

**Sierra Nevada Research Institute
University of California, Merced
Organized Research Unit (ORU) Annual Report 2017/18**

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

The 2017/18 academic year represents another year of accomplishments by the members of the Sierra Nevada Research Institute. The mission of the SNRI faculty and researchers *is to develop new knowledge that will sustain the natural resources and promote social well-being in the Sierra Nevada and Central Valley region* which continues to be critical for California and the West.

The promise of UC Merced continues to be realized as SNRI members, their research groups and students make discoveries that contribute to the sustainability of the San Joaquin Valley region, the state and the global community. Research programs include renewable energy, decarbonizing the economy, more-sustainable ecosystem management and other climate solutions. As California experiences extremes in climate, from drought and flood to extreme wildfires, SNRI researchers are regularly *sought out for their research and insights by news organizations, legislators, State agencies, decision-makers, agricultural leaders, environmental organizations and NGO's*.

SNRI researchers had 18 grant proposals funded for a total value of \$6,403,726.00 in the 17/18 year. Awards included an NSF Early Career Award for Assistant Professor Jessica Blois, a two-year Graduate Fellowship for Stefanie Helmrach and a series of critical research grants for SNRI Faculty. The support provided by Prosper Godono working out of the SNRI offices has been significant in the increasing award applications.

In the Fall of 2017, SNRI hosted a well-attended premiere of the documentary film, "Beyond the Brink" in downtown Merced. The film focuses on the critical water/food/energy nexus in the San Joaquin Valley and features several UC Merced and UC researchers. The SNRI Research Symposium was a success on the first day of Research Week. We also hosted Climate Change author and speaker Kim Stanley Robinson for two campus talks. *See Attachments (pages 68-71)*

Last year SNRI and UC Water in partnership with the UCOP ANR and UC San Diego launched a new UCTV channel called "Sustainable California", which features videos about UC Research and projects. The project is growing with new videos being developed and an emerging partnership with the UC NRS is expected to reach a widening audience in the coming years.

The new and redesigned SNRI Website was launched in the Fall of 2017. We continue to evolve the site to better serve faculty, students and SNRI supporters.

SNRI membership continues to grow with 38 faculty members and 32 professional researchers engaged in SNRI related research at UC Merced.

2.) Names of persons serving on the SNRI Advisory Committee. – Page 2

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

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

Ex-Officio: Roger Bales, Armando Quintero

3.) Dates of Committee meetings: - Page 2

Held two SNRI Salon's on November 14th and 16th to elicit faculty recommendations for SNRI

4.) Summary of key Advisory Committee recommendations. - 2

- Increase Legislator engagement with SNRI
- Connect researchers with State grants and increase local applied research inventory
- Engage state agency leaders to campus and to participate in off-campus meetings
- Organize SNRI Researchers for large grant calls
- Sustainability needs to be a pillar for SNRI
- Co-locate SNRI faculty in new Campus Sustainability Building/Floor
- Strengthen Water/Soil/Ag connections in research
- Articulate the SNRI Base – Internal and External
- Seek additional Graduate student funding

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

- *See 2 Attachments A: (pages 15-19)*

6.) Names of faculty members actively engaged in the unit's research and their supervision of staff and students. - Page 3

Faculty

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

Supervision of students:

7.) Names of undergraduate students, graduate students, staff researchers and postdoctoral scholars directly contributing to the unit who are on the unit's payroll. Pages 3 & 4

This list shows the three students who work in the SNRI office, paid with State Funds. The additional names on the list reflect some of the many students and postdoctoral scholars who work with researchers and are funded for varying periods of work from grants managed by SNRI for SNRI faculty in this fiscal year. Available database information does not allow for a complete report.

Employee Full Name	Title Long Description	Fund source
CASAS, ANDRES	STUDENT 1	State - SNRI Funds
FRITSE, ANDRE CRAIG	STUDENT 2	State - SNRI Funds
IRISNADI, TIMOTHY	STUDENT 1	State - SNRI Funds
CASTRO, MADELINE KAYE	STUDENT 2	Grant funded
COONEY, MORGAN SPENCER	STUDENT 3	Grant funded
ELIAS, OSCAR ANTONIO	STUDENT 1	Grant funded
GLASSER, SUSAN MARLEY	STUDENT 1	Grant funded
KALUA, MICHAEL DAVID	STUDENT 3	Grant funded
LUCEY, FLORENCE HELLEN	STUDENT 1	Grant funded
MURTILLO, ALLAN ROMAN	STUDENT 4	Grant funded
OJEDA, NANCY VERONICA	STUDENT 1	Grant funded
PEREZ, ARACELI	STUDENT 1	Grant funded
QUARNSTROM, SEAN	STUDENT 3	Grant funded
SAM, JONATHAN AARON	STUDENT 3	Grant funded
TORRES, RYAN JACOB	STUDENT 1	Grant funded
Total		

Employee Full Name	Title, Long	Fund
ARONSTEIN, PAUL JOSHUA	GRADUATE STUDENT RESEARCHER -	Grant funded
FRYJOFF, HUNG, ANNA	GRADUATE STUDENT	Grant funded
HEEREN, ALEXANDER JOHN	POSTDOCTORAL SCHOLAR-EMPLOYEE	Grant funded
KEYSER, ALISA RENAE	POSTDOCTORAL SCHOLAR-EMPLOYEE	Grant funded
KLOS, PETER ZION	POSTDOCTORAL SCHOLAR-EMPLOYEE	Grant funded
NWOSU, UGWUMSINACHI G	POSTDOCTORAL SCHOLAR-EMPLOYEE	Grant funded
PATTAMMATEL, AJITH	POSTDOCTORAL SCHOLAR-EMPLOYEE	Grant funded
SOHRABI, MOHAMMADMEHDI	POSTDOCTORAL SCHOLAR-EMPLOYEE	Grant funded
WHELAN, MARY ELIZABETH	POSTDOCTORAL SCHOLAR-EMPLOYEE	Grant funded
YAN, JING	POSTDOCTORAL SCHOLAR-EMPLOYEE	Grant funded
Total ACADEMIC		

Employee Full Name	Title, Long	Fund
AYALA, ASTORGA, MARIA	LABORATORY ASSISTANT I	Grant funded
SERNA, BLAZ M	LABORATORY ASSISTANT I	Grant funded
TAYLOR, ROBERT JAMES	LABORATORY ASSISTANT I	Grant funded
Total LIMITED Employees: 3		

Names of undergraduate and graduate students , staff researchers and postdoctoral scholars directly contributing to the ORU's scholarly work through assistantships, fellowships, traineeships or salary. (this is only a partial list and is limited by available database information)

Postdoctoral Scholars

Carper, Dana
Hays, Cynthia
Hernandez, Alex
Keyser, Alisa
Klos, Peter
Kupihea, James
Nwosu, Ugwumsinachi
Pattammattel, Ajith
Sohrabi, Mohammad
Vincent, Emmanuel
Whelan, Mary
Yan, Jing

Staff Researchers

Bernacchi, Leigh
Gilmore, Michelle
Meng, Xiande
Milostan, Jeanne
Stacy, Erin

Students

Araya, Samuel
Ayala, Astorga
Booth, Lorenzo Ade
Busset , Nicholas Garrett
Casas , Andres
Castro, Madeline
Cooney, Morgan
Elias, Oscar
Frise, Andre Craig
Glasser, Susan Marley
Kalua, Michael David
Lucey, Florence Hellen
MacNeill, Curtis
Murillio, Allan Roman
Ojeda, Nancy Veronica
Perez, Aracelli
Quarnstrom, Sean Michael

Students

Sam, Jonathon Aaron
Stinecipher, James
Taylor, Robert
Torres, Ryan Jacob
Trisnadi, Timothy Titus

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

*Note: Not all faculty provided information for this section **Pages 5-11***

Professor	Student/Faculty	Institution
Ardell, David	Andrea Collins-Hed	UC Merced– PhD candidate
	Fateme Hadi Nezhad	UC Merced – PhD candidate
Bales, Roger Bales, Roger	Rhondene Wint	UC Merced – PhD candidate
	Graham Fogg	UC Water/Davis
	Andy Fisher	UC Water/Santa Cruz
	Michael Kiparsky	UC Water/Berkeley
	Hellen E. Dalhke	UC Water/Davis
	Holly Doremus	UC Water/Berkeley
	Steven D. Glaser	UC Water/CZO/Berkeley
	Thomas Harter	UC Water/Davis
	Jay Lund	UC Water/Davis
	Josué Medellín-Azuara	UC Water/Davis
	Samuel Solis	UC Water/Davis
	Kevin O’Hara	UC Water/Davis
	William Stewart	UC Berkeley
	Carlos Oroza	UC Berkeley
	Ziran Zhag	UC Berkeley
	Zeshi Zheng	UC Berkeley
	Hunsaker, Carolyn	UC Berkeley
	Anthony O’Geen	CZO/USFS
	Peter Hartsough	CZO/UC Davis
	Naomi Tague	CZO/UC Davis
Beman, Michael	Cliff Reibe	CZO/UC Santa Barbara
	Michael Golden	CZO/U Wyoming
	SNAMP Collaborators	CZO/UC Irvine
		<i>(See Conklin)</i>
	Joseph Rungee	UC Merced – PhD candidate
	Eli Perez-Coronel	UC Merced – PhD candidate
Berhe, Asmeret	Jorge Montiel-Molina	UC Merced – PhD candidate
	Ariadna Cairo	UC Merced – PhD candidate
	Sonia Vargas (new)	UC Merced – PhD candidate
	Joaquin Fraga-Hernandez	UC Merced – PhD candidate
Berhe, Asmeret	CZO Collaborator	<i>(See Bales)</i>
	Craig Rassmussen	University of Arizona
	Dale Johnson	University of Nevada, Reno
	Carolyn Hunsaker	US Forest Service
	Caroline Masiello	Rice University
	Emma McCorkle	UC Merced – PhD candidate
	Kimber Moreland	UC Merced – PhD candidate

Berhe, Asmeret	Robert Graham	UC Riverside
	Carolina Boix Fayos	(CEBAS), Spain
	Morgan Barnes	UC Merced - PhD candidate
	Rebecca Lever	UC Merced - PhD candidate
	Dale Johnson	UNR
	Jonathan Sanderman	CSIRO Adelaide
	Markus Kleber	Oregon State University
	Johan Six	UC Davis
	Chelsea Arnold	UC Merced - PhD candidate
	Manisha Dolui	UC Merced - PhD candidate
	Lixia Jin	UC Merced - PhD candidate
Beutel, Marc	Leila Wahab	UC Merced - PhD candidate
	Louis Amegbletor	
	Melissa Conn	UC Merced - PhD candidate
	Byran Fuhrman	UC Merced - PhD candidate
	Lindsey Jerome	UC Merced - PhD candidate
	Jaycee Martinez	UC Merced - PhD candidate
	Mark Seelos	UC Merced - PhD candidate
Blois, Jessica	Stefano Casitrati	UC Merced - PhD candidate
	Behrensmeyer, Kay	Smithsonian Institution
	Eronen, Jussi	University of Helsinki
	Ferrier, Simon	CSIRO (Australia)
	Fitzpatrick, Matt	University of Maryland Center for Environmental Science
	Gill, Jacquelyn	University of Maine
	Gotelli, Nick	University of Vermont
	Graham, Russ	Penn State
	Grimm, Eric	Illinois State Museum
	Jackson, Steve	USGS Southwest Climate Science Center
	Lawing, A. Michelle	Texas A&M
	Lugilde, Diego Nieto	University of Maryland Center for Environmental Science
	Lyons, S. Kate	Smithsonian
	McGill, Brian	University of Maine
	McGuire, Jenny	Georgia Tech
	Mychajliw, Alexis	Stanford University
	Polly, P. David	Indiana University
	Williams, Jack	UW Madison
	Gio Rapacciuolo	UC Merced – PhD candidate
	Eric Williams	UC Merced – PhD candidate
	Danaan DeNeve	UC Merced – PhD candidate
	Robert Boria	UC Merced – PhD candidate
	Nate Fox	UC Merced – PhD candidate

