Chancellor’s Research Fellowship
Spring Reception

May 27, 2015
Chancellor’s Research Fellowship
Spring Reception

The Chancellor's Research Fellowship is a competitive award presented to thirteen students annually. Recipients are selected from an applicant pool based on a well defined research proposal and a letter of recommendation from a faculty mentor. Fellows are awarded $5,000 for the academic year. The funds can be used for research expenses, travel to present at conferences, and a stipend. Throughout the year the fellows will be involved in monthly professional development workshops. The workshops may also include formal and informal interactions with campus administrators. Additionally, Fellows contribute their time to the recruitment and development of the next cohort of Fellows. Fellows are involved in recruitment activities, application workshops, and present their research findings at the Annual Undergraduate Research, Scholarship, and Creative Activity Symposium.

The Spring Reception provides an opportunity to acknowledge the accomplishments of the outgoing cohort, and to welcome the new cohort. This is also an opportunity to recognize the faculty who mentor and guide these rising scholars.

Thank you for joining us for this joyous event.

Kim A. Wilcox
Chancellor

Steven Brint
Vice Provost, Undergraduate Education

Gladis Herrera-Berkowitz
Director, Student Success Programs
PROGRAM

WELCOME
Steve Brint
Vice Provost, Undergraduate Education

OPENING REMARKS
Kim Wilcox
Chancellor

MUSICAL PERFORMANCE
Elma Frias and Nicole Perez

AWARDS CEREMONY
2014/2015 Chancellor’s Research Fellows Recognition
2015/2016 Chancellor’s Research Fellows Induction
Gladis Herrera-Berkowitz
Director, Student Success Programs

CLOSING REMARKS
Steve Brint
Vice Provost, Undergraduate Education

RECEPTION
Director’s Garden
Pictured from left to right: Chancellor Kim A. Wilcox, Elma Frias (Neuroscience/Music), Stephanie Gamez (Biology), Boi Quach (Bioengineering), Matthew Leitao (Psychology), Allison Cid (Microbiology), Geoffrey Pronovost (Biochemistry), Connor Richards (Physics), Iliana Cordova (Psychology), James Colbath (Biology), Nicole Perez (Psychology).

Fellows Not Pictured: Mark Forde (Political Science/International Relations), Martha Nunez Ornelas (Physics and Mathematics), Leah Rosario (Political Science/Law and Society)
2014 – 2015 Chancellor’s Research Fellows

Allison Cid, Microbiology
Faculty Mentor: Eugene Nothnagel, Botany and Plant Sciences
Project Title: The Determination of the Effects of O-Methylation on the Dehydration and/or Desiccation Resistance in the Cell Walls of Moss and Tobacco Plants
Conference Presentation(s):
“Effect of 3-O-Methylation of Cell Wall Galactosyl Residues on Desiccation Tolerance of Leaves from Transgenic Tobacco Plants” - Poster Presentation, UCR Undergraduate Research Symposium, Riverside, CA, April 2015
“Effect of O-methylation of Cell Wall Galactosyl Residues on Desiccation Tolerance of Leaves from Transgenic Tobacco Lines” - Poster Presentation, 40th Annual West Coast Biological Sciences Undergraduate Research Conference at Point Loma Nazarene University in San Diego, CA, April 2015
Membership: Supplemental Instruction Leader, Secretary of Future P.I.L.L.S., American Red Cross
Awards: Academic Excellence Award 2015, Dean’s Academic Distinction Award 2015
Graduation 2016

James Colbath, Biology
Faculty Mentor: Theodore Garland, Biology
Project Title: Are mice “Born to Run”; Resistant to Muscle Injuries and/or Better Able to Recover from Such Injuries?
Conference Presentation(s):
“Are High-Activity Mice Resistant to Muscle Injuries?” - Poster Presentation, UCR Undergraduate Research Symposium, Riverside, CA, April 2015
Membership: University Honors
Awards: Academic Excellence Award 2015, Dean’s Academic Distinction Award 2015
Graduation 2015: James will enroll in a Masters of Science in Biology at Northern Arizona University in the fall.
“Being a Chancellor’s Research Fellow this past year has been challenging; full of issues, setbacks and doubt. But, just as with many challenges, it has also been very rewarding and, if I had the opportunity, I would do it again.”

Iliana Cordova, Psychology
Faculty Mentor: Prue Talbot, Cell Biology and Neuroscience
Project Title: Electronic Cigarette Chemicals and Their Effects on Neural Differentiation
Conference Presentation(s):
“Cross-Continental Comparison of Nicotine Labeling Accuracy in Electronic Cigarette Refill Fluids” - Poster Presentation, UCR Undergraduate Research Symposium, Riverside, CA, April 2015 Awards: Cornelius Hopper Fellowship, Kaiser Permanente First Year Fellowship, Psi Chi Honor Society
Membership: Medical Scholars Member, Director of Internal Affairs Mini Medical School
Graduation 2016
2014 - 2015 Chancellor’s Research Fellows

Mark Forde, Political Science/International Relations
Faculty Mentor: David Pion-Berlin
Project Title: Triggering Uprisings and Regime Change through Political Assassinations
Conference Presentation(s):
“Triggering uprisings and Regime Change through Political Assassinations” - Oral Presentation, UCR Undergraduate Research Symposium, Riverside, CA, April 2015
Awards: CHASS Dean’s Academic Distinction Award 2015
Graduation 2015: He will be attending graduate school in the fall.

Elma Frias, Neuroscience and Music (Double Major)
Faculty Mentor: Emma Wilson, Biomedical Sciences
Project Title: Investigating Morphological Changes of Astrocytes and Their Role in Glutamate Release during Toxoplasma gondii Infection
Conference Presentation(s):
“Investigating the role of aquaporin-4 in the influx of leukocytes during Toxo- plasma gondii infection” - Poster Presentation, ASN 46th Annual National Meet- ing, Atlanta, Georgia, March 2015
“Investigating Morphological Changes of Astrocytes and their Role in the Influx of Leukocytes during Toxoplasma gondii Infection” - Oral Presentation, UCR Undergraduate Research Symposium, Riverside, CA, April 2015
Memberships: UCR Jazz Ensemble, Lead Trombonist, UCR Gluck Summer Camp Fellow
Awards: Chancellor’s Award for Excellence in Undergraduate Research and Creative Achievement 2015, Public Anthropology Award for Excellence in Writing on Public Issues
Graduation 2015: Elma will work as a Jr. Specialist at UCR and apply to graduate school next year.
2014 - 2015 Chancellor’s Research Fellows

Stephanie Gamez, Biology
Faculty Mentor: Bradley White, Entomology
Project Title: The Genetic Basis of Body Color Variation in the African Malaria Mosquito
Conference Presentation(s):
“The Genetic Basis of Body Color Variation in the African Malaria Mosquito” - Oral Presentation, UCR Undergraduate Research Symposium, Riverside, CA, April 2015
Publication: Genome-wide patterns of polymorphism in an inbred line of the African malaria mosquito Anopheles gambiae, Co-Author, Genome Biology and Evolution, October 30, 2014
Membership: California Alliance for Minority Participation, UCR
Graduation 2015

Matthew Leitao, Psychology
Faculty Mentor: Megan Robbins, Psychology
Project Title: Coping: How Tone Affects Couples Ability to Support One Another
Conference Presentation(s):
“It’s Not What You Say But How You Say It: Vocal Tone and Emotion Among Women Coping with Breast Cancer” - Poster Presentation, UCR Undergraduate Research Symposium, Riverside, CA, April 2015
Awards: Best Poster at UCR Undergraduate Research Symposium, Riverside, CA, April 2015
Graduation 2015: Traveling (Backpacking through Europe {Spain, Portugal, France, Belgium, Netherlands, Sweden, Germany, Switzerland, and Italy}) He then intends to go to graduate school.

“The Chancellor’s Research Fellowship was an amazing opportunity and experience for me. I had my own share of ups and downs with this project, but the lessons I learned and connections I made are priceless.”

Martha Nunez Ornelas, Physics and Mathematics
Faculty Mentor: Bill Gary, Physics and Astronomy
Project Title: Search for Supersymmetry with the CMS Detector at the LHC
Conference Presentation(s):
“Search for Supersymmetry at the LHC in Direct Top Squark Production with many Jets and Large Missing Transverse Energy in the Final State” - Poster Presentation, UCR Undergraduate Research Symposium, Riverside, CA, April 2015 Membership:
California Alliance for Minority Participation, UCR
Graduation 2015: Admitted to Physics Ph.D. programs at UC Riverside and Florida State, also admitted to Physics Bridge to Ph.D. programs at Ohio State and Indiana University. Martha has decided to attend Ohio State.
2014 - 2015 Chancellor’s Research Fellows

Nicole Perez, Psychology
Faculty Mentor: Kate Sweeny, Psychology
Project Title: University Student Attitudes And Behaviors Towards Cognitive Enhancement Drugs
Conference Presentation(s):
"University Students Attitudes And Behaviors Towards Cognitive Enhancement Drugs" - Poster Presentation, Psychology Undergraduate Research Conference, UCLA, March 2015
“University Students Attitudes and Behaviors towards Cognitive Enhancement Drugs” - Oral Presentation, UCR Undergraduate Research Symposium, Riverside, CA, April 2015
"Students and Smart Drugs" - Oral Presentation, Western Regional Honors Conference, University of Nevada, Reno, April 2015
"University Students Attitudes And Behaviors Towards Cognitive Enhancement Drugs" - Poster Presentation, Western Psychological Association Conference, Las Vegas, Nevada, April 2015
Publications: University Student Attitudes and Behaviors Towards Cognitive Enhancement Drugs, UCR Undergraduate Research Journal 2015
Memberships: University Honors, Academic Resource Center Peer Advisor, Mental Health Chair for Flying Samaritans
Awards: University Honors Experiential Learning Scholarship, UCR Student Affairs Leadership Award, UCR Student Mini Grant
“As a CRF, I have gained the opportunity to understand the multidisciplinary research of my peers and have developed succinct public speaking skills, but most importantly, I have learned to take a chance! This experience has greatly enhanced my junior year and I can’t wait to continue to explore research as I move towards my graduate career.”
Graduation 2016
2014 - 2015 Chancellor’s Research Fellows

Geoffrey Pronovost, Biochemistry
Faculty Mentor: Monica Carson, Biomedical Sciences

Project Title: Correlation or Causation: the Roles of TREM 2 and P2Y 12 on Microglial Surveillance Following Traumatic Brain Injury

Conference Presentation(s):
“TREM2 deficiency decreases hemispheric swelling following traumatic brain injury”
- oral presentation, UCR Undergraduate Research Symposium, Riverside, CA, April 2015
“TREM2 deficiency decreases hemispheric swelling following traumatic brain injury without affecting astrogliosis or microgliosis” – poster presentation, American Society for Neurochemistry annual meeting, Atlanta, GA, March 2015
“TREM2 deficiency decreases hemispheric swelling following traumatic brain injury without affecting astrogliosis or microgliosis” – poster presentation, UC LEADS annual symposium, UC Merced, March 2015
“Hemispheric swelling and astrogliosis decrease in TREM2KO mice following traumatic brain injury, but microgliosis remains unchanged” – poster presentation, Center for Glial-Neuronal Interactions annual symposium, UC Riverside, January 2015
“Correlation or causation: the effects of TREM2 on microglial-neuronal interactions” – oral presentation, Division of Biomedical Sciences Department Seminar, UC Riverside, August 2014

Memberships: University Honors, UC LEADS, Undergraduate Research Journal Student Editorial Board Member

Awards: Barry Goldwater Scholarship (2015/2016), CNAS Academic Excellence Award 2015, Outstanding Poster Presentation, UC LEADS

Graduation 2016
“Being a CRF has been a wonderful experience that has allowed me to get more immersed in my research, and has aided in my growth as a scientist. The fellowship has also demonstrated the outstanding research taking place across multiple disciplines on campus, and has further instilled my strong sense of pride in being a Highlander.”
Boi Quach, Bioengineering  
**Faculty Mentor:** Kaustab Ghosh, Bioengineering  
**Project Title:** Role of Cell Tension in Matrix Stiffness-Dependent Endothelial Inflammation  
**Conference Presentation(s):**  
“Rho/ROCK Regulates Matrix Stiffening-dependent Endothelial Activation by Suppressing TRPV4” - Oral Presentation, UCR Undergraduate Research Symposium, Riverside, CA, April 2015  
**Membership:** Student Editorial Board for the UCR Undergraduate Research Journal  

**Graduation 2016**  
“The CRF has given me a great opportunity to meet and bond with great fellows. I also got a chance to work with faculty on a professional and personal level.”

Connor Richards, Physics  
**Faculty Mentor:** Owen Long, Physics  
**Project Title:** Search for Strong Production of Gluinos using Higgs-tagging in Jet-enriched Events  
**Conference Presentation(s):**  
“Search for All-Hadronic Gluino Decays at the LHC” - Oral Presentation, UCR Undergraduate Research Symposium, Riverside, CA, April 2015  
“Search for Gluino-Mediated Pair Production of Higgsinos in Proton-Proton Collisions at 13 TeV in the CMS Detector” - Oral Presentation, Southern California Conference for Undergraduate Research, November 2014  
**Publication:** “Search for Gluino-Mediated Pair Production of Higgsinos in pp Collisions at 13 TeV in the CMS Detector”, University of California, Riverside Undergraduate Research Journal, June 2015  
**Memberships:**  
Phi Beta Kappa (April 2015), University Honors, UC LEADS, President of CNAS Ambassadors  
**Awards:** Barry Goldwater Scholarship (2014/2015, 2015/2016), Donald A. Strauss Scholarship (April 2015), CNAS Academic Excellence Award, 2015, CNAS Dean’s Academic Distinction Award 2015, UC LEADS Fellowship (April 2015)  
**Graduation 2016**  
“The Chancellor’s Research Fellowship is an invaluable experience because it provides both the support to pursue an original research project and a talented cohort of fellows from a variety of disciplines, which helps to develop one’s understanding of and ability to communicate their research.”
Leah Rosario, Political Science/Law and Society
Faculty Mentor: Katja Guenther, Sociology
Project Title: A Study of the Transgender Movement on College Campuses
Conference Presentation(s):
“The Motivational Framework of Trans Activism” - Oral Presentation, UCR Undergraduate Research Symposium, Riverside, CA, April 2015
Awards: Golden Key Honor Society
Graduation 2015: Leah plans to attend Law School
“The CRF has granted me the wonderful opportunity to expand my research beyond its original scope.”

CONGRATULATIONS TO THE 2014-2015 CRF COHORT FOR THEIR ACCOMPLISHMENTS IN THE PAST YEAR!

THE UCR TEAM WISHES YOU THE BEST IN YOUR FUTURE ENDEAVORS.
Welcome 2015 - 2016 Chancellor’s Research Fellows

Alina Geangu, Plant Biology
Faculty Mentor: Jeffrey Diez, Botany and Plant Sciences
Project Title: Distribution, Size Structure, and Growth of Calocedrus decurrens in response to climate and elevation

Cody Gonzalez, Mechanical Engineering
Faculty Mentor: Sandeep Kumar, Mechanical Engineering
Project Title: In Situ Observation of The Electrochemical Lithiation of Silicon Thin Films
Presentation(s): In Situ Observation of the Electrochemical Lithiation of Polysilicon Thin Films, Poster presentation, UCR Undergraduate Research Symposium, Riverside, CA, April 2015

Cynthia Ibarra, Psychology
Faculty Mentor: Rebekah Richert, Psychology
Project Title: The Effects of Gaming Exposure on Metacognitive Experience

Sierra LaPoint, Art History/Religious Studies Faculty Mentor: Matthew King, Religious Studies
Project Title: The Dynamic Ontologies of the Kālacakra Sand Mandala
Awards: Academic Excellence Award 2015

Madeline Luth, Microbiology
Faculty Mentor: Sharon Walker, Chemical and Environmental Engineering
Project Title: Development of a High Throughput Screening Assay to Evaluate Attachment of Pathogens to Leafy Green Crops

Andrew Nakla, Biology
Faculty Mentor: Devin Binder, Biomedical Sciences
Project Title: Investigation of the levels of glutamate aspartate transporter in a mouse model of epilepsy

Akhila Nekkanti, Neuroscience
Faculty Mentor: Elizabeth Davis, Psychology
Project Title: A Prospective Longitudinal Investigation of the Effects of Mindfulness Meditation on Stress Responses and Perceived Coping Self-Efficacy in Youth
We Look Forward to a Productive New Year!

Anthony Nguyen, Biochemistry Faculty Mentor: David Reznick
Project Title: Analysis of Reproductive Mode (Placental and Nonplacental) on Genetic Variation Across Geographically Isolated Populations of P. prolifica and P. infa

Melanie Queponds, Theatre and English
Faculty Mentor: Tiffany Lopez
Project Title: Contemporary Latina Theatre for Young Audiences: Mariachi Girl Awards: Dean’s Academic Distinction Award 2015

Julianne Rolf, Environmental Engineering Faculty Mentor: David Jassby
Project Title: Conductive Reverse Osmosis- Polyamide Membranes for Silica-Containing Wastewater Treatment
Membership: Student Editor of the UCR Undergraduate Research Journal
Awards: Academic Excellence Award 2015, Dean’s Academic Distinction Award 2015

Jennifer Shedden, Biology
Faculty Mentor: Timothy Higham
Project Title: Escape Behavior and Flight Initiation Distance in the Granite Spiny Lizard, Sceloporus Orcutti
Awards: Dean’s Academic Distinction Award

Ryan Straka, Music
Faculty Mentor: Tim Labor
Project Title: Galaxies in Collision: A Collaboration between Astronomy and Music

Brandon Tran, Psychology
Faculty Mentor: Kate Sweeney
Project Title: Use of Medical Jargon by Doctors as a Predictor of Patient Outcomes Presentation:
Pronoun Usage by Doctors and Patients in Surgical Consultations, Oral presentation, UCR Undergraduate Research Symposium, Riverside, CA, April 2015
Undergraduate Education would like to thank all the people who contributed to making this celebration possible.

Chancellor Kim Wilcox and Diane Del Buono

**FACULTY MENTORS 2014-2015**
Dr. Monica Carson, Biomedical Sciences
Dr. Theodore Garland, Biology
Dr. Bill Gary, Physics and Astronomy
Dr. Kaustabh Ghosh, Bioengineering
Dr. Katja Guenther, Sociology
Dr. Owen Long, Physics and Astronomy
Dr. Eugene Nothnagel, Botany and Plant Sciences
Dr. David Pion-Berlin, Political Science
Dr. Megan Robbins, Psychology
Dr. Kate Sweeney, Psychology
Dr. Prue Talbot, Cell Biology and Neuroscience
Dr. Bradley White, Entomology
Dr. Emma Wilson, Biomedical Sciences

**CRF FACULTY REVIEW COMMITTEE**
Dr. Curt Burgess, Psychology
Dr. Walter Clark, Music
Dr. Andrea Denny-Brown, English
Dr. William Grover, Bioengineering
Dr. Cheryl Hayashi, Biology
Dr. David Lo, Biomedical Sciences
Dr. Matthew Mahutga, Sociology
Dr. Leonard Mueller, Chemistry
Dr. Eugene Nothnagel, Botany
Dr. Rebekah Richert, Psychology
Dr. Thomas Stahovich, Mechanical Engineering