

Sierra Nevada Research Institute

Annual Report

FY 2016/17



UNIVERSITY OF CALIFORNIA

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Sierra Nevada Research Institute

UNIVERSITY OF CALIFORNIA, MERCED
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Memorandum

Date: September 12, 2017

To: Sam Traina, Vice Chancellor for Research and Business Development

From: Roger Bales, Director, Sierra Nevada Research Institute

September 13, 2017

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With this letter we submit the Sierra Nevada Research Institute DRU Annual Report for 2016/17. This report follows the outline which was provided by your office. Most of the data and the information in this report were provided by SNRI members and staff, UCMerced's business information office, the CAYUSE system and Development and Alumni Relations.

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The SNRI is the oldest DRU at UCMerced and as it was envisioned, this research unit brings together faculty and researchers to discover new knowledge in this region of California from the crest of the Sierra Nevada, through the San Joaquin Valley to the Central Coast ranges of California.

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The timely creation of this University and the Sierra Nevada Research Institute places this research community at the heart of a range of critical issues facing Californians. Challenges around water, energy, agriculture, wildfire, climate change and impacts on human health all represent the research focus of SNRI researchers and scientists. Grant support for these areas of research continues to flow into this DRU. This year we have increased the support for faculty in the grant process and it is already showing important results.

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The heightened public awareness created by nearly five years of drought and a year of the highest precipitation on record has placed an information demand on the SNRI researchers from all sectors: leaders in government, news agencies, business and citizens.

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We completed a five-year review of the SNRI DRU this year and we are working with our Advisory Committee to more actively engage our members in making the Sierra Nevada Research an even more robust DRU.

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There are currently 38 faculty members in SNRI and 22 professional researchers engaged in SNRI related research at UCMerced and they are operating with more than \$22 million dollars in grant support.

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Sierra Nevada Research Institute
University of California, Merced
Organized Research Unit (ORU) Annual Report 2016/17

1.) Brief summary of major activities during the past year, including a discussion of how the prior year's goals have been met.

The 2016/17 academic year represents another significant year for the Sierra Nevada Research Institute. The mission of the SNRI is *to develop new knowledge that will sustain the natural resources and promote social well-being in the Sierra Nevada and Central Valley region* continues to be critical for California and the West.

Research carried out by SNRI members and their research groups provide knowledge that contributes to the sustainability of the region, state and global community. Research programs include renewable energy, decarbonizing the economy, more-sustainable ecosystem management and other climate solutions. The recent drought and now record rain year has highlighted the need for sustainable water management, the focus of UC Water and many other SNRI projects. Research in our Center for Climate Communications, in UC Solar and under many individual efforts have also contributed to this goal. SNRI faculty continue to contribute to the sustainability of UC Merced and the UC as a whole, and they are doing research that contributes to the UC goal of carbon neutrality by 2025.”

The first 5-Year review of the SNRI was completed this year and the response is being prepared this Fall. Faculty, students and the staff of SNRI participated in the onsite interviews by the review committee.

SNRI researchers are regularly sought out for their research and insights by news organizations, legislators, State agencies, agricultural leaders, environmental organizations and NGO's.

This year, SNRI researchers published in numerous scientific journals (248 papers) and were in the news more than fifty times in print, radio, online, and television media. Outlets included the New York Times, Desert Sun, USA Today, National Public Radio, New Scientist, book chapters, the Sacramento Bee, Merced Sun Star, Forbes, California television stations, The Economist, The London Times, Scientific American and more. Topics covered the full range of SNRI faculty research, including: Op-ed pieces on sustainability and water information systems, articles and interviews on; climate and wildfire, mercury research in water systems around the world, drone technology, climate impacts on fog in coastal forests, Valley Fever research, graduate fellowship gifts, climate news accuracy, an early career award for a faculty member and more.

Earlier this year, SNRI secured NSF funding for a documentary film, “Beyond the Brink” that focuses on the critical water/food/energy nexus in the San Joaquin Valley. This

movie features UC Merced researchers and will be released this Fall with a premiere hosted by the SNRI in downtown Merced.

In this fiscal year, SNRI and UC Water launched a new UCTV channel, "Sustainable California" which features videos about UC Merced and UC research. The team is working to develop additional content with researchers and is expected to reach a widening audience in the coming years.

During the 2017 UC Merced Research Week, SNRI delivered a well attended symposium featuring the work of four SNRI affiliated faculty. (attachment H)

There are currently 36 faculty members in SNRI and 32 professional researchers engaged in SNRI related research at UC Merced.

2.) Names of persons serving on the unit's Advisory Committee.

Internal: Asmeret Asefaw Berhe (Committee Chair), Josh Viers, Michael Dawson, YangQuan Chen, Jan Goggans

External: Koren Nydick, Resources Manager, Sequoia/Kings Canyon National Parks

3.) Dates of Committee meetings :

May 16, 2017 (Committee was appointed in Spring 2016)

4.) Summary of key Advisory Committee recommendations.

- Discussed 5-year review and actions to be taken by VC Research and SNRI Director
- Will reconstitute the Directors Council in 17/18
- Develop a seminar series with SNRI Faculty for 17/18
- Create more of a community for SNRI members and partners
- SNRI Director welcomes additional engagement by SNRI Advisory Committee
- Coordinating Film Premiere for this Fall, "Beyond the Brink"
- UCTV Sustainable California channel launched
- SNRI Staff working on SNRI Welcome Event for this Fall
- Revisit criteria used by SNRI Membership committee and reconfirm current members
- Jan Goggans would like to see SNRI and SSHA calendars coordinated and possibly co-sponsor events and activities.
- SEKI is working on expanding the Field Station program with UC Merced

5.) Copy of Advisory Committee report(s), minutes, or other relevant documentation.

- See attachment A: (page 13)

6.) Names of faculty members actively engaged in the unit's research and their supervision of staff and students.

Faculty

Ardell, David	Diaz, Gerardo	Matlock, Teenie
Bales, Roger	Frank, Carolin	Moran, Emily
Beman, Michael	Ghezzehei, Teamrat A.	Nobile, Clarissa
Berhe, Asmeret Asefaw	Guo, Qinghua	O'Day, Peggy
Beutel, Marc	Harmon, Tom	Rice, Robert
Blois, Jessica	Hart, Stephen	Rolland, Erik
Campbell, Elliott	Hull, Kathleen	Rogge, Wolfgang
Chen, Yang Quan	Innes, Robert	Sexton, Jason
Chen, Yihsu	Jenkins, Jeff	Traina, Samuel
Conklin, Martha	Joyce, Andrea	Westerling, Le Roy
Dawson, Michael	Lercari, Nicola	Winston, Roland
Edwards, Daniel	Leppert, Valerie	Viers, Joshua

Supervision of students:

7.) Names of undergraduate and graduate students and postdoctoral scholars directly contributing to the unit who are on the unit's payroll:

Employee Full Name	Title Long Description
ARONSTEIN,PAUL JOSHUA	GRADUATE STUDENT RESEARCHER - NO REMISSION
FRYJOFF-HUNG,ANNA FRANCISK	GRADUATE STUDENT
HEEREN,ALEXANDER JOHN	POSTDOCTORAL SCHOLAR-EMPLOYEE
KEYSER,ALISA RENAE	POSTDOCTORAL SCHOLAR-EMPLOYEE
KLOS,PETER ZION	POSTDOCTORAL SCHOLAR-EMPLOYEE
NWOSU,UGWUMSINACHI G	POSTDOCTORAL SCHOLAR-EMPLOYEE
PATTAMMATTEL,AJITH MADHUSO	POSTDOCTORAL SCHOLAR-EMPLOYEE
SOHRABI,MOHAMMADMEHDI	POSTDOCTORAL SCHOLAR-EMPLOYEE
SOLTAU,SUSAN MARIE	GRADUATE STUDENT RESEARCHER - NO REMISSION
VILLA,YOCELYN BRICEYDA	GRADUATE STUDENT RESEARCHER - NO REMISSION
WHELAN,MARY ELIZABETH	POSTDOCTORAL SCHOLAR-EMPLOYEE
YAN,JING	POSTDOCTORAL SCHOLAR-EMPLOYEE
Total ACADEMIC undergrad, grad and post doc Employees: 12	

Employee Full Name	Title Long Description
AYALA ASTORGA,MARIA DEL RE	LABORATORY ASSISTANT I
SERNA,BLAZ M	LABORATORY ASSISTANT I
TAYLOR,ROBERT JAMES	LABORATORY ASSISTANT I
Total LIMITED Employees: 3	

Employee Full Name	Title Long Description
CASAS,ANDRES	STUDENT 1
CASTRO,MADELINE KAYE	STUDENT 2
COONEY,MORGAN SPENCER	STUDENT 3
ELIAS,OSCAR ANTONIO	STUDENT 1
FRISE,ANDRE CRAIG	STUDENT 2
GLASSER,SUSAN MARLEY	STUDENT 1
KALUA,MICHAEL DAVID	STUDENT 3
LUCEY,FLORENCE HELLEN	STUDENT 1
MURILLO,ALLAN ROMAN	STUDENT 4
OJEDA,NANCY VERONICA	STUDENT 1
PEREZ,ARACELI	STUDENT 1
QUARNSTROM,SEAN MICHAEL	STUDENT 3
SAM,JONATHAN AARON	STUDENT 3
TORRES,RYAN JACOB	STUDENT 1
TRISNADI,TIMOTHY TITUS	STUDENT 1
Total CASUAL/RESTRICTED Employees: 15	