Campbell, Elliott	James Stinecipher	UC Merced – PhD candidate
Chen, Yihsu	Not available	
Chen, YangQuan	Not available	
Conklin, Martha	UCWater collaborators	<i>(See Bales)</i>
	CZO collaborators	<i>(See Bales)</i>
	John Battles	<i>UC Berkeley/SNAMP</i>
	Maggie Kelly	<i>UC Berkeley/SNAMP</i>
Conklin, Martha	Steve Stephens	<i>UC Berkeley/SNAMP</i>
	Lynn Huntsinger	<i>UC Berkeley/SNAMP</i>
	Stefano Casitrati	UC Merced – PhD candidate
	Melissa Thaw	UC Merced – PhD candidate
Dawson, Michael	Bob Wayne	<i>UCLA</i>
	Rasmus Nielsen	UCB
	Beth Shapiro	UCSC
	Jeff Wall	UCSF
	Karly Higgins	UC Merced – PhD candidate
	Lauren Schiebelhut	UC Merced – PhD candidate
	Giovanni Rapacciuolo	UC Merced – PhD candidate
	Dannise Ruiz	UC Merced – PhD candidate
Diaz, Gerardo	Andres Munoz	UC Merced – PhD candidate
	Viacheslav Plotnikov	UC Merced – PhD candidate
	Sai Thani Kiran Hota	UC Merced – PhD candidate
	Hector Gomez	UC Merced – PhD candidate
	Genesis Higueros	UC Merced - undergrad
	Jose Rbalcaba-Cruz	UC Merced - undergrad
	Juan De Dios Mariscal	UC Merced – undergrad
	Uriel Paez Reyes	UC Merced - undergrad
Edwards, Daniel	Kinsey Brock	UC Merced – PhD candidate
	Megha Suswaram	UC Merced – PhD candidate
	Laura Van Vranken	UC Merced – PhD candidate
	Indiana Madden	UC Merced – undergrad
	Kaithlen Zen Pacheco	UC Merced - undergrad
	Robert Degen	UC Merced – undergrad
	Anthony Javiya	UC Merced - undergrad
Fogel, Marilyn	Alexander, Conel	Carnegie Institution of Washington
	Miller, Gifford	University of Colorado
	Misc.	Stroud Water Research Institute
	Steele, Andrew	Carnegie Institution of Washington
Frank, Carolin	Albalasmeh, Ammar	Jordan University of Science and Technology

Frank, Carolin	Jackie Shay Dana Carper Paola Saldierna Jame Kupihea Jorge Montiel	UC Merced – PhD candidate UC Merced – PhD candidate UC Merced – PhD candidate UC Merced – PhD candidate UC Merced – PhD candidate
Ghezzehei, Teamrat	Bayala, Roger Berli, Markus	Institut Senegalais Pour la Recherche Agricole Desert Research Institute, Nevada
Ghezzehei, Teamrat	Carminati, Andrea Dijkema, Jelle Furman, Alex Moret, David Sancho, Carolina Pena Van Der Ploeg, Marine Van Genuchten, Rien Jessica Alvarez Samuel Araya Toshiyuki Bandai Touyeee Thao	University of Gottingen Wageningen University and Desert Research Institute Technion Institute, Israel Consejo Superior de Investigaciones Cientificas Consejo Superior de Investigaciones Cientificas Wageningen University Federal University of Sao Paulo UC Merced – PhD candidate UC Merced – PhD candidate UC Merced – PhD candidate UC Merced – PhD candidate
Guo , Qinghua	SNAMP	(See Conklin)
Harmon, Tom	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 Reid, Brian Rundel, Philip	University of California Riverside Universidad Austral de Chile University of Nevada Reno Universidad de la República, 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 Oceanografía & Universidad Nacional del Sur, Argentina Instituto Argentino de Oceanografía & Universidad Nacional del Sur, Argentina University of Costa Rica Centro de Investigaciones en Ecosistemas de la Patagonia, Universidad Austral de Chile UCLA
Harmon, Tom	Rusak, James	Queen's University and Ontario Ministry of

	Schwendenmann, Luitgard Scordo, Facundo	the Environment University of Auckland, New Zealand Universidad Nacional del Sur, Argentina
	Scott, Dane Silvia, London	University of Montana Instituto de Investigaciones Económicas y Sociales del Sur
	Velez, Maria Wemple, Beverley Zelikova, Jane Zilio, Mariana	University of Regina, Canada University of Vermont University of Wyoming Instituto de Investigaciones Económicas y Sociales del Sur
	Henry Pai Diganta Adhikari Irvin Arroyo Angel Fernandez Bou	UC Merced – PhD candidate UC Merced – PhD candidate UC Merced – PhD candidate UC Merced – PhD candidate
Hart, Stephen	James Kupihea Morgan Barnes Nicholas Dove Susan Soltau Emma Aronson Cliff Riebe Mengqiang Zhu Ben Sullivan	UC Merced – PhD candidate UC Merced - PhD candidate UC Merced - PhD candidate UC Merced - MS candidate UC Riverside University of Wyoming University of Wyoming University of Nevada Reno
Hestir, Erin	Christiana Ade Erik Bolch Brandon Genco Brittany Lopez Barreto	UC Merced PhD– candidate UC Merced PhD– candidate UC Merced PhD– candidate UC Merced PhD– candidate
Hull, Kathleen	Adam Fleenor	UC Merced PhD– candidate
Innes, Robert	not available	
Jenkins, Jeffrey	Madeline Brown Dana Swarth Jeremy Neil Felber Jair Bermudez	UC Merced PhD– candidate UC Merced PhD– candidate UC Merced PhD– candidate UC Merced PhD– candidate
Joyce, Andrea	Not available	
Keske, Catherine	Elizabeth Holcomb	UC Merced PhD– candidate
Lecari, Nicola	not available	

Leppert, Valerie	Henry Forman Dra. Monserrat Bizarro-Sordo	Davis School of Gerontology, USC, US Materials Institute, UNAM, Mexico
Matlock, Tennie	Annaliza Torres Not available	UC Merced PhD – candidate
Medellin-Azura, Josue	Jorge Valero	UC Merced PhD– candidate
Moran, Emily	Mengjun Shu Jeffrey Lauder Dean Wu	UC Merced PhD– candidate UC Merced PhD– candidate UC Merced PhD– candidate
Nobile, Clarissa	Diana Rodriguez Ashley Valle Arevalo Craig Ennis Thaddeus Seher Akshay Paropkari Austin Perry Priyanka Bapat Sabah Ul-Hasaon	UC Merced PhD– candidate UC Merced PhD– candidate UC Merced PhD– candidate UC Merced PhD– candidate UC Merced PhD– candidate UC Merced PhD– candidate UC Merced PhD– candidate UC Merced PhD– candidate
O'Day, Peggy	Stefanie Helmrich Nigel Quinn Paul Aronstein Rolf Mehlhorn Julie Collignan	UC Merced PhD– candidate LBNL UC Merced PhD– candidate LBNL LBNL
Rice, Robert	Butler, Leslie Glaser, Steve Horwath, William Zhang, Ziran Steven Glazier	UC Davis University of California Berkeley University of California Davis UC Berkeley UC Berkeley
Rogge, Woflgang	Not available	
Sexton, Jason	Blackman, Ben Carscadden, Kelly Hirst, Megan Hoffmann, Ary	University of Virginia University of Toronto University of Melbourne University of Melbourne
Sexton Jason	Slatyer, Rachel Dannise Ruiz Ramos Molly Stephens Daniel Toews Brandon Hendrickson	University of Melbourne UC Merced PhD– candidate UC Merced PhD– candidate UC Merced PhD– candidate UC Merced PhD– candidate

	Jacqueline Shay	UC Merced PhD– candidate
	Lillie Pennington	UC Merced PhD– candidate
	Jorge Armando Montiel	UC Merced PhD– candidate
	Molina	UC Merced PhD– candidate
	Sunshine Lopez	UC Merced PhD– candidate
	Gabriel Zepeda	UC Merced PhD– candidate
	Mimi Pomephimkam	UC Merced PhD– candidate
	Chungtug Asa Francisco	UC Merced PhD– candidate
Traina, Samuel	None	
Westerling, Anthony	Xu Qingqing	UC Merced – PhD candidate
	Samrajya Thapa	UC Merced – PhD candidate
	Sam Jonathan	UC Merced – PhD candidate
Winston, Roland	Constance Chang-Hasnain	UC Berkeley
	Pieter Stroeve	UC Davis
	Umesh Mishra	UCSB
	Alfredo Martinez-Morales	UC Riverside
	Yang Yang	UCLA
	Matthew Law	UC Irvine
	Michael Isaacson	UCSC
	Steve DenBaars	UCSB
	Nael El-Farra	UC Davis
	Ali Javey	UC Berkeley
	Sungho Jin	UC San Diego
	Zhaowei Liu	UC San Diego
	Patrick Mantey	UCSC
	Adam Moule	UC Davis
	Sayeff Salahuddin	UC Berkeley
	James Speck	UCSB
	Daniel Sperling	UC Davis
	Sadrul Ula	UC Riverside
	Jerry Woodall	UC Davis
	Ming Wu	UC Berkeley
	Eli Yablonovitch	UC Davis
Viers, Joshua	UC Water collaborator	(see Bales)
	Alan Cai	UC Merced PhD– candidate
	Vicky Espinoza	UC Merced PhD– candidate
	Anna Fryjoff-Hung	UC Merced PhD– candidate
Viers, Joshua	Alison Whipple	UC Merced PhD– candidate
	Lorenzo Booth	UC Merced PhD– candidate

9.) Numbers and FTE of academic research personnel, technical staff, and administrative personnel paid through the unit's accounts. Page 12

This reflects only the state accounts. The attachment shows all personnel paid with state funds and grants.

Administrative Personnel 6 FTE

- *See Attachment B for a more complete listing of these individuals (pages 20-21)*

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. Page 12

The SNRI faculty, students and staff are a strong representative group of the UC Merced community, which has one of the most diverse student populations in the UC system. *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.

