



**APPLICATION FOR THE YEAR 2019
SUMMER UNDERGRADUATE RESEARCH PROGRAM**

June 3, 2019- August 24, 2019

**APPLICATION DEADLINE: Monday, February 25, 2019 to Dr.
Eric Hill, AHN 127**

- REQUIREMENTS:**
1. Participation in weekly seminar/lunches, including giving one presentation.
 2. Final poster report.

Name: _____ Student I.D. # _____
(Please Print Legibly)

Local Address: _____ Current Local/Cell Telephone #: _____

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Email Address (that is checked regularly) _____

Cumulative GPA: _____ Major: _____ Minor: _____

Status: First Year Sophomore Junior

Below are signatures from at least one and up to four faculty whom you have talked to, whom you would consider working with this summer, and that you match their qualifications if applicable. Once your application has been submitted, the faculty will decide, based on interest, skills, and finances, which students to accept. You should rank your choices with most preferred being #1. (Remember the FACULTY must have signed this form.)

		your ranking
_____	_____	<input type="checkbox"/>
Print Name	Signature of faculty	
_____	_____	<input type="checkbox"/>
Print Name	Signature of faculty	
_____	_____	<input type="checkbox"/>
Print Name	Signature of faculty	
_____	_____	<input type="checkbox"/>
Print Name	Signature of faculty	

Required Final Report: All research students must submit a poster presentation of the work accomplished. Guide sheets are available from the Office of the Director, Center for Science and Mathematics. The faculty advisor may require an additional written report as a more formal record of the work completed. A poster presentation summarizing your work and results will be posted in the glass cases in Hedco Hall by **Wednesday, September 25, 2019.**

Please answer these questions to the best of your ability, either written legibly or typed.

1. In what way would a summer research project fit into your college learning goals and/or post-college plans? What do you hope to get out of a summer research project?

2. List courses you have taken that would be useful to the research in your chosen topics and your GPA in these courses only.

3. Describe any previous experience that you think is applicable to summer research. For example:
(a) a previous research experience that you have had, (b) a course you took and how it prepared or inspired you to do research, or (c) skills you have developed that could be useful to research.

<p>NOTE: You will be notified when the final selection process is complete. At that time you MUST meet with your faculty advisor to complete a “Terms of Agreement” and “Acceptance Form”.</p>

SUMMER RESEARCH FACULTY 2019

This list contains the Science Center faculty who may take students this summer. You will see their name, office number, a very general description of their research, and any qualifications they expect of students who apply to work with them. Please go talk to any of them who interest you before filling out the application form.

BIOLOGY

- ▶ [These biology faculty will **NOT** be taking students this summer: *Aronson, Ben; Forristall, Caryl; Silvera, Linda; Olson, Lisa; Blauth, Susan; Blauth, Jim*]

Ryan, Bryce..... Hedco 110, Mouse models of autistic-like behavior
Malcolm, James..... Hedco 109, Physiological Ecology of Woodrats
Stelle, Lei Lani..... Hedco 106, Marine Mammal Behavioral Ecology, (will only consider students who have prior experience studying marine mammals (e.g. have volunteered on my project; students can begin volunteering during this Spring))

- Biomedical research at Loma Linda is possible for one or two outstanding students. Students interested should talk to Bryce Ryan.

CHEMISTRY

- ▶ [These chemistry faculty will **NOT** be taking students this summer: *Dan Wacks; Murray, Barbara; Van Engelen, Debra; Lyons, Rebecca; Longin, Teri; Schrum, David; Soulsby, David*]

Acquaye, Henry..... Hedco 209, development of new transition metal complexes, (must have completed chem 231 & 232)
Ferracane, Michael..... Hedco 206, design and synthesis of peptide-based opioids to treat addiction (must have completed Chem 231 & 232)

EVST

McIntyre, Wendy..... Lewis 124, Camera Trapping of Mammals in the Bear Paw Preserve, (prefer students that have had EVST 100, EVST 230 AND EVST 305, or some combination)
Jenkins, Hillary..... Lewis 126, Tree rings and extreme drought, spatio-temporal patterns of water distribution, quality, and scarcity in southern California, fire recovery in forested ecosystems of Southern California, ongoing hydrologic and vegetation monitoring in montane meadows in the San Bernardino.

MATH/CS

- ▶ [These mathematics/computer science faculty will **NOT** be taking students this summer:
Bieri, Joanna; Chakrapani, Pani; Beery, Janet; Bentley, Jim; Cornez, Rick; Cornez, Trish; Koonce, Sandy; Veenstra, Tamara]

Morics, Steve.....AHON 205 , Conditions for monotonicity failure in ranked choice voting elections;
Developing classroom activities for a Mathematics & Music Salzburg course; projects in combinatorics.

PHYSICS

Martin Hoecker-Martinez AHON 121

DeWeerd, Alan..... AHON 120, Quantum optics and chaotic oscillator or circuit (must have completed PHYS 310)

Eric Hill..... AHON 127, Scanning Tunneling Microscopy (STM) and Scanning Electron Microscopy (SEM), and possibly science outreach