

HUGHES SCIENCE PIPELINE PROJECT
TWELFTH ANNUAL STUDENT RESEARCH SYMPOSIUM

TUESDAY, 20 APRIL 2004

ELLA WEED ROOM, 3RD FLOOR, MILBANK HALL

SCHEDULE OF SPEAKERS

- 4:05 PAUL E. HERTZ, Director of the HSPP
Welcome
- 4:15 SUSANNA BLANKLEY Research Mentor: Peter Bower, Environmental Science
Coarse Woody Debris and its Role in Carbon Sequestration
- 4:30 CAROLYN OLSON Research Mentor: Peter Balsam, Psychology
Signal Reliability in Pavlovian Conditioning
- 4:45 AAISHA MIRZA Research Mentor: Paul Currie, Psychology
Injections of Nitric Oxide Synthase Inhibitors into the Dorsal Raphe Nucleus of the Midbrain:
Effects on Appetitive Behavior
- 5:00 JADE ZEFF Research Mentor: Robert Remez, Psychology
Art Making and Cognitive Function
- 5:15 MAIKA ONISHI Research Mentor: John Glendinning, Biological Sciences
The Influence of Allelic Variation in *Tas1r3* on Short-term Licking Responses to Sweeteners
- 5:30 ZEAH VENITELLI Research Mentor: Jeanne Poindexter, Biological Sciences
Immunocytochemical Localization of Attachment of Bacteriophage ϕ Cb5 to Wild-type and Mutant
Caulobacter crescentus Cells
- 5:45 CHOMEE YOON Research Mentor: Shao-Ying Hua, Biological Sciences
Dependence of Action Potential Delay and Synaptic Delay on Extracellular Calcium Ion
Concentration
- 6:00 STACEY GOTTESMAN Research Mentor: Larry Heuer, Psychology
Authority-Subordinate Disparities in the Meaning and Importance of Procedural Fairness
- 6:15 IRINA BERNESCU Research Mentor: Rae Silver, Psychology
Resetting Effects of Light on the Mammalian Brain Clock
- 6:30 LAUREN TAL Research Mentor: Ann Shinnar, Chemistry
Subcellular Localization of Aminosterol Biosynthesis in Squaliform Shark Liver
- 6:45 AIMÉE PECK Research Mentor: Ann Shinnar, Chemistry
Biosynthesis of Squalamine in Sharks: Detection of Aminosterols by Mass Spectrometry
- 7:00 LOUISA MORRISON Research Mentor: Elizabeth Kujawinski, Chemistry
The link between microbial community composition and organic matter transformations in a
laboratory system

- 7:15 KUN HAO (ANNA) ZHENG Research Mentor: John Glendinning, Biological Sciences
The Influence of *Tas1r3* Polymorphism on Short-term Sweetener Consumption in 6 Mouse Strains
- 7:30 CAROLINA GABBAI Research Mentor: Brian Morton, Biological Sciences
Development of a Java Class to Analyze Structural Heterogeneity in DNA Sequence Application
with Chloroplast Genomes
- 7:45 PAULINE WANG Research Mentors: R. Mukherjee & A. Miller, Physics/Astronomy
Building Instrumentation for Observing the Sunyaev-Zel'dovich Effect
- 8:00 KAITLIN KRATTER Research Mentors: Charles Liu & Laura Kay, Physics/Astronomy
Spectroscopic Analysis of Nearby Galaxies
- 8:15 DANIELLE SUSSAN Research Mentor: Lisa Son, Psychology
The Development of Metacognitive Monitoring Abilities and Its Educational Implications
- 8:30 MAYAN BOMSZTYK Research Mentor: John Glendinning, Biological Sciences
Bitter Habituation and Generalization in B6 Mice