CURRICULUM VITAE Mahtab Jafari, Pharm.D. Professor of Pharmaceutical Sciences University of California, Irvine

DEMOGRAPHIC INFORMATION

Name Mahtab Jafari

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Laboratory Website: http://faculty.sites.uci.edu/jafarilab/

EDUCATION AND TRAINING

Education

1994 Pharm.D. University of California, San Francisco 1994-95 Pharmacy Residency University of California, San Francisco

Licensure and Certification

1994-present California Pharmacist License #RPH47589

1994-present Nevada Pharmacist License #12390

2018 Certificate in Leadership for Healthcare Transformation

UCI Paul Merage School of Business, Irvine, CA

2021 Master Certified Health Coach

Dr. Sears Wellness Institute, Englewood, CO

2021 Advanced Wellness and Health Coach Training and Techniques Certificate

Dr. Sears Wellness Institute, Englewood, CO

PROFESSIONAL APPOINTMENTS

Academic Appointments

<u>Year</u>	Academic Title	Institution			
1995-1996	Assistant Clinical Professor	UCSF School of Pharmacy			
•	Adjunct Faculty (WOS)	UCSF School of Pharmacy			
1996-2000	Assistant Clinical Professor	Western University of Health Sciences			
	(Founding faculty member)	School of Pharmacy, Pomona CA			
2000	Associate Professor	Western University of Health Sciences			
1997-2000	Assistant Clinical Professor	UCI School of Medicine			
2000-2005	Associate Clinical Professor	UCI School of Medicine			
2005-2010	Assistant Professor	Dept. of Pharmaceutical Sciences, UCI			
2005-2007	Associate Director	Program in Pharmaceutical Sciences, UCI			
	(Developed and implemented	d the B.S. in Pharmaceutical Sciences)			
2008-2019	Joint Appointment	Dept. of Pharmacology, UCI			
	(Pharmacology merged with	Pharmaceutical Sciences in 2019)			
2008-present	Joint Appointment	Dept. of Ecology & Evolutionary Biology, UCI			
2007-2013	Director	Pharmaceutical Sciences Undergraduate			
		Program, UCI			
2010-2016	Associate Professor	Dept. of Pharmaceutical Sciences, UCI			
2015-2019	Vice Chair	Dept. of Pharmaceutical Sciences, UCI			
	Pharmacy School Planning	·			
2016-present	Professor	Dept. of Pharmaceutical Sciences, UCI			
2018-present		The UCI Center for Healthspan Sciences			
•		•			

Hospital and Institutional Appointments

<u>Year</u>	<u>Title</u>	Hospital or Affiliated Institution
1995-1997	Clinical Pharmacist Coronary Care Unit	UCSF Medical Center
1997-2001	Clinical Pharmacist	UCI Medical Center
1998-2002	Coronary Care Unit Director, Cholesterol Clinic	UCI Medical Center
2000	Co-Director, Cardiovascular	
2015-2019	Risk Reduction Program Ex officio member	Chief Executive Roundtable, UCI Foundation

Other Professional Positions

<u>Year</u>	<u>Title</u>	<u>Institution</u>
2001	Research Scientist	Abbott Laboratories, Neuroscience Group Abbott Park, IL
2002-2004	Senior Research Scientist	Abbott Laboratories, Neuroscience Group
2003-2005	Regional Scientific Manager	Abbott Laboratories, Metabolic Group

AWARDS AND HONORS

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PROFESSIONAL ACTIVITIES

University of California, San Francisco, CA

1992-1994	Member, School of Pharmacy Admission Committee
1994-1995	Vice President, Phi Lambda Sigma (Pharmacy Leadership Society)
	School of Pharmacy
Fall 1994	Social Chair, Residency Class, School of Pharmacy
Spring 1995	Treasurer, Residency Class, School of Pharmacy
1995	Faculty Advisor, Hypertension Screening Project
1996	Faculty Coordinator, Pharmaceutical Care Project
1996	Founder, Physical Assessment for Pharmacists Course
2011-present	Member, UCSF School of Pharmacy Alumni Board
2019-2020	President-elect, UCSF School of Pharmacy Alumni Association
2021-present	President, UCSF School of Pharmacy Alumni Association

Western University of Health Sciences, Pomona, CA

1996	Founding Faculty Member, College of Pharmacy
1997	Member, College of Pharmacy American Council on Pharmacy Education
	Task Force
1996-1997	Member, Promotion and Tenure Committee, College of Pharmacy
1996-1998	Member, Curriculum Committee, College of Pharmacy
1996-2004	Member, Humanism and Diversity Committee
1997-1998	Member, Planning, Priorities and Resources Committee
1997-1998	Co-chair, Humanism in Health Sciences Committee
1998	Faculty Advisor, American Heart Association Hypertension Screening
1998-2000	Speaker, White Coat Ceremony
1998-2000	Editor in Chief, Humanism journal, Western University of Health Sciences

1998-2000	Member, Awards and Scholarship Committee
1998-2001	Chair, Humanism in Health Sciences Committee
1999-2000	Member, Student Liaison Committee
1999-2000	Member, Faculty Senate
2000-2001	Faculty Editor, Humanism in the Health Sciences Journal
2000-2001	Managing Editor, Humanism in the Health Sciences Journal
2000	Co-coordinator, Blood Pressure and Cholesterol Screening on Campus
2000	Member, Research and Graduate Committee
2001-2001	Member, Search Committee for Pharmacy Practice Department Chair

University of California, Irvine, CA (1997-present)

1997 1999-2001 1998-present	Member, Congestive Heart Failure Improvement Team Member, Institutional Review Board (IRB) Faculty Advisor, Dialogue Society at UCI
2002 2003-2007 2004	Member, Biomedical Ethics Society of Students Advisory Board Member, Center for Scientific Study of Morality and Ethics Member, Organizing Committee, Stem Cell: Science, Ethics and Politics in Dialogue Conference
2005	Faculty Organizer, Panel Discussion, Understanding the Promises and Problems of Stem Cells
2005	Member, Organizing Committee, A Symposium on "Safety and Security in a Turbulent World"
2006	Member, Search Committee, Joint Appointment: Pharmaceutical Sciences and Chemical Engineering
2006	Member, Organizing Committee, Stem Cells and Society: A Series of Dialogues
2006	Member, Committee on Advancement to Candidacy Proposal, "Harnessing Self-Made Phage Libraries" by Cathie Overstreet, Department of Molecular Biology & Biochemistry
2007-present	Executive Board Member, Center for Scientific Study of Morality and Ethics
2007-2010	Ambassador, UCI Dr. Samuel M. Jordan Center Persian Studies and Culture
2008-2009	Advisor, Academic Geriatric Resource Center, Campus Advisory Committee
2007-2018	Standing Dean, Commencement, Department of Pharmaceutical Sciences
2009	Member, Graduate Student Committee of Galina Dvorkina, Department of Ecology and Evolutionary Biology
2009	Faculty Organizer, Panel Discussion, The Science Behind Happiness Co-sponsors: The UCI Center for Scientific Study of Ethics and Morality & The UCI Susan Samueli Center for Integrative Medicine
2009	Faculty Organizer, Panel Discussion, Spirituality and the Brain Co-sponsors: The UCI Center for Scientific Study of Ethics and Morality & The UCI Susan Samueli Center for Integrative Medicine
2011& 2012	Faculty Organizer, Music for the Mind Fundraiser for the Susan Samueli Center for Integrative Medicine Autism
2010-2016 2010-2015 2011-2016	Initiatives Member, UCI Senate Assessment Committee Project Leader, Pharmaceutical Sciences Assessment Program Member, Dean's Leadership Council, UCI Claire Trevor School of the Arts

