

UC San Diego Faculty Mentor Program



Symposium

May 24, 2016

Presented by
Academic Enrichment Programs

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**ACADEMIC
ENRICHMENT PROGRAMS**

Price Center West
Ballrooms A&B
5:00—8:00 p.m.

Faculty Mentor Program (FMP) Symposium

May 24, 2016

The Faculty Mentor Program (FMP) at UC San Diego offers invaluable undergraduate research experience to students who have completed a minimum of 90 credits and have a grade point average of at least 2.7. The FMP prepares undergraduates for post-baccalaureate success by providing the opportunity to work directly with UC San Diego faculty on research projects.

The annual FMP Symposium is a poster showcase of the work of FMP students who completed their research. The Symposium allows students to discuss this research with faculty, and one another. Both the program and symposium are coordinated by Academic Enrichment Programs (AEP), a unit within Student Retention and Success in the Student Affairs division. AEP's overarching goal is to encourage students to see research as an integral part of their UC San Diego education and inspire them to earn advanced degrees and pursue careers in research.

This year, 116 students will present their work. The conference is organized into two poster sessions. When students are not presenting they will support their peers and engage them in conversation about their research and posters. Forms are available for all attendees to provide feedback to the presenters.

The FMP Symposium is possible because of support from the Vice Chancellor of Student Affairs, Dr. Juan Gonzalez and Assistant Vice Chancellor Jeff Orgera. We thank the AEP staff, student workers, and Laura Puhl and Mark Kinsey of the Price Center for their hard work and dedication. We give a special thank you to the students for their enthusiastic pursuit of their research and are especially thankful to the UC San Diego faculty who have served as mentors in the FMP program. Finally, we would not have a successful program without our amazing mentors.

2016 FMP Symposium Program

- 4:30 p.m. *Doors Open to the Public*
- 5:00 – 5:30 **Opening Remarks, Dr. David Artis, Dean of Undergraduate Research Initiatives**
Outstanding Mentor Awards
- 5:30 – 6:30 **Poster Session 1**
- 6:30 – 6:45 Break [Poster Switch]
For budgetary reasons, refreshments are primarily available for student presenters & Faculty Mentors
- 6:45 – 7:45 **Poster Session 2**
- 8:00 p.m. **Symposium Ends**



Symposium 2016

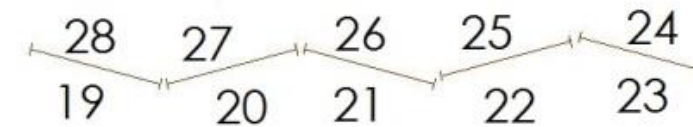
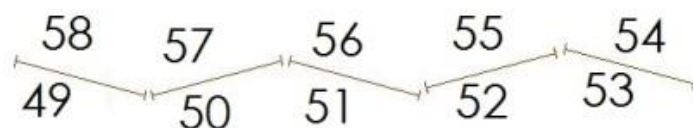
Finding a Student

The list of student presenters is arranged in alphabetical order, and includes the location of their poster stand and their session,

1st Session • 5:30 – 6:30 | 2nd Session • 6:45 – 7:45

Each stand is labeled as displayed below.

POSTER BOARD SET-UP



Ballroom Entrance

Nia Acevedo

• 1ST SESSION, BOARD 38

OVERCOMING THE YUCKY FACTOR: COLORECTAL SCREENING IN THE ASIAN-PACIFIC ISLANDER COMMUNITY

Muir College, Public Health Major

Mentored by Dr. Georgia Sadler, Surgery; John Tat, BS. BA., Doctoral Student; Isaac Quintanilla MPH

Kristin Agcaoili

• 1ST @ 2ND SESSION, BOARDS 3 & 4

VIRTUAL REALITY VISUALIZATION FOR CYBER-ARCHAEOLOGY

Warren College, Computer Science Major

Mentored by Dr. Jurgen Schulze, Computer Science

Maher Alhaja

• 1ST SESSION, BOARD 1

NOVEL IMMUNOTHERAPEUTICS: ALLOSTERIC AND ACTIVE SITE INHIBITORS OF PI3KINASE GAMMA

Muir College, Pharmacological Chemistry, Major McNair student

Mentored by Dr. Judith Varner, Pathology

Aisha Ali

• 2ND SESSION, BOARD 2

CREDIT INTERLINKING AND AGRICULTURAL MARKETS: EXAMINING THE EFFECTS OF TRADER INPUTS ON DIFFERENTIAL PRICING

Sixth College, Economics, Major McNair student

Mentored by Dr. Craig McIntosh, School for Global Policy & Strategy, Department of Economics

Erick Alvarado

• 1ST SESSION, BOARD 2

NEW METHOD TO DETERMINE ^{17}O ABUNDANCE IN ATMOSPHERIC CO_2

Warren College, Chemical Engineering, Major ER/RA student

Mentored by Dr. Subrata Chakraborty, Chemistry

Karen Angeles

• 1ST @ 2ND SESSION, BOARDS 57 & 58

VIRTUAL VIBRATION EXPERIMENT

Muir College, Structural Engineering Major

Mentored by Professor Petr Krysl, Structural Engineering

Carlos Araujo

• 1ST SESSION, BOARD 5

COGNITIVE AND EXECUTIVE PREDICTORS OF PSYCHOTIC SYMPTOMS

Revelle College, Cognitive and Behavioral Neuroscience, Major
McNair student

Mentored by Dr. Amy Lansing, UCSD Medical School, Psychiatry

Catalina Arreola

• 1ST @ 2ND SESSION, BOARDS 32 & 33

CERVICAL CANCER EDUCATION METHOD DEVELOPMENT

Revelle College, Public Health / Human Biology Major

Mentored by Dr. Georgia Sadler, Surgery

Mina Askar

• 2ND SESSION, BOARD 5

*INVESTIGATION OF LATERAL SEPTUM CIRCUITRY CAUSING EARLY LIFE STRESS-INDUCED
SOCIAL IMPAIRMENT*

Marshall College, Human Biology Major

Mentored by Dr. Byungkook Lim, Biological Sciences; Sora Shin
(postdoc at Lim Lab)

