Friday 4/28/2006

Please proof read for italics, spelling of names, etc.
Must reply to me with an OK or corrections by 8 am of Monday 5/1/2006

Draft PROGRAM
Order: Grad/Undergrad, Department, Concentration

TYPING OF HUMAN ENTEROVIRUSES: A MOLECULAR APPROACH
By: Elly Chou, Dr. David Kiang (California State Department of Health Services), Lauren Wold (California State Department of Health Services), Elain Yeh (California State Department of Health Services), Dr. Lily Chen, Dr. David Schnurr (California State Department of Health Services)
Biomedical Laboratory Science
Faculty Advisor: Dr. Lily Chen

MASS SPECTROMETRY, ELISA AND FARNESYLATION OF PEPTIDES WITH A C-TERMINAL CAAX MOTIF
By: Rose Mary Paw
Biomedical Laboratory Science
Faculty Advisor: Dr. Diana Smith-Beckerman

ISOPRENYLATED PROTEINS FROM WILDTYPE AND KNOCKOUT MOUSE EMBRYO FIBROBLASTS DEFICIENT IN CAAX PROCESSING ENZYMES
By: Xichen Li and Glen E. Walton Jr. (City College of San Francisco)
Biomedical Laboratory Science
Faculty Advisor: Dr. Diana Smith-Beckerman and Dr. Lily Chen

XA21-MEDIATED DISEASE RESISTANCE IN RICE
By: Alain Oyafuso
Cell and Molecular Biology
Faculty Advisor: Dr. Maureen Whalen

MECHANISM OF ACTION OF THE XANTHOMONAS EFFECTOR EARLY CHLOROSIS FACTOR
By: Dante Placido, Dr. Christina Morales, Dr. Jyothi Rajagopal, Chris Lowe, Sanddya Bohini, and Peggy Lau
Cell and Molecular Biology
Faculty Advisor: Dr. Maureen Whalen

ROLES OF SWRAB GENE IN MOTILITY OF *BACILLUS SUBTILIS*
By: Diana Marina
Cell and Molecular Biology
Faculty Advisor: Dr. Leticia Maquez-Magana

DOES HIV-1 TAT PROTEIN IMPACT THE ERROR RATE OF RNA POLYMERASE II
By: lala Motlhabi and Vikashi Jethwani
Cell and Molecular Biology
Faculty Advisor: Dr. Joseph Romeo

SOMITE FORMATION OCCURS IN A DORSAL-TO-VENTRAL PROGRESSION IN XENOPUS LAEVIS
By: Minh Ho, Bonnie Afonin, and Dr. Carmen Domingo
Cell and Molecular Biology
Faculty Advisor: Dr. Carmen Domingo

IDENTIFICATION OF SIGNALS THAT REGULATE GSH1 PROMOTER ACTIVITY
By: Nilu Prasad, Daniel Bravo, and Natasha Chandiramani
Cell and Molecular Biology
Faculty Advisor: Dr. Robert M. Ramirez

DIVERENT ROLES FOR PAX3 AND PAX7 IN THE DEVELOPING CHICKEN EMBRYO
By: Rachel Kadzik, Lisa Galli, and Tiffany Barnes
Cell and Molecular Biology
Faculty Advisor: Dr. Laura W. Burrus

CHEMOKINE MIP-1B IS REGULATED BY ATF3 *IN VITRO* AND *IN VIVO*
By: Roberto Barroz
Cell and Molecular Biology
Faculty Advisor: Dr. Steven Weinstein

GSP-3 AND GSP-4 ARE IMPORTANT FOR C. ELEGANS SPERM MEIOSIS
By: Susan Mirsoian and Dr. Diana Chu
Cell and Molecular Biology
Faculty Advisor: Dr. Diana Chu

TRANSCRIPTIONAL INTERFERENCE CAN INDUCE LATENCY IN HIV-1- AND SIVMAC239-INFECTED PBMCS
By: Vikash Jethwani
Cell and Molecular Biology
Faculty Advisor: Dr. Joseph Romeo

ANALYSIS OF THE INTERACTIONS BETWEEN WNT-3A AND WNT-5B SIGNALING PATHWAYS DURING CHICK DEVELOPMENT
By: Yurixsa Martinez, Katie Sanders, Marina Meyerzon, and Dr. Laura W. Burrus
Cell and Molecular Biology
Faculty Advisor: Dr. Laura W. Burrus

PREVALENCE AND PHYLOGENETICS OF BLOOD PARASITES IN CALIFORNIA SPOTTED OWLS, *STRIX OCCIDENTALIS OCCIDENTALIS*
By: Heather Lannie
Conservation Biology
Faculty Advisor: Dr. Ravinder Sehgal

BEES IN SAN FRANCISCO: PARK CHARACTERISTICS AS EXPLANATORY VARIABLES OF SPECIES RICHNESS AND ABUNDANCE
By: Cynthia Fenter and Dr. Gretchen LeBuhn
Ecology and Systematic Biology
Faculty Advisor: Dr. Gretchen LeBuhn

