Thursday, April 25, 2019
Duncan Hall
San José State University
10:00am to 2:00pm

Interdisciplinary Science Building Groundbreaking
and
The 15th Annual College of Science Student Research Day

Join us for the groundbreaking ceremony for the $180 million Interdisciplinary Science Building, which will include teaching and research laboratories for organic and synthetic chemistry, biochemistry, molecular biology and computational science programs.

Following the groundbreaking, the 15th Annual Student Research Day will feature over 100 research posters presented by student authors who work with College of Science faculty.

Message from the Dean

On behalf of the faculty, staff and students in the SJSU College of Science, it is my pleasure to welcome you to the 15th Annual Student Research Day. Today's event, with more than 100 posters, is the largest of any Student Research Day to date. The original work presented here by undergraduates and masters students represents all of our departments: Biological Sciences, Chemistry, Computer Science, Geology, Mathematics & Statistics, Meteorology & Climate Science, Physics & Astronomy, and Science Education. It covers the full breadth of pure and applied areas pursued in the college: neurophysiology, polymer stability, the effects of fetal alcohol exposure, the role of atmospheric aerosols in climate change, AI-enabled ecology and AI-enabled galaxy identification, fire weather forecasting, novel musical instrument design, development of effective STEM pedagogies, data clustering algorithms, social network security, and many, many more. Research, teaching and collaboration are inseparable features of the student experience in the SJSU College of Science. Our students build strong theoretical knowledge in their course work while gaining hands-on experience working in research teams. They become experts in CRISPR, machine learning, gene therapy, sedimentology, forecasting, network optimization, nuclear magnetic resonance, X-ray diffraction, and confocal microscopy, to name just few. And they do this work in college facilities that are, frankly, long past their prime. That the research and training is of such high quality is a testament to our faculty and technical staff who work tirelessly to get the most out of our teaching and research spaces.

For this reason, today is a particularly momentous one as we have just broken ground on our state-of-the-art Interdisciplinary Science Building (ISB). This $180M CSU-funded project is the first new academic building at SJSU in three decades and the first new facility for the College of Science in more than 40 years. The ISB will include teaching and research laboratories for organic and synthetic chemistry, biochemistry, and molecular and micro biology; a high-performance computing center for faculty from across, and beyond, the College of Science for whom computation is a critical component of their work; large open collaboration spaces on every floor; data science and information science labs operated by the College of Professional and Global Education; and an administrative office for the college. The mixture of teaching, research and collaboration on every floor is a physical expression of the importance of each in the training of our students.

I invite you to spend time speaking with our student researchers about their work, its importance to their field of study, and its importance to their future plans. Whether you are an alumnus, a community partner, faculty or staff, corporate representative, neighbor, or a current student, I think you will be inspired and amazed by the student-centered research in the SJSU College of Science. If you would like to learn more about the College, feel free to contact me at the email or phone number below.

Dr. Michael Kaufman
Dean, SJSU College of Science
Michael.Kaufman@sjsu.edu
(408) 924-4800
http://science.sjsu.edu

College of Science Research Day would not be possible without the hard work of a team of dedicated professionals. Professor Roy Okuda, who originated the SRD 15 years ago, continues to lead it each year. College of Science staff, including Stan Vaughn, Jeff Honda, Cher Jones, Lee Veliz, Mike Stephens, and Matt Geary, arranges logistics and setup. Cathy Kozak and her IT team are responsible for printing the myriad posters. Thank you to everyone for your terrific work.

Special Displays

A. Fire Weather Mobile Profiling System
The California State University-Mobile Atmospheric Profiling System (CSU-MAPS) is the only mobile profiling system in the world designed for wildfire meteorology. The system has been deployed to over 25 wildfire events in California, including the Camp Fire in 2018.

B. List of students matriculating to graduate or professional schools, NSF Fellowships, and students attending summer research programs.

