

SPECIAL POSTER

*College of Science students matriculating to Graduate or Professional Schools
in Fall 2013 and students working in off-site summer programs.*

DISPLAY (in front of Duncan Hall stairs)

- 1. A New Mobile Facility for Studying Wildfires.**
Faculty: Craig B. Clements
Department of Meteorology and Climate Science

POSTERS

Department of Biological Sciences

- 2. Characterization of the Role of Mechanical Forces in Inflamed Mouse Extensor Digitorum Longus Stretch Receptor Activity.**
Joy A. Franco
Faculty: Katie Wilkinson
- 3. Analgesic Effects on the Follicular Development and Vaginal Cytology in Young Ovaries Transplanted to Aged Mice.**
Anna Le
Faculty: Shelley Cargill
- 4. Length and Density Analysis of Angiogenesis in Meloxicam and Buprenorphine Treated Murine Ovary Transplants.**
Christine Petrovec
Faculty: Shelley Cargill
- 5. Functional Characterization of the Notch Response Element: Mastermind Selectivity and Interaction With the TATA Box Determines Activation Strength.**
Cassandra A. Ramos
Faculty: J. Brandon White
- 6. Characterization of Carbonylcyanide-3-chlorophenylhydrazone Induction of Cell Death in Cancer Cells.**
Danny Ha
Faculty: J. Brandon White
- 7. Flavonoid Induction of Apoptosis Does not Require Bak/Bax: Evidence Suggesting Direct Interaction with the Mitochondria.**
Zackery Bevens, Anthony Bortolazzo, Tetiana Lialiutska
Faculty: J Brandon White
- 8. Pertussis Toxin-associated Delay of Dendritic Cell Polarization of Th17 Cells During *Bordetella pertussis* Infection in Mice.**
Victoria Wu, Ryan Ferguson, Marlene Taylor, Shahryar Niknam, Chris Sequeria
Faculty: Tzvia Abramson

Department of Biological Sciences

9. Gut Associated Circulating Lymphocytes in Pediatric Crohn's Patients.

Venus Allahyarzadeh, Christopher Qualls, Tuan M. Nguyen

Faculty: Tzvia Abramson

10. Ethanol Exposure Causes Oxidative Stress in *Drosophila* Larvae.

Anthony Bortolazzo, Theresa Logan-Garbisch, Audrey Ford, Omar Fateen

Faculty: Rachael French

11. The Functions of *pointed* and *vap* in a Fly Model of Fetal Alcohol Syndrome.

Peter Luu, Elizabeth Benn-Hirsch, Sabrina Lopez, David Do

Faculty: Rachael French

12. Bromoperoxidase Production by Bacteria Associated With the Marine Acorn Worm, *Ptychodera jamaicensis*.

Michelle Levisch, Milena Lilles, June Shinseki, Omar Garcia, Mim Ngo, Kayte East, Amanda Norrie, Secira Biotic

Faculty: Sabine Rech

13. Elucidating the SAX-3/Roundabout-mediated Axon Outgrowth Termination Pathway in *C. elegans*.

Johann Zaroli, Anthony Thomas, Tamaraleah Jackson, Vanessa Jimenez, Jessica Jarecki

Faculty: Miri VanHoven

14. Understanding the Role of the Synaptic Vesicle Cycle in Synaptic Partner Recognition in *C. elegans*.

Benjamin Barsi-Rhyne, Kristine Miller, Chris Vargas, Kristine Andersen, Jacqueline Pyle, Jessica Jarecki

Faculty: Miri VanHoven

15. Social Rank Predicts Risk-Aversion in Foraging by Squirrel Monkeys, *Saimiri boliviensis boliviensis*.

Brian Liu, Amanda Aguilera

Faculty: Luis A. Bonachea

Collaborators: Jessica R. Rogge, Lawrence E. Williams – University of Texas M.D. Anderson – Michale E. Keeling Comparative Medicine and Research Center

16. Investigating Sulfur River 1 (SR1) Bacteria in Sulfur Rich and Host-associated Environments.

Margarita Rangel, Stephanie Nystrom, Amelia Lindsey, Adam Caldwell, Sumreet Ghotra

Faculty: Cleber Ouverney

17. An Assessment of Antifouling Paint (Copper) Tolerance of Populations of Marine Fouling Organisms in California.

Kyle Martin, Ann Ho, Danielle Perryman, Darren Wostenberg

Faculty: Joshua Mackie

Collaboration: Sean Craig, Humboldt State University

Department of Chemistry

18. Rapid and Cost Effective Detection of Drugs of Abuse in Urine Using Reverse Phase LC/MS. (Amy) Myeonghui Kim and Development of Analytical Methods for the Determination of Metabolites as Potential Biomarkers. Andy Dang

Faculty: Maria M. Pesek, Joseph J. Pesek

19. LC-UV and LC-MS Methods for the Determination of Isoniazid.

Loan Nguyen, Le Huyen Tong

and Correlation of Retention Times of Basic, Acidic and Neutral Compounds with Zeta Potential Measurements for Characterization of Stationary Phases.