Names of undergraduate and graduate students and postdoctoral scholars directly contributing to the ORU's scholarly work through assistantships, fellowships, or traineeships:

Research Scientists

Burkhart, John
Hilton, Tim
Hunsaker, Carolyn
Kueppers, Lara
Miller, Norman
Pathak, Tapan
Quinn, Nigel
Rice, Robert
Safeeq, Mohammad
Vincent, Emmanuel

Postdoctoral Scholars

Carper, Dana
Hays, Cynthia
Keyser, Alisa
Kupihea, James
Whelan, Mary
Yan, Jing

Staff Researchers

Meng, Xiande
Milstan, Jeanne
Stacy, Erin

Students

Araya, Samuel
Ayala, Astorga
Booth, Lorenzo Ade
Busset , Nicholas Garrett
MacNeill, Curtis
Rungee, Joseph
Stinecipher, James
Taylor, Robert
Torres, Ryan Jacob
Casas , Andres
Castro, Madeline Kaye
Cooney, Morgan Spencer

Students

Elias, Oscar Antonio
Frise, Andre Craig
Glasser, Susan Marley
Kalua, Michael David
Lucey, Florence Hellen
Murillio, Allan Roman
Ojeda, Nancy Veronica
Perez, Aracelli
Quarnstrom, Sean Michael
Sam, Jonathon Aaron
Torres, Ryan Jacob
Trisnadi, Timothy Titus

8.) Extent of student and faculty participation from other academic institutions.

Note: Not all faculty provided information for this section

Professor

Bales, Roger

Student/Faculty

Graham Fogg
Andy Fisher
Michael Kiparsky
Hellen E. Dalhke
Holly Doremus
Steven D. Glaser
Thomas Harter
Jay Lund

Institution

UC Water/Davis
UC Water/Santa Cruz
UCWater/Berkeley
UC Water/Davis
UC Water/Berkeley
UC Water/CZO/Berkeley
UC Water/Davis
UC Water/Davis

Professor

Student/Faculty

Institution

Professor	Student/Faculty	Institution
Bales,Roger	Josué Medellín-Azúara Samuel Solis Kevin O'Hara William Stewart Carlos Oroza Ziran Zhag Zeshi Zheng Hunsaker, Carolyn Anthony O'Geen Peter Hartsough Naomi Tague Cliff Reibe Michael Golden SNAMP Collaborators CZO Collaborator Behrensmeyer, Kay Eronen, Jussi Ferrier, Simon Fitzpatrick, Matt Gill, Jacquelyn Gotelli, Nick Graham, Russ Grimm, Eric Jackson, Steve Lawing, A. Michelle Lugilde, Diego Nieto Lyons, S. Kate McGill, Brian McGuire, Jenny Mychajliw, Alexis Polly, P. David Williams, Jack	UC Water/Davis UC Water/Davis UC Water/Davis UC Berkeley UC Berkeley UC Berkeley UC Berkeley UC Berkeley UC Berkeley UC Berkeley CZO/USFS CZO/UC Davis CZO/UC Davis CZO/UC Santa Barbara CZO/U Wyoming CZO/UC Irvine <i>(See Conklin)</i> <i>(See Bales)</i> Smithsonian Institution University of Helsinki CSIRO (Australia) University of Maryland Center for Environmental Science University of Maine University of Vermont Penn State Illinois State Museum USGS Southwest Climate Science Center Texas A&M University of Maryland Center for Environmental Science Smithsonian University of Maine Georgia Tech Stanford University Indiana University UW Madison
Beman, Michael		
Berhe, Asmeret		
Blois, Jessica		
Blois, Jessica		
Campbell, Elliott		
Chen, Yihsu		
Chen, YangQuan		
Conklin, Martha		
		<i>(See Bales)</i>
		<i>(See Bales)</i>
		<i>UC Berkeley/SNAMP</i>

Professor	Student/Faculty	Institution
Dawson, Michael	Lynn Huntsinger Bob Wayne Rasmus Nielsen Beth Shapiro Jeff Wall	<i>UC Berkeley/SNAMP</i> <i>UCLA</i> <i>UCB</i> <i>UCSC</i> <i>UCSF</i>
Diaz, Gerardo	Not available	Carnegie Institution of Washington
Fogel, Marilyn	Alexander, Conel Miller, Gifford Misc.	University of Colorado Stroud Water Research Institute
Frank, Carolin	Steele, Andrew	Carnegie Institution of Washington
Ghezzehei, Teamrat	Albalasmeh, Ammar Bayala, Roger Berli, Markus Carminati, Andrea Dijkema, Jelle	Jordan University of Science and Technology Institut Senegalais Pour la Recherche Agricole Desert Research Institute, Nevada University of Gottingen Wageningen University and Desert Research Institute
Guo , Qinghua	Furman, Alex Moret, David Sancho, Carolina Pena Van Der Ploeg, Marine	Technion Institute, Israel Consejo Superior de Investigaciones Cientificas Consejo Superior de Investigaciones Cientificas
Harmon, Tom	Van Genuchten, Rien SNAMP Allen, Michael Ayllon, Roxanna Chandra, Sudeep Conde, Daniel Escobar, Jaime Hanson, Paul Helman, Michal Hoyos, Natalia Jones, Stuart Longo, Maria Clara Oberbauer, Steve Perillo, Gerardo Picollo, M. Cintia Pinto, Adrian	Wageningen University Federal University of Sao Paolo (See <i>Conklin</i>) University of California Riverside Universidad Austral de Chile University of Nevada Reno Universidad de la Repùblica, Uruguay Universidad del Norte, Colombia University of Wisconsin University of Montana Universidad del Norte, Colombia University of Notre Dame Universidad Nacional del Sur, Argentina Florida International University Instituto Argentino de Oceanografìa & Universidad Nacional del Sur, Argentina Instituto Argentino de Oceanografìa & Universidad Nacional del Sur, Argentina University of Costa Rica
Harmon, Tom	Reid, Brian	Centro de Investigaciones en Ecosistemas de la Patagonia, Universidad Austral de Chile

Professor	Student/Faculty	Institution
Sexton, Jason	Blackman, Ben	University of Virginia
	Carscadden, Kelly	University of Toronto
	Hirst, Megan	University of Melbourne
	Hoffmann, Ary	University of Melbourne
Hart, Stephen	Rundel, Philip Rusak, James Schwendenmann, Luitgard Scordo, Facundo Scott, Dane Silvia, London Velez, Maria Wemple, Beverley Zelikova, Jane Zilio, Mariana Emma Aronson Cliff Riebe Mengqiang Zhu Ben Sullivan	UCLA Queen's University and Ontario Ministry of the Environment University of Aukland, New Zealand Universidad Nacional del Sur, Argentina University of Montana Instituto de Investigaciones Económicas y Sociales del Sur University of Regina, Canada University of Vermont University of Wyoming Instituto de Investigaciones Económicas y Sociales del Sur UC Riverside University of Wyoming University of Wyoming University of Nevada Reno
Leppert, Valerie	Henry Forman Dra. Monserrat Bizarro-Sordo None	Davis School of Gerontology, USC, US Materials Institute, UNAM, Mexico
Hull, Kathleen Joyce, Andrea Moran, Emily	Not available Not available	
Matlock, Tennie O'Day, Peggy Rice, Robert	none Not available Butler, Leslie Glaser, Steve Horwath, William Zhang, Ziran Steven Glazier	University of California Davis University of California Berkeley University of California Davis UC Berkeley UC Berkeley

	Slatyer, Rachel	University of Melbourne
Westerling, Anthony	Not available	
Winston, Roland	Constance Chang-Hasnain Pieter Stroeve Umesh Mishra Alfredo Martinez-Morales Yang Yang Matthew Law Michael Isaacson Steve DenBaars Nael El-Farra Ali Javey Sungho Jin Zhaowei Liu Patrick Mantey Adam Moule Sayeff Salahuddin James Speck Daniel Sperling Sadrul Ula Jerry Woodall Ming Wu Eli Yablonovitch Adam Durbin Mark Durbin UC Water collaborator	UC Berkeley UC Davis UCSB UC Riverside UCLA UC Irvine UCSC UCSB UC Davis UC Berkeley UC San Diego UC San Diego UCSC UC Davis UC Berkeley UCSB UC Davis UC Riverside UC Davis UC Berkeley UC Davis UC Berkeley UC San Diego UC San Diego (See Bales)
Viers, Joshua		

9.) Numbers and FTE of academic research personnel, technical staff, and administrative personnel who are paid through the unit's accounts.

All accounts

Academic Research Personnel	27 FTE
Technical Staff	15 FTE
Administrative Personnel	9 FTE

- See attachment B for a complete listing of these individuals (pages 17-18)

10.) Efforts to contribute to the campus's diversity goals. Contributions to diversity and equal opportunity can take a variety of forms, including efforts to advance equitable access to education, public service that addresses the needs of California's diverse population, or research in a scholar's area of expertise that highlights inequities.