Department of Biological Sciences

1. Development of an Optogenetic Method to Stimulate Gamma Motor Neurons.
   Apoorva Karekal, Sai Byri, Sameer Masri, Natanya Villegas
   Faculty: Katherine Wilkinson
   Collaborator: Shawn Hochman (Emory University)

2. Sympathetic Neurotransmitters Modulate Muscle Spindle Afferent Stretch. Sensitivity in Adult Mice.
   Arthur Harnisch, Steven Valdespino, Alexandra Salazar, Phylicia Sanchez
   Faculty: Katherine Wilkinson

3. The Effects of Obesity on Spinal Cord Excitability.
   Mulatwa Haile, Gerard Nguyen, Shea Putnam, Zahra Raza, Alondra Suarez
   Faculty: Katherine Wilkinson

4. A New Paradigm for Regulation of Cell Death by Intracellular pH Dynamics in the Fly Eye.
   Jobelle Peralta, Blake DuPriest, Madeline Mok, Lyzett Lavenant, Gabriel Castellanos, Massie Majidi, Tania Mancilla
   Faculty: Bree Grillo-Hill

5. Probing Intracellular pH Dynamics During Invasive Migration in the Drosophila Wing.
   Vivian Bui, Martey Haw, Barbara Sandoval, Laura Martins, Tommy Luong
   Faculty: Bree Grillo-Hill

6. Effects of Increased pHi on the Regulation of Proliferation.
   Ismahan Chire, Harnoor Virk, Snizhana Khomych
   Faculty: Bree Grillo-Hill

7. Utilization of the RhD locus as a safer harbor for gene therapy applications.
   Enoch Kim, Chyna M. Swan, Sukhjiwan S. Kang
   Faculty: Jennifer Johnston

Department of Biological Sciences

8. Validation of CRISPR guide RNAs specific to the VWF locus for the treatment of hemophilia A patients with inhibitors.
   Melissa J. Pilling, Enoch Kim, Daniella Huinac, Shufan Li
   Faculty: Jennifer Johnston

9. Histone Deacetylase Inhibitors enhance the cutting efficiency of CRISPRs.
   Codey Y. Huang, Emiko L. Yamamoto, Kenneth Roman, Navneet Kaur
   Faculty: Jennifer Johnston

10. Sleep alters the physical architecture of sensory synapses in *C. elegans*.
    Fatima Farah, Anirudh Bokka, Eric Chang, Aruna Varshney, Joy Li, Claudia Echeverria, Anjana Baradwaj, Idan Siman-Tov, Doris Coto Villa, Kristine Andersen,Sara Alladin
    Faculty: Miri VanHoven
    Collaborators: Kelli Benedetti (UCSF), Fernando Munoz Lobato (UCSF), Sarah Nordquist (UCSF), Noelle L'Etoile (UCSF)

11. Elucidation of the molecular mechanisms that underlie neural circuit formation.
    Aruna Varshney, Nghi Le, Doris Coto, Khristina Magallanes, Idan Siman-Tov, Courtney Knitter, Sierra Pollock
    Faculty: Miri VanHoven
    Collaborator: Martina Bremer (SJSU Dept of Mathematics and Statistics)

12. Sensory activity is required for synaptic integrity in *C. elegans*.
    Angelina Tang, Nebat Ali, Jordan Mitchell, Taha Muqtadir, Veronica Bi, Leah Teschner, Fatima Farah, Kristine Andersen, Benjamin Barsi-Rhyne, Kristine Miller, Alan Tran, Jacqueline Pyle, Bryan Tsujimoto, Alex Duong, Joy Li
    Faculty: Miri VanHoven
    Collaborator: Martina Bremer (SJSU Dept of Mathematics and Statistics)

13. Pyrroloquinoline Quinone is Required for Lanthanide-dependent Methanol Dehydrogenase Expression in *Methylobacterium extorquens*.
    Caitlin Hoeber, Mona Nguyen, Ralph Valentine Crisostomo, Simi Kaur
    Faculty: Elizabeth Skovran

14. Rare Earth Transport and Regulation in *Methylobacterium extorquens* is Analgous to Iron Transport and Regulation in Bacteria.
    Elena Ayala, Huong Vu, Gabriel Subuyuj, Clarisse Hufana, Krisha Gupta, Justin Wingett
    Faculty: Elizabeth Skovran

15. Evolution and plasticity of flowering time of *Leptosiphon bicolor* (Polemoniaceae) in response to an historic California drought.
    Anjum Kaur Gujral, Lani Renshaw, Lars Rosengreen
    Faculty: Susan Lambrecht

Department of Biological Sciences

16. Ovarian Follicle Stage Distribution in C57 Mice Fed a High Fat Diet for 5, 10, or 15-weeks.
Carolyn Denson, Eric Duong, Zunaira Iftikhar, Karina Nava-Melchor
Faculty: Shelley Cargill

17. Young germ cell-depleted donor ovaries reduce hepatic IGF-1 levels versus young germ-cell containing donor ovaries in aged, post-reproductive recipient CBA/J mice.
Jason Kanady
Faculty: Shelley Cargill