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. Pages 22-59

SNRI does not ask faculty, researchers or 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 the 335 publications by SNRI faculty and researchers in the 2017/2018 academic year retrieved from online databases. (pages 22-59)*

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. Page 13

<i>FY 17/18 Active Grants and Contracts to faculty</i>	\$ 3,275,073.05
<i>Gifts</i>	\$ 148,785.00
<i>State Funding (SNRI Operations)</i>	\$ 612,047.71

- **See Attachment D for all funds administered by SNRI (page 60-63).**
- **See Attachment E for Gift details (pages 64-65)**

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.

18 new proposals were awarded this fiscal year, with a total value of \$ 6,403,726.00

Important note: *There are two Research administrators in SNRI and they provide both pre-award and post-award support for the faculty and manage the activity of over 50 active grants. This year a number of*

Proposals prepared: 59

Proposals submitted: 49

Proposals funded: 18

Note: These are minimum numbers, and may reflect missing data for some faculty. This data is from the UC Merced CAYUSE system

- **See Attachment F for FY 17/18 Grant activity (Pages 66-68)**

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

Direct Research	\$ 3,275,073.05
Academic Salaries	\$ 118,937.71
Career Staff	\$ 325,087.51
Student Appointments	\$ 40,572.00
General Operations	\$ 3,621.08
Travel	\$ 13,583.90
Benefits	\$ 188,398.45
Other Expenses	\$ 27,787.70
Total	\$ 3,804,662.95

14.) Description and amount of space currently occupied. Page 14

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. Page 14

- Continue the development of SNRI research by supporting faculty and other researchers. Contribute to the further development of UC Merced as a world class research university. Help faculty and researchers build stronger partnerships and engagement with research, governance and policy leaders focused on the Sierra and Central Valley regions, and comparative regions world-wide.
- Coordinate with planning to have SNRI be a part of the Sustainability group in the new Campus Building.
- Contribute to recruiting additional new faculty and expanding engagement with sustainability related research.
- Reactivate the SNRI Directors Council.
- Develop Seminar Programs/Speaker events for SNRI and campus audiences, through efforts of faculty and staff.
- Achieve a more balanced workload for the ORU administrative support staff.

ATTACHMENT: A

SNRI Salon #1

November 14, 2017

Meeting with various SNRI faculty and Director

All faculty were invited

Legislator engagement

- Cori Lucero to meet with SNRI Faculty
- How can researchers affect legislation?
 - Climate Foci
 - November 28th a meeting on campus. California Room, 30 people attending . Invite only. Regarding AB-109 regarding \$11 million in Carbon Cap & Trade funds. Discussion about possible continuing Appropriation.

Water Topic visits

- Jim Costa – Local Congressman
- Ask Cori to arrange for elected office representatives to meet with SNRI Faculty – either on campus or in Sacramento.
- Arrange for meetings with faculty and State Agency program managers.

Research Topics that can enage \$ (grant, donation, UCOP)

- Topics that connect to climate indirectly
- Review creative approaches for researchers to connect with State Funding opportunities
- Local applied research inventory

Congressional National Science Day

- Washington DC visit for faculty to meet with lawmakers

Communications Training for faculty

- Identify types of training – public speaking – media
- <http://mrcmediatraining.com> is an outstanding training (AQ)

Climate Communications Group

- What do they do?
- Need for more faculty involvement
- Need a faculty lead
- Workshops on climate for water agencies

Water Agencies

- Invite to campus

Status of external Advisory Committee?

- Needs to be reconstituted

SNRI Web of connections

- Social
- What do we do and what do we need to do it better and be supported
- Describe the Research Portfolio of SNRI and identify what is missing

Organize for large calls

- Which large grants does SNRI target? Now through 2020
- INFUSE
- Good ideas will demand hard work
- UCHBC partnership
 - Develop staff to support Faculty and Students
 - Documentation for proposals
 - Institutional Data & commitments
 - Grant Coordinator with campus knowledge : Housing, dining, logistics, student life, etc

Research Week

- Showcase SNRI research breadth and topics
- Engage undergraduates
- Engage a broader external audience

Earth day events for SNRI?

- Partnership with other units LES/ES
- Host events like Jessica Blois put together at Karmangar Theatre
- Food Security as a key topic

Help with Grants for faculty

- Prosper has been a big help
- Need to expand Grant support

SNRI Salon #2

November 16, 2017

Meeting with various SNRI faculty and Director

All faculty were invited

Sustainability

- Where are the campus investments?
- What does our signature look like?
- Sustainability as an SNRI pillar
- Is part of SNRI descriptor
- Focused on this region (Crest to Coast) and around the world
- Co-Location of 20 SNRI Faculty
- Sustainability as a core
- Is SNRI too regional? Think about narrative
- New Faculty don't see themselves as having research that fits the SNRI foot print
- Progressive
- Public Health - synergy to be illustrated

Agriculture engagement

- Strengthen Water-Ag connection
- Need lead PI's on grants
- Need a senior sustainability faculty member
- Endowed Chair for Sustainability/Agriculture

State Funding opportunities for research

- \$11 million available for carbon cap & trade

Articulate the SNRI Base

- Ag faculty
- ANR investments
- What are the strategic areas
- Research strengths within SNRI
- Identify larger grants that help build around core areas
- Identify people who will lead going forward
- Endowed Chair
- Leverage existing faculty
- Self organize and nucleate around foci
- Macrosystems ecology
- Find Faculty to lead
- Identify key faculty members

Marketing

- AFRI Proposals

Funding

- Graduate Student funding
- Private funding
- Directors Council

Other Partners

* UCSD ~Center for Climate impacts and Adaptation
(created with Alumni Donation and Provost Funding)

L.E.S. Earth Day Event

- Mike Beman
- Justin Yeagel
- Rebecca Ryles

Emily & Jay

- Carpentry Workshops

Thematic Areas of SNRI

- Transform Economy
- Adapt to Climate Change
- Applications of basic Science & Social Science on equal footing
- Change individual behavior toward X, Y, Z...
- Climate Impacts and Adaptation

ATTACHMENT B

For Appointment Department: **F100 - SIERRA NEVADA RESEARCH INSTITUTE**

This list is divided into lists that reflect the following. The first box includes all SNRI employees paid with state funds. The additional boxes reflect the variety of appointments and funding sources managed by SNRI for research and administration. The funding source is indicated by employee in the third column. Available database information does not allow for a complete report here.

Employee Full Name	Title Long Description	Fund source
FRISE,ANDRE CRAIG	ASSISTANT 1	STATE
GALVAN,CRYSTAL ANN	ADMINISTRATIVE OFFICER 2	STATE
HAGERMAN,MEKENNA VICTORIA	ASSISTANT I	STATE
QUINTERO,ARMANDO M	EXECUTIVE ADVISOR 4	STATE
VALLE-AREVALO,ALEXIS IVONN	RESEARCH ADMINISTRATOR 3	STATE
VENTURA,CLEOTILDE T	ADMINISTRATIVE SUPERVISOR 2	STATE
Total SNRI Employees: 6		

Appointment Type Code: **5** | Appointment Type Description: **ACADEMIC**

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

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

Employee Full Name	Title Long Description	Fund source
GALVAN,CRYSTAL ANN	ADMINISTRATIVE OFFICER 2	STATE
GILMORE,MICHELLE ELIZABETH	STAFF RESEARCH ASSOCIATE II	GRANT
HAGERMAN,MEKENNA VICTORIA	ASSISTANT I	STATE
MENG,XIANDE	RESEARCH DATA ANALYST 2	GRANT
QUINTERO,ARMANDO M	EXECUTIVE ADVISOR 4	STATE
STACY,ERIN MICHELE	STAFF RESEARCH ASSOCIATE III	GRANT
VALLE-AREVALO,ALEXIS IVONN	RESEARCH ADMINISTRATOR 3	STATE

VENTURA,CLEOTILDE T	ADMINISTRATIVE SUPERVISOR 2	STATE
WOMBLE,PATRICK	STAFF RESEARCH ASSOCIATE III	GRANT
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	GRANT
SERNA,BLAZ M	LABORATORY ASSISTANT I	GRANT
TAYLOR,ROBERT JAMES	LABORATORY ASSISTANT I	GRANT
Total LIMITED Employees: 3		

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

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

ATTACHMENT C

All publications listed are from Google Scholar

Publications – Books, Journal Articles, Reports

Faculty Member	Publications 17/18 Year.
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Ardell, David	Adaptive Partitioning of the tRNA Interaction Interface by Aminoacyl-tRNA-Synthetases A Collins-Hed, DH Ardell bioRxiv, 312462
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Ardell, David	Whole RNA-sequencing and transcriptome assembly of <i>Candida albicans</i> and <i>Candida africana</i> under chlamydospore-inducing conditions D Giosa, MR Felice, TJ Lawrence, M Gulati, F Scordino, L Giuffrè, ... Genome biology and evolution 9 (7), 1971-1977
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Bales, Roger	Spatial snow water equivalent estimation for mountainous areas using wireless-sensor networks and remote-sensing products Z Zheng, NP Molotch, CA Oroza, MH Conklin, RC Bales Remote Sensing of Environment 215, 44-56
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Bales, Roger	Management Implications of Snowpack Sensitivity to Temperature and Atmospheric Moisture Changes in Yosemite National Park, CA JW Roche, RC Bales, R Rice, DG Marks JAWRA Journal of the American Water Resources Association 54 (3), 724-741
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Bales, Roger	Subsurface plant-accessible water in mountain ecosystems with a Mediterranean climate PZ Klos, ML Goulden, CS Riebe, CL Tague, AT O'Geen, BA Flinchum, ... Wiley Interdisciplinary Reviews: Water 5 (3), e1277
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Bales, Roger	Estimating evapotranspiration change due to forest treatment and fire at the basin scale in the Sierra Nevada, California JW Roche, ML Goulden, RC Bales Ecohydrology, e1978
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Bales, Roger	Mechanisms controlling the impact of multi-year drought on mountain hydrology RC Bales, ML Goulden, CT Hunsaker, MH Conklin, PC Hartsough, ... Scientific reports 8 (1),
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Bales, Roger	Designing a network of critical zone observatories to explore the living skin of the terrestrial Earth SL Brantley, WH McDowell, WE Dietrich, TS White, P Kumar, ... Earth Surface Dynamics
Bales, Roger	Emerging stress and relative resiliency of Giant sequoia groves experiencing multiyear dry periods in a warming climate Y Su, RC Bales, Q Ma, K Nydick, RL Ray, W Li, Q Guo Journal of Geophysical Research: Biogeosciences 122 (11), 3063-3075
Bales, Roger	Insights into mountain precipitation and snowpack from a basin-scale wireless-sensor network Z Zhang, S Glaser, R Bales, M Conklin, R Rice, D Marks Water Resources Research 53 (8), 6626-6641
Bales, Roger	Forest thinning impacts on the water balance of Sierra Nevada mixed-conifer headwater basins PC Saksa, MH Conklin, JJ Battles, CL Tague, RC Bales Water Resources Research 53 (7), 5364-5381
Bales, Roger	Technical report: The design and evaluation of a basin-scale wireless sensor network for mountain hydrology Z Zhang, SD Glaser, RC Bales, M Conklin, R Rice, DG Marks Water Resources Research 53 (5), 4487-4498
Beman, Michael	Microbial community networks associated with variations in community respiration rates during upwelling in nearshore Monterey Bay, California JM Wilson, SY Litvin, JM Beman Environmental microbiology reports 10 (3), 272-282
Beman, Michael	Archaeal, bacterial, and eukaryal microbial community structure of sediment and seawater in a coastal region near Puerto Nuevo, Baja California S Ul-Hasan, RM Bowers, A Figueroa-Montiel, AF Licea, JM Beman, ... bioRxiv, 324442
Beman, Michael	Nature Communications D Kuh, J Kuusisto, M Laakso, TA Lakka, T Lehtimäki, A Metspalu, ... Nature 9 (1), 321