UC Merced has one of the most diverse student populations in the UC system. In all areas, the SNRI students, grad students and employees—reflect California. The new knowledge being created by the SNRI Faculty, researchers and students create a better understanding of conditions, needs, and solutions that have a direct impact on low-income, rural and diverse populations. *Note the ethnic diversity represented by the names of the UC Merced undergraduate, graduate students and employees listed in section 7 of this report.*

Contributions to the campus' diversity goals come from the efforts of individual faculty, supervisors and campus leadership. Actions in the SNRI include hiring and supporting a diverse workforce, active participation in selecting students for fellowships and scholarships, meetings with students and prospective students and participation in numerous community events. The SNRI has a very diverse staff, and our offices are a healthy and safe workplace for everyone.

11.) List of publications, issued by and acknowledging the unit, including books, journal articles, and reports and reprints, showing author, title, and press run; or other evidence of creative scholarship, such as colloquia, conferences, workshops, performances, and exhibitions. Publications must acknowledge the ORU.

SNRI does not ask faculty, researchers and students to acknowledge SNRI in publications. Some do list an SNRI affiliation, along with a school affiliation within UC Merced. However, SNRI does not explicitly request that members and their research affiliates do this. It is left to the individual to decide what is appropriate for each publication.

- See Attachment C for complete listing of articles by SNRI members and researchers in the 2014/2015 academic year
(Pages 19-)

12.) Sources and amounts (on an annual basis) of income, including contracts and grants, gifts, University support, service agreements, and income from the sale of publications and from services.

<i>FY 16/17 Grants and Contracts</i>	\$ 21,929,366.57
<i>Gifts</i>	\$ 13,185.62
<i>State Funding (SNRI Operations)</i>	\$ 571,923.48
<i>FY 16/17 total for SNRI grants/gifts/state funding</i>	\$ 22,944,045.78
<i>Total value of current active SNRI Grants (2014-2020)</i>	\$ 22,215,137.01

- See Attachment D for grant funding details (page 45-48).

- See Attachment E for FY 16/17 Gift details (Page

These are approximate amounts of grants and contracts to SNRI members and researchers. This was compiled from data available from the SNRI MSO, the UC Merced Sponsored Projects Office and the Campus Gift administration Office.

13 new proposals were awarded this fiscal year with a total value of \$1,897,110.00

Important note: There are two Research administrators in SNRI and they manage over 50 active grants as well as assisting faculty with pre-award applications

Proposals prepared: 59

Proposals submitted: 49

Proposals funded: 13

- See Attachment F for FY 16/17 Grant activity

13.) Expenditures from all sources of support funds, distinguishing use of funds for administrative support, direct research, and other specified uses.

Direct Research	\$ 3,547,094.72
Academic Salaries	\$ 45,111.00
Career Staff	\$ 287,303.19
Student Appointments	\$ 5,911.04
General Operations	\$ 17,106.55
Travel	\$ 7,785.66
Benefits	\$ 138,544.16
Other Expenses	\$ 9,499.21
Total	\$ 4,052,444.49

14.) Description and amount of space currently occupied.

Two administrative office spaces in Science and Engineering Building 1

Science and Engineering Building 1, Room 206 (160 sq ft)

Science and Engineering Building 1, Room 208 (321 sq ft)

Science and Engineering Building 1, Room 236 (160 sq ft)

Conference room - Science and Engineering Building 1, Room 200 (486 sq ft)

Administrative Office Building (Temporary Modular buildings)

AOB 125 Office (109 sq ft)

AOB 144 Office (107 sq ft)

AOB 145 Office (110 sq ft)

Total square footage: 1,453 sq ft

15.) Summary of ORU goals for the coming year.

- Continue the development of SNRI, UC Merced as the world class research university partner for outstanding engagement with research, governance and policy leaders focused on the Sierra and Central Valley regions, and comparative regions world-wide.
- Reconstitute Directors Council
- Develop a Seminar Series for SNRI with Faculty and CITRIS
 - Develop a speakers list (Roger, Asmeret & Armando)
- Coordinate and host “Beyond the Brink” Film Premiere in Merced on September 14, 2017
- Support UCTV Sustainable California Channel – engage faculty and encourage development of short videos describing research and new knowledge for this channel
- Continue to develop a more balanced workload for the ORU administrative support staff

ATTACHMENT: A

SNRI Advisory Committee Notes

May 16, 2017

11:00am – 12:00pm

UCMSSM 230 - Tuolumne Meadows and phone conference

Present: Asmeret Asefaw Berhe (Chair), Josh Viers, Jan Goggans, Yang Quan Chen, Koren Nydick, Roger Bales, Director, Armando Quintero, Executive Director

Absent: Mike Dawson

5 Year Review

Sam is happy with the main response.

Several comments that we need to think about.

- Committee wants more faculty engagement with SNRI programming
- Metrics impact need to be more related to SNRI program and faculty contributions to UC Merced relative to SNRI membership
- Sam and the Senate will respond
- UCM has 6 months to write a response
- Office of Research and budget issues have an impact and this may mean some re-organization and strategic planning.
- Summer conversation – Roger and Armando meet with Paul and Trevor
- How are the faculty engaged beyond being members?
- What is the important need for SNRI?
- Could be the vehicle to bring more people together
- Help recruit undergrad and grad majors?

Discussion by the Advisory committee includes:

- Schedule next SNRI Advisors meeting for a breakfast in October 2017
- Time to Reconstitute the Directors Council
- Develop a Seminar Series for SNRI with Faculty
- Create more of a community for SNRI
- Roger welcomes greater engagement of Advisory Council
- Use funding for seminar speakers and other activities
- Weekly seminar - CITRIS speaker series and EECS, fills a 100 seat room.
- Look at partnering with - bring industry leaders for SNRI - Koren and SEKI, etc.
- Develop a list of potential speakers. Armando work with Roger and Asmeret and reach out to the Committee with recommendations.
- Find out who is organizing the ES seminars?

Coordinate Beyond the Brink Fall Premier showing in Merced with the ES Group Calendar.

- Panel discussions with the Film. Hosted event(s) on campus, at Kamangar Theatre
- Armando - Leigh – Michelle to coordinate

Website development

- SNRI has hired Tim Tisnadi to work with Armando this summer to design and implement new website in coordination with Campus Web Administrators.

UCTV

- Send the link to the SNRI Advisors
- Koren - has videos that are ready made to put on the channel
- Invite Koren to participate in future UCTV conference call

Lab fee proposal - program - Climate Science - big

- Encourage multiple letters of intent to get traction
- Mike Goulden at UC Irvine is interested in this.
- Yang Quan Chen is interested in mapping and sniffing with drones.
- Larger issues here for large grants – The question is always, who will be the PI?
- Roger has experience in doing this. He is available to line up partners and the SNRI Office has more pre-award support.
- Teamrat and Asmeret are submitting
- JC Ross and Prosper Godonoo are two new Research Administrators.
- Get recommendations for a good grant writer – JC Ross' name is brought up in this regard.
- Roger can also recruit people to help on strategic feedback for proposals.

Goals for the Committee

- Revisit with membership committee – do we need to distinguish between active faculty and less active faculty? Do we want to have distinct types of SNRI membership? Membership Committee: Mike Dawson, Wolfgang Rogge and Andrea Joyce: Review ideas with this committee on criteria and discuss what is working and what is not working for membership.
- Staff is working on SNRI Welcome event for the Fall
- Jan Goggans- would love to see SNRI events on SSHA calendar and vice-versa.
Interested in learning how Shaw faculty can combine Environmental literature efforts with SNRI.
Explore how SSHA can engage in grants with SNRI
Jan is publishing an article on the Central Valley - cultural studies
Anthony - studying west lands water district
Find out who is doing environmental writing in SSHA

Koren Nydick reports on Sequoia/Kings Canyon

- SEKI research prospectus to be finalized this winter
- SEKI Science symposium in 2018
- Competitive SEKI Mini Grants for 2018
- Had a meeting with the Southern Sierra Science Cooperative - focus is going to do with tree mortality/fire management/ecosystem services
- IRWMP at SEKI
- Kids engagement to become scientists.
- Koren - the hope is to host the field station - effort to update the agreement and Christy Brigham is working on that with UCMerced. Next year park will be working on a broader strategic plan.
- Advisory Committee should weigh in on SEKI work

Final notes for Asmeret and Roger

These meeting notes need to be provided to same as a final report to Sam on SNRI.

Set up clear accepted procedures for ORU 5 year reviews for UC Merced

Should SNRI Field Station Manager, Anne Kelly to be a part of SNRI Advisory Group?