18. Quantification of plasma IGF-1 and estradiol in ovarian transplant-recipient aged female CBA mice.
Dania Abid
Faculty: Shelley Cargill

19. Testing for population-level morphological variation in museum collections of Clark's nutcrackers, *Nucifraga Columbiana*.
Caitlyn Brown
Faculty: Benjamin Carter

20. Can machine learning accurately predict white-sand habitats in the lowland Amazon?
Tracey Simmons
Faculty: Benjamin Carter
Collaborator: Tracy Misiewicz (University of Oklahoma, Norman)

21. Dementin and Notch Implicate the γ-Secretase Complex in the Developmental Response to Ethanol.
Nahed Darwish, Tyra Furtado
Faculty: Rachael French

22. Insulin signal transduction mediates ethanol-induced feeding dysfunction in a fly model of Fetal Alcohol Spectrum Disorder.
Rachel Vasquez, Manae Matsubara
Faculty: Rachael French

23. Cracking the role of the uncultured TM7 Bacteria in human health; one protein at a time.
Joshua Garcia, Sharina Santos
Faculty: Cleber Ouverney

24. Molecular Evaluation of Novel Multi-drug Resistance and Beta-lactamase genes from Local Uncultured Bacteria.
Ivan Cheng, Jeno Oclarit, Aaron Gonzales, Alice Cai
Faculty: Cleber Ouverney

Department of Chemistry

25. Europium(III) Coordinated to Oxytetracycline as Potential Bioprobes.
Shing Cho Ma, Cassie Villafuerte, Trevor Cabreros
Faculty: Gilles Muller

26. The Importance of Solvent on the Recognition of the Mixture of L and D Serine.
Phuoc C. N. Tran, Rose Carion
Faculty: Gilles Muller

27. Benefits of High Temperature Olefin Metathesis Catalysts on ADMET Polymerizations.
Jasleen Sahota, Matt Dahlberg, Emily Hazel, Mami Horikawa
Faculty: Chester Simocko

28. New Olefins for SADMET Polymerization.
Hasaan Rauf, Su Hu, Saadia Quraishi
Faculty: Chester Simocko

29. Thermal Stability of Mixed Polymer Brushes.
Alexis Sarabia, Omar Munoz
Faculty: Chester Simocko
Collaborators: Center for Integrated Nanotechnologies, Sandia National Laboratories

30. Inhibition of Cationic Antimicrobial Resistance in *Pseudomonas aeruginosa*.
Kendra Cortez, Natalie Kahler, Ammar Mirza, Marcela Salazar, Lucero Sandoval, Cassandra Villicana, Wenjie Yu
Faculty: Laura Miller Conrad

31. Uncovering Antivirulence Targets in *Pseudomonas aeruginosa* by a Photoaffinity Labeling Approach.
Kareem Aboulhosn, Yu-Jui Chang, Dominic Ortega
Faculty: Laura Miller Conrad

32. Disrupting Bacterial Communication by Inhibition of LuxI-type Synthase CviI.
Matthew Aguilar, Arturo Chavez, Mellanie Gomes, Sanjay Kalliat, Geovanni Ruiz Olmos
Faculty: Laura Miller Conrad

33. Building an enzyme-like active site into synthetic single chain polymeric nanoparticles.
Vanshika Gupta, Derscene Tien, Khanh Nguyen
Faculty: Madalyn Radlauer

Department of Chemistry

34. Cross metathesis with a hybrid ruthenium-polymer complex.
Juan C. Moreno, Tyler L. DeVincenzi, Dana A. Wong
Faculty: Madalyn Radlauer

35. Modification of Inorganic Complexes towards Enhanced Alkane Oxidation Catalysis.
Victoria C. Tafuri, David M. Navarro, Harris K. Ordona
Faculty: Madalyn Radlauer

36. Engaging San Jose State University Freshman Students in Authentic Research Experience.
Jennifer Li, Bridget Foley, Mallory Kato
Faculty: Lionel Cheruzel

37. Harnessing P450 biocatalysis with Ru(II)-diimine complexes.
Bridget Foley, Mina Nguyen, Alejandra Toledo, Marya Melkie, Liridona Leti, Daniel Parker, Mallory Kato
Faculty: Lionel Cheruzel

38. Identifying an Allosteric Switch in Human SIRT1.
Angelina Huynh, Carina Amaya, Tina Nguyen
Faculty: Ningkun Wang, Brooke Lustig