A REDISCRIPTION OF FACELINA STEARNSI COCKERELL, 1901 (NUDIBRANCHIA: AEOLIDACEA: FACELINIDAE) WITH A REASSIGNMENT OF ITS GENERIC PLACEMENT
By: Jamie M. Chan and Dr. Terrence M. Gosliner
Ecology and Systematic Biology
Faculty Advisor: Dr. Terry Gosliner

SEQUENCES OF ARYL HYDROCARBON RECEPTORS 1 AND 2 FROM SHINER SURFPERCH (CYMATOGASTER AGGREGATA) POPULATIONS IN POLYCHLORINATED BIPHENYL CONTAMINATED AND REFERENCE SITES AROUND SAN FRANCISCO BAY
By: Jeff Schinske and Dr. Sarah Cohen
Ecology and Systematic Biology
Faculty Advisor: Dr. Sarah Cohen

TIME COSTS AND SAMPLING EFFICIENCIES FOR DIFFERENT SIZED AND SHAPED QUADRATS
By: Jennifer Carah, Anastasia Chavez, Lucas Bohnett, and Dr. Ed Connor
Ecology and Systematic Biology
Faculty Advisor: Dr. Edward Connor

MAJOR HISTOCOMPATIBILITY COMPLEX CLASS IIB EXPRESSION IN TWO DRAMATICALLY DIFFERENT POPULATIONS OF FUNDULUS HETEROCLITUS
By: Molly Klein-McDowell
Ecology and Systematic Biology
Faculty Advisor: Dr. Sarah Cohen

LATITUDINAL VARIATION IN TRANSCRIPTOME PROFILES FOLLOWING HEAT AND COLD STRESS IN THE PORCELAIN CRAB, *PETROLISTHES CINCTIPES*
By: Elizabeth Moore
Marine Biology
Faculty Advisor: Dr. Jonathon Stillman

A COMPARISON OF IMMUNOGENETIC PROFILES BETWEEN PCB CONTAMINATED AND REFERENCE ATLANTIC KILLIFISH (FUNDULUS HETEROCLITUS) POPULATIONS
By: Joelle Tirindelli
Marine Biology
Faculty Advisor: Dr. Sarah Cohen

GEOGRAPHIC VARIATION IN AGE COMPOSITION OF KELP ROCKFISH (SEBASTES ATROVIRENS)
By: Lisa Krigsman
Marine Biology
Faculty Advisor: Dr. Ralph Larson

COMPUTER SIMULATION OF YOUNG FISH & SHRIMP MIGRATION INTO SAN FRANCISCO ESTUARY
By: Renny Talianchich
Marine Biology
Faculty Advisor: Dr. Wim Kimmerer

NEURAL GROWTH AND THE SCN DURING THE ONSET OF PUBERTY
By: Susie Fong
Physiology and Behavioral Biology
Faculty Advisor: Dr. Christopher Moffatt

LIGAND BINDING INTERACTIONS MODULATING THE SUBSTRATE SPECIFICITY OF DIAMINE OXIDASE
By: Creobelle Guzman and David Elgart
Biochemistry
Faculty Advisor: Dr. Raymond M. Esquerra

EFFECT OF FATTY ACID LIGATION ON NON-ENZYMATIC GLYCATION OF HSA AND ON STABILITY OF GHSA COMPLEXES
By: Michael Minton and Khin Oo
Biochemistry
Faculty Advisor: Dr. Raymond M. Esquerra

INVESTIGATION OF SUBSTRATE SPECIFICITY AT THE P1′ SITE OF TRYPSIN MUTANTS USING FLUORESCENCE RESONANCE ENERGY TRANSFER
By: Paul Carver
Biochemistry
Faculty Advisor: Dr.Teaster Baird

REDUCTION AND IMMOBILIZATION OF SELENATE BY ZEROVALENT IRON
By: Ayako Suzuki and Dr. Bruce A. Manning
Chemistry

Faculty Advisor: Dr. Bruce A. Manning

EXPLORING THE EFFECTS OF CONDITION PARAMETERS ON NEURONAL NITRIC OXIDE SYNTHASE USING MULTICHANNEL TIME-RESOLVED OPTICAL ABSORPTION FOLLOWING CARBON MONOXIDE PHOTOLYSIS
By: Latevi Lawson, Russ Jensen, Michael Minton, and Dr. Raymond M. Esquerra
Chemistry
Faculty Advisor: Dr. Raymond M. Esquerra

SYNTHESIS AND CHARACTERIZATION OF DI-SUBSTITUTED TETRAPHENYLPORPHYRINS
By: Lenin Parrales
Chemistry
Faculty Advisor: Dr. Uschi Simonis

ONLINE STREAMING MULTIMEDIA OVER MULTICAST
By: Aizaz Hakro
Computer Science
Faculty Advisor: Dr. Marguerite Murphy

CROSS-MODAL INFORMATION RETRIEVAL
By: Bibek Bhattarai and Brian Zambrano
Computer Science
Faculty Advisor: Dr. Rahul Singh

STRUCTURAL QUERYING IN MOLECULAR DATABASES
By: Emmanuel R. Yera and Elinor Velasquez
Computer Science
Faculty Advisor: Dr. Rahul Singh

BIASING RESPONSE IN FITTS LAW TASKS
By: Emory Al-Imam
Computer Science
Faculty Advisor: Dr. Edward Lank

FUR BALL NAVIGATION SYSTEM
By: Haishi Bai, Greydon Buckley, Mark Howard, and Greydon Buckley
Computer Science
Faculty Advisor: Dr. Edward Lank

EVENT-BASED PERSONAL MULTIMEDIA MANAGEMENT
By: Juan Camilo Pinzon
Computer Science
Faculty Advisor: Dr. Rahul Singh

BIOLOGICAL TEXT MINING FOR DRUG DISCOVERY

By: Naureen Moon
Computer Science
Faculty Advisor: Dr. Rahul Singh

TCP OVER WIRELESS
By: Niveditha Thondoti
Computer Science
Faculty Advisor: Dr. Marguerite Murphy

LINUX 2.6 TCP BUFFER TUNING
By: Onkar Lalla
Computer Science
Faculty Advisor: Dr. Marguerite Murphy

SPARK: SIMILAR PICTURE AND RELATIONSHIP KONSTRUCTOR
By: Scott Bishop, Jensen Galan, Chongyong Fei, and Stacie Riddle
Computer Science
Faculty Advisor: Dr. Rahul Singh

FREEFLOW: DATABASES AND INTERFACES FOR ENABLING DRUG DISCOVERY
By: Tammy Chan, Preeti Malik, Elinor Velasquez, and Emmanuel R. Yera
Computer Science
Faculty Advisor: Dr. Rahul Singh

PARTS, IMAGE, AND SKETCH-BASED MODELING METHOD FOR DOMAIN EXPERTS
By: Tracie Hong and Jun Murakawa
Computer Science
Faculty Advisor: Dr. Ilmi Yoon

SEMANTIC MAPPING NIH NCBI DTDS
By: Vien Tran
Computer Science
Faculty Advisor: Dr. Marguerite Murphy

PHENOTYPE AND DISCOVERY AND PATTERN RECOGNITION
By: Andreas Falley, Mark Howard, and Jose Eguizabal
Computing for Life Science
Faculty Advisor: Dr. Rahul Singh

MS2DB: AN ALGORITHMIC APPROACH TO DETERMINE DISULFIDE LINKAGE PATTERNS IN PROTEINS BY UTILIZING TANDEM MASS SPECTROMETRIC DATA
By: Timothy Lee and Alex Chavez
Computing for Life Science

Faculty Advisor: Dr. Rahul Singh

WEB SERVICES JOINS USING ER DESIGN TOOL XML DATABUS
By: Yan Liu
Computing for Life Science
Faculty Advisor: Dr. Marguerite Murphy

IMPLEMENTATION AND PERFOMANCE OF MIMO OFDM
By: Sathya Sekhar
Computer Engineering
Faculty Advisor: Dr. Todor Cooklev and Dr. Shyshenq Liou

TWO-TIERED SENSOR NETWORKS
By: Yi-Chia Liao
Computer Engineering
Faculty Advisor: Dr. Todor Cooklev

PACKET SNIFFING
By: Deepthi Shetty
Electrical Engineering
Faculty Advisor: Dr. Todor Cooklev

DESIGN OF COMPLEX FILTER BANKS AND ITS APPLICATION TO WAVELET BASED OFDM
By: Hima Gariney
Electrical Engineering
Faculty Advisor: Dr. Todor Cooklev

COGNITIVE RADIO FOR WIRELESS SENSOR NETWORKS
By: Wei Wang
Electrical Engineering
Faculty Advisor: Dr. Todor Cooklev

THE MORPHOLOGICAL EFFECT OF VARIABLE FLOW ON A MEANDERING CHANNEL MODEL
By: Glen Leverich, Christian Braudrick (UC Berkeley), Dr. Leonard Sklar, and Dr. William Dietrich (UC Berkeley)
Geology
Faculty Advisor: Dr. Leonard Sklar and Dr. William Dietrich (UC Berkeley)

GEOLOGIC AND GEOMORPHIC SURFACE MAPPING ALONG THE SOUTHERN DEATH VALLEY FAULT ZONE, SOUTHEASTERN CALIFORNIA
By: Heather Lackey
Geology
Faculty Advisor: Dr. John Caskey

QUANTIFYING BEACH RESPONSE TO EPISODIC LARGE WAVE EVENTS OCEAN BEACH, SAN FRANCISCO
By: Jeff Hansen
Geology
Faculty Advisor: Dr. Toby Garfield

THE EVOLUTION OF TAFONI ON SANDSTONE IN COASTAL AREAS OF NORTHERN CALIFORNIA
By: Jonathan Boxerman
Geology
Faculty Advisor: Dr. Ray Pestrong