ATTACHMENT: B**SNRI Academic Research Personnel and Administrative Personnel**For Appointment Department: **F100 - SIERRA NEVADA RESEARCH INSTITUTE**Appointment Type Code: **5** | Appointment Type Description: **ACADEMIC**

Employee Full Name	Title Long Description
ARONSTEIN,PAUL JOSHUA	GRADUATE STUDENT RESEARCHER - NO REMISSION
BALES,ROGER C	DIRECTOR
BARMAN,APURBA KUMAR	ASSISTANT PROJECT -FISCAL YEAR
BERNACCHI,LEIGH ALEXIS	ASSOCIATE SPECIALIST
CAMPBELL,JOHN E	ASSOCIATE RESEARCHER-ACADEMIC YEAR-1/9T
CONKLIN,MARTHA H	ASSOCIATE RESEARCHER-ACADEMIC YEAR-1/9T
FRANK,ANNA CAROLIN	ASSOCIATE RESEARCHER-ACADEMIC YEAR-1/9T
FRYJOFF-HUNG,ANNA FRANCISK	GRADUATE STUDENT
GUO,QINGHUA	RESEARCH -FISCAL YEAR
HART,STEPHEN COERT	RESEARCHER-ACADEMIC YEAR-1/9T
HEEREN,ALEXANDER JOHN	POSTDOCTORAL SCHOLAR-EMPLOYEE
HILTON,TIMOTHY WILLIAM	ASSISTANT PROJECT -FISCAL YEAR
HULL,KATHLEEN L	ASSOCIATE RESEARCHER-ACADEMIC YEAR-1/9T
HUNSAKER,CAROLYN THOMAS	RESEARCH ASSOCIATE (WITHOUT SALARY)
KEYSER,ALISA RENAE	POSTDOCTORAL SCHOLAR-EMPLOYEE
KLOS,PETER ZION	POSTDOCTORAL SCHOLAR-EMPLOYEE
NWOSU,UGWUMSINACHI G	POSTDOCTORAL SCHOLAR-EMPLOYEE
PATTAMMATTEL,AJITH MADHUZO	POSTDOCTORAL SCHOLAR-EMPLOYEE
SAFEEQ,MOHAMMAD	ASSISTANT RESEARCH -FISCAL YEAR-BUSINE
SOHRABI,MOHAMMADMEHDI	POSTDOCTORAL SCHOLAR-EMPLOYEE
SOLTAU,SUSAN MARIE	GRADUATE STUDENT RESEARCHER - NO REMISSION
SU,YANJUN	ASSISTANT PROJECT -FISCAL YEAR
VILLA,YOCELYN BRICEYDA	GRADUATE STUDENT RESEARCHER - NO REMISSION
VINCENT,EMMANUEL MATHIEU J	ASSISTANT PROJECT -FISCAL YEAR
WESTERLING,ANTHONY L.	ASSOCIATE RESEARCHER-ACADEMIC YEAR-1/9T
WHELAN,MARY ELIZABETH	POSTDOCTORAL SCHOLAR-EMPLOYEE
YAN,JING	POSTDOCTORAL SCHOLAR-EMPLOYEE
Total ACADEMIC Employees: 27	

Appointment Type Code: **2** | Appointment Type Description: **REGULAR/CAREER**

Employee Full Name	Title Long Description
GALVAN,CRYSTAL ANN	ADMINISTRATIVE OFFICER 2
GILMORE,MICHELLE ELIZABETH	STAFF RESEARCH ASSOCIATE II
HAGERMAN,MEKENNA VICTORIA	ASSISTANT I
MENG,XIANDE	RESEARCH DATA ANALYST 2
QUINTERO,ARMANDO M	EXECUTIVE ADVISOR 4
STACY,ERIN MICHELE	STAFF RESEARCH ASSOCIATE III
VALLE-AREVALO,ALEXIS IVONN	RESEARCH ADMINISTRATOR 3
VENTURA,CLEOTILDE T	ADMINISTRATIVE SUPERVISOR 2
WOMBLE,PATRICK	STAFF RESEARCH ASSOCIATE III
Total REGULAR/CAREER Employees: 9	

Appointment Type Code: **3** | Appointment Type Description: **LIMITED**

Employee Full Name	Title Long Description
AYALA ASTORGA,MARIA DEL RE	LABORATORY ASSISTANT I
SERNA,BLAZ M	LABORATORY ASSISTANT I
TAYLOR,ROBERT JAMES	LABORATORY ASSISTANT I
Total LIMITED Employees: 3	

Appointment Type Code: **4** | Appointment Type Description: **CASUAL/RESTRICTED**

Employee Full Name	Title Long Description
CASAS,ANDRES	STUDENT 1
CASTRO,MADELINE KAYE	STUDENT 2
COONEY,MORGAN SPENCER	STUDENT 3
ELIAS,OSCAR ANTONIO	STUDENT 1
FRISE,ANDRE CRAIG	STUDENT 2
GLASSER,SUSAN MARLEY	STUDENT 1

KALUA, MICHAEL DAVID	STUDENT 3
LUCEY, FLORENCE HELLEN	STUDENT 1
MURILLO, ALLAN ROMAN	STUDENT 4
OJEDA, NANCY VERONICA	STUDENT 1
PEREZ, ARACELI	STUDENT 1
QUARNSTROM, SEAN MICHAEL	STUDENT 3
SAM, JONATHAN AARON	STUDENT 3
TORRES, RYAN JACOB	STUDENT 1
TRISNADI, TIMOTHY TITUS	STUDENT 1
Total CASUAL/RESTRICTED Employees: 15	

Attachment C

Publications – Books, Journal Articles, Reports

Faculty Member	Publications 16/17 Year
Ardell, David	Ardell, David H., and Ya-Ming Hou. "Initiator tRNA Genes Template the 3' CCA End at High Frequencies in Bacteria." <i>BMC Genomics</i> . BioMed Central, 08 Dec. 2016. Web. 05 July 2017.
Bales, Roger	Harrison, Brent, and Roger Bales. "Comparison of Skill Assessments of Water Supply Forecasts for the Western Sierra Nevada and the Colorado River Basin." <i>Comparison of Skill Assessments of Water Supply Forecasts for the Western Sierra Nevada and</i> (2016): 90.
Bales, Roger	Harrison, Brent, and Roger Bales. "Skill assessment of water supply outlooks in the Colorado River basin." <i>Hydrology</i> 2.3 (2015): 112-131.
Bales, Roger	Bales, RC; & Harrison, B. (2016). Comparison of Skill Assessments of Water Supply Forecasts for the Western Sierra Nevada and the Colorado River Basin. UC Merced: oa_harvester:1591111.
Bales, Roger	Oroza, C. A., Zheng, Z., Glaser, S. D., Tuia, D., & Bales, R. C. (2016). Optimizing embedded sensor network design for catchment-scale snow-depth estimation using LiDAR and machine learning. <i>Water Resources Research</i> , 52(10), 8174-8189.
Bales, Roger	Bales, RC; Conklin, M; Saksa, P; Martin, S; & Ray, R. (2016). Appendix E: Water Team Final Report. UC Merced: oa_harvester:1591096.
Bales, Roger	Bales, RC; White, T; Brantley, S; Banwart, S; Chorover, J; Dietrich, W; et al.(2016). The Role of Critical Zone Observatories in Critical Zone Science. UC Merced: oa_harvester:1591102.
Bales, Roger	Bales, RC; & Harrison, B. (2016). Comparison of Skill Assessments of Water Supply Forecasts for the Western Sierra Nevada and the Colorado River Basin. UC Merced: oa_harvester:1591111.
Bales, Roger	Bales, RC; & Harrison, B. (2016). Percent bias assessment of water supply outlooks in the Colorado River basin. UC Merced: oa_harvester:1591107.
Bales, Roger	Rheinheimer, D. E., R. C. Bales, C. A. Oroza, J. R. Lund, and J. H. Viers (2016), Valuing year-to-go hydrologic forecast improvements for a peaking hydropower system in the Sierra Nevada, <i>Water Resour. Res.</i> , 52, 3815–3828, doi:10.1002/2015WR018295.

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- Bales, Roger Sylvia Szabo, Robert J. Nicholls, Barbara Neumann, Fabrice G. Renaud, Zoe Matthews, Zita Sebesvari, Amir AghaKouchak, Roger Bales, Corrine Warren Ruktanonchai, Julia Kloos, Efi Foufoula-Georgiou, Philippus Wester, Mark New, Jakob Rhyner & Craig Hutton (2016) Making SDGs Work for Climate Change Hotspots, *Environment: Science and Policy for Sustainable Development*, 58:6, 24-33, DOI: 10.1080/00139157.2016.1209016
- Bales, Roger Topographic and vegetation effects on snow accumulation in the southern Sierra Nevada: a statistical summary from lidar data
Z Zheng, PB Kirchner, RC Bales
The Cryosphere 10 (1), 257-269 2016
- Bales, Roger Zhang, Z., S. D. Glaser, R. C. Bales, M. Conklin, R. Rice, and D. G. Marks (2017), Technical report: The design and evaluation of a basin-scale wireless sensor network for mountain hydrology, *Water Resour. Res.*, 53, doi:10.1002/2016WR019619.
- Beman, Michael Graham, Emily B. et al. "Microbes as Engines of Ecosystem Function: When Does Community Structure Enhance Predictions of Ecosystem Processes?" *Frontiers in Microbiology* 7 (2016): 214. PMC. Web. 24 May 2017.
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- Viers, Joshua David E Rheinheimer, Roger C Bales, Carlos A Oroza, Jay R Lund, Joshua H Viers (2016). Valuing year-to-go hydrologic forecast improvements for a peaking hydropower system in the Sierra Nevada. Water Resources Research
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- Viers, Joshua Alison A Whipple, Joshua H Viers, helen E Dahkle (2017). Flood regime typology for floodplain ecosystem management as applied to the unregulated Cosumnes River of California, United States. *Ecohydrology*
- Viers, Joshua Zachary L Steel, Anna E Steel, John N Williams, Joshua H Viers, Pablo A Marquet, Olga Barbosa (2017). Patterns of bird diversity and habitat use in mixed vineyard-matorral landscapes of Central Chile. *Ecological Indicators*
- Viers, Joshua Kristin Steger, Amy T Kim, Joshua H Viers, Peter Fiener, David R Smart (2017). Deep soil dynamics of floodplain carbon in the Central Valley of California. *EGU General Assembly Conference Abstracts*
- Viers, Joshua Karla J Winkler, Joshua H Viers, Kimberly A Nicholas (2017). Assessing ecosystem services and multifunctionality for vineyard systems. *Frontiers in Environmental Science*
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Attachment E