39. Understanding the Allosteric Regulation of SIRT1 on Different Substrates.
Christiane Cabreros, Johnson Huynh, Yue Tong Lee
Faculty: Ningkun Wang

40. Using Biophysical Methods to Interrogate SIRT1 Conformational Change in Allosteric Regulation.
Thu Nguyen, Matthew Perry
Faculty: Ningkun Wang

41. Predicting Switch-Like Features in Proteins Using Logistic Regression with Sequence-Based Descriptors.
Benjy Strauss, Angelina Huynh, Edgardo Millan, Khai Cao, Phuong Tran, Mai Nguyen, Jonathan Oribello, Saira Montermoso
Faculty: Brooke Lustig, Ningkun Wang

42. Characterizing Alternative RNA-Protein Interactions for BIV Tat Peptide Binding to TAR.
Thanh Le, Curtis Ma, Ethan Suwandi, Alex Fozo, Truc Le, Miral Patel, Vaseem Mir
Faculty: Brooke Lustig

Department of Chemistry

43. Nanocarbon Approaches to Batteries and Supercapacitors.
David Courter, Jessica Garcia, Amy Chan, Danielle Castro, Corey Abraham
Faculty: Roger Terrill

44. Physicochemical Factors Underpinning SERS.
Calvin Jumawan, Kevin La, Evelyn Hoang, Matthew Hunt, Paulin Huynh
Faculty: Roger Terrill

45. Separation and Surface Area Examination of Spacecraft Cabin Aerosols.
Grace Belancik
Faculty: Bradley Stone
Collaborator: Marit E. Meyer (NASA-Ames)

46. Metabolomics analysis of oak chip-aged wine samples using silica hydride-based stationary phases.
Christin Wong
Faculty: Maria Matyska-Pesek, Joseph J. Pesek

47. Assessment of Dual Retention Properties and Analyte Selectivity for the Experimental Silica Hydride-based Stationary Phases.
Seiichiro Watanabe
Faculty: Maria T. Matyska-Pesek, Joseph J. Pesek

48. Aqueous Normal Phase Chromatography-coupled with HDX-MS: A Potential Approach to Reduce Proton Back-Exchange in Structural Proteomics Assay.
Seiichiro Watanabe
Faculty: Maria T. Matyska-Pesek, Joseph J. Pesek

49. Analysis of Secondary Solute Effects on DNA:DNA Binding by Microscale Thermophoresis.
Jasmin Espejo, Caroline Harmon
Faculty: Daryl Eggers

50. Formation of Light Absorbing Compounds from Reactions of Carbonyl Species under Highly Acidic Aqueous Aerosol Conditions.
Kenia Mejia Escobar, Michelia Dam, Mei Yun Li, Tina Truong, Rasha Alnajjar, Janaina de Sousa, Adrian Sandoval, Evelin Ventura, Miguel Clemente, Sai Somepalle, Fatima Hussain, Alex Shen, Rebecca Spangler
Faculty: Annalise Van Wyngarden

Department of Chemistry

51. Using High Resolution Mass Spectrometry to Examine Organic Polymer Speciation in Aerosols During Cloud Formation.
Rasha Alnajjar, Kimberly Houghton, Patricia Goh, Rebecca Spangler, Weston Schweitzer, Khaled Khaled, Jeffrey Berry
Faculty: Annalise Van Wyngarden

52. Recombinant Protease Expression, Purification and Activation of *Aedes aegypti* Early Trypsin (AaET).
Khanh Kim Tran, Neomi Millan
Faculty: Alberto Rascón
Collaborators: Roger L. Miesfeld (University of Arizona), Jun Isoe (University of Arizona)

53. Recombinant expression of N-terminally His6-tagged (No Leader) Serine Protease II and IV from *Aedes aegypti* Using T7 Shuffle E. coli Cells.
Elizabeth Moreno
Faculty: Alberto Rascón
Collaborators: Roger L. Miesfeld (University of Arizona), Jun Isoe (University of Arizona)

54. Soluble Expression Attempts of *Aedes aegypti* Serine Protease V (AaSPV) Utilizing SHuffle® T7 Cells.
Jason Earley, Sze Wan (Jo) Wong
Faculty: Alberto Rascón
Collaborators: Roger L. Miesfeld (University of Arizona), Jun Isoe (University of Arizona)

55. Bioactive Natural Products from Two Endemic Species of *Grindelia*.
Junghyuk (Jan) Jin, William Chau
Faculty: Roy K. Okuda