Jesus Baquera

• 1ST SESSION, BOARD 6

LOCALIZATION OF SOUND

Muir College, Aerospace Engineering, Major McNair student

Mentored by Dr. Mauricio de Oliveira, MAE

Jimmy Benge

• 2ND SESSION, BOARD 6

EXPLORING POPULATION & FUNCTIONAL GENOMICS IN MARINE TURTLES

Marshall College, Molecular Biology Major

Mentored by Professor Carolyn Kurle, Biology

Giovanni Birrueta

• 1ST SESSION, BOARD Y

*EVALUATING CANCER-RELATED PAIN MANAGEMENT IN THE EMERGENCY DEPARTMENT
SETTING*

Warren College, Physiology and Neuroscience, Major ER/RA student

Mentored by Dr. Chris Coyne, Department of Emergency Medicine

Liza Brusman

• 2ND SESSION, BOARD 7

ESTROGEN REGULATION OF CIRCADIAN GENE TRANSCRIPTION

Warren College, Human Biology Major

Mentored by Dr. Pamela Mellon, Reproductive Medicine; Karen Tonsfeldt, PhD, Mellon Lab

Javier Buenrostro

• 1ST @ 2ND SESSION, BOARDS 57 & 58

VIRTUAL VIBRATION EXPIREMENT

Revelle College, Structural Engineering Major

Mentored by Professor Petr Krysl, Structural Engineering

Jose Burciaga

• 2ND SESSION, BOARD 8

LATINAS AND HIGHER EDUCATION

Sixth College, Political Science, Major McNair student

Mentored by Dr. Luz Chung, Education Studies

Kristine Cay

• 1ST SESSION, BOARD 7

MANTRAM REPETITION AS AN ALTERNATIVE TREATMENT FOR THE REDUCTION OF STRESS IN COLLEGE STUDENTS

Muir College, Pharmacological Chemistry Major

Mentored by Dr. Sidney Zisook, Psychiatry; Kimberly Weingart, Ph.D., Psychology

Pauline Chang

• 2ND SESSION, BOARD 9

INFLUENCE OF WORKING IN MAQUILADORAS ON CIVIC ENGAGEMENT IN THE CONTEXT OF TIJUANA

Marshall College, Political Science Major

Mentored by Professor Fonna Forman, Political Science

Emily Chase

• 1ST SESSION, BOARD 8

INCLUSION OF AUTISTIC STUDENTS IN GENERAL EDUCATION CLASSROOMS: HELPFUL OR HARMFUL?

ERC College, Psychology Major

Mentored by Dr. Alan Daly, Education Studies; Christoforos Mamas, Visiting Scholar

Sijie Chen

• 2ND SESSION, BOARD 10

SINGLE-PARTICLE MEASUREMENTS USING LS MODULE OF HR-TOF-AMS

Revelle College, Earth Science Major

Mentored by Professor Lynn Russell, Scripps Atmospheric Aerosol Group; Chia-Li Chen, post doc, Scripps Atmospheric Aerosol Group

Calvin Cheng

• 1ST SESSION, BOARD 9

FINITE ELEMENT ANALYSIS PREDICTION OF STEEL BEAM-TO-COLUMN MOMENT CONNECTION RESPONSE

Marshall College, Structural Engineering, Major McNair student

Mentored by Dr. Chia-Ming Uang, Structural Engineering

Yichen Chuang

• 2ND SESSION, BOARD 11

THE ESTABLISHMENT OF AN IN VIVO MODEL TO STUDY ENTERIC INFECTION

Sixth College, Human Biology Major

Mentored by Professor Soumita Das, Pathology

Linda Chun

• 2ND SESSION, BOARD 12

HEART FAILURE READMISSION RATE AMONG THE ELDERLY

ERC College, Biology, Major ER/RA student

Mentored by Dr. Edward Castillo, Department of Emergency Medicine

Gitanjali Das

• 2ND SESSION, BOARD 13

ACCESSIBILITY OF APP PRIVACY POLICIES FOR MINORS

Sixth College, Physiology and Neuroscience Major

Mentored by Dr. Cinnamon Bloss, Psychiatry and Family Medicine and Public Health

Nathalie Djaja

• 2ND SESSION, BOARD 14

EXPERIENCE-DEPENDENT CHANGES IN NPAS4 DRIVEN BDNF ISOFORM LOCALIZATION

Marshall College, Biochemistry/Cell Biology Major

Mentored by Dr. Brenda Bloodgood, Neurobiology; Stefano Brigidi, PhD, Neurobiology; Andrea Hartzell, PhD Candidate, Neurobiology

Jacqueline Doan

• 2ND SESSION, BOARD 17

PARENTAL PERCEPTION OF CHILD HEALTH

ERC College, Human Biology Major

Mentored by Dr. Sheila Gahagan, Academic General Pediatrics, Child Development, and Community Health; Christine Williams, MPH, Academic General Pediatrics, Child Development and Community Health

Aaron Downs

• 1ST SESSION, BOARD 10

EFFECTS OF OXYGEN LEVEL MANIPULATION ON INSULIN PATHWAY STIMULATION

Revelle College, Human Biology Major

Mentored by Professor Yun Sok Lee, Medicine; Matthew Riopel, Ph.D, Olefsky Laboratory