- Beman, Michael Primary Production, Community Respiration, and Net Community Production along Oxygen and Nutrient Gradients: Environmental Controls and Biogeochemical Fe...
J Wilson, S Abboud, JM Beman
Frontiers in Marine Science 4, 12
- Berhe, Asmeret Distinct bioenergetic signatures in particulate versus mineral-associated soil organic matter
EK Williams, ML Fogel, AA Berhe, AF Plante
Geoderma 330, 107-116
- Berhe, Asmeret Role of Soil Erosion in Biogeochemical Cycling of Essential Elements: Carbon, Nitrogen, and Phosphorus
AA Berhe, RT Barnes, J Six, E Marín-Spiotta
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- Berhe, Asmeret Pyrogenic carbon erosion: implications for stock and persistence of pyrogenic carbon in soil
RB Abney, AA Berhe
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- Berhe, Asmeret Vulnerability of physically protected soil organic carbon to loss under low severity fires
M Jian, AA Berhe, M Berli, TA Ghezzehei
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- Berhe, Asmeret Subsurface plant-accessible water in mountain ecosystems with a Mediterranean climate
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- Berhe, Asmeret Beyond clay: towards an improved set of variables for predicting soil organic matter content
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- Berhe, Asmeret Biogeochemistry: The soil carbon erosion paradox
J Sanderman, AA Berhe
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- Berhe, Asmeret The future of ecology is collaborative, inclusive and deconstructs biases
KS Ramirez, AA Berhe, J Burt, G Gil-Romera, RF Johnson, AM Koltz, ...
Nature Ecology and Evolution, doi:10.1038/s41559-017-0445-7

- Berhe, Asmeret Post-wildfire erosion in mountainous terrain leads to rapid and major redistribution of soil organic carbon
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- Berhe, Asmeret Lessons from the Earth Science Women's Network
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- Berhe, Asmeret Healthy Soils for Healthy Societies
AA Berhe, R Amundson, AE Sztein
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- Berhe, Asmeret Brave new world
K Lajtha, E Bai, T Baisden, AA Berhe, B Bowden, J Brookshire, E Brzostek, ...
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SN Araya, ML Fogel, AA Berhe
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- Berhe, Asmeret Erosional redistribution of topsoil controls soil nitrogen dynamics
AA Berhe, MS Torn
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- Berhe, Asmeret Carbon Dynamics
AA Berhe, C Arnold, L Jin, M Kaiser, R Lever
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- Berhe, Asmeret Influence of topography on soil organic carbon dynamics in a Southern California grassland
C Fissore, BJ Dalzell, AA Berhe, M Voegtli, M Evans, A Wu
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- Beutel, Marc Bioavailability and uptake of smelter emissions in freshwater zooplankton in northeastern Washington, USA lakes using Pb isotope analysis and trace metal concent...
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Beutel, Marc	Nutrient Fluxes From Profundal Sediment of Ultra-Oligotrophic Lake Tahoe, California/Nevada: Implications for Water Quality and Management in a Changing Climate MW Beutel, AJ Horne Water Resources Research 54 (3), 1549-1559
Beutel, Marc	Tracking long-distance atmospheric deposition of trace metal emissions from smelters in the upper Columbia River valley using Pb isotope analysis of lake sediments AW Child, BC Moore, JD Vervoort, MW Beutel Environmental Science and Pollution Research 25 (6), 5501-5513
Beutel, Marc	Influence of dominant environmental processes in the tropical Cuban basin Hanabanilla and reservoir on sediment composition Y Labaut, CR Betancourt, M Díaz-Asencio, MW Beutel Limnetica 37 (2), 297-309
Beutel, Marc	Effects of nitrate addition on water column methylmercury in Occoquan Reservoir, Virginia, USA MW Beutel, R Duvil, FJ Cubas, TJ Grizzard Water research 110, 288-296
Beutel, Marc	Evaluation of atmospheric nitrogen deposition model performance in the context of US critical load assessments JJ Williams, SH Chung, AM Johansen, BK Lamb, JK Vaughan, M Beutel Atmospheric Environment 150, 244-255
Blois, Jessica	Multiresponse algorithms for community-level modelling: Review of theory, applications, and comparison to species distribution models D Nieto-Lugilde, KC Maguire, JL Blois, JW Williams, MC Fitzpatrick Methods in Ecology and Evolution 9 (4), 834-848
Blois, Jessica	How will climate novelty influence ecological forecasts? Using the Quaternary to assess future reliability MC Fitzpatrick, JL Blois, JW Williams, D Nieto-Lugilde, KC Maguire, ... Global change biology
Blois, Jessica	The Neotoma Paleoecology Database, a multiproxy, international, community-curated data resource JW Williams, EC Grimm, JL Blois, DF Charles, EB Davis, SJ Goring, ... Quaternary Research 89 (1), 156-177

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Campbell, Elliot	Reviews and syntheses: Carbonyl sulfide as a multi-scale tracer for carbon and water cycles ME Whelan, ST Lennartz, TE Gimeno, R Wehr, G Wohlfahrt, Y Wang, ... Biogeosciences 15 (12), 3625-3657
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- Campbell, Elliot The case for local food in sustainable food-energy-water systems
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- Campbell, Elliot Plant uptake of atmospheric carbonyl sulfide in coast redwood forests
JE Campbell, ME Whelan, JA Berry, TW Hilton, A Zumkehr, J
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- Campbell, Elliot Assessing a new clue to how much carbon plants take up
JE Campbell, J Kesselmeier, D Yakir, JA Berry, P Peylin, S Belviso, ...
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- Campbell, Elliot Peak growing season gross uptake of carbon in North America is
largest in the Midwest USA
TW Hilton, ME Whelan, A Zumkehr, S Kulkarni, JA Berry, IT Baker,
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- Campbell, Elliot A cost of tractability? Estimating climate change impacts using a single
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W Thompson, S Gerlt, JE Campbell, LM Kueppers, Y Lu, MA Snyder
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- Campbell, Elliot Large historical growth in global terrestrial gross primary production
JE Campbell, JA Berry, U Seibt, SJ Smith, SA Montzka, T Launois, ...
Nature 544 (7648), 84
- Campbell, Elliot Improving attributional life cycle assessment for decision support: the
case of local food in sustainable design
Y Yang, JE Campbell
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- Campbell, Elliot Improving attributional life cycle assessment for decision support: the
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- Campbell, Elliot The Rise of Legal Positivism in Germany: A Prelude to Nazi
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HB Acton, DM Adams, MJ Allen, MJ Allen, S Cooper, MJ Allen,
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Chen, Yang Quan	An Improved Frequency-domain Method for the Fractional Order PI λ D μ Controller Optimal Design W Zheng, Y Luo, Y Chen, Y Pi, W Yu IFAC-PapersOnLine 51 (4), 681-686
Chen, Yang Quan	Backstepping-based boundary control design for a fractional reaction diffusion system with a space-dependent diffusion coefficient J Chen, B Cui, YQ Chen ISA transactions
Chen, Yang Quan	PID2018 Benchmark Challenge: Model Predictive Control With Conditional Integral Control Using A General Purpose Optimal Control Problem Solver-RIOTS S Dehghan, T Zhao, Y Zhao, J Yuan, A Ates, YQ Chen arXiv preprint arXiv:1806.01976
Chen, Yang Quan	PID2018 benchmark challenge: Multi-objective stochastic optimization algorithm A Ates, J Yuan, S Dehghan, Y Zhao, C Yeroglu, YQ Chen arXiv preprint arXiv:1806.00958
Chen, Yang Quan	PID2018 Benchmark Challenge: Model-based Feedforward Compensator with A Conditional Integrator J Yuan, A Ates, S Dehghan, Y Zhao, S Fei, YQ Chen arXiv preprint arXiv:1806.00137
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Chen, Yang Quan	A detailed study on accuracy of uncooled thermal cameras by exploring the data collection workflow T Zhao, H Niu, A Anderson, YQ Chen, J Viers Autonomous Air and Ground Sensing Systems for Agricultural Optimization and ...

