computer program specialized for this purpose, enter data from survey sheets and field data sheets into database.

Hours per week: 10

Number of Positions Available: 6 Spring, 4 Summer

Quarters recruiting: Summer 2012

Contact Info:

PI: Dr. Thomas B. Smith
Dept: Center for Tropical Research, Institute of the Environment
UCLA

If you are interested please send a CV and contact information for two references to:

Name: Dr. Brenda Larison
Email: blarison@ucla.edu

Date Posted: March 8, 2012
Title of research: Study of antipsychotic medication adherence in schizophrenia

Research description: The UCLA Aftercare Research Program has been on the UCLA campus for over two decades, and provides free psychiatric treatment for patients with a recent onset of schizophrenia who participate in the research study. Our longitudinal research program examines whether we can accentuate our efforts to get first break patients back to work to prevent the onset of chronic disability.

Qualifications: Some experience in using Excel. Experience with SPSS preferred but not required. Some experience in library literature reviews, use of pubmed on Biomed library website, some experience in reading and summarizing psychology research articles. Attention to detail and ability to work well within a small team of SRP students is required. Ability to attend our lab meeting, Thursdays 1-2pm, is required.

Responsibilities: For this SRP position, the student will help to check and verify for accuracy a data base of antipsychotic medication adherence. Student will also help with library research as needed for various projects associated with our medication adherence database.

Hours per week: 6 hours per week

Number of Positions Available: 5

Quarters recruiting: Summer 2012

Contact info:

PI: Kenneth Subotnik, Ph.D.
Dept: Psychiatry and Biobehavioral Sciences
Address: 300 UCLA Medical Plaza, Rm 2240
Phone: (310) 825-0334
Email: ksubotnik@mednet.ucla.edu

If you are interested please send your resume (and class schedule for next quarter, if available). Please send initial resume or inquiry by e-mail. Include your return phone number to:

Name: Kenneth Subotnik, Ph.D.
Email: ksubotnik@mednet.ucla.edu

Date Posted: March 8, 2012
Title of research: Animal Cognition

Research description: We study cognitive processes in animals. Current projects explore acquisition processes of spatial and temporal cognition, causal reasoning, operant variability, and problem solving. For more information on our research projects, please visit http://pigeonrat.psych.ucla.edu/

Qualifications: Any Life Science major/minor, particularly Psychobiology and Neuroscience. Students who have taken Psych 110 or Psych 111 are highly encouraged to apply. Training is provided and preference is given to students looking for long-term commitment. We have a strong track record of mentoring undergraduates and priority for independent research projects is contingent on performance and commitment to our lab.

Responsibilities: Assist with animal care, observation, training, & testing using various equipment.

Hours per week: Estimated 6 - 8 hours/week, 2 - 3 hour blocks preferred

Number of Positions Available: 5

Quarters recruiting: All quarters –Summer 12, F12

Contact Info:

   PI:      Dr. Aaron Blaisdell  
   Dept:    Psychology 
   Address: Franz 8441A

   If interested, please send a cover letter and curriculum vita (CV) to the lab manager:

   Name: Hwee Cheei Lim  
   Phone: 310-267-4590  
   Email: linpaddyis@yahoo.com

   *Important: Please note that all candidates are required to submit a cover letter and CV. For help on getting started, please visit: http://www.college.ucla.edu/urc%2Dcare/srpgetstarted.htm

   Date Posted: March 6, 2012
Title of research: Exploring potential migraine mechanisms and therapeutics using optical imaging and electrophysiological approaches.

Research description: The research involves assisting and eventually performing experiments to characterize how pharmacological interventions affect the phenomenon of spreading depression and oscillatory activity in the nervous system. We address these clinically relevant issues using cell cultures, brain slices, and rodent in vivo preparations.

Qualifications: The student must be ambitious and able to work independently. Previous experience with MATLAB and ImageJ is desired but not necessary. The student must be prepared to take the necessary classes to work with lasers and to handle animals and perform experiments. Strong writing and quantitative skills are needed to document progress. A willingness to learn custom programs to perform time-series analyses is essential.

Responsibilities: The student will be responsible for the following: 1. Generate Standard Operating Procedures (SOPs) for the laboratory during the initial training phase. 2. Make solutions and help prepare tissue for experimentation. 3. Assist and eventually conduct optical imaging and electrophysiological experiments. 4. Perform time-series analysis on electrical and optical signals to generate publication quality graphs. 5. Assist with lab maintenance as needed.

Hours per week: 10 hours per week is expected and necessary to make significant progress. For projects involving computer work, the student can work in either lab or elsewhere, but weekly meetings and a lab notebook with proper documentation are required to demonstrate constant progress. It is often the case that at least two quarters are required to generate enough data to warrant authorship on abstracts and manuscripts.