Jairett Epperson

• 1ST SESSION, BOARD 11

NEW ARRIVAL CENTER: EDUCATION FOR REFUGEE STUDENTS IN SAN DIEGO

Muir College, Sociology and Music Humanities, Major McNair student

Mentored by Dr. Luz Chung, Education Studies

Richard Flahive

• 1ST SESSION, BOARD 12

REENTRY AND EDUCATION: THE FORMERLY INCARCERATED STUDENT EXPERIENCE AT SAN DIEGO CITY COLLEGE

Muir College, Political Science & Sociology, Major McNair student
Mentored by Dr. Amy Binder, Sociology

Kimberly Garcia

• 2ND SESSION, BOARD 18

SPECTRUM SENSING WITH SIZE DEPENDENT NOISE

Sixth College, Electrical Engineering Major

Mentored by Dr. Tara Javidi, Electrical Engineering; Nancy Ronquillo, Grad student, Department of Electrical and Computer Engineering

Deborah Gardner

• 1ST SESSION, BOARD 13

EXPERIMENTAL EXAMINATION OF ISOTOPE EFFECTS IN OZONE FORMATION

Sixth College, Environmental Engineering Major

Mentored by Dr. Subrata Chakraborty, Chemistry & Biochemistry

Zach Gavin

• 2ND SESSION, BOARD 19

WEARABLE SENSING DEVICES OF DERMAL ELECTRICAL IMPEDANCE AND THEIR APPLICATIONS

Sixth College, Nanoengineering, Major McNair student

Mentored by Professor Sheng Xu, Nanoengineering

Dennise Gomez-Singh

• 1ST SESSION, BOARD 14

UNDERSTANDING THE ROLE OF STUDENT SUPPORT SERVICES AT AN URBAN HIGH SCHOOL

Muir College, Sociology-Social Inequalities Major

Mentored by Dr. Luz Chung, Education

Valeria Gonzalez

• 2ND SESSION, BOARD 20

MINIATURIZATION OF FLEXIBLE ANTENNAS FOR INTEGRATION ONTO ADHESIVE ELECTRONIC SENSORS

Warren College, Electrical Engineering, Major McNair student
Mentored by Dr. Todd Coleman, Bioengineering; Yun Soung Kim, Grad student, Bioengineering

Regene Hathcock

• 1ST SESSION, BOARD 15

I CHOOSE COLLEGE: MOTIVATING HIGH SCHOOL STUDENTS FOR HIGHER EDUCATION

Muir College, Psychology, Major ER/RA student
Mentored by Professor Luz Chung, Education Studies; Makeba Jones, EDS

Shayna Herns

• 1ST SESSION, BOARD 44

INHIBITING HIV-1 REPLICATION IN MACROPHAGES USING BET INHIBITORS

Sixth College, Human Biology Major
Mentored by Dr. Stephen Spector, Pediatrics; Grant R. Campbell, Ph.D

Michael Hertz

• 1ST SESSION, BOARD 16

MAKING SENSE OF TEMPORAL PASSAGE

Warren College, Philosophy Major
Mentored by Professor Craig Callender, Philosophy

Tiffany Hinchey

• 1ST SESSION, BOARD 17

DEVELOPMENT OF A TWO-DIMENSIONAL, NON-LINEAR FRAMEWORK FOR BLOOM'S TAXONOMY

Marshall College, General Biology Major
Mentored by Dr. Stanley Lo, Biological Sciences

Christian Hong

• 2ND SESSION, BOARD 24

PEDIATRIC SEDATION VIA RECTAL ADMINISTRATION

Warren College, Latin American Studies, Major ER/RA student
Mentored by Dr. Hiu Lam, Emergency Department

Lilith Huang

• 1ST SESSION, BOARD 18

A SYSTEMATIC SEARCH OF CANCER THERAPEUTICS RESPONSES THAT MATCH ONCOGENE ACTIVATION PROFILES

Muir College, Bioengineering: Bioinformatics Major
Mentored by Dr. Pablo Tamayo, Medicine

Samantha Hussey

• 1ST SESSION, BOARD 23

EVALUATING CANCER-RELATED PAIN MANAGEMENT IN THE EMERGENCY DEPARTMENT SETTING

Warren College, General Biology, Major ER/RA student
Mentored by Dr. Christopher Coyne, Department of Emergency Medicine

Rashini Jayaratne

• 1ST SESSION, BOARD 19

THE USEFULNESS OF NOVEL ENTEROID DERIVED MONOLAYERS IN UNDERSTANDING DIARRHEA CAUSED BY SALMONELLA IN ENTERIC INFECTIONS

Revelle College, Microbiology Major
Mentored by Dr. Soumita Das, Pathology

Grace Ji

• 2ND SESSION, BOARD 25

ASSESSMENT OF RISK FACTORS CONTRIBUTING TO MEDICAL LITIGATIONS IN EMERGENCY DEPARTMENTS WITHIN THE UNIVERSITY OF CALIFORNIA HEALTH SYSTEMS

Muir College, Human Biology, Major ER/RA student
Mentored by Dr. Gary Vilke, Emergency Medicine

Liban Jibril

• 1ST SESSION, BOARD 20

GOLD NANOWIRE STRAIN SENSOR

Revelle College, Chemical Engineering, Major McNair student
Mentored by Dr. Darren Lipomi, Nanoengineering

Andrew Johnson

• 1ST SESSION, BOARD 37

AT RISK CULTURAL HERITAGE SITES IN THE MIDDLE EAST

ERC College, Archaeology Major
Mentored by Dr. Tom Levy, anthropology

Sanskruiti Kakaria

• 2ND SESSION, BOARD 27

ESTABLISHING VALIDITY OF THE RELATIONSHIP FORMATION TASK WITHIN A PSYCHIATRIC POPULATION

Sixth College, Psychology Major

Mentored by Dr. Charles Taylor, Psychiatry; Sarah Pearlstein, PhD, Clinical Psychology, Positive Emotion and Anxiety Research Laboratory, University of California, San Diego

