CURRICULUM VITAE

May 29, 2024

VIVEK BHALLA, MD, FASN, FAHA
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EDUCATION

9/90-5/94	BS	Electrical Engineering / Computer Science University of California, Berkeley
9/94-6/98	MD	University of California, San Diego San Diego, CA

TRAINING

6/98-6/99	Internship, Internal Medicine Harbor-UCLA Medical Center, Los Angeles, CA
7/99-6/01	Residency, Internal Medicine Harbor-UCLA Medical Center, Los Angeles, CA
7/01-6/03	Fellowship, Clinical Nephrology University of California, San Francisco, San Francisco, CA
7/03-8/05	Fellowship, Basic Science Nephrology University of California, San Francisco, San Francisco, CA

ACADEMIC APPOINTMENTS

9/1/05-12/31/07	Adjunct Assistant Professor, Department of Medicine University of California, San Francisco, San Francisco, CA
1/1/08-8/31/08	Acting Assistant Professor, Department of Medicine / Nephrology Stanford University School of Medicine, Stanford, CA
9/1/08-8/31/13	Assistant Professor-UTL, Department of Medicine / Nephrology Stanford University School of Medicine, Stanford, CA
9/1/13-5/31/20	Assistant Professor-MCL, Department of Medicine / Nephrology Stanford University School of Medicine, Stanford, CA
6/1/20-pres.	Associate Professor-MCL, Department of Medicine / Nephrology Stanford University School of Medicine, Stanford, CA

NON-ACADEMIC APPOINTMENTS

9/12-12/22	Director, Pre-clinic Course- Renal Physiology Stanford University School of Medicine, Stanford, CA
6/14-pres.	Director, American Heart Association-certified Stanford Hypertension Center Stanford Health Care, Stanford, CA

HONORS AND AWARDS

1992-1994	Tau Beta Pi, Engineering Honors Society, UC Berkeley
1992-1994	Eta Kappa Nu, Electrical Engineering Honors Society, UC Berkeley
1994	Phi Beta Kappa, UC Berkeley
1994	Graduation with Honors, UC Berkeley
1995	Pre-Clinical Scholarship, US Dept. HHS
2000	Solomon Scholars Resident Research Award, UC Los Angeles
2003	Fellow, American Society of Nephrology (ASN)
2006	Excellence in Small Group Instruction, Nominee, UC San Francisco
2007	Teaching Awardee, Halie T. Debas Academy of Medical Educators, UC San Francisco
2012	Henry J Kaiser Family Foundation, Excellence in Preclinical Teaching, Stanford University
2017	Fellow, American Heart Association (AHA)
2017	School of Medicine Award for Outstanding Lecture / Presentation, Stanford Medicine
2022	Member, American Society of Clinical Investigation
2022	Henry J. Kaiser Family Foundation Teaching Award – Preclinical Instruction, Nominee
2024	Oscar Salvatierra Award for Exceptional Service to Stanford Medical Students and the School of Medicine

LICENSES, CERTIFICATIONS, ETC.

1999	Medical Board of California (License No. A070125)
1999	Drug Enforcement Agency (DEA No. BB6643109)
2001-2023	American Board of Internal Medicine, Specialty- Internal Medicine #205268
2001	Spanish Language Proficiency Exam, San Francisco Department of Public Health
2002	Medicare UPIN No. H60357
2003-pres.	American Board of Internal Medicine, Subspecialty- Nephrology #205268
2004	Advanced Cardiac Life Support Program, National Cognitive and Skills Examination
2015	American Society of Hypertension
2019	Stanford Leadership Development Program
2024	SHC Medical Director Leadership Compass Program

CLINICAL RESPONSIBILITIES

2001-2003	Fellow, Clinical Nephrology

2005-2007 Faculty, San Francisco General Hospital-Inpatient Nephrology Consult Service, 4 weeks
Outpatient Nephrology Clinic, weekly
2008-pres. Faculty, Stanford Hospital & Clinics
Inpatient Nephrology Consult Service, 6-8 weeks
Outpatient Nephrology Clinic, weekly

TEACHING and MENTORING

Formal Teaching

2004-2007 Renal Section, Organs Block 1st Year Medical Students Small Group Discussant
2004-2006 Mechanisms of Disease 4th Year Medical Students Small Group Discussant
2005-2007 Medical Intern Lecture Series Organizer / Discussant
2006-2007 "Clinical Evaluation of Body Volume: Edematous States"
"Osmolality and Sodium Disorders", 1st Year Medical Students Class Lecturer
2006-pres. Nephrology Fellows – Core Curriculum, UC San Francisco, Stanford University
"Diabetic Kidney Disease", "Cystic Kidney Disease", "Glomerular Disease", "Ingestions and the Kidney", "Hypertension"; Electrolyte Club Presentations, Stanford University
2007-2010 Endocrinology Fellows – Core Curriculum, UC San Francisco
"Diabetic Kidney Disease"
2016-pres. Endocrinology Fellows – Teaching Conference, Stanford University
"Diabetic Kidney Disease"
2008-pres. Stanford Housestaff Lectures, "Diabetes and Kidney Disease"
2008-2009 Practice of Medicine – Clinical Reason Sessions, 2nd Year Medical Students
Core Faculty Discussant
2009-pres. Human Health and Disease 222- "Introduction to Body Fluid Compartments"
Human Health and Disease 222- "Regulation of Water Balance"
Human Health and Disease 222- "Hyponatremia and Hypernatremia"
Human Health and Disease 222- "Sodium Balance, Diuretics, and Diet"
Human Health and Disease 222- "Application of the Steady-State Principle"
Human Health and Disease 222- "Review Session- Renal Physiology"
Class Lecturer, 2nd year Medical Students
2019-pres. Science of Medicine 222- "Nephrotic and Nephritic Syndromes"
Class Lecturer, 2nd year Medical Students
2010-2012 Co-Director, Pre-clinic Course- Human Health and Disease 222, Renal / Urinary block
2012-2022 Director, Pre-clinic Course- Human Health and Disease 222, Renal / Urinary block
2010-pres. Bio 199X, Faculty Instructor
2013 Stanford Biodesign Fellowship Lecture Series, "Diabetes and Kidney Disease"
2015-pres. Human Health and Disease 221- "Hypertension"
2017-pres. Cardiology Fellows – Teaching Conference, Stanford University
"Hypertension- General Principles", "Resistant Hypertension"
2018-pres. Physician Assistant Lecture Series, Stanford University, "Hypokalemia"

Predoctoral Students Supervised

2003-2005	John Siu	UC Berkeley
2008-2009	Xiaoyu Xia	UC Los Angeles
2010-2011	Jared Wong	MIT
2010-2011	Elizabeth Change Wendel	Stanford University
2011-2013	Donald Goens III	Stanford University
2012-2014	Aishu Venkataraman	Stanford University
2015-2016	Sonali Iyer	UC Berkeley
2017-2018	Vianna Vo	Stanford University
2017	Angela Balistrieri	Harvard University
2017	Claire Wang	Stanford University
2017	Madhav Nekkar	UC Berkeley
2017-2019	Arvind Muruganantham	Baylor University
2018	Ragwa Elsayed	San Jose State University
2018-2021	Demetri Maxim	Stanford University
2018-2019	Hazen Stribling	UC Berkeley
2020-2021	Thalia Le	Emory University
2020-2021	Manav Shah	Hofstra University
2020-2021	Kole Joachim	Whittier College
2021-2022	Xiao Ran Luo	UC Berkeley
2022	Shiraz Harel	Bryn Mawr University
2022	Kamala Varadarajan	UC Santa Barbara
2022	Adyant Shankar	Stanford University
2023	Arianna Mejia	University of Pennsylvania

Graduate Students Supervised

2005-2006	Marjolein Wijngaarden	Leiden University Medical Center (Netherlands)
2014-2017	Fariborz Soroush	Temple University (co-Mentor)
2015-2017	Inbar Raber	Stanford University School of Medicine
2019-2021	Victoria Nasci	Medical College of Wisconsin
2021-2022	Alondra Valencia	Stanford University School of Medicine
2021-2022	Demetri Maxim	Stanford University
2022	Enyinnaya Kamalu	Howard University

Postdoctoral Fellows Supervised

2008-2010	Sindhu Chandran	Stanford University
2008-2010	Jyothi Jayaram Vishnumangalam	Stanford University
2009-2011	Suresh S. Palaniyandi	Stanford University (co-Mentor)
2010-2011	Puneeth Kumar Adishesha	Stanford University
2010-2012	Robert Bradley McClellan	Stanford University
2010-2014	Mariana Labarca	Stanford University
2013-2021	Xiaoyi Zheng	Stanford University
2013-2014	Evan Hall	Stanford University