THE COLORING INVARIANT OF KNOTS AND TANGLES
By: Candice Price
Mathematics
Faculty Advisor: Dr. Mariel Vazquez

ITERATIVE CONSTRUCTIONS OF TIGHT FRAMES
By: Mizue Horiuchi
Mathematics
Faculty Advisor: Dr. Shidong Li

IMPROVING STELLAR VELOCITY ANALYSIS AT LICK OBSERVATORY - OLD DATA, NEW PLANETS
By: David Abouav
Astronomy
Faculty Advisor: Dr. Debra Fischer

UNUSUAL LOW-MASS WHITE DWARFS IN THE DENSE STAR CLUSTER NGC 6397: SIGNS OF STELLAR COLLISIONS?
By: Rachel Strickler, Dr. Adrienne Cool, Lilianna Lopez, Dr. Jay Anderson (Rice University), Dr. Haldan Cohn (Indiana University), and Dr. Phyllis Lugger (Indiana University)
Astronomy
Faculty Advisor: Dr. Adrienne Cool

ATMOSPHERIC SIGNATURE OF THE EXOPLANET HD 149026B
By: Nassim Bozorgnia
Astrophysics
Faculty Advisor: Dr. Debra Fischer and Dr. Chris McCarthy

A SEARCH FOR DETACHED AND SEMI-DETACHED BINARY STARS IN THE GLOBULAR STAR CLUSTER NGC 6397
By: Liliana I. Lopez, Dr. Adrienne M. Cool, Rachel Strickler, Dr. Jay Anderson (Rice University), and Dr. Haldan Cohn (Indiana University)
Physics

Faculty Advisor: Dr. Adrienne Cool

THE ORBITS OF EXTRASOLAR PLANETS
By: Peter Driscoll, Dr. Debra Fischer, and Dr. Eric Ford (UC Berkeley)
Physics
Faculty Advisor: Dr. Debra Fischer
By: Ricky Leung
Physics
Faculty Advisor: Dr. Barbara Neuhauser

REMNANT GAUGE SYMMETRY BREAKING AND THE PHASE STRUCTURE OF GAUGE-HIGGS THEORIES
By: William Caudy
Physics
Faculty Advisor: Dr. Jeff Greensite

FIRST EVIDENCE OF A PRECESSING JET EXCAVATING A PROTOSTELLAR ENVELOPE
By: Jason E. Ybarra, Mary Barsony, Karl E Haisch, Jr. (UVSC), Thomas H. Jarrett (IPAC), Raghvendra Sahai (JPL), and Alycia J. Weinberger
(Carnegie)
Physics and Astronomy
Faculty Advisor: Dr. Mary Barsony

SLOAN DIGITAL SKY SURVEY IMAGES AND THE GALAXY LUMINOSITY FUNCTION
By: Jessica Fielder and JoEllen McBride
Physics and Astronomy
Faculty Advisor: Dr. Ronald Marzke

TEMPERATURE VARIATIONS IN PLANET BEARING STARS
By: Raj Sareen
Physics and Astronomy
Faculty Advisor: Dr. Debra Fischer

SEARCHING FOR OTHER SOLAR SYSTEMS
By: Raman Narayan
Physics and Astronomy
Faculty Advisor: Dr. Debra Fischer

PERSPECTIVES AND EXPERIENCES OF MINORITY FACULTY
By: Sha Jones, Dr. Megan Mahoney (UCSF), Dr. Elisabeth Wilson (UCSF), and Portia Daniels
Biology
Faculty Advisor: Dr. Frank Bayliss

METAL COMPLEXES OF USNIC ACID DERIVATIVES
By: Lisa Offringa
Botany
Faculty Advisor: Dr. Margareta Sequin (Chemistry & Biochemistry)

USE OF BIOINFORMATICS TO COMPLEMENT AND ENHANCE THE STUDY OF A FAMILY OF BACTERIAL PATHOGENS EFFECTORS
By: Adeshola Adefioye and Ageliki Tzovolos
Cell and Molecular Biology
Faculty Advisor: Dr. Maureen Whalen and Dr. Greg Spicer

YOPJ FAMILY OF BACTERIAL PATHOGEN EFFECTORS; CELL AND MOLECULAR BIOLOGICAL ANALYSIS OF FUNCTION OF HOMOLOGUES IN HETEROLOGOUS HOST-PATHOGEN INTERACTIONS.
By: Ageliki Tzovolos
Cell and Molecular Biology
Faculty Advisor: Dr. Maureen Whalen

GENETIC METHODS TO STUDY SWARMING MOTILITY IN PAENIBACILLUS LMB265
By: Alexander Sun and Audrey Parangan
Cell and Molecular Biology
Faculty Advisor: Dr. Leticia Maquez-Magana

