

METABOLIC RESPONSES TO ENVIRONMENTAL SALINITY IN THE CLAM  
CORBULA AMURENSIS

By: Adam Paganini and Dr. Jonathon Stillman

Marine Biology

Faculty Advisor: Dr. Jonathon Stillman and Dr. Wim Kimmerer

Abstract:

DUAL ROLES OF THE CONSERVED GLC7/PP1 PHOSPHATASES, GSP-3 AND  
GSP-4, IN CHROMOSOME DYNAMICS AND SPERM ACTIVATION

By: Aiza Cathe A. Go, Bernadette Nera, and Mark Samson

Physiology & Cell and Molecular Biology

Faculty Advisor: Dr. Diana Chu

DECODING DARK MATTER: A DYNAMICAL CODE FOR THE JOINT ANALYSIS  
OF CLUSTER OBSERVATIONS

By: Alison Mansheim

Physics

Faculty Advisor: Dr. Andisheh Mahdavi

A GEOMETRIC APPROACH TO A NUMBER THEORETIC TOOL: THE  
BERNOULLI-DEDEKIND SUM

By: Anastasia Chavez

Mathematics

Faculty Advisor: Dr. Matthias Beck

By: Andrea Cayenne

Marine Biology

Faculty Advisor: Dr. Jonathon Stillman

DESCRIBING ECDYSIS BEHAVIOR IN STICK INSECTS

By: Andrew Carriman

Physiology & Behavioral Biology

Faculty Advisor: Dr. Megumi Fuse

EFFECT OF BINDING FATTY ACIDS ON THE GLYCATION OF HUMAN SERUM  
ALBUMIN

By: April Ranney and Emelia Padilla

Biochemistry

Faculty Advisor: Dr. Raymond Esquerra

XMAS: EXPERIENTIAL VISUALIZATION, MINING, AND ANALYSIS OF TIME-  
SERIES MICROARRAY EXPERIMENTS

By: Ben Dalziel

Computer Science

Faculty Advisor: Dr. Hui Yang and Dr. Rahul Singh

PHOTOLYSIS OF SPERM WHALE CARBONMONOXYMYOGLOBIN.

By: Benjamin Lintner and Ignacio Lopez

Chemistry

Faculty Advisor: Dr. Raymond Esquerra

Abstract:

By: Carol Umanzor

Cell and Molecular Biology and Biological Education

Faculty Advisor: Dr. Kimberly Tanner

INVESTIGATION OF LOW SALINE RESISTANCE IN SINORHIZOBIUM  
MELILOTI

By: Charlene Navarrete

Cell and Molecular Biology

Faculty Advisor: Dr. Joseph Chen

EXPANDING YOUR HORIZON ANALYSIS

By: Chia Teoh

Cell and Molecular Biology

Faculty Advisor: Dr. Kimberly D. Tanner

INVESTIGATING BAY AREA FILIPINOS' IDEAS TOWARD ENVIRONMENTAL  
CONSERVATION IN A MUSEUM SETTING

By: Courtney Scott

Marine Biology

Faculty Advisor: Dr. Kimberly D. Tanner

USING HOMOLOGY TO DETECT COPY NUMBER VARIATION ASSOCIATED  
WITH BREAST CANCER RECURRENCE

By: Daniel DeWoskin

Mathematics

Faculty Advisor: Dr. Javier Arsuaga

A MODEL FOR SOCIAL NETWORKS

By: Elizabeth Gross

Mathematics

Faculty Advisor: Dr. Arek Goetz

STUDENT CONCEPTIONS OF WEATHER PHENOMENA ACROSS MULTIPLE  
COGNITIVE LEVELS

By: Elizabeth Polito

Geosciences

Faculty Advisor: Dr. John Monteverdi and Dr. Kimberly Tanner

THE EFFECTS OF WNT6 IN SOMITE PATTERNING

By: Eugenel Espiritu

Cell and Molecular Biology  
Faculty Advisor: Dr. Laura Burrus  
Abstract:

MOLECULAR SYSTEMATICS OF PHACELIA (BORAGINACEAE).

