



FIAT *f(lux)*

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Robert & Colleen  
*HaasScholars*  
Program

FIAT *f(lux)*  
2004 Haas Scholars  
Undergraduate  
Research Conference

University of California, Berkeley  
Office of Undergraduate Research  
Haas Scholars Program  
301 Campbell Hall #2922  
Berkeley, CA 94720-2922

fiat lux:  
LET THERE BE LIGHT  
+ flux:  
A STATE OF CONSTANT CHANGE

FIAT *f(lux)*

Academics  
and Artists  
in Transition

2004  
Haas Scholars  
Undergraduate  
Research  
Conference

UNIVERSITY  
OF CALIFORNIA,  
BERKELEY

APRIL 21–MAY 1  
The Faculty Club

Robert & Colleen  
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Program

[http://research.berkeley.edu/haas\\_scholars/](http://research.berkeley.edu/haas_scholars/)

The 2004 conference theme — *Fiat f(lux)* — plays with the UC motto, *Fiat Lux* (let there be light, or wisdom), on several levels. This year's Haas Scholars seek to advance knowledge and understanding by building on UC's academic traditions and resources. At the same time, through their groundbreaking research and art, they seek to affect change (or flux) in the academy and beyond.

The algebraic form applied to the Latin motto, *Fiat f(lux)*, suggests the inclusion of science and engineering research; as well as social science, humanities, and the arts.

The core of the *Fiat f(lux)* sunburst symbolizes the scholars' collective energy; the emanating rays represent the creativity generated by interdisciplinary exchange and friendship.

We invite you to join this respectful and democratic community in celebrating the culmination of this year's remarkable work.

### Theatrical Performance

An all-female performance of Shakespeare's *Twelfth Night*  
Directed by Crystal Finn  
Durham Studio Theater  
April 21–23, 7:30  
Admission free

### Photo Exhibition

*Still Moments of a World in Flux: the Photographs of Dafna Kory, Elizabeth Lane, and Jason Malinsky*  
Wurster Hall lobby  
Opening: April 29, 5:00–8:00  
Exhibition: April 30–May 1

Design by Nancy Carroll / Illustration by David Gentry

## FRIDAY, APRIL 30

### The Faculty Club, Heyns Room

10:15–10:45 **Welcome and Coffee**

10:45–12:15 **Genes, Proteins, and Peptides:  
Probing the Molecules of Life**

Chair: Professor Susan Marqusee, Molecular and Cell Biology

**Nasim Sadeghian** (Molecular and Cell Biology Major)  
*Cloning of Extended Auricle 1: A Maize Leaf Developmental Mutant*  
Sponsor: Professor Michael Freeling, Plant and Microbial Biology

**Irene Wong** (Molecular and Cell Biology and Japanese Major)  
*A Novel Approach to Synthetic Vaccine for HIV-1 Involving a Beta-Hairpin Peptide Having Fluoroaromatic Amino Acids*  
Sponsor: Ahamindra Jain, Lecturer, Chemistry

**Jacqueline Gilmore** (Molecular and Cell Biology Major)  
*Investigation of the Biophysical Origin of Proteolytic Resistance*  
Sponsor: Professor Susan Marqusee, Molecular and Cell Biology

12:15–1:45 **Lunch, Howard Room, to honor the 2003–2004 scholars and mentors**

2:00–3:30 **The Revolution Will Not Be Televised:  
Community Activism in Response to Marginality**

Chair: Professor Laura Nader, Anthropology

**Malcolm Harvey** (Sociology Major)  
*The Association Between Combat Post-Traumatic Stress Disorder, Self-Perception, and Worldview — and its Social Ramifications*  
Sponsor: Professor Kim Voss, Sociology

**Jason Malinsky** (Individual Major: Environmental Policy and Investigative Reporting)  
*The Obligation to Endure: Pesticide Poisonings in California*  
Sponsor: Professor William Berry, Earth and Planetary Science

