## School of Science and Technology (SST) 
### Annual Accomplishment Summary 2017-2018

Dean Lynn Stauffer, Ph.D.

<table>
<thead>
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<th>MAJOR ACCOMPLISHMENTS for 2017-18</th>
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<td>Aligned with the strategic priorities identified in SSU’s Strategic Plan 2018-2025:</td>
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1. **STUDENT SUCCESS**
   - With GI 2025 funding, the first SST Academic Advisor and MESA Coordinator was hired and the SST Student Success and MESA Center was launched with the vision of providing an inclusive and interactive environment for student learning, assistance, and engagement toward students achieving their academic and personal goals.
   - Science & Technology faculty are committed to effective teaching as evidenced by Student Evaluation of Teaching Effectiveness (SET) aggregate scores that report SST faculty are rated as “Very Effective” across all evaluation criteria. With more than 7040 student responses (Fall 2017) and on a 5 point scale, SST faculty averaged scores well above 4.0 (very effective) and amongst the highest rated were: “displayed competence in course topics” (4.53/5.0), “displayed enthusiasm for teaching the course” (4.51/5.0), “respects different points of view” (4.42/5.0) and “my instructor is actively helpful when student have problems” (4.38/5.0).

2. **ACADEMIC EXCELLENCE** and INNOVATION
   - Facilities supporting student learning and engagement opened this year:
     - SSU Makerspace – this collaborative space opened in the SSU Library in Fall 2017. A $580K National Science Foundation Improving Undergraduate STEM Education (IUSE) grant funded this cutting-edge innovation space. New GE course SCI 220: Dream, Make and Innovate is being offered (Area E).
     - SSU Observatory building – the original 41-year old structure was replaced with a state-of-the-art split roof observatory and telescopes were refurbished; ribbon cutting and public viewing night was held on September 8, 2017.
   - Faculty sought opportunities to innovate in their classrooms:
     - Collaboration (NSF subaward) with UC Berkeley on Transforming College Teaching: Statewide Implementation of the Faculty Learning Program to Improve STEM Undergraduate Teaching and Learning continued this year with two faculty cohorts focused on active and engaged learning strategies (with the SSU Faculty Center).
     - Immersive learning (VR/AR/XR) initiative advanced with students in two large GE courses (Introductory Astronomy (ASTR 100) and Introductory Biology (BIO 110)) engaging in immersive learning experiences.
     - Expanded Geology laboratory facilities with new set of petrographic analytical tools that allow students and others to collect first order data to describe and classify rock samples.
   - The Mathematics & Statistics Department is a change leader in the CSU reforming the developmental math curriculum to better serve underprepared students. With funding from the graduation initiative (GI2025), the department ran pilot sections for four new stretch courses in 2017-18. All remedial math courses have been eliminated for 2018-19.
• The national LIGO (Laser Interferometer Gravitational Wave Observatory) Meeting was held at SSU in March 2018. The meeting brings together the top scientists in the breakthrough area of gravitational waves.

3. LEADERSHIP CULTIVATION
• The 6th Annual SSU Science Symposium – a culminating experience rooted in the School’s teacher-scholar faculty model was held on May 2, 2018. The Symposium featured over 160 posters representing the work of over 400 student contributors. Program and poster abstracts at web.sonoma.edu/scitech/symposium/2018_Symposium%20Program.pdf. Student Symposium Ambassadors were added this year – providing a valuable retention experience for lower division students.

• SSU’s first Girls Tinker Academy is being held in Summer 2018. With support from the Community Women Investing in STEM Equity (CWISE) initiative of the Sonoma County Career Technical Education Foundation, the two-week program for middle-school girls is an example of the work SST is doing in our community to broaden participation in STEM. SST student mentors are part of the program with the intent of supporting participants beyond the two-week experience.

• The SST Summer 2018 High School Internship (SHIP) program is in its 11th year. SHIP pairs outstanding Sonoma County high school students in the summer between their junior and senior year with Sonoma State faculty mentors to explore research questions in science. SHIP is a partnership between SST and the Sonoma County Office of Education Foundation.

4. TRANSFORMATIVE IMPACT
• SST inspires young people to pursue STEM studies and careers at the North Bay Discovery Day. Over 15,000 attended the event in Fall 2017. Multiple SST departments staffed hands-on exhibits and demonstrations as part of this transformative community event.

• SST hosted the Expanding Your Horizons conference this year. EYH seeks to connect girls with the fun, interesting and meaningful careers in STEM. SST faculty, staff and students were instrumental in the one-day conference.

• SST sponsored the broad-reaching fire ecology symposium Living with Fire in California’s Coast Ranges held at SSU in May 2018. Cal Fire and US Forest Service were also major sponsors.

SUMMARY of ACCOMPLISHMENTS (based on faculty self-reporting; not all faculty responded)

A. PUBLICATIONS

1. Biology


potential and distinct transcriptome profile of epidermis. Journal of Investigative Dermatology (in press).


2. **Chemistry**


i. This book focuses on the darker, wilder side of chemistry. It covers broad subjects that touch on everyday life, including the chemistry of poisons, illicit drugs, explosives, foods, common household products, and radiation.

ii. This book has been reviewed in the journals: Education in Chemistry, Kirkus Reviews, Chemistry World & Chromatographia.
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### 3. Engineering Science

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<tr>
<td><strong>a.</strong> <strong>S. Shrestha</strong> and <strong>F. Farahmand</strong>, Introducing Project-Based Engineering Laboratory to Non-Engineering Undergraduate Students, Accepted, 2018 ASEE Annual Conference and Exposition, June 2018</td>
</tr>
<tr>
<td><strong>b.</strong> T. McWhorter and <strong>S. Shrestha</strong>, System for Monitoring Air Quality and Smog, Accepted, 2018 IEEE Internal Conference on Electro/Information Technology, May 2018</td>
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<tr>
<td><strong>c.</strong> Y.-T. Chen and <strong>S. Shrestha</strong>, Source Classification of Indoor Air Pollutants using Principal Component Analysis for Smart Home Monitoring Applications, Accepted, 2018 IEEE Internal Conference on Electro/Information Technology, May 2018</td>
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### 4. Geology

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<td><strong>d.</strong> <strong>James, M.J.</strong> 2017. Taxidermy and Taxonomy: A Tale of Two Tortoises. Proceedings of the Pacific Division of the American Association for the Advancement of Science 36(1): 64.</td>
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5. **Kinesiology**


b. David Boffey, **Bulent Sokmen**, Wanda Boda, **Steven Winter**, and **Kurt Sollanek**. (2017) The Effects of Submaximal Load on Peak Power Output and FatigueÂ During the Bench Throw. The Journal of Strength and Conditioning Research


6. **Mathematics & Statistics**


7. **Nursing**

a. Altaker, Krista; Howie-Esquival, Jill; Cataldo, Janine; Relationships among palliative care, ethical climate, empowerment, and moral distress in intensive care unit nurses. American Journal of Critical Care, July 2018 (publication pending).