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HG Sun, Y Zhang, D Baleanu, W Chen, YQ Chen
Communications in Nonlinear Science and Numerical Simulation
- Chen, Yang Quan General Robustness Analysis and Robust Fractional-Order PD Controller Design for Fractional-Order Plants
D L Liu, S Zhang, Xue, Y Chen
IET CTA [http://digital-library.theiet.org/content/journals/10.1049/iet-cta ...](http://digital-library.theiet.org/content/journals/10.1049/iet-cta...)
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- Chen, Yang Quan Continuous fractional-order Zero Phase Error Tracking Control
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- Chen, Yang Quan Extraction of Coal and Gangue Geometric Features with Multifractal Detrending Fluctuation Analysis
K Liu, X Zhang, YQ Chen
Applied Sciences 8 (3), 463
- Chen, Yang Quan Regional Analysis of Time-Fractional Diffusion Processes
F Ge, YQ Chen, C Kou
Springer International Publishing
- Chen, Yang Quan LoopSmart: Smart Visual SLAM Through Surface Loop Closure
G Zhang, YQ Chen
arXiv preprint [arXiv:1801.01572](https://arxiv.org/abs/1801.01572)
- Chen, Yang Quan New integral inequalities and asymptotic stability of fractional-order systems with unbounded time delay
BB He, HC Zhou, CH Kou, YQ Chen
Nonlinear Dynamics, 1-12
- Chen, Yang Quan Fixed-Wing MAV Adaptive PD Control Based on a Modified MIT Rule with Sliding-Mode Control
AT Espinoza-Fraire, YQ Chen, A Dzul, R Lozano, R Juarez
Journal of Intelligent & Robotic Systems, 1-14
- Chen, Yang Quan Industrial feedforward control technology: a review
L Liu, S Tian, D Xue, T Zhang, YQ Chen
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- Chen, Yang Quan Spreadability
F Ge, YQ Chen, C Kou
Regional Analysis of Time-Fractional Diffusion Processes, 199-213
- Chen, Yang Quan Conclusions and Future Work
F Ge, YQ Chen, C Kou
Regional Analysis of Time-Fractional Diffusion Processes, 233-248
- Chen, Yang Quan Regional Controllability
F Ge, YQ Chen, C Kou
Regional Analysis of Time-Fractional Diffusion Processes, 45-120
- Chen, Yang Quan Regional Stability and Regional Stabilizability
F Ge, YQ Chen, C Kou
Regional Analysis of Time-Fractional Diffusion Processes, 215-232
- Chen, Yang Quan Regional Detection of Unknown Sources
F Ge, YQ Chen, C Kou
Regional Analysis of Time-Fractional Diffusion Processes, 181-197
- Chen, Yang Quan Regional Observability
F Ge, YQ Chen, C Kou
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boundary controlled fractional reaction diffusion system
J Chen, B Cui, YQ Chen, L Mao
Control Conference (ASCC), 2017 11th Asian, 2435-2440
- Chen, Yang Quan Mechanical response and simulation for constitutive equations with
distributed order derivatives
JS Duan, YQ Chen
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Computing 8 ...
- Chen, Yang Quan Challenges in water stress quantification using small unmanned aerial
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T Zhao, B Stark, YQ Chen, AL Ray, D Doll
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X Zhang, YQ Chen
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L Sun, H Chen, YQ Chen
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- Chen, Yang Quan A New Cuckoo Search
Z Lian, L Lu, Y Chen
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J Yu, J Cao, WH Liao, Y Chen, J Lin, R Liu
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A Ates, BB Alagoz, C Yeroglu, J Yuan, YQ Chen
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XF Zhang, YQ Chen
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- Chen, Yang Quan A Survey of Fractional-Order Neural Networks
S Zhang, YQ Chen, Y Yu
ASME 2017 International Design Engineering Technical Conferences
- Chen, Yang Quan On the Controllability of Distributed-Order Fractional Systems With Distributed Delays
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- Chen, Yang Quan Quantifying almond water stress using unmanned aerial vehicles (uavs): correlation of stem water potential and higher order moments of non-normalized canopy dis...
T Zhao, YQ Chen, A Ray, D Doll
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B Shang, C Wu, Y Zhang, YQ Chen
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K Cao, CB Zeng, YQ Chen, D Yue
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S Zhang, YQ Chen, Y Yu
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K Liu, Y Chen, X Zhang
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MS Sharifi, K Christensen, A Chen, D Stuart, YS Kim, YQ Chen
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Attachment: D

SNRI Account Summary by Department of all
Grant/Research/Gift Funds

Account Summary by Department
For the period June 1,2018 to June 24,
2018

EXPENDITURES (Current Funds)

Department : F100 SIERRA NEVADA RESEARCH INSTITUTE

Account/CC	Fund	Fiscal Year		Inception		Encumbranc e	Ledger Balance ()=Debit
		Appropriation ()=Debit	Expenditure s ()=Credit	Appropriatio n ()=Debit	Expenditure s ()=Credit		
449001	RESEARCH-SIERRA NEVADA RES INST-OPER						
	23494	1689.04	1689.04	19936.21	19936.21		0.00
Total 449001		1689.04	1689.04	19936.21	19936.21	0.00	0.00
449001/2A	RESEARCH-SNRI-OPERATIONS						
	19900	611408.19	570326.11	611408.19	570326.11	216.91	40865.17
	37365						0.00
	40061	19908.57	2847.21	19908.57	2847.21	209.83	16851.53
	55163				7969.94		0.00
	68320	16473.65	743.61	16473.65	743.61		15730.04
Total 449001/2A		647790.41	573916.93	655760.35	573916.93	426.74	73446.74
449001/6A	RESEARCH-SNRI-OPERATIONS-DEPT RESEARCH						
	69085						0.00
Total 449001/6A		0.00	0.00	0.00	0.00	0.00	0.00
449001/AJ	RESEARCH-SIERRA NEVADA RES INST-A. JOYCE						
	69085						0.00
Total 449001/AJ		0.00	0.00	0.00	0.00	0.00	0.00
449001/CC	RESEARCH-SNRI-CLIMATE COMMUNICATION						
	19900		28072.81		28072.81		(28072.81)
	40061	13384.32	11167.17	13384.32	11167.17		2217.15
Total 449001/CC		13384.32	39239.98	13384.32	39239.98	0.00	(25855.66)
449001/MS	RESEARCH-SIERRA NEVADA RES INST-SAFEEQ						
	22473	47276.76	8853.24	121650.00	83226.48		38423.52
	57569	3487.14	2661.64	34861.00	34035.50		825.50
Total 449001/MS		50763.90	11514.88	156511.00	117261.98	0.00	39249.02
449001/VR	RESEARCH-SNRI-OPERATION-VEHICLE RECHARGE						
	19900	6000.00	3732.84	6000.00	3732.84		2267.16
Total 449001/VR		6000.00	3732.84	6000.00	3732.84	0.00	2267.16
449001/WA	RESEARCH-SNRI-WAWONA FIELD STATION-OP						
	19900					0.01	(0.01)
	68320	364.49		364.49			364.49
Total 449001/WA		364.49	0.00	364.49	0.00	0.01	364.48
Total 449001		719992.16	630093.67	851956.37	754087.94	426.75	89471.74
449002/NM	RESEARCH-SNRI-IDC RETURN-N MILLER						
	20095	567.50		567.50			567.50
Total 449002/NM		567.50	0.00	567.50	0.00	0.00	567.50
449002/RR	RESEARCH-SNRI-IDC RETURN-R RICE						
	20095	720.18		720.18			720.18
Total 449002/RR		720.18	0.00	720.18	0.00	0.00	720.18
449002/SJ	RESEARCH-SNRI-IDC RETURN-S JEPSON						
	20095	23.31		23.31			23.31
Total 449002/SJ		23.31	0.00	23.31	0.00	0.00	23.31
449002/WR	RESEARCH-SNRI-IDC RETURN-ROGGE						
	20095	69.92		69.92			69.92
Total 449002/WR		69.92	0.00	69.92	0.00	0.00	69.92
Total 449002		1380.91	0.00	1380.91	0.00	0.00	1380.91
449205/CF	RESRCH-SNRI EARTH SYS-PART SUPP-C-FRANK						

	21267	20000.00	4464.54	20000.00	4464.54		15535.46
Total 449205/CF		20000.00	4464.54	20000.00	4464.54	0.00	15535.46
Total 449205		20000.00	4464.54	20000.00	4464.54	0.00	15535.46
449208/RB	RES-SNRI-ENV ENG-OVRD VAR-R BALES						
	21241	4770.30		12445.00	7674.70		4770.30
Total 449208/RB		4770.30	0.00	12445.00	7674.70	0.00	4770.30
Total 449208		4770.30	0.00	12445.00	7674.70	0.00	4770.30
449209/RB	RESEARCH-SNRI-ENV ENG-PART SUPP-BALES						
	21241	30973.39		300064.00	269090.61		30973.39
Total 449209/RB		30973.39	0.00	300064.00	269090.61	0.00	30973.39
Total 449209		30973.39	0.00	300064.00	269090.61	0.00	30973.39
449213/ER	RES-SNRI-COMPUTER SCI & ENG-E ROLLAND						
	58117						0.00
Total 449213/ER		0.00	0.00	0.00	0.00	0.00	0.00
Total 449213		0.00	0.00	0.00	0.00	0.00	0.00
449214	RESEARCH-SNRI-ENVIRONMENTAL ENGINEERING						
	23494			244.36	244.36		0.00
Total 449214		0.00	0.00	244.36	244.36	0.00	0.00
449214/AJ	RESEARCH-SNRI-ENV ENG ANDREA JOYCE						
	58134			14628.84	14628.84		0.00
Total 449214/AJ		0.00	0.00	14628.84	14628.84	0.00	0.00
449214/AW	RESEARCH-SNRI-ENVRNMNTL ENG-A WESTERLING						
	18344	26386.07	16934.38	250000.00	240548.31	6097.85	3353.84
	18355	53638.42	19185.26	118464.00	84010.84		34453.16
	22114	(572.01)		60000.00	60572.01		(572.01)
	22477	87742.44	24918.63	190000.00	127176.19		62823.81
	22553	39998.00	7325.28	39998.00	7325.28		32672.72
	57558	12581.70	12569.22	153019.52	153007.04		12.48
	57578	53342.92	9613.76	61557.00	17827.84		43729.16
	69090		72274.37		72274.37		(72274.37)
Total 449214/AW		273117.54	162820.90	873038.52	762741.88	6097.85	104198.79
449214/J1	RESEARCH-SNRI-ENVIRONMENTL ENG-CAMPBELL						
	37658	16991.05		16991.05			16991.05
Total 449214/J1		16991.05	0.00	16991.05	0.00	0.00	16991.05
449214/JC	RESEARCH-SNRI-ENV ENG-J ELLIOT CAMPBELL						
	21300	1219658.35	371623.70	1346241.00	498206.35	142555.94	705478.71
	22423	248183.23	131546.53	623284.68	506647.98	91740.74	24895.96
	37658	70000.00	28198.96	70000.00	28198.96		41801.04
	58110	1452.82	1694.55	249277.00	249518.73		(241.73)
	69763	275673.38		275673.38			275673.38
	69851	3521.49		3521.49			3521.49
Total 449214/JC		1818489.27	533063.74	2567997.55	1282572.02	234296.68	1051128.85
449214/JV	RES-SNRI-ENVIR ENG-J VIERS						
	58122			34238.14	34238.14		0.00
Total 449214/JV		0.00	0.00	34238.14	34238.14	0.00	0.00
449214/M1	RESEARCH-SNRI-ENVIRONMENTL ENG-M CONKLIN						
	18308	59063.06	35364.21	100000.00	76301.15		23698.85
	21241	260539.03	125795.43	587682.00	452938.40		134743.60
Total 449214/M1		319602.09	161159.64	687682.00	529239.55	0.00	158442.45
449214/M2	RESEARCH-SNRI-ENVIRONMENTL ENG-M CONKLIN						
	18308	88000.00		88000.00			88000.00
	69085	100227.65	89665.19	100227.65	89665.19		10562.46
Total 449214/M2		188227.65	89665.19	188227.65	89665.19	0.00	98562.46
449214/MB	RESEARCH-SNRI-ENVIRON ENG-BEUTEL						
	20961	146857.00	26085.24	146857.00	26085.24	1454.12	119317.64
Total 449214/MB		146857.00	26085.24	146857.00	26085.24	1454.12	119317.64
449214/MC	RESEARCH-SNRI-ENVIRONMENTL ENG-M CONKLIN						
	18308	16643.03	14987.71	68183.00	66527.68		1655.32

