We would like to thank everyone for supporting the URConnection! We are happy to publish Issue 6, where you can learn more about the research experiences of Amarprith Parhar as well as upcoming events and interesting research currently going on. We encourage students of all disciplines and class levels to get involved with undergraduate research. Whether it is participating in studies, or conducting experiments, research is something that all should take advantage of! We hope you take the opportunity to stop by so we can give you more information about what research is and how it can be a part of your college experience.

- Your Peer Advisors,
Erica Li & Chrislyn Lawrence

**Upcoming Events**

**How to Get Involved in Research**  
**Thursday, Jan. 22, 4:10-5:00pm**  
Mtg Rm D, Student Community Ctr.

**How to Write an Abstract**  
**Tuesday, Jan. 27, 4:10-5:00pm**  
Wednesday, Jan. 28, 12:10-1:00pm  
**Thursday, Jan. 29, 3:10-4:00pm**  
Mtg Rm D, Student Community Ctr.

**Conference Abstract Deadline**  
**Tuesday, Feb. 17, by 4:00pm**

**How to Get Involved in Research**  
**Thursday, Feb. 11, 4:10-5:00pm**  
Mtg Rm D, Student Community Ctr.

**Research Highlights**

**Memories Erased by Light**
Kazumasa Tanaka, and Brian Wiltgen have been able to manipulate the formation of memories through using light. Their work involves using genetically modified mice whose nerve cells show up as green when activated. This allowed Tanaka and Wiltgen to understand which nerve cells were involved in learning and memory retrieval. The nerve cells were deactivated when exposed to light. This allowed the researchers to find that the hippocampus is vital to memory recall. To read more, [click here](#)

**Food Science Discovery**
Kyria Boundy-Mills' lab has been awarded by the UC Davis STAIR program for their work with the Phaff Yeast Culture Collection. This award will allow them to work on commercial development of yeasts. The lab discovered these yeasts secrete high amounts of glycolipids. The applicability of this new discovery stretches from detergents to emulsifiers. Boundy-Mills works a great deal on producing renewable biosurfactants which would reduce material and purification costs. To read more, [click here](#)

**Entomologist wins Meyer Award**
Mary Louise Flint, an entomologist here at UC Davis, is the 2014 James H. Meyer Distinguished Achievement Award recipient. Her specialty is Integrated Pest Management and she contributed to the Statewide IPM Program until her retirement. She is continuing her work on the walnut twig beetle and thousand cankers disease. She also continues to mentor graduate students. Her manuals are widely used and helped to create IPM programs for 20 crops. To read more, [click here](#)
Meet Undergraduate Researcher
Amarprith Parhar!

Amarprith Parhar is a 5th year senior double majoring in International Relations and Japanese and minoring in Education. She transferred from the Los Rios Community College District in 2012 to further her education here at UC Davis. Currently, she is mentored by Dr. Kathryn Olmsted researching the history of assassinations carried out by the United States in order to focus on the United States’ current drone policy.

Interview

What are the benefits of getting involved in undergraduate research?
It opens you up to all of the research opportunities on campus and connect you more with faculty because you are working directly with a mentor. It helps you figure out what you want to do in the future and specifically if research or graduate school is what you really want to do.

What was your process for finding the perfect research position?
First, I introduced myself to Dr. Kathryn Olmsted and told her of my interests. I e-mailed her a copy of my thesis and told her the angle from which I wanted to approach it. She, then, informed me that she was interested in my ideas. Next, we arranged to meet during her office hours. When we met, we went over my thesis and made somewhat of a syllabus for my research project. We imagined the final project and decided the types of resources I would be using. From there, we continued meeting weekly and It has been a growing experience since.

Do you have any tips for undergrads who are having trouble finding a professor to work with?
First, narrow down the field in which they are interested in working and finalize a thesis topic. Then make a list of all of the professors working on their topics of interest. Introduce yourself via e-mail to the professor and let him or her know of your desire to work with him or her and attach a copy of your thesis. Then plan to meet in office hours to further discuss working with the professor. If you are looking to work in a lab – in which case having a thesis is not necessary--- then do the same steps without submitting a thesis. If anyone has the opportunity to get involved in undergraduate research he or she should definitely pursue it. Every student, despite major, should get involved in research because it causes the student to really learn more about his or her interests and goals. We are here at a research university so take ownership of that and get the experience!

About Your Peer Advisors

This is Erica’s first year with the URC. She is a fourth year Psychology major who would love to share what she has learned with her students. She has had experience in multiple labs that she would be happy to share. She is always ready to give advice about anything regarding research!

This is also Chrislyn’s first year with the URC. She is a fourth year Linguistics major aspiring to attend medical school. With her research experience in biology and psychology and linguistics background, she believes that her services can help students in any field here at UC Davis.

CONTACT

If you’re interested in scheduling a one-on-one appointment, or you have an interesting story or tip to share about undergraduate research that you would like posted in one of our issues, please contact us:

Phone: (530) 752-3390
Email: urc@ucdavis.edu
Location: 2300 Student Community Center, 2nd Floor
Hours: Monday-Friday; 9:00 a.m.- 5:00 p.m.
Website: urc.ucdavis.edu

urc.ucdavis.edu
Congratulations to the Undergraduate Research Center
Fall 2014 Provost’s Undergraduate Fellowship Awardees!

Kevin Coe, Plant Sciences
Assessing Drought and Salinity Tolerance in Accessions of Setaria viridis

Young Ha Suh, Wildlife, Fish & Conservation Biology
Environmental Effects on Wood Duck Nesting Behavior

Brandi Torrevillas, Animal Biology
Regulation of Insulin-like Peptide Expression in the Midgut of Anopheles stephensi by Abscisic Acid: a Potential Mechanism for Reducing Plasmodium falciparum Infection

Kendra Chan, Evolution, Ecology & Biodiversity
The Effect of Species and Genotypic Diversity on Eelgrass Detrital Systems

Amanda Cruz, Biochemistry & Molecular Biology
LRIG1

Tyler Lewy, Microbiology
Effect of Aging on Viral Co-Infection in HIV Patients

Rachel Nakagawa, Genetics
The Role of Transcription Factor E2F5 in Bladder Cancer

Anh Tuyet Nguyen, Molecular & Cellular Biology
Analysis of the Role of Histone Methyltransferase MET-2 in Sex Chromosome Transmission in Hermaphrodite-male Versus Obligate Female-male Caenorhabditis Species

Eric Ronne, Evolution, Ecology & Biodiversity
Differential Gene Expression Analysis of Larval Development in the Echinoderms Clypeaster rosaceus and Clypeaster subdepressus

Mark Rupasinghe, Biochemistry & Molecular Biology
Magnetic Particle Imaging Tracer Synthesis and Characterization

Sassan Suarez, Neurobiology, Physiology, & Behavior
Role of Hippocampus in Remote Memory Recall

Sabah Rezvani, Biomedical Engineering
RGD Alginate Scaffolds for Lentiviral Transduction

Jose Chavez-Verduzco, Art Studio
The Semiotics in Art

Maxwell Hong, Psychology
Social Threat and Symbols

Jovian Lam, Psychology
Understanding the Mediating Role Between DHEA, Stress, Executive Function, and Health

Marcos Martinez, Anthropology
Life History and Weaning Age at an Archaeological Site in the San Francisco Bay Area

Sean Stout, Geology
Landslides of the Walker River Canyon

Jesse Tamayo, Chemistry
One Electron Oxidation of an Isotopically Labeled Cobalt Trimer