Occidental College
Summer Research Conference
Schedule of Events

8:00 a.m.  Poster set up
           Samuelson Pavilion

8:30 a.m.  Registration
           Quad, near stairs to Arthur G. Coons (AGC) Hall

9:00 a.m.  Oral Presentations, Session One
           Fowler Hall, Rooms 111, 112, 202, 207, 209, 302

10:15 a.m. Oral Presentations, Session Two
           Fowler Hall, Rooms 111, 112, 202, 207, 209, 302

11:30 a.m. Keynote address
           Dr. Raymond Yen ’82
           Mosher 1 Auditorium, Norris Hall of Chemistry

12:30 p.m. Lunch
           Gresham Dining Room

1:15 p.m.  Poster Presentations, Session One
           Samuelson Pavilion

1:45 p.m.  Poster Presentations, Session Two
           Samuelson Pavilion

2:30 p.m.  Oral Presentations, Session Three
           Fowler Hall, Rooms 111, 112, 202, 207, 209, 302

July 31, 2013
ORAL PRESENTATIONS
9:00-10:00 AM

Session 1-A, Fowler Hall, Room 112
Chair: Andrew Shtulman

9:00 How individuals with different levels of knowledge communicate in a collaborative task
Valérie Bourassa, Mentor: Andrew Shtulman, Psychology

9:15 Characteristics of successful collaboration despite differences in conceptual understanding
Evan Thomas, Mentor: Andrew Shtulman, Psychology

9:30 How parents shape their children's exposure to affectively negative information about the biological world.
Andrea Villalobos, Mentor: Andrew Shtulman, Psychology

9:45 Children's memory for affectively negative information about the biological world
Devin Shermer, Mentor: Andrew Shtulman, Psychology

Session I-B, Fowler Hall, Room 207
Chair: Deborah Martinson

9:00 New Soul
Joey Massari, Mentor: James Ford, English & Comparative Literary Studies

9:20 "A Pause but not a Conclusion": the Fantastic Genre and the Final Scenes of Toni Morrison's Paradise
Hilary Jones, Mentor: Jean Wyatt, English & Comparative Literary Studies

9:40 Reflections on Place through Literature
David Weightman, Mentor: Deborah Martinson, English Writing & Rhetoric
Session I-C, Fowler Hall, Room 202
Chair: Cheryl Okumura

9:00  *Isolation of Bacmid DNA and Transfection of Insect Cells to Express Recombinant Factor VIII Protein*
      Luke Remley & Sally Madiba, Mentor: Aram Nersissian, Chemistry

9:40  *Amphetamine Reduces Novelty Seeking in LoS and HiS Rats*
      Taryn Predki, Mentor: Dale Chapman, Psychology

Session I-D, Fowler Hall, Room 111
Chair: Janet Morris

9:00  *Portrait of the Artist as a 'Researcher'*
      Jacob Surpin, Mentor: Martha Ronk, English & Comparative Literary Studies

9:20  *Reading Semiocapitalism: Affective Ambivalence in Herman Melville's “Bartleby” and Todd Haynes’ “Safe”*
      Zachary Ehmann, Mentor: Heather Lukes, Critical Theory & Social Justice

9:40  *Spielberg, The Shoah Foundation, and the Americanization of The Holocaust*
      Benjamin Silver, Mentor: Marla Stone, History

Session I-E, Fowler Hall, Room 209
Chair: Clair Morrissey

9:00  *Theories of Translation*
      Juliet Suess, Mentor: Warren Montag, English & Comparative Literary Studies

9:20  *Representation in the Photographs of Ray K. Metzker*
      Ethan Goldberg, Mentor: Dan Fineman, English & Comparative Literary Studies

9:40  *A Constructivist Approach to Justifying Human Rights*
      Priya Ghose, Mentor: Clair Morrissey, Philosophy
ORAL PRESENTATIONS

10:15 – 11:15 AM

Session II-A, Fowler Hall, Room 302
Chair: Andrew Cosbie

10:15 Electrochemical Cartilage Reshaping
Maya Herzig, Mentor: Michael Hill, Chemistry