Anish Kannan

• 1ST @ 2ND SESSION, BOARDS 3 & 4

VIRTUAL REALITY VISUALIZATION FOR CYBER-ARCHAEOLOGY

Sixth College, Computer Science Major

Mentored by Dr. Jurgen Schulze, Computer Science

Tanya Kantak

• 1ST SESSION, BOARD 21

CHARACTERIZING NEURONS THAT MEDIATE THE CIRCADIAN RHYTHM

Marshall College, Physiology and Neuroscience Major

Mentored by Dr. Satchidananda Panda, Biology

Veronica Khauv

• 2ND SESSION, BOARD 28

AUTOMATED INTERVERTEBRAL DISC FINDING AND OSTEOPHYTE VOLUME QUANTIFICATION IN MICROCT

Warren College, Computer Science Bioinformatics Major

Mentored by Dr. Koichi Masuda, Orthopaedics

Sowon Kim

• 2ND SESSION, BOARD 54

RARE VARIANTS IN VINCULIN AND TROPOMYOSIN 1 FOUND IN DILATED CARDIOMYOPATHY.

Marshall College, Biochemistry and Cell Biology Major

Mentored by Dr. Robert Ross, UCSD School of Medicine, Division of Cardiovascular Medicine; Chao Chen, M.D./Ph.D., UCSD School of Medicine, Ross Lab

Mallory Kraus

• 2ND SESSION, BOARD 29

A BIOLOGICAL MARKET MODEL FOR BOTTLENOSE DOLPHIN SOCIALITY
Muir College, Cognitive Science Major
Mentored by Dr. Christine Johnson, Cognitive Science

I-Chi Lai

• 2ND SESSION, BOARD 26

*WHETHER THE NICOTINE NEUROPROTECTIVE EFFECT IS MEDIATED BY
NEUROTRANSMITTER SWITCHING*
Sixth College, Physiology and Neuroscience Major
Mentored by Dr. Darwin Berg, Neurobiology; Dr. Davide Dulcis, Ph.D.,
Department of Psychiatry, Dulcis Lab

Mitchel Lau

• 2ND SESSION, BOARD 30

*THE INTERACTIONS OF ENTERIC BACTERIAL EFFECTORS AND ITS EFFECTS ON THE
PATHOGENESIS OF INTESTINAL MACROPHAGES*
Sixth College, Biochemistry/Cell Biology Major
Mentored by Professor Soumita Das, Pathology

Jaehong Lee

• 1ST SESSION, BOARD 24

*IN-VITRO ASSESSMENT OF THE BEHAVIORS OF OSTEOLAST CELLS ON 3D TEMPLATED
HYDROXYAPATITE (HA) SCAFFOLDS FABRICATED BY NATURE-INSPIRING FREEZE
CASTING METHOD*
Muir College, Physiology and Neuroscience Major
Mentored by Professor Shu Chien, Bioengineering; Dr. Sung Sik Hur -
Research Scientist, Shu Chien Lab

Soo Yong Lee

• 1ST SESSION, BOARD 25

*RELATIONSHIP BETWEEN ATTENTIONAL DEFICITS AND POST-TRAUMATIC STRESS
DISORDER*
Marshall College, Psychology Major
Mentored by Professor Ariel Lang, Psychiatry; Jessica Bomyea, Ph.D.,
Department of Psychology

Jessica Lettes

• 2ND SESSION, BOARD 31

TOWARDS UNDERSTANDING HUMAN-SPECIFIC DISEASES THROUGH EXON ORTHOLOGY USING ORTHOEXON

Muir College, General Biology Major

Mentored by Dr. Gene Yeo, Department of Cellular and Molecular Medicine; Olga Botvinnik Graduate Student (Ph.D.), Bioinformatics and Systems Biology, Yeo Lab

Nicole Leung

• 2ND SESSION, BOARD 34

PATIENT FACTORS IN CLINICAL TRIALS

Revelle College, Biochemistry and Cell Biology Major

Mentored by Dr. Cinnamon Bloss Bloss, Psychiatry; Cynthia Cheung, BA, Bloss Lab

Irene Li

• 1ST SESSION, BOARD 26

PREDICTORS AND OUTCOMES OF THE SEEKING SAFETY TREATMENT ON SUBSTANCE USE AMONG INCARCERATED GIRLS

Revelle College, Clinical Psychology Major

Mentored by Dr. Amy Lansing, Psychiatry; Wendy Plante, Physiological Psychology/Psychobiology, B.S., Psychiatry Department

Martin M Zaragoza

• 2ND SESSION, BOARD 35

SELECTIVE AREA GROWTH OF GAN ON SAPPHIRE AND SILICON SUBSTRATES

Warren College, Electrical Engineering, Major McNair student

Mentored by Professor Shadi A. Dayeh, ECE; Atsunori Tanaka, PhD Student, ECE Department, Integrated Electronics and Bio-Interfaces Lab

