Postdoctoral Fellowship Program

*For a list of **current & past postdoctoral fellows** please see bottom of page*

Leveraging the Influence of California's Premier Institutions to Diversify the Mathematical, Physical Sciences and Engineering

Welcome to the California Alliance Postdoctoral Fellowship Program! This site provides applicants and potential faculty advisors information about the California Alliance's postdoctoral fellowships, the application process, ways to and tenure.

About the Program

The California Alliance offers postdoctoral research fellowship opportunities at four top-tier California institutions: UC Berkeley, UCLA, Stanford, and Caltech in the **Mathematical, Physical Sciences and Engineering** fields. The program also includes faculty mentoring, professional development, and academic networking opportunities.

The California Alliance is an unprecedented partnership between the state's top tier institutions to increase the number of under-represented minority mathematicians, scientists and engineers who obtain doctoral degrees, go on to pursue research at the postdoctoral level, and join the ranks of the faculty and scientific staff at competitive institutions. The California Alliance universities are large-scale producers of STEM graduate students and provides as well as top producers of under-represented scientists.

We invite applicants from across the nation to submit **ONE** application for consideration for a postdoctoral appointment at any of the **FOUR** institutions. It is also possible that applicants will be considered at our partnering national laboratories. Please review the following information regarding the application and award process, and eligibility.

Applications can be submitted online.

Applications for 2020/2021 will ONLY be accepted for Caltech. Deadline for application is February 1st, 2020. Please check back for more information.

Two letters of reference are required, one recommendation from the applicant's Ph.D. advisor, and one letter of support from the applicant's proposed postdoc advisor. Letters should be sent in PDF format to : california-alliance@berkeley.edu

Please note: The California Alliance currently accepts applications from US Citizens and Permanent Residents. Our partner, PPFP, considers applications from U.S. Citizens, Permanent Residents, and other scholars who are legally authorized to work in the United States. These two programs have different eligibility criteria. Please see https://ppfp.ucop.edu/info/.

Evaluation and Selection

Candidates are evaluated by faculty reviewers in their own academic fields across the Alliance. Faculty reviewers will evaluate candidates according to their academic accomplishments, the strength of their research proposal, and their potential for faculty and other competitive science careers. Faculty reviewers also may consider the applicants' proposed mentor's potential to work productively with the candidate and commitment to equity and diversity in higher education.

Eligibility

Applicants must be U.S. citizens or Permanent Residents and belong to an under-represented minority group (African American, Chicano/Latino, Native American, Alaskan Native and Pacific Islander). Proposed research must fall within the **Mathematical, Physical Sciences and Engineering** fields.

Faculty Mentors

Postdoctoral Fellowship mentors are faculty who are expected to: (1) take an active role in helping the fellow plan and achieve his or her research goals, (2) assist the fellow in establishing a visible presence in department, (3) facilitate opportunities for the fellow to participate in national and international research meetings, (4) encourage the fellow to focus all time on research, (5) assist the fellow in seeking opportunities to present papers or to interview for faculty positions at doctoral research intensive institutions, and (6) encourage attendance at the annual California Alliance retreat.

The program encourages mentors to meet with their postdoctoral fellows at the beginning of the fellowship to discuss their working arrangements and consider potential research projects. Although the Faculty Mentor is the primary point of contact for the fellow's research and professional development opportunity, he/she should provide an overall framework to ensure that the fellow has access to a broad academic network to support his or her work. Mentors may also play an important role in advising fellows about the academic job market and making connections to related departments at other doctoral research extensive institutions that may be interested in the fellow for a faculty appointment.

The California Alliance community includes a vibrant cross-institutional group of faculty and administrators who are committed to honoring the goals of the Alliance. We encourage applicants to seek out a mentor who is a good match for both research and career development. Please contact one of the following campus representatives if you would like guidance on the process of identifying potential mentors: http://www.calliberkeley.edu/contact

Host Departments

Host departments are encouraged to welcome the fellow into the department and make every effort to ensure that the fellow is included in communications about departmental colloquia, seminars and social events. Host departments are expected to provide the fellow with information about salary and benefits. Additionally, host departments are expected to provide the Fellow with access to appropriate office space and not be administrative support such as department mail services, library access and technical support.

Awards and Appointments

The California Alliance Fellowship Program may award up to 8 postdoctoral fellowships. The award provides postdoctoral fellows a salary of $50,000-$75,000 per year, depending on the field and level of experience, with additional funds for research and professional development. Fellows will also receive enrollment in medical, dental and basic life insurance coverage while employed as a California Alliance Postdoctoral Fellow. Each award is for a 2-year period.

Expectations

California Alliance Postdoctoral Fellows are expected to: (1) establish residence and participate in academic life at the campus of their postdoctoral appointment, (2) focus full-time on their research and professional development for faculty or scientific research careers, (3) meet regularly with their faculty mentor, and (4) attend California Alliance professional development programs.

For questions regarding this program or the application process, please contact us at: calliberkeley@berkeley.edu

Current California Alliance Postdoctoral Fellows

University of California, Berkeley:

KOCHISE BENNETT

B.S. University of California, Los Angeles: Physics - 2089
M.S. University of California, Irvine: Physics - 2016
Ph.D. University of California, Irvine: Physics - 2016

AMAL EL-GHAZALY

B.S. Carnegie Mellon University: Electrical & Computer Engineering - 2011
M.S. Carnegie Mellon University: Electrical & Computer Engineering - 2011
Ph.D. Stanford University: Electrical Engineering - 2018
Division: Electrical Engineering & Computer Science
Principal Investigator: Jeffrey Bokor
Hometown: Knoxville, TN
Current Research Project: Ultrafast All-Electrical Switching of Integrated Magnetic Nanoscale Memory Bits
Interests & Hobbies: Running, cycling, cooking, reading, playing music

SEAN NATOLI

B.S. Southern Utah University: Chemistry - 2012
Ph.D. Purdue University: Chemistry - 2017
Division: Chemistry
Principal Investigator: Professor John F. Hartwig
Hometown: Kingman, AZ
Current Research Project: Artificial Metalloenzymes
Interests & Hobbies: Hiking, Reading, Traveling, and Gardening.

ERIK ROMERO

B.S. UC Riverside: Chemistry - 2014
Ph.D. UC San Diego: Chemistry - 2018
Division: Chemistry
Principal Investigator: Professor John F. Hartwig
Hometown: Hesperia, CA
Current Research Project: Developing C-H Functionalization Methodologies.
Interests & Hobbies: Cooking, Eating, Meeting new people, traveling, golf

Caltech:
Please see Caltech's current California Alliance Postdocs here

Stanford University:

CHIBUEZE AMANCHUKWU

B.S. Texas A&M University: Chemical Engineering - 2012
M.S. Massachusetts Institute of Technology: Chemical Engineering - 2017
Division: Chemical Engineering
Principal Investigator: Zhenan Bao
Hometown: Houston, TX
Current Research Project: Developing new electrolytes for Silicon metal and silicon anode based batteries.
Interests & Hobbies: Playing basketball and soccer, Watching sports, Reading, Writing short stories.

GRACE BULLVAG

B.S. Stanford University: Civil & Environmental Engineering - 2005
M.S. Montana Tech of the University of Montana: Project Engineering Management - 2010
M.S. Columbia University: Earth Resources Engineering - 2012
Ph.D. Cornell University: Biological & Environmental Engineering - 2017
Division: Earth Systems Science
Principal Investigator: Rob Jackson
Hometown: Seattle
Current Research Project: Water quality impacts from natural resource extraction in the arid West.
Interests & Hobbies: AGEP, mentoring, attending powwows, beading, sewing, drawing, running, hiking, & spending time with family

HECTOR LOPEZ HERNANDEZ

B.S. University of California, Riverside: Mechanical Engineering - 2012
Ph.D. University of Illinois at Urbana-Champaign: Mechanical Engineering - 2017
Website

PABLO SOLIS

B.S. Massachusetts Institute of Technology: Mathematics - 2008
B.S. Massachusetts Institute of Technology: Physics - 2008
Ph.D. University of California, Berkeley: Mathematics - 2014
Division: Mathematics
Principal Investigator: Raul Vakil
Hometown: Los Angeles
Current Research Project: Non-abelian Hodge theory for singular filtered-vector bundles.
Interests & Hobbies: Climbing, salsa, yoga, eating, skateboarding, hiking, photography, traveling.

University of California, Los Angeles:

CHIAMAKA KALA NWEKE

B.S. University of California, Davis: Civil & Environmental Engineering - 2012
M.S. University of California, Berkeley: Civil & Environmental Geotechnical Engineering - 2015
Ph.D. University of California, Berkeley: Civil & Environmental Geotechnical Engineering - 2017
Division: Civil & Environmental Engineering
Principal Investigator: Dr. Scott Brandenberg
Hometown: Lagos, Nigeria/Los Angeles, CA
Current Research Project: Assessing the effects of deep sediment basins on ground motions.
Interests & Hobbies: Woodworking, Basketball, Soccer (Football), American Football, Creating Music, Playing Instruments (Guitar, Piano, Flute), Investing (Stocks, Real Estate), Writing (Poetry, Books)

CLAUDIA PRAZON

B.S. University of North Carolina at Chapel Hill: Mathematics - 2009
Ph.D. University of North Carolina at Chapel Hill: Applied Mathematics - 2016
Division: Applied Mathematics
Principal Investigator: Dr. Andrea Bertozzi
Hometown: Los Angeles
Current Research Project: Theoretical and experimental study on shear-induced migration and particle settling of bidisperse particle fibers flows down an incline.
Interests & Hobbies: Politics, traveling, photographs, beach volleyball.

JUAN LORA

B.S. University of Southern California: Astronomy - 2089
Ph.D. University of Arizona: Planetary Science - 2016
Division: Physical Sciences
Principal Investigators: Jonathan Lunine and Jonathan Mitchell
Hometown: Bogota, Colombia/E. Bethlehem, MD
Current Research Project: Climate modeling of Earth's past and planetary atmospheres.
Interests & Hobbies: Music, visual arts, reading, wave

DANIEL PINEDA

B.S. The University of Texas at Austin: Mechanical Engineering - 2012
M.S. University of California, Berkeley: Mechanical Engineering - 2014
Ph.D. University of California, Berkeley: Mechanical Engineering - 2017
Division: Mechanical and Aerospace Engineering
Principal Investigators: R. Mitchell Spearrin
Hometown: San Antonio, TX
Current Research Project: Chemical kinetic investigation of the combustion of fuel blends using laser absorption spectroscopy.
Interests & Hobbies: Cycling, hiking, live music, painting.

Past California Alliance Postdoctoral Fellows

University of California, Berkeley:

ROSANO MANITZA

B.S. Yale University: Physics & Philosophy, Economics & Mathematics - 2010
M.S. Stanford University: Physics - 2012
M.A. Harvard University: Education Policy & Management - 2014
Ph.D Stanford University: Physics - 2016
Division/Lab/ Fellowship: Astronomy
Principal Investigator: Kim Cauthen
Hometown: Brooklyn, NY
Current Research Project and/or Job Title: Postdoctoral Fellow at Harvard-Smithsonian Center for Astrophysics - Institute for Theory and Computation/ Physicist at Black Hole Initiative
California Alliance Postdoctoral Fellow Active Years: 2016/2017, 2017/2018
Interests & Hobbies: Cars, Travel, Popular Science, Networking

YEHONASAV BIRENZVIEG

B.A. Hebrew University of Jerusalem, Israel: Physics & Chemistry - 2007
M.A. Hebrew University: Physics - 2009
Ph.D Hebrew University: Physics & Chemistry
Division: Chemistry
Principal Investigator: Paul Alivisatos
Hometown: Binyamina, Israel
Current Research Project and/or Job Title: Assistant Professor Technion - Israel Institute of Technology
Website
California Alliance Postdoctoral Fellow Active Years: 2016/2017, 2017/2018

MARCELLA GOMEZ

B.S. UC Berkeley: Mechanical Engineering - 2008
Ph.D Caltech: Mechanical Engineering - 2015
Division/Lab/ Fellowship: Engineering
Principal Investigator: Murat Arcak
Hometown: Riverside, CA
Current Research Project and/or Job Title: Assistant Professor Applied Mathematics Baskin School of Engineering UC Santa Cruz
California Alliance Postdoctoral Fellow Active Years: 2015/2016, 2016/2017

JONATHAN MAITZ

Ph.D Stanford University: Theoretical Physics - 2015
Current Research Project: High energy physics with an emphasis on Dirac gaugino theory and early universe cosmology.
Website

Caltech:
Please see Caltech's past California Alliance Postdocs here

Stanford University:

NAZIRA IBARRA

B.S. UC Berkeley: Mechanical Engineering - 2008
Ph.D University of Southern California: Earth & Planetary Science
Division/Lab/ Fellowship: Engineering
Principal Investigator:
Hometown:
Current Research Project and/or Job Title: Assistant Professor, Geology, San Francisco State University
California Alliance Postdoctoral Fellow Active Years: 2015/2016, 2016/2017

CRYSTAL VALDEZ

B.S. UC Berkeley: Mechanical Engineering - 2008
B.S. California Polytechnic State University - Biochemistry - 2009
M.S. University of California Los Angeles: Earth & Planetary Science - 2015
Division/Lab/ Fellowship: Chemistry
Principal Investigator:
Hometown:
Current Research Project and/or Job Title: Pfizer: Bioinformatics Scientist
California Alliance Postdoctoral Fellow Active Years: 2015/2016, 2016/2017

University of California, Los Angeles:

MANISTA PHILLIPS

B.S. Florida Agricultural and Mechanical University: Mechanical Engineering - 2007
M.S. Florida Agricultural and Mechanical University: Mechanical Engineering - 2011
Ph.D Florida Agricultural State University: Mechanical Engineering - 2014
Division/Lab/ Fellowship: Mechanical Engineering
Principal Investigator:
Hometown:
Current Research Project and/or Job Title: Cantera Corp: AGEP, NSF SBIR Postdoctoral Fellow
California Alliance Postdoctoral Fellow Active Years: 2015/2016, 2016/2017

CONTACT US:
California Institute of Technology
Michelle Hernandez
michelle@caltech.edu
Massachusetts Institute of Technology
Nikki Spalthoff
nikki@mit.edu
Harvard University
Jessica Hernandez-Sunshine
jessica_hernandez@harvard.edu
Stanford University
Sean Mesa
seanmesa@stanford.edu
University of California, Berkeley
Tessa Williams
tessa@berkeley.edu

University of California, Los Angeles
Lilia Jordan
ljordan@ucla.edu
University of Michigan
William Lewis
williamlewis@umich.edu
University of Texas at Austin
Ana Maria Gonzalez-Espinosa
University of Washington
William Quayle
wquay@uw.edu

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