2013-2018	Jonathan Nizar	Stanford University
2014-2015	Gabriela Velez	Stanford University
2014-2015	Elisabeth Walczak	Stanford University
2015-2017	Aram Krauson	Stanford University
2017-2019	Gilad Jaffe	Stanford University
2018-2020	Daniela Zanetti	Stanford University (co-Mentor)
2019-2020	Zachary Gray	Stanford University
2019-2021	Pablo Garcia	Stanford University (co-Mentor)
2019-2020	George Kunkel	Stanford University
2019-2023	Ying Shi	Stanford University
2018-2020	Alexandre Gaudet	Pasteur Institute, Lille, INSERM Stanford University
2019-2021	Rebecca Boyle	Stanford University
2020-pres.	Mario Funes-Hernandez	Stanford University
2021-pres.	Cory Sean Smith	Stanford University
2021-pres.	Yogita Sharma	Stanford University
2022-pres.	Carmen Cajina	National Autonomous University of Nicaragua (UNAN-Managua)
2022-pres.	Robin Lo	Stanford University
2023-pres.	Jia Wei Tan	Stanford University
2024-pres.	Haochen Guan	Stanford University

PRIOR and CURRENT TRAINEES

Predoctoral Trainees (28)	*Dates*	*Current (or most recent) Appointment*
#, †Arianna Mejia	2023	Undergraduate student, University of Pennsylvania
Adyant Shankar	2022	Master's student, Bioinformatics, Stanford University
#Kamala Varadarajan	2022	Clinical Research Coordinator, Stanford University
#Shiraz Harel	2022	Clinical Research Coordinator, Stanford University
†Enyinnaya Kamalu	2022-pres.	Medical student, Howard University
Demetri Maxim	2018-2022	Master's student, Stanford University; Founder, CEO, Nephrogen
#Xiao Ran Luo	2021-2022	Medical student, Duke-NAS
#, †Alondra Valencia	2021-2022	Medical student, Stanford University
Kole Joachim	2020-2021	Medical student, USC
Manav Shah	2020-2021	Medical student, Hofstra University
#Thalia Le	2020-2021	Medical student, Drexel University
#,†Victoria Nasci	2019-2021	Postdoctoral Fellow, Vanderbilt University
Hazen Stribling	2018-2019	Undergraduate student, UC Berkeley
#Ragwa Elsayed	2018	Product Designer, Natera Genetics
Arvind Muruganantham	2017-2019	Undergraduate student, Baylor University, President's Gold Scholarship
#Vianna Vo	2016-2018	Undergraduate student, Stanford University
#Angela Balistieri	2017	Undergraduate student, Harvard University

Madhav Nekkar	2017	Undergraduate student, UC Berkeley; Regents' Scholar, Chancellor's Scholar; 1st year Medical student, Columbia University
#Claire Wang	2017	Undergraduate student, Stanford University
#Inbar Raber, MD	2015-2017	Cardiology Fellow, Beth Israel Deaconess Medical Center, Boston, MA
Fariborz Soroush, PhD (co-Mentor)	2014-2017	Postdoctoral Fellow, Children's Hospital of Philadelphia; Operations Manager, WuXi Advanced Therapies
#Aishu Venkataraman, MD	2012-2014	Headache Fellow, Baylor College of Medicine, Pediatric Neurology
†Donald Goens, MD	2011-2013	Gastroenterology Fellow, University of California, San Diego
Jared L. Wong, BS	2010-2011	BS at Massachusetts Institute of Technology; Software Engineer, Figma
#Elizabeth C. Wendel, MD	2010-2011	Medical student, Harvard University; Urologist, Piedmont Healthcare
#Xiaoyu Xia, PhD	2008-2009	Precision Medicine Project Manager, City of Hope
#M.Wijngaarden,MD,PhD	2005-2006	Dept of Medicine, Leiden Univ, Netherlands
John Siu, MD	2003-2005	Medical student, University of Wisconsin; Anesthesiology, Washington Hospital-Fremont

Postdoctoral Trainees (27)	*Dates*	*Current (or most recent) Appointment (*, tenure-track appointment)*
#Haochen Guan	2024-pres.	Visiting Postdoctoral Scholar, Stanford University
#Jia Wei Tan	2023-pres.	Nephrology Fellow, Stanford University
Robin Lo	2022-pres.	Nephrology Fellow, Stanford University
#,†Carmen Lorena Cajina Aguirre, MD	2022-pres.	Internal Medicine Resident, University of Kansas
#Yogita Sharma, PhD	2021-pres.	Postdoctoral Fellow, Stanford University
Cory Sean Smith, MD	2021-pres.	Hospitalist, Internal Medicine
†Mario Funes Hernandez, MD	2020-pres.	4th year Nephrology Fellow, Chief Fellow, Stanford University, Kidney Transplantation, AHA Diversity Awardee, SFRN Health Tech
#Rebecca Boyle, PA-C	2019-2021	Physician Assistant, Stanford HealthCare
Alexandre Gaudet, MD, PhD	2018-2020	*Assistant Professor, Med / Pulmonary Critical Care, INSERM
#Ying Shi, PhD	2019-2023	Postdoctoral Fellow, Stanford University
†Pablo Garcia, MD (co-Mentor)	2019-2021	Assistant Professor of Medicine / Nephrology, Univ. of New Mexico
Zachary Gray, MD	2019-2020	Attending Hospitalist, Stanford University
†George H. Kunkel, PhD, MPH	2019-2020	Postdoctoral Fellow, Stanford University

#Daniela Zanetti, PhD (co-Mentor)	2018-2020	Marie Curie Postdoctoral Fellow, at the Institute of Genetic and Biomedical Research (IRGB) of the National Research Council (CNR), Sardinia, Italy.
Gilad M. Jaffe, MD	2017-2019	Pulmonology, University of California San Diego
Jonathan M. Nizar, MD	2013-2018	*Assistant Professor, University of Iowa School of Medicine
Aram Krauson, PhD	2015-2017	Research Scientist, Massachusetts General Hospital Research Institute
#Elisabeth Walczak, PhD	2014-2015	Acting Director, Product Development, Scale Biosciences
#, †Maria G. Velez, MD, PhD	2014-2015	Attending Physician, Nephrology, Denver, CO
Xiaoyi Zheng, PhD	2013-2021	Research Scientist, BriaCell
Evan Hall, MD, M. Phil	2013-2014	*Assistant Professor, Hematology / Oncology, Fred Hutch Cancer Center
#,†Mariana Labarca, PhD	2010-2014	Postdoctoral Fellow, Pontifical Catholic University of Chile
Robert B. McClellan, MD	2010-2012	Assistant Professor of Pediatrics, University of Tennessee Erlanger
Puneeth Adishesha, PhD	2010-2011	Assistant Professor, Bhagavat Memorial Mahajana P.G. Centre, Mysore, India
Suresh Palaniyandi, PhD (co-Mentor)	2009-2011	*Assistant Professor, Hypertension/Vascular Research, Wayne State University
#Sindhu Chandran, MBBS	2008-2010	*Associate Professor of Medicine, University of California, San Francisco
#J. Vishnumangalam, PhD	2008-2010	Staff Scientist, Team Lead, Accellix

#Woman; †Underrepresented Minority or Disadvantaged

Prior Fellows/Trainees

Predoctoral Fellows (from 26 total)

Demetri Maxim
Stipend: Stanford University SPARK grant
2018-2022
Mr. Maxim performed an independent study project in the Bhalla laboratory to test whether CRISPR/Cas9-mediated gene editing of the primary mutation in ADPKD cysts is sufficient to rescue a cystic phenotype in human ADPKD cyst-derived cultures. He has received funding for translational research projects and completed a Master's in Biology at Stanford University. Demetri also was awarded a prestigious Firestone Medal for excellence in undergraduate research and was instrumental in obtaining a Stanford SPARK grant to develop CRISPR-Cas9-mediated method for gene editing in humans. Mr. Maxim is founder and CEO of a start-up biotech company, Nephrogen, dedicated to gene editing therapies in the kidney, initially based on work we did together at Stanford.

Alondra Valencia
Stipend: NIH/NIDDK Summer Internship Program
2021-2022

Ms. Valencia performed an independent study project in the Bhalla laboratory to test whether CRISPR/Cas9-mediated gene editing of the Esm-1 gene locus regulates mRNA stability and/or protein translation. Alondra was awarded an NIDDK Summer Internship through the Stanford Diabetes Research Center and also received funding through the Med Scholars Program to continue her research through the academic year.