2014-2015	Member, Search Committee for the Dean of School of Medicine and the					
	Vice Chancellor for the Health Affairs. UCI					
2016	Member, Search Committee for the Dean of UCI Gross School of Nursing					
•	Member, The UCI School of Pharmacy Planning Committee, UCI					
2004-2018	Advisory Board Member, UCI Susan Samueli Center for Integrative Medicine					
2006-present	Member, Organizing Committee of Susan Samueli Center for Integrative Medicine Women Wellness Day Conference					
2010-2015	Member, Undergraduate Deans Council					
2010-present	Member, UCSF School of Pharmacy Alumni Board					
2012-2013	Acting Co-Director, The UCI Center for the Scientific Study of Ethics and Morality					
2010-2013	Member, UCI Senate Assessment Committee					
2011-2015	Member, UCI Assessment Group					
2010-2011	Chair, Merit Review Committee. Department of Pharmaceutical Sciences					
2010-2011	Member, Tenure Committee. Department of Pharmaceutical Sciences					
2011-2015	Member, Assessment Group					
2012-13	Member, Merit Review committee, Department of Pharmaceutical Sciences					
2013-14	Member, Chair 5 th year Review Committee, Department of Pharmaceutical					
	Sciences					
2013-2014	Member, Lecturer PSOE Search Committee. Department of					
0044 0045	Pharmaceutical Sciences					
2014-2015	Member, VC for Health Affairs and Dean of School of Medicine Search					
2015 2010	Committee Marshar, Pharmany School Organizing Committee					
2015-2019	Member, Pharmacy School Organizing Committee					
2016-2017	Member, Clinical Strategic Plan Development Committee					
2016	Member, Dean of Sue and Bill Gross School of Nursing Search Committee					
2016-2017	Member, Interprofessional Education Committee, College of Health					
2010-2017	Sciences					
2016-2018	UCI-Representative, UC-Wide Drug, Device, Discovery and Development					
2010-2010	(D4)					
2017	Member, UC-Wide Inaugural Drug Discovery Symposium, UCLA. Los					
0047	Angeles, CA					
2017	Member, UCI COHS Quality & Safety Curricular Development					
•	Executive Committee Member, The UCI Anti-Cancer Challenge					
2019	Member, Susan and Henry Samueli College of Health Sciences Building Planning					
2019	Member, UCI Task Force on Alcohol, Drugs and Behaviors					
2019	Member, Space and Building Planning Committee, College of Health					
2010	Sciences					
2019	Chair, Merit Review committee, Department of Pharmaceutical Sciences					
2019-2020	Member, The UCI Chief Wellness Officer Search Committee					
2019-2021	Member, The UCI Committee on Privilege and Tenure					
	Member, The UCI Institute for Future Health					
	Member, Diversity, Equity, and Inclusion Committee, School of Pharmacy					
į	and Pharmaceutical Sciences					
2019-present	Faculty Advisor and Founder, Girls in STEM, University of California, Irvine					
2020-2021	Member, Undergraduate Research Opportunity Program (UROP) Faculty					
	Advisory Board					

2020-present Faculty Advisor, The UCI COVID-19 Student Relief Initiative 2021-present Equity Advisor, School of Pharmacy and Pharmaceutical Sciences. UCI Office of Inclusive Excellence

PROFESSIONAL ORGANIZATIONS

<u>Year</u> <u>Society</u>	
1996-2003 Member, Practice Research Network Cardiology, American College of Clinical Pharmacy (ACCP)	
1997-2003 Member, Practice Research Network Ambulatory Care, American College of Clinical Pharmacy (ACCP)	
1997-1998 Member, Research Affairs Committee, American College of Clinical Pharmacy (ACCP)	
1998-2000 Member, Practice Research Network Women Health, American College of Clinical Pharmacy (ACCP)	
1998-2000 Referee, American Journal of Pharmacy Education	
1999 Member, Continuing Education Committee, California Society of Health Sys Pharmacists Focus 1999	tem
2001 Alternate Delegate, California Society of Health System Pharmacists	
2007-2018 American Aging Association	
2008-2012 Longevity Consortium, National Institute of Aging, NIH	
2014-2019 The Association of Analytical Communities International (AOAC)	

COMMUNITY ORGANIZATIONS

<u>Year</u>	Service
1987-1988	Volunteer Tutor for Physically Challenged Students, Mesa College, San Diego, CA.
1988-1990	Volunteer Peer Adviser, Extended Opportunities, Programs and Services, Cypress, CA.
1989-1990	Volunteer Outdoor Program Coordinator, UNICEF, Atlanta, GA
1996-2001	Member, Claremont Community Friends, Claremont University, Claremont, CA.
1996-1998	Young Adult Class Teacher, Woodland Hills, California; Los Angeles, CA.
2000	Project Coordinator, Heart Disease Risk Factor Assessment, Pomona,
	CA.
2002	Member, Organizing Committee, United Nation's Fundraiser Programs
2003	Member, Conference Organizing Committee, Global Impact of Ethics in
	Science and Media Symposium, University of California, Los Angeles
2003-2004	Speaker, UNICEF (United Nation's Children Fund), Los Angeles, CA.
2004	Member, Conference Organizing Committee, Music: A Universal
	Language for Harmony, University of California, Los Angeles
2008-2009	Member, Board of Directors, Children Hope International Literacy and
	Development, Orange County, CA
2012&2013	Member, Organizing Committee, Iranian American Women Leadership Conference
2012	Member, TEDxYouth Bommer Canyon Organizing Committee
2011-2018	Member, FDA/AOAC/USP Biannual Conference Organizing Committee
	,

2016-2017	Speaker, The Academy High School. Santa Ana, CA							
2018-2019	Member, WISEPlace Women Shelter Campaign, Santa Ana, CA							
2019-2021	Mentor, Girls Inc. Orange County Chapter							
2020-present	Scientific	Advisory	Board	Member,	Dr.	Sears	Wellness	Institute,
-	Englewood, CO							

PEER REVIEW ACTIVITIES

Manuscripts Reviewer

2007-present	Reviewer, Central European Science Journal
2007-2009	Reviewer, Biogerontology
2008-present	Reviewer, Evidence-based Complementary and Alternative Medicine
2009-2016	Editorial Board Member, Biogerontology
2010	Reviewer, Aging Cell
2011	Reviewer, PlosONE
2015-present	Reviewer, Rejuvenation Research
2021	Guest Co-Editor, Special Issue in Frontiers in Nutrition. Plant Foods and
	Dietary Supplements: Building Solid Foundations for Clinical Trials
2021-present	Guest Co-Editor, Frontiers in Nutrition, Special Issue in Plant Foods and
	Dietary Supplements

Grant Applications Reviewer

2011-present	Ellison Medical Foundation
2011-present	American Federation for Aging Research
2017-2018	National Institute of Health, National Institute of Aging (Ad-hoc reviewer)
2011-present	National Institute of Health, Center for Complementary and Integrative
	Health Study Section
2019	Reviewer, City of Paris Bureau de l'Innovation

REPORT OF RESEARCH

I have experience in basic, translational and clinical research in both academic and pharmaceutical industry settings. Until 2005, the focus of my research was on designing and implementing clinical trials on cardiovascular, metabolic, and psychiatric drugs. I also developed an educational research program on evaluating the impact of teaching spirituality and belief systems to healthcare students on patients' clinical outcomes. In 2005, I shifted the focus of my research to aging, lifespan and healthspan using human cultured cells and fruit flies as my main model systems. The main focus of my current research program is on slowing the aging process through a science that I introduced as "Healthspan Pharmacology" in 2015.

The Jafari Laboratory developed and validated an algorithm to screen, identify, and evaluate potential anti-aging compounds (natural products and botanical extracts) using *Drosophila melanogaster* as the main model system. Since 2005, we have identified five natural products that have extended the lifespan and improved the healthspan of flies (*Rhodiola rosea*, *Rosa damascena*, curcumin, cinnamon, and *Angelica keiskei*). Using various model systems such as cultured cells, *Drosophila* and mice, we have been evaluating the anti-aging mechanism of these products and we recently tested *Rhodiola rosea* in a leptin deficient mouse model. Our goal is to eventually evaluate our test compounds on biomarkers of health in humans. We also evaluate

the impact of botanical extracts on the microbiome of flies and mice in an effort to understand the link between microbiome and health.

We recently started a new field of work in collaboration with colleagues in the Department of Ecology and Evolutionary Biology to develop a platform for natural products and drug analytics. Using Drosophila as our main model system, we are currently in the process of evaluating the feasibility of combining multi-OMIC, AI and functional assays for expedited drug discovery and repurposing. In February 2021, we submitted an R21 grant titled "Machine Learning to Identify Causal Effects of Drugs" that was not funded. We are planning to collect preliminary data and resubmit this grant as an RO1 in 2022.

I am also involved in an educational research project based on the Life101 course that I developed in 2013. Life101 teaches students healthy lifestyle choices with the goal of helping students manage their stress. We have been collecting longitudinal data on the short term and long-term impacts of this course on our students' well-being. In 2019, I received an Innovative Learning Technology Initiative (ILTI) grant from the UC Office of President to enhance the online Life101 curse and transform it into a MOOC course that is now offered on www.coursera.org platform. In August 2020, I submitted a grant proposal to the John Templeton Foundation under the Genetics category, titled "A Pilot Study to Investigate the Relationship Between Gratitude Practice, Telomere Length and Genetics, and Emotional Well-Being of College Students". The Life101 course was supposed to be used as a platform to conduct the work presented in this grant application. The grant was not funded, and it will be resubmitted in 2022.

Research Areas

Healthspan Pharmacology

- Identification of anti-aging botanical extracts and their putative active compounds that increase lifespan and improve healthspan
- Evaluation of the mechanism of action of botanical extracts on potential pathways of aging (nutrient signaling pathways such as sirtuin and insulin signaling, mitochondrial bioenergetics, autophagy, microbiome)
- Evaluation of the impact of natural products Drosophila models of human diseases such as aging, Huntington Disease, Alzheimer's Disease and depression.
- Evaluation of the impact of botanical extracts on the microbiome of Drosophila and mice.

OMIC-AI-Functional Assays Natural Products and Drug Analytics

- Development of a multi-OMICs platform to identify the mechanisms of drug action, and thus potential side-effects or alternative uses.
- Optimization of functional assays to evaluate the impact of natural products and pharmaceuticals on the lifespan and healthspan of *Drosophila*.
- Optimization of a machine-learning tool called "FLAM" (for Fused Lasso Additive Models) that has shown success in parsing genome-wide differentiation to identify the causal links between omic differentiation and functional characters

Dietary Supplements Safety

 Evaluation of the adverse effects of dietary supplements using animal models (fruit flies and mice).

Educational Research

 Development and evaluation of courses with a focus on the impact of spirituality and belief systems on patient care through grants from National Institute of Healthcare Research and the John Templeton Foundation

- Evaluation of the impact of Life101 course on students' stress and well-being.
- Evaluation of teaching online self-care courses on the students' well-being.

Community Based Research

- Evaluation of point-of-care diagnostics in the management of dyslipidemia
- Evaluation and optimization of Rhodiola rosea harvests from farming in Alaska

Research Funding Information

HL-31210 (NIH), Grant in Aid from the American Heart Association, Hyseq, Inc. 1998-2002 Pharmacogenomics of Cardiovascular Therapies

The major goal of this project was to evaluate the impact of pharmacogenomics variables on response to lipid lowering medications.

Role: Co-Investigator, University of California, Irvine (PI: John Kane, MD, PhD, UCSF)

National Institute of Healthcare Research/John Templeton Foundation 1998-2000

Educational Grants in Spirituality and Medicine

The major goal of this project was to develop a course and an educational research program in Schools of Medicine and Pharmacy on the importance of the knowledge of various belief systems in patient care.

Role: Principal Investigator, Western University of Health Sciences, Pomona, Ca

National Institute of Healthcare Research/John Templeton Foundation 2000-2002

Educational Grants in Spirituality and Medicine

The major goal of this project was to develop a course and an educational research program in School of Medicine on the importance of the knowledge of various belief systems in patient care. Role: Co-Principal Investigator, University of California, Irvine

R01 GM085251-01 (NIH)

2009-2013

Drosophila as a Model for Chemotherapy Pharmacogenomics

The major goal of this project was to use *Drosophila* as a model system for pharmacogenomic studies.

Role: Co-investigator, University of California, Irvine (PI: Anthony Long)

AG-NS-0495-08 Ellison Medical Foundation

2008-2012

The Role of Mitochondrial Superoxide in Aging

The purpose of this work was to determine the role of mitochondrial superoxide in aging and disease.

Role: Supervisor, University of California, Irvine (PI: Samuel E. Shriner)

R21AT004987-01A2 (NIH)

2010-2014

Botanicals, Mitochondrial Bioenergetics, and Aging Pathways

The major goal of this project was to evaluate the mechanism of action(s) of four botanical extracts on common aging pathways using *Drosophila* as the model system.

Role: Principal Investigator, University of California, Irvine

R21CA152804-01A1 (NIH)

2011-2013

Rhodiola rosea Extracts, Salidroside and Bladder Cancer Chemoprevention

The major goal of this project was to evaluate the impact of Rhodiola rosea and one of its putative active compounds, salidroside, in a human cultured cell bladder cancer model. Role: Co-investigator, University of California, Irvine (PI: Xiaolin Zi)

UCI Bridge Funds 2012-2013

The purpose of these funds was to develop a cell culture facility to complement my work with fruit flies.

Role: Principal Investigator, University of California, Irvine

Alaska Rhodiola rosea Products Cooperative Farmers

2016-2018

Improving the Quality of *Rhodiola rosea* in Alaskan Farms

The purpose of this project was to evaluate the quality of Rhodiola rosea harvest from various farmers in Alaska through characterization of the root extracts using analytical HPLC and in vivo assays.

Role: Principal Investigator, University of California, Irvine

UCI/Ewha Women University in Seoul, Korea Collaborative Grant 2015-2016 & 2016-2017 Korean Botanicals, Lifespan and Healthspan

The goal was to evaluate the impact of indigenous Korean botanicals (i.e., Angelica keiskei) and their putative active compounds on the lifespan and healthspan of fruit flies.

Role: Principal Investigator at UCI (Eun-Kyoung Seo, PhD was PI in Seoul, Korea)

School of Medicine and Dept. of Pharmaceutical Sciences

2017-2018

Collaborative Grant

The Impact of Metformin, Rapamycin, and Rhodiola rosea on Surrogate Biomarkers of Lifespan and Healthspan in Leptin Receptor Mutant Mice

The goal of this project was to collect preliminary data for a study to evaluate the impact of Rhodiola rosea on lifespan and healthspan of normal aging mice.

Role: Co-Principal Investigator from Pharmaceutical Sciences, University of California, Irvine (Co-PI: Richard Van Etten, MD, PhD from School of Medicine)

UCI Microbiome Initiative Technical Support Grant

2018

The Impact of *Rhodiola rosea* on the microbiome of leptin deficient mice.

Role: Principal Investigator, University of California, Irvine

University of California, Office of the President Innovative Learning Teaching Initiative 2019 Life101

The goal of this grant is to develop an enhanced version of the online Life 101 so that it can be offered to all UC students and also on Coursera to all college students.

Role: Principal Investigator

REPORT OF TEACHING

I have been teaching undergraduate, graduate and healthcare students for the past 25 years. My teaching philosophy is based on principles of conceptual, active, and assessment learning.

During my academic career at UCSF, Western University of Health Sciences and UCI, I have developed many new courses and educational programs. At UCSF, I was involved in the curricular reform of the School of Pharmacy. At Western University, as one of the founding faculty members of the college of pharmacy, I participated in the development of an innovative Pharm.D. Block Curriculum that received an Honorable Mention for Innovation in Teaching Awards by American Association of Colleges of Pharmacy. I was recruited back to UCI in 2005 to develop the first B.S. degree program in Pharmaceutical Sciences in the UC system and help develop the Department. With this foundation, the Department grew rapidly, and Pharmaceutical Sciences became one of the most popular majors at UCI and today serves as the #1 feeder program for Pharm.D. students nationwide.

I have extensive experience teaching healthcare students and residents in medical and pharmacy schools and have received numerous awards for teaching. In 2018, I received the UCSF Campaign *Dedicated* Alumni Award in recognition of devoting my career to inspiring the next generation of scientists and healthcare providers. I am also very interested in online education. To enhance the mental and physical health of our undergraduate students, I developed a course titled Life101. Since summer of 2013, Life101 (PHRMSCI 42) has been offered both in class and online to about 700 students per year. This course also serves as the focus of my current educational research program. In 2019, I received an ILTI grant from the UC Office of President to enhance online Life101 so that it can be offered to all UC students. During the pandemic, Life101 was offered to students in all 10 UC campuses during Summer 2020, Winter 2021, Spring 2021, and Summer Session 2021 with an enrollment of 1600 students. In June 2021, I started to offer Life101 on the www.coursera.org platform for free to call high school and college students.

Outside of UCI, I was selected by the NIH Office of Dietary Supplement to participate in developing and teaching a workshop titled, Improving Natural Product Research Translation: from Sources to Clinical Trials. This workshop will be offered to the scientists attending national and international conferences on natural product research. The topic of my section in this workshop is "Using Invertebrate Models in Pre-Clinical Research on Natural Products".

In addition to developing and teaching didactic courses, I also believe in the value of internship programs and mentoring. The FDA professional internship course that I developed for Pharmaceutical Sciences undergraduate students resulted in two national awards in 2013; The Greater Los Angeles Federal Executive Board Public Service Team Accomplishment Award and The FDA Collaboration Award. I also offer research courses at UCI (PHRMSCI 198 and 199 and BIOSCI 199) and I mentor about 10-15 students per year and I support them to perform independent research projects. My undergraduate students often serve as first co-author or co-author on original research manuscripts and majority of them have been accepted to highly ranked schools of pharmacy, medicine, and graduate programs.

While serving as Vice-Chair for Pharmacy School Planning, I developed a block-based Pharm.D. curriculum for the emerging School of Pharmacy and Pharmaceutical Sciences in the UCI College of Health Sciences, with the goal of training 21st century pharmacy students who will be part healthcare provider, part scientist, and part strategist. In this curriculum, inter-professional education starts in the classroom to foster better patient outcomes in clinical settings. My hope as we move forward with the development of the Susan and Henry Samueli College of Health Sciences was that we exploited this unique opportunity to synchronize the teaching efforts of Schools of Pharmacy, Nursing, Medicine and Population Health and pioneer a collaborative and inter-professional teaching opportunity to prepare our healthcare students for professional careers in a world where health care is undergoing rapid transformation. Our School of Pharmacy and Pharmaceutical Sciences decided not to offer a block-based curriculum, but inter-professional education appears to be a top priority for our College of Health Sciences.

Teaching Medical, Pharmacy and Nursing Students and Residents

<u>Title</u>	-	<u>Enrollment</u> Students/Residents)	<u>Dates</u>
Cardiology Clerkship	CCU UCSF Medical Center	14/4	1995-1996
Clinical Pharmacy	School of Pharmacy UCSF	125	1996-1997
Cardiovascular	Western University	125	1997-2001
Pharmacotherapy Block (Doctor of Pharmacy Students)	College of Pharmacy	100	1997-2001
Pharmacology (Doctor of Osteopathic Medicine	Western University Students)	120	1997-2001
Cardiology Clerkship	CCU and Outpatient Clinics UCI Medical Center	3 29/4	1997-2001
Advanced Cardiology Clerkship		3 residents	1999-2001
Pharmacology (Nurse Practitioners Students)	Drugs Used in Dyslipidemia	a 20	2007-2010

Teaching Undergraduate Students in Major Didactic Courses (Since 2005)

Year	Course	Units # Students	% Effort
2006/07	Drugs: The Good and The Bad	2	100
	Bio 92 (New Course in 2006)	80/100	
Winter	Molecular Pharmacology (PHRMSCI	4	100
2006/07/07/09/10/11/12/ 13/14/15/16/16/17/19/20	170A) (New Course in 2006)	120-320	
2008/09/10/11	Medical Pharmacology (UCI SOM)	NA	6 hours
2007/07/09/10/11/12/13	Topics in Pharmaceutical Sciences (PHRMSCI 177)	2 100	2 hours
Winter	Life101 (PHRMSCI 42)	1	100
2013/14/15/16/17/19/20	(New Course in 2013)	115-300	
	1-unti course: 2013-2019		
	2-unit course: 2019-present	2	
	·	250-350	
2012/13/14/15 & 2016	Professional Internships (PHRMSCI 197)	2	100
	(New Course in 2012)	6/4/3	
Summer 2014	Online Molecular Pharmacology	4	100
	(PHRMSCI 170A)	35	

Summer	Online Life 101 (PHRMSCI 42)	1	100
2014/15/16/17/18/19/20/	1-unti course: 2013-2019	270-380	
21	2-unit course: 2019-present		
	·	2	
		300-350	
Winter 2020	Ethics in Science	4	10
	The Pseudoscience of Dietary	45	
	Supplements		
Winter 2021	Online Life101 (PHRMSCI42)	594	100
	Offered to students on all UC campuses		
Spring 2021	Online Life101 (PHRMSCI42)	368	100
	Offered to students on all UC campuses		

Graduate Students Research Mentorship (UCI only)

1998	Rachna Patel, Pharmacy Resident, VA Long Beach (Mentor) (Pharmacoeconomics of statins)
2001	Omard Badawi, Pharmacy Resident UCI (Mentor) (Management of Dyslipidemia in HIV)
2008-2012	Samuel Shriner, Ph.D., Associate Project Scientist (Supervisor)
	PI, Ellison Medical Foundation (<i>The Role of Mitochondrial Superoxide in Aging</i>)
2011-2013	Michael Okuro, M.S. Student (Advisor)
	(Natural Product Synthesis/Efficacy Chemistry)
2012-2016	Terry Lopez, Ph.D Student (Advisor/PI)
	(The Impact of Green Tea Extracts on Mitochondrial Iron Transporters)
2015	Annee Wildgoose, UCI Competitive Edge Summer Fellow (Mentor)
2016	Anjelica Cardenas, NIH Summer Fellow, Pharmaceutical Sciences, UCI
2019-2020	Jasmin Arabit, Ph.D. Student (Advisor/PI)
2018-present	Kasia Bittner, Ph.D student (Member, Ph.D. Committee)
2018-present	Kenneth Arnold, Ph.D. student (Member, Ph.D. Committee)
2018-2021	Saad Mohammad, Ph.D. Student (Member, Ph.D. Committee)
2019-present	Henri Farhoodi, Ph.D Student (Member, Ph.D. Committee)

Mentoring Undergraduate Students in Internship and Research Courses

2012-2015 UCI Pharmaceutical Sciences Internship Programs (FDA Irvine and Irvine Pharmaceuticals Company)

2005-present Research Courses (BIOSCI 198/199 and PHRMSCI 198/199)

Mentored 190 undergraduate students, 7 runners-up for Excellence in Research Award, 2 Chemistry Honors Students, and one recipient of Excellence in Research Award in undergraduate research course (PHRMSCI 198, PHRMSCI 199 and BIOSCI 199), Undergraduate Research Opportunity Program (UROP), Summer Undergraduate Research Program (SURP), and Excellence in Research.

Selected UROP/SURP recipients (2009-2019)

- 2009 Tracy Le UROP: The impact of *Rhodiola rosea* and its active putative compounds in differentiated neurons from P19 embryonal carcinoma stem cells.
- 2009 Gerald Tran UROP: The activation of mammalian SIR proteins by Rhodiola rosea.
- 2009 Tanya Duong SURP: The role of SIRT activity in *Rhodiola rosea*. in vitro and *R. rosea*-fed *Drosophila melanogaster in vivo*.
- 2009 Ai-Quyen Duong UROP: The effect of Rhodiola rosea on SIR activity.
- 2009 Maral Gazarian UROP: Rhodiola rosea increased resistance to ROS in Drosophila melanogaster.
- 2009 Christopher Dagher UROP: The potential rejuvenating properties of *Rhodiola rosea* on *Drosophila melanogaster.*
- 2010 Beina Azadgoli UROP: The effects of *Rhodiola rosea* on sleep deprivation and circadian rhythms in *Drosophila melanogaster*.
- 2010 Nelli Ghazaryan UROP: The Effects of the active ingredients of *Rhodiola rosea*, Salidroside, and Rosavin, on lifespan extension in *Drosophila melanogaster*.
- 2010 Steven Maler UROP: Measuring the effects of *Rhodiola rosea* on the Sirtuin pathway and aging in *Drosophila melanogaster*.
- 2010 Karen Vo: *Rhodiola rosea* increase lifespan and improves healthspan in aged *Drosophila melanogaster*.
- 2010 Tracy Le UROP: The impact of *Rhodiola rosea* and its active putative compounds during oxidative stress in *Drosophila melanogaster*.
- 2011 Stephanie M. Truong UROP: Characterization of the putative active compounds in *Rhodiola rosea*.
- 2012 Steven Kurumuda SURP: The Action of *Cinnamomum aromaticum* on Insulin and Insulin-Like growth factor signaling in *Drosophila melanogaster*.
- 2012 David Lu UROP/SURP: Identifying Green Tea's Effect on Dietary Restriction in *Drosophila melanogaster*.
- 2012 Kevin Pham UROP: The impact of Rosa damascena on the target of rapamycin
- 2012 Teresa Tran UROP: The action of curcumin as a sirtuin-activating compound and dietary restriction mimetic.
- 2012 Teresa Tran SURP: Protection of human cultured cells against oxidative stress by Tahitian botanical plants.
- 2012 Kathryn Salvadora SURP: The effects of *Rhodiola rosea* on mitochondrial dysfunction.
- 2012 Kevin Kuang Lee UROP/SURP: Identifying *Rhodiola rosea's* mechanism of action through dietary restriction.
- 2012 Victor Ramos SURP: The treatment of mitochondrial dysfunction in cultured cells by *Rhodiola rosea.*
- 2012 Vincent Cagonot SURP: Evaluating the effects of *Rosa damascena* on the Sirtuin pathway and aging in *Drosophila melanogaster*.

- 2012 Steven Kurumuda UROP: Identifying *Cinnamomum aromaticum's* Mechanism of Action through Dietary Restriction in *Drosophila melanogaster*.
- 2012 Andrew N.M. Pham UROP: The effect of Maltodextrin on *Drosophila melanogaster* lifespan.
- 2013 Christie Yoon SURP: The effect of *Rhodiola rosea* in survival, oxidative stress tolerance, and differentiation of pluripotent stem cells.
- 2013 Beatrice T. Chiang UROP: The ability of Green Tea to protect against stress.
- 2011 Beatrice T. Chiang UROP: The impact of Green Tea on the Insulin-Signaling pathway.
- 2013 Elyse M. Young UROP: Biological Characterization of Rosavin and Synthetic Rosavin Analogs.
- 2013 Miah Pollack SURP: The UV-protective action of Rhodiola rosea in human karatinocytes.
- 2012 Miah Pollack UROP: Validation of 60-Fullerene's effect on *Drosophila melanogaster* lifespan.
- 2013 Steven Kurumada SURP: The action of *Cinnamomum cassia* on locomotive activity in *Drosophila melanogaster*.
- 2013 Andrew N.M. Pham UROP: The action of *Rhodiola rosea* on carbohydrate metabolism in the fruit fly.
- 2013 Naziha B. Hussain UROP: The action of *Rhodiola rosea* on physical performance and lifespan in aged flies.
- 2013 Benjamin V. Nguyen UROP: The pharmacokinetics of herbal extracts in *Drosophila melanogaster*.
- 2014 Jocelyn Huey UROP: The effect of *Rhodiola rosea* on *Drosophila melanogaster* cyclic AMP signaling and lifespan extension.
- 2014 Naziha B. Hussain UROP: Rhodiola rosea effects: locomotion & lifespan of aged flies.
- 2014 Mackenzie G. Poole UROP: The induction of autophagy following treatment with *Rhodiola rosea* in *Drosophila melanogaster*.
- 2014 Shannon Ramsden UROP: Extension of *Drosophila melanogaster* lifespan by green tea through inhibition of dietary iron.
- 2014 Shannon Ramsden UROP: The effect of green tea and iron on male *Drosophila melanogaster* fertility and lifespan extension.
- 2014 Hoang M. Pham UROP: Mitoferrin is essential for the effects of green tea polyphenols on lifespan and fertility of male *Drosophila melanogaster*.
- 2014 Richelle Homo UROP: Consumption and fate of natural products in *Drosophila melanogaster*.
- 2015 Julia C. Barbour UROP: The action of natural products on inflammation in *Drosophila melanogaster*
- 2015 Rupal Golokiea UROP: The action of *Rhodiola rosea* on *Drosophila* lifespan and cyclic AMP levels
- 2015 Alexandra Le UROP: Rescue of mitochondrial dysfunction by Rhodiola rosea
- 2015 Benjamin V. Nguyen UROP: The action of *Rhodiola rosea* root extract in rescuing mitochondrial dysfunction

- 2015 Cindy T. Nguyen UROP: Evaluation of *Rhodiola rosea* in a *Drosophila melanogaster* model of Huntington's disease
- 2015 Hanh M. Pham UROP: The study of cinnamaldehyde on Alzheimer's disease *Drosophila melanogaster*
- 2015 Sally T.N. Pham UROP: The impact of *Angelica keiskei* on lifespan and healthspan
- 2015 Julia C. Barbour SURP: The action of natural products on inflammation in *Drosophila melanogaster*
- 2015 Rupal Golokiea SURP: The action of *Rhodiola rosea* on *Drosophila* lifespan and cyclic AMP levels
- 2015 Richelle Roelandt L. Homo SURP: Consumption and fate of natural products in *Drosophila melanogaster*
- 2015 Cindy T. Nguyen SURP: Evaluation of *Rhodiola rosea* in a *Drosophila melanogaster* model of Huntington's disease
- 2015 Benjamin V. Nguyen SURP: The action of *Rhodiola rosea* root extract in rescuing mitochondrial dysfunction
- 2015 Hanh M. Pham SURP: The study of cinnamaldehyde on Alzheimer's disease *Drosophila melanogaster*
- 2015 Sally T.N. Pham SURP: The impact of *Angelica keiskei* on lifespan and healthspan
- 2015 Julia Barbour UROP: The action of *Rhodiola rosea* on inflammation in *Drosophila melanogaster*
- 2015 Julia C. Barbour UROP: Impacts of Green Tea Polyphenols on *Drosophila melanogaster* development and reproduction.
- 2015 Rupal Golakiea UROP: The action of *Rhodiola rosea* on *Drosophila melanogaster* lifespan and cyclic AMP levels
- 2015 Christian Gonzalez UROP: The study of reproductive behaviors in Alzheimer's disease models of *Drosophila melanogaster* and cinnamaldehyde as a suggested treatment
- 2015 Richelle Roelandt L. Homo UROP: Quantification of cinnamaldehyde in *Drosophila melanogaster* using ESI-UPLC/MS-MS
- 2015 Julia C. Barbour UROP: The action of natural products on inflammation in *Drosophila melanogaster*.
- 2015 Cindy T. Nguyen UROP/SURP: Evaluation of *Rhodiola rosea* in a *Drosophila melanogaster* model of Huntington's Disease.
- 2015 Yerazik Tahmasian UROP: The effect of Green Tea Polyphenols on Iron Metabolism: Lifespan and fertility of DMT deficient *Drosophila melanogaster*.
- 2015 Shannon Ramsden UROP: The effect of two different forms of iron on *Drosophila melanogaster*.
- 2015 Benjamin V. Nguyen SURP/UROP: *Rhodiola rosea* confers protection against mitochondrial dysfunction in *Drosophila melanogaster*.
- 2015 Sean P. Hogan UROP: *Rhodiola rosea* increases the lifespan of *Drosophila melanogaster* independently of carbohydrate content in the diet.

- 2015 Mackenzie G. Poole UROP: The effect of *Rhodiola rosea* on *Drosophila melanogaster* autophagy.
- 2015 Phillip Tran UROP: The effect of glucosamine on glucose metabolism and aging in *Drosophila melanogaster.*
- 2016 Christian Gonzalez UROP: Challenging the standardization of herbal extracts: *Rhodiola rosea*
- 2016 Alexandra Le UROP: The effect of *Rhodiola rosea* on mitochondrial and glycolytic dysfunction on a cell culture model
- 2016 Hanh M. Pham UROP: Rescue of Alzheimer's disease in *Drosophila melanogaster* by cinnamaldehyde
- 2016 Christian Gonzalez SURP: Challenging the standardization of herbal extracts: *Rhodiola rosea*
- 2016 Khachik E. Labachyan SURP: Establishing *Drosophila melanogaster* as a model for inflammation through examination of the gut microbiome in response to natural products
- 2016 Hanh M. Pham SURP: Rescue of Alzheimer's disease in *Drosophila melanogaster* by cinnamaldehyde
- 2016 Jasmin Arabit UROP: The effects of *Rhodiola rosea* on a *Drosophila melanogaster* model of Huntington's disease
- 2016 Khachik E. Labachyan UROP: The impact of *Rhodiola rosea* on the gut microbiome of *Drosophila melanogaster*
- 2016 Hanh M. Pham UROP: The effects of cinnamaldehyde on the healthspan of Alzheimer's disease *Drosophila melanogaster* models
- 2016 Howard J. Phang UROP: Diet and supplementation: a combined therapy for healthspan improvement
- 2017 Jasmin Grace J. Arabit UROP: The positive impacts of *Rhodiola rosea* in a fly model of Huntington's disease
- 2017 Jasmin Grace J. Arabit UROP: *Rhodiola rosea* may improve symptoms of Huntington's disease in a fly model
- 2017 Dara Kiani UROP: The impact of *Rhodiola rosea* on the gut microbiome of *Drosophila melanogaster*
- 2017 Hanh M. Pham UROP: The impact of cinnamaldehyde on the healthspan of Alzheimer's disease *Drosophila melanogaster* models
- 2017 Jasmin Grace J. Arabit SURP: *Rhodiola rosea* may improve symptoms of Huntington's disease in a fly model
- 2017 Hanh M. Pham SURP: The impact of cinnamaldehyde on the healthspan of Alzheimer's disease *Drosophila melanogaster* models
- 2017 Howard J. Phang SURP: Diet and supplementation: a combined therapy for healthspan improvement
- 2019 Cindy D. Nguyen UROP: Investigating the effects of curcumin on lipopolysaccharide-induced inflammation in a Drosophila melanogaster myeloproliferative neoplasm model

- 2019 Bahram Pashaee UROP/SURP: Olfaction and feeding of *Rosa damascena* may improve lifespan and symptoms of anxiety and depression in *Drosophila*
- 2019 Victoria Guan UROP/SURP: The impact of compound 893, a potential caloric restriction mimetic, on the lifespan and healthspan of *Drosophila melanogaster*
- 2019 Beverly Anne Fuerte UROP: Curcumin as a Putative intervention for myeloproliferative neoplasms in a fly model
- 2020 Amiel Jandy Angelo UROP: Investigating the Effects of Eradicating the Gut Microbiome in a *Drosophila melanogaster* Model of Myeloproliferative Neoplasms (MPNs)
- 2020 Bahram Pashaee/Beverly Fuerte UROP: *Drosophila melanogaster* as a Model Organism for Depression
- 2020 Beverly Anne Fuerte UROP: Investigating the effects of lipopolysaccharide microinjection in *Drosophila melanogaster* model of myeloproliferative neoplasms
- 2020 Cindy Duy Nguyen UROP: Investigating the effects of enteric dysbiosis on the progression of myeloproliferative neoplasms in a *Drosophila melanogaster* model
- 2020 Victoria Guan UROP: Impact of *Rhodiola rosea* Microfractions on Locomotion, Starvation, and Fecundity

SCIENTIFIC AND PROFESSIONAL PRESENTATION

Invited Presentations at National and International Conferences and Professional Events

<u>1995-1997</u>

- Trends in the occurrence of recreational drug-induced seizures. Western States Conference for Pharmacy Residents, Fellows and Preceptors. Monterey, CA.
- Chemoprophylaxis with Aspirin: Stroke, Myocardial Infarction, and Peripheral Vascular Diseases. Presentation at Preventive Care for the Elderly. California Geriatric Education Center at UCLA. Santa Monica, CA.
- Management of Congestive Heart Failure in Primary Care Settings. First Annual Alumni CME Seminar: Essentials of Primary Care. Western University of Health Sciences, Pomona, CA.
- Pharmacotherapy of Congestive Heart Failure. California Society of Health-System Pharmacists. Newport Beach, CA.
- Lipoproteins and Lipid Disorders. UCI Heart Disease Prevention Program. Irvine, CA.

1998

- Cholesterol: The Silent Serial Killer. Cardiology Grand Rounds. UCI Medical Center. Orange, CA.
- Refractory Heart Failure. Core Lecture Series. UCI Medical Center and VA Long Beach, CA

- Cholesterol. Continuing Medical Education, Pathology Grand Rounds. UCI Medical Center. Orange, CA.
- Spirituality and Depression. California Society of Health-System Pharmacists Focus 1998. Lake Tahoe, NV.
- Management of Congestive Heart Failure in the Elderly. Geriatric Pharmacy mini-Residency Program. Western University of Health Sciences and California Geriatric Education Center. Pomona, CA.
- Management of Lipid Disorders in the Elderly. Geriatric Pharmacy mini-Residency Program. Western University of Health Sciences and California Geriatric Education Center. Pomona, CA.

1999

- Neurohormonal Management of Congestive Heart Failure. University of California at Irvine, Santa Ana Clinic Noon Conference. Santa Ana, CA.
- Angiotensin Receptor Blockers: A New Tool for the Pharmacological Management of Hypertension. San Gabriel Society of Health System Pharmacist CE Program. Los Angeles, CA and Costa Mesa, CA.
- Effectiveness of Cholesterol Lowering for Secondary Prevention in CHD Patients.
 Updates for the General Internist CE Program. University of California at Irvine, College of Medicine. Newport Beach, CA.
- Artery, The Good and The Bad: Hypertriglyceridemia as a Cardiac Risk. California Society of Health System Pharmacists Focus 1999. Long Beach, CA.
- Natural Meditation. California Society of Health System Pharmacists Focus 1999. Long Beach, CA.

2000

- Hypertriglyceridemia as a Cardiac Risk Factor. University of California, Irvine, Noon Conference. Orange and Long Beach, CA.
- Dyslipidemia in the Elderly. CME Update in Geriatrics. Western University of Health Sciences, Pomona, CA. Antioxidants and
- Pharmacogenomic Research in Dyslipidemia. Cardiology Faculty Development Seminar. University of California, Irvine.
- Ethical Risk Factors...Cardiac Risk Factors. California Society of Health System Pharmacists, Students Chapter. Western University of Health Sciences, Pomona, CA
- Treatment of Aggression and Impulsivity. Lancaster State Prison. Grand Rounds. Lancaster, CA
- Walk in Lipid Testing Program: The Value of Point of Care Services. American College of Cardiology, Los Angeles, CA.

2001

- Cholesterol Management. University of California, Irvine, Cardiology Fellowship Lecture Series. Orange, CA.
- Genetic Markers in the Management of Dyslipidemia. American College of Clinical Pharmacy Annual Meeting. Tampa, FL
- Dual Diagnosis: Bipolar Disorder and Substance Abuse. Hollywood Mental Health Clinics. Grand Rounds. Hollywood, CA.

20<u>02</u>

- The Clinical Application of Pharmacogenomics: Are we there yet? University of California, Irvine, Noon Conference. Orange and Long Beach, CA.
- The Role of Combination Therapy in Schizophrenia. Yuba City Mental Health Clinics. Grand Rounds. Yuba City, CA.

- New Treatment Modalities in Schizophrenia. University of California, Davis, Grand Rounds. Sacramento, CA.
- Educational Research: Grant- Based Courses. American College of Clinical Pharmacy. Savannah, GA
- Dual Diagnosis: Bipolar Disorder and Substance Abuse. University of California at Davis Mental Health Clinic, Grand Rounds Sacramento, CA.
- Cardiac Risk Factors-Ethical Risk Factors, University of California, Irvine
- Pharmacokinetics of Divalproex Sodium ER and IV New England Medical Center, Department of Pediatric Neurology, Noon Conference Boston, MA
- Metabolic Complications of Medications Used in Schizophrenia Southern California Society of Psychiatry Riverside, CA
- Metabolic Complications of Medications Used in Schizophrenia. University of California, Irvine, Psychiatry Grand Rounds Orange, CA
- Divalproex Sodium Formulations. University of California, Davis Mental Health Clinic, Grand Rounds, Sacramento, CA.

2003

- Adjunctive Therapy Lowers Elevated Cholesterol Associated with Olanzapine and Risperidone Treatment of Schizophrenia. International Congress on Schizophrenia Research. Colorado Springs, CO
- Metabolic Complications of Atypical Antipsychotics. Manhattan Psychiatric Clinic Grand Rounds New York, NY
- Pharmacokinetic Properties of Intravenous Antiepileptic Medications Jamaica Medical Center Morning Conference, New York, NY
- Divalproex Adjunctive Therapy Lowers Elevated Cholesterol Associated with Olanzapine and Risperidone Treatment of Schizophrenia. International Congress on Schizophrenia Research. Colorado Springs, CO.

2005

- Chinese Herbs, Antioxidation, and Longevity, Satellite Meeting of XXXV IUPS. Beckman Center, Irvine, CA
- Drug Development: From Benchtop to Bedside. Susan Samueli Center for Integrative Medicine, Irvine, CA
- Evolutionary Pharmacology of Aging: Rules for the Use of Model Systems 2005 Buck Institute Symposium, Novato, CA.

2006

- UC Irvine Faculty Panel: Careers in Biomedical Sciences Santa Ana College, Santa Ana, CA
- The Anti-Aging Properties of Chinese Herbs: Proposed Rules of Investigation Susan Samueli Center for Integrative Medicine, Irvine, CA
- A Scientific Recipe for an Anti-Aging Salad, 4th Annual UCI Women's Wellness Day Conference, Irvine, CA
- The Healthy Living Luncheon, UCI Susan Samueli Center for Integrative Medicine, Zov's Bistro, Tustin, CA

2007

- Drosophila Melanogaster as a Model System to Evaluate Drug Induced Central Nervous System Adverse Effects. International Congress on Schizophrenia Research, Colorado Springs, Co.
- Anti-Aging Research using Fruit Flies. Sally Ride Science Festival for Girls at University of California, Irvine, CA

The Truth About Anti-Aging Foods and Diets: The Scientific Evidence, 5th Annual UCI Women's Wellness Day Conference, Irvine, CA

2008

- Extension of *Drosophila* Lifespan by *Rhodiola rosea* Through an Antioxidant Independent Mechanism, Understanding Aging: Biomedical and Bioengineering Approaches, UCLA, Los Angeles, CA
- Rhodiola rosea (SHR-5) Protects Human Cells Against Oxidative Stress, Understanding Aging: Biomedical and Bioengineering Approaches, UCLA, Los Angeles, CA
- Medical Education in Pharmaceutical Industry: The Good and The Bad. Rehabilitation Medicine Program, University of California, Irvine
- Screening Anti-Aging Compounds: Rules of Investigation. New Applications for Aging Research: Bridging the Gap Between Model Organisms and Patients. San Diego, CA (Presenter and Moderator of the Session on Screening Anti-Aging Compounds)

2009

- Successful Aging: Integrative Medicine. Annual UCI CME Conference, University of California, Irvine (Moderator of the session on Preventing Drug/Herb Interactions and Antioxidants, Vitamins, and Minerals)
- Authenticity of Herbal Extracts: Status and Challenges, UCI Research Symposium, From Molecular Biology to Human Therapies: Strategies, Challenges, and Opportuniteis, Irvine, CA
- Lifespan Extension and Modulation of Mitochondrial Superoxide Levels in *Drosophila* melanogaster by Rhodiola rosea, 19th IAGG World Congress in Gerontology and Geriatrics, Paris, France
- Co-Moderated the Keynote Lecture with Etienne Baulieu, "Place of sarcopenia in the frailty syndrome" by Luigi Ferrucci from National Institute on Aging (NIH). 19th IAGG World Congress in Gerontology and Geriatrics, Paris, France
- Rhodiola rosea and Protection of Human Cultured Cells Against Oxidative Stress. L'Oreal Research and Development, Paris, France
- Rhodiola rosea and Lifespan Extension. Southern California Drosophila Conference. University of California, Irvine
- Rhodiola rosea and Lifespan Extension. Signum Biotechnology, Princeton, New Jersey
- Lifespan Extension and Increased Stress Resistance in Flies fed *Rhodiola*. National Institute of Aging Longevity Consortium Meeting, San Diego, CA

2010

- Practicing Public Scholarship: Rethinking Faculty Work (Panelist). Public Scholarship, Engaging Contradictions in the Contemporary University, University of California, Irvine
- Women Well Being Panel (Panelist). Nutraceuticals and Natural Products. Iranian American Women Leadership Conference, Irvine, CA

2011

- Herbal Extracts, Lifespan and Healthspan
 The 21st Spring International Conference of the Korean Society of Gerontology: Intervention of Aging and Age-related Diseases, Busan, Korea
- Herbal Extracts, Lifespan and Healthspan
 Food and Drug Administration & Association for Official and Analytical Chemists Irvine, CA
- Fundamental Studies with Rhodiola rosea, An Adaptogenic Plant International Scientific Acupuncture and Meridian Symposium The Beckman Center, Irvine, CA

Women Well Being Panel (Panelist). Scientific Evidence Behind Anti-Aging Modalities.
 Iranian American Women Leadership Conference, Costa Mesa, CA

2012

- Slow-Aging with Botanicals, International Conference on Functional Foods University of California, Santa Barbara
- Essentials of Women Health Panel (Moderator). Iranian-American Women Leadership Conference, Irvine, CA
- Integrative Medicine in Women Health Panel (Moderator). OC Global Women Conference.
 Costa Mesa, CA
- Dietary Supplements. UCI Anteater Recreational Center Fitness Lunch
- How to live to be 200? UCI CEO Round Table Retreat Faculty Speaker

2013

- Healthy Aging with Botanical Extracts: The Identification and Mechanistic Evaluation of Anti-aging Botanicals. International Congress on Gerontology and Geriatrics, Seoul, Korea
- Natural Therapies for Stress Management. UCI Women's Wellness Day Conference. Irvine, CA

2015

- Anti-Aging Properties of Botanical Extracts. 10th Annual Biomedical Forum for Sino-American Biotechnology and Pharmaceutical. Irvine, CA
- Life101 for College Students. Associates of the President / Chancellor's Meeting. University of California, Irvine
- Dietary Supplements: Helpful or Harmful. UCI Chief Executive Roundtable Women's Forum. University of California, Irvine
- Rhodiola rosea: A novel botanical intervention to increase lifespan and improve healthspan. Biology of Ageing Conference. Singapore, Singapore
- Botanical Interventions to Improve Lifespan and Healthspan. National University of Singapore. School of Pharmacy. Singapore, Singapore

2016

- The Science of Healthspan. International Women Forum Trusteeship. Irvine, CA
- The Science of Healthspan: Adding Healthy Years to Your Life. OCTANe Medical Device and Investor Forum. Irvine, CA
- The Science of Healthspan. UCI Paul Merage School of Business Wealth Management Conference. Newport Beach, CA
- Life101 for College Students. All-U Leadership Conference, Irvine, CA
- Long Healthy Lives. OCTANE Investigator and Medical Devices Forum. Irvine, CA

2017

- Dietary Supplements: Helpful or Hurtful? Jewish Community Center Wellness Seminars.
 Newport Beach, CA
- Dietary Supplements: Helpful or Hurtful? Regents Points Assisted Living Community. Irvine. CA
- The Science of Healthspan: Adding Healthy Years to Human Life. 2017 UCI Reunions. University of California, Irvine.

2018

 Fruit Flies: A Robust and Cost-Effective Model System to Screen Therapeutics in Alzheimer's Disease. Society for Brain Mapping and Therapeutics 15th Annual Conference. Los Angeles, CA Healthspan Pharmacology: Botanical Extracts Mechanism of Action and Animals Models of Aging.
 Enhancing Natural Products Clinical Trials Workshop, National Institute of Health, Bethesda, MD

2019

- Testing the Effects of Botanicals on Healthspan
 Office of Dietary Supplements Seminar, National Institute of Health, Bethesda, MD
- Drosophila melanogaster: A Robust and Cost-Effective Model to Screen Therapeutics for Neurodegenerative Disorders, 5th Neurological Disorders Summit (NDS-2019), Los Angeles, Ca
- Healthspan Pharmacology: Evaluating the Impact of Botanicals on Lifespan and Healthspan. Botanical Medicines Symposium. Hong Kong Polytechnic University, Hong Kong (will be rescheduled to a later day due to safety issue with traveling to Hong Kong)
- Molecular Mechanisms of Aging. University of California Nanyang Technological University Singapore Healthy Aging Research Workshop, University of California, Los Angeles, Ca

Invited Seminars at National and International Academic Institutions (since 2008)

2008

- Rhodiola rosea, Lifespan Extension and Oxidative Stress, University of Florida, FL,
 Department of Aging and Geriatrics Division of Biology of Aging
- Herbal Extracts and Oxidative Stress, University of Southern California, Los Angeles, CA
- Rhodiola rosea, Lifespan Extension and Oxidative Stress, University of Aarhua, Aarhus, Denmark.
- Rhodiola rosea, Herbal Extracts and Anti-Aging, University of Duesseldorf Institut für Biochemie und Molekularbiologie, Duesseldorf, Germany

2009

- Adaptogenic Plants in Modern Medicine: Fact or Fiction? Massachusetts Institute of Technology, Cambridge, MA
- Using *Drosophila* as a Model System to Screen for Anti-Aging Compounds, San Diego State University, Department of Biology, San Diego, CA

2010

- Rhodiola rosea and Oxidative Stress, University of California at San Francisco and Pacific Medical Center Research Coordination Center, San Francisco, CA
- Rhodiola rosea, Lifespan, and Healthspan. National Institute of Health Longevity Consortium Symposium, Washington DC, WA

2011

- Improving Health with Plants: Science or Fiction, Public Talk at The University of French Polynesia, Tahiti
- Herbal Extracts, Lifespan and Healthspan, Department of Phytochemistry, University of French Polynesia, Tahiti
- Herbal Extracts, Lifespan and Healthspan, Tokyo University of Life Sciences and Pharmacy, University Talk, Tokyo, Japan
- The Impact of Herbal Extracts on Pathways of Aging, Inha University, Department of Biology Seminar, Seoul, Korea

2012

- Medicine and Politics Seminar/Panel Discussion (Moderator), University of California, Irvine
- Searching for Anti-Aging Botanicals. Science Departments Seminar. University of Pepperdine, Malibu, Ca

2013

 Pharmaceutical Sciences at the University of California, Irvine. Hana Academy, Seoul, Korea

2014

- Debating Affordable Care Act. ASUCI Panel Discussion. University of California, Irvine
- Botanical Extracts and Longevity Pathways. Inha University, Seoul, Korea
- Can Botanical Extracts add healthy years to our lives by modulating our longevity pathways? University of Rome Tor Vergata, Italy (A seminar organized by the Italian Ministry of Health for Expo 2015 Medicinal Plants)
- Botanical Extracts and Longevity Pathways. Inha University, Seoul, Korea
- Botanical Extracts and Longevity Pathways
 School of Medicine and Kremlin Bicetre Hospital. Paris, France

<u>2015</u>

- Modulation of Healthspan with Botanical Extracts. Department of Biology Seminar.
 University of Barcelona, Barcelona, Spain
- Rhodiola rosea: A Novel Botanical Intervention to Increase Lifespan and Improve Healthspan. Chapman University, School of Pharmacy Seminar, Irvine, Ca
- Rhodiola rosea: A Novel Botanical Intervention to Increase Lifespan and Improve Healthspan. University of Alaska at Anchorage
- Distance Learning Online Instructor Panel Discussion. University of California, Irvine
- Rhodiola rosea: A Novel Botanical Intervention to Increase Lifespan and Improve Healthspan. National University of Singapore, Singapore
- Dietary Supplements: Helpful or Hurtful? UCI CEO Round Table Women's Associate Forum. Irvine, Ca

2016

Healthspan Pharmacology, UCI 2016 Epidemiology Seminar Series, Irvine, Ca

2017

 Healthspan Pharmacology: Healthspan Extension with Rhodiola rosea. Hong Kong University, School of Biological Sciences, Plant Evolution and Adaptation Seminar Series.

2018

- The Impact of Botanical Extracts on Microbiome. Microbiome Initiative Monthly Meeting. University of California, Irvine
- Healthspan Pharmacology: The Impact of Botanicals on Lifespan and Healthspan, University of Vienna School of Pharmacy, Vienna, Austria

2019

Strategically Managing Professional Transitions
 Women's Career Advancement Symposium, University of California, San Francisco

Screening and Evaluating Botanicals in Healthspan Pharmacology.
 Clinical Translational Aging Research Monthly Seminar.
 University of Florida, Gainesville

2020

- Evidence-Based Modalities to Improve Longevity Senior Scholar Program at the UCLA's Longevity Center Los Angeles, Ca (Zoom Presentation)
- Improving Our Emotional Health UCSF School of Pharmacy, San Francisco, Ca (Two Zoom Workshops to first year and second year PharmD students)

Additional Invited Speaker Activities (TEDx, Web Interviews, Webinars)

2011

- "What If"
 TEDxYouth Bommer Canyon
 http://www.youtube.com/watch?v=BiOv6R0EHmw
- "My Grandmother Never Took Dietary Supplements" TEDxChange Newport Coast http://www.youtube.com/watch?v=lfLaD0AP4eE
- Botanicals and the Pathways of Aging, Interview with The Science Network http://thesciencenetwork.org/programs/the-science-studio/botanicals-and-the-pathways-of-aging

2013

- "Life101 for College Students"
 TEDx UCI, Irvine, CA
 https://www.youtube.com/watch?v=GYP-MNrGD6w
- An Interview with Mahtab Jafari
 In-Sight: Independent Interview Based Journal, November 15, 2013
 https://in-sightjournal.com/2013/11/15/dr-mahtab-jafari-associate-professor-pharmaceutical-sciences-program-university-of-california-irvine/

2015

Dietary Supplements: Helpful or Hurtful?
 A Wellness University Webinar, Irvine, CA

2018

What innovation means to me and why?
 Iranian-American Innovation Forum, University of California, Irvine

2019

- Local, Global and Me: A Panel Discussion on Food and Health United Way Orange County, Costa Mesa, Ca
- Careers in Healthcare: A Panel Discussion Girls Inc. Orange County Chapter, University of California, Irvine

2020

- A Panel Discussion on Longevity: Engineer your healthy lifespan with evidence-based information. 4th Annual Laguna Beach Community Health Symposium, Laguna Beach, Ca
- Cooking with the Professor: Spices of Life. Illuminations: The Chancellor's Art and Culture Initiatives. University of California, Irvine
- Academic Professions for PharmDs. The UCI Pre-Pharmacy Society, Irvine, Ca
- Anteaters in Pharmacy Alumni Panel (Panelist). University of California, Irvine
- Nutrition to Improve Longevity. Regents Point Retirement Community. Irvine, Ca
- Stress Management in a Pandemic. Regents Point Retirement Community. Irvine, Ca

2021

- Exercise as Medicine. Local, Global & Me. Women's Empowerment Series, United Way Orange County, CA.
- Beauty Sleep for Health. Local, Global & Me. Women's Empowerment Series, United Way Orange County, CA.
- Optimizing Our Nutrition. Local, Global & Me. Women's Empowerment Series, United Way Orange County, CA.
- Recognizing and Managing Stress. Local, Global & Me. Women's Empowerment Series, United Way Orange County, CA.
- Science of Changing Habits. Local, Global & Me. Women's Empowerment Series, United Way Orange County, CA.
- A Panel Discussion on Leadership Strategies Balancing Act. Division of Continuing Education. University of California, Irvine.

SELECTED MEDIA LINKS (SINCE 2006)

Spectrum NEWS1, Inside the Issues, April 2, 2021. Life Skills Course Expanded to All 10 UC Campuses https://urldefense.com/v3/ http://specne.ws/XPdMPD;!!OLgoXmg!HRL4xmNFbhwcy8CaSN CQ2gdy4pS7cPpD5 nFWXYgu1giXc14NPLe3BQ1ID0QxdTS\$

CNN, January 7, 2021. Some Parents Expand Pandemic Bubble to Include Children's Boyfriends and Girlfriends.

https://us.cnn.com/2021/01/07/health/pandemic-social-bubble-covid-19-wellness/index.html

Orange County Register, December 2, 2020. With the Pandemic Boosting the College Stress, UC System is Boosting the Course Life101.

https://www.ocregister.com/2020/12/02/with-the-pandemic-boosting-college-stress-the-uc-system-is-boosting-the-course-life-101/

Forbes. December 26, 2018. Kin Euphorics Promises Benefits Of Booze With No Hangover. https://www.forbes.com/sites/jennysplitter/2018/12/26/kin-euphorics-booze-with-no-hangover/#6eae3a44410a

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Wall Street Journal Interview "Can a caffeine-packed plant give a boost?" http://online.wsj.com/article/SB10001424052748704299804575095581735183488.html

CREATIVE ACTIVITIES

1998	Producer: Life and Work of Dr. Paul Brand: Compassionate Care; A documentary film based on an interview with Drs. Paul and Margaret Brand, Western University of Health Sciences, Pomona, CA.
1999-2000	Founder: Bioethics Nights, Western University of Health Sciences, Pomona, CA.
2019-2020	Developing an Internship Program for the residents of the Reagents Point—A retirement facility in Irvine, CA.

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- 2) Preventive Cardiology. 2nd Edition. Part V, Chapter 25: Establishing a Preventive Cardiology Program. McGraw-Hill 2005.
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- 2) Shireen Banerji, Reginald T. Ho, Steven Kayser, <u>Mahtab Jafari-Fesharaki</u>, Melvin Scheinman *Torsade de Pointes/Polymorphic Ventricular Tachycardia: Etiology, Risk*

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- Omar Badawi and <u>Mahtab Jafari</u>. Detection and Management of Dyslipidemia in HIV Patient. Western States Conference for Pharmacy Residents, Fellows and Preceptors. Monterey, CA. May 2001.
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- 13) <u>Mahtab Jafari</u>, Alana Olshwang, and Daniel Robitshek. *Students' Attitudes and Knowledge Regarding Belief Systems and Patient Care*. Spirituality and Healing in Medicine Conference. Salt Lake City, UT. March 2002.
- 14) Alana Olshwang and <u>Mahtab Jafari</u>. Continuing the Dialogue: Using Accreditation to Enhance Student Learning. WASC Annual Meeting Poster Presentation. Chicago, IL, April 2002
- Mahtab Jafari, Alan Swann, Kenneth Sommerville, Katherine Tracy, Patricia Wozniak, and Michelle Collins. Short-term Metabolic Effects of Divalproex Sodium in Bipolar Patients. American College of Clinical Pharmacy: Spring Research and Practice Forum. Savannah, GA. April 2002.
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