Denzil Mathew

• 1ST SESSION, BOARD 27

E-CIGARETTES: FORGING A CLOUDY FUTURE

ERC College, Biochemistry and Cell Biology Major

Mentored by Dr. Laura Crotty Alexander, Medicine

Jonathan Mendez

• 2ND SESSION, BOARDS 15 & 16

INTRODUCTORY BIOLOGY LAB COURSE POSES EFFECTS ON STUDENT PERCEPTIONS OF BIOLOGISTS

Muir College, General Biology Major

Mentored by Professor Stanley Lo, Biological Sciences

Karina Meneses

• 1ST SESSION, BOARD 28

EXPLORING NOVEL INFORMATION-THEORETIC MEASURES OF ASSOCIATION FOR GENOMICS AND CANCER RESEARCH

Revelle College, Mathematics Major

Mentored by Dr. Pablo Tamayo, Medical Genetics

Marissa Miramontes

• 2ND SESSION, BOARD 36

HIGH DYNAMICAL RANGE INTRAVENTRICULAR COLOR-DOPPLER VELOCIMETRY

Revelle College, Bioengineering, Major McNair student

Mentored by Dr. Juan Carlos del Álamo, Department of Mechanical and Aerospace Engineering; Lorenzo Rossini, PhD student, Department of Mechanical and Aerospace Engineering

Martha Moreno

• 1ST SESSION, BOARD 29

RELATIONSHIP BETWEEN MATERNAL COMMUNICATION AND EATING DISORDER SYMPTOMOLOGY IN MEXICAN-AMERICAN WOMEN

Muir College, Psychology/Clinical Psychology, Major McNair student

Mentored by Dr. Becky Marquez, Family Medicine and Public Health

Katerina Morgan

• 2ND SESSION, BOARD 37

WOMEN'S PATHWAYS TO CRIMINALITY: UNDERSTANDING AGENCY IN WOMEN'S DRUG USE

Marshall College, Sociology Major

Mentored by Professor Akos Rona-Tas, Sociology; Dr. Andrea Dauber-Griffin, DPhil, Sociology

Diba Mortazavi

• 1ST SESSION, BOARD 30

ALCOHOL DEPENDENCY PREDICTORS AMONG DELINQUENT GIRLS: THE ROLE OF TRAUMA BURDEN AND POSITIVE EXPECTANCIES OF ALCOHOL-RELATED PTSD RELIEF
Revelle College, General Biology Major
Mentored by Dr. Amy Lansing, Psychology

Oliva Mota Segura

• 2ND SESSION, BOARD 38

MODULATION OF AN IDENTIFIED GAP JUNCTION SYNAPSE
Muir College, Biochemistry and Cell Bio, Major McNair student
Mentored by Macagno Eduardo Macagno, Cell and Developmental Biology; Michael Baker, Ph.D, Cell and Developmental Biology

Carlos Munoz

• 1ST SESSION, BOARD 31

VIDEO AMPLICATION BLOOD FLOW
Warren College, Chemicla Engineering, Major McNair student
Mentored by Dr. Pedro Cabrales, Bioengineering

Christina Muñoz

• 2ND SESSION, BOARD 39

SOCIAL NETWORKS AND SOCIAL CAPITAL: EXAMINING LATINO STUDENT NETWORKS IN PRIMARY EDUCATION
Marshall College, Sociology, Major McNair student
Mentored by Dr. Alan Daly, Education Studies Department; Dr. Christoforos Mamas, Post Doc, Education Studies Department, Dr. Kevin Lewis, Ph.D, Sociology Department, lewis@ucsd.edu

Emily Nan

• 1ST SESSION, BOARD 34

TARGETING CHRONIC LYMPHOCYTIC LEUKEMIA WITH PORCUPINE INHIBITOR LGK974
Warren College, Human Biology Major
Mentored by Dr. Dennis Carson, Department of Medicine; Dr. Christina Wu, Ph.D., Carson Collaboratory

Thu Nhi Ngo

• 2ND SESSION, BOARD 42

*SCREENING FOR GOLPH3 IN XENOGRAFT MODELS: A STUDY OF GOLPH3
PHYSIOLOGICAL EXPRESSION IN VIVO*
ERC College, Molecular Biology Major
Mentored by Dr. Seth Field, Medicine

Anna Nilsson

• 1ST SESSION, BOARD 35

*THE SYNERGISTIC EFFECT OF THE SUSTAINED RELEASE OF DAUNORUBICIN AND
KETOROLAC IN THE TREATMENT OF PROLIFERATIVE VITREORETINOPATHY UTILIZING A
POROUS SILICON PARTICLE DELIVERY SYSTEM*
Marshall College, Physiology and Neuroscience Major
Mentored by Dr. Lingyun Cheng, Ophthalmology

Stephanie Nunes

• 2ND SESSION, BOARD 43

*HIV PREVALENCE AT VENUES FREQUENTED BY MEN WHO HAVE SEX WITH MEN
(MSM) AND TRANSGENDER WOMEN IN TIJUANA, MEXICO*
Muir College, Public Health Major
Mentored by Dr. Heather Pines, Medicine

Alisa Ochoa

• 1ST SESSION, BOARD 36

*CULTURAL DIFFERENCES IN DIETARY BEHAVIOR IN OVERWEIGHT MEXICAN-AMERICAN
MOTHERS AND ADULT DAUGHTERS*
ERC College, Global Health Major
Mentored by Dr. Becky Marquez, Family and Preventative Medicine

Daisy Ojeda

• 2ND SESSION, BOARD 44

BEE'S RESPONSE TO NEONICOTINOID IMIDACLOPRID
ERC College, Environmental Engineering Major
Mentored by Professor James Nieh, Ecology, Behavior, and Evolution

Seung Dae Park

• 1ST @ 2ND SESSION, BOARDS 32 & 33

CERVICAL CANCER EDUCATION METHOD DEVELOPMENT
Marshall College, General Biology Major
Mentored by Dr. Georgia Robins Sadler, Surgery