**Laura Alarcón** (Anthropology Major)  
*Shaping a Nation: Middle Class Mobilization in Caracas*  
Sponsor: Professor Laura Nader, Anthropology

3:45–5:15 **Searching for Meaning**

Chair: Professor Ananya Roy, City and Regional Planning

**Timothy Poore** (Psychology Major)  
*Effects of Unconditional Self-Construal on Vigilance and Performance: The Role of "Positive Glow"*  
Sponsor: Professor Rodolfo Mendoza-Denton, Psychology

**Elizabeth Lane** (Philosophy Major)  
*The Elderly Among Us* (Photography project)  
Sponsor: Professor Emerita Penny Dhaemers, Visual Studies, Architecture

**Dafna Kory** (Interdisciplinary Studies Field Major)  
*Give and Take: Charity and Tourism in Bodhgaya, India*  
Sponsor: Professor Ananya Roy, City and Regional Planning

5:15–7:00 **New Scholars Reception, Howard Room**

7:15–8:00 **A Scratched Lens: Readings from Zeina Halim's Novel-in-Progress, followed by discussion**

## SATURDAY, MAY 1

### The Faculty Club, Heyns Room

9:00–9:30 **Welcome and Coffee**

9:30–11:00 **The Border Fallacy:  
Pressures on Gender, Culture, and Nation**

Chair: Professor Joel Altman, English

**Crystal Finn** (English Major)  
*Women Playing Men: Cross-Gender Conditions in Shakespeare Performance*  
Sponsor: Professor Joel Altman, English

**Zeina Halim** (English Major)  
*An Egyptian-American Author Wrestles with Sexuality and Religion in the Writing of Her First Novel*  
Sponsor: Ishmael Reed, Senior Lecturer, English

**Faisal Ghorri** (History Major)  
*Secret Trials and Deportations*  
Sponsor: Professor Kiren Chaudhry, Political Science

11:15–12:15 **Catalysts and Computers:  
Novel Technological Approaches to Societal Challenges**

Chair: Professor Alex Katz, Chemical Engineering

**Sandra Anderson** (Chemistry Major)  
*The Interplay Between Local Organization and Activity of a Heterogeneous Base Catalyst*  
Sponsor: Professor Alex Katz, Chemical Engineering

**Margaret Yau** (Electrical Engineering and Computer Sciences Major)  
*Tangible Messaging: Accessible Technology for the Elderly*  
Sponsor: Professor Anind Dey, Electrical Engineering and Computer Sciences

12:15–12:45 **Light Lunch, Heyns Room**

12:45–2:15 **The Ongoing War Between Man and Microbe:  
Pathogen Survival and Host Response**

Chair: Professor Sangwei Lu, Public Health

**Jonathan Clingan** (Molecular and Cell Biology Major)  
*A Functional Study of HCMV UL 117 Transcript and Protein*  
Sponsor: Professor Fenyong Liu, Public Health

**Raul Clavijo** (Molecular and Cell Biology Major)  
*Role of the cadAB Operon in the Egg Resistance of Salmonella*  
Sponsor: Professor Sangwei Lu, Public Health

**Manasa Basavapatna** (Molecular and Cell Biology and Social Welfare Major)  
*Role of Interferons in Primary Dengue Infection in Mice*  
Sponsor: Professor Eva Harris, Public Health

2:30–4:00 **A Place of One's Own**

Chair: Professor Dawne Moon, Sociology

**Gregory Hughes** (Sociology Major)  
*Exploring Rural Gay Identity and Community Formation*  
Sponsor: Professor Dawne Moon, Sociology

**Tara Rado** (Anthropology Major)  
*"Here, We Are Artistas:" Sex Work and Daily Life in a Public Park in Downtown Rio de Janeiro*  
Sponsor: Professor Nancy Scheper-Hughes, Anthropology

**Alysoun Quinby** (Linguistics Major)  
*Linguistic Atlas of River Yurok*  
Sponsor: Professor Andrew Garrett, Linguistics