SNRI Account Summary by Department all Funds and Sources

For the period June 1,2017 to June 30, 2017

EXPENDITURES (Current Funds)

Department : F100 SIERRA NEVADA RESEARCH INSTITUTE

Account/CC	Fund	Fiscal Year		Inception	
		Appropriation ()=Debit	Expenditures ()=Credit	Appropriation ()=Debit	Expenditures ()=Credit
449001	RESEARCH-SIERRA NEVADA RES INST-OPER				
	23494	5760.71	5760.71	18247.17	18247.17
449001/2A	RESEARCH-SNRI-OPERATIONS				
	19900	561035.11	558922.48	561035.11	558922.48
	37365				
	40061	17986.70	4044.13	17986.70	4044.13
	55163	7969.94		7969.94	
	68320	4221.50		4221.50	
449001/6A	RESEARCH-SNRI-OPERATIONS-DEPT RESEARCH				
	69085				
449001/AJ	RESEARCH-SIERRA NEVADA RES INST-A. JOYCE				
	69085				
449001/CC	RESEARCH-SNRI-CLIMATE COMMUNICATION				
	19900	151163.58	111269.66	151163.58	111269.66
	40061	34773.56	22096.99	34773.56	22096.99
449001/MS	RESEARCH-SIERRA NEVADA RES INST-SAFEEQ				
	22473	87668.03	40391.27	121650.00	74373.24
	57569	34861.00	31373.86	34861.00	31373.86
449001/SJ	RES-SIERRA NEVADA RES INST-S JEPSEN				
	24933		37681.84	37681.84	
449001/VR	RESEARCH-SNRI-OPERATION-VEHICLE RECHARGE				
	19900	10888.37	10888.37	10888.37	10888.37
449001/WA	RESEARCH-SNRI-WAWONA FIELD STATION-OP				
	19900				
	68320	364.49		364.49	
449002/NM	RESEARCH-SNRI-IDC RETURN-N MILLER				
	20095	567.50		567.50	
449002/SJ	RESEARCH-SNRI-IDC RETURN-S JEPSON				
	20095	388.78	365.47	388.78	365.47
449002/WR	RESEARCH-SNRI-IDC RETURN-ROGGE				
	20095	34.25		34.25	
449205/CF	RESRCH-SNRI EARTH SYS-PART SUPP-C-FRANK				
	21267	20000.00		20000.00	
449205/SH	RESEARCH-SNRI-EARTH SYS-PART SUPPRT-HART				
	21228		225948.21	225948.21	
449208/RB	RES-SNRI-ENV ENG-OVRD VAR-R BALES				
	21241	4770.30		12445.00	7674.70
449209/RB	RESEARCH-SNRI-ENV ENG-PART SUPP-BALES				
	21241	130973.39	100000.00	300064.00	269090.61
449213/ER	RES-SNRI-COMPUTER SCI & ENG-E ROLLAND				
	58117				
449214	RESEARCH-SNRI-ENVIRONMENTAL ENGINEERING				
	23494		244.36	244.36	
449214/AJ	RESEARCH-SNRI-ENV ENG ANDREA JOYCE				
	57221		39957.44	39957.44	
	57223		34380.48	34380.48	
	58106	(314.95)	(314.95)	25563.00	25563.00
	58134	513.28	142.12	15000.00	14628.84
449214/AW	RESEARCH-SNRI-ENVRNMNTL ENG-A WESTERLING				
	18236		65142.08	65142.08	

			39190.65	39190.65
			74718.34	74718.34
	18299		22828.65	250000.00
	18300			223613.93
	18344	49214.72	42584.01	118464.00
	18355	96222.43	17520.25	60000.00
	22114	16948.24		60572.01
	22477	116358.96	28616.52	190000.00
	25202			102257.56
	57558	107642.81	95061.11	121980.48
	57578	29177.00	8214.08	153019.52
	69085			140437.82
	69090	90750.00	2147.19	29177.00
449214/J1			90750.00	8214.08
				2147.19
				RESEARCH-SNRI-ENVIRONMENTL ENG-CAMPBELL
	37658	48434.86	31443.81	48434.86
449214/JC				31443.81
				RESEARCH-SNRI-ENV ENG-J ELLIOT CAMPBELL
	21300	1346241.00	126582.65	1346241.00
	22423	503512.71	255329.48	126582.65
	37658	70000.00		375101.45
	58110	16498.50	15045.68	70000.00
	69763	202053.16	89390.78	249277.00
	69851	9021.49	5500.00	247824.18
449214/JV				202053.16
				89390.78
				69851
				9021.49
				5500.00
				RES-SNRI-ENVIR ENG-J VIERS
	58122	761.86		35000.00
449214/M1				34238.14
				RESEARCH-SNRI-ENVIRONMENTL ENG-M CONKLIN
	18308	92016.63	32953.57	100000.00
	21101			40936.94
	21241	270258.69	133592.66	223240.18
449214/M2				223240.18
				RESEARCH-SNRI-ENVIRONMENTL ENG-M CONKLIN
	18308	88000.00		463809.00
	69085	187893.78	87666.13	327142.97
449214/MC				RESEARCH-SNRI-ENVIRONMENTL ENG-M CONKLIN
	07427	(27906.90)		(27906.90)
	18240			162590.64
	18296			130839.22
	18306			136135.79
	18308	54921.82	38278.79	136135.79
	21101			68183.00
	21241	95721.07	185144.86	51539.97
	22467	(108.35)	157096.20	185144.86
	22476	(600.00)	207285.21	121378.60
	22600	(600.00)	200263.81	207285.21
	25650	394099.00	121679.11	200263.81
	26723		394099.00	121679.11
	37658			(0.06)
	40080	100808.87	83156.63	(0.06)
449214/Q1				162590.64
				RESEARCH-SNRI-ENVIRONMENTAL ENG-Q. GUO
	21101		435320.96	435320.96
449214/QG				RESEARCH-SNRI-ENVIRONMENTAL ENG-Q. GUO
	18296			435320.96
	21101			12035.80
	21263	110393.85	47862.73	12035.80
	22478		59162.47	47862.73
	22482			265854.00
	22604			189609.00
	24922			38409.00
449214/R1				32053.79
				RESEARCH-SNRI-ENVIRONMENTAL ENG-R. BALES
	21101		50492.26	32053.79
	21241	940233.68	59248.49	50492.26
	22480	20000.00		59248.49
449214/R2				1193357.20
				RESEARCH-SNRI-ENVIRONMENTAL ENG-R. BALES
	21101		11080.66	11080.66
	21241	70720.56	20000.00	99442.62
				99442.62
				41098.52
				109554.00
				79931.96

	40061	4759.50	4759.50	
	69085	395294.12	232433.88	395294.12
449214/RB	RESEARCH-SNRI-ENVIRONMENTAL ENG-R. BALES			
	05397	321.01	321.01	
	18295		118662.89	118662.89
	18296		145705.81	145705.81
	18301		124225.82	124225.82
	18365	431052.69	60759.15	454644.00
	21101		359232.01	359232.01
	21205	3023.11	3136.91	1705280.00
	21241	175912.27	77363.28	407635.00
	22470	119987.69	120227.45	238436.00
	22475	3977.85	3987.40	122500.00
	22480	179556.01	77233.98	304000.00
	36470	77515.36	77860.10	77515.36
	40080	51250.78	20648.44	51250.78
	58143		20308.46	20308.46
	69085	197851.09	197851.09	
	69851			
	75554	(46.07)	(46.39)	(46.07)
449214/RR	RESEARCH-SNRI-ENVIR ENG-R. RICE			
	22471	164400.48	26817.44	206005.23
449214/WR	RESEARCH-SNRI-ENVIRO ENGINEERING W ROGGE			
	21282	2010.40	2010.40	3940.94
449216/YC	RESEARCH-SNRI-MECHANICAL ENG-Y CHEN			
	36470	56494.49	12724.17	56494.49
449224/RB	RSRCH-SNRI-ENV ENG-COST SHARE-BALES			
	19900	135566.38	81894.85	135566.38
449253/AB	RES-SNRI-EARTH SYSTEMS SCIENCES-A BERHE			
	21241	10023.61	3561.36	14039.00
449253/CF	RES-SNRI-EARTH SYSTEMS SCIENCES-C FRANK			
	21267	1314110.41	260527.12	1633447.00
449253/JS	RES-SNRI-EARTH SYSTEMS SCIENCES J SEXTON			
	40061	28025.00	20761.12	28025.00
449253/LK	RESEARCH-SNRI-EARTH SYSTEMS SCIENCES			
	22410	65569.79	60971.95	1087541.06
	26724		19128.45	19128.45
449253/NM	RES-SNRI-EARTH SYSTEMS SCIENCES-N MILLER			
	18307		19350.04	19350.04
	21246		46919.80	46919.80
	23206		72210.31	72210.31
	69085	203.68	203.68	
449253/PO	RESEARCH-SNRI-EARTH SYSTEMS-P. O'DAY			
	21221	85.26	85.26	299999.52
	22416		691296.46	691296.46
	22426	200000.00	83148.44	200000.00
	40061	8660.99	557.80	8660.99
	58123		42327.00	42327.00
	58139	286148.41	142985.78	361535.00
449253/SH	RESEARCH-SNRI-EARTH SYSTEMS - S. HART			
	18366	140540.29	71895.52	140907.00
	21101		41674.46	41674.46
	21228		66531.12	66531.12
	21241	49001.67	32408.52	140208.00
	57097	80887.46	35210.12	92643.00
	58149	2221.26	2221.26	5392.79
449253/TG	RES-SNRI-EARTH SYSS SCIENCES T-GHEZZEHEI			
	22484	357300.00	14289.84	357300.00
449315/KH	RESEARCH-SNRI-ANTHROPOLOGY-K. HULL			
	25653		89261.51	89261.51
	25655	2377.65	2281.20	34569.00
				34472.55