Jason Park

• 1ST SESSION, BOARD 39

COMPUTATIONAL ANALYSIS OF EGFR MUTATED CELL LINES

Marshall College, Computer Science w/ Specialization in
Bioinformatics Major

Mentored by Professor Pablo Tamayo, Medicine

Aaron Patel

• 1ST SESSION, BOARD 40

SYNTHETIC LETHALITY IN MUTANT-KRAS ONCOGENIC PATHWAYS

Warren College, Bioengineering/Biotech Major

Mentored by Dr. Pablo Tamayo, Moore Cancer Center

Kathaleen Pham

• 1ST SESSION, BOARD 41

POSITIVE TRAITS IN BIPOLAR DISORDER

Marshall College, Physiology and Neuroscience, Major McNair
student

Mentored by Dr. Tiffany Greenwood, Psychiatry

Anh Pham

• 2ND SESSION, BOARD 45

SEA VIEW - TACKLING DATA FORMAT INCOMPATIBILITY IN OCEANOGRAPHY

Marshall College, Math/Econ, Major McNair student

Mentored by Dr. Karen Stocks, Geoscience Data Center

Katy Pham

• 1ST @ 2ND SESSION, BOARDS 32 & 33

CERVICAL CANCER EDUCATION METHOD DEVELOPMENT

Marshall College, Human Biology Major

Mentored by Dr. Georgia Sadler, Surgery

Muna Pina

• 1ST SESSION, BOARD 42

SOCIO-ECONOMIC MOBILITY IN SAN DIEGO

Revelle College, Urban Studies and Planning, Major McNair student

Mentored by Dr. Mirle Bussell, Urban Studies and Planning

Paulina Pineda Severiano

• 1ST SESSION, BOARD 43

LATINO RACIAL IDENTITY

ERC College, Philosophy and Spanish Literature, Major McNair student

Mentored by Professor Michael Hardimon, Philosophy

Molly Poole

• 2ND SESSION, BOARDS 22 & 23

TRANSFER STUDENTS AT A CLOSER LOOK

Revelle College, Mathematics Major

Mentored by Professor Luz Chung, Education Studies

Ashley Qu

• 2ND SESSION, BOARD 21

GROWTH OF SUPERCONDUCTING HIGH-Tc YBa₂Cu₃O₇ THIN FILMS FOR MULTI-LAYER SQUIDS

Revelle College, Mechanical Engineering Major

Mentored by Professor Shane Cybart, Physics

Cristina Rangel

• 2ND SESSION, BOARD 46

EMOTIONAL REACTIVITY AND POST-TRAUMATIC GROWTH AS PREDICTORS OF MALADAPTIVE COPING AMONG FEMALE ADOLESCENT DELINQUENTS

Marshall College, Cognitive and Behavioral Neuroscience, Major McNair student

Mentored by Dr. Amy Lansing, Psychiatry

Valerie Saiag

• 1ST SESSION, BOARD 45

ART IN THE ANDES?

Marshall College, Visual Arts Major McNair student

Mentored by Dr. Christine Hunefeldt, History

Alina Salamatina

• 2ND SESSION, BOARD 47

CHARACTERIZING EMERGENCY DEPARTMENT VISITS PRIOR TO A SUICIDE AND SELF-INFLICTED INJURY RELATED EMERGENCY DEPARTMENT VISIT

Sixth College, Biochemistry and Cell Biology, Major ER/RA student
Mentored by Dr. Edward Castillo, Emergency Medicine; Gary M. Vilke, MD, Emergency Medicine; Jesse Brennan, MA, Emergency Medicine

Sara Sandoval

• 1ST SESSION, BOARD 46

IMPACT OF DROUGHT AND HABITAT FRAGMENTATION ON NATIVE BEE ASSEMBLAGES

Revelle College, Ecology, Behavior & Evolution, Major McNair student

Mentored by Dr. David Holway, Ecology, Behavior & Evolution;
James Keng-Lou Hung, PhD Candidate, Ecology Behavior & Evolution

Francisco Santana

• 2ND SESSION, BOARD 50

LIVE IMAGING OF WOUND RESPONSE GENES USING MS2 LOOPS INSERTION

ERC College, Biochemistry & Cell Biology, Major McNair student

Mentored by Dr. William McGinnis, Cell and Developmental Biology;
Sandra Diaz Garcia, Postdoctoral fellow, Cell and Developmental Biology

Melody Sayrany

• 2ND SESSION, BOARD 49

THE EFFICACY OF 1V270 IMMUNOACTIVATOR MOLECULE IN INHIBITING BREAST CANCER METASTASIS

Revelle College, Human Biology Major

Mentored by Dr. Dennis Carson, Immunology; Dr. Tomoko Hayashi, M.D./Ph.D., Carson Laboratory

Ryan Schramm

• 1ST SESSION, BOARD 47

GAS CANNON SABOT SYSTEM DEVELOPMENT

Warren College, Structural Engineering Major

Mentored by Professor Hyonny Kim, Structural Engineering

Connor Smith

• 1ST @ 2ND SESSION, BOARDS 3 & 4

VIRTUAL REALITY VISUALIZATION FOR CYBER-ARCHAEOLOGY

Sixth College, Computer Science Major

Mentored by Dr. Jurgen Schulze, Computer Science and Engineering

Tiffany So

• 2ND SESSION, BOARD 48

WHAT DO AGITATED PATIENTS WANT IN THE EMERGENCY DEPARTMENT?