8. Physics & Astronomy

Peer-reviewed:


c. All-sky search for periodic gravitational waves in the O1 LIGO data. Abbott, B. P. and 1048 co-authors including L. Cominsky, Physical Review D, Volume 96, Issue 6, id.062002 (9/2017)


g. GW170814: A Three-Detector Observation of Gravitational Waves from a Binary Black Hole Coalescence. B. P. and 1109 co-authors including L. Cominsky, Physical Review Letters, Volume 119, Issue 14, id.141101 (10/2017)


o. First low-frequency Einstein@Home all-sky search for continuous gravitational waves in Advanced LIGO data. Abbott, B. P. and 1041 co-authors including L. Cominsky, 2017PhRvD..96l2004A (12/2017)


r. First Search for Nontensorial Gravitational Waves from Known Pulsars. Abbott, B. P. and 1053 co-authors including L. Cominsky, 2018PhRvL.120c1104A (1/2018)

s. All-sky search for long-duration gravitational wave transients in the first Advanced LIGO observing run. Abbott, B. P. and 990 co-authors including L. Cominsky, 2018CQGra..35f5009A (3/2018)

t. Effects of data quality vetoes on a search for compact binary coalescences in Advanced LIGO’s first observing run. Abbott, B. P. and 959 co-authors including L. Cominsky, 2018CQGra..35f5010A (3/2018)

u. Prospects for observing and localizing gravitational-wave transients with Advanced LIGO, Advanced Virgo and KAGRA. Abbott, B. P. and 1099 co-authors including L. Cominsky, Living Reviews in Relativity, Volume 21, Issue 1, article id. 3, 57 (4/2018)

Conference papers:


x. Overview of NASA’s Universe of Learning: An Integrated Astrophysics STEM Learning and Literacy Program. Smith, Denise; Lestition, Kathleen; Squires, Gordon; Biferno, Anya A.; Cominsky, Lynn; Manning, Colleen; NASA’s Universe of Learning Team, 2018AAS...23113103S (1/2018)

1. **Biology**
   
a. **Bentley, L.** Association for Tropical Biology Annual Conference, Merida, Mexico (July 2017)
   
b. **Bentley, L.** Ecological Society of America Annual Meeting (August 2017)
   
c. **Crocker, D.E.** Reproductive energetics and stress ecology of northern elephant seals. UC Berkeley, 2/26/18
   
d. **Crocker, D. E.** Stress and reproduction in northern elephant seals. Moss Landing Marine Lab, 9/24/17
   
e. **Guilford, J.** Five students in GEP359 (co-sponsored by CEI and GEP) Water Research Training course traveled with me to present our research at the Water Resources and Policy Initiatives Conference in Palm Desert April 5-6.
   
f. Mitonuclear interactions influence performance and fitness characters in a montane insect. Presented at the November 2017 meeting of the Entomological Society of America as part of a symposium called "Mitochondria, Metabolism, and Homeostasis: From Molecular Mechanisms to Societies. **N.E. Rank.**
   
   
   
   
j. Michel, Nicolette; Regello, Richard; **Rank, Nathan**. Environmental and genetic influences on larval development rate of montane leaf beetles in nature. Presented at CSUPERB in Jan 2018.
   
k. **St. John, W.** Invited to speak as part of a Princeton "Campus as Lab of Community Practice" presentation on CALL Grant course redesigns: “Restoration Ecology: Copeland Creek as a Living Lab”
   
l. **St. John, W.** Invited to speak as part of the Safari West Summer Speakers Series: “The Western Pond Turtle.” $1,000 honorarium was donated to the San Francisco Zoo to promote turtle research
   
m. **St. John, W.** Invited to speak at the GEP Environmental Forum: “Riparian Restoration on Copeland Creek: A Collaborative Affair”
   
n. **St. John, W.** SSU Biology Department Colloquium talk: “Riparian Restoration on a University Campus: SSU’s Copeland Creek"
   
2. **Chemistry**
   
a. **Farmer, S.** A public outreach talk entitled, "How Chemistry Saved the Whales" was presented to the Petaluma Rotary Club.
   
b. **Farmer, S.** A public outreach talk entitled, "The Most Important Reaction in the World" was presented to the Petaluma Sons in Retirement organization.
   
c. **Farmer, S.** A public outreach talk entitled, "The Most Important Reaction in the World" was presented to the Sonoma chapter of the United Nations Association-USA.
   
d. **Farmer, S.** A talk entitle "Utilizing OER’s in Chemistry Courses" was presented to the CSU Course Redesign with Technology Summer Institute.
e. **Farmer, S.** A Key Note address was given at the San Diego State University ALS Faculty Recognition Fair.


j. **Fukuto, J.M.** “The Chemical Biology of Hydropersulfides (RSSH) and Related Species”, Baylor University, Waco TX, Department of Chemistry and Biochemistry seminar series, April 6, 2018.


m. **Fukuto, J.M.** and Salem, J. “Investigation into the Chemistry of Persulfides and Polysulfides: An Implication of their Biological Functions” 30th Annual Northern California ACS Undergraduate Research Symposium, Oakland CA, 2018.


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3. **Computer Science**

a. **Leal, A.** "Cotton or Silk: Negotiating Fabric Description Through Technology": Given at:
   i. UC Berkeley's Institute of Design
   ii. US Institute for Theater Technologies: as an Engineering Thesis Award
### 4. Engineering Science

| b. | Kassis, S. 2017 CSU Immersive Learning Summit |
| c. | Kassis, S. CS Colloquium, Sonoma State University |
| d. | Shrestha, S. SSU Engineering Friday Tech Talk, Sep. 29, 2017, “Smart Sensing Systems in Medical and Health Applications” |
| e. | Shrestha, S. Engineering Lecture Series, Mar. 1, 2018, “Smart Sensing Systems and Analysis of Exhaled Breath for Detecting Diseases” |
| g. | Shrestha, S. ASEE Annual Conference and Exposition, May 26, 208, “Introducing Project-Based Engineering Laboratory to Non-Engineering Undergraduate Students” |

### 5. Geology

| h. | James, M.J. University of San Diego, San Diego, April 9, 2018. |
| i. | James, M.J. Scripps Institution of Oceanography, La Jolla, April 6, 2018. |
| j. | James, M.J. Stanford Alumni of Sonoma County, January 20, 2018 |
| k. | James, M.J. Syracuse University, Charles Darwin’s Birthday, February 12, 2018 |
l. James, M.J. Sacramento State University, March 7, 2018
m. James, M.J. UC Santa Cruz, Seymour Marine Science Center, March 18, 2018
n. James, M.J. Oakmont, SIR or Sons In Retirement group, Santa Rosa, March 28, 2018
o. James, M.J. Sonoma State Geology Club speaker series, September 27, 2017
p. James, M.J. Spaulding Wooden Boat Center, Sausalito, September 20, 2017
q. James, M.J. Bodega Marine Laboratory, University of California, Davis, July 19, 2017 (second talk).
r. James, M.J. Northern California Geological Society, Orinda, California, June 28, 2017.
s. James, M.J. Bodega Marine Laboratory, University of California, Davis, June 16, 2017.
t. James, M.J. Monterey Bay Aquarium Research Institute, Moss Landing, California, June 7, 2017.
aa. James, M.J. Hopkins Marine Station, Stanford University, Pacific Grove, California, May 9, 2017.