56. Bioactive Natural Products from California Native Plants.
Vi Dang, Allen Kim , Bao Nguyen, Pomaikai Yamaguchi, Ben Wu, Jennifer Tsai, Andy Thai
Faculty: Roy K. Okuda

57. Lanthanide Coordination Compounds with Free Radical Ligands.
Victoria Ramirez, Jason Ruan
Faculty: David J. R. Brook
Collaborator: Bruce Noll, Bruker AXS

Department of Chemistry

58. X-ray Magnetic Circular Dichroism Study of Transition Metal-Free Radical Coordination Compounds.
    Jeffrey DaRos
    Faculty: David J. R. Brook
    Collaborators: Eric Pellegrin, Stefano Agrestini, ALBA Synchrotron, Barcelona, SPAIN

59. Synthesis Toward New Water Soluble Spin Probes.
    Lawrence Clemente
    Faculty: David J. R. Brook

60. Fluorescence Enhancement of NVC Nanodiamonds via Gold Nanoparticle Conjugation for Biodetection Strategies.
    Nedah Basravi, Davida Simpson, Camilla Hanson, Karen Lopez, Grace Jeanpierre,
    Faculty: Abraham Wolcott
    Collaborators: Dennis Nordlund (SSRL), Virginia Altoe (The Molecular Foundry)

61. Boron Based Surface Modification of Alcohol Terminated Fluorescent Nitrogen Vacancy Nanodiamonds.
    Daniel N. Labunsky, Solomon Adjei II, Tyanna Supreme
    Faculty: Abraham Wolcott
    Collaborators: Virginia Altoe (The Molecular Foundry), Adam Schwartzberg (The Molecular Foundry), Dennis Nordlund (SSRL)

62. The Transition Edge Sensor and Examination of Nitrogen Moieties on Nanoscale Diamond.
    Jocelyn Valenzuela, Cynthia Melendrez, Grace Jeanpierre, Tsz Cheung, Polo Tran, Alejandro Hernandez
    Faculty: Abraham Wolcott
    Collaborators: Dennis Nordlund (SSRL), Charles J. Titus (Dept. of Physics, Stanford University), Kent Irwin (Dept. of Physics, Stanford University), Virginia Altoe (The Molecular Foundry)

Department of Computer Science

63. Classifying Classic Ciphers Using Machine Learning.
    Nivedhitha Ramarathnam Krishna
    Faculty: Mark Stamp

64. Multifamily Malware Models.
    Samanvitha Basole
    Faculty: Mark Stamp

65. Smartphone Gesture-Based Authentication.
    Preethi Sundaravaradhan
    Faculty: Mark Stamp

66. Faster Edge Betweenness Centrality on Trees.
    Julian Vu
    Faculty: Katerina Potika

67. Node Embeddings with applications to Social Network Analysis.
    Shishir Kulkarni, Jay Ketan Katariya
    Faculty: Katerina Potika

68. Emulation vs Instrumentation for Android Malware Detection.
    Anukriti Sinha
    Faculty: Fabio Di Troia

69. Intrusion Detection and CAN Vehicle Networks.
    Ashraf Saber
    Faculty: Fabio Di Troia

70. Traffic Flow Forecasting Using Distributed CNN with Hadoop and Spark.
    Yihang Tang
    Faculty: Melody Moh

71. Breaking Audio CAPTCHA using Machine and Deep Learning and the Defense.
    Heemany Shekhar
    Faculty: Melody Moh

72. Detecting Adversarial Hate Speech on Social Media.
    Brian Khieu
    Faculty: Melody Moh

73. Intelligent Log Analysis for Anomaly Detection using Machine and Deep Learning.
    Steven Yen
    Faculty: Teng Moh

Department of Computer Science

74. On Adversarial Attacks on Deep Learning Models.
    Nag Mani
    Faculty: Teng Moh

75. Virtual Outfits Over Video Using GANs.
    Andrew Jong
    Faculty: Teng Moh

76. Large Scale Pediatric Information Extraction from Biomedical Texts Using Semi-Supervised Machine Learning.
    Deepti Garg
    Faculty: Sami Khuri
    Collaborator: Natalia Khuri (Stanford University)

77. Machine Learning for Research in CRISPR-CAS Systems.
    Neha Bhagwat, Ishita Mathur, Shantanu Deshmukh
    Faculty: Sami Khuri

78. Benchmarking Optimization Algorithms for Capacitated Vehicle Routing Problems.
    Pratik Surana
    Faculty: Sami Khuri
    Collaborator: Natalia Khuri (Stanford University)