	21241	132969.60	29890.50	254348.20	151269.10		103079.10
	22488		34184.68		34184.68	8271.01	(42455.69)
	22489	387597.00	5603.15	387597.00	5603.15		381993.85
	22600	272419.89	270016.93	394099.00	391696.04	2957.49	(554.53)
	26723	17652.24	16623.95	162000.00	160971.71		1028.29
	40061	95000.00	780.83	95000.00	780.83	518.26	93700.91
	40080	18885.46		18885.46			18885.46
Total 449214/MC		941167.22	372087.75	1380112.66	811033.19	11746.76	557332.71
449214/QG	RESEARCH-SNRI-ENVIRONMENTAL ENG-Q. GUO						
	21263	51231.38	32181.07	265854.00	246803.69		19050.31
	22482	6355.21		38409.00	32053.79		6355.21
	22604			50492.26	50492.26		0.00
Total 449214/QG		57586.59	32181.07	354755.26	329349.74	0.00	25405.52
449214/R1	RESEARCH-SNRI-ENVIRONMENTAL ENG-R. BALES						
	21241	555913.60	335499.52	1749270.80	1528856.72	1077.25	219336.83
	22480	8919.34	11872.81	20000.00	22953.47		(2953.47)
Total 449214/R1		564832.94	347372.33	1769270.80	1551810.19	1077.25	216383.36
449214/R2	RESEARCH-SNRI-ENVIRONMENTAL ENG-R. BALES						
	21241	59581.04	8280.39	139513.00	88212.35		51300.65
	40061	4759.50	1004.08	4759.50	1004.08		3755.42
	69085	244847.35	235956.68	244847.35	235956.68	19310.62	(10419.95)
Total 449214/R2		309187.89	245241.15	389119.85	325173.11	19310.62	44636.12
449214/RB	RESEARCH-SNRI-ENVIRONMENTAL ENG-R. BALES						
	18365	370293.54	70908.80	454644.00	155259.26		299384.74
	19900	459666.00	3080.00	459666.00	3080.00	18252.84	438333.16
	21205	0.01		1705393.81	1705393.80		0.01
	21241	241007.99	41301.83	550094.00	350387.84	64409.77	135296.39
	22470	(239.76)	(239.76)	238436.00	238436.00		0.00
	22475	(9.55)	(610.84)	122500.00	121898.71		601.29
	22480	102322.03	66191.04	304000.00	267869.01		36130.99
	36470	(344.74)		(344.74)			(344.74)
	40080	30602.34	2717.63	30602.34	2717.63		27884.71
	58007	104433.00	26265.41	104433.00	26265.41		78167.59
	69085	803.09		803.09			803.09
	69835		610.84		610.84		(610.84)
	75554	0.32	0.32	0.32	0.32		0.00
Total 449214/RB		1308534.27	210225.27	3970227.82	2871918.82	82662.61	1015646.39
449214/RR	RESEARCH-SNRI-ENVIR ENG-R. RICE						
	22471	2451730.23	68400.09	206005.23	136822.28		2383330.14
Total 449214/RR		2451730.23	68400.09	206005.23	136822.28	0.00	2383330.14
449214/ST	RESEARCH-SNRI-ENVIRONMENTAL ENG-TRAINA						
	58637	120000.00	33255.45	120000.00	33255.45		86744.55
Total 449214/ST		120000.00	33255.45	120000.00	33255.45	0.00	86744.55
449214/WR	RESEARCH-SNRI-ENVIRO ENGINEERING W ROGGE						
	69085	15000.00		15000.00			15000.00
Total 449214/WR		15000.00	0.00	15000.00	0.00	0.00	15000.00
Total 449214		8531323.74	2281557.82	12734396.73	8798778.00	356645.89	5893120.03
449216/YC	RESEARCH-SNRI-MECHANICAL ENG-Y CHEN						
	36470	43770.32	10653.49	43770.32	10653.49		33116.83
Total 449216/YC		43770.32	10653.49	43770.32	10653.49	0.00	33116.83
Total 449216		43770.32	10653.49	43770.32	10653.49	0.00	33116.83
449224/RB	RSRCH-SNRI-ENV ENG-COST SHARE-BALES						
	19900		66501.17		66501.17		(66501.17)
Total 449224/RB		0.00	66501.17	0.00	66501.17	0.00	(66501.17)
Total 449224		0.00	66501.17	0.00	66501.17	0.00	(66501.17)
449253/AB	RES-SNRI-EARTH SYSTEMS SCIENCES-A BERHE						
	21241	9319.25	2616.55	16896.00	10193.30		6702.70
Total 449253/AB		9319.25	2616.55	16896.00	10193.30	0.00	6702.70

449253/CF	RES-SNRI-EARTH SYSTEMS SCIENCES-C FRANK						
	21267	1053583.29	240802.94	1633447.00	820666.65	58985.53	753794.82
Total 449253/CF		1053583.29	240802.94	1633447.00	820666.65	58985.53	753794.82
449253/JS	RES-SNRI-EARTH SYSTEMS SCIENCES J SEXTON						
	40061	7263.88	53.48	7263.88	53.48		7210.40
Total 449253/JS		7263.88	53.48	7263.88	53.48	0.00	7210.40
449253/LK	RESEARCH-SNRI-EARTH SYSTEMS SCIENCES						
	22410	7332.65	7332.65	1090275.87	1090275.87		0.00
Total 449253/LK		7332.65	7332.65	1090275.87	1090275.87	0.00	0.00
449253/NM	RES-SNRI-EARTH SYSTEMS SCIENCES-N MILLER						
	69085	203.68		203.68			203.68
Total 449253/NM		203.68	0.00	203.68	0.00	0.00	203.68
449253/PO	RESEARCH-SNRI-EARTH SYSTEMS-P. O'DAY						
	18244		1117.17		1117.17	19.23	(1136.40)
	21221			299999.52	299999.52		0.00
	22426	116851.56	109632.03	200000.00	192780.47	7.08	7212.45
	40061	8103.19	1982.36	8103.19	1982.36		6120.83
	58139	267626.63	157991.68	485999.00	376364.05	368.07	109266.88
Total 449253/PO		392581.38	270723.24	994101.71	872243.57	394.38	121463.76
449253/SH	RESEARCH-SNRI-EARTH SYSTEMS - S. HART						
	18366	68644.77	34399.01	140907.00	106661.24	27.76	34218.00
	21241	116777.15	71612.45	240392.00	195227.30	400.03	44764.67
	37499	3000.00	15.40	3000.00	15.40		2984.60
	37658	18371.00		18371.00			18371.00
	40061	14250.00		14250.00		1628.67	12621.33
	57097	45677.34	24265.25	92643.00	71230.91	1336.52	20075.57
	58149			5392.79	5392.79		0.00
Total 449253/SH		266720.26	130292.11	514955.79	378527.64	3392.98	133035.17
449253/TG	RES-SNRI-EARTH SYSS SCIENCES T-GHEZZEHEI						
	22484	343010.16	126127.04	357300.00	140416.88	63.00	216820.12
Total 449253/TG		343010.16	126127.04	357300.00	140416.88	63.00	216820.12
Total 449253		2080014.55	777948.01	4614443.93	3312377.39	62835.89	1239230.65
449315/KH	RESEARCH-SNRI-ANTHROPOLOGY-K. HULL						
	25653			89261.51	89261.51		0.00
	25655			34472.55	34472.55		0.00
	25657	59944.99	23774.05	74015.01	37844.07	9085.00	27085.94
Total 449315/KH		59944.99	23774.05	197749.07	161578.13	9085.00	27085.94
Total 449315		59944.99	23774.05	197749.07	161578.13	9085.00	27085.94
449318/NL	RESEARCH-SNRI-HISTORY-LERCARI						
	18387	15000.00	495.55	15000.00	495.55		14504.45
	37658		5774.45		5774.45		(5774.45)
	58609		4294.48		4294.48		(4294.48)
Total 449318/NL		15000.00	10564.48	15000.00	10564.48	0.00	4435.52
Total 449318		15000.00	10564.48	15000.00	10564.48	0.00	4435.52
449321/AJ	RESEARCH-SNRI-PSYCHOLOGY-A. JOYCE						
	20958	50000.00	36923.71	50000.00	36923.71	19.58	13056.71
	58145	(1450.05)	2747.68	50000.00	54197.73		(4197.73)
	58148			36470.67	36470.67		0.00
	58608	221.64		25391.00	25169.36		221.64
	58616	12877.19	12877.19	49000.00	49000.00		0.00
	58633	45000.00	30737.61	45000.00	30737.61	1400.19	12862.20
	58639	49800.00	40311.04	49800.00	40311.04	872.73	8616.23
Total 449321/AJ		156448.78	123597.23	305661.67	272810.12	2292.50	30559.05
Total 449321		156448.78	123597.23	305661.67	272810.12	2292.50	30559.05
629001/DH	PUBLIC SERVICE-SNRI-NPI-HOSLEY						
	40039	991.86		991.86			991.86
	69262	9082.55		9082.55		1368.52	7714.03
Total 629001/DH		10074.41	0.00	10074.41	0.00	1368.52	8705.89

629001/RB	PUBLIC SERVICE-SNRI-R. BALES					
	69851	20968.93	15177.79	20968.93	15177.79	5791.14
Total 629001/RB		20968.93	15177.79	20968.93	15177.79	0.00
Total 629001		31043.34	15177.79	31043.34	15177.79	1368.52
629213/ER	PUBLIC SERV-SNRI-COMP SCI & ENG-ROLLAND					
	58117			13826.86	13826.86	0.00
Total 629213/ER		0.00	0.00	13826.86	13826.86	0.00
Total 629213		0.00	0.00	13826.86	13826.86	0.00
789214/JC	FINANCIAL AID-SNRI-ENV ENG-CAMPBELL					
	37658	(26588.82)		(26588.82)		(26588.82)
Total 789214/JC		(26588.82)	0.00	(26588.82)	0.00	0.00
789214/MC	FINANCIAL AID-SNRI-ENV ENG-CONKLIN					
	18308	(12294.00)		12240.00	24534.00	(12294.00)
Total 789214/MC		(12294.00)	0.00	12240.00	24534.00	0.00
789214/RB	FIN AID-SNRI-ENVIRONMENTAL ENG-R BALES					
	21241		11360.47	17488.00	28848.47	(11360.47)
Total 789214/RB		0.00	11360.47	17488.00	28848.47	0.00
Total 789214		(38882.82)	11360.47	3139.18	53382.47	0.00
789253/PO	FIN AID-SNRI-LIFE/ENV SCIENCE-O'DAY					
	18244		17249.17		17249.17	(17249.17)
Total 789253/PO		0.00	17249.17	0.00	17249.17	0.00
Total 789253		0.00	17249.17	0.00	17249.17	0.00
State Funds		1077074.19	671712.93			
Gifts		99263.66	19771.93			
Grants		10300990.12	3275073.05			
Totals		11477327.97	3966557.91			