6. Kinesiology

b. Sollanek, K. Gave a 1-hour presentation called “The hydration debate: making sense of the mixed messages” at 4 different National Athletic Training Association (NATA) meetings. The audience was Certified Athletic Trainers (ATCs) who attended to obtain continuing education units (CEU’s) under the category of an “Evidence Based Practice (EBP) Session.”
c. Sollanek, K. Mid America Athletic Trainers’ Association (MAATA); LaVista, NE. March 17, 2018.
e. Sollanek, K. Gatorade Ambassadors Training (GAT); Rosemont, IL. April 11, 2018.
f. Sollanek, K. College Athletic Trainers’ Association (CATS); Las Vegas, NV. May 17, 2018.

7. Mathematics & Statistics

b. Hobson, N. “The slope is increasing!”—Students’ takeaways from Calculus,” Joint National Meeting of the American Mathematical Society and the Mathematical Association of America. San Diego, CA. January, 2018

c. Hobson, N. "Constant Rate of Change: The Reasoning of a Former Teacher and Current Doctoral Student. The slope is increasing!”—Students' takeaways from Calculus. Poster presented at the Twenty First Annual Conference on Research in Undergraduate Mathematics Education. San Diego, CA.

d. Hobson, N. "Habits of Graphing: 'I just don't like that,'" SSU M*A*T*H Colloquium, Sonoma State University, February, 2018

e. Hobson, N. "Students’ Ways of Thinking about Graphs," Abstract presented at the Western sectional meeting of the Mathematical Association of America. Portland, OR. April, 2018

f. Hobson, N. "Quantum Kostka and the Rank one Problem for vector bundles of conformal blocks," talk at Bay Area Discrete (BAD) Math Day conference, Santa Clara University, April, 2018


h. Lahme, B. Meta Math Writing Workshop, Denver, November 2017.

i. Lahme, B. Calculus Workshop, Santa Clara University, Santa Clara, August 2017 (invited presenter).

8. Nursing


b. Altaker, K. Online and Blended Teaching Excellence Program - presentations on pedagogy, student learning outcomes, creating engagement in the online classroom, etc. - Presented poster on project development at Faculty and Graduate Student Scholarship Symposium.

c. Altaker, K. Nursing Ethics Conference - Los Angeles CA - report back to Nursing Department.

d. Ritter, B. Lecture Hyperlipidemia and Hypertension SSU FNP program


f. Rockett, K. Pain Management New Graduates St Joseph


9. Physics & Astronomy


b. Cominsky, L. Adelaide, Australia, "Building the STEM Pipeline with Rockets, UAVs and CubeSats" Frank J. Malina Education prize lecture at the International Astronautical Congress (September 14, 2017)


e. Cominsky, L. Chico, CA (2018) “Gravitational Waves from Merging Binaries” invited lecture at Chico State University (Feb 23, 2018)

f. Cominsky, L. Ukiah, CA (2018) “Gravitational Waves from Merging Binaries” invited lectures to four classes at Ukiah High School State (March 1, 2018)
g. **Cominsky, L.** Rohnert Park, CA (2018) “Gravitational Waves from Merging Binaries” invited lecture at Sonoma State (March 26, 2018)

h. **Cominsky, L.** Arcata, CA (2018) “Gravitational Waves from Merging Binaries” invited lecture at Humboldt State University (April 19, 2018)

i. **Cominsky, L.** Walnut Creek, CA (2018) “Gravitational Waves from Merging Binaries” invited lecture at Mt. Diablo Astronomical Society (April 24, 2018)


k. **Cominsky, L.** Kinmen, Taiwan, "High Energy Views of the Universe", invited education keynote lecture at the annual meeting of the Astronomical Society of the Republic Of China (May 20, 2018)

l. **Targett, T.** OLLI presentation at SSU, “Myths of Astronomy” (50 attendees)

m. **Targett, T.** Public presentation at Wonderfest, “Myths of Astronomy” (300 attendees)

n. **Targett, T.** Presentation to the students at Cloverdale High, “Myths of Astronomy” (40 attendees)

o. **Targett, T.** Physics and Astronomy presentation to TekTrek, “Myths of Astronomy” (120 attendees)

p. **Targett, T.** Physics and Astronomy presentation to Girl Scouts of America SSU campus visit, “Myths of Astronomy” (40 attendees)

q. **Targett, T.** Organized campus-wide invitation Ceilidh (Scottish Dance) event (50 attendees)

### C. NEW FUNDING AWARDED IN 2017-18

#### 1. Biology

a. **Bentley, L.** CSU’s Agricultural Research Initiative grant, “Evaluating the role of pathogen and wildfire interactions in driving calamitous wildfire in Big Sur and Sonoma” (co-PI; no money for SSU, but the grant was partially funded)

b. **Bentley, L.** SSU RSCAP Mini-Grant


e. **Rank, N. and Bentley, L.** The role of sudden oak death as a component of wildfire severity in Sonoma County post-fire. $5000, SST Provost Fund.

f. **St. John, W.** $1,000 WATERS Collaborative award for Copeland Creek restoration

g. **St. John, W.** $2,700 Innovative Strategic Priorities award from SST, for purchasing wildlife cameras and radio telemetry equipment

#### 2. Chemistry


b. **Lares, M.** – PI. KORET Grant.

c. **Negru, B.** – PI. RSCAP- $5911 “Gas Manifold for Localized Surface Plasmon Resonance Spectroscopy and Sensing. “ 2018

d. **Perri, M.** – PI RSCAP Summer Fellowship: $5K “Preparation for Publication of a Manuscript on the Chem Compute Science Gateway,” 2018
3. **Computer Science**

   a. **Leal, A.** Faculty SOURCE Grant: $2000
   
   b. **Leal, A.** RSCAP summer Fellowship: “Designing Technology for Negotiating Material Description”: $5000
   
   c. **Leal, A.** Innovation and Strategic Priorities Grant: “Portable Virtual Reality: Increasing Access”: $2650
   
   d. **Leal, A.** SST Professional Development Proposal: Travel to attend and present at conferences: $2500

4. **Geology**

   a. **Anfinson, O.A.** The Research Council of Norway- INTPART: Co-PI, Changes at the Top of the World through Volcanism and Plate Tectonics: Norwegian-Russian-North American Arctic research and education. Lead PI Carmen Gaina. (University of Oslo) ($5,680,000 NOK ($669,000 USD)).
   
   
   c. **Mookerjee, M.** Submitted in January: NSF-MRI: "MRI: SSU Acquisition of a Variable Pressure Scanning Electron Microscope with integrated EBSD, EDS, WDS, and CL." Decision Pending

5. **Kinesiology**

   a. **Sokmen, B.** SSU Faculty Source Grant, $2100. The effects of caffeine ingestion on metabolism, substrate utilization, acidity, cardiovascular stress, and time to completion during intermittent anaerobic sprinting and aerobic running in SSU cross-country runners.
   
   b. **Sokmen, B.** SSU Faculty Source Grant, $2200. Preventive Medicine: The effects of external forces and unstable surface on sway, center of gravity, linear and angular velocity to predict fall during ambulation
   
   c. **Sokmen, B.** Koret Grant, $2150. The effects of altering the co-activation ratio of the agonist and antagonist muscle groups on skeletal muscle motor recruitment pattern following ACL surgery and during rehabilitation
   
   
   e. **Sollanek, K.** Project title: Sweat App Validation. Funding agency: Koret Foundation, Sonoma State University (Rohnert Park, CA.). Funding: Total costs $3,200. Awarded funding from an internal SSU grant to help support research project and 4 undergraduate Kinesiology students.

