2019

Twentieth Annual
Spring Research Conference
Thursday, January 17th
Friday, January 18th
Bancroft Hotel

disrupting:
daring to reimagine
Welcome! In choosing their conference theme, the 2018-2019 Haas Scholars, the program’s 20th cohort, celebrates this important milestone by echoing the central graphic used by the very first cohort. They build on this proud history and the established foundation of knowledge in each field, but also dare to question, reimagine, and even disrupt, contributing essential new understandings and solutions to a world that desperately needs them.

**PHOTOGRAPHY EXHIBITS:**

**The Ruins of Marin**
Sebastian Herics

**Inside the Lab**
Andre Lai

**al-Balqa, Jordan**
Mathew Madain

**Moment, Memory, and Research**
Lulu Matute

**Women of Etruria:**
Micaela Shonafelt

**Living with Loss in Ciudad Juárez**
Raúl Varela

**FILM SCREENING JANUARY 18**

**Fighting to Not Be Forgotten: 25 Years of Feminicides in Ciudad Juárez**

**THURSDAY, JANUARY 17**

**Great Hall, Bancroft Hotel**

8:30–9:00 | Welcome and Coffee

**Chair:** Iris Mauz, Psychology
**Grace Allison (Psychology major)**
**PerceivingisBelieving:ImpactofPartnerPerceptions**
**Faculty Mentor:** Iris Mauz, Psychology

**Raven Devens (Sociology major)**
**Sex Work and Labor Power**
**Faculty Mentor:** Mary Kelsey, Sociology

**Micaela Shonafelt (Classical Civilizations major)**
**Silent No More: Giving Voice to the Women of Etruria**
**Faculty Mentor:** Lisa Pieraccini, History of Art

10:45–12:15 | Uncovering Communal Memories: The Great War, the Cold War, and Feminicide

**Chair:** Margareta Lovell, History of Art

**Mathew Madain (History, Global Studies, and Near Eastern Studies major)**
**Minorities in the Crossfire: World War I and the Crisis of Jordan’s Christians**
**Faculty Mentor:** Maria Mavrourdi, History and Classics

**Sebastian Herics (American Studies major)**
**Missile Memories: Preservation and the Ethics of Narrative**
**Faculty Mentor:** Margareta Lovell, History of Art

**Raúl Varela (Anthropology major)**
**Fighting to Not Be Forgotten: 25 Years of Feminicides in Ciudad Juárez**
**Faculty Mentor:** Raymond Telles, Ethnic Studies

12:30–1:30 | Lunch, Great Hall, Bancroft Hotel

1:45–2:45 | From Lab to Clinic: Small Devices for Large Impact

**Chair:** Ana Arias, Electrical Engineering & Computer Sciences

**Andre Lai** (Bioengineering major, Electrical Engineering & Computer Sciences minor)
**A High-Throughput Microfluidic Device for Single Cell Isolation and Analysis**
**Faculty Mentor:** Vivian Chu, Bioengineering

**Jasmine Jan** (Biomedical engineering major, Electrical Engineering & Computer Sciences minor)
**Printed Optoelectronic Devices for Point-of-Care Biomarker Sensing**
**Faculty Mentor:** Ana Claudia Arias, Electrical Engineering & Computer Sciences

3:00–4:30 | Resisting Criminalization: Brown Bodies, Carcerality, and Border Politics

**Chair:** Victoria Robinson, Ethnic Studies and American Cultures

**Lissa Garcia** (Ethnic Studies major, Education minor)
**Border Performativity and Transfeministx Students in the Tijuana-San Diego Border Region**
**Faculty Mentor:** Cristina Marks, Sociology

**Nancy Rubio** (Chicano/a Studies major)
**Programming without Policing:**
**Latina Youth and Alternative Education in Watsonville, CA**
**Faculty Mentor:** Victoria Robinson, Ethnic Studies and American Cultures

4:45–5:30 | Film Screening: Fighting to Not Be Forgotten: 25 Years of Feminicides in Ciudad Juárez

**Chair:** Raúl Varela (Anthropology major)
**Moderator:** Raymond Telles, Ethnic Studies

**FRIDAY, JANUARY 18**

**Great Hall, Bancroft Hotel**

10:00–10:30 | Welcome and Coffee

10:30–12:00 | Exploring Our World from Large to Small: Dark Matter and Quantum Materials

**Chair:** Karl van Bibber, Nuclear Engineering

**Dan Ferenc-Segedin (Physics major)**
**Phase Coexistence in Multiferroic BiFeO**
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**Faculty Mentor:** Raman Rameh, Physics

**Coelan John (Physics major)**
**Controlling Magnetic and Electronic Properties of Intercalated Transition Metal Dichalcogenides**
**Faculty Mentor:** James Analytis, Physics

**Nicholas Rapidis (Physics major)**
**A Search for Cosmological Signatures of the Axion**
**Faculty Mentor:** Karl van Bibber, Nuclear Engineering

12:00 Lunch, Great Hall, Bancroft Hotel

1:00–2:00 | Understanding Causes, Imagining Solutions: Roots of the Rural Opiate Epidemic and K-12 Ethnic Studies Experiences and Possibilities

**Chair:** David Harding, Sociology

**Andrea Ramírez (Sociology major, Chicano/a Studies minor)**
**Blossoming in Knowledge Through Understanding Suppressed Roots**
**Faculty Mentor:** David Harding, Sociology

**Rebecca Forbes (American Studies major)**
**Understanding the Roots of Opioid Abuse in Small Town Tuolumne County**
**Faculty Mentor:** Nathan Sayre, Geography

2:15–3:15 | Solving the Brain’s Mysteries: Neural Mechanisms and Health Challenges

**Chair:** Yang Dan, Molecular & Cell Biology

**Mohammad Saffari Doost (Integrative Biology major)**
**Identification of Neural Circuits Coordinating Sleep and Cardiovascular Regulation**
**Faculty Mentor:** Yang Dan, Molecular & Cell Biology

**Caleb Choy (Molecular & Cell Biology major)**
**The Role of CD44 and Src Kinases on Aggressive Motility in Glioblastoma**
**Faculty Mentor:** Sanjay Kumar, Bioengineering

3:30–4:30 | Bridging Past and Present Practices: from Oohline Fish Harvesting to Haitian Transnational Migration

**Chair:** Kent Lightfoot, Anthropology

**Arianda Gonzalez** (Anthropology major)
**Ancient Fisheries of the San Francisco Bay Area: Perspectives from the West Berkeley Shellmound**
**Faculty Mentor:** Kent Lightfoot, Anthropology

**Celene Bolanos** (Development Studies and Latin American Literatures major, Food Systems minor)
**Understanding the Roots of Opioid Abuse in Small Town Tuolumne County**
**Faculty Mentor:** David Harding, Sociology

4:45–5:30 | Film Screening: Fighting to Not Be Forgotten: 25 Years of Feminicides in Ciudad Juárez

**Chair:** Raúl Varela (Anthropology major)
**Moderator:** Raymond Telles, Ethnic Studies

A Senior Capstone Experience for All Majors