By: Genevieve K. Walden  
Ecology and Systematic Biology  
Faculty Advisor: Dr. Robert Patterson

ANALYSIS OF SRAM RELIABILITY UNDER VARIATIONS AND TRANSISTOR  
AGING EFFECTS IN NANO-SCALE

By: Harwinder Singh  
Electrical and Computer Engineering  
Faculty Advisor: Dr. Hamid Mahmoodi

EXIT STRATEGIES FOR STARTUP COMPANIES: A GAME THEORETIC  
APPROACH

By: Jasdeep Gambhir  
Mathematics  
Faculty Advisor: Dr. Jean-Pierre Langlois

ROLE OF CONFORMATIONAL CHANGES IN SOLUBLE GUANYLATE  
CYCLASE

By: Jasmin Kristianto, Kensuke Yamamoto, Stephanie Wood, and Makena Muchunku  
Biochemistry  
Faculty Advisor: Dr. Nancy Gerber

PROTEIN 3D STRUCTURAL MATCHING USING RESIDUE CONTEXTS

By:  
Biochemistry  
Faculty Advisor: Dr. Rahul Singh

TANGLESOLVE: A TOPOLOGICAL TOOL USED IN THE ANALYSIS OF SITE-  
SPECIFIC RECOMBINATION

By: Jennifer Lopez, Wenjing Zheng, and Dr. Mariel Vazquez  
Mathematics  
Faculty Advisor: Dr. Mariel Vazquez

ARTHROPOD DIVERSITY ON THE CALIFORNIA ACADEMY OF SCIENCES'  
GREEN ROOF

By: Jessica Van Den Berg and Christopher Quock  
Ecology and Systematic Biology  
Faculty Advisor: Dr. John Hafernik

A 3-D MAP OF THE BARTLETT SPRINGS FAULT, LAKE AND MENDOCINO  
COUNTIES, CALIFORNIA

By: Johnathan Brown  
Geosciences  
Faculty Advisor: Dr. S. John Caskey

POST-MIDDLE-PLEISTOCENE TECTONIC DEVELOPMENT OF THE  
CONFIDENCE HILLS, SOUTHERN DEATH VALLEY, CALIFORNIA  
By: Joshua T. Goodman, Dr. S. John Caskey, Dr. Elmira Wan, Dr. David B. Wahl, and  
Dr. Andrei M. Sarna-Wojcicki  
Geology  
Faculty Advisor: Dr. S. John Caskey  
Abstract:

SPHINGOMYELIN IN MEMBRANE RAFTS REGULATES C2C12 MYOBLAST  
DIFFERENTIATION AND MYOTUBE FORMATION  
By: Jung Lim and Yuko Okamoto  
Cell and Molecular Biology  
Faculty Advisor: Dr. Wilfred Denetclaw

COUNTING STANDARD AND SEMISTANDARD TREES  
By: Jupei Hsiao  
Mathematics  
Faculty Advisor: Dr. Federico Ardila

M2K: A SEARCH FOR PLANETS ORBITING LATE K AND EARLY M DWARF  
STARS  
By: Kelsey Clubb  
Astronomy  
Faculty Advisor: Dr. Debra Fischer

S-NITROSYLATION OF SOLUBLE GUANYLYL CYCLASE  
By: Kensuke Yamamoto  
Biochemistry  
Faculty Advisor: Dr. Nancy Gerber

RAIL TRAFFIC CONTROL SIMULATOR FOR MAXIMIZING THROUGHPUT  
By: Ko Narita  
Mechanical Engineering  
Faculty Advisor: Dr. V.V. Krishnan

TROPICAL ORIENTED MATROIDS  
By: Kristen Freeman  
Mathematics  
Faculty Advisor: Dr. Federico Ardila

DETERMINATION OF THE NEUROTRANSMITTER THAT INHIBITS THE CNS  
DURING ECYDSIS IN THE HORNWORM, MANDUCA SEXTA

By: Laura Mendoza and Sabina Bera  
Physiology and Behavioral Biology  
Faculty Advisor: Dr. Megumi Fuse

#### UNDERSTANDING DISSOLVED ORGANIC CARBON

By: Leah Johnson  
Applied Geosciences  
Faculty Advisor: Dr. Tomoko Komada  
Abstract:

#### WNTLESS-DEPENDENT DISTRIBUTION AND ACTIVATION OF WNT1 AND WNT3A

By: Lydia Li  
Cell and Molecular Biology  
Faculty Advisor: Dr. Laura Burrus

#### SENSITIZATION IN MANDUCA

By: Marissa McMackin and Emily Merchasin  
Physiology and Behavior Biology  
Faculty Advisor: Dr. Megumi Fuse

#### THE TRANSCRIPTION FACTOR ATF3 BINDS TO THE IFN-B PROMOTER IN MURINE MACROPHAGES STIMULATED WITH LPS

By: Marvin J. Sandoval  
Cell and Molecular Biology  
Faculty Advisor: Dr. Steve Weinstein

#### DIRECTIONAL MEAN SHIFT

By: Mehran Kafai and Yiyi Miao  
Computer Science  
Faculty Advisor: Dr. Kazunori Okada

#### INVESTIGATION OF DNA PACKING GEOMETRY IN P4 BACTERIOPHAGES

By: Mela Hardin  
Mathematics  
Faculty Advisor: Dr. Mariel Vazquez

#### AUTOMATED IMAGE-BASED PHENOTYPIC SCREENING FOR HIGH-THROUGHPUT DRUG DISCOVERY

By: Michalis Pittas and Ido Heskia  
Mathematics  
Faculty Advisor: Dr. Rahul Singh

#### THE EFFECT OF CALMODULIN AND CALCIUM BINDING ON THE REACTIVITY OF THE HEME ACTIVE SITE IN NNOS

By: Mike Minton, Pooncharas Tipgunlakant, Luiz Galdino, and Christopher M. Bernt

Chemistry  
Faculty Advisor: Dr. Raymond Esquerra

TOWARDS THE STUDY OF A PHYSICAL INTERACTION BETWEEN CDC24  
AND THE CDS1 CHECKPOINT KINASE IN SCHIZOSACCHAROMYCES POMBE

By: Noel Cruz  
Cell and Molecular Biology  
Faculty Advisor: Dr. Sally G. Pasion  
Abstract:

SOLUTION STRUCTURE OF PROTEINS BY MD SIMULATION

By: Qiuting Hong  
Chemistry  
Faculty Advisor: Dr. Sergio Aragon

THE ROLE OF INDIRECT HYDROPHOBIC INTERACTIONS IN SUBSTRATE  
RECOGNITION

By: Raniel Alcantara  
Biology  
Faculty Advisor: Dr. Teaster Baird, Jr.

UNDERSTANDING THE ROLE OF SWRAA IN SPORULATION IN A SWARMING  
STRAIN OF BACILLUS SUBTILIS

By: Rebecca Garcia  
Cell and Molecular Biology  
Faculty Advisor: Dr. Leticia Marquez-Magaña

THE ROLE OF LEUCOKININ IMMUNOREACTIVITY IN THE TOBACCO  
HORNWORM, MANDUCA SEXTA IN THE PROCESS ECDYSIS

By: Roth Ea  
Cell and Molecular Biology  
Faculty Advisor: Dr. Megumi Fuse

ORDERED TITANIUM DIOXIDE FILMS GROWN ON SELF-ASSEMBLED  
MONOLAYERS

By: Shirin M. Usmani, Diana Mars, and Dr. Andrew S. Ichimura  
Chemistry  
Faculty Advisor: Dr. Andrew S. Ichimura

METABOLOME ANALYSIS OF S. CEREVISIAE

By: Stefan Jenkins  
Cell and Molecular Biology  
Faculty Advisor: Dr. Lily Chen

CONFORMATIONAL STUDIES OF SGC USING TIME RESOLVED FRET

By: Stephanie Wood

Biochemistry

Faculty Advisor: Dr. Nancy Gerber

THE ROLE OF P53 IN APOPTOSIS OF GASTROINTESTINAL TISSUE STEM  
CELLS OF LATE GENERATION TERT  $-/-$  MICE

By: Terry Reyes

Cell and Molecular Biology

Faculty Advisor: Dr. Sally G. Pasion

Abstract:

DEALING WITH THE GENDER PARTICIPATION GAP IN SECONDARY SCIENCE  
EDUCATION

By: Thomas Jenkinson and Priscilla Owren (Horace Mann Academic Middle School)