Number of Positions Available: 2

Quarters recruiting: Summer 2012; Fall 2012
Contact info:

PI: Andrew Charles, MD; Director of UCLA Headache Research and Treatment Program,
Dept: Neurology

The research will be conducted in Dr. Andrew Charles’ laboratory in the Department of Neurology under the direct supervision of Dr. Serapio M. Baca (smbaca@ucla.edu). All interested students should email Dr. Baca a CV and provide at least one letter of reference.

Date Posted: February 27, 2012
Title of research: LONI Probabilistic Brain Atlas (LPBA-100)

Research description: The aim of the project will be the expansion of the LONI Probabilistic Brain Atlas (LPBA). The initial LPBA40 is a series of maps of brain anatomic regions. These maps were produced from a set of whole-head MRI of 40 human volunteers. Each MRI was manually delineated to identify a set of 56 structures in the brain, most of which are within the cortex. These delineations were then transformed into a common atlas space to produce a set of co-registered anatomical labels. The original MRI data were also transformed into the atlas space. The 3D volumes contained within this data set represent intensity averages of the co-registered skull-stripped MRI volumes, probabilistic tissue maps based on automated classification of the native-space MRI into white matter, grey matter, and cerebrospinal fluid, probabilistic maps for each delineated structure, probabilistic maps for the grey matter portions of each structure, maximum likelihood maps that identify the most likely structure at each voxel in the atlas space. A similar approach will be used to create more extensive atlases.

Qualifications: Dedication and interest in neuroscience, brain mapping and computing. Neuroanatomy familiarity is a plus.

Responsibilities: The students will be responsible for the manual delineation of neuroanatomical structures within a subset of the ICBM data. Before tracing on the ICBM data, the students must become a reliable rater. This is done by delineating the assigned region of interest in previously mapped brains. The students' work is compared to that of reliable raters. Passing this test confirms that the students have gained sufficient familiarity with the delineation protocol. Other duties may include running scripts and/or LONI Pipeline workflows which utilize a variety of neuroimaging analysis tools to perform alignments/averages. The ultimate goal is the generation of a set of multi-modal atlases.

Hours per week: 6 hours/wk. Flexible times.

Number of Positions Available: 20

Quarters recruiting: Summer 2012
Fall 2012

Contact info:
PI:  Arthur Toga
Dept:  Neurology
Address:  635 Charles Young Drive South, Suite 225
          Los Angeles, CA 90095-7334
Phone:  310-206-2101
Email:  toga@loni.ucla.edu
Website:  http://loni.ucla.edu

If you are interested please contact:
Name:  Sam Hobel
Phone:  310-206-2101
Email:  shobel87@gmail.com

Date Posted: February 27, 2012
Title of research: **Cognitive changes in aging, mild cognitive impairment, and dementia**

Research description: Our research is focused on detecting the earliest cognitive impairments in aging using methods from cognitive psychology and clinical neuropsychology.

Qualifications: Psychology, Psychobiology, or Neuroscience majors are preferred but not required. Students must commit to one year minimum (12 consecutive months, including summer). Previous research experience is preferred but not required. Students planning to apply for graduate school in the future are especially encouraged to apply.

Responsibilities: Data scoring and entry; test administration.

Days: Wednesdays and Fridays are the days we are looking to fill so you must be available on either day to apply. Additionally, please send your availability for the remainder of the week.

Hours per week: 8 minimum on one full day (8:30 – 5:00). Students need to commit to a minimum of one full year (12 consecutive months).

Quarters recruiting: **All quarters – 2011-12**

Contact Info:

PI: Ellen Woo, PhD
Dept: Neurology
Address: 10911 Weyburn, Suite 200, Los Angeles, CA 90095

If you are interested please email Jennifer Ben-Ami your CV, along with the specific day(s) and number of hours per week you are able to commit to, and indicate your availability to commit for 12 consecutive months.

Name: Jennifer Ben-Ami, MA
Phone: 310-794-2619
Email: jbenami@mednet.ucla.edu

**Date Posted: January 26, 2012**
Title of research: MRI/Neuroimaging Studies in Child Psychiatry

Research description: Our lab is involved in researching morphological differences in the brain between control subjects and pediatric patients with ADHD, OCD, autism, and schizophrenia. Through MRI imaging, we analyze structural parameters such as cortical thickness, volume, and neurochemical composition. We use specialized software to facilitate our visualization, manipulation, and statistical computation of brain imaging data.

Qualifications: 1) Background in working with MRI/neuroimaging strongly desired.
2) Shell scripting, command line, and/or computer programming background/knowledge strongly desired. Knowledge of Linux strongly desired.
3) Prior coursework/major in neuroscience, psychobiology, or psychology preferred, but students intending to enter those majors or related fields are also encouraged to apply.