ERC College, Physiology & Neuroscience, Major ER/RA student

Mentored by Dr. Michael Wilson, School of Medicine/Emergency Department

Tiffany So

• 1ST SESSION, BOARD 48

ANALYSIS OF POSITIVE TRAITS IN THE BIPOLAR SPECTRUM

ERC College, Physiology & Neuroscience Major

Mentored by Dr. Tiffany Greenwood, Psychology

Lisa Sugiki

• 1ST @ 2ND SESSION, BOARDS 57 & 58

VIRTUAL VIBRATION EXPERIMENT

Revelle College, structural engineering Major

Mentored by Dr. Petr Krysl, Structural Engineering

Akshita Taneja

• 2ND SESSION, BOARDS 15 & 16

INTRODUCTORY BIOLOGY LAB COURSE POSES EFFECTS ON STUDENT PERCEPTIONS OF BIOLOGISTS

Revelle College, Human Development & Neuroscience/Physiology Major

Mentored by Professor Stanley Lo, Biological Sciences

Olivia Tang

• 1ST SESSION, BOARD 49

TRAITS OF CANCER CLINICAL TRIALS EDUCATION PROGRAMS FOR ASIANS AND PACIFIC ISLANDERS TO AVOID

ERC College, Public Health Major

Mentored by Dr. Georgia Sadler, Surgery; Sandy Bohan, Doctoral Student, Surgery

Medhanie Tesfamariam

• 2ND SESSION, BOARD 51

A WIRELESS INTEGRATED ANALOG FRONTEND FOR ECG MONITORING

Marshall College, Bioengineering, Major McNair student

Mentored by Dr. Todd Coleman, Bioengineering; Amr Haj-Omar,

PhD, Neural Interactive Lab; Christopher Villongco, PhD,

Departments of Medicine and Bioengineering

Thiba Thiagarajan

• 2ND SESSION, BOARD 1

REPRESENTATION OF HINDUISM IN CALIFORNIA TEXTBOOKS

Sixth College, Anthropology (conc. Sociocultural) Major

Mentored by Professor Steven Parish, Anthropology; Kamala

Visweswaran, Ph.D. Anthropology

Briana Thrift

• 1ST SESSION, BOARD 50

NO-POPs TRIAL

Sixth College, Public Health, Major McNair student

Mentored by Dr. Jose Suarez, Family Medicine and Public Health

Jonathan Tin

• 2ND SESSION, BOARDS 22 & 23

TRANSFER STUDENTS AT A CLOSER LOOK

Warren College, Mathematics Major

Mentored by Professor Luz Chung, Education Studies (EDS)

Stephanie Ting

• 1ST SESSION, BOARD 51

A MAP OF ONCOGENIC STATES AND CELL VULNERABILITIES FOR LIVER CANCER

Sixth College, Computer Science Bioinformatics Major

Mentored by Dr. Pablo Tamayo, Medicine

Elaine Tran

• 1ST SESSION, BOARD 52

KNOWLEDGE AND PERCEPTIONS OF BREAST CANCER CLINICAL TRIALS AMONG THE API COMMUNITY

Muir College, Pharmacological Chemistry Major

Mentored by Dr. Georgia Sadler, School of Medicine; Sandy Bohan

Calvin Tsang

• 2ND SESSION, BOARDS 40 & 41

*CORAL COMPETITIVE NETWORKS: CONSISTENT INTERSPECIFIC DYNAMICS
DEMONSTRATED USING LARGE-AREA IMAGERY*

ERC College, Marine Biology Major

Mentored by Dr. Stuart Sandin, SIO; Clint Edwards, Research
Assistant, SIO Sandin Lab

Paige Turner

• 2ND SESSION, BOARD 52

*INTERRELATIONSHIP BETWEEN FAMILY DEMOGRAPHICS, PARENT BELIEFS, HOME
PRACTICES, AND SCHOOL READINESS*

ERC College, Human Development Major

Mentored by Dr. Alison Wishard Guerra, Education Studies

Vachan Vadmal

• 1ST SESSION, BOARD 53

*THE FUNCTIONAL LANDSCAPE OF ONCOGENIC ACTIVATION IN HEAD AND NECK
CANCERS*

Revelle College, Computer Science Major

Mentored by Dr. Pablo Tamayo, School of Medicine

Viviana Vela

• 2ND SESSION, BOARD 53

POUNDING OF BASE ISOLATED STRUCTURES WITH RUBBER BUMPERS

Sixth College, Structural Engineering, Major McNair student

Mentored by Professor Gilberto Mosqueda, Structural Engineering
Department

Jiayan Wang

• 1ST SESSION, BOARD 38

*OVERCOMING THE YUCKY FACTOR: COLORECTAL SCREENING IN THE ASIAN-PACIFIC
ISLANDER COMMUNITY*

Muir College, Public Health Major

Mentored by Dr. Georgia Robins Sadler, UC San Diego Moores
Cancer Center, Department of Surgery; John Tat, BS, BA; Isaac
Quintanilla Salinas, MPH

McKenna Williams

• 1ST SESSION, BOARD 22

CONVERGENCE AND DIVERGENCE OF SARCOPENIA AND CACHEXIA
Muir College, Cognitive Science Major
Mentored by Dr. Pei-an (Betty) Shih, Psychiatry

Amelia Woo

• 1ST SESSION, BOARD 54

CREATION AND CHARACTERIZATION OF MUTANT VITIS. VINIFERA CHALCONE AND STILBENE SYNTHASES
Sixth College, Chemistry Major
Mentored by Dr. Michael Burkart, Chemistry and Biochemistry; Jeff Mindrebo, Master's, Chemistry and Biochemistry, Burkart Lab

Benjamin Yang

• 2ND SESSION, BOARD 55

PROGRESSION OF GLIOBLASTOMA CELLS AND THEIR MECHANICAL-EPIGENETIC BEHAVIORS
Revelle College, Bioengineering: Biotechnology Major
Mentored by Dr. Shu Chien, Bioengineering; Dr. Sung-Sik Hur, PhD, Institute of Engineering in Medicine

Rachel Yang

• 2ND SESSION, BOARD 56

CHINA'S BILATERAL CURRENCY SWAP AGREEMENTS
Sixth College, Economics Major
Mentored by Professor J. Lawrence Broz, Political Science