Ecology and Systematic Biology

Faculty Advisor: Dr. Kimberly D. Tanner

MICROARRAY ANALYSIS OF HEAT STRESS IN SAMOAN CORALS

By: Tyler Waterson and Dr. Jonathon Stillman

Marine Biology

Faculty Advisor: Dr. Jonathon Stillman

WEB-BASED TOOLS FOR ENHANCING TEACHER PREPARATION PROGRAMS

By: Xinhang Shao and Ngoc Lam-Miller

Computer Science

Faculty Advisor: Dr. Kazunori Okada

A SURVEY THE ENTROPY OF SELF-AVOIDING POLYGONS IN THE SIMPLE  
CUBIC LATTICE

By: Zoe Talbot

Mathematics

Faculty Advisor: Dr. Yitwah Cheung, Dr. Rob Scharein, and Dr. Mariel Vazquez

FEEL THE DIFFERENCE: A STUDY OF THE BODY'S RESPONSE TO TACTILE  
STIMULI

By: Abraham Reynoso, Joe DeBattista, Ngo Nguyen, and Stephanie Cunningham

Physiology and Behavior Biology

Faculty Advisor: Anne Thilges

FOUNDATION FOR A 20-STORY BUILDING

By: Adamross Lingad, Kimberly Sindac, Timothy Shu, Raul Verduzco

Civil Engineering

Faculty Advisor: Dr. Tim D'Orazio

TRUSS BRIDGE

By: Ahlong Shin, Noris Gomez, Vu Le, Charles Njoroge, and Mesfin Agegnehu

Civil Engineering

Faculty Advisor: Dr. Norman Owen

AIR TRAFFIC CONTROL TOWER

By: Ahmed Thleiji, WenPei Kuang, and Patrick Howell

Civil Engineering

Faculty Advisor: Multu Ozer

Abstract:

DESIGN OF A REVERSIBLY ACTIVATED TRYPSIN VIA AN ENGINEERED METAL BINDING SITE

By: Anna Gubeladze

Biochemistry

Faculty Advisor: Dr. Teaster Baird, Jr.

ROLE OF WNT4 ON MYOGENESIS DURING EARLY EMBRYONIC DEVELOPMENT IN THE CHICK

By: Anthony Eritano

Cellular and Molecular Biology

Faculty Advisor: Dr. Laura W. Burrus

STUDYING SPOOLING-LIKE CONFORMATIONS FOR DNA KNOTS IN WRITHE-DIRECTED ORGANIZATION OF DNA IN PHAGE CAPSIDS OF BACTERIOPHAGE P4

By: Ariff Moolla and Mela Hardin

Biology and Mathematics

Faculty Advisor: Dr. Sally G. Pasion and Dr. Javier Arsuaga

CHARACTERIZATION AND DYNAMICS OF WATER ACCESSIBLE AREAS IN THE HYDROPHOBIC INTERIOR OF PROTEINS USING A COMPUTATIONAL APPROACH

By: Ben Rodriguez

Biochemistry

Faculty Advisor: Dr. Anton Guliaev

THE AVERAGE CROSSING NUMBER OF EQUILATERAL POLYGONS IN CONFINEMENT

By: Benjamin Borgo, Rob Scharein, Yuanan Diao, and Dr. Javier Arsuaga

Applied Mathematics

Faculty Advisor: Dr. Javier Arsuaga

MITOCHONDRIAL DNA STRUCTURE IN TRYPANOSOME

By: Chris Keown

Mathematics

Faculty Advisor: Dr. Javier Arsuaga

SYNTHESIS AND CHARACTERIZATION OF ZEOLITE MFI FILMS USING TPA-F  
AND TPA-OH STRUCTURE DIRECTING AGENTS

By: Chris Reaves

Chemistry

Faculty Advisor: Dr. Andrew S. Ichimura

REAL-TIME IMPACT LOGGER & ANALYSIS

By: Christina Phan, Teo Limbo, and Eli Lyons

Electrical Engineering

Faculty Advisor: Dr. Tom Holton

Abstract:

CNG LAWNMOWER

By: Christopher Fernandez, Paul Stelter, and Yeygeuiy Shkelev

Mechanical Engineering

Faculty Advisor: Dr. Kwok-Siong Teh

UNIMODALITY OF ORDER POLYNOMIALS THROUGH THE STUDY OF  
EHRHART SERIES OF ORDER POLYTOPES

By: Christopher O'Neill

Mathematics

Faculty Advisor: Dr. Matthias Beck

THE PRESIDIO BEE BIODIVERSITY SURVEY

By: Christopher Quock and Jessica Van Den Berg

Ecology and Systematic Biology

Faculty Advisor: Dr. John Hafernik

THE EFFECTS OF NON-ENZYMATIC GLYCATION ON THE NITRITE  
REDUCTASE ACTIVITY OF HEMOGLOBIN

By: Damon Robles, Yadiel K, and Kay Saw

Chemistry

Faculty Advisor: Dr. Raymond Esquerra

SONIC STICK

By: Danny Azar and Ho Yin Chan

Electrical Engineering

Faculty Advisor:

MEMBRANE COMPOSITION AND GENE EXPRESSION DURING THERMAL  
ACCLIMATION IN PORCELAIN CRABS

By: Daria Ronges

Marine Biology

Faculty Advisor: Dr. Jonathon Stillman

BROTHERHOOD WAY STORM WATER REMEDIATION

By: David Reber, Nick Birth, Adam Krakow, Mingming Yee, and Alvin Yim  
Civil Engineering  
Faculty Advisor: Dr. Elahe Enssani

#### LOW POWER WIRELESS MEDICAL MONITORING SYSTEM

By: Di Lan, William Yu, and Dennison Lorenzana  
Electrical Engineering  
Faculty Advisor: Dr. Hao Jiang and Dr. Tom Holton  
Abstract:

#### SELF-ASSEMBLED MONOLAYERS TO SUPPORT THE GROWTH OF INORGANIC FILMS

By: Diana Mars and Shirin M. Usmani  
Chemistry  
Faculty Advisor: Dr. Andrew S. Ichimura

#### MEMBRANE RAFT DISRUPTION IN CHICKEN EMBRYO SKELETAL MUSCLE CELL CULTURES

By: Dianna Baldwin  
Zoology  
Faculty Advisor: Dr. Wilfred Denetclaw

#### CHARACTERISTICS OF AN ALUMINUM (III) PHEOPHORBIDE-A SERINE DERIVATIVE AS POTENTIAL USE IN PHOTODYNAMIC THERAPY

By: Diem Huynh  
Chemistry  
Faculty Advisor: Dr. Ursula Simonis

#### GROWTH STUDIES OF ORIENTED MFI ZEOLITE FILMS AS A FUNCTION OF TIME

By: Dina Flamik  
Chemistry  
Faculty Advisor: Dr. Andrew S. Ichimura and Dr. Uschi Simonis

#### SOLAR TRACKER

By: Eugene Russiyanov, Jed Hewitt, and Kate Tun  
Electrical Engineering  
Faculty Advisor: Dr. Hao Jiang and Dr. Hamid Shannaser

#### TIMBER ARCH BRIDGE

By: Fabian Gomez, Greg Paulson, Luis Hernandez, Jack Chen, Mikhail Ernakovich, Yonatan Andemariam, Miguel Escudero, and Jose Reynolds  
Civil Engineering  
Faculty Advisor: Mutlu Ozer

#### SUPER SCIENCE

By: Gaelen S. Smith, and Alyssa Berry  
Physiology and Zoology  
Faculty Advisor: Dr. Christopher Moffatt

AUTONOMOUS MICROMOUSE  
By: Hailu Keremo, Harrit Bains, and Loon Phang  
Electrical Engineering  
Faculty Advisor: Dr. Hao Jiang  
Abstract:

COMPARATIVE STUDY OF LDH STABILITY IN RESPONSE TO  
PHYSIOLOGICAL STRESS ON TROPICAL AND TEMPERATE PORCELAIN  
CRABS  
By: Haydee Medina  
Marine Biology  
Faculty Advisor: Dr. Jonathon Stillman

ANNOTATION OF SEVERAL DICISTRONIC GENES IN 12 DROSOPHILID  
SPECIES  
By: Henry Hunter, Teresa Laird, Christina Staubus, Lala Motlhabi, and Dr. Christopher  
D. Smith  
Cell and Molecular Biology  
Faculty Advisor: Dr. Christopher D. Smith