	25657	74015.01	14070.02	74015.01	14070.02
449321/AJ	RESEARCH-SNRI-PSYCHOLOGY-A. JOYCE				
	58145	28713.02	30163.07	50000.00	51450.05
	58148	15257.83	15252.42	36476.08	36470.67
	58608	25391.00	25169.36	25391.00	25169.36
	58616	49000.00	36122.81	49000.00	36122.81
629001/DH	PUBLIC SERVICE-SNRI-NPI-HOSLEY				
	25652		154163.22	154163.22	
	40039	977.49		977.49	
	69262	9082.55		9082.55	
629001/NP	PUB SERVICE-SNRI-NATL PARK INST-HOSLEY				
	25652		(8657.44)	(8657.44)	
629001/RB	PUBLIC SERVICE-SNRI-R. BALES				
	69851	25000.00	4031.07	25000.00	4031.07
629001/Y3	PUBLIC SRVC-SNRI-NATL PARK INST-HOSLEY				
	25652		64.08	64.08	
629213/ER	PUBLIC SERV-SNRI-COMP SCI & ENG-ROLLAND				
	40074				
	58117		13826.86	13826.86	
789214/JC	FINANCIAL AID-SNRI-ENV ENG-CAMPBELL				
	37658	0.38	26589.20	0.38	26589.20
789214/MC	FINANCIAL AID-SNRI-ENV ENG-CONKLIN				
	18306		13864.00	13864.00	
	18308	12294.00	12240.00	24534.00	
789214/QG	FIN AID-SNRI-ENVIRONL ENG-Q GUO				
	24922		8541.08	8541.08	
789214/RB	FIN AID-SNRI-ENVIRONMENTAL ENG-R BALES				
	21241		17488.00	17488.00	
789253/SH	FIN AID-SNRI-LIFE/ENVIRON SCI-HART				
	21228		25650.00	25650.00	
		\$10,954,591.11	\$4,373,050.90	\$22,944,045.78	\$16,362,505.57

Attachment F

SNRI Account Summary by Department of all Grant/Research Funds

For the period June 1,2017 to June 30, 2017

EXPENDITURES (Current Funds)

Department : F100 SIERRA NEVADA RESEARCH INSTITUTE

Account/CC	Fund	Fiscal Year		Inception	
		Appropriation ()=Debit	Expenditures ()=Credit	Appropriation ()=Debit	Expenditures ()=Credit
449001	RESEARCH-SIERRA NEVADA RES INST-OPER				
449001/2A	RESEARCH-SNRI-OPERATIONS				
	37365				
	68320	4221.50		4221.50	
449001/6A	RESEARCH-SNRI-OPERATIONS-DEPT RESEARCH				
	69085				
449001/AJ	RESEARCH-SIERRA NEVADA RES INST-A. JOYCE				
	69085				
449001/CC	RESEARCH-SNRI-CLIMATE COMMUNICATION				
449001/MS	RESEARCH-SIERRA NEVADA RES INST-SAFEEQ				
	22473	87668.03	40391.27	121650.00	74373.24
	57569	34861.00	31373.86	34861.00	31373.86
449001/SJ	RES-SIERRA NEVADA RES INST-S JEPSEN				
	24933			37681.84	37681.84
449001/VR	RESEARCH-SNRI-OPERATION-VEHICLE RECHARGE				
	19900	10888.37	10888.37	10888.37	10888.37
449001/WA	RESEARCH-SNRI-WAWONA FIELD STATION-OP				
	19900				
	68320	364.49		364.49	
449002/NM	RESEARCH-SNRI-IDC RETURN-N MILLER				
	20095	567.50		567.50	
449002/SJ	RESEARCH-SNRI-IDC RETURN-S JEPSON				
	20095	388.78	365.47	388.78	365.47
449002/WR	RESEARCH-SNRI-IDC RETURN-ROGGE				
	20095	34.25		34.25	
449205/CF	RESRCH-SNRI EARTH SYS-PART SUPP-C-FRANK				
	21267	20000.00		20000.00	
449205/SH	RESEARCH-SNRI-EARTH SYS-PART SUPPRT-HART				
	21228			225948.21	225948.21
449208/RB	RES-SNRI-ENV ENG-OVRD VAR-R BALES				
	21241	4770.30		12445.00	7674.70
449209/RB	RESEARCH-SNRI-ENV ENG-PART SUPP-BALES				
	21241	130973.39	100000.00	300064.00	269090.61
449213/ER	RES-SNRI-COMPUTER SCI & ENG-E ROLLAND				
	58117				
449214	RESEARCH-SNRI-ENVIRONMENTAL ENGINEERING				
	23494			244.36	244.36
449214/AJ	RESEARCH-SNRI-ENV ENG ANDREA JOYCE				
	57221			39957.44	39957.44
	57223			34380.48	34380.48
	58106	(314.95)	(314.95)	25563.00	25563.00
	58134	513.28	142.12	15000.00	14628.84
449214/AW	RESEARCH-SNRI-ENVRNMNTL ENG-A WESTERLING				
	18236			65142.08	65142.08
	18299			39190.65	39190.65
	18300			74718.34	74718.34
	18344	49214.72	22828.65	250000.00	223613.93
	18355	96222.43	42584.01	118464.00	64825.58
	22114	16948.24	17520.25	60000.00	60572.01

	22477	116358.96	28616.52	190000.00	102257.56
	25202			121980.48	121980.48
	57558	107642.81	95061.11	153019.52	140437.82
	57578	29177.00	8214.08	29177.00	8214.08
	69085				
	69090	90750.00	2147.19	90750.00	2147.19
449214/J1	RESEARCH-SNRI-ENVIRONMENTL ENG-CAMPBELL				
	37658	48434.86	31443.81	48434.86	31443.81
449214/JC	RESEARCH-SNRI-ENV ENG-J ELLIOT CAMPBELL				
	21300	1346241.00	126582.65	1346241.00	126582.65
	22423	503512.71	255329.48	623284.68	375101.45
	37658	70000.00		70000.00	
	58110	16498.50	15045.68	249277.00	247824.18
	69763	202053.16	89390.78	202053.16	89390.78
	69851	9021.49	5500.00	9021.49	5500.00
449214/JV	RES-SNRI-ENVIR ENG-J VIERS				
	58122	761.86		35000.00	34238.14
449214/M1	RESEARCH-SNRI-ENVIRONMENTL ENG-M CONKLIN				
	18308	92016.63	32953.57	100000.00	40936.94
	21101			223240.18	223240.18
	21241	270258.69	133592.66	463809.00	327142.97
449214/M2	RESEARCH-SNRI-ENVIRONMENTL ENG-M CONKLIN				
	18308	88000.00		88000.00	
	69085	187893.78	87666.13	187893.78	87666.13
449214/MC	RESEARCH-SNRI-ENVIRONMENTL ENG-M CONKLIN				
	07427	(27906.90)		(27906.90)	
	18240			162590.64	162590.64
	18296			130839.22	130839.22
	18306			136135.79	136135.79
	18308	54921.82	38278.79	68183.00	51539.97
	21101			185144.86	185144.86
	21241	95721.07	60003.47	157096.20	121378.60
	22467	(108.35)	(108.35)	207285.21	207285.21
	22476	(600.00)	(600.00)	200263.81	200263.81
	22600	394099.00	121679.11	394099.00	121679.11
	25650			(0.06)	(0.06)
	26723	100808.87	83156.63	162000.00	144347.76
	37658				
	40080	3800.00	3914.54	3800.00	3914.54
449214/Q1	RESEARCH-SNRI-ENVIRONMENTAL ENG-Q. GUO				
	21101			435320.96	435320.96
449214/QG	RESEARCH-SNRI-ENVIRONMENTAL ENG-Q. GUO				
	18296			12035.80	12035.80
	21101			47862.73	47862.73
	21263	110393.85	59162.47	265854.00	214622.62
	22478			189609.00	189609.00
	22482	6355.21		38409.00	32053.79
	22604			50492.26	50492.26
	24922			59248.49	59248.49
449214/R1	RESEARCH-SNRI-ENVIRONMENTAL ENG-R. BALES				
	21101			443406.53	443406.53
	21241	940233.68	384320.08	1749270.80	1193357.20
	22480	20000.00	11080.66	20000.00	11080.66
449214/R2	RESEARCH-SNRI-ENVIRONMENTAL ENG-R. BALES				
	21101			99442.62	99442.62
	21241	70720.56	41098.52	109554.00	79931.96
	40061	4759.50		4759.50	
	69085	395294.12	232433.88	395294.12	232433.88
449214/RB	RESEARCH-SNRI-ENVIRONMENTAL ENG-R. BALES				
	05397	321.01		321.01	
	18295			118662.89	118662.89