Caesar Munera, Colby Tse

Faculty: Joseph J. Pesek, Maria T. Matyska

20. Changes in the Solubility of Aromatic Amino Acids Reflect Differences in Desolvation Energy.

Tanya Ghaemmaghani

Faculty: Daryl K. Eggers

21. Use of ITC to Study the Thermodynamics of Enzyme-Inhibitor Binding.

Jennifer Le

Faculty: Daryl K. Eggers

22. Solvent Influence on the Chiral Recognition of Amino Acids.

Jamie L. Lunkley, Kristina M. Tuminaro, Kevin Chen, Phillip Shieh

Faculty: Gilles Muller

23. Photophysical and Chiroptical Properties of Chiral Complexes of Europium (III) with *N,N'*-Bis(1-phenylpropyl)-2,6-pyridinedicarboxamide.

Victoria Chang, Roberto Tovar, Edwin Joya, Victoria Anne Johnson

Faculty: Gilles Muller, Daniel Straus

24. Classification and Related Methods Applied to a Simple Homology Approach for Modeling Protein Residue Solvent Accessibility.

Joanna Spencer, Vaishnavi Nagesh, Anneli Hardy, Reecha Nepal, John Resngit, Edwin Chung

Faculty: Brooke Lustig and Andrea Gottlieb

25. Increased Binding Stability Correlates with Tat Peptide Flexibility in Lattice Modeling of BIV Tat-Tat.

Frank Nguyen, Savitha Srinivasan, Loc Nguyen, Reema Shalan, Radhakrishna Patel, Edwin Chung

Faculty Brooke Lustig

26. Synthesis and Characterization of First Row Transition Metal Complexes of a Paramagnetic Terpyridine Analog.

Dorothy Chung, Servando Ponce

Faculty: David Brook

Department of Chemistry

27. Synthesis Approach to Water Soluble Verdazyls.

Diego Matteo, Tiffany Truong, Jan Ho

Faculty: David Brook

28. Expression and Purification of Bromoperoxidase from *Corallina vancouveriensis*.

Phil Campbell, Mallory Kato

Faculty: Elaine D. Collins

Collaborators: Roy Okuda

29. Enzyme Activity of Bromoperoxidase Encapsulated in Alginate Gels.

Quoc Dang, Zachary Goecker, Thu Le, John H. Kim, Ngoc Tumi Tran

Faculty: Roy Okuda

30. Chemical Synthesis of a Phosphorylated, Lipid-Linked Inositol Glycan as a Potential Anti-Cancer Agent.

Vanessa Ruiz

Faculty: Marc d'Alarcao

Collaborator: Prof. Susumu Suzuki, Tohoku University, Sendai, Japan

31. Synthesis of an Inositol Glycan and Reevaluation of its Insulin-like Activity.

Rosalind Tu, Jamie Liu, Jacinto De La Cruz

Faculty: Marc d'Alarcao

32. Evidence for Aldol Condensation Products in Organic Films Formed on Sulfuric Acid Solutions at Upper Troposphere/Lower Stratosphere Aerosol Acidities.

Saul Perez Montano, Linda Leong, Kieu Ha, Jeffrey Berry, Nathan Feick, Riyanto Dwisaksono, Khaled Khaled, Hoang Le

Faculty: Annalise Van Wyngarden

Collaborator: Laura T. Iraci, NASA Ames Research Center

33. Photo-sensitivity of Organic/Sulfuric Acid Mixtures at Concentrations Typical of Upper Troposphere/Lower Stratosphere Aerosols.

Adrian Sandoval, Kieu Ha, Saul Perez Montano

Faculty: Annalise Van Wyngarden

Collaborator: Laura T. Iraci, NASA Ames Research Center

34. Ru(II)-diimine Labeled P450 BM3 Enzymes

Ngoc-Han Tran, Sudharsan Dwaraknath

Faculty: Lionel E. Cheruzel

35. Development of Highly Efficient Light-driven P450 Biocatalysts

Daniel Nguyen, Angelina Nguyen, Thien-Anh Nguyen, Than Dao, Sruthi Mahadevan, Nguyen Nguyen

Faculty: Lionel E. Cheruzel

Department of Computer Sciences

36. HTTP Attack Detection using N-gram Analysis.

Aditya Oza

Faculty: Mark Stamp

37. Metamorphic Code Generation from IR Bytecode.

Teja Tamboli

Faculty: Mark Stamp

38. Application of Secretary Algorithm to Dynamic Load Balancing in User-Space on Multicore Systems.

Kyoung-Hwan Yun

Faculty: Teng Moh

39. Enhanced Clustering of Technology Tweets.

Ananth Gopal

Faculty: Teng Moh

40. Using Machine Learning to Automatically Detect Helpful and Unhelpful Product Reviews.

Scott Bolter

Faculty: Teng Moh

41. Improving Smart-Phone Privacy using the Cloud.

Surabhi Gaur

Faculty: Melody Moh

42. Improving Smart-Grid Security using Merkle Trees.

Melesio Munoz

Faculty: Melody Moh

Department of Geology

43. The Relationship Between Large Woody Debris and a Decrease of Median Bed Material Size in a Gravel Bed Channel After Post-Fire Debris Flows.

Lauren E. Short

Faculty: Manny Gabet

44. A Snail's Tale: A Geologic History of a Species.

Anthony Lenci

Faculty: Jonathan R. Hendricks

45. The Digital Atlas of Ancient Life.

Eric Lenci, Nina Abdollahian, Anthony Lenci

Faculty: Jonathan Hendricks

Department of Geology

46. Structure and Construction of the Highly Elongate, Cretaceous Seven-Fingered Jack Pluton in the Devil's Smokestack Area, North Cascades, Washington.

Scott Elkins

Faculty: Robert B. Miller

47. Foliation Development and Intrusive Relationships in the Cretaceous Wrights Lake and Jurassic Pyramid Peak Plutons of the Northern Sierra Nevada Batholith, Desolation Wilderness, California.

Brad Buerer

Faculty: Robert B. Miller

48. Structure, Construction, and Geochronology of the Cretaceous Seven Fingered Jack Pluton in the Klone Peak Area, North Cascades, Washington.

Kelly N. Dustin

Faculty: Robert B. Miller

49. Vulnerability of Groundwater to Perchloroethylene Contamination from Dry Cleaners in the Niles Cone Groundwater Basin, Alameda County, California.

Anne Jurek

Faculty: June Oberdorfer

Department of Mathematics

***Classification and Related Methods Applied to a Simple Homology Approach for Modeling Protein Residue Solvent Accessibility.**

Joanna Spencer, Vaishnavi Nagesh, Anneli Hardy, Reecha Nepal, John Resngit, Edwin Chung

Faculty: Andrea Gottlieb; Brooke Lustig

*(*This poster is located in the Chemistry Department cluster - Poster # 24)*

50. Detecting Speed Bumps in Point Cloud Data.

David Goulette, Austin Cheng, Robert Hanson, Valerie Sui,

Faculty: Dr. Bem Cayco

Collaborator: Jake Askeland, Volkswagen

51. Metamodeling: A Stochastic Kriging Approach.

Jian-Long Liu, Vivek Bansal, Helen Liang, Chenchen Shen, Wanzhen Wu, Xueqin Yin

Faculty: Bee Leng Lee, Bem Cayco

Collaborators: Peter Haas, Cheryl Kieliszewski, Ignacio Terrizzano, IBM

Department of Meteorology and Climate Science

52. Observations of Extreme Fire Behavior and Fire-Atmosphere Interactions during the FireFlux II Field Campaign.

Braniff Davis, Jonathan Contezac, Dianne Hall, Daisuke Seto

Faculty: Craig Clements

Collaborators: Adam Kochanski and Steven Krueger (University of Utah)

53. Observations of Fire Front Passage in Complex Terrain.

Jon Contezac, Dianne Hall, Braniff Davis, Daisuke Seto, Allison Charland

Faculty: Dr. Craig Clements.

54. Effects of Atmospheric Nocturnal Drying Events on Bay Area Wildfire.

Richard Bagley

Faculty: Dr. Craig Clements

55. Mechanisms of Winter Snow Cover Variations over the Sierra Nevada: 2001-2012.

Terrence J. Mullens, Yu Li, Henry D. Bartholomew, Andrew Chiuppi III

Faculty: Menglin S. Jin

56. The Effect of Synoptics on the Urban Heat Island in Oklahoma City.

Anamarie Perez

Faculty: Martin Leach

Department of Physics and Astronomy

57. Using Stereo Photogrammetry to Create Digital Elevation Models of Planetary Surfaces.

Greta Cukrov

Faculty: Monika Kress

Collaborators: (Cynthia Phillips, SETI Institute)

58. The Mineralogical and Chemical Analyses of Antarctica Dry Valley Sediments as Potential Analogs for Mars.

Shital Patel

Faculty: Monika Kress

Collaborator: Janice Bishop, SETI Institute

59. How to Identify Different Types of Aerosol Particles.

Caroline S. Ward

Faculty: Patrick J. Hamill

Collaborators: NASA AMES Research Center

60. Aerosol Discrimination Through Linear Polarization.

Patricio Piedra

Faculty: Patrick J. Hamill

Department of Physics and Astronomy

61. MaxEnt Muon-Spin Research of EuBCO superconductivity near T_c and of earthquake-like hole behavior in MgO.

R. Schwartz, A. Love, S. Lee, B. Johnson, G. Welch

Faculty: C. Boekema, F. Freund & M.C. Brown

Collaboration: SLAC, SETI NASA Ames

62. Electron Localization in Fe_3O_4 : a Wannier Study.

J. Wainwright, A. Carpentier & A. Kim

Faculty: C. Boekema & P. Sakkaris

63. Structure and Evolution of Exoplanetary Systems, Star Clusters, and Galaxies.

Beth Johnson, Vakini Santhanakrishnan, Richard Vo

Faculty: Aaron J. Romanowsky

Collaborators: Beth Johnson (BS Physics), CAMPARE / SETI Institute

Tony Carpentier (MS Physics), Boekema research group, SJSU

Acknowledgements:

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Congratulations and thanks to all the hard working undergraduate and graduate students and their faculty mentors who presented their work today!