SYNTHESIS, CHARACTERIZATION, AND SUBCELLULAR LOCALIZATION OF  
MITOCHONDRIA-BASED PORPHYRINIC PIGMENTS  
By: Hnin Khin  
Biochemistry  
Faculty Advisor: Dr. Uschi Simonis and Dr. Meden Issac

RAPID SYNTHESIS OF HIGH-ASPECT RATIO ZINC OXIDE NANOWIRES BY A  
CATALYST-FREE, LOW-POWER INDUCTIVE HEATING PROCESS  
By: Joachim Pedersen  
Mechanical Engineering  
Faculty Advisor: Dr. Kwok-Siong Teh

BEER BOT: AUTOMATIC BEER POURING MACHINE  
By: Jonathan Hughes, Marvic Verzano, and Colin Muschette  
Electrical and Mechanical Engineering  
Faculty Advisor: Dr. Tom Holton

SYNTHESIS AND CHARACTERIZATION OF AMINO ACID SUBSTITUTED  
PHEOPHORBIDES  
By: Kara Cross  
Chemistry  
Faculty Advisor: Dr. Ursula Simonis

THE EFFECTS OF DISSONANT AND CONSONANT MUSIC ON HEART RATE,  
EEG BRAIN WAVE PATTERNS, AND GALVANIC SKIN RESPONSE

By: Kristina Millikan, Lisa Wise, Inara Iskenderova, and Farnaz Kholousi

Physiology and Behavior Biology

Faculty Advisor: Anne Thilges

EXPLORING THE REPRODUCIBILITY AND VALIDITY OF COMPARATIVE  
QUALITATIVE POLYMERASE CHAIN REACTION

By: Laura Cooper

Biochemistry

Faculty Advisor: Dr. Elizabeth Runquist

Abstract:

INVESTIGATION OF PROTEIN INTERACTIONS THAT CONTROL THE NITRITE  
REDUCTASE ACTIVITY OF HEME PROTEINS

By: Lea Lough

Biochemistry

Faculty Advisor: Dr. Raymond Esquerra

NADH AND METAL BINDING EQUILIBRIA OF PHENYLACETALDEHYDE

By: Levenlou Vender

Biochemistry

Faculty Advisor: Dr. George Gassner

REDUCTIVE IMMOBILIZATION OF SELENIUM OXYANIONS BY ZERO-  
VALENT IRON SURFACES

By: Marisa Miller

Biochemistry

Faculty Advisor: Dr. Bruce Manning

ACCEL-O-MOUSE (CODENAME YODA)

By: Mathew Brady, Victor Mannuel, and Lalesh Sharma

Electrical Engineering

Faculty Advisor: Dr. Hao Jiang

ANAEROBIC DEGRADATION OF ORGANIC CARBON IN AN INTERTIDAL  
SEDIMENT: RELATIVE IMPORTANCE OF MAJOR ELECTRON ACCEPTORS

By: Mayu Kawaguchi and Jonathon A. Polly

Chemistry

Faculty Advisor: Dr. Tomoko Komada and Dr. Uschi Simonis

HUMAN POWERED VEHICLE

By: Michael Diep, Ahmed Hassani, and Kevin Ng

Mechanical Engineering

Faculty Advisor: Dr. Kwok-Siong Teh

MECHANISM OF STYRENEOXYGENASE WITH SUBSTRATE ANALOGS AND INHIBITORS

By: Mie Win

Biochemistry

Faculty Advisor: Dr. George Gassner

WIRELESS POWER TRANSFER

By: Mojan Norouzi, David Munguia, Akhil Malik, and Zeeshan Ali

Electrical Engineering

Faculty Advisor: Dr. Hao Jiang

Abstract:

JET ENGINE

By: Patrick Moore, Nicholas Ng, and Nick Certo

Mechanical Engineering

Faculty Advisor: Dr. Kwok-Siong Teh and Dr. A. S. Ed Cheng

CONSTRUCTION OF LATTICE KNOTS FROM THE GAUSS CODE

By: Nicholas Normandin

Mathematics

Faculty Advisor: Dr. Mariel Vazquez

SMART MAGNETIC CARD READER FOR THE SCIENCE BUILDING

By: Noppol Setbol, Akeem Abodunrin, and Ronnie Roraldo

Computer Engineering

Faculty Advisor: Dr. Hamid Shahnasser

THE ELECTRIC MOTORCYCLE PROJECT

By: Oliver Burke and David Shirling

Mechanical Engineering

Faculty Advisor: Dr. Kwok-Siong Teh and Dr. A. S. Ed Cheng

WORK IN PROGRESS

By: Paula Robinson

Physiology and Behavior Biology

Faculty Advisor: Dr. Jonathon Stillman

GUIDING AND ROUTING LIGHT ALONG DEFECT CHANNELS: FROM IMPERFECTION TO PERFECTION.