Donald Goens, MD
Stipend: NIH/NIDDK R01 supplement; AHA Western States' Predoctoral Training Award
2011-2013
Dr. Goens received an American Heart Association summer internship, completed his honors thesis as a Stanford undergraduate, and was supported by an NIH R01 minority supplement under the supervision of Dr. Bhalla. Dr. Goens worked on the interaction of Nedd4-2 and 14-3-3 *in vitro* and modeling hypertension due to the metabolic syndrome *in vivo*. Dr. Goens co-authored a manuscript and is now an internal medicine resident at the University of Chicago.

Marjolein Wijngaarden, MD, PhD
2005-2006
Under the direct supervision of Dr. Bhalla, Dr. Wijngaarden received training in molecular biology and biochemistry. As a result of her supervised rotation, Marjolein has presented work at international meetings and co-authored two manuscripts with Dr. Bhalla. She completed her MD and PhD physiology at Leiden University followed by her internal medicine residency at Leiden University. She is now pursuing fellowship training and further postdoctoral work.

Xiaoyu Xia, BS
2008-2009
Ms. Xia worked as a research assistant and also received training in mouse models of diabetes mellitus and regulation of ion transport in the kidney. She learned molecular biology and tissue culture techniques and co-authored one manuscript with Dr. Bhalla. She received her PhD in Biochemistry at the University of California Los Angeles in 2015 and is now a Precision Medicine Project Manager at City of Hope.

Postdoctoral Fellows (from 21 total)

Ying Shi, MD, PhD
Stipend: Fellowship Grant from the Larry L. Hillblom Foundation (2021-2023)
Dr. Shi completed her MBBS in Hubei University in China and pursued an additional Master's in Medicine program at Southern Medical University in Guangzhou, China, known for excellence in Nephrology research. She then obtained a highly competitive award from the Chinese Scholarship Council to conduct graduate work at the Kolling Institute at the University of Sydney, Australia under the direction of Drs. Carol Pollock, Xin-Ming Chen, and Chunling Huang on the role of RIPK kinases in renal fibrosis. She joined the Bhalla laboratory in October 2019 to study SGLT2-mediated glucose transport in the setting of obesity and insulin resistance. She utilized a single cell analysis approach from publicly available data and has a manuscript in preparation.

Alexandre Gaudet, MD, PhD

Stipend: Fulbright France-United States Commission Award ; France—Stanford Center for Interdisciplinary studies
2019-2020
Dr. Gaudet is a physician scientist specializing in pulmonary critical care. He completed his PhD in 2018 under the supervision of Drs. Phillippe Lassalle and Nathalie de Freitas-Caries at the Pasteur Institute, University of Lille (INSERM). He studied the role of Esm-1 in inflammation of acute lung injury. Dr. Bhalla served on his thesis committee, and he joined the Bhalla laboratory in the fall of 2019 as a Fulbright scholar to study methods for modulation of Esm-1 in diabetic kidney injury. His scholarly output was unfortunately curtailed due to the COVID-19 pandemic, but Dr. Gaudet transitioned to a bioinformatics-based analysis of Esm-1 function and published a first-author manuscript and one co-authored manuscript during his research fellowship. Dr. Gaudet has been recently promoted to a tenure-track position as Assistant Professor of Medicine.

Daniela Zanetti, PhD
Stipend: AHA Western States Affiliate Postdoctoral Fellowship Awardee 19POST34370115
Co-Sponsor
2018-2020
Dr. Zanetti was sponsored by Dr. Erik Ingelsson and Dr. Bhalla to study serum and urine biomarkers in the UK Biobank and their role in predicting cardiometabolic phenotypes. These studies employed state-of-the-art statistical methods including mendelian randomization. She has published her original work in *Hypertension*.

Jonathan Nizar, MD
Stipend: Spectrum Child Health Pediatric Research Fund Awardee (2013-2015);
AHA Western States Affiliate Postdoctoral Fellowship Awardee (2016-2017);
NIH/NIDDK K08, Mentored Clinical Scientist Award (2017-2022)
2013-2018
Dr. Nizar completed an MD at the University of California San Diego and performed bench research during his undergraduate and graduate career. He completed his clinical year of Nephrology fellowship and joined the Bhalla laboratory to continue work on the NIH R01 grant related to the mechanisms of salt-sensitive hypertension in insulin resistance. He has published three first author manuscripts: one in *JCI Insight* and two in *AJP-Renal Physiology* and has an additional editorial, review, and co-authorship. He is a tenure-track faculty member at the University of Iowa School of Medicine. In 2019, he was selected for an American Society of Clinical Investigation Young Physician Scientist Award.

Elisabeth Walczak, PhD
Stipend: NIH T32 Grant-T32DK007357, Stanford Adult and Pediatric Nephrology, Urology
2014-2015
Dr. Walczak completed a PhD in adrenal biology in the laboratory of Dr. Gary Hammer at the University of Michigan. She published her graduate work in *Molecular Endocrinology* and *Nature Reviews Endocrinology* on the role of Wnt signaling in adrenal progenitor cells, and she had expertise in cellular and molecular biology related to adrenal progenitor cells. Dr. Walczak worked on renal tubular modeling and the role of IGF-1. She co-authored one publication in the laboratory and received a fundable score on an F32 (21). Regrettably Dr. Bhalla was unable to retain Dr. Walczak in the laboratory, and she was recruited as a Field Application Scientist for Cellular Research in August 2015. She rose to the ranks of senior scientist at BD Biosciences and is now pursuing further opportunities in

biotechnology. Dr. Bhalla and Dr. Walczak continue to work together on single cell RNAseq and have a manuscript under review.

Xiaoyi Zheng, PhD
Stipend: Fellowship Grant from the Larry L. Hillblom Foundation (2014-2017)
Dr. Zheng joined the laboratory in 2013 as a recent graduate of Temple University. He has performed glomerular transcriptomic profiling from mice with differential susceptibility to diabetic kidney disease and published this work in *Plos One*. He also characterized the function and contribution of one of these genes *in vivo*. He presented his research at the American Society of Nephrology and Experimental Biology Annual Meetings, and his preliminary data helped to secure an NIH pilot grant for Dr. Bhalla. He has published his recent work in *Kidney360* and has one additional manuscript in preparation. In 2018, he successfully transitioned to a Research Scientist position in the Division of Nephrology within our laboratory and now is a research scientist for BriaCell.

Sindhu Chandran, MBBS
Stipend: NIH T32 Grant-T32DK007357, Stanford Adult and Pediatric Nephrology
2008-2010
Dr. Chandran received training in molecular biology and biochemistry under the direct supervision of Dr. Bhalla and with the benefit of training under the NIH T32 awarded to the Division of Nephrology. Specifically, she characterized the role of 14-3-3 proteins in ENaC-mediated sodium transport in the distal nephron. She has co-authored two manuscripts with Dr. Bhalla, including a first-author paper, in the *Journal of Biological Chemistry*. She is currently an Associate Professor in the Division of Nephrology at the University of California, San Francisco.

Current Fellows/Trainees

Predoctoral Fellows

Enyinnaya Kamalu
Stipend: Stanford-HBCU Summer Internship program
Mr. Kamalu has been performing an independent study project in the Stanford Hypertension Center to test whether Black patients have a larger blood pressure response to pharmacological inhibition of the mineralocorticoid receptor. He began this work through a Department of Medicine training program. Mr. Kamalu is continuing to receive career mentorship from Dr. Bhalla as he navigates medical school training at Howard University.

Adyant Shankar
Stipend: Stanford Immersion in Medicine Series
Mr. Shankar is an undergraduate student at Stanford University who shadowed me in our Stanford Hypertension Center clinical practice. He is currently a master's student in Bioinformatics at Stanford University

Postdoctoral Fellows (from 6 total)

Haochen Guan, MD
Stipend: Chinese Scholarship Council
2024-Current

Dr. Guan completed her Master's degree from Fudan University in 2019 and her MD from Shanghai Jaiotong University in 2022. During her graduate work she completed a project on autophagy-dependent Na-K-ATPase signaling in the setting of renal injury. During medical school she work on the role of DNA methyltransferases in glomerular disease. She joined the laboratory to study mechanisms of Esm-1-mediated prevention of diabetic kidney disease.

Robin Lo, MD
Stipend: NIDDK KUH U2C/TL1 LAUNCH program (Stanford)(2023-2024);
ASN Ben J. Lipps Fellowship Award (2024-2026)
2023-Current
Dr. Lo completed his MD training at the University of Connecticut in 2019 and internal medicine residency at the University of California Irvine in 2022. He joined the laboratory after his clinical nephrology fellowship in order to explore mechanisms of diuretic-induced tubular remodeling. Dr. Lo has received funding for his research from an NIH training grant and then an individual fellowship grant from the American Society of Nephrology.

Mario Funes-Hernandez, MD
Stipend: AHA Diversity Fellowship for Strategic Focused Research Network- Health Tech
Dr. Funes is a second-year nephrology fellow at the Stanford University School of Medicine. He is currently serving as Chief fellow. Within the Stanford Hypertension Center and under the supervision of Dr. Bhalla, he has published one review article in *Journal of Human Hypertension*. He is also enrolled in a Masters in Epidemiology curriculum and is receiving didactic training in digital health applications.

Yogita Sharma, PhD
Stipend: Maternal and Children's Health Research Institute (Stanford) (2023-2024)
2021-Current
Dr. Sharma completed her PhD in 2020 under the supervision of Dr. Alka Rao within the Protein Science and Engineering division of the Council of Scientific and Industrial Research-Institute of Microbial Technology (CSIR-IMTECH). She identified and characterized a novel glycosyltransferase (S/O-HexNActransferase) in prokaryotes. She performed both functional and structural studies and helped to develop a novel database for prokaryotic glycosyltransferases. Dr. Sharma joined the laboratory in November 2021 to characterize the N-linked glycosylation of human Clckb and its mechanism of regulation of channel function in the kidney.

Jia Wei Tan, MD
Stipend: T15 LM007033-41, Department of Biomedical Data Science Graduate Program
2024-Current
Dr. Tan completed her Doctor of Medicine from the UCSI University School of Medicine in Kuala Lumpur, Malaysia. During her medical training, Dr. Tan completed a research internship at Brigham and Women's Hospital under the mentorship of Dr. Gordon Williams, Division Chief of Endocrinology and Professor of Medicine at Harvard University. Dr. Tan studies the role of renin and aldosterone in primary and secondary forms of hypertension. She is performing post-hoc secondary analyses from the CORAL trial and will analyze the predictive value of measurements of components of the renin-angiotensin-aldosterone system from baseline samples. She is also interested in developing tools to quantify aldosterone sensitivity. For this work, she will utilize responses to mineralocorticoid receptor

antagonists in SPRINT, the largest, prospective collection of data on patients treated with this class for hypertension.

Informal Teaching

2001-2002 Teaching of UCSF Students / Residents on Nephrology Consult Service
Case Conference / Journal Club presentations for Division of Nephrology

2005-2007 Teaching of UCSF Students / Residents / Fellows on Inpatient Consult Service
Teaching of UCSF Students / Residents / Fellows in General Nephrology Clinic
Case Conference / Journal Club presentations for Division of Nephrology

2008-pres. Teaching of Stanford Medical School Students / Residents / Fellows on Inpatient Consult Service / Case Conferences / Journal Club presentations for Division of Nephrology, Department of Medicine / Hypertension Center Case Conferences

Informal Teaching through Professional Societies

2014-pres. American Society of Nephrology Annual Meeting, Kidney STARS Mentor
2016-pres. Posters & Presenters, Networking with a Mentor, Experimental Biology Annual Meeting

Teaching Awards

2006 Excellence in Small Group Instruction, Nominee (1st year medical students, UCSF)
2007 Excellence in Teaching Award, Halie T. Debas Academy of Medical Educators
2012 Henry J Kaiser Family Foundation Award for Excellence in Preclinical Teaching, Stanford University School of Medicine
2017 Outstanding Lecture/Presentation, Stanford University School of Medicine
2024 Oscar Salvatierra Award for Exceptional Service to Stanford Medical Students and the School of Medicine

PUBLICATIONS (in chronological order)

Original Peer-Reviewed Articles (39)

1. **Bhalla V**, Nast CC, Stollenwerk N, Tran S, Barba L, Kamil ES, Danovitch G, Adler SG. Recurrent and *de novo* diabetic nephropathy in renal allografts. *Transplantation.* 2003 Jan;75(1):66-71.
2. **Bhalla V**, Daidié D, Li H, Pao AC, LaGrange LP, Wang J, Vandewalle A, Stockand JD, Staub O, Pearce D. SGK1 regulates ubiquitin ligase Nedd4-2 by inducing interaction with 14-3-3. *Mol Endocrinol*. 2005 Dec;19(12):3073-84.
3. **Bhalla V**, Oyster NM, Fitch AC, Wijngaarden MA, Neumann D, Schlattner U, Pearce D, Hallows KR. AMP-activated kinase inhibits the epithelial Na- channel through functional regulation of the ubiquitin ligase Nedd4-2. *J Biol Chem.* 2006 Sep;281(36):26159-69.
4. Pao AC, McCormick JA, Li H, Siu J, Govaerts C, **Bhalla V***, Soundararajan R, Pearce D. NH2 terminus of serum and glucocorticoid-regulated kinase 1 binds to phosphoinositides and is essential for isoform-specific physiological functions *Am J Physiol Renal Physiol.* 2007 Jun; 292(6):F1741-50. *Participated in study design and in analysis/interpretation of data

5. **Bhalla V*^**, Hallows KR*, Oyster NM, Wijngaarden MA, Lee JK, Li H, Chandran S, Xia X, Huang Z, Chalkley RJ, Burlingame AL, Pearce D. Phosphopeptide screen uncovers novel phosphorylation sites of Nedd4-2 that potentiate its inhibition of the epithelial Na+ Channel. *J Biol Chem.* 2010 Jul;285(28):21671-8. *- co-first author; ^- corresponding author

6. Symplicity HTN-2 Investigators, Esler MD, Krum H, Sobotka PA, Schlaich MP, Schmieder RE, Böhm M. Renal sympathetic denervation in patients with treatment-resistant hypertension (The Symplicity HTN-2 Trial): a randomised controlled trial. *Lancet* 2010 Dec;376(9756):1903-9. *Data Safety Monitoring Board (reviewed all serious adverse events)*: Lee DP, Witteles RM, **Bhalla V**.

7. Chandran S, Li H, Dong W, Krasinska K, Adams C, Alexandrova L, Chien A, Hallows KR, **Bhalla V**. Neural precursor cell-expressed developmentally down-regulated protein 4-2 (Nedd4-2) regulation by 14-3-3 protein binding at canonical serum and glucocorticoid kinase 1 (SGK1) phosphorylation sites. *J Biol Chem.* 2011 Oct;286(43):37830-40.

8. Krishnan E, Lingala B, **Bhalla V**. Low-level lead exposure and the prevalence of gout: an observational study. *Ann Intern Med*. 2012 Aug;157(4):233-41.

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Non peer-reviewed academic publications (2)

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26. Nizar J, Vo V, **Bhalla V**. "High Fat Diet Enhances K-mediated Sensitivity to Thiazides". *Experimental Biology Annual Meeting*, 2018.

27. Nizar J, Vo V, **Bhalla V**. "Acute and Chronic High K Diet Decrease NCC Activity by Distinct Mechanisms", *Experimental Biology Annual Meeting*, 2018.

28. Zheng X, Higdon L, Sayed N, Liu C, Wu JC, Maltzman J, **Bhalla V**. "Endothelial Cell-Specific Molecule-1 Reduces Leukocyte Infiltration and Albuminuria in Diabetic Nephropathy". Stanford Diabetes Research Center Symposium, 2018.

29. Zheng X, Higdon L, Sayed N, Liu C, Wu JC, Maltzman J, **Bhalla V**. "Esm-1 Protects Mice from Glomerular Macrophage Infiltration and Macroalbuminuria in Diabetic Nephropathy". *Experimental Biology Annual Meeting*, 2019.

30. Krauson AJ*, Schaffert S*, Walczak EM, Nizar JM, Holdgate G, Iyer S, Elsayed R, Charu V, Kambham N, Qiao Y, Khatri P, **Bhalla V**. "Diverse nephron cell type-specific adaptation to furosemide by morphometry and single cell RNA sequencing". *Experimental Biology Annual Meeting*, 2019. *contributed equally to this abstract.

31. Kunkel GH, Krauson AJ, Schaffert S, Walczak EM, Nizar JM, Holdgate G, Iyer S, Elsayed R, Charu V, Kambham N, Qiao Y, Khatri P, **Bhalla V**. "'Wnt4(+) Cell Mapping and Changes in ENaC regulatory genes in Furosemide-treated Mice", *9th International Symposium on Aldosterone and ENaC in Health and Disease: The Kidney and Beyond, Quadrennial Meeting*, 2019.

32. Rebecca Boyle, Vivek Charu, William E. Rainey, **Vivek Bhalla**, "Masking by Hypokalemia-Primary Aldosteronism with Undetectable Aldosterone: A Case Report", *International Aldosterone Conference*, 2020.

33. Sarraju A, Babakhanian M, Szeto I, Seninger C, Chang TI, **Bhalla V**, Downing L, Rodriguez F, Turakhia M, Wang PJ, "Feasibility of an Asynchronous, Semi-Automated Remote Patient Monitoring Blood Pressure Management System", *Hypertension AHA Sessions Annual Meeting*, 2021.

34. Xiao Ran Luo, Mario Ricardo Funes-Hernandez, Robert T. Isom, **Vivek Bhalla**, "Rates of Diagnostic Work-up by Magnetic Resonance Imaging of the Abdomen for Patients with Resistant Hypertension", *Hypertension AHA Sessions Annual Meeting*, 2022.

35. Marina Basina, **Vivek Bhalla**, Nandi Shah, "ODP118 PTH (1-34) Replacement Therapy for Hypoparathyroidism due to Sporadic Calcium Sensing Receptor Gain-of-Function Point Mutation", *Journal of the Endocrine Society*, Volume 6, Issue Supplement_1, November-December 2022, Pages A175–A176, https://doi.org/10.1210/jendso/bvac150.360

36. Carmen Cajina, Mario Funes Hernandez, Kole Joachim, **Vivek Bhalla**, "Paradoxical Increase in Post-Captopril Aldosterone", *Hypertension AHA Sessions Annual Meeting*, 2023.

37. David S. Lim, John T. Leppert, **Vivek Bhalla**, "Leveraging Language Models for Automated Detection and Characterization of Adrenal Nodules in MRI Radiology Reports", *XIXth International Adrenal Meeting*, 2024.

RESEARCH SUPPORT

Awarded

09/19/23-08/31/24 NIH NIDDK 1R41DK138689
CRISPR-Cas Editing as a Genetic Cure for Autosomal Dominant Polycystic Kidney Disease
Co-Investigator
The overall goal of this project is to utilize CRISPR/Cas9-inspired techniques and functional validation studies in human and mouse cells in vitro and optimized gene delivery methods in a PKD mouse model to increase PKD1 expression by using a mutation-agnostic gene editing strategy.

07/01/23-06/30/28 NIH NIDDK 1U2CDK133488
Learners to Leaders in Academic Urology, Nephrology, and non-cancer Hematology
Co-Investigator; Network Core Co-Lead
The overall goal of the LAUNCH program is to train pre-doctoral and post-doctoral trainees at four major institutions (collaboratively, UCSF, Stanford, UC Berkeley, UC Davis) in the areas of Kidney, Urology, and benign Hematology with a focus on diversity, equity, and inclusion.

09/01/21-08/31/26 NIH NIDDK 1U01DK130060-01
Chronic Kidney Diseases of UnceRtain Etiology (CkDu) in Agricultural Communities (CURE) research Consortium Renal Science Core
Contact PI, mPI: Bhalla, Friedman (Harvard), Waikar (BU)
The overall goal of the Discovery Science Collaborative for CKDu Renal Science Core is to bring the best investigative methods and scientific technology to the problem of CKDu.

01/28/21- NIH NIDDK R01DK127138

12/31/25 Chronic disease of unknown etiology: applying a multidisciplinary approach to investigate the world's most common tubulointerstitial kidney disease
Co-Investigator
The aim of this grant is to launch a multidisciplinary prospective study on chronic kidney disease of unknown cause occurring at high frequency in agricultural communities throughout the world. We plan to apply parallel epidemiologic and molecular tools to investigate a range of hypothesized causes, with complementary environmental and clinical analyses.

09/15/20-07/31/25 NIH NIDDK KUH R25, The Stanford Pre-Renal Initiative: Undergraduate Training I Kidney Health
PI, Program Director
The PI will establish a new initiative to foster interest and training in Nephrology, Urology, and Hematology that aligns with the mission of KUH. We are committed to diversity and inclusion of trainees underrepresented in the biomedical field and will track outcomes and career progression.

Past

07/01/20-03/31/24 American Heart Association – Strategic Focused Research Network: Health Technology Heart Health Technology Center: Innovation to Implementation
Project Co-I
We will use technology on unmet-needs in healthcare, quickly and inexpensively to iterative development and tests, implement in a larger scale and train future leaders in an interdisciplinary way between cardiovascular and technology. The project will focus on a digital, provider- and patient-facing interface to efficiently manage blood pressure in patients with hypertension.

04/01/22-03/30/23 Stanford Undiagnosed Diseases Network Pilot Fund (PI: Bhalla)
Genome Study of Overlap Syndrome to Elucidate Causes of Two Rare Diseases of Adolescence
Principal Investigator
We will utilize next generation whole genome sequencing to assess for the contribution of genetics to an overlap of two disorders: Gitelman's syndrome and Postural Orthostatic Tachycardia syndrome (POTS).

04/01/20-03/31/22 Stanford Medicine Translational and Clinical Innovation Fund
Exploiting Sugars to Elude a Genetic Defect- Precision Therapy for Precision Medicine
Co-PI
In this precision medicine initiative, the co-PIs will determine the glycopeptide composition of isolated, wild-type and glycosylation-deficient mutant CLC-Kb and perform rescue experiments by sugar substitution of mutant channels.

02/01/19-01/31/23 US-Israel Binational Science Foundation
The Role of Ferritin as a Ferric Iron Exporter in Kidney Iron Homeostasis
Co-PI

The Co-PIs will study the role of ferritin trafficking in kidney iron homeostasis. We will elucidate mechanisms and regulation of ferritin secretion using primary cultures of: 1) glomeruli, 2) proximal and distal tubular epithelium and 3) renal mononuclear phagocytes.

09/15/18 - 06/30/22 NIH/NIDDK, Parent Grant Program (R01) (DK110385-01A1)
Mechanisms and Consequences of Defective Flow-induced Potassium Secretion in the Metabolic Syndrome
PI
The PI will test the hypothesis that insulin resistance in the distal nephron is a phenocopy for BK channel deficiency with decreased insulin signaling leading to disrupted calcium (Ca2+)-activated BK channel activity, and thus, defective FIKS and K adaptation, with consequent hyperkalemia.

03/01/21- 06/30/22 Stanford SPARK Program in Translational Research
Gene Therapy for Autosomal Dominant Polycystic Kidney Disease (ADPKD)
PI

02/19-07/21 NIH/NIDDK, University of Pittsburgh / Mount Sinai George O'Brien Kidney Center
Wnt4(+) Cell Fate Mapping and ENaC Activity in Furosemide-treated Mice
PI

03/19-06/21 Vascular Dynamics, Inc. CALM-2 – Controlling and Lowering Blood Pressure with the MobiusHD
Co-PI

05/20-01/21 National Collegiate Inventors & Innovators Alliance (NCIIA)-VentureWell Grants,
A Novel Urine Dipstick for the Detection of Acute Kidney Injury (AKI)
PI

01/17-12/17 Stanford Diabetes Research Center Pilot Grant
Validation of cell free RNA associated with human diabetic kidney disease
Co-PI

09/11-08/17 NIH/NIDDK, Parent Grant Program (R01) (DK09156501A1)
ENaC Transport in Insulin Resistance: Role of Insulin & IGF-I Receptors
PI

09/14-06/16 France-Stanford Center for Interdisciplinary Studies
Role of Insulin in Sodium and Potassium Homeostasis: Implications for Obesity-Associated Hypertension
PI

10/14-09/15 Cardiovascular Institute Seed Grant
Validation of Novel Antibody Biomarkers for Human Diabetic Kidney Disease
PI

10/13-09/14 NIH/AMDCC Pilot & Feasibility Program
The Influence of Esm-1 on Leukocyte Infiltration in Diabetic Nephropathy
PI

10/12-09/13 Stanford Department of Medicine, Translational Research and Applied Medicine (TRAM) Pilot Grant
Validation of Novel Biomarkers for Human Diabetic Kidney Disease
PI

09/12-08/13 NIH/NIDDK, Research Supplements to Promote Diversity in Health-Related Research (DK09156502S1)
ENaC Transport in Insulin Resistance: Role of Insulin & IGF-I Receptors
PI

03/11-04/13 Abbott Renal Care, Investigator-Initiated Study
Oxidative/Carbonyl Stress and Vitamin D in Diabetic Nephropathy
PI

06/10-12/12 NIH/AMDCC Pilot & Feasibility Program
Reduction of Carbonyl Stress for the Prevention of Diabetic Kidney Disease
PI

07/11-04/12 NIH/Clinical and Translational Science Award (UL1 RR025744), Office of Community Health-sponsored substudy
Validation of Biomarkers for Diabetic Nephropathy in a Community-Based Healthcare Setting
PI

07/10-06/12 NIH/NIDDK, Small Grant Program (R03) (1DK083613)
Molecular Mechanisms of Distal Sodium Transport in Insulin Resistance
PI

09/10-08/11 American Society of Nephrology – Carl W. Gottschalk Research Grant
Molecular Mechanisms of Salt-Sensitive Hypertension in Insulin Resistance
PI

09/08-09/10 National Kidney Foundation, Shaul G. Massy Young Investigator Grant (YIB787)
Isoform-Specific Roles of 14-3-3 Proteins in Sodium Transport
PI

09/05-08/12 NIH/NIDDK, Mentored Clinical Scientist Award (K08) (1DK071648)
Role of Nedd4-2, SGK1, and 14-3-3 in ENaC Trafficking
PI

07/04-08/05 NIH/NIDDK, Ruth L. Kirschstein National Research Service Award (F32) (1F32DK066968)
Sgk1-Mediated Effects on Sodium Transport in the Kidney
PI

BASIC and TRANSLATIONAL RESEARCH PROGRAMS
Current

1. "Molecular Mechanisms of Solute Transport in Insulin Resistance"
PI, 2008-pres.
Collaborator(s): Dan Bernstein, MD; Fredric Kraemer, MD; Ralph Rabkin, MD, Stanford
Lisa M Satlin, MD, Mount Sinai School of Medicine
Lise Bankir, PhD, INSERM, Paris
Blythe Shepard, PhD, Georgetown University
Using transgenic mouse models to understand the molecular basis and implications of impaired solute regulation (sodium, potassium, glucose) which accompanies the insulin resistance syndrome

Corresponding publications:

Corresponding grant

2. "Molecular Mechanisms of Diuretic Resistance and Tubular Hypertrophy"
PI, 2014-pres.
Collaborator(s): Elisabeth Walczak, PhD, BD Biosciences
Ralph Rabkin, MD; Purvesh Khatri, PhD, Stanford
James McCormick, PhD; Oregon Health Sciences University
Jiang Kang Chen, PhD; Medical College of Georgia
Using transgenic mouse models and single cell RNAseq to understand the molecular basis of diuretic-induced tubular remodeling and compensatory sodium reabsorption throughout the tubule

3. "Role of Vascular Endothelial and Kidney-enriched Esm-1 in Kidney Disease"
PI, 2013-pres.
Collaborator(s): Mohammad Kiani, PhD, Temple University
Jonathan Maltzman, MD, PhD; Joseph Wu, MD, PhD, Stanford
Phillippe Lassalle, MD; Nathalie de Freitas Caires, PhD, INSERM, Lille, France
Lei Wang, PhD, University of South Florida
Ruisheng Liu, PhD, University of South Florida
Rui Benedito, PhD, Centro Nacional de Investigaciones Cardiovasculares (CNIC), Madrid, Spain
Moshe Levi, MD, Georgetown University
Avi Rosenberg, MD, PhD, Johns Hopkins University
Samir Parikh, MD, University of Texas Southwestern

Identifying mechanisms of Esm-1-mediated inhibition of kidney inflammation *in vivo* and *in vitro*

4. "Genetic Defects in Ion Channels – Implications for Blood Pressure, Fluid/Electrolyte Homeostasis"
PI, 2012-pres.
Collaborator(s): Merritt Maduke, PhD; Neeraja Kambham, MD; Sharon Pitteri, PhD, Stanford
Kerim Mutig, PhD, Institut fuer Vegetative Anatomie Charité – Universitaetsmedizin Berlin
Oleh Pochynyuk, PhD, University of Texas Health Science Center University
Sharon Pitteri, PhD, Stanford University
Using novel genetic mutations to characterize the function of human chloride channels in the kidney

Past

5. "Gene Therapy for Autosomal Dominant Polycystic Kidney Disease"
PI, 2019-2022
Collaborator(s): Demetri Maxim, BS; Avnesh Thakor, MD, PhD; Mark Kay, MD, PhD, Stanford

Utilizing gene editing to over-express polycystin genes in vivo.

6. "Functional Genomic Approach to the Study of Diabetic Glomeruli"
PI, 2008-2017
Collaborator(s): Timothy W. Meyer, MD; Sanchita Bhattacharya, PhD, Stanford
Identifying difference in glomerular gene expression between inbred strains of mice with varied susceptibility to hyperglycemia

7. "Oxidative/Carbonyl Stress in Diabetic Kidney Disease"
PI, 2008-2011
Collaborator(s): Daria Mochly-Rosen, PhD, Stanford University
Sanjay Srivastava, PhD, University of Louisville
Modulating detoxifying enzymes which alter the level of toxic aldehydes in kidney tissue to elucidate mechanisms of diabetic kidney disease

8. "Mechanisms of Functional Interaction between Nedd4-2, 14-3-3, and ENaC"
PI, 2008-2011
Collaborator(s): Kenneth Hallows, MD, PhD, University of Pittsburgh
Defining mechanisms of 14-3-3-mediated inhibition of Nedd4-2 and subsequent stimulation of ENaC using biochemistry, molecular biology, mass spectrometry, and electrophysiology

9. "Regulation of Nedd4-2 by JNK1 Phosphorylation"
PI, 2005-2010

Collaborator(s): Kenneth Hallows, MD, PhD, University of Pittsburgh
Robert Chalkey, PhD, Alma Burlingame, PhD; UC, San Francisco
Identified sites of regulatory phosphorylation of the E3 HECT-domain ubiquitin ligase Nedd4-2, and elucidating the mechanisms of regulation

10. "Isoform-Specific Roles of 14-3-3 Proteins in Sodium Transport"
PI, Young Investigator Grant (NKF), 2008-2010
Defined mechanisms of specificity for 14-3-3 isoforms in the coordinate regulation of epithelial sodium transport by SGK1 and Nedd4-2 in collecting duct epithelia

11. "Role of Nedd4-2, SGK1, and 14-3-3 in ENaC Trafficking"
PI, Mentored Clinical Scientist Award (K08), 2005-2010
Mentors: David Pearce, MD, UC, San Francisco (Former)
W. James Nelson, PhD, Stanford University (Current)
Elucidated the mechanisms by which regulators of sodium transport affect the intracellular trafficking of the epithelial sodium channel (ENaC)

12. "Mechanism of AMP kinase (AMPK)-mediated Regulation of Sodium Transport"
PI, 2005-2006
Mentor: David Pearce, MD, UC, San Francisco
Collaborator(s): Kenneth Hallows, MD, PhD, University of Pittsburgh
Studied the mechanisms by which energy metabolism is coupled to sodium transport by biochemical and mass spectrometry techniques

13. "The Role of 14-3-3 Proteins in SGK1-Mediated Sodium Transport"
PI, Ruth L. Kirschstein National Research Service Award (F32), 2004-2005
Mentor: David Pearce, MD, UC, San Francisco
Characterized the molecular mechanisms by which SGK1 stimulates ENaC-mediated sodium transport in the distal nephron

14. "Effects of Insulin Resistance on Glucose Disposal in Skeletal Muscle"
PI, Independent Study Project (ISP), UC, San Diego School of Medicine, 1996-1998
Mentor: Robert R. Henry, MD, UC, San Diego School of Medicine
Investigated the effect of IGF-1 vs. insulin on human skeletal muscle cell cultures from diabetic and non-diabetic patients

Vivek Bhalla, "Analysis of Insulin and IGF-1 Mediated Signaling Pathways in Skeletal Muscle Cell Cultures of Nondiabetic and Type 2 Diabetic Subjects: Searching for the Location of Insulin Resistance", ISP Thesis, 1998.

CLINICAL RESEARCH PROGRAMS
Current

1. "Characteristics of Aldosterone Sensitivity"
PI, 2020-pres.

Collaborator(s): Glenn Chertow, MD, Stanford; Wanzhu Tu, PhD; Howard Pratt, MD, Indiana University; Zhongwei Li, PhD, University of Southern California; Anand Vaidya, MD, Brigham and Women's Hospital; James M. Luther, MD, Vanderbilt University; Zhongwei Li, USC; Manju Tamura, MD, MPH, Stanford University

Defining risk factors and characteristics of aldosterone responsiveness in target tissues (kidney heart, vasculature)

2. "The Role of Accessory Renal Arteries in Renin-dependent Hypertension"
PI, 2021-pres.
Collaborator(s): Robert Isom, MD; Lilach Lerman, MD, Mayo
Defining prevalence and features of accessory renal arteries (length, caliber, branching) associated with resistant hypertension compared with accessory renal arteries in kidney transplant donors.

3. "Characteristics of Posaconazole-induced Hypertension and Hypokalemia"
PI, 2019-pres.
Collaborator(s): Pablo Garcia, MD; Robert Isom, MD; Margaret Stedman, PhD; Stanley Derenski, MD; David Epstein, MD, PhD; Andrew Horvath, MD
Using the electronic health record to better understand the incidence and risk factors of posaconazole-induced effects on the distal nephron

4. "Characteristics of Renovascular Disease-related Hypertension"
PI, 2018-pres.
Collaborator(s): Robert Isom, MD; Glenn Chertow, MD, MPH; Margaret Stedman, PhD; Robin Shoemaker, University of Kentucky
Using clinical trial data from CORAL to understand aldosterone-related risk factors for persistent hypertension post-revascularization; using electronic health record data to better understand the role of accessory renal arteries in hypertension.

5. "Chronic Kidney Disease of Uncertain Etiology"
PI, 2015-pres.
Collaborator(s): Shuchi Anand, MD, MS; Andrew Fire, MD, PhD; Neeraja Kambham, MD; Maria Montez-Rath, PhD; Paul Wise, MD, Stanford; David Friedman, MD, Harvard; Sushant Waikar, MD, MPH, Boston University
Using cross-sectional cohort data to better understand mechanisms of tubular injury in mysterious kidney disease affecting agricultural workers in Mesoamerica and Sri Lanka

Past

6. "Screening Practices for Resistant Hypertension"
PI, 2017-2021
Collaborator(s): Glenn Chertow, MD, MPH; Margaret Stedman, PhD; John Leppert, MD; Gomathi Krishnan, PhD, Stanford; Jordana Cohen, MD, University of Pennsylvania; James B. Byrd, University of Michigan
Using the electronic health record to better understand the nature of screening tests for secondary causes of hypertension

7. "Biomarker Discovery for Diabetic Kidney Disease"
Co-PI, 2009-2013.
Collaborator(s): Latha Palaniappan, MD, MPH; Michael Snyder, PhD, Stanford
Discovering candidate biomarkers for the onset and progression of diabetic kidney disease in adults using cell-free RNA and bioinformatics

8. "Pb2+ as a risk factor for hyperuricemia, gout, and progression of kidney disease"
Co-PI, 2012-2013
Collaborator(s): German Hernandez, MD, Texas Tech University
Marcia Stefanick, PhD; Eswar Krishnan, MD, Stanford
Using longitudinal, well-phenotyped cohorts to better understand the role of Pb2+ exposure in hyperuricemia, gout, bone disease, and the progression of diabetic kidney disease

9. "Kidney Complications of the Metabolic Syndrome in Asians"
Consulting Investigator, PAMF Research Institute, 2011-2012
Collaborator(s): Latha Palaniappan, MD, MPH, PAMF, Stanford
Define prevalence, incidence, and risk factors for diabetic nephropathy and metabolic syndrome-related hypertension in Asians compared with other race/ethnicity cohorts

10. "Risk Factors for Recurrent or De Novo Diabetic Nephropathy in Renal Allografts"
PI, 1999-2001
Mentor: Sharon Adler, MD, Harbor-UC, Los Angeles Medical Center
Analyzed clinical risk factors for the development of recurrent and de novo diabetic nephropathy in renal transplant patients

CLINICAL TRIALS

Current

2023	Baxdrostat, Phase 3	-Site-Co-PI (funded)
2024	FINE-ONE	-Site-Co-PI (funded)

Past

2010	Ardian, Symplicity HTN-2	-Data Safety Monitoring Board
2012	Reata Pharmaceuticals, Protocol 402-C-0903	-Site-PI
2012-2016	Kona, KM 12-001	-Data Safety Monitoring Board
2013-2016	Valencia Technologies	-Data Safety Monitoring Board
01/16-07/16	Kona, KM 14-001	-Data Safety Monitoring Board
2016-2020	IMPACT, Stanford University	-Data Safety Monitoring Board
2016-2022	Tolerance Induction Trial, Stanford University	-Data Safety Monitoring Board
2016-2020	STRONG-D, Stanford University	-Data Safety Monitoring Board
2019-2021	CALM-2	-Site-Co-PI
2020	REPLACE-COVID	-Adjudicator, Renal Events
2022	CinCor-Pharma	-Site-Co-PI

EDITORIAL SERVICE

2004-pres.	European Molecular Biology Organization (EMBO) Journal	- Manuscript reviewer
2005-pres.	Journal of the American Society of Nephrology	- Manuscript reviewer
2005-pres.	American Journal of Physiology, Renal Physiology	- Manuscript reviewer - Editorial Board
2009-pres.	Pediatric Nephrology	-Manuscript reviewer
2009-pres.	Nephron	-Manuscript reviewer
2009-pres.	Proceedings of the National Academy of Sciences	-Manuscript reviewer
2010-pres.	PPAR Reviews	-Manuscript reviewer
2010-pres.	Growth Hormone and IGF-1 Research	-Manuscript reviewer
2010-pres.	Frontiers in Physiology – Renal and Epithelial Physiology	-Editorial Board
2011-pres.	American Journal of Kidney Diseases	-Manuscript reviewer
2011-pres.	Diabetes	-Manuscript reviewer
2012-pres.	Journal of the American Medical Association	-Manuscript reviewer
2013-2020	European Journal of Clinical Investigation	- Editor
2014-pres.	American Journal of Physiology, Cell	-Manuscript reviewer
2014-pres.	American Journal of Physiology, Endocrinology	-Manuscript reviewer
2016-pres.	Physiologic Reports	-Editorial Board
2016-pres.	Circulation – Cardiovascular Genetics	-Manuscript reviewer
2016-pres.	American Heart Journal	-Manuscript reviewer
2017-pres.	International Journal of Molecular Sciences	-Manuscript reviewer
2017-pres.	Journal of Clinical Investigation	-Manuscript reviewer
2018-pres.	Endocrinology	-Manuscript reviewer
2019-2020	Current Opinion Nephrology and Hypertension	-Section Editor
2019-pres.	Journal of Clinical Investigation Insight	-Manuscript reviewer
2022-pres.	Kidney International Reports	-Manuscript reviewer
2022-pres.	Clinical Journal of the American Society of Nephrology	-Manuscript reviewer
2023-pres.	Hypertension Research	-Editorial Board
2023-pres.	Genome Medicine	-Manuscript reviewer

GRANT REVIEW

07/08	National Institutes of Health, Ad hoc Reviewer, ZHL1 CSR-D (O1) 1 - Grand Opportunities in Large Scale DNA Sequencing and Molecular Profiling of Well Phenotyped NHLBI Cohorts
02/10	Food and Health Bureau of the Hong Kong SAR Government, Ad hoc Reviewer, Health and Health Services Research Fund
04/11-04/12	American Heart Association- Molecular Signaling 4- Peer Review Committee
07/11, 07/15	NIH-Diabetes Complications Consortium, Reviewer, Pilot & Feasibility Grants
04/13-06/17	Child Health Research Institute, Stanford University
06/14	2014/10 ZDK1 GRB-G (O1) 1 - NIDDK-KUH-Fellowship Review
04/15-02/18	American Heart Association- Cardiorenal 1/3- Peer Review Committee
10/16	National Institutes of Health, Ad hoc Reviewer, Molecular and Integrative Signal Transduction (MIST) Study Section
10/17	National Institutes of Health, Ad hoc Reviewer, KMBD Study Section

02/19-pres. National Institutes of Health, DDK-D Fellowship Application Review Committee
04/20 American Heart Association- COVID-19 Rapid Response Grant Review Committee
03/23 National Institutes of Health, ad hoc Reviewer, George M. O'Brien Kidney Consortium Review

UNIVERSITY SERVICE

2010-2011 Department of Medicine Physician-Scientist Advisory Committee
2011-pres. Candidate Interviewer, Internal Medicine Residency Selection Committee
01/19 "Diabetes and Kidney Disease", Seminar Series- Extending Life by Controlling Chronic Disease- BIO 109A, BIOC 109A/209A, HUMBIO 158, Stanford University
06/19 "Hypertension in the 21st Century: High blood pressure and what we know now, and what we need to know in the future", Stanford Health Library, Stanford University
02/20-pres. "How Cells Sense Oxygen", Seminar Series- Extending Life by Controlling Chronic Disease- BIO 109A, BIOC 109A/209A, HUMBIO 158, Stanford University
03/22 "Aging and the Kidney", Seminar Series- How We Age?- GENE 229, Stanford University

PROFESSIONAL ORGANIZATIONS

Memberships

2001-pres. American Heart Association, Kidney and Cardiovascular Council; Hypertension Council
2001-pres. Renal Physicians Association
2001-pres. American Society of Nephrology (Fellow, Investigator Track)
2004-pres. American Society of Cell Biology
2006-pres. National Kidney Foundation
2009-pres. Cardiovascular Institute, Stanford University
2011-pres. Child Health Research Institute, Stanford University
2015-2017 American Society of Hypertension
2014-pres. Bio-X, Stanford
2017-pres. Stanford Diabetes Research Center
2021-pres. Stanford Center for South Asia
2022-pres. American Physiological Society

Service to Professional Societies

07/14-03/16 Biosciences Research Advisory Group, American Society of Nephrology
07/16-pres. Community Leader, Basic Science Nephrology, American Society of Nephrology
07/16-06/18 Vice-Chair, Kidney in Cardiovascular Disease Council, American Heart Association
07/16-06/18 Council Operations Committee, American Heart Association
09/16-pres. Hypertension Science Subcommittee, Hypertension Council, American Heart Association
05/17-12/17 Campaign Committee, American Society of Nephrology Foundation
2017-2019 Task Force, Hypertension Measures Set Update, AHA/ACC
2017-2019 Writing Group, AHA Scientific Statement, Cardiorenal syndrome

07/18-06/20	Chair, Kidney in Cardiovascular Disease Council, American Heart Association
04/19	American Medical Association, Featured Panelist, Utility of Wrist and Finger Devices in the Management of Hypertension
07/20-06/22	Immediate Past-Chair, Kidney in Cardiovascular Disease Council, American Heart Association
07/20-06/22	Chair, Nominating Committee, Kidney in Cardiovascular Disease Council, American Heart Association
2020-pres.	American Medical Association, Validated Device Listing Advisory Group, Member
2022-pres.	Scientific and Clinical Education Lifelong Learning Committee, Kidney in Cardiovascular Disease Council, American Heart Association
2023-2024	American Society of Nephrology, Continuous Professional Development Committee
07/23-06/25	Member, Hypertension Fall Specialty Conference Planning Committee, Council of Hypertension, American Heart Association
2024	American College of Cardiology, Planning Committee, Hypertension Roundtable

Service to Professional Meetings

2015	American Society of Nephrology Annual Meeting, Moderator
2016	American Society of Nephrology Annual Meeting, Abstract Chair
2016	American Society of Nephrology Annual Meeting, Moderator
2016	American Society of Nephrology Annual Meeting, Abstract Chair
2017	National Kidney Foundation Spring Clinical Meeting, Moderator
2017	Hypertension Scientific Sessions, Hypertension Research Annual Meeting, Moderator
2017	American Society of Nephrology Annual Meeting, Abstract Reviewer
2017	American Society of Nephrology Annual Meeting, Moderator
2018-2022	Program Committee, Hypertension Scientific Sessions, American Heart Association
2018-2020	Vice-Chair, Program Committee, Hypertension Scientific Sessions, American Heart Association
2019-2023	Hypertension Scientific Sessions, American Heart Association, Abstract Reviewer
2020	Hypertension Scientific Sessions, Hypertension Research Annual Meeting, Moderator
2020-2021	American Society of Nephrology Education Committee, Cell and Transport Physiology; Late Braking Clinical Trials, Abstract Reviewer
2022	American Society of Nephrology Annual Meeting, Moderator
2022-2023	Hypertension Scientific Sessions, American Heart Association, Abstract Reviewer
2022	Transcatheter Cardiovascular Therapeutics, AHA Vascular Discovery Session on Hypertension Therapies: Present and Future, Program Committee
2022	Scientific Sessions, American Heart Association, Moderator (declined)
2023-2024	Scientific Sessions, American Heart Association, Program Committee
2023	Polycystic Kidney Disease Research Resource Consortium Annual Symposium, Moderator
2023	American Society of Nephrology Annual Meeting, Moderator
2023	Basic Research Forum for Emerging Kidney Scientists, Faculty Moderator

Consultations

2007-2011 Medical Advisory Board, Viscira
2011-2012 Consulting Investigator, Palo Alto Medical Foundation Research Institute (PAMFRI)
2017-2018 Maxim Integrated
2017-2018 Medical Advisory Board, Oraxion Therapeutics
2017-pres. Medical Advisory Board, PyrAmes
2018-2020 Medical Advisory Board, Relypsa
2022-pres. Scientific Advisory Board, Janssen Pharmaceuticals
2022-pres. Scientific Advisory Board, Nephrogen
2023-pres. Scientific Advisory Board, Astra Zeneca
2023-pres. Scientific Advisory Board, Bayer
2023-pres. Medtronic, US RDN Therapy Awareness Council
2023-pres. Scientific Advisory Board, Idorsia

INVITED PAPERS, LECTURES, PRESENTATIONS

Renal Grand Rounds, UC, San Francisco

05/02 "Pathophysiology of Polycystic Kidney Disease"
02/03 "RNA Interference and Potential Applications for Nephrology"
12/03 "Searching for Causes of Hypertension: One Protein at a Time"
08/04 "Amyloidosis – Pathophysiology and New Treatments"
03/06 "Basic Science Techniques in Nephrology – The Science Behind the Science"
05/07 "Research Conundrums in Diabetic Nephropathy – Of Mice and Men"

Renal Research Conference, UC, San Francisco

04/04 "Role of 14-3-3 Proteins in SGK1-Mediated Sodium Transport"
01/05 "Updates on Research – Coordinate Regulation of Sodium Transport by SGK1 and 14-3-3 Proteins"
02/06 "Updates on Research – Coordinate Regulation of Sodium Transport by SGK1 and 14-3-3 Proteins"
12/06 "Further Insights into the Regulation of Nedd4-2 – Research in Progress"

Nephrology Grand Rounds, Stanford University

09/11 "Oxidative Stress in DKD: Overcoming Obstacles"
03/14 "Aberrant Ion Handling in Insulin-Resistant Mice: Implications for Blood Pressure"
04/22 "Why I'm obsessed with measuring aldosterone: leaning into more definitive diagnoses of hypertension"
11/23 "Mechanisms of DKD Susceptibility"

Renal Research Conference, Stanford University

09/08 "The Search for Early Onset Genes in Diabetic Kidney Disease"
01/10 "Molecular Mechanisms of Salt-Sensitive Hypertension in Insulin Resistance"
02/11 "Nedd4-2: Convergence Point for Kinase Regulation of Sodium Transport"
01/12 "Mouse Model of Obesity, Insulin, Resistance, and Hypertension: Work in Progress"

03/13 "Modeling Obesity and Salt-sensitive Hypertension in Mice: Lessons Learned"
03/14 "Isolation of Kidney Principal Cells- Novel Methods and Applications"
07/14 "Why Doesn't Everyone with Diabetes get Nephropathy? Interrogating Glomerular Leukocyte Infiltration in Mice"
07/15 "Novel CLC-Kb Pore Mutation Associated with Defective Glycosylation, Distal Tubular Remodeling, and End-Stage Renal Disease"
08/16 "What happens when you give diuretics? A story of hypertrophy and IGF-1"
07/17 "Putative Role for Endothelial Cell-Specific Molecule-1 in Kidney Disease"
08/18 "Heterogeneity of Nephron Plasticity with Diuretic Treatment-Morphometry and single cell RNAseq"
11/19 "Endothelial cell-specific molecule-1 (Esm-1): and its Role(s) in Inflammation and Diabetic Kidney Disease"
08/20 "Loops Tubules, and Channels in DKD- Basic Science"

Invited Presentations (73)

10/00 "Recurrent and De Novo Diabetic Nephropathy in Renal Allografts" - American Society of Nephrology Annual Meeting, Toronto, Canada
11/03 "Mechanisms of SGK1-Mediated Transport through Nedd4-2 Inhibition" - American Society of Nephrology Annual Meeting, Free Communication, San Diego, CA
05/04 "SGK1-Mediated Regulation of Sodium Transport" - National Kidney Foundation Young Investigator Forum; San Francisco, CA
11/04 "The Role of 14-3-3 Proteins in SGK1-Mediated Sodium Transport" - American Society of Nephrology Annual Meeting, St. Louis, MO
12/04 "The Role of 14-3-3 Proteins in SGK1-Mediated Sodium Transport" - American Society of Cell Biology Annual Meeting, Washington, DC
03/05 "14-3-3 Proteins Propagate SGK1 Regulation of Na+ Transport" - Oregon Health Sciences University, Division of Nephrology, Renal Research Conference, Portland, OR
04/05 "Coordinate Regulation of Sodium Transport by SGK1 and 14-3-3 Proteins" - Research in Progress Seminar, UC San Francisco, San Francisco, CA
04/06 