Attachment: E**Gifts Administered through Development and Alumni Relations**

<u>Fund Description</u>	<u>Organization Name</u>	<u>Title</u>	<u>First Name</u>	<u>Last</u>	<u>Gift Amount</u>
SNRI - Climate Feedback	FirstGiving	Mr.	Dan	Sandberg	\$10.00
SNRI - Climate Feedback	FirstGiving	Mr.	Dan	Sandberg	\$10.00
SNRI - Climate Feedback	FirstGiving	Mr.	Ville	Lahde	\$50.00
SNRI - Climate Feedback	FirstGiving	Mr.	Dan	Sandberg	\$10.00
SNRI - Climate Feedback	FirstGiving	Mr.	Ville	Lahde	\$50.00
SNRI - Climate Feedback	FirstGiving	Mr.	Dan	Sandberg	\$10.00
SNRI - Climate Feedback	FirstGiving	Mr.	Peter	Roberts	\$50.00
SNRI - Climate Feedback	FirstGiving	Mr.	Dan	Sandberg	\$10.00
SNRI - Climate Feedback	FirstGiving	Mr.	Dan	Sandberg	\$10.00
SNRI - Climate Feedback	FirstGiving	Mr.	Anthony	White	\$10.00
UCTV Sustainable California Channel		Dr.	Herbert	Blossom	\$5,000.00
SNRI - Climate Feedback	FirstGiving	Mr.	Dan	Sandberg	\$10.00
SNRI: Hydrology Research Program	Vanguard Charitable				\$20,000.00
SNRI: Terrestrial Ecosystem Ecology Research PI: Steve Hart		Dr.	Stephen	Hart	\$15,000.00
Sierra Nevada Research Institute Fund			Anonymous		\$5,000.00
Sierra Nevada Research Institute Fund		Mr.	Gary	Kremen	\$1,700.00
SNRI - Climate Feedback	FirstGiving	Mr.	Ville	Lahde	\$50.00
Sierra Nevada Research Institute Fund		Mr.	Stephen	Ho	\$50.00
Sierra Nevada Research Institute Fund		Dr.	Emily	Moran	\$15.00
Sierra Nevada Research Institute Fund			Anonymous		\$25.00
SNRI - Climate Feedback	FirstGiving				\$30.00
UC WATER Security and Sustainability Research Initiative		Ms.	Danielle	Dawang	\$50.00
SNRI - Climate Feedback		Mr.	Dan	Sandberg	\$10.00
SNRI - Building Local Capacity to Restore Forest Resiliency	The PG&E Corporation Foundation				\$100,000.00
SNRI - Climate Feedback	FirstGiving	Mr.	Dan	Sandberg	\$10.00
SNRI - Climate Feedback	FirstGiving	Mr.	Dan	Sandberg	\$10.00
SNRI - Climate Feedback	FirstGiving	Mr.	Peter	Smith	\$20.00
SNRI - Climate Feedback	FirstGiving	Mr.	David	Slater	\$20.00
Sierra Nevada Research Institute Fund			Erin	Hestir	\$10.00
Sierra Nevada Research Institute Fund			Fernanda	Santos	\$10.00
Sierra Nevada Research Institute Fund		Ms.	Mary	Newman	\$40.00
Sierra Nevada Research Institute Fund		Professor	Valerie	Leppert	\$50.00
SNRI - Climate Feedback	FirstGiving	Dr.	Harvey	Fernbach	\$25.00
Sierra Nevada Research Institute Fund		Mr.	Stephen	Ho	\$25.00
Sierra Nevada Research Institute Fund				Kayser-	
Sierra Nevada Research Institute Fund		Ms.	Lisa	Grant	\$30.00
SNRI - Climate Feedback	FirstGiving	Mr.	James	Schlather	\$100.00
SNRI - Climate Feedback	FirstGiving	Mr.	Dan	Sandberg	\$10.00
Sierra Nevada Research Institute Fund		Mr.	Armando	Quintero	\$200.00
Sierra Nevada Research Institute Fund		Mr.	Peter	Michael	\$100.00
SNRI - Climate Feedback	FirstGiving	Mr.	Gary	Smith	\$50.00

SNRI - Climate Feedback	FirstGiving	Mr.	David	Slater	\$20.00
Sierra Nevada Research Institute Fund		Mr.	George	Kelley	\$100.00
SNRI - Climate Feedback	FirstGiving	Mr.	Declan	Conway	\$100.00
Sierra Nevada Research Institute Fund		Dr.	Melanie	Yeo	\$20.00
Sierra Nevada Research Institute Fund		Ms.	Anthea	Hansen	\$50.00
Sierra Nevada Research Institute Fund		Dr.	Elizabeth	Whitt	\$50.00
Sierra Nevada Research Institute Fund		Ms.	Sara	White	\$20.00
Sierra Nevada Research Institute Fund		Mr.	Armando	Quintero	\$25.00
SNRI - Climate Feedback	FirstGiving	Mr.	Dan	Sandberg	\$10.00
SNRI - Climate Feedback	FirstGiving	Mr.	David	Slater	\$20.00
Sierra Nevada Research Institute Fund		Dr.	Karen	Merritt	\$500.00
Total					\$148,785.00

ATTACHMENT: F (next 3 pages)

This information is from the UC Merced CAYUSE records

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

Proposals prepared 57

Proposals submitted 50

Proposal funded 18

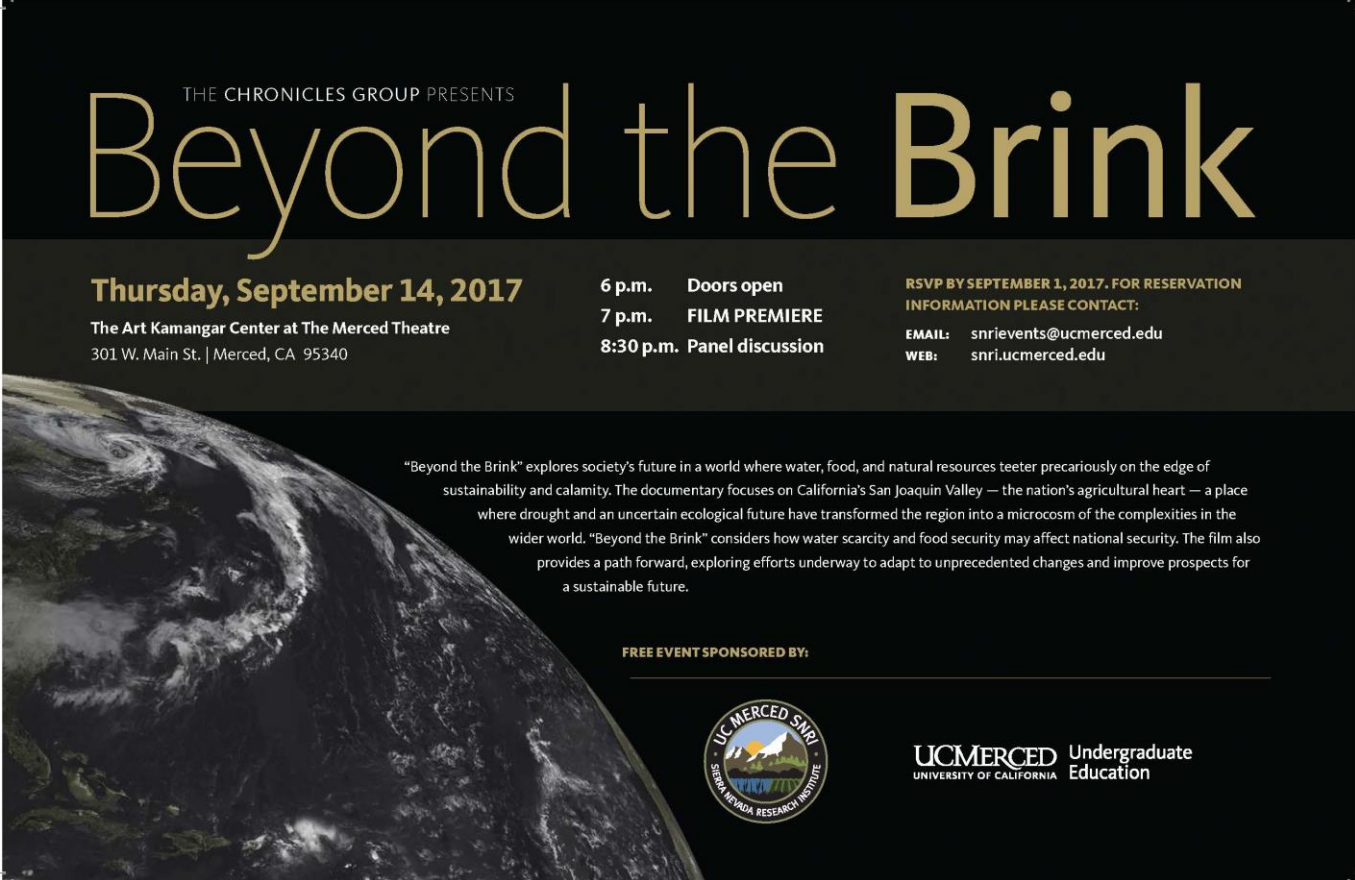
Total value of newly funded proposals in FY 16/17 \$6,403,726.00

06/05/2018	18-0482	BALES	2018bales_nsf_Southern-Sierra_czo_supplemental	5400 - NATIONAL SCIENCE FOUNDATION - NSF	SNRI
	18-0481	O'DAY	2018o'day_Cal-Fish_Wildlife_Ecosystem_Restoration	6530 - CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE - DFG	SNRI
06/04/2018	18-0480	WESTERLING	2018westerling_calfire_san-mateo-county	6522 - CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION - CAL FIRE	SNRI
	18-0479	EDWARDS	DEdwards_NSF_CAREER_07-18-18-SP-18-0467	5400 - NATIONAL SCIENCE FOUNDATION - NSF	SNRI
05/29/2018	18-0472	BALES	2018bales_nsf_Southern-Sierra_czo_supplemental	5400 - NATIONAL SCIENCE FOUNDATION - NSF	SNRI
	18-0467	EDWARDS	DEdwards_NSF_CAREER_07-18-18-SP-18-0467	5400 - NATIONAL SCIENCE FOUNDATION - NSF	SNRI
05/23/2018	18-0453	BALES	2018bales_usda-nlgca_conference	VB76 - CALIFORNIA STATE UNIVERSITY, FRESNO	SNRI
05/21/2018	18-0442	O'DAY	2018beutel_o'day_traina_savannah-river_doe_msipp	F9CA - SAVANNAH RIVER NUCLEAR SOLUTIONS, LLC	SNRI
	18-0434	BERHE	2018berhe_LDRD	6766 - UC LAWRENCE LIVERMORE NATIONAL LABORATORY (U.S. DOE)	SNRI
05/11/2018	18-0428	Moran	2018moran_nsf_eager	5400 - NATIONAL SCIENCE FOUNDATION - NSF	SNRI
05/08/2018	18-0423	BERHE	2018berhe_hart_barneys_fellowshp-doe	5090 - DEPARTMENT OF ENERGY WASHINGTON, D.C. - DOE	SNRI
05/01/2018	18-0413	ROGGE	2018rogge_citris_seed_funding	FD5F - UC CENTER FOR INFORMATION TECHNOLOGY RES IN INTEREST OF SOCIETY-CITRIS	SNRI
04/18/2018	18-0406	GHEZZEHEI	2018ghezzehei-ucdavis-sub-dwr	6763 - UC DAVIS	SNRI
04/19/2018	18-0405	Safeeq	2018safeeq_TNC_April	7262 - NATURE CONSERVANCY	SNRI
04/18/2018	18-0391	BERHE	Student travel support to advance US Soil Science	5400 - NATIONAL SCIENCE FOUNDATION - NSF	SNRI
04/04/2018	18-0374	WESTERLING	2018westerling_sgc_sub-ucla	6764 - UNIVERSITY OF CALIFORNIA, LOS ANGELES - UCLA	SNRI
03/14/2018	18-0350	BEMAN	2018beman_ucmexus_march	6732 - UC MEXUS	SNRI
03/07/2018	18-0340	WESTERLING	2018westerling_noaa_sub-ucsd	6778 - UC SAN DIEGO	SNRI
02/14/2018	18-0305	BERHE	2018sulman_berhe_doe-sub_boston	8166 - BOSTON UNIVERSITY	SNRI
02/15/2018	18-0290	Moran	2018moran_forest-future	VG6Q - SEQUOIA RIVERLANDS TRUST	SNRI