Responsibilities: Initially, your responsibility will be to familiarize yourself with brain MRIs as well as neuroimaging research techniques/software. We will help students develop the necessary expertise through the use of software to delineate anatomical regions of the brain. With time, students will learn how to apply neuroimaging techniques to aid in the analysis of structures in the brain. Consideration for the 199 research course will only be made after a 1-year period as an SRP student or only if the student has already had relevant experience in this field.

Hours per week: 10

Quarters recruiting: All quarters. Minimum 3-quarter commitment (can be completed next school year)

Contact info:
PI: Jennifer Levitt, MD
Dept: Psychiatry & Behavioral Sciences
Address: 760 Westwood Plaza, 47-439 Semel Institute

If you are interested please contact:
Name: Ronald Ly
Email: Ly.Ronald@gmail.com

Date Posted: January 20, 2012
Title of research: Los Angeles Healthcare Security Project

Research description: The project deals with medical disaster preparedness and resilience for Los Angeles. Are we as prepared as we should be? What are the weak spots? How can technology be helpful? Who should be involved? How do we measure our preparedness?

Qualifications: Some knowledge of public health

Responsibilities: Research on the databases needed for the project (organizations, initiatives, people of interest, app’s) and the website

Hours per week: 2-5 (please note for SRP credits: 2-5 hrs = 1 unit; 6hrs and above = 2 units)

Quarters recruiting: Summer 2012

Contact info:
PI: Peter Katona, MD
Dept: Medicine
Address: 100 UCLA Med Plaza #310
Phone: 310 208-1967
Email: pkatona@ucla.edu

If you are interested please contact:
Name: Peter Katona, MD
Phone: 310 208-1967
Email: pkatona@ucla.edu

Date Posted: January 13, 2012
Title of research: National Institute of Drug Abuse QUIT (Quit Using Drugs Intervention Trial) for Casual Users of Stimulants (Methamphetamine and Cocaine)

Research description: Recruit, interview and conduct assessments of patients at some of the largest free clinics in the country for a trial to reduce drug use. The Quit Using Drugs Intervention Trial (QUIT) will be the first randomized controlled trial in the U.S. that is powered to detect the effect of a primary care clinician delivered brief intervention protocol for reducing ‘at risk’ drug use and drug-related harm among low-income adult patients (ages 18 and older) at 2 safety net clinics in Los Angeles County. For this small trial, we will sample patients with ‘at risk’ use of drugs (marijuana, opioids, cocaine or amphetamines), the most commonly used serious drugs among patients at our clinic sites. "At risk" drug use is defined in this study as current use (past 90 days) of drugs measured as a self-reported total score of 4 to 26 on the WHO Alcohol Substance Involvement Screening Test (ASSIST). A total of 8,000 patients will be approached for screening to yield a 3-month effective sample size of 200 eligible patients per condition (1) an intervention condition or (2) a control condition involving an attention control on preventing cancer. In the intervention condition, very brief (less than 5 minutes) clinician advice regarding quitting stimulants use will be followed by two 2 and 6 week post-visit drug health education sessions on quitting stimulant use and cautioning against use of other ‘at risk’ substance use such as alcohol and tobacco. Patients assigned to the control condition will receive standard care for drug use and a attention control cancer prevention program at the baseline visit with their clinician, which will be followed by two post-visit telephone health education sessions that will be of equal duration as the intervention sessions but will address healthy eating, physical activity, and seat belt use. Follow-up assessments will be conducted at 3 months post-randomization.

Qualifications: Interest in Health/Prevention/Drug/Social Science Research. Students with interest in public policy, sociology, public health or pre med. Bilingual speakers (Spanish; Tagalog; Korean; Armenian) a plus.

Responsibilities: Recruit, interview and conduct assessments of patients in clinic based settings.

Hours per week: (Please note that students can work up to 6 hours per week)
Quarters recruiting:  
**Summer 2012**  
**Fall 2012**

Contact info:
- **PI:** Lillian Gelberg  
- **Dept:** Family Medicine  
- **Address:** 10880 Wilshire Blvd Suite 1800

If you are interested please contact:
- **Name:** Lisa Arangua  
- **Phone:** 310-963-8869  
- **Email:** larangua@mednet.ucla.edu

Date posted: January 11, 2012
Title of research: Statistics Online Computational Resource Project (www.SOCR.ucla.edu)

Research description: This work will involve development of new materials for technology-enhanced probability and statistics instruction, as well as, expanding and testing the current SOCR computational libraries, visualization resources and web-services. See examples of ongoing SOCR projects described here: http://wiki.stat.ucla.edu/socr/index.php/Available_SOCR_Development_Projects

Qualifications: Motivated and committed UCLA graduate or undergraduate students with a solid background in computing, probability, statistics, HTML/Wiki (http://wiki.stat.ucla.edu/socr) and Java programming. Excellent interpersonal and communicational skills.

