Medha M. Pathak, Ph.D.

Assistant Professor,
Dept. of Physiology & Biophysics,
University of California, Irvine

275B (Office) and 291 (Lab) Irvine Hall, Irvine CA 92697-4561.

Tel.: 949-824-6623 (Office), 949-824-7260 (Lab)

Email: medhap@uci.edu. Website: https://www.pathaklab-uci.com/

EDUCATION

University of California, Berkeley - Berkeley, California

May 2006

Ph.D., Biophysics

National Centre for Biological Sciences - Bangalore, India

December 2000

M.Sc., Life Sciences (Neuroscience)

St. Xavier's College - Ahmedabad, India

July 1996

B.Sc. Biochemistry & Chemistry

RESEARCH POSITIONS

University of California, Irvine - Irvine, California

Assistant Professor, Department of Physiology & Biophysics Joint appointment in the Department of Biomedical Engineering

June 2016 – present

April 2019 onwards

Research area: Mechanical forces in development and repair at the molecular, cellular and organismal level

University of California, Irvine - Irvine, California

Assistant Researcher

April 2015 - May 2016

Research area: Piezo I in human neural stem cell mechano-regulation

University of California, Irvine - Irvine, California

Associate Specialist

January 2011 – March 2015

Collaborators: Francesco Tombola and Lisa Flanagan

Project: Physiology and biophysics of mechanically-gated and voltage-gated ion channels

Harvard Medical School - Boston, Massachusetts

December 2006 – December 2010

Postdoctoral Fellow

Mentor: David P. Corey.

Project: Mapping components of the inner ear hair cell transduction machinery

University of California, Berkeley - Berkeley, California

Postdoctoral Fellow Graduate student June 2006 – September 2006

August 2000 – May 2006

Advisor: Ehud Y. Isacoff

Thesis: Watching an ion channel at work: fluorescence measurements of ion channel dynamics

National Centre for Biological Sciences - Bangalore, India

August 1996 - July 2000

Advisor: Upinder S. Bhalla

Master's thesis: Development of a fiber-optic technique for fluorescence recordings

Madurai Kamraj University - Madurai, India

May - June 1996

Advisor: K. Veluthambi

Summer research project: Restriction mapping and subcloning of DNA B of Vigna mungo yellow mosaic

virus

St. Xavier's College, Ahmedabad, India

lune 1995 - May 1996

Advisor: Fr. Vincent J. Braganza

Undergraduate research project: Protoplast fusion and somatic embryogenesis of rice

PROFESSIONAL DEVELOPMENT TRAINING

HHMI Gilliam Mentorship Training, Howard Hughes Medical Institute and the University of Wisconsin's Center for the Improvement of Mentored Experiences in Research (CIMER) 10/1/2019 – 09/30/2020

EMBO Laboratory Leadership Course for Group Leaders, Stowers Institute, Kansas City, MO.

04/08/2019 to 04/13/2019

AAMC Early Career Women Faculty Leadership Development Seminar, San Diego, CA.

02/02/2019 - 02/05/2019

Faculty Success Program, National Center for Faculty Development & Diversity, Online.

08/26/2018 - 11/17/2019

Optical Microscopy and Imaging in the Biological Sciences, Marine Biological Laboratory, Woods Hole, MA.

09/07/2016 - 09/17/2016

Young Investigator meeting, Poovar, Kerala, India.

HHMI Gilliam Fellowship for Advanced Studies

02/24/2009 - 02/28/2009

9/1/2019 - 8/30/2022

Biology of the Inner Ear – Experimental and Analytical Approaches, Marine Biological Laboratory, Woods Hole, MA. 08/19/2007 – 09/01/2007

HONORS

HHMI Gilliam Fellowship for Advanced Study, Howard Hughes Medical Institute	2019
Chancellor's Award for Excellence in Undergraduate Research Mentoring, UCI	2018
ADVANCE Faculty Career Development Award, UCI	2018
Junior Faculty Networking Cohort, Journal of General Physiology	2017
Outstanding Paper of the year for Pathak et al. J.Gen. Physiol. (Cranefield award to senior author	2016
GSK Neuroscience Discovery Award, FASEB Ion Channel Regulation Conference	2015
Travel award: Force-Gated Ion Channels, Janelia Farms Research Campus	2015
The "Cahalan Buck" Research Accomplishments Award, UCI Dept. of Physiology & Biophysi	cs 2014
Helen Hay Whitney Postdoctoral Fellowship 200)8 – 2011
Travel award: Force-Gated Ion Channels, Janelia Farms Research Campus	2008
Travel award: Young Investigator Meeting, Poovar, India	2009
Travel award: Biology of the Inner Ear, MBL, Woods Hole, Massachusetts	2007
Travel award: Gordon Conference on Mechanotransduction & Gravity Signaling	2005
Junior Research Fellowship, National Centre for Biological Sciences, India (4 of 6000 applicants	,
199	6 – 2000
National Summer Research Fellowship, JNCASR, India	1996
Siddharth Bhatt Prize: all-round performance, St. Xavier's College, Ahmedabad, India	1996
LUMC Clinical Laboratories Research Fellowship, St. Xavier's College, Ahmedabad, India 199	95 – 1996

FUNDING

Active

Functional dynamics of Piezo I and Traction Forces in Tissue Repair	
Role: Principal Investigator	\$150,000 direct costs
NIH New Innovator Award (DP2) Building the brain: How mechanical forces shape human neural development Role: Principal Investigator. Impact score: 10 (1 percentile)	9/30/2018 – 6/30/2023 \$2,317,500 total costs
NIH R01 grant Piezo I in neural stem cell mechano-regulation Role: Principal Investigator	9/30/2018 – 6/30/2023 \$1,692,676 total costs
NSF Conference grant MechBio 2018: The Mechanome in Action. Role: Principal Investigator	7/1/2018 – 6/30/2020 \$37,663 total costs
NIH R13 Conference grant	7/25/2018 - 7/24/2020

MechBio 2018: The Mechanome in Action.

Role: Principal Investigator

Completed

UCI Schools of Medicine and Biological Sciences Pilot Funding
8/1/2017 – 1/31/2019

Molecular and imaging approaches to visualize mechanotransduction in human neural development \$50,000

Role: Principal Investigator.

Sue and Bill Gross Stem Cell Research Center Seed Grant, UCI 2/1/2017 – 7/31/2018

Piezo I in human neural stem cells

\$25,000

Role: Principal Investigator.

Committee on Research Grant, School of Medicine Seed Grant, UCI 7/1/2017 – 6/30/2018

Molecular Tools for Imaging Mechanics of Human Neural Development

\$10,000

Role: Principal Investigator.

National Institutes of Health R21 Tombola (PI) 2/1/2015 – 1/31/2018

Stretch-activated ion channels in human neural stem cell mechanotransduction \$275,000

Role: Co-Investigator.

UCI Center for Autism Research and Treatment Flanagan & Tombola (co-Pls) 7/2013 – 2/2015

Membrane biophysical properties and Ca2+ dynamics in stem cells and neurons from autism spectrum disorders. **Role:** Senior key personnel \$60,000

Benefunder 2015

Using Stem Cells to Repair the Damaged Brain \$4,010

Community Outreach Funding Role: Principal Investigator

SOM Faculty Research Grant Tombola (PI) 7/1/2011 – 5/31/2012

UCI Academic Senate Council on Research, Computing and Libraries

\$7,500

Biophysical and functional studies on novel mammalian mechanotransduction channels

Role: Co-Investigator

Helen Hay Whitney Fellowship Pathak (Pl) 4/1/2008 – 3/31/2011

Mapping components of the hair cell transduction machinery

\$138,000

Role: Principal Investigator

PUBLICATIONS (1564 citations through 10/2019, from Google Scholar)

Profile: http://scholar.google.com/citations?user=xY16hvgAAAA|&hl=en

- * denotes Equal Contribution.
- 17. Ellefsen KL*, Holt JR*, Chang A*, Nourse JL*, Arulmoli J, Mekhdjian A, Abuwarda H, Tombola F, Flanagan LA, Dunn AR, Parker I, **Pathak MM.** (2019). Myosin-II mediated traction forces evoke localized Piezo I Ca₂₊ flickers. *Communications Biology*. 2, Article number: 298. A previous version of the article is available on the *bioRxiv* server https://doi.org/10.1038/s42003-019-0514-3.

Discussed in: https://f1000research.com/articles/8-1486

- 16. Zhao C, Sun Q, Cao Y, **Pathak MM**, Lu X, Yang Q. (2019). Mechanosensitive Ion Channel Piezo I Regulates Adipose Inflammation and Systemic Insulin Resistance. Frontiers in Endocrinology. Jun 13;10:373.
- 15. Nourse JL and **Pathak MM.** (2017). How Cells Channel Their Stress: Interplay Between Piezo1 and the Cytoskeleton. Seminars in Cell and Developmental Biology. 2017 Nov; 71:3-12.

 Invited review article
- 14. **Pathak MM***, Tran T*, Hong L, Morris CE, Tombola F. (2016). The HvI proton channel responds to mechanical stimuli. *Journal of General Physiology*. 148(5):405-418.

- Recognized as the outstanding paper of the year by the Society of General Physiologists, through a Cranefield award to senior author, Francesco Tombola.
- 13. Arulmoli J, Wright HJ, Phan D, Sheth U, Botten GA, **Pathak MM,** Zarembinski TI, Yanni DS, Razorenova OV, Hughes CCW, Flanagan LA. (2016). Combination scaffolds of salmon fibrin, hyaluronic acid, and laminin for human neural stem cell tissue engineering. *Acta Biomaterialia*, 1;43:122-38.
- 12. Phan L*, Kautz R*, Arulmoli J, Kim I, Le DT, Shenk MA, **Pathak MM**†, Flanagan LA†, Tombola F†, Gorodetsky AA† (2016). Reflectin as a Material for Neural Stem Cell Growth. ACS Applied Materials & Interfaces. 13;8(1):278-84
 - † Corresponding authors.
- 11. Arulmoli J, **Pathak MM**, McDonnell LP, Nourse JL, Tombola F, Earthman JC, Flanagan LA. (2015) Static stretch affects neural stem cell differentiation in an extracellular matrix-dependent manner. *Scientific Reports*. 5: 8499.
- 10. **Pathak MM**†, Nourse JL, Tran T, Hwe J, Arulmoli J, Le DTT, Bernardis E, Flanagan LA, Tombola F†. (2014) Stretch-activated ion channel Piezo I directs lineage choice in human neural stem cells. *Proceedings of the National Academy of Sciences*. 111(45):16148-53.
 - † Corresponding authors.
- 9. Kim IH, Hevezi P, Varga C, **Pathak MM**, Hong L, Ta D, Tran CT, Zlotnik A, Soltesz I, Tombola F. (2014). Evidence for functional diversity between the voltage-gated proton channel HvI and its closest related protein HVRP1. *PLoS One*. 9(8):e105926.
- 8. Nourse JL*, Prieto JL*, Dickson AR, Lu J, **Pathak MM**, Tombola F, Demetriou M, Lee AP, Flanagan LA. (2014). Membrane biophysics define neuron and astrocyte progenitors in the neural lineage. *Stem Cells*. 32(3):706-16.
 - Featured Publication, Neural Cell News, September 18, 2013
- 7. Hong L, **Pathak MM**, Kim IH, Ta D, Tombola F. (2013). Voltage-sensing domain of voltage-gated proton channel HvI shares mechanism of block with pore domains. *Neuron*. 77(2):274-87.
 - Commentary: Kalia & Schwartz (2013). Common principles of voltage-dependent gating for Hv and Kv channels. Neuron. 77(2):214-6.
- 6. **Pathak MM*,** Yarov-Yarovoy V*, Roux B, Agarwal G, Kohout S, Barth P, Tombola F, Isacoff EY. (2007). Closing in on the resting state of the Shaker K+ channel. Neuron. 56(1):124-40. Selected as the "Featured article" on Neuron website.
- 5. Tombola F, **Pathak MM**, Gorostiza P, Isacoff EY. (2007). The twisted ion-permeation pathway of a resting voltage-sensing domain. *Nature*. 445(7127):546-9.
 - Faculty of 1000 recommendation, Exceptional (F1000 factor 3).
- 4. Tombola F, **Pathak MM**, Isacoff EY. (2006). How does voltage open an ion channel? *Annual Review of Cell and Developmental Biology*. 22:23-52.
- 3. Tombola F, Pathak MM, Isacoff EY. (2005). How far will you go to sense voltage? Neuron. 48:719-25.
- 2. Tombola F, **Pathak MM**, Isacoff EY. (2005). Voltage-sensing arginines in a potassium channel permeate and occlude cation-selective pores. *Neuron*. 45:379-88.
- 1. **Pathak MM**, Kurtz L, Tombola F, Isacoff EY. (2005). The cooperative voltage sensor motion that gates a potassium channel. *Journal of General Physiology*. 125:57-69.

 Cover article

Publication gap from 2008 to 2012 due to health problems that have since been resolved through medical and surgical treatment. Details available on request.

INVITED TALKS

- 1. International Society of Mechanobiology, Sydney, Australia. Planned for November 2020
- 2. European Calcium Society Meeting, Cork, Ireland. Planned for August 2020
- 3. Biophysical Society Conference on Molecular Biophysics of Membranes, Lake Tahoe. Planned for June 2020

- 4. NIH National Heart Lung and Blood Institute (NHLBI) Seminar Series, Bethesda, MA. Planned for April 2020
- 5. American Society for Biochemistry and Molecular Biology (ASBMB), San Diego, CA. Planned for April 2020
- 6. Workshop on Mechanobiology at Materials Research Society Fall Meeting, Boston, MA. *Planned for December* 2019
- 7. Invited talk at Materials Research Society Fall Meeting, Boston, MA. Planned for December 2019
- 8. UCI Department of Developmental and Cell Biology Seminar Series, Irvine, CA. October 2019
- 9. NIH NCCIH 20th Anniversary Symposium, NIH, Bethesda, MD. September 2019
- 10. NIH workshop on "Neurocircuitry of Force-Based Manipulations", NIH, Bethesda, MD. September 2019
- 11. Universidad Nacional Autonoma de Mexico, Queretaro, Mexico. September 2019
- 12. Nature Conference on Engineering Biology for Medicine, Duke University, Raleigh, NC. May 2019
- 13. UCI Department of Biological Chemistry Seminar Series, Irvine, CA. May 2019
- 14. Institute of Neuroscience, University of Tennessee Health Science Center, Memphis, TN. May 2019
- 15. UCI Campus-wide Cancer Symposium, UC Irvine, Irvine, CA. May 2019
- 16. Western University Departmental Seminar Series, Pomona, CA. April 2019.
- 17. Annual Meeting of the Biophysical Society Meeting, Mechanobiology subgroup, Baltimore, MD. March 2019.
- 18. UCSD Quantitative Biology Seminar Series, San Diego, CA. February 2019.
- 19. Advanced Imaging Methods Workshop, UC Berkeley, Berkeley, CA. January 2019.
- 20. Force-gated Ion Channels Conference at Max Delbruck Center, Berlin, Germany. October 2018.
- 21. Department of Genetics, Cell Biology, and Development Seminar Series, University of Minnesota, Minneapolis, MN. September 2018.
- 22. UCI 3rd Annual Joint Faculty Retreat, UCI School of Medicine and School of Biological Sciences, UC Irvine, Costa Mesa, CA. April 2018.
- 23. NSF-funded seminar series for graduate students "Oh! The places you will go...with a PhD in science", Department of University of Tennessee, Knoxville, TN. April 2018.
- 24. UCI Center for Complex Systems Biology Annual Retreat, Los Angeles, CA. March 2018.
- 25. FASEB Ion Channel Regulation conference, Steamboat Springs, CO. July 2017.
- 26. UCI 2nd Annual Joint Faculty Retreat, UCI School of Medicine and School of Biological Sciences, UC Irvine, Silverado, CA. May 2017.
- 27. Biomechanics and Mechanobiology seminars series, Dept. of Mechanical and Aerospace Engineering, University of California at San Diego, San Diego, CA. May 2017.
- 28. MechBio Symposium: Putting Together the Cell Mechanome. University of California at San Diego, San Diego, CA. August 2016.
- 29. Department of Cell & Molecular Physiology Seminar Series, Loyola University Medical School, Chicago, IL. May 2016.
- 30. Institute of Molecular and Cell Biology, Singapore. February 2016.
- 31. Mechanobiology Institute, Singapore. February 2016.
- 32. FASEB Ion Channel Regulation conference, Big Sky, MO. July 2015.
- 33. Force-gated Ion Channels Meeting. HHMI Janelia Research Campus, Ashburn VA. March 2015.
- 34. Center for Autism Research and Treatment Monthly Seminar Series, UC Irvine, CA. January 2015.
- 35. Sue & Bill Gross Stem Cell Research Center Seminar series, UC Irvine, CA. Spring 2014 Seminar Series. May 2014.
- 36. Harold Lecar Memorial Symposium. UC Berkeley, CA. May 2014.
- 37. Tata Institute of Fundamental research (TIFR), Mumbai, India. October 2010.
- 38. National Centre for Biological Sciences, Bangalore, India, November 2006.
- 39. National Centre for Biological Sciences, Bangalore, India, September 2004.
- 40. St. Xavier's College, Ahmedabad, India, September 2004.

PROFESSIONAL MEMBERSHIPS

Biophysical Society
Harvard Women in Neuroscience
Association for Research in Otolaryngology
American Association for the Advancement of Science
International Society for Stem Cell Research
Biomedical Engineering Society

2001 – present
2007 – 2010
2007 – 2016
2007 – present
2013 – present
2014 – present

TEACHING EXPERIENCE

Guest lecturer, Cardiac Mechanobiology, Biomedical Engineering Graduate Course

2019

University of California, Irvine - Irvine, California

Instructor, Medical Physiology, Medical Students Curriculum

2017 - Present

University of California, Irvine - Irvine, California

Instructor, Scientific Writing Graduate Course

2018

University of California, Irvine - Irvine, California

Instructor, Physiology of Ion Channels Graduate Course

2012 - Present

Marine Biological Laboratory - Woods Hole, Massachusetts

Teaching Assistant, Biology of the Inner Ear Summer Course

2009

Harvard Medical School - Boston, Massachusetts

Teaching Assistant, Neuroscience course for Graduate and Medical students

2008

University of California, Berkeley - Berkeley, California

Graduate Student Instructor, Introduction to Neuroscience Graduate Student Assistant, Biophysical Neurobiology 2003 2001 – 2003

National Centre for Biological Sciences - Bangalore, India

Teaching Assistant, Basic Neurobiology

1999

Teaching Assistant, Hands-on Workshop on Emerging Trends in Neurophysiology

1999

STUDENTS MENTORED

Medical Students

0	Truc Tran, Pennsylvania State University, Hershey, PA	Summer 2017
0	Dai Trang Thi Le, University of Central Florida	Summer 2016

- Recipient of a UCF research grant for work done in the lab

Graduate Students

0	Alan Ly, UCI Cellular & Molecular Biosciences Graduate Student	2019 - Present
0	Isabel Rivera, UCI Inter-departmental Program in Neurosciences Rotation Student	Winter 2019
0	Nihal Eltom, UCI Inter-departmental Program in Neurosciences Rotation Student	Fall 2018
0	Jesse Holt, UCI, Physiology & Biophysics	2017 - Present

- HHMI Gilliam Diversity Fellow
- Eugene Cota Robles Diversity Fellow
- Recipient of a \$10,000 opportunity award from the Center for Multiscale Cell Fate at UCI, for a new collaborative project with Dr. Wei-Zheng Zeng (Dr. Ardem Patapoutian's lab) in The Scripps Research Institute.
- Recipient of a \$2,500 travel award for a new collaborative project with Dr. Rizal Hariadi's lab at Arizona State University

0	Chloe Saras Thangavelu, Cellular & Molecular Biosciences Rotation Student	2018 - 2018
0	Haley Masters, UCI, Cellular & Molecular Biosciences Rotation Student	2017 - 2017
0	David Au, UCI, Cellular & Molecular Biosciences Rotation Student	2017 - 2017
0	Chang Zhao, UCI Masters in Biotechnology	2015 - 2016
0	Rylan Katz, UCI, Chem. Engg. & Material Sci. (Primary Mentor: Alon Gorodetsky)	2014 - 2016
0	Janahan Arulmoli, UCI, Biomedical Engineering (Primary Mentor: Lisa Flanagan)	2013 – 2016
0	Iris Kim, UCI, Physiology & Biophysics (Primary Mentor: Francesco Tombola)	2011 – 2014
0	Graduate student mentor for 4 Ph.D. rotation students, UC Berkeley	2002 - 2006

Post-baccalaureate students

Esmeralda Izqueirdo, UC Riverside

2017 - 2018

		Medha M. Pathak
	NII NI LIGI	
0	Nhu Nguyen, UCI	2015 - 2016
0	Dai Trang Thi Le, UCI (currently medical student at University of Central Florida)	2014 – 2015
0	Jennifer Hwe, UCI (currently post-bac. pre-medical student at Charles Drew Univ.)	2013 – 2015
Unde	rgraduate students	
0	<u> </u>	Fall 2019 - present
0	Samantha Smith, UCI undergraduate research student	2018 – present
	- UCI Undergraduate Research Opportunities Program grant awardee (2019	
0	Harsh Bhavsar, UCI undergraduate research student	2018 – present
	- UCI Undergraduate Research Opportunities Program grant awardee (2019	
0	Brian Nguyen, UCI undergraduate research student	2017 – 2018
0	Ladelyn Boonlua, UCI undergraduate research student	2017 – 2018
	- UCI Undergraduate Research Opportunities Program grant awardee (2017	
0	Nguyen Minh Truong, UCI undergraduate research student	2017 – 2018
	- UCI Undergraduate Research Opportunities Program grant awardee (2019	
	- UCI Undergraduate Research Opportunities Program grant awardee (2018	
0	Huixun Du, UCI undergraduate research student	2017 – present
	- UCI Summer Undergraduate Research Program grant awardee (2018)	`
	- UCI Undergraduate Research Opportunities Program grant awardee (2018) 2017 – 2018
0	Klara Zakery, UCI undergraduate research student Adrija Chakrabarty, UCLA undergraduate research student	Summer 2017
0	Juhi Gopal, UCI undergraduate research student	2016 – 2018
0	Hamid Abuwarda, UCI undergraduate research student	2016 – 2018
O	- Co-author on a research article	2016 – 2016
	 Robert Ernst Prize for Excellence in Research in the Biological Sciences (20 	18)
	- UCI Excellence in Research awardee (2018)	10)
	- UCI Summer Undergraduate Research Program grant awardee (2017)	
	- UCI Undergraduate Research Opportunities Program grant awardee (2017))
0	Colleen Chau, UCI undergraduate research student	2015 – 2016
	- UCI Undergraduate Research Opportunities Program grant awardee (2016	
	- UCI Summer Undergraduate Research Program grant awardee (2018)	,
0	Christina Le, UCI undergraduate research student	2014 – 2016
	- UCI Undergraduate Research Opportunities Program grant awardee (2015	, 2016)
	- UCI Summer Undergraduate Research Program grant awardee (2015)	•
0	Julie Self, Bates College	Summer 2015
0	Truc Tran, UCI undergraduate research student	2011 – 2014
	- Co-author on two research articles	
	- UCI Excellence in Research awardee (2012)	
	 UCI Undergraduate Research Opportunities Program grant awardee (2012) 	, 2013)
	- UCI Summer Undergraduate Research Program grant awardee (2013)	
0	Chau Tran, UCI undergraduate research student	2013 – 2014
	- Co-author on a research article	
0	Heather Newman, UC Berkeley undergraduate research student	2004 – 2005
0	Lisa Kurtz, UC Berkeley undergraduate research student	2001 – 2004
	- Co-author on a research article	
High s	school students	
0		ust 2019 - present
0		une 2019 - present
0	Ally Mendelhall, Tesoro High School, Las Flores, CA	Summer 2017
0	Adam Clements, El Toro High School, Lake Forest, CA	2016 - 2017
0	Jessica Parpana, Tesoro High School, Las Flores, CA	Summer 2016
0	Namita Prakash, Sage Hill School, Newport Coast, CA	2015-2016
0	Adrija Chakrabarty, Troy High School, Fullerton, CA	Summer 2015
0	Zac Morton, Tesoro High School, Las Flores, CA	2014 - 2015

PROFESSIONAL ACTIVITIES

Manuscript reviewer: ACS Nano, Advanced Science, Cell, eLife, F1000 Reviews, Frontiers in Pharmacology of Ion Channels and Channelopathies, Journal of General Physiology, Nature Communications, Plos One, PNAS, Scientific Reports.

Panelist, Nature Conference Panel Discussion on How to Design a Scientific Project: Hypothesis Generation, Study Design, and How to Deal with Potential Failure. May 2019

bioRxiv Affiliate 2019 - present

Journal of General Physiology Editorial Advisory Board Member

2019 - 2021

Conference chair – The Mechanome in Action, July 26-27 2018, UC Irvine.

2018

Ad hoc reviewer - Neurotransporters, Receptors, Channels and Calcium Signaling (NTRC) study section, National Institutes of Health. 2018

Ad hoc grant reviewer - Human Frontier Science Program

2017

Member – Early Careers Committee of the Biophysical Society Organized workshops at Biophysical Society Meetings:

2013 - 2019

"Setting up your lab as an Assistant Professor"

2016

"Grant Opportunities for Early Career Faculty" "Moving on from your Postdoc Position: Negotiating the Transition" 2015

Abstract Reviewer - Biomedical Engineering Society Annual Meeting, Tampa, Florida

2014

Panelist - Grant-writing workshop organized by the UCI Postdoc Association

2015 2015

Ad hoc consultant - Global Biological Standards Institute

2015

Judge - Poster Competition, American Society Cell Biology Annual Meeting, Philadelphia, PA

2014

Workshop Organizer - "Biosciences in India: Directions, Challenges and Opportunities" An Early Careers Committee Workshop at the Biophysical Society Meeting. San Francisco, California 2010

Workshop Organizer - "Wanted by India: A discussion meeting on academic career options in the Biosciences", UCSF, San Francisco, California 2009

Career Workshop Panelist - Careers in Bioscience and Biotechnology Workshops:

2004

St. Xavier's School, Ahmedabad, India

L.A.D College of Women, Nagpur, India

Executive Committee & Admissions Committee Member - Berkeley Biophysics Group 2001 – 2002

MEDIA COVERAGE

UCI researcher awarded NIH Director's New Innovator Award. 2 Oct 2018

https://www.eurekalert.org/pub releases/2018-10/uoc--ura093018.php

Interview: Neuroscientist Medha Pathak and the "Mechanome in Action". 16 Nov 2018

https://oscillations.net/2018/11/16/neuroscientist-medha-pathak-and-the-mechanome-in-action/

New PI Slack, PI of the Month. 15 Jan 2019

https://newpislack.wordpress.com/2019/01/13/medha-pathak-ph-d/

INSTITUTIONAL SERVICE

Service to the Department

Faculty Recruitment Committee, Tissue Engineering, FHLRE Initiative with the SCRC	2018 – 2019
Faculty Recruitment Committee, Professor-in-Residence faculty position	2018 – 2019
Faculty Recruitment Committee, Vision Cluster, SOM Cluster Hiring Initiative	2017 – 2018
Faculty Recruitment Committee, Neurodevelopment Cluster, SOM Cluster Hiring Initiative	e, 2016 – 2018
SOM Research Computing Committee, Department representative	2017

2016 –

Co-ordinated talks, workshops panel discussions

- Writing workshop for grad students and postdocs
- o Panel discussion on how to communicate with your local elected official on science policy
- o Department research seminar

Service to the Sue and Bill Gross Stem Cell Center

Faculty Recruitment Committee, Tissue Engineering, FHLRE Initiative with Physiology	dept, 2018 - 2019
Shared Resource Committee Member	2018-2019
CRISPR Core Committee Member for hiring Core facility manager	2018
Panel Discussion on How to Communicate With Your Local Congressperson (join	t event with the
Department of Physiology), Event co-ordinator	2017
Search committee member for hiring core facility manager	2017
Poster Judge, Stem Cell Awareness Day Symposium	2016
Faculty Recruitment Initiative, contributed to writing the proposal for the Faculty Hir	ring for Leveraged
Research Excellence proposal	2016

Service to graduate programs

Cellular and Molecular Biology Graduate Program, Co-chair, Preliminary Exam Commi	ttee 2019
Cellular and Molecular Biology Graduate Program, Faculty Interviewer	2019
Center for Complex Biological Sciences, Panelist, Applying for Fellowships and Grants	2019
Medical Scientist Training Program (MSTP) Admissions Committee, Member	2018 - 2019
Behrens Graduate Fellowship Interview Committee Member	2018
Cellular and Molecular Biology Graduate Program, Prelim exam Committee Member	2018
Cellular and Molecular Biology Graduate Program, Faculty Interviewer	2017
Inter-departmental Neuroscience Program, Faculty Interviewer	2017
Cellular and Molecular Biology Graduate Program, Prelim exam Committee Member	2017
Cellular and Molecular Biology Graduate Program, Admissions Committee Member	2016 - 2017