OPTIMAL EXPANSION OF PRIMARY HIV-1 FOR USE IN SUPPORTIVE IMMUNOTHERAPY IN NEWBORNS
By: Chris Lai Hipp
Cell and Molecular Biology
Faculty Advisor: Dr. Girish Vyas (UCSF)

NON-PSYCHOACTIVE CANNABINOID CONSTITUENTS ARE INHIBITORS OF AGGRESSIVE HUMAN BRAIN CANCERS *IN VITRO*
By: Jahan Marcu, Rigel T. Christian (CPMC), Dr. Sean D. McAllister (CPMC).
Cell and Molecular Biology
Faculty Advisor: Dr. Laura W. Burrus

FRIZZLED-10 IS REQUIRED FOR THE EXPANSION OF THE DORSAL NEURAL TUBE DURING CHICK DEVELOPMENT
By: Joseph Ramahi
Cell and Molecular Biology
Faculty Advisor: Dr. Laura W. Burrus

GENETIC INTERACTION BETWEEN CDC24 AND CHECKPOINT MUTANTS IN FISSION YEAST
By: Kadra Ahmed
Cell and Molecular Biology

Faculty Advisor: Dr. Sally Pasion

IS THE NIGHT TIME THE RIGHT TIME: NIGHT AND DAY BLOOMING DISCRETE GENE IN SUBSPECIES OF *LINANTHUS DICHOTOMUS* (POLEMONEACEAE)
By: Mariela Pauli, Sally Chess, and Dr. Gretchen LeBuhn
Cell and Molecular Biology
Faculty Advisor: Dr. Gretchen LeBuhn

IDENTIFICATION OF SAN FRANCISCO BAY COLONIAL BOTRYLLID ASCIDIANS WITH THE USE OF 3 GENETIC LOCI AND DIGITAL FILMING OF SPECIES-SPECIFIC ALLORECOGNITION BEHAVIORS
By: Patrick Lee and Karen Alroy
Marine Biology & Limnology
Faculty Advisor: Dr. Sarah Cohen

YEAR CLASS STRENGTH OF THE OLIVE ROCKFISH, *SEBASTES SERRANOIDES* - A COOL-WATER LIMITED SPECIES?
By: Tom Calvanese
Marine Biology & Limnology
Faculty Advisor: Dr. Ralph Larson

MUSCLE FIBER TYPE AND CROSS SECTIONAL AREA CHANGES IN PARTICIPANTS WITH END STAGE RENAL DISEASE UNDERGOING DIFFERENT RENAL REPLACEMENT THERAPIES
By: Angeles Rios, Dr. Eric Butz (UCSF), and Dr. Kimberly Topp (UCSF)
Physiology and Behavioral Biology
Faculty Advisor: Dr. Wilfred Denetclaw

2-D DIGE ANALYSIS OF *YERSINIA PESTIS* STRAIN VARIABILITY IN MOUSE LUNG TISSUE
By: Rachelle Bermingham
Physiology and Behavioral Biology
Faculty Advisor: Dr. Christopher Moffatt and Dr. Sandra L. McCutchen-Maloney (Lawrence Livermore National Laboratory)

THE MAPK CASCADE REGULATES EARLY CHICKEN EMBRYO MYOGENIC DEVELOPMENT
By: Natasha Chandiramani, Jared Greenberg, Seung Jong Lee, Patricia Powell, and Dr. Wilfred Denetclaw
Faculty Advisor: Dr. Wilfred Denetclaw

ECTOPIC LIPS IN THE CENTRAL DERMOMYOTOME REGION OF THE SOMITE INDUCE MYOTOME FORMATION IN CHICK EMBRYO
By: Yanfei Ma, HaNam Nguyen, Karen Berry, Andrei Odobescu, and Dr. Wilfred Denetclaw

Faculty Advisor: Dr. Wilfred Denetclaw

CLONING AND EXPRESSION OF STYRENE OXIDE ISOMERASE FROM PSEUDOMONAS PUTIDA S12
By: Alice Ngo
Biochemistry
Faculty Advisor: Dr. George T. Gassner

THE EFFECTS OF PESTICIDES ON THE ACTIVITY OF CYP3A4
By: Caroline Bush and Hung Tieu
Biochemistry
Faculty Advisor: Dr. Nancy Gerber

THE EFFECT OF NONENZYMATIC GLYCATION ON THE NITRITE REDUCTASE ACTIVITY IN HUMAN HEMOGLOBIN
By: Chris Kehoe and Danny Tabari
Biochemistry
Faculty Advisor: Dr. Raymond M. Esquerra

DESIGNING PROBE AND PRIMER SET
By: Dmitriy Zherebnenkov
Biochemistry
Faculty Advisor: Dr. Elizabeth A. Runquist

UV SPECTRAL LIBRARY SEARCH OF CAFFEINE, PHENYLALANINE, AND SODIUM BENZOATE IN DIET SODA USING REVERSED-PHASE HPLC PHOTODIODE ARRAY DETECTION
By: Ghoncheh Angha and Anvi Parikh
Biochemistry
Faculty Advisor: Dr. Bruce Macher, Dr. Teaster Baird, and Meden Isaac