6. **Mathematics & Statistics**

   a. **Hobson, N.** Student SOURCE Awards: Two students $1,500 each.
   
   b. **Hobson, N.** Center for Undergraduate Research in Mathematics: $5,000 for faculty and $3,000 for three undergraduate students (for 2018-2019 academic year)
   
   c. **Hobson, N.** Professional Development Funding through Sonoma State School of Science and Tech, two trips sponsored.
   
7. Nursing
   a. **Altaker, K.** Professional Development funds were received from SST for International Ethics Conference attendance with presentation. (approx $2000).
   b. **Wilkosz, M.E.** CVS Minute Clinic Scholarship Grant $5000
   c. **Wilkosz, M.E.** Song Brown Mini Grant - pending - $10,000
   d. **Wilkosz, M.E.** Rohnert Park City "Small Grants" - $5000

8. Physics & Astronomy
   a. **Severson, S.** SSU School of Science and Technology Travel Grant, SSU, $1759

D. CONTINUED FUNDING

1. Biology
   a. **Bentley, L.** National Environment Research Council (NERC) Standard Grant, “Understanding tree architecture, form, and function in the tropics”. £800,000 (co-PI; University of Oxford).
   b. **Bentley, L.** National Science Foundation Grant: Collaborative Research: Developing integrated trait-based.

2. Kinesiology
   a. **Sollanek, K.** Project title: Trials to assess the beverage hydration index of oral rehydration solutions. Funding agency: Entrinsic Health Solutions, LLC (enterade©). Funding: Total costs $25,000. The contract was signed between Company and SSU on December 22, 2016. Data collection for the study took place during the Spring 2017 semester, during which time the study was completed. The manuscript was accepted for publication on December 27, 2017.

3. Mathematics & Statistics
   a. **Brannen, N.S.** CSU-LSAMP Year 5 of Phase 5: $24,980 from Chancellor’s office, $15,020 from NSF, plus an amendment of $5,250 from Statewide LSAMP.

4. Nursing
   b. **Wilkosz, M.E.** Song Brown FNP/PA Grant $192,000

5. Physics & Astronomy
   a. **Cominsky, L.** April 2014, Rockets and CubeSats in the STEM Pipeline, California Space Grant, L. Cominsky Principal Investigator, $9975. Additional funding of $9979 in February 2015, $3000 in 2017.
   b. **Cominsky, L.** June 2015, Fermi and Swift Communications and Outreach, NASA, L. Cominsky, Principal Investigator, $300,000 for 6/1/2015 - 5/31/2018
| c. Cominsky, L. | October 2015, Rising Data: Flight Project Curriculum for Community College Students, NASA Minority University Research and Education Program Community College Curriculum |
| d. Cominsky, L. | Improvement, E. Quealy, Principal Investigator (Napa Valley College), L. Cominsky Co-investigator, $749,922 total for three years, including $268,645 to SSU. |
| e. Cominsky, L. | January 2016, NASA’s Universe of Learning, NASA Science Mission Directorate Cooperative Agreement, D. Smith, Principal Investigator (Space Telescope Science Institute), L. Cominsky Co-investigator, $1,564,824 to SSU for five years. |
| f. Cominsky, L. | April 2016, EdgeCube: A 1U Global Monitor for Earth's Ecosystem, SMD and SpaceGrant, L. Cominsky Principal Investigator, $200,000 for two years. |
| g. Cominsky, L. | July 2016, STEM Education Through Sophomore Innovation (SETSI), Jeremy Qualls, Principal Investigator, L. Cominsky, Co-PI, NSF IUSE program, $584,705 for three years. |
| h. Severson, S. | Instructionally Related Activities (IRA) Funding for SSU Physics Seminar Series - $7,265/year |
| i. Severson, S. | Instructionally Related Activities (IRA) Funding for SSU Observatory Viewing Nights - $3,914/year |

### E. PROFESSIONAL DEVELOPMENT ACTIVITIES

#### 1. Biology

- Bentley, L. CSU Chancellor's Office Grant Proposal Development Mentoring Program.
- Guilford, J. VITaL training (virtual reality).
- Lee, S. In April I attended the TopHat Interact conference/workshop in Phoenix. This conference was aimed at connecting on-line textbook authors/users.
- Rank, N. I continue to oversee the SSU Biodiversity Outreach Program, which is supported by IRA funds. This program engages SSU undergraduate students to present information about groups of organisms to schools, public events, and other groups.
- St. John, W. "Canvas 101" and "Canvas Intermediate" workshops
- St. John, W. Have completed "Canvas Self-Paced for Instructors" training

#### 2. Chemistry

- Works, C. Participated as a Faculty Mentor in the CSU Chancellor’s Office Grant Proposal Development Program.
- Works, C. Started Duuple Training and Development of the Chemistry Department Website.
- Works, C. Coordinated the FLP through the faculty center and funded through a grant from the NSF.
- Wiltse, J. Transforming STEM Teaching Faculty Learning Program, Spring & Fall 2018
- Works, C. Coordinated the Faculty Retreat at SSU Jan. 2018.
- Works, C. Created and worked with GERS to reform GE at SSU
- Works, C. Co-Chaired strategic planning efforts and developed a strategic plan.

#### 3. Computer Science

- Gill, G. POGIL Northwest Regional Workshop, July 2017. Participated in 3-day workshop to learn and facilitate Process Oriented Guided Inquiry Learning (POGIL) activities in classroom.
- Gill, G. CSU 2017-18 Course Redesign with Technology (CRT) Summer Institute, June 2017. Completed a 5-day workshop as part of course redesign award for programming I (CS 115).
- Leal, A. Moodle Assessment Workshop: By Faculty Center
- Leal, A. Sonoma STEM Faculty Learning Program: With $1500 stipend
|   | Leal, A. NSF CAREER Workshop: $1200 travel grant  
| f. | Leal, A. Computer-Human Interaction Conference's Early Career Symposium: Very competitive 1-day event for professional development at premiere research conference  
| 4. | Engineering Science  
| a. | Shrestha, S. Transforming STEM Teaching Faculty Learning Program, Spring & Fall 2018  
| b. | Shrestha, S. Participation in Outreach Programs:  
|   | i. North Bay Science Discovery Day, Oct. 28, 2017, Santa Rosa  
|   | ii. Brooks School in Windsor vision to Engineering Department, May 26, 2018  
| 5. | Geology  
| b. | James, M.J. I attended a lecture series called "Great Writers of the West: Steinbeck and the Environment" at the Bill Lane Center at Stanford University, and was invited to have dinner afterwards with the speakers and their campus hosts at The Faculty Club on the Stanford campus. I made and extended several good professional relationships through these events.  
| c. | James, M.J. I was interviewed four times for radio programs in Philadelphia, Florida, and California, and a couple of these interviews are posted on iTunes.  
| d. | James, M.J. I was interviewed and filmed for a forthcoming documentary about field collectors for the Smithsonian Institution who were active at the same time as the men in my book and who met on board ship with the subjects of my book in Ensenada harbor in June 1905.  
| e. | Mookerjee, M. 1-day short course on “Statistical Treatment of Structural Geology Data,” January 2018  
| f. | Mookerjee, M. "Structure from Motion: a transformative 3D capability for structural geology and tectonics," January 2018  
| g. | Mookerjee, M. Review and demonstration of available geodetic imaging resources - OpenTopography, NCALM, UNAVCO + teaching curricula developed for GETSI, January 2018  
| 6. | Kinesiology  
| a. | Sokmen, B. American College of Sports Medicine annual conference May 29, 2018, at Minneapolis, MN.  
| b. | Sollanek, K. Attended the American College of Sports Medicine Annual Meeting, May 29-31, 2018, Minneapolis, MN.  
| c. | Sollanek, K. Participated in the Universal Design for Learning (UDL) Faculty Learning Community through the Faculty Center, Fall 2017-Spring 2018.  
| d. | Winter, S. Far West Athletic Trainers’ Association Symposium  
| e. | Winter, S. California Athletic Trainers’ Association Symposium  
| 7. | Mathematics & Statistics  
| b. | Hobson, N. Faculty Learning Community on Universal Design of Learning; Faculty Center Workshops: Moodle 101, Moodle Grade Book.  
| c. | Hobson, N. Project NExT (New Experiences in Teaching) Workshops at the MAA MathFest (Summer 2017, 2018).  
| e. | Hobson, N. CSU Chancellor’s Office Sponsored Webinars on Courses and Support around quantitative literacy (Various)  


f. **Hobson, N.** Inclusion Workshop, SSU Math and Stats Department with Aris Wringer. May 2018.

g. **Lahme, B.** Mathematics Consortium Working Group, San Diego, CA, January 2018

h. **Lahme, B.** Joint Mathematics Meetings, San Diego, CA, January 2018

i. **Lahme, B.** Critical Issues in Mathematics Education 2018: Access to mathematics by opening doors for students currently excluded from mathematics, MSRI, February 2018

j. **Lahme, B.** Mathematics Consortium Working Group, San Diego, CA, May 2018

k. **Lahme, B.** Inclusiveness Workshop, Math and Stats Department, SSU, May 2018

8. **Nursing**

a. **Altaker, K.** Unconscious Gender Bias workshop on campus; and coordinated for gender bias workshop in nursing department.

b. **Altaker, K.** CSU's Intro to Quality Online Learning and Teaching course.

c. **Altaker, K.** Career Fair for Nursing at SRJC.

d. **Altaker, K.** Nursing Advisory Council with community partners.

e. **Ritter, B.** Collaboration with FNP colleagues regarding content for future publication pertaining to Diagnostic Reasoning and Nurse Practitioners.

f. **Valdez, A.M.** I attended several teaching conferences this academic year. I also attended the Association of California Nurse Leaders conference in February 2018.

g. **Wilkosz, M.E.** Faculty and Graduate Student Scholarship Symposium

h. **Wilkosz, M.E.** Undergraduate Research Symposium

i. **Wilkosz, M.E.** Latino Health Forum

j. **Wilkosz, M.E.** Latino Family Summit

k. **Wilkosz, M.E.** Mi Futuro

l. **Wilkosz, M.E.** Decision Day

m. **Wilkosz, M.E.** Expanding Your Horizons

n. **Wilkosz, M.E.** "I am the Future Day" with the nonprofit Robert's Family Development Center

9. **Physics & Astronomy**

a. **Cominsky, L.** I was part of a panel at SSU about grant writing.

b. **Severson, S.** Writing Intensive Course Workshops 1 & 2

c. **Severson, S.** Attended the LIGO Gravitational Observatory Conference, SSU.

F. TEACHING, SCHOLARSHIP, AND/OR SERVICE COLLABORATIONS

1. **Biology**

a. **Bentley, L.** Provost Innovation grant research and student outreach related to Sudden Oak Death

b. **Bentley, L.** Collaboration with the CA Native Plant Society and Dr. Matt Clark's Advanced GIS class for Re-Oaking Sonoma County project

c. **Bentley, L.** Attendance (with BIOL 350 students) to Living with Fire Symposium on SSU Campus in May

d. **Bentley, L.** Collaboration with Pepperwood Preserve on fire science research and outreach

e. **Cohen, M.** Spring 2018 -- Phosphorous Blue Ribbon Panel member

f. **Cohen, M.** Workgroup on meeting nutrient loading regulations in the Laguna de Santa Rosa, Center for Collaborative Study.

g. **Guilford, J.** Collaborated with the Sonoma County Water Agency through GEP359.

h. **Rank, N.** I sponsored a student, Courtney Foster, to research wildlife presence at Fairfield Osborn Preserve, with a support from a Norwick Award.
i. **St. John, W.** Offered tours of Copeland Creek (focusing on restoration efforts) to students in Jeff Baldwin’s Geography 206 course (five walking tours, of 45-minutes each)

j. **St. John, W.** Invited to (and attended) Open Space Fire Recovery Meeting with the Sonoma County Water Agency, to brainstorm ways in which fire recovery research could be integrated into SSU courses or student projects

k. **St. John, W.** Attended walk-through of burned areas of Crane Creek, hosted by Point Blue, and Hattie Brown of the Sonoma County Regional Parks Department, to discuss post-fire assessment projects that could be integrated into SSU courses and independent student research projects

l. **St. John, W.** Worked with 9 Entomology (BIOL 323) students to survey benthic macroinvertebrates in Copeland Creek on campus, to fulfill the service learning requirement for that class

m. **St. John, W.** Collaborated with Hattie Brown (Sonoma County Regional Parks) and Justine Law (Hutchins Department faculty) to bring two groups of students (“Field Biology,” and “Climate Change and Society”) to work together on vegetation monitoring of burned and unburned areas affected by the October, 2017, fire at Crane Creek Regional Park. Results presented at Science Symposium: “Post-Fire Vegetation Assessment at Crane Creek Regional Park.”

n. **St. John, W.** Science Symposium poster with WATERS intern Margaret Lambert: “Then to Now: The history of Copeland Creek on Sonoma State University”

o. **St. John, W.** Independent research and Science Symposium poster with undergraduate Jesica Rodriguez: “Surveying for Native Plant Communities along Copeland Creek”

p. **St. John, W.** Co-advisor (with Michaela Grobbel) for undergraduate Holly Lyon’s senior project (German/ENSP major). Included a) Science Symposium poster on the differences between environmental attitudes in Germany vs. the U.S: “The Green Why: Investigating Environmental Action in Germany and the United States”; and b) The Green Why website: https://thegreenwhy.wordpress.com/

q. **St. John, W.** Science Symposium poster with undergraduates Jeremy Harman, Shane Forman, and Marisol Luna: “Nest Site Selection Preferences and Shade Cover: A Comparative Study Across Two Populations of the Western Pond Turtle, Emys marmorata.”

r. **St. John, W.** Science Symposium poster with undergraduates Carissa Foster, Laura Anderson, and Victoria Brunal: “Accessing Potential Nesting Sites for a Reintroduced Population of Western Pond Turtles.”

s. **St. John, W.** Science Symposium poster with Field Biology students Regine Jackson and Mariah Chastain: “Birds in the Riparian Border”

t. **St. John, W.** Science Symposium poster with Field Biology students Jesica Rodriguez, Hannah McKeown, Holly Lyon, and Joshua Cariaso: “Vertebrate Activity Along SSU’s Copeland Creek,” featuring wildlife camera photos

u. **Zippay, M.** One of my graduate students, Kristen Hosek, was honored with a second place at the CSU Research Competition in Sacramento State on Saturday, May 5th for her research presentation, "Under Pressure: The Physiological Response of Mytilus edulis to Multiple Stressors".

### 2. Chemistry

a. **Whiles, L.; Lares, M.; Fukuto, J.M.** Service Learning in the Chem/Biochem FLC and connections to UD classes

### 3. Computer Science
a. **Gill, G.** Course Redesign with Technology award; co-PI with Dr. Mark Gondree (CS) for redesigning CS 115 (Programming I) (One of 3 given to SSU and the only one in School of Science and Technology). $25,239. June 2017- June 2018


d. **Leal, M.** Maker Convening: Multiple-school collaboration of bringing together those from sister campuses to focus on Making. (https://make.sonoma.edu/csumaker)

e. **Leal, M.** SSU’s premiere at Bay Area Maker Faire: SSU hosted a booth and shared its maker initiatives to one of the biggest Maker-related fairs in the world. (https://makerfaire.com/bay-area/)

f. **Leal, M.** Piner County High School visit: Presented computer science and gave tour of the maker space: 4.21.2018

### 4. Engineering Science

a. **Kassis, S.** Collaborated with Scott Severson on utilizing VR for teaching Astronomy 100

b. **Kassis, S.** Collaborating with SDSU on Immersive Learning

c. **Kassis, S.** Lead and supported the Women In Tech team in the 2018 California Solar Regatta

d. **Kassis, S.** 2018 Expanding Your Horizons Conference Volunteer

e. **Kassis, S.** 2017 Discovery Day outreach for Engineering

f. **Kassis, S.** Organized a Confidence Building Workshop for Women In Tech students

g. **Kassis, S.** 2018 Seawolf Decision Day tabling for Engineering and Women in Tech

h. **Kassis, S.** Hosted and lead panel discussion on women of color in STEM

i. **Shrestha, S.** Collaboration with Dr. Farid Faramand in developing project-based engineering laboratories to non-engineering undergraduate students

### 5. Geology


b. **Anfinson, O.A.** Mentor- Career Exploration Workshop, Geological Society of America Cordilleran Section Meeting, Honolulu, HI (2017)

c. **Anfinson, O.A.** Presenter and Panel Member- Sonoma County Meeting on Flooding of Copland Creek, Rohnert Park, CA (2017)

d. **Anfinson, O.A.** Presenter- Geological Perspectives on Flooding in Copland Creek, Lichau and Roberts Rd Residents, Cotati Fire Department, Rohnert Park, CA (2017)


g. **Anfinson, O.A.** Referee- Arktos (2018)


i. **Anfinson, O.A.** Referee- Basin Research (2017)

j. **Anfinson, O.A.** Referee- ACS Petroleum Research Fund (n=1, 2017)

k. **Anfinson, O.A.** Referee- “The sedimentology of detrital thermochronology-Chapter 7â€ (2017)

l. **Anfinson, O.A.** Participant- Circum Arctic Structural Evolution Conference, Hannover, Germany (2017)

m. **James, M.J.** In terms of international outreach, I served as the host for the executive director and the grants officer of the Charles Darwin Foundation on their visit to the Bay Area during their North American visit from Ecuador, where I arranged day-long visits to the California
Academy of Sciences and to several departments and museums on the campus of the University of California at Berkeley, on September 28 and 29, 2017.

n. James, M.J. I was an invited participant for an online paleontology education program, with two days of meeting at the University of California Museum of Paleontology on the Berkeley campus on February 25-26, 2017.

o. James, M.J. I am a volunteer at the Museums of Sonoma County in Santa Rosa, where I participate in setting up for events, cooking food, serving food and drinks, and cleaning up after events.

6. Kinesiology

a. Sokmen, B. Advisor for our KIN Club and SSU women’s soccer club.

b. Sokmen, B. Participated SSU Summer 2018 High School Internship Program (SHIP)

c. Sollanek, K. Continued as the faculty advisor for the “3 WINS Fitness program,” which is a community-based fitness program that has SSU’s KIN students leading free group exercise classes at the Rohnert Park Community Center. Start Date: April 2017 - Present.

d. Winter, S. California Athletic Trainers’ Association Clinical Symposium Committee Member

e. Winter, S. California Athletic Trainers’ Association Approved Provider Representative to the Athletic Trainer Board of Certification

7. Mathematics & Statistics


b. Hobson, N. Expanding Your Horizons, Marketing and Outreach co-chair.

c. Hobson, N. Mathematics on the Sandpile Groups (with SSU Student, Jake Paxton).

d. Hobson, N. SSU Math Festival Poster Organizer

e. Lahme, B. Stretch Course Development

f. Lahme, B. Math 100: Explorations in Mathematical Thinking - course development

g. Lahme, B. Illustrative Mathematics HS Curriculum development (to appear July 2019)

8. Nursing

a. Altaker, K. Development of Online and Blended Teaching Excellence Program based on Quality Assurance Grant from CSU - working with Faculty Center to create and deliver program for faculty. Working with students in their community health clinics to gather information and advocate for legislation change where needed - promoting voice in policy-making.


c. Wilkosz, M.E. Mi Futuro collaboration for Song Brown Mini-Grant

9. Physics & Astronomy

a. Cominsky, L. External Reviewer, Humboldt State University Physics Department, April 2018

b. Cominsky, L. Hosted LIGO-Virgo Scientific Collaboration Meeting at SSU, March 2018

c. Cominsky, L. Scientific Organizing Committee for IAU Symposium 338 Gravitational Wave Astrophysics, October 2017

d. Cominsky, L. Board of Directors, Astronomical Society of the Pacific, 2016 - 2019

e. Cominsky, L. Board of Directors, Contemporary Physics Education Project, 2016 - present

f. Cominsky, L. AAAS/PHYS division Executive Committee member, 2015 - 2019

g. Severson, S. Organize and conduct SSU Observatory’s Viewing Nights (~ 4 public and ~ 3 course events per semester), serving students and the public.

h. Severson, S. Assist in the organization of the SSU Department of Physics & Astronomy Senior Capstone Seminar, with additional bi-weekly preparation meetings with students.
i. **Severson, S.** Organized an event hosting the Girl Scouts of Northern California stargazing event. In response to the wildfires, I stepped up to host the Girl Scouts at the observatory, arranged for a talk, and a set of Lynn Cominsky’s EPO activities guided by the Women in Tech students.

j. **Severson, S.** I am working with Dr. Kassis to implement and assess an outside-the-classroom Virtual Reality experience with my section of ASTR 100. Students are interacting with the Sun-Earth-Moon system in a VR app called Universe Sandbox at the MakerSpace. I have adapted materials piloted by SDSU last fall, and we are the first site to join them in this exciting collaboration.

k. **Severson, S.** Assisted at the LIGO Gravitational Observatory Conference, SSU.

l. **Severson, S.** Oversaw 3 student research projects in Fall, and 2 student research projects in Spring. Topics included: telescope alignment and control, automated telescope guiding, telescope refurbishment and optical cleaning, black hole growth, and the infrared "red edge" detection of living plants via photometry.