Responsibilities: The researchers will work with SOCR faculty, students and developers to design, expand and improve SOCR HTML/Wiki pages, educational materials and web-based tools. Researchers will also engineer new concept-specific probability and statistics applets, demonstrations and visualizations. If evidence of satisfactory progress exists, this may evolve into a long-term project.

Hours per week: Discuss with PI. Researches will be acknowledged via course research credit, opportunities for authoring publications and web recognitions.

Quarters recruiting: Ongoing 2011-12

Contact info:
PI Ivo Dinov
Dept Statistics
Address 8125 Mathematical Sciences Bldg
Los Angeles, CA 90095-1554
Phone 310-825-8430
Email dinov@stat.ucla.edu
URL http://www.SOCR.ucla.edu

Date Posted January 10, 2012
Title of research: Statistics Online Computational Resource Project (www.SOCR.ucla.edu)

Research description: This work will involve development of new HTML5/JavaScript tools and resources for technology-enhanced science education, as well as, expanding and testing the current SOCR computational libraries, visualization resources and web-services.

Qualifications: Motivated and committed UCLA graduate or undergraduate students with a solid computational background, specifically XML, DOM, HTML5/JavaScript programming experience. Excellent interpersonal and communicational skills.

Responsibilities: The student researchers will work with SOCR faculty, students and developers to design, expand and improve SOCR and Distributome web-apps, navigators and other web resources. Researchers may also engineer new concept-specific probability and statistics applets, demonstrations and visualizations. If evidence of satisfactory progress exists, this may evolve into a long-term project. Review SOCR projects online (http://wiki.stat.ucla.edu/socr/index.php/SOCR_Projects).

Hours per week: Discuss with PI. Researches will be acknowledged via course research credit, opportunities for authoring publications and web recognitions.

Quarters recruiting: Ongoing 2011-12

Contact info:
- PI Ivo Dinov
- Dept Statistics
- Address 8125 Mathematical Sciences Bldg
- Los Angeles, CA 90095-1554
- Phone 310-825-8430
- Email dinov@stat.ucla.edu
- URL http://www.SOCR.ucla.edu

Date Posted: January 10, 2012
Title of research: **Neurobiology of Atypical Cerebral Asymmetry in ADHD**

Research description: This project utilizes behavioral, neuro-cognitive, EEG, fMRI, and behavioral genetics methodologies to try and better understand the nature of abnormal brain laterality in ADHD and associated forms of psychopathology. Our broad goal is to try and characterize system-wide features of the brain's basic operating system, and specifically so with respect to the two hemispheres. Abnormal brain laterality appears to be a ubiquitous feature of disordered brain function. We are essentially trying to understand why.

Qualifications: Our research involves a broad array of activities, and as such, we feel that most students can find a meaningful way to contribute regardless of their particular background.

Responsibilities: Assist with subject recruitment, scheduling subjects, preparing subject files for pre-appointment and appointment, tracking subject responses, data entry.

Hours per week: Flexible: 3 to 6

Quarters recruiting: **All quarters 2012**

Contact info:  
**PI:** T. Sigi Hale  
**Dept:** Psychiatry  
**Address:** 760 Westwood Plaza, Suite 48-228B  
Los Angeles, CA 90095  
**Phone:** (310) 825-8660  
**Email:** sig@ucla.edu

If you are interested please contact  
**Name:** Olivia Kaminski  
**Email:** HaleLab24@gmail.com

Date Posted: December 12, 2011
Title of research: Mechanism of protein aggregation in Alzheimer's and prion diseases

Research description: Alzheimer’s and prion diseases are caused by aggregation of proteins, which lead to the formation of toxic assemblies including long filaments called fibrils and smaller intermediates called oligomers. We are interested in studying the structures of these fibrils and oligomers using biochemical and biophysical methods. Our goal is to understand the mechanism of protein aggregation using structural biology approaches.

Qualifications: Enthusiasm for scientific research. Research experience desired, but not required. Basic knowledge about biology and biochemistry. Preference will be given to students with long-term commitment (3 quarters or more).

Responsibilities: Protein purification. Study the aggregation of proteins. Characterize protein aggregates with various biophysical methods such as dye binding assays, gel electrophoresis, and fluorescence.

Hours per week: 12 hours minimum.

Quarters recruiting: Summer, Fall - 2012

Contact info:
PI: Zhefeng Guo, Ph.D.
Dept: Department of Neurology
Address: Reed 4155
Phone: 310-206-8773
Email: zhefeng@mbi.ucla.edu

If you are interested, please contact:
Name: Zhefeng Guo
Email: zhefeng@ucla.edu

Date Posted: November 28, 2011