10:35 Synthesis of an Artificial Electron-Relay for Cytochrome P450
Rebeca Fernández & Tim Hogervorst, Mentor: Michael Hill, Chemistry

10:55 Determining Conformational Changes of G6PD Via Limited Proteolysis
Sam Gill, Mentor: Chris Craney, Chemistry

Session II-B, Fowler Hall, Room 112
Chair: Renee Baran

10:15 Corynebacterium pseudoWHAT?: A murine model for equine Corynebacterium pseudotuberculosis development: Part 1
Megan Sumida, Mentor: Roberta Pollock, Biology

10:35 Corynebacterium pseudoWHAT?: A murine model for equine Corynebacterium pseudotuberculosis development: Part 2
Kristina Geiger, Mentor: Roberta Pollock, Biology

10:55 Creating a phylogeography using genomic data for bird species from Mexican pine-oak forests
Jessie Salter, Mentor: John McCormack, Biology
Session II-C, Fowler Hall, Room 207
Chair: Brian Kim

10:15  *Perspectives on Race From White Men of Generation Y*
*Ryan Kammerman*, Mentor: Richard Mora, Sociology

10:35  *Support Needs, Meanings and Accommodations for Homicide Survivors: What the Experts Say*
*Larissa Saco*, Mentor: Danielle Dirks, Sociology

10:55  *“She’s White and She’s Hot, So She Can’t Be Guilty”: The Construction of Criminality and White Womanhood*
*Emma Zack*, Mentor: Danielle Dirks, Sociology

Session II-D, Fowler Hall, Room 202
Chair: Janet Scheel

10:15  *Thermal Expansion of the Heavy Fermion Antiferromagnetic YiBiPt*
*Rishi Bhandia*, Mentor: George Schmiedeshoff, Physics

10:35  *Charge Transport in Gold Nanoparticle Films*
*Galen Mack-Crane*, Mentor: George Schmiedeshoff, Physics

10:55  *Fourier and POD Analysis of Turbulent Rayleigh-Bénard Convection*
*Raphael Monroy*, Mentor: Janet Scheel, Physics

Session II-E, Fowler Hall, Room 209
Chair: Martha Matsuoka

10:15  *LA Hip Hop’s Inheritance: Central Avenue to the Present*
*Daniel Harrison*, Mentor: Jeremiah Axelrod, History

10:35  *From Columbine to Sandy Hook: Investigating the Effectiveness of LAUSD School Safety Protocols in the Context of U.S. Gun Culture*
*Caroline Bringenberg*, Mentor: Martha Matsuoka, Urban and Environmental Policy

10:55  *Mexican Repatriation Through the Great Depression in L.A.: Mexico de Afuera in Oblivion*
*Kyler Hall*, Mentor: Alexandra Puerto, History
Session II-F, Fowler Hall, Room 111
Chair: James Ford

10:15  *Black Student Activism and Black Consciousness*
      **Myaisha Hayes**, Mentor: James Ford, English & Comparative Literary Studies

10:35  *Resisting Racialized Student Push-out in LAUSD: An Analysis of Youth-led Political Activism*
      **Mara Dauber**, Mentor: Thalia González, Politics

10:55  *Anti-Racial Profiling Laws in the Age of Color-Blind Racism*
      **Jordan Greenslade**, Mentor: Caroline Heldman, Politics
POSTER PRESENTATIONS

Session One (1A – 1Z), 1:15-1:45 PM
Session Two, (2A – 2Z), 1:45-2:15 PM

Session One:

1A Military Veteran Résumés: Can Transition Assistance Programs Improve an Applicant's Chances of Getting an Interview Callback?
Samuel Benfey, Mentor: Brian Kim, Psychology

1B The Green Successor: Performing Catalysis with Cytochrome P450
Candice Crilly, Mentor: Michael Hill, Chemistry

1C Bromeliads: Master Manipulators of Acidity
Kyle Fukui, Mentor: Gretchen North, Biology

1D College Student Satisfaction and Occidental: What Oxy Students Are Telling Us About Their Experiences
Zachary Buschbach, Mentor: Hanna Spinosa

1E The Use of an RFP-GFP Construct as a Molecular Tool to Visualize the Intracellular Fate of Group A Streptococcus
Hyewon No, Mentor: Cheryl Okumura, Biology

1F Optimizing the Efficiency of Data Sorting through Computer Algorithms
Kyle Shin, Mentors: Aram Nersissian and Harry B. Gray (Caltech), Chemistry

1G The role of attention in the cutaneous rabbit illusion
Soumya Choudhury, Mentor: Diana Card Linden, Cognitive Science

1H Studies on an enantioselective synthesis of DAB-1
Hilary Brown, Mentor: Donald Deardorff, Chemistry

1I Contribution of Streptococcal Collagen-Like Protein (Scl-1) in the Evasion of Oxidative Burst Mediated Killing of Group A Streptococcus
Neelou Etesami, Mentor: Cheryl Okumura, Biology

1J Studies on an enantiomeric synthesis of Cymbalta
Jayson Yuter, Mentor: Donald Deardorff, Chemistry

1K Abundance, Distribution, and Size Frequency of Three Emergent Fishery Species in Palos Verdes, California
Adrienne Mikovari, Mentor: Daniel Pondella, Biology

1L Exhumation of the Zanskar Himalaya, India, from Apatite Fission Track Thermochronology
Drew Van Vleck, Mentor: Ann Blythe, Geology

1M Synthesis of Fluorescent Chemosensors for Hypochlorous Acid and Other Reactive Oxygen Species
Alexander Rand, Mentor: Derek Ross, Chemistry

1N The Design and Characterization of Polyvalent Viruses via the Bacteriophage Qβ Scaffold
Kevin Hong, Mentor: Andrew Udit, Chemistry

1O Re-Thinking the Nature of Trust: Illuminating the Vulnerability of Organ Transplant Patients Through The Visual Arts
Eleanor Powell, Mentor: Clair Morrissey, Philosophy

1P The Virus BLItz: Characterizing Heparin Antagonist Virus-Like Particles
Myles Groner, Mentor: Andrew Udit, Chemistry

1Q Conductivity measurements of nanostructured Au films from greener emulsions of Au nanoparticles
Anton Molina, Mentor: Eileen Spain, Chemistry

1R Effects of Alprazolam and Clorazepate on Exploration in Open-Field
Carlos Perez-Vivaldo, Mentor: Nancy Dess, Psychology

1S Explorations of Bdellovibrio bacteriovorus films and sibling film inhibition
Edward Hyeong-Jin Kim and Nicholas Thomas, Mentor: Eileen Spain, Chemistry

1T The effect of bi-lateral bunt training on bunt skill and bi-manual motor coordination
Van Fudge, Mentor: Lynn Mehl, Kinesiology

1U Rapid formation of nanostructured Au films for solar steam generation applications
Benjamin Clark, Mentor: Eileen Spain, Chemistry

1V The interfacial interactions of the redox potential of cytochrome c 552
Tianming Zhu, Mentor: Michael Hill, Chemistry

1W Confirming the NEX2 peptide as c4h
Eric Kazangian, Mentor: Joseph Schulz, Biology

1X Invertebrate Communities in Werauhia gladioliflora
Michelle Lo, Mentor: Elizabeth Braker, Biology

1Y  Regime Shifts: Evidence from the Historical Narrative
    Max Xie, Mentor: Andrew Jalil, Economics

SESSION TWO:

2A  Verification of a single genetic mutation in blue copper proteins
    Darryenn Castellanos, Mentor: Aram Nersissian, Chemistry

2B  Tic-Tac-Toe: Pairing Strategies
    Brandon Martelli, Mentor: Eric Sundberg, Mathematics

2C  Optimization of Wildtype phospholipase D Purification
    Christopher Hino, Mentors: Roberta Pollock and Karen Molinder, Biology