### G. MAJOR SERVICE CONTRIBUTIONS (e.g., committee memberships, organization of special events, new program design, new course design)

1. **Biology**
   - **Bentley, L.** Volunteering (and planning committee member) for the EYH Conference in April 2018
   - **Bentley, L.** Semester replacement for Dr. Sean Place on FSSP committee
   - **Bentley, L.** New course design (BIOL 351 - Climate Change Biology)
   - **Bentley, L.** Co-organized ATBC annual meeting oral symposium “Forest complexity,” Merida, Mexico.
   - **Bentley, L.** Judge for ESA Physiological Ecology Section Award at Annual Meeting, Oregon
   - **St. John, W.** Re-chartered and served as faculty advisor for Friends of Copeland Creek campus club

2. **Chemistry**
   - **Works, C.** Chair of the Faculty/Senate
   - **Lares, M.** Chair of the Professional Development Sub-Committee
   - **Whilies, L.** Chair of the Educational Policy Committee
   - **Negru, B.** Member of the Senate Diversity Sub Committee
   - **Whilies, L.** Member of FCG and SPC for CSUPERB

3. **Computer Science**
   - **Leal, A.** Coordinated Computer Science’s first Tech Showcase, a venue focusing on sharing cool technology to the greater SSU community. Senior design students and the Virtual Reality Club showcased their work.
   - **Leal, A.** Tinker Academy: Co-hosting a mini-summer camp connecting middle school girls to the world of making, and STEM.

4. **Engineering Science**
   - **Kassis, S.** Established the Immersive Learning @SSU Program with the Immersive Learning Track and the Development Track.
   - **Shrestha, S.** Member, SST Professional Development Committee
   - **Shrestha, S.** Served on the CIO Search Committee

5. **Geology**
   - **Anfinson, O.A.** Elected Member- Dispute Resolutions Board (2017-Present)
   - **Anfinson, O.A.** Chair-Unmanned Aviation Systems Board (2016-present)
c. Anfinson, O.A. Member - Radiation Safety Committee (2015-Present)  
d. Anfinson, O.A. Member - Copland Creek Committee (2016-present)  
e. Anfinson, O.A. Member - Geology Department Tenure Track Search Committee (2016, 2017)  
f. Anfinson, O.A. Sustainability in the classroom course redesign for GEOL 311/312 ($3000)  
g. James, M.J. Tall ship "Falls of Clyde" in Honolulu Harbor, member of Board of Directors.  
h. James, M.J. Chair, Tenure-track hiring committee in Hydrology, hired Robin Glas from Syracuse Univ.  
i. James, M.J. Finished a 3-year elected term on the Academic Senate  
j. James, M.J. SSU GE Subcommittee of the Academic Senate, elected  
k. James, M.J. SST Curriculum Committee, serving as chair of Geology  
l. James, M.J. SST Professional Development Committee  
m. James, M.J. Chair, Department of Geology  
n. James, M.J. I do all the advising of new majors and Geology BS and Earth Science BA majors, and I process all of the extensive paperwork with ARR change forms and graduation applications to ensure a steady rate of graduates from my department.  
o. Mookerjee, M. Academic Senate: SST Senator  
p. Mookerjee, M. Chemical Hygiene Committee Member  
q. Mookerjee, M. Panel Member on Grant Writing at SSU  
r. Mookerjee, M. Invited speaker for the CS Department Colloquium  
s. Mookerjee, M. Geology Faculty Search Committee Member  
t. Mookerjee, M. Chair of the Geology Department RTP Committee  

6. Kinesiology  
a. Sokmen, B. Served as Department of Kinesiology Grad Coordinator  
b. Sokmen, B. A member of SSU’s Institutional Review Board (IRB) Committee  
c. Sokmen, B. A member of SSU’s Senate University Program Review Subcommittee (UPRS)  
d. Sokmen, B. A member of Health Professions Advisory Program (HPAC)  
e. Sokmen, B. Run Human Performance Laboratory part of the “Piner High School visit”  
f. Sollanek, K. A member of the Academic Freedom Subcommittee (AFS)  
g. Winter, S. Faculty Standards and Affairs Committee Member / Acting Chair March 2018 - May 2018  
h. Winter, S. Athletic Advisory Committee Member  
i. Winter, S. Science and Technology Professional Development Committee Member  
j. Winter, S. Science and Technology Curriculum Committee  

7. Mathematics & Statistics  
a. Brannen, N.S. Academic Senate (At-large member).  
b. Brannen, N. S. CFA Executive Board (Secretary)  
c. Brannen, N.S. Developed, with other math/stats faculty, a new course: Math 100.  
d. Hobson, N. Math and Stats Dept TT Hiring Committee member; Math 100 Design Committee member; Math Education Committee Member; Math Festival Poster Organizer.  
e. Lahme, B. Math and Stats search committee chair  
f. Lahme, B. Math and Stats RTP committee  
g. Lahme, B. Expanding your Horizons facilities coordinator  
h. Lahme, B. department chair  
i. Lahme, B. Lecturer Evaluation Committee chair  
j. Lahme, B. Lecturer pool search committee chair  
k. Lahme, B. MAA committee on the teaching of undergraduate mathematics  

8. Nursing
a. Altaker, K. Nursing Department: Pre-Licensure Team member, Post-Licensure Team member and meeting coordinator; Med-Surg Team Leader and content expert.

b. Altaker, K. School of Science and Technology: Serve on SST Professional Development Committee.

c. Altaker, K. University: Collaboration with Faculty Center to develop faculty course on online and blended teaching. Elected for three-year term to serve on Senate Diversity Subcommittee, with active contributions.

d. Ritter, B. Contribute to course content pertaining to clinical reasoning SSU FNP Program

e. Rockett, K. Research Committee Facilitator: Santa Rosa Memorial Hospital

f. Rockett, K. Worked at Santa Rosa Memorial Hospital during the Fires in October

g. Rockett, K. Volunteered with Red Cross during the Fires in October

h. Wilkosz, M.E. Academic Senate - SST Senator

i. Wilkosz, M.E. Accessible Technology Initiative Sub Committee

j. Wilkosz, M.E. IRB

k. Wilkosz, M.E. SEIE Curriculum Committee

l. Wilkosz, M.E. Graduate Studies Sub-Committee

m. Wilkosz, M.E. SST Chairs Committee

n. Wilkosz, M.E. Various department committees

9. Physics & Astronomy

a. Cominsky, L. University RTP Committee member Fall 2015 - May 2018

b. Cominsky, L. SSU Academic Foundation Advisory board member, Fall 2011 - June 2018

c. Severson, S. Organized the successful Grand Opening ceremony for the new SSU Observatory. The large gathering was covered by campus and local news, included the President, Provost and Dean, and highlighted the multi-year effort to modernize our heavily used astronomical facilities.

d. Severson, S. Served as external reviewer for University of San Francisco Department of Physics & Astronomy Program Review.

e. Severson, S. Member of the School of Science and Technology Professional Development Committee

f. Severson, S. Served as Dept. RTP committee chair, and spearheaded a successful Temporary Lecturer Pool Refresh.

g. Severson, S. Lead the BS-Astrophysics program design through EPC, and final SSU approval.

h. Severson, S. Developed and taught a new Writing-Intensive Course ASTR 305.