	18296		145705.81	145705.81
	18301		124225.82	124225.82
	18365	431052.69	60759.15	454644.00
	21101		359232.01	359232.01
	21205	3023.11	3136.91	1705280.00
	21241	175912.27	77363.28	407635.00
	22470	119987.69	120227.45	238436.00
	22475	3977.85	3987.40	122500.00
	22480	179556.01	77233.98	304000.00
	36470	77515.36	77860.10	77515.36
	58143		20308.46	20308.46
	69085	197851.09		197851.09
	69851			
	75554	(46.07)	(46.39)	(46.07)
449214/RR	RESEARCH-SNRI-ENVIR ENG-R. RICE			
	22471	164400.48	26817.44	206005.23
449214/WR	RESEARCH-SNRI-ENVIRO ENGINEERING W ROGGE			
	21282	2010.40	2010.40	3940.94
449216/YC	RESEARCH-SNRI-MECHANICAL ENG-Y CHEN			
	36470	56494.49	12724.17	56494.49
449224/RB	RSRCH-SNRI-ENV ENG-COST SHARE-BALES			
449253/AB	RES-SNRI-EARTH SYSTEMS SCIENCES-A BERHE			
	21241	10023.61	3561.36	14039.00
449253/CF	RES-SNRI-EARTH SYSTEMS SCIENCES-C FRANK			
	21267	1314110.41	260527.12	1633447.00
449253/JS	RES-SNRI-EARTH SYSTEMS SCIENCES J SEXTON			
449253/LK	RESEARCH-SNRI-EARTH SYSTEMS SCIENCES			
	22410	65569.79	60971.95	1087541.06
	26724			19128.45
449253/NM	RES-SNRI-EARTH SYSTEMS SCIENCES-N MILLER			
	18307		19350.04	19350.04
	21246		46919.80	46919.80
	23206		72210.31	72210.31
	69085	203.68		203.68
449253/PO	RESEARCH-SNRI-EARTH SYSTEMS-P. O'DAY			
	21221	85.26	85.26	299999.52
	22416		691296.46	691296.46
	22426	200000.00	83148.44	200000.00
	58123		42327.00	42327.00
	58139	286148.41	142985.78	361535.00
449253/SH	RESEARCH-SNRI-EARTH SYSTEMS - S. HART			
	18366	140540.29	71895.52	140907.00
	21101		41674.46	41674.46
	21228		66531.12	66531.12
	21241	49001.67	32408.52	140208.00
	57097	80887.46	35210.12	92643.00
	58149	2221.26	2221.26	5392.79
449253/TG	RES-SNRI-EARTH SYSS SCIENCES T-GHEZZEHEI			
	22484	357300.00	14289.84	357300.00
449315/KH	RESEARCH-SNRI-ANTHROPOLOGY-K. HULL			
	25653		89261.51	89261.51
	25655	2377.65	2281.20	34569.00
	25657	74015.01	14070.02	74015.01
449321/AJ	RESEARCH-SNRI-PSYCHOLOGY-A. JOYCE			
	58145	28713.02	30163.07	50000.00
	58148	15257.83	15252.42	36476.08
	58608	25391.00	25169.36	25391.00
	58616	49000.00	36122.81	49000.00
629001/DH	PUBLIC SERVICE-SNRI-NPI-HOSLEY			
	25652		154163.22	154163.22
	40039	977.49		977.49

	69262	9082.55	9082.55	
629001/NP	PUB SERVICE-SNRI-NATL PARK INST-HOSLEY			
	25652		(8657.44)	(8657.44)
629001/RB	PUBLIC SERVICE-SNRI-R. BALES			
	69851	25000.00	4031.07	25000.00
629001/Y3	PUBLIC SRVC-SNRI-NATL PARK INST-HOSLEY			4031.07
	25652		64.08	64.08
629213/ER	PUBLIC SERV-SNRI-COMP SCI & ENG-ROLLAND			
	40074			
	58117		13826.86	13826.86
789214/JC	FINANCIAL AID-SNRI-ENV ENG-CAMPBELL			
	37658	0.38	26589.20	0.38
789214/MC	FINANCIAL AID-SNRI-ENV ENG-CONKLIN			
	18306		13864.00	13864.00
	18308		12240.00	24534.00
789214/QG	FIN AID-SNRI-ENVIRONL ENG-Q GUO			
	24922		8541.08	8541.08
789214/RB	FIN AID-SNRI-ENVIRONMENTAL ENG-R BALES			
	21241		17488.00	17488.00
789253/SH	FIN AID-SNRI-LIFE/ENVIRON SCI-HART			
	21228		25650.00	25650.00
Totals		\$9,952,398.36	\$3,547,094.72	\$21,929,366.57
				\$15,524,062.93

ATTACHMENT G

Grant proposals submitted through Sponsored Projects Office in FY 16/17

Proposals prepared 59

Proposals submitted 49

Proposal funded 13

Total value of newly funded proposals in FY 16/17 \$1,897,110.00

Prop No.	PI	Project Name	Sponsor
<u>17-0447</u>	BLOIS	Blois_NSF Career [GEO]_7.21.17 2017_beutel_waterqualityassessmentofHodgesReservoir	5400 - NATIONAL SCIENCE FOUNDATION - NSF
<u>17-0414</u>	Beutel		VGDP - SAN DIEGO COUNTY WATER AUTHORITY
<u>17-0393</u>	Jenkins	Yosemite Wilderness - John Muir Trail	4180 - NATIONAL PARK SERVICE - NPS
17-0376	O'DAY	ODAY_EPA2017 Critical Baseline Monitoring of Water Quality for Hemlock Forest Restoration Project	3900 - ENVIRONMENTAL PROTECTION AGENCY - EPA
<u>17-0372</u>	CONKLIN		6522 - CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE
<u>17-0369</u>	FRANK	CFRANK UCB2017	6761 - UC BERKELEY
<u>17-0361</u>	GHEZZEHEI	U of Miami Subaward_NSF PIRE_Ghezzehei_4.14.17	9184 - UNIVERSITY OF MIAMI
<u>17-0351</u>	O'DAY	Human models of the particulate-induced inflammatory/antioxidant axis in aging	9272 - UNIVERSITY OF SOUTHERN CALIFORNIA - USC
<u>17-0349</u>	WESTERLING	Drought Early warning for California	<u>6778 - UC SAN DIEGO</u>
<u>17-0336</u>	GHEZZEHEI	Community perception of water and food security	9281 - UNIVERSITY OF MINNESOTA
<u>17-0333</u>	Safeeq	Developing climate resilient specialty cropping systems tailored to growers' needs	6774 - UC AGRICULTURE AND NATURAL RESOURCES - UCA
<u>17-0321</u>	CONKLIN	MConklin-NSF_INFEWS_03-06-17-SP-17-0321	5400 - NATIONAL SCIENCE FOUNDATION - NSF
<u>17-0320</u>	CAMPBELL	E.Campbell INFEWS due 03.06.2017 http://www.lpi.usra.edu/planetary_news/2016/11/07/nasa-earth-and-space-science-fellowship-nessf-program-3/	5400 - NATIONAL SCIENCE FOUNDATION - NSF
<u>17-0316</u>	GUO		5136 - NASA HEADQUARTERS
<u>17-0299</u>	GHEZZEHEI	Application of Hydrochar as a potential soil conditioner in Almond Orchards	8025 - ALMOND BOARD OF CALIFORNIA
<u>17-0282</u>	WESTERLING	<u>California Nevada Applications Program (CNAP)</u>	<u>6778 - UC SAN DIEGO</u>
<u>17-0276</u>	CAMPBELL	New Fusion of NASA Remote Sensing Data to Validate Terrestrial Carbon Cycle Models using Measured Fluxes of Carbonyl Sulfide Climate Adaptation and Resiliency	5106 - NASA AMES RESEARCH CENTER
<u>17-0253</u>	WESTERLING	Assessment	<u>6778 - UC SAN DIEGO</u>
<u>17-0226</u>	SUN	Sun_NSF NRT_LOI_12.09.16	5400 - NATIONAL SCIENCE FOUNDATION - NSF
<u>17-0213</u>	BALES	NSF SSCZO Beyond the Brink	5400 - NATIONAL SCIENCE FOUNDATION - NSF
<u>17-0190</u>	HULL	<u>KHull_NPS2016</u>	<u>4180 - NATIONAL PARK SERVICE - NPS</u>
<u>17-0184</u>	O'DAY	Collaborative Research: Mineral surface reactivity, energetics, and adsorption of phosphorus as a critical nutrient	5400 - NATIONAL SCIENCE FOUNDATION - NSF
<u>17-0169</u>	CAMPBELL	Energy Canals: Discovering the Food-Energy-Water Synergies of Photovoltaic	5400 - NATIONAL SCIENCE FOUNDATION - NSF