02/16/2018	18-0288	BERHE	2018sulman_berhe_doe-sub_colorado	V8JD - UNIVERSITY OF COLORADO BOULDER	SNRI
02/15/2018	18-0284	BERHE	2018sulman_berhe_doe-sub_dartmouth	9659 - DARTMOUTH COLLEGE	SNRI
02/22/2018	18-0261 	FRANK	2018-frank-doe-march	VBFL - DEPARTMENT OF ENERGY OFFICE OF SCIENCE/OFFICE OF BASIC ENERGY SCIENCES - DOE BES	SNRI
05/04/2018	18-0236	Pathak	2018tapan_ucanr-Climate-outreach	6774 - UC AGRICULTURE AND NATURAL RESOURCES - UCANR	SNRI
01/18/2018	18-0218	HART	2017barnes_natural-reserve-system_Mathias-Grant	7159 - UC NATURAL RESERVE SYSTEM	SNRI
12/09/2017	18-0216	CONKLIN	Conklin-nsf-psu-iuse-sub-2017	8979 - PENNSYLVANIA STATE UNIVERSITY	SNRI
11/23/2017	18-0209	BERHE	2017berhe_nsf_EAGER_Nov	5400 - NATIONAL SCIENCE FOUNDATION - NSF	SNRI
11/15/2017	18-0192	Lercari	2017Lercari_Parks-&-Recreation_3D_Experiences	6540 - CALIFORNIA PARKS AND RECREATION, DEPARTMENT OF - CAL RA	SNRI
10/23/2017	18-0153	Edwards	2017-Edwards_SCI_Genomics_Oct-31	VBGS - SAFARI CLUB INTERNATIONAL FOUNDATION	SNRI
10/16/2017	18-0148	Beutel	2017beutel_nsf_oct-20-17	5400 - NATIONAL SCIENCE FOUNDATION - NSF	SNRI
10/09/2017	18-0122	BERHE	2017-berhe_nsf-sub_georgia-southern_10.16.17	0307 - GEORGIA SOUTHERN UNIVERSITY	SNRI
09/25/2017	18-0108	O'DAY	2017sea-grant_fellowship_O'Day_Stefanie	6735 - UC SEA GRANT COLLEGE PROGRAM	SNRI
09/28/2017	18-0100	CONKLIN	2017usda_agricultural_research_service_water	0350 - US DEPARTMENT OF AGRICULTURE AGRICULTURAL RESEARCH SERVICE ARS - USDA	SNRI
09/07/2017	18-0079	CONKLIN	Hemlock Forest-Restoration Project 2	4123 - BUREAU OF RECLAMATION - USDI	SNRI
09/01/2017	18-0075	BERHE	2017_ucop_fellowship_berhe_moreland	6773 - UNIVERSITY OF CALIFORNIA OFFICE OF THE PRESIDENT - UCOP	SNRI
08/31/2017	18-0069	GHEZZEHEI	2017ghezzehei_nsf_sub	7200 - OHIO STATE UNIVERSITY	SNRI
09/11/2017	18-0062	BALES	2017bales_nsf_owia	5400 - NATIONAL SCIENCE FOUNDATION - NSF	SNRI
08/27/2017	18-0046	FRANK	nsf_sub_texas-tech_frank2017-09-01	9199 - TEXAS TECHNICAL UNIVERSITY	SNRI

08/16/2017	<u>18-0045</u> 	BEMAN	nsf-reu_kelly-beman-sexton_2017-08-23	5400 - NATIONAL SCIENCE FOUNDATION - NSF	SNRI	S
09/08/2017	<u>18-0038</u> 	GHEZZEHEI	2017ghezzehei_bard_sept_13	6798 - UNITED STATES ISRAEL BINATIONAL AGRICULTURAL RESEARCH AND DEVELOPMENT - BARD	SNRI	I
08/28/2017	<u>18-0032</u> 	CONKLIN	MConklin-usda-nifa_infews	0450 - NATIONAL INSTITUTE FOR FOOD AND AGRICULTURE - NIFA	SNRI	I
07/28/2017	<u>18-0029</u> 	BALES	MOU	VHH5 - Blue Forest Conservation LLC	SNRI	I
07/31/2017	<u>18-0020</u> 	BALES	2017bales_wcb_ca	F972 - CALIFORNIA WILDLIFE CONSERVATION BOARD - WCB	SNRI	S
07/14/2017	<u>18-0016</u> 	Jenkins	Improve Visitor Experience in Crowded Wilderness Areas	4180 - NATIONAL PARK SERVICE - NPS	SNRI	V
07/17/2017	<u>18-0015</u> 	Beutel	2017beutel_sub_ucsb_ucop	6771 - UC SANTA BARBARA	SNRI	I
07/12/2017	<u>18-0009</u> 	BEMAN	2018_beman_sub_ucsd_ucop_prime	6778 - UC SAN DIEGO	SNRI	S
08/24/2017	<u>18-0008</u> 	JOYCE	Almonds 2017	8025 - ALMOND BOARD OF CALIFORNIA	SNRI	I
07/20/2017	<u>18-0003</u> 	GHEZZEHEI	Ghezzehei_Fate-of-Carbon_UCOP-2018	6773 - UNIVERSITY OF CALIFORNIA OFFICE OF THE PRESIDENT - UCOP	SNRI	I
07/11/2017	<u>18-0002</u> 	JOYCE	Pistachios 2017	FA2C - CALIFORNIA PISTACHIO RESEARCH BOARD	SNRI	I
	<u>17-0484</u> 	Beutel	Low_energy_nitrogen_removal_from_wastewater	6521 - CALIFORNIA ENERGY COMMISSION - CEC	SNRI	V
07/12/2017	<u>17-0466</u> 	Safeeq	USDA AFRI_Safeeq_7.13.17	0599 - US DEPARTMENT OF AGRICULTURE/MISCELLANEOUS AGENCIES - USDA	SNRI	S
08/10/2017	<u>17-0462</u> 	JOYCE	AJoyce_Merced Mosquito Abatement_2017	VH90 - Merced County Mosquito Abatement District	SNRI	I
07/14/2017	<u>17-0447</u> 	BLOIS	Blois_NSF Career [GEO]_7.21.17	5400 - NATIONAL SCIENCE FOUNDATION - NSF	SNRI	S

ATTACHMENT H: Beyond the Brink – Film Premiere poster



THE CHRONICLES GROUP PRESENTS

Beyond the Brink

Thursday, September 14, 2017
The Art Kamangar Center at The Merced Theatre
301 W. Main St. | Merced, CA 95340

6 p.m. Doors open
7 p.m. FILM PREMIERE
8:30 p.m. Panel discussion

RSVP BY SEPTEMBER 1, 2017. FOR RESERVATION INFORMATION PLEASE CONTACT:
EMAIL: snrievents@ucmerced.edu
WEB: snri.ucmerced.edu

"Beyond the Brink" explores society's future in a world where water, food, and natural resources teeter precariously on the edge of sustainability and calamity. The documentary focuses on California's San Joaquin Valley — the nation's agricultural heart — a place where drought and an uncertain ecological future have transformed the region into a microcosm of the complexities in the wider world. "Beyond the Brink" considers how water scarcity and food security may affect national security. The film also provides a path forward, exploring efforts underway to adapt to unprecedented changes and improve prospects for a sustainable future.

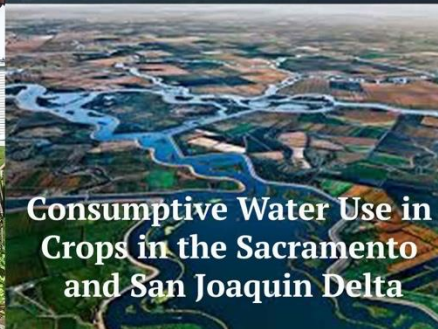
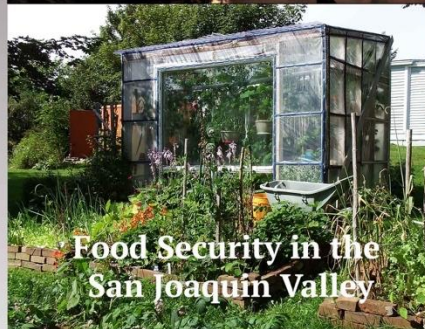
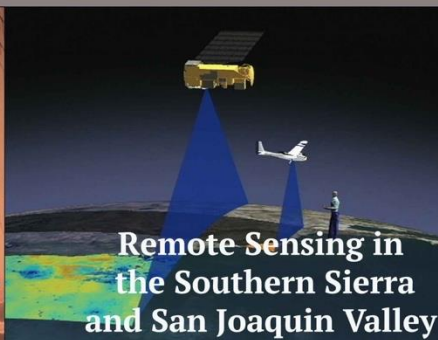
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SNRI Research : In the Southern Sierra and the San Joaquin Valley



Monday, March 5, 2018 12:30 pm – 3:00 pm

Kolligian Library - Room 232

- 1:00 pm Introductions and Overview - Roger Bales, Director - Sierra Nevada Research Institute
- 1:10 pm Remote Sensing in the Southern Sierra and San Joaquin Valley
Erin Hestir, Assistant Professor
- 1:30 pm Consumptive water use in crops in the Sacramento and San Joaquin Delta
Josue Medellin-Azura, Associate Professor
- 1:50 pm Food Security in the San Joaquin Valley
Catherine Keske, Associate Professor
- 2:10 pm Forest disturbance effects on Sierra Nevada Water
Jim Roche, PhD, Yosemite Hydrologist
- 2:30 pm Moderated Discussion

Food and Refreshments Provided





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Attachment: H

SNRI Sustainability and Climate Change speaker

KIM STANLEY ROBINSON



THE NEW YORK TIMES
BEST SELLING AUTHOR
OF "SHAMEN,"
THE "MARS TRILOGY"
AND "NEW YORK 2140"

PRESENTS

**TWO TALKS AT
UC MERCED**

Thursday, April 26

11:30 a.m. KL 232

TALK: "New York 2140"
a changed climate novel
REFRESHMENTS AND PIZZA PROVIDED

3 p.m. COB 116

TALK: John Muir, writer
and activist



PRESENTED BY THE
University of California, Merced
Sierra Nevada Research Institute in partnership with the
UC Merced Center for Climate Communication
and the UC Merced Yosemite Leadership Program

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