Huwate Yeerna

• 1ST SESSION, BOARD 55

GENERATING A FUNCTIONAL MAP (ONCO-GPS) FOR HEMATOPOIETIC CANCERS
Revelle College, Bioengineering: Bioinformatics Major
Mentored by Dr. Pablo Tamayo, Medicine

Estefani Zepeda

- 2ND SESSION, BOARDS 40 & 41

*CORAL COMPETITIVE NETWORKS: CONSISTENT INTERSPECIFIC
DYNAMICS DEMONSTRATED THROUGH LARGE-AREA IMAGERY*

ERC College, Marine Biology Major

Mentored by Dr. Stuart Sandin, Scripps Institution of Oceanography;
Clinton Edwards. M.S./B.S., Scripps Institution of Oceanography,
Sandin Lab

Ni Zhan

- 1ST @ 2ND SESSION, BOARDS 57 & 58

VIRTUAL VIBRATION EXPERIMENT

Muir College, Structural Engineering Major

Mentored by Dr. Petr Krysl, Structural Engineering

Tairan Zhu

- 1ST SESSION, BOARD 56

CRYOGENIC AMPLIFIER

Sixth College, Electrical Engineering, Major ER/RA student

Mentored by Dr. Shane Cybart, Physics

Academic Enrichment Programs

Academic Enrichment Programs (AEP) are designed to broaden the educational experience of undergraduate UC San Diego students, through a variety of programs, conferences, and scholarship opportunities. Students obtain valuable research and professional preparation and are encouraged to pursue advanced degrees. WWW.AEP.UCSD.EDU




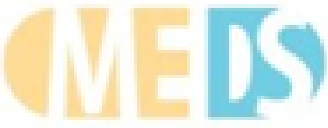




PROGRAMS & SCHOLARSHIPS

	<p>The California Louis Stokes Alliance for Minority Participation (CAMP) in Science, Engineering and Mathematics Program provides support for ethnically underrepresented students majoring in STEM fields. The program is designed to serve African American, Latino/Hispanic, American Indian, Alaskan Native, or Native Pacific Islander undergraduates who are U.S. citizens or permanent residents.</p>
	<p>The Faculty Mentor Program (FMP) offers invaluable research experience to all UC San Diego juniors and seniors, with a minimum grade point average of 2.7, who would like to prepare for graduate or professional school. <i>FMP hosts an annual symposium open to the public.</i></p>
	<p>Frontiers of Innovation Scholars Program (FISP) is a campus-wide effort to support the primary research initiatives of UC San Diego and provides fellowships for undergraduate, graduate, and postdoctoral scholars. <i>FISP hosts an annual symposium open to the public.</i></p>
	<p>Health and Medical Professions Preparation Program (HMP3) is designed to increase students' qualifications for entry into health professions and is open to all UC San Diego students interested in health careers. <i>HMP3 hosts the MEDS Conference.</i></p>

	<p>IME BECAS was established by the Mexican government to grant scholarships for low-income Mexican or Mexican-origin student at UC San Diego. It is open to students completing a summer research program with a GPA of 3.0 and above.</p>
	<p>McNair Scholars Program is a federally funded initiative serving low-income, first generation, or underrepresented college students committed to pursuing Ph.Ds. Eligible students must also have at least junior standing and a minimum 3.0 GPA.</p>
	<p>National Action Council for Minorities in Engineering (NACME) provides scholarships to minority and underrepresented engineering students who maintain a GPA of at least 2.8.</p>
	<p>National Competitive Scholarships positions UC San Diego undergraduates to win national scholarships, including the Rhodes, Strauss, and Fulbright, among others.</p>
	<p>Summer Research Program (SRP) is an 8-week summer program which provides 30-hours a week of mentored research experience, housing, GRE training, and a stipend to UC San Diego students, with a GPA higher than 3.0. <i>SRP hosts the Summer Research Conference.</i></p>
	<p>Summer Transfer Ahead Research Training (START) program offers incoming transfer students an introductory research experience at UC San Diego during the summer <i>prior</i> to their first fall quarter at the university.</p>
	<p>Undergraduate Research Scholarships offers award amounts of \$5000 for UC San Diego undergraduates conducting research over the summer.</p>
	<p>UC Scholars is an 8-week, full-time research experience for undergraduates with a GPA of 3.0 or above, and is supported by Student Affairs.</p>

ACADEMIC ENRICHMENT PROGRAMS • CONFERENCES

	<p>Conference for Research in the Arts, Social Sciences, & Humanities (CRASSH) specifically encourages UC San Diego students to conduct research in the arts, humanities, and social sciences of and recognizes this work. The conference is open to all students.</p>
	<p>Frontiers of Innovation Scholars Program (FISP) Symposium is an annual conference that showcases the research of FISP Scholars; oral and poster presentations are delivered by postdoctoral, graduate student, and undergraduate trainees. The research is reflective of the multi-disciplinary goal of the program.</p>
	<p>Faculty Mentor Program (FMP) Symposium is an annual poster conference that highlights the work of FMP students. Undergraduates have completed research with a UC San Diego faculty member. The Symposium allows students to discuss their research with the UC San Diego Community.</p>
	<p>Medical Education for Diverse Student (MEDS) encourages, educates, and empowers students on their road to a career in health. The conference is open to pre-med and pre-pharmacy students at UC San Diego and neighboring community colleges.</p>
	<p>Summer Research Conference (SRC) is an annual conference held in August at UC San Diego. All undergraduates in the San Diego region conducting research during the summer are invited to participate.</p>
	<p>Undergraduate Research Conference (URC) provides an opportunity for undergraduates in all departments and majors to present their research. Students must be nominated by their professor as the URC encourages baccalaureate level research between faculty and students.</p>