79. Music Retrieval System Using Query-By-Humming.
    Parth Patel
    Faculty: Robert Chun

80. Next Level: A Course Recommender System Based On Job Interests.
    Shehba Shahab
    Faculty: Robert Chun

Department of Geology

81. Evidence of Time-Transgressive Displacement on the Rodgers Creek fault, Windsor, CA.
Alianora Walker
Faculty: Kimberly Blisniuk
Collaborator: Suzanne Hecker (USGS)

82. Evidence for an active and evolving left-stepping San Andreas fault (Mission Creek fault strand) from the Little San Bernardino Mountains to Yucaipa Ridge.
Jesse Waco
Faculty: Kimberly Blisniuk
Collaborator: Julie Fosdick (UConn)

83. Eruption Style and Volcanic Clast Distribution Modeling at Axial Seamount.
Beth Johnson
Faculty: Ryan Portner
Collaboratos: Dave Clague (MBARI), Brian Dreyer (UCSC), Thibaut Barryere (University of Bergen)

Department of Mathematics and Statistics

84. Blue-Red Hackenbush Spiders.
Ravi Cho, Ardak Kapbasov
Faculty: Tim Hsu

85. Topologically Minimal Surfaces in the Three-Sphere.
Luis Torres
Faculty: Marion Campisi

86. Outlier detection and missing value imputation using mixture models.
Xin Zhang
Faculty: Cristina Tortora

87. Active Labeling using Model-based Classification.
Travis Barton, Min Fang, Jingfei Gong, Vu Thu Huong, Hung Tong, Zhangqi Wang
Faculty: Cristina Tortora
Collaborators: Steve Brown (Intuit), Kumar Sricharan (Intuit)

88. Parallelepiped Law of Diagonal Planes.
Alana Bailey
Faculty: Hidefumi Katsuura

Department of Mathematics and Statistics

89. A Monte Carlo Simulation Study of Statistical Approaches to Analyze Repeated Measurements Arising from Biological Experiments.
Beatriz Hernandez
Faculty: Martina Bremer

90. Large Scale Spectral Clustering with Stochastic Optimization.
Khiem Pham
Faculty: Guangliang Chen

91. Categorical Data Clustering Through Spectral Methods.
Chia-Chin Wu
Faculty: Guangliang Chen

92. The Secret behind the Squiggles: A Guitar with Optimally Curved Frets.
Mitchell Chavarria
Faculty: Jordan Schettler

Department of Meteorology and Climate Science

93. Turbulence statistics and sensible heat fluxes associated with head fire and flank fires.
Melissa Gonzalez-Fuentes
Faculty: Craig Clements

94. Fire Danger and Fire Weather Indices in the Santa Cruz Mountains, California.
Liliana Chicas
Faculty: Craig Clements

95. Improving accuracy of rain forecasts for the South Bay.
Dung Nguyen
Faculty: Alison Bridger

96. Determinant Factors Controlling Cirrus Cloud Microphysical Properties based on Aircraft Observations from 87°N to 67°S.
Ryan Patnaude
Faculty: Minghui Diao

97. Ice, Liquid and Mixed-Phase Clouds over the Southern Ocean and Comparisons with a Global Climate Model.
Ching An Yang
Faculty: Minghui Diao
Collaborator: Andrew Gettelman (NCAR)

Department of Meteorology and Climate Science

98. Observations of Clouds at McMurdo Station in Antarctica and Evaluation of Climate Simulations.
Jackson Yip
Faculty: Minghui Diao
Collaborators: Israel Silber (Penn State University); Andrew Gettelman (NCAR)

99. The 2017 San Jose Flood Event: Extreme weather or mismanagement?
Patrick Collins, Jacob Davison, Tyler Maio, Howard Tang
Faculty: Eugene Cordero

Department of Physics and Astronomy

100. Galaxy Classification with Neural Networks in SDSS.
J. Andrew Casey-Clyde, Hiren Thummar, Jean Donet
Faculty: Aaron Romanowsky
Collaborator: Nima Maghoul (Nordstrom)

101. Photometric Analysis of Ultra-Diffuse Galaxies.
Enrique Cabrera, Jean Donet
Faculty: Aaron Romanowsky

102. Properties of Few Electrons on a One-dimensional Optical Lattice.
Elena Fader
Faculty: Ehsan Khatami

103. Veiling on Pre-Main Squequence T Tauri Stars.
Sara Sole
Faculty: Olenka Hubickyj
Collaborator: Prof. Celso Batalha , Ph. D. (Evergreen Valley College)