INHIBITORS FOR PSMA: APPLICATION IN IMAGING/THERAPY OF PROSTATE CANCER
By: Jacinda-Chau Do and Yoko Toriyabe
Biochemistry
Faculty Advisor: Dr. Clifford Berkman

THE ROLE OF MANT-GTP IN SGC
By: Jasmin Kristianto, Jeff Tinianow, Yu Shi Chan, Sharon Woo, Paula Garay, and John Sczepaniak
Biochemistry
Faculty Advisor: Dr. Nancy Gerber

THE EFFECT OF EXERCISE ON ACETYL COA CARBOXYLASE 1 AND MALOMYL COA DECARBOXYLASE
By: John Bui

Biochemistry
Faculty Advisor: Dr. Elizabeth A. Runquist

P-450 AND SPINNICH FERREDOXIN WITH ISOPENTENYL ADNINE AND ADENOSINE KINETICS VIA UV/VIS SPECTROSCOPY
By: John Sczepaniak
Biochemistry
Faculty Advisor: Dr. Nancy Gerber

THE EFFECT OF CADMIUM ON SULFATE ASSIMILATION GENE EXPRESSION IN ARABIDOPSIS THALIANA
By: Jot Preet Sahi
Biochemistry
Faculty Advisor: Dr. Jane G. DeWitt

EXPRESSION AND CHARACTERIZATION OF PHENACETALDEHYDE DEHYDROGENASE FROM THE STYRENE CATABOLIC PATHWAY
By: Maryam Naseri-Jabari, Shahram Emami, and Dr. George T. Gassner
Biochemistry
Faculty Advisor: Dr. George T. Gassner

A GRAPHICAL USER INTERFACE FOR ANALYZING KINETIC ABSORPTION DATA FROM BIOLOGICAL SYSTEMS
By: Richelle Raagas and Arthur De Los Reyes
Biochemistry
Faculty Advisor: Dr. Raymond M. Esquerra

THE EFFECT OF CADNIUM ON THE EXPRESSION OF GENE INVOLVED IN PHYTOCHELAIN SYNTHESIS IN ARABIDOPSIS THALIANA
By: Ana I. Cervantes and Jot Preet-Sahi
Chemistry
Faculty Advisor: Dr. Jane G. DeWitt

CONFORMATIONAL CHANGES OF HTPG MAY REVEAL HSP90'S MOLECULAR MECHANISM
By: Bess-Carolina Dolmo, Kristin Krukenberg (UCSF), Carol Cho (UCSF), and Dr. David Agard (UCSF)
Chemistry
Faculty Advisor: Dr. David Agard (UCSF) and Dr. Raymond A. Esquerra

ALKALI METAL DOPED ZEOLITES AS A SOLID STATE REDUCING AGEN
By: Christine So
Chemistry
Faculty Advisor: Dr. Andrew Ichimura

THE STABILITY OF 6-CARBANIONS OF URACIL AND PYRIDONES

By: Fong Ying Yeoh, Freeman M. Wong, and Christina Capule
Chemistry
Faculty Advisor: Dr. Weiming Wu

CAN HYDRODYNAMICS PREDICT THE DIFFUSION PROPERTIES OF AMINO ACIDS?
By: Jared Thompson
Chemistry
Faculty Advisor: Dr. Sergio Aragon

TETRAPHENYL PORPHYRINS FOR USE IN PHOTODYNAMIC THERAPY (PDT)
By: Kip Conner, Dr. Uschi Simonis, Meden Isaac, and Dr. Tomasso Vanneli
Chemistry
Faculty Advisor: Dr. Uschi Simonis

PORPHYRIN SYNTHESIS
By: Valentina Tan, Angela Zare, Lori Bogner, Kip Conner, Sarah Kong, Betty Lau, Donald Lindsay, Meden Isaac, Lenin Parrales, Dr.Ursula Simonis, and Dr. Tommaso Vannelli
Chemistry
Faculty Advisor: Dr. Uschi Simonis

HYPERIMAGES
By: Pierre-Yves Corlobe and Cedric Massa
Computer Science
Faculty Advisor: Dr. Rahul Singh

DESIGN OF A REINFORCED CONCRETE PARKING STUCTURE
By: Adrian Bello, Ralph Leyva, Jorge Narvaez, and Aron McKeag
Civil Engineering
Faculty Advisor: Dr. Wenshen Pong

AIM FOR ER (AUTONOMOUS IMMEDIATE MONITORING FOR EMERGENCY RESOURCE)
By: Atsede Ayalew, Terrence Gilfillian, Doan Ho, and Carolina Silva
Civil Engineering
Faculty Advisor: Dr. Elahe Enssani

SANTA BARBARA POTABLE WATER PROJECT
By: Guy Halperin, James Shahamiri, and Gustavo Chotto
Civil Engineering
Faculty Advisor: Dr. Wenshen Pong