		Covered Aqueducts	
		Collaborative Research: FRA: Integrating Major North American Forest Cover Types with MacroSystem-scale Canopy	
17-0155	BERHE	Ecohydrological Processes	9261 - UNIVERSITY OF DELAWARE
17-0151	Safeeq	Incorporating time variable land cover into a large scale hydrologic model	8123 - ARIZONA STATE UNIVERSITY/TEMPE
17-0143	Bernacchi	The Family Waters Assessment of processes and factors influencing mercury methylation in managed wetlands within the San Francisco Bay-Delta using a kinetic-thermodynamic biogeochemical model	5280 - NFAH HUMANITIES, NATIONAL ENDOWMENT FOR
17-0140	O'DAY		6778 - UC SAN DIEGO
17-0128	TRAINA	Oilfield Water Chemistry Assessment of Climate Change Effects and Impacts on the Hydrology of Southern Sierra Nevada Basins	VB76 - CALIFORNIA STATE UNIVERSITY, FRESNO
17-0122	BALES	Waste to Wisdom II: Development of a Woody Biomass Feedstock Supply Chain for Bioenergy and Bioproducts in the Southwestern U.S	VG6Q - SEQUOIA RIVERLANDS TRUST
17-0094	BALES	Monitoring and Evaluating Hydrologic Impacts of Forest Restoration in the Headwaters of American River Basin	4672 - CALIFORNIA STATE UNIVERSITY, HUMBOLDT STATE SPONSORED - CSU
17-0069	Safeeq	Climate Change and Public Response to Water Variability	F972 - CALIFORNIA WILDLIFE CONSERVATION BOARD - W
17-0015	Pathak	Climate and Health Interdisciplinary Research Program	6763 - UC DAVIS
17-0011	WESTERLING	Modeling Methylmercury and salinity from wetland tributaries to the Delta	6764 - UNIVERSITY OF CALIFORNIA, LOS ANGELES - UCLA
16-0449	O'DAY	Pistachio leaffoot	6530 - CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE -
16-0413	JOYCE	CFrank_NSF2016	FA2C - CALIFORNIA PISTACHIO RESEARCH BOARD
16-0412	FRANK	Behavior of the Leaffoted bug	9293 - UNIVERSITY OF PENNSYLVANIA
16-0395	JOYCE	MSafeeq_NatureConservancy2016	8025 - ALMOND BOARD OF CALIFORNIA
16-0393	Safeeq	Testing West Nile_Mosquito	7262 - NATURE CONSERVANCY
16-0392	JOYCE	ECampbell-UKentucky (NASA)-ROSES-06-01-16	F218 - MOSQUITO RESEARCH FOUNDATION - MRF
16-0388	CAMPBELL	Davis-DWR Alternative Soil Management	9267 - UNIVERSITY OF KENTUCKY/UNIVERSITY OF KENTUCKY FOUNDATION
16-0363		Bales_TomKat UC_05.02.16	6550 - CALIFORNIA DEPARTMENT OF WATER RESOURCES
16-0360	BALES	Conklin_Reclamation Western Watershed_3.30.16	6771 - UC SANTA BARBARA
16-0359	CONKLIN	Bales_CA LCC_3.28.16	4123 - BUREAU OF RECLAMATION - USDI
16-0358	BALES	RBales_USDA2012	V8C4 - CALIFORNIA LANDSCAPE CONSERVATION COOPERATIVE
16-0355	BALES	ABerhe_DOE2016	0300 - US DEPARTMENT OF AGRICULTURE FOREST SERVICE
16-0352	BERHE	Blois_NSF Career [BIO]_7.20.16	9277 - UNIVERSITY OF WISCONSIN-MADISON
16-0349	BLOIS	Campbell_NSFINFEWS3.22.16	5400 - NATIONAL SCIENCE FOUNDATION - NSF
16-0343	CAMPBELL	Bales Safeeq_SSIWRM_Deadline TBD	5400 - NATIONAL SCIENCE FOUNDATION - NSF
16-0336	Safeeq	Sun et al_AFRI ELI_3.24.16	6550 - CALIFORNIA DEPARTMENT OF WATER RESOURCES
16-0331	SUN	Safeeq et al_NSF INFEWS_3.22.16	0450 - NATIONAL INSTITUTE FOR FOOD AND AGRICULTURE
16-0311	CONKLIN		5400 - NATIONAL SCIENCE FOUNDATION - NSF

<u>16-0303</u>	CONKLIN	M.Conklin_NASA 2016	5101 - NASA/MISCELLANEOUS CENTERS
<u>16-0300</u>	WESTERLING	ALWesterling_USDAFS	0300 - US DEPARTMENT OF AGRICULTURE FOREST SERVICE
<u>16-0295</u>	GUO	Q.GUO	5101 - NASA/MISCELLANEOUS CENTERS
<u>16-0274</u>	O'DAY	PODAY_DOE_JAN2016	5099 - DEPARTMENT OF ENERGY/MISCELLANEOUS OFFICES
16-0271	GHEZZEHEI	Peat Carbon Dynamics	5090 - DEPARTMENT OF ENERGY WASHINGTON, D.C. - DC
<u>16-0257</u>	ROGGE	W.Rogge_UCSC/NSF2016	6769 - UC SANTA CRUZ
<u>16-0244</u>	CONKLIN	ConklinNSF MRI	5400 - NATIONAL SCIENCE FOUNDATION - NSF
<u>16-0185</u>	O'DAY	PODAY_NSF2015_2	5400 - NATIONAL SCIENCE FOUNDATION - NSF

Attachment E
Gifts Administered through Development and Alumni Relations

	Organization Name	Title	First Name	Last Name	Gift Amount
Climate Feedback		Mr.	Angus	Rose	\$40.00
Climate Feedback	FirstGiving				\$1,018.42
Climate Feedback	FirstGiving				\$41.34
Climate Feedback		Mr.	Angus	Rose	\$40.00
SNRI Fund		Mr.	Gary	Kremen	\$3,100.00
Climate Feedback	FirstGiving				\$103.30
Climate Feedback	FirstGiving				\$231.18
SNRIFund		Dr.	Stephen	Hart	\$50.00
SNRI Fund		Dr.	Karen	Merritt	\$500.00
Climate Feedback		Mr.	Curt	Newton	\$50.00
Climate Feedback		Ms.	Britta	Voss	\$25.00
Climate Feedback	FirstGiving				\$73.54
Climate Feedback		Dr.	Michael	Henehan	\$20.00
Climate Feedback		Ms.	Annie	Kia	\$40.00
Climate Feedback		Mr.	David	Landskov	\$15.00
Climate Feedback		Mr.	Ville	Lahde	\$50.00
Climate Feedback		Mr.	Samuel	Slanina	\$20.00
Climate Feedback		Ms.	Lucy	Fellowes	\$25.00
Climate Feedback			Anonymous		\$100.00
Climate Feedback			Anonymous		\$50.00
Climate Feedback		Dr.	Stefan	Rahmstorf	\$700.00
SNRI Fund	Wells Fargo Foundation				\$500.00
Climate Feedback	United Way of Central New Mexico				\$200.00
Climate Feedback		Mr.	Dan	Sandberg	\$10.00
Climate Feedback	FirstGiving				\$77.84
climate Feedback			Anonymous		\$100.00
Climate Feedback		Mr.	Geoffrey	Pounder	\$25.00
SNRIFund	RMC Water and Environment				\$500.00
Climate Feedback		Mr.	Dan	Sandberg	\$10.00
Climate Feedback		Mr.	Dan	Sandberg	\$10.00
UCTV Sustainable California		Dr.	Herbert	Blossom	\$5,000.00
Climate Feedback		Mr.	Dan	Sandberg	\$10.00
Climate Feedback		Mr.	David	Slater	\$20.00
Climate Feedback		Dr.	Leonard	Burtscher	\$50.00
Climate Feedback		Dr.	Wendy	Dillenschneider	\$25.00
Climate Feedback		Dr.	Stefan	Rahmstorf	\$100.00
Climate Feedback		Mr.	Dale	Whitton	\$30.00
Climate Feedback			Anonymous		\$25.00
Climate Feedback			Anonymous		\$50.00
Climate Feedback			Anonymous		\$10.00
Climate Feedback		Mr.	Dan	Sandberg	\$10.00
Climate Feedback		Mr.	David	Slater	\$20.00
Climate Feedback		Mr.	Dan	Sandberg	\$10.00
Climate Feedback		Dr.	Darrell	Kaufman	\$100.00
					\$13,185.62



For more information contact: snrirequests@ucmerced.edu

SNRI RESEARCH : FROM THE HIGH SIERRA TO THE SAN JOAQUIN VALLEY



**Monday, March 6, 2017 12:30 pm – 3:00 pm
Kolligian Library - Room 232**

1:00 pm Introductions and Overview - Leroy Westerling, Associate Professor

1:10 pm Climate Change and Snow: Future Scenarios and Historical Analogs
Mohammad Safeeq, Project Scientist and Assistant Adjunct Professor

1:30 pm Entomology in the San Joaquin Valley - Andrea Joyce, Assistant Professor

1:50 pm Mercury Cycling in California Reservoirs - Marc Beutel, Associate Professor

2:10 pm What is the Capacity of California Plants to Weather Climate Change?
Jay Sexton, Assistant Professor

2:30 pm Moderated Discussion



This symposium is
supported by a gift
from Woddard & Curran

Food and Refreshments Provided