i. Severson, S. Adopted the Free OpenStax Astronomy Textbook (along with Dr. Targett and Wes Farriss) This is motivated by student instructional materials costs, and includes the evaluation of the text over the past two years and the adaption of course materials to the new reference

j. Targett, T. Chair, SST curriculum committee, organized and set meetings, posted agenda, led discussions, and advanced curricular changes to the SST dean and EPC

k. Targett, T. Co-led replacement of SSU campus observatory and grand re-opening (joint with Prof. Scott Severson)

l. Targett, T. Chief editor Physics & Astronomy department newsletter “The Physics Major”

m. Targett, T. Hosted “British Cultural Orientation” for study abroad students about to attend UK universities (40 students)

n. Targett, T. Gave interview of “Chronicle of Higher Education” on developing teaching methods
o. **Targett, T.** Several interviews with several local newspapers (e.g. Sonoma State Star & Press Democrat) on observatory re-build and re-opening

p. **Targett, T.** Main speaker at SSU International Reception event, as part of International Week 2017

q. **Targett, T.** Faculty advisor, Sonoma State eSports group (80 student members)

r. **Targett, T.** Faculty advisor, SSU Society of Physics Students (15 student members)

s. **Targett, T.** Organizer and docent, SSU Public Observing Nights (4 per semester)

t. **Targett, T.** Presentation at “Dinner with the Profs,” LivingLearningCommunity at SSU (20 attendees)

u. **Targett, T.** Invited speaker, round table discussion on “Conflicts between short-term sociopolitical desires and long-term goals for a healthy Earth” hosted at SSU (30 student & faculty attendees)

**H. ADDITIONAL IMPORTANT ACCOMPLISHMENTS**

1. **Biology**

a. **Bentley, L.**
   i. Megan Gaitan (grad student) won the following awards:
   1. Vanette Bunyan Scholarship
   2. 1st place Research Award Phi Beta Delta International
   ii. Megan also was chosen as one of 10 people to represent SSU at the CSU-wide Research competition in Sacramento, where she presented her research in an oral presentation (after only 4 months of grad school!)
   iii. Anthony Chui, my undergrad in Fall 2017, was accepted to a graduate MPH program at Yale University with a merit based scholarship.
   iv. Co-author on paper in review at Nature (from my NSF-supported grant work).
   v. Submitted a CA Strategic Growth Council grant (as PI) for $1M (notification in July).

b. **Lee, S.**
   Training as an official TopHat ambassador to promote the use of innovative technology and teaching strategies in our higher ed classrooms and will begin assisting with demonstrations of the TopHat Classroom response system and speaking at conferences.

c. **St. John, W.**
   i. Created an iNaturalist project titled “Sonoma State Biodiversity” (https://www.inaturalist.org/projects/sonoma-state-biodiversity), primarily for Field Biology students, but it is available for any member of the iNaturalist community to use
   ii. Coordination of Copeland Creek Riparian Restoration project on campus (WATERS funded project). Fall, 2017, activities included several JUMP-sponsored volunteer workdays, and planting of native plants (grasses, rushes, and sedges). Spring, 2018, activities included volunteer workdays to control invasive species in previously cleared areas (primarily Himalayan blackberry, and hemlock)
   iii. Selected by soccer student-athlete Miriam Bloom for recognition at the first SSU Appreciation Day, sponsored by the Department of Intercollegiate Athletics (the event itself did not take place, due to the wildfires)

2. **Chemistry**

a. **Fukuto, J.M.** Recipient of the President Excellence in Scholar Award, 2018.

3. **Computer Science**

a. **Gill, G.**
Two student teams won best poster awards at CCSC and one of the teams won the "Bright-Idea" award at SSU symposium:


4. Engineering Science

   a. Shrestha, S.

      i. SSU Engineering Friday Tech Talks - Led the efforts in launching a new seminar series, SSU Engineering Friday Tech Talk. Six speakers in the Fall and ten speakers in the Spring gave presentations and conducted demos and hands-on on various topics ranging from fundamental engineering concepts to cutting-edge technology trends. The speakers included experts from area industries, SSU Engineering alumni, and SSU faculty and students.

      ii. New Lab Space - Creating a new lab space for research, teaching, and outreach in embedded systems, sensors, and robotics. Currently, the space currently has four new computers (purchased through start-up fund), two small robotic arms (one purchased through Dean's office and another through start-up fund), and three workstations. Four undergraduate and two high school students (through SHIP) will be working in the lab this summer.

5. Geology

   a. Anfinson, O.A.

      SSU Student Research- 2017-2018

      1. Izzac Russo (BS; GEOL 426-Senior Thesis), Tim Dooley, and Holden Robinson (BS; GEOL 495). Mitigating flood damage on Copeland Creek through analysis of the Copeland Creek Alluvial Fan.
      2. Tim Downing (BS; GEOL 495), Bringing Geologic wonders of Sonoma County to life through 3D imaging and printing.
      3. Lucia Tropeano (BS; GEOL 495), Geology from Above: Sharing Aerial Geologic Videos with the general public through Instagram.
      4. Victoria Simaneau (BS; GEOL 426-Senior Thesis), Elijah Messinger (BS), Joe Adams (BS), Justin Casaus (BS), and Anthony Gamboa (BS) - (GEOL 495)- Depositional Ages and Provenance of Franciscan Strata, Mt. Tamapalais, CA. Included 2 Students as part of the Student High school Internship Program (Rebecca Fernandez and Nick Roland)

   b. James, M.J.

      The most important is the publication of my book, Collecting Evolution, that I worked on for 20 years, from 1997 to publication in 2017 with Oxford University Press.

   c. Mookerjee, M.

      Steering Committee Member for two proposed projects:

      2. "EC3O" which is a variation on my initial EarthCube proposal: "EC3- Earth-Centered Communication on Cyberinfrastructure"

   d. Kinesiology

      a. Sokmen, B.
i. Serving as chair of four student’s master’s program and serving on several as a committee member.

ii. Mentoring two McNair Students.

b. Sollanek, K.
   i. Served as a reviewer for the journal “Medicine & Science in Sports & Exercise.” Reviewed one manuscript during the 2017-2018 academic year.
   iii. Served as a reviewer for the journal “Wilderness & Environmental Medicine.” Reviewed one manuscript during the 2017-2018 academic year.
   iv. Chaired one graduate student’s thesis project who successfully defended on December 14th, 2017.

c. Winter, S.
   National Collegiate Athletic Association Faculty Athletic Representative for Sonoma State

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e. Mathematics & Statistics

a. Brannen, N.S.
   Travel to Uzbekistan June 1 - June 12, 2018 to make a site visit to the IRES (International Research Experience for Students) program at the Uzbekistan Academy of Sciences, as a representative of the CSU-LSAMP Program Oversight Committee (POC).

b. Hobson, N.
   Pythagorean Theorem Quilt in the art exhibit at the annual Joint Mathematics Meeting, January 2018.

f. Nursing

a. Ritter, B.
   Serve on Board of Directors for Local Chapter of California Association for Nurse Practitioners

b. Valdez, A.M.
   i. Served as an Advisory Board member for HealthImpact and the California Health Workforce Advisory Council.
   ii. Appointed to serve as an Advisory Board member for the National Education Progression in Nursing initiative.

c. Physics & Astronomy

a. Cominsky, L.
   i. Fellow, California Academy of Sciences October 2017
   ii. Frank J. Malina Astronautics Medal, International Astronautical Federation, Awarded in August 2017

b. Severson, S.
   i. Assisted Lecturer Wes Farriss in his successful SST proposal for a new campus telescope mount.
   ii. Guided a donation process to bring us other much needed astronomical equipment, a new telescope and mount from Donors Mr. and Mrs. Katzung.