By: Ratna Lama

Physics

Faculty Advisor: Dr. Zhigang Chen

CHICKEN EMBRYO DEVELOPMENT: REGIONAL AND TEMPORAL DEVELOPMENT OF SOMITES

By: Remy Binder and Meghan Lane  
Cell and Molecular Biology  
Faculty Advisor: Dr. Wilfred Denetclaw

DEVELOPMENT OF A NEW FIELD METHOD FOR DETERMINATION OF  
ARSENIC IN DRINKING WATER USING ION EXCHANGE RESINS AND  
HANDHELD X-RAY FLUORESCENCE ANALYZER

By: Rene L. Johnson and Peter E. Baker  
Biochemistry  
Faculty Advisor: Dr. Pete T. Palmer  
Abstract:

ARE SEASTARS OF THE GENUS LEPTASTERIAS SEPERATED BY HABITAT IN  
THE ROCKY INTERTIDAL OF NORTHERN CALIFORNIA? AN ANALYSIS OF  
MITOCHONDRIAL DNA AND MORPHOLOGY

By: Richard Coleman, Alyssa Lai, and Ashley Smith  
Marine Biology  
Faculty Advisor: Dr. Sarah Cohen

PROGRESSIVE METAL STAMPING DIE

By: Richard Moore  
Mechanical Engineering  
Faculty Advisor: Dr. Kwok-Siong Teh

HIGH SPEED RAIL STATION

By: Robert Halliday, Colin Kemper, Lucas Zimmer, Marjess Tacoban, Shiraz Muzaffar,  
and Sunia Malolo  
Civil Engineering  
Faculty Advisor: Dr. Wenshen Pong

INTRODUCING NOVEL SUBSTRATE SELECTIVITY INTO TRYPSIN THROUGH  
REDESIGN

By: Sayeeda Najibi  
Biochemistry & Cell and Molecular Biology  
Faculty Advisor: Dr. Teaster Baird, Jr.

SOLAR POWERED BATTERY CHARGER

By: Scott Siordia, Yves Fotso, James Carolino, and Kris Quismorio  
Electrical Engineering  
Faculty Advisor: Dr. Hao Jiang

NEW SFSU ENGINEERING HALL

By: Sean Jaime, James Go, Carrie King, and Tiffany Chin  
Civil Engineering  
Faculty Advisor: Dr. Wenshen Pong

SYNTHESIS OF AN ARGININE SUBSTITUTED PEOPHORBIDE-A AS EFFECTIVE  
PHOTOSENSITIZERS FOR PHOTODYNAMIC THERAPY (PDT)

By: Soohwan Kim

Chemistry

Faculty Advisor: Dr. Uschi Simonis

SURFACE CHEMISTRY UNDER PHOTOLYSIS

By: Stéphanie Cherdo

Chemistry

Faculty Advisor: Dr. Andrew S. Ichimura

Abstract:

INVERTED PENDULUM ROBOT

By: Tim Wang and Curtis Hilger

Electrical Engineering

Faculty Advisor: George Anwar

GEOTECHNICAL ENGINEERING OF FOUNDATION DESIGNS

By: Travis Haft, Radoslaw Stamcher, Devon Crowe, and Stephen Jo

Civil Engineering

Faculty Advisor: Dr. Tim D'Orazio

HECKE OPERATORS ON PALINDROMIC POLYNOMIALS

By: Whitney Zeldow

Mathematics

Faculty Advisor: Dr. Matthias Beck

THE PLIOCENE RESPONSE TO WARMER THAN MODERN SEA SURFACE  
TEMPERATURES IN COASTAL UPWELLING REGIONS

By: Zi Zi Searles

Geology

Faculty Advisor: Dr. Petra Dekens

cam in office 4/15 wanting to register

By: Rozaliya Rangelova

Faculty Advisor: