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

9:15  *How individuals with different levels of knowledge communicate in a collaborative task*
   **Valérie Bourassa**, 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*

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

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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

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Session I-F, Fowler Hall, Room 302  
Chair: Gretchen North

9:00  JAK-STAT signaling pathway as a therapeutic target in leukemia  
Tina Tran, Mentor: Dr. Ravi Bhatia, City of Hope

9:20  The Effects of Verbal Cues on the Biomechanics of “High Knee” and “Butt Kick” Running Form Drills  
Marnie Kinnaird, Mentor: Stuart Rugg, Kinesiology

9:40  Research and Recommendations on the Environmental Sustainability of the Occidental College Campus  
Lila Singer-Berk, Mentor: Robert Gottlieb, Urban and Environmental Policy
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  Channel Selection by Multiplexing  
Kevin Kuwata, Mentor: Dan Snowden-Ifft, 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 Okumara, 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

1Z Organic and Local Food Movement in Hong Kong & the U.S.
Tracy Hei Man Wong, Mentors: Robert Gottlieb and Mark Vallianatos,
Urban and Environmental Policy

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
Austen Dake, Mentor: Hanna Spinosa

2H Impacts of Captive Rearing and Gut Microbe Elimination on the Neotropical Pentatomid, Sibaria englemani
Kalita Bistolas, Mentor: Shana Goffredi, Biology

2J The Future of CSR
Samuel Pastor, Mentor: Sanjeev Khagram, Diplomacy & 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  
Kristie Fun-Fun 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
Let There Be Light: The Long-Term Effects of Varying Canopy Light Exposure on Pentaclethra macroloba Sapling Development
Kristen Treat, Mentor: Elizabeth Braker, Biology

Thermal Expansion of the Heavy Fermion Antiferromagnet YbBiPt
Rishi Bhandia, Mentor: George Schmiedeshoff, Physics
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  Removal of undershoot in DRIFT signals using software
Everest Law, Mentor: Dan Snowden-Ifft, Physics

3:10  The Effects of Aspect Ratio on Onset Pattern Formation in Simulated Rayleigh-
Bénard Convection
Mary Flagstad, Mentor: Janet Scheel, Physics

Session III-B, Fowler Hall, Room 209
Chair: Carmel Levitan

2:30  An Evaluation of a Summer School Program for English Language Learners
Emily Fowler, Mentor: Mary Christianakis, Critical Theory & Social Justice

2:50  The Temporal Impulse Response of the Auditory System
Alex Kuefler, Mentor: Carmel Levitan, Cognitive Science

3:10  Hemispheric Specialization of the Rubber Hand Illusion
Anika Lavine, Mentor: Carmel Levitan, Cognitive Science

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, Mentors: Malek Moazzem-Doulat and Dale Wright, Religious Studies

3:10  Nietzsche and Creativity
      Shalini Pace, Mentor: Dale Wright, Religious Studies

3:30  The Pursuit of an Ontological Creativity: Subalterity and the Resolve of Freedom
      Zabia Colovos, Mentor: Dale Wright, Religious Studies
Session III-E, Fowler Hall, Room 112  
Chair: Broderick Fox

2:30  *It's not all about Picasso: An Examination of How Art History Approaches Race*  

2:50  *Solving the Digital Dilemma: Confronting 21st Century Challenges in Preserving Moving Image Media*  
**Ryan Rambach**, Mentors: Daniel Chamberlain, Center for Digital Learning & Research and Broderick Fox, Art History & Visual Arts

3:10  *Ethnographic Portrayals of Native Americans in Film*  
**Ryan Metzler**, Mentor: Broderick Fox, Art History & Visual Arts

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

2:30  *Choosing to be Childfree: Situational Causes of Voluntary Childlessness*  
**Shayna Jackson**, Mentor: Lisa Wade, Politics

2:50  *My LA River: Northeast Los Angeles River Collaborative as a New Model for Revitalization*  
**Nafeesa Andrabi**, Mentor: Jan Lin, Sociology

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

3:30  *LA Mural Ordinance: an Analysis on the Mural Ban and its Effects*  
**Jaqueline Ayala**, Mentor: Danielle Dirks, Sociology