STEEL BRIDGE
By: Jose Leaños, Samson Ghedremeskel, Kin Tse, Poohong Louie, Joe Elemen, Glen Lin, and Brian Young

Civil Engineering
Faculty Advisor: Dr. Norman Owen

DESIGNING THE JUBA RIVER EARTH DAM
By: Liz Hanley, Bonnie Kirkland, Sonia D'Silva, and Abdi Shaib
Civil Engineering
Faculty Advisor: Dr. Timothy D'Orazio

STEEL BUILDING DESIGN
By: Michael Pustov, Kevin Riley, John Santos, and Jonh Ayson
Civil Engineering
Faculty Advisor: Dr. Wenshen Pong

DESIGN OF FOUNDATION FOR A CASINO
By: Robert DiJorio, Irma Martinez, Rhodel DeClaro, and Jon Lio
Civil Engineering
Faculty Advisor: Dr. Timothy D'Orazio

BLUE MOON BRIDGE (WOOD BRIDGE)
By: Sydney Chow, Andre Antonio, Robert Begonia, Ben Ceralde, Ben Ulvevadet, Merlito Coloma, Hung Nguyen, and Eric Lilly
Civil Engineering
Faculty Advisor: Dr. Wenshen Pong

FOUNDATION DESIGN FOR A SOCCER STADIUM
By: Yemane Haile, Matthew Chew, and Han Yao Chen
Civil Engineering
Faculty Advisor: Dr. Timothy D'Orazio

EPILEPTIC ANALYSIS AND DETECTION SCHEME
By: Ian Robertson
Computer Engineering
Faculty Advisor: Dr. Todor Cooklev and Dave Calkin

MP3 PLAYER
By: James Woo
Computer Engineering
Faculty Advisor:

MP3 PLAYER
By: Tae Kim and Juanita Flores
Computer Engineering
Faculty Advisor: David Calkins

HUMAN FOLLOWER ROBOT
By: Amir Segev-Sayag, Bill Ma, and Minh Truong

Electrical Engineering
Faculty Advisor: Dr. Thomas Holton

GPS LOCATOR
By: Charles Fung, Chen Li Wen, and Chi Iao
Electrical Engineering
Faculty Advisor: Dr. Thomas Holton

NATCAR, THE LINE FOLLOWING CAR
By: Eric Fitzpatrick and John Paul de Jesus
Electrical Engineering
Faculty Advisor: Dr. Thomas Holton

WALL FOLLOWER
By: George Pahulu, Nicolette Drummond, and Desean Chambers
Electrical Engineering
Faculty Advisor: Dr. Thomas Holton

THE TRACTION ELEVATOR AND CONTROL TECHNIQUES
By: Justin Hoffman and Mike F. Reinhard
Electrical Engineering
Faculty Advisor: Dr. Thomas Holton

AUTONOMOUS CAR
By: Khin Chew, Rosy Chan, and Wunna Chi
Electrical Engineering
Faculty Advisor: Dr. Thomas Holton

NO TITLE YET… IT'S A ROBOT WHICH FOLLOWS A LINE
By: Maryam Gulaid
Electrical Engineering
Faculty Advisor: Dr. Shyshenq Liou

THE ROBOTIC BARTENDER
By: Melissa Dagdagan
Electrical Engineering
Faculty Advisor: Dr. Thomas Holton

CHIMES
By: Mike A. Cary, Jacky Wong, and Steve Jain
Electrical Engineering
Faculty Advisor: Larry Klingenberg

ANIMAL DETTERENT
By: Naji Ghosseiri and Kevin McLaughlin
Electrical Engineering

Faculty Advisor: Dr. Thomas Holton

COLOR-TRACKING CAR FOLLOWER
By: Rommel Agra, Henry Quinonez, and Ramanjot Singh
Electrical Engineering
Faculty Advisor: Dr. Thomas Holton

PH PROCESS CONTROL
By: Yaw Ofori-Nyako and Samson Ahferom
Electrical Engineering
Faculty Advisor: Dr. Thomas Holton

BEER BASH, A 120LB COMBAT ROBOT FOR ROBOGAMES 2006
By: Joshua Mehlman, Susan Reno, Jacob Harrington, Rosemary Villagomez, Bruce White, and Avish Bharwani
Mechanical and Electrical Engineering
Faculty Advisor: Mike Strange and David Calkins

SUMO ROBOT
By: Austin Chin and Tommy Li
Mechanical Engineering
Faculty Advisor: David Calkins

4-ROTOR HELICOPTER
By: Brian Navasca, Camilo Jimenez, Michael Mercurio, and Yin Yin Wu
Mechanical Engineering
Faculty Advisor: Dr. Michael Holden and Dr. Mamdouh Abo-El-Ata

HOVER CRAFT (MADE OUT OF PVC)
By: Cianan Duncan
Mechanical Engineering
Faculty Advisor:

CAST AND CATCH DISABLED PERSONS FISHING ROD
By: David Hefflefinger, Mike Kerans, and Irina Walsh
Mechanical Engineering
Faculty Advisor: Dr. Michael Holden and Dr. Mamdouh Abo-El-Ata

COMPARISON OF COMPOSITE MATERIALS FOR HPV FAIRINGS
By: Erik Andrade, Thu Nguyen, and Peter Zheng
Mechanical Engineering
Faculty Advisor: Dr. Mamdouh Abo-El-Ata

FIREFIGHTING ROBOT
By: Richard Ng, Sasha Spoor, Carmen Picar, Chandra Maharian, and Alan Ho
Mechanical Engineering

Faculty Advisor: Dr. Michael Holden and Dr. Mamdouh Abo-El-Ata

MINI BAJA OFF-ROAD VEHICLE
By: Sean Finn, Randy Ruano, Aren Hofland, Shai Shaul, Matt Richards, and Juan Carlos Miranda
Mechanical Engineering
Faculty Advisor: Dr. Ed Cheng and Micheal Strange

ELASTOMER ENERGY BUFFER TO REPLACE A FRICTION CLUTCH
By: Thomas P. Alldredege, Prisa Chanthavong, and Eric L. Bura
Mechanical Engineering
Faculty Advisor: Dr. Ed Cheng

ZIRCON: THE OLDEST RECORDER OF HIMALAYAN HISTORY
By: Yuko Mamiya and Johnathan Brown
Geology
Faculty Advisor: Dr. Mary Leech

UNRAVELING THE UNKNOTTING OF TYPE II TOPOISOMERASES: EXAMINING RANDOM STATE CHANGES OF KNOTS
By: Janella Slaga
Applied Mathematics
Faculty Advisor: Dr. Mariel Vazquez

USING CUBIC HOMOLOGY FOR PREDICTING BREAST CANCER PROGNOSIS FROM DNA COPY NUMBER DATA
By: Hong Y. Liang, L. Javier Hernandez (La Rioja University, Spain) and J. Climent (UCSF)
Computer Science
Faculty Advisor: Dr. Javier Arsuaga

DEVELOPING A WEB-BASED ENVIRONMENT FOR INTEGRATING BREAST CANCER OMICS DATA IN THE CLINICAL SETTING
By: Xiaoyu Hu, Hong Y. Liang, Yuhna Chae, Dr. Javier Arsuaga
Computer Science
Faculty Advisor: Dr. Javier Arsuaga

THE POLYTOPE OF AFFINE ENDOMORPHISMS OF A REGULAR K-GON
By: Mark Contois
Mathematics
Faculty Advisor: Dr. Joseph Gubeladze

IDENTIFYING CHROMOSOME CLUSTERS IN HUMAN FIBROBLAST NUCLEI USING SCHIP
By: Nausheen Mirza
Open Univ no Major

Faculty Advisor: Dr. Javier Arsuaga

NONLINEAR OPTICS IN PHOTONIC LATTICES
By: Alex Samodurov
Physics and Astronomy
Faculty Advisor: Dr. Zhigang Chen

CHROMOSPHERIC ACTIVITY IN NEARBY STARS
By: Howard Isaacson
Physics and Astronomy
Faculty Advisor: Dr. Debra Fischer

"Display ONLY"
A CONSERVED HISTONE H2A VARIANT IMPORTANT FOR FERTILITY
By: Jason Randolph
Cell and Molecular Biology
Faculty Advisor: Dr. Diana Chu

A COMPARATIVE POLLINATION STUDY OF THREE DIFFERENT SEXUAL SYSTEMS IN THE GENUS ERIOGONUM
By: Steven Santos
Ecology and Systematic Biology
Faculty Advisor: Dr. Kim Steiner

MULTIPLE-PERSPECTIVE INTERACTIVE WEB SEARCH
By: Ya-Wen Hsu and Naureen Moon
Computer Science
Faculty Advisor: Dr. Rahul Singh

RESPONSES OF HERBIVOROUS CICHLID FISHES TO ANTHROPOGENIC SEDIMENTATION IN LAKE TANGANYIKA
By: Danielle Gilbert, P.B. McIntyre, E. Michel, M. Mulongaibalu, J. Sapp
Computer Science
Faculty Advisor: Dr. Ellinor Michel (The Natural History Museum, London, England)

GENETIC COI ANALYSIS OF AN INVASIVE COPEPOD IN SAN FRANCISCO BAY
By: Allegra Briggs
Marine Biology
Faculty Advisor: Dr. Wim Kimmerer

LINUX KERNEL TUNING AND EXPERIMENTAL VERIFICATION USING NS 2 SIMULATOR
By: Jaslin Sekhon

Computer Science
Faculty Advisor: Dr. Marguerite Murphy

SMART ANTENNAS TECHNOLOGY: ADAPTIVE FILTER BANKS: REDUCING INTERFERENCE IN WIRELESS COMMUNICATION SYSTEMS
By: Shalini Tripathi
Electrical Engineering
Faculty Advisor: Dr. Todor Cooklev