2D  Student Loans at Occidental College
    Aleksandra Radojevic, Mentor: Brandon Lehr, Economics

2E  Studies on Enantioselective Synthesis of Cymbalta
    Christopher Discolo, Mentor: Donald Deardorff, Chemistry

2F  Suppression of tba-1(ju89) neural defects by klp-7 and zer-1
    Christina Turner, Mentor: Renee Baran, Biology

2G  Oxy Greeks: Factors Influencing a Student’s Decision to Join a Sorority or Fraternity on Campus
    Austin Dake, Mentor: Hanna Spinosa
2H *Impacts of Captive Rearing and Gut Microbe Elimination on the Neotropical Pentatomid, Sibaria englemani*
*Kalisa Bistolas*, Mentor: Shana Goffredi, Biology

2J *The Future of CSR*
*Samuel Pastor*, Mentor: Sanjeev Khagram, Diplomacy and World Affairs

2K *Surfgrass as a significant habitat: Which fish species are most commonly found here?*
*Binh Vuong*, Mentor: Daniel Pondella, Biology

2L *Once the Badge Comes On, it Never Comes Off*
*Fernando Zepeda*, Mentor: Richard Mora, Sociology

2M *Bloom or Gloom? Bike Comparison of Los Angeles, Hong Kong and Guangzhou*
*Fun-Fun (Kristie) Chu*, Mentors: Robert Gottlieb and Mark Vallianatos, Urban and Environmental Policy

2N *Exhumation of Central San Gabriel Mountains using Apatite Fission-Track Thermochronometry*
*Anne Fendick*, Mentor: Ann Blythe, Geology

2O *From Aquaporins to Treetops: Characterizing Tank Bromeliads*
*John Dawson*, Mentor: Gretchen North, Biology

2P *Measuring Temporal Recalibration*
*Kassi Mirandette*, Mentor: Carmel Levitan, Cognitive Science

2Q *Analysis of the Effects of Lyso PC on EDPPC*
*Elissa Kim*, Mentor: Phoebe Dea, Chemistry

2R *Deciphering Science and Math Conceptual Improvement in Area Middle Schools*
*Donovan Dennis*, Mentor: Chris Craney, Chemistry

2S *Feeding Experiment and Behavioral Observations of Microtylopteryx hebardi*
*Tayler Renshaw*, Mentor: Elizabeth Braker, Biology

2T *Studies on the Enantioselective Synthesis of DAB-1*
*Anasheh Sookezian*, Mentor: Donald Deardorff, Chemistry

2U *From Aquaporins to Treetops: Hydraulic Conductances in Tank Bromeliads*
*Franklin Maharaj*, Mentor: Gretchen North, Biology
2V  Perfluorododecanoic acid kinetics and equilibrium at the air-water interface  
James Hartanto, Mentor: Eileen Spain, Chemistry

2W  Spatially organized films of B. bacteriovorus: ecological & human health implications  
Elya Shamskhou, Mentor: Eileen Spain, Chemistry

2X  Simulation of Particle Dynamics due to a Realistic End Potential  
Jeffrey Johnson, Mentor: Dennis Eggleston, Physics

2Y  Let There Be Light: The Long-Term Effects of Varying Canopy Light Exposure on Pentaclethra macroloba Sapling Development  
Kristen Treat, Mentor: Elizabeth Braker, Biology

ORAL PRESENTATIONS

2:30 – 3:50 PM

Session III-A, Fowler Hall, Room 302  
Chair: Andrew Udit

2:30  Click Chemistry and Viruses- Creating a Better Anticoagulant  
Griffin Mead, Mentor: Andrew Udit, Chemistry

2:50  Channel Selection by Multiplexing  
Kevin Kuwata, Mentor: Dan Snowden-Ifft, Physics

3:10  Removal of undershoot in DRIFT signals using software  
Everest Law, Mentor: Dan Snowden-Ifft, Physics

3:30  The Effects of Aspect Ratio on Onset Pattern Formation in Simulated Rayleigh-Benard Convection  
Mary Flagstad, Mentor: Janet Scheel, Phyiscs
Session III-B, Fowler Hall, Room 209
Chair: Carmel Levitan

2:30 *The Temporal Impulse Response of the Auditory System*
Alex Kuefler, Mentor: Carmel Levitan, Cognitive Science

2:50 *Hemispheric Specialization of the Rubber Hand Illusion*
Anika Lavine, Mentor: Carmel Levitan

3:10 *An Evaluation of a Summer School Program for English Language Learners*
Emily Fowler, Mentor: Mary Christianakis, Critical Theory & Social Justice

3:30 *Origins of Joy: Ultrasonic Vocalization in Selectively Bred Rats*
Rachel Lapidus, Mentor: Nancy Dess, Psychology

Session III-C, Fowler Hall, Room 207
Chair: Bhavna Shamasunder

2:30 *Citizenship and Human Rights: Insights from an Interdisciplinary Approach*
Sarah Doyel, Mentor: Anthony Chase, Diplomacy & World Affairs

2:50 *Postcolonial Public Health: Sociopolitical Constructions of an Emerging Diseases Worldview*
Kerry Sakimoto, Mentor: Donna Maeda, Diplomacy & World Affairs

3:10 *The Decline and Fall of the Iran-Syria-Hezbollah Nexus*
Zachary Abels, Mentor: Hussein Banai, Diplomacy & World Affairs

3:30 *Pacoima Beautiful: A Study of Transformational Power in the San Fernando Valley*
Raquel Mason, Mentor: Bhavna Shamasunder, Urban and Environmental Policy

Session III-D, Fowler Hall, Room 202
Chair: April Mazzeo

2:30 *Aimee Semple McPherson: A 1920s Evangelist and Innovator of Religion and Media*
Sarah-Anne Nelson, Mentor: Keith Naylor, History

2:50 *Heidegger: Thinking the In-Between*
Brian Holtvedt, Mentor: Malek Moazzem-Doulat and Dale Wright, Religious Studies
3:10  \textit{Nietzsche and Creativity}  
\textbf{Shalini Pace,} Mentor: Dale Wright, Religious Studies

3:30 \textit{The Pursuit of an Ontological Creativity: Subalterity and the Resolve of Freedom}  
\textbf{Zabia Colovos,} Mentor: Dale Wright, Religious Studies

Session III-E, Fowler Hall, Room 112  
Chair: Brody Fox

2:30 \textit{It's not all about Picasso: An Examination of How Art History Approaches Race}  
\textbf{Robert Rodríguez-Donoso,} Mentor: Amy Lyford, Art History and the Visual Arts

2:50 \textit{Solving the Digital Dilemma: Confronting 21st Century Challenges in Preserving Moving Image Media}  
\textbf{Ryan Rambach,} Mentors: Daniel Chamberlain and Brody Fox

3:10 \textit{Ethnographic Portrayals of Native Americans in Film}  
\textbf{Ryan Metzler,} Mentor: Brody Fox, Art History and Visual Arts

Session III-F, Fowler Hall, Room 111  
Chair: Danielle Dirks

2:30 \textit{Choosing to be Childfree: Situational Causes of Voluntary Childlessness}  
\textbf{Shayna Jackson,} Mentor: Lisa Wade, Politics

2:50 \textit{My LA River: Northeast Los Angeles River Collaborative as a New Model for Revitalization}  
\textbf{Nafeesa Andrabi,} Mentor: Jan Lin, Sociology

3:10 \textit{Jim Crow in a "Post Racial" Society: How Policies of the War on Drugs are Affecting Youth}  
\textbf{Marina Serrano,} Mentor: Mary Christianakis, Critical Theory & Social Justice

3:30 \textit{LA Mural Ordinance: an Analysis on the Mural Ban and its Effects}  
\textbf{Jaqueline Ayala,} Mentor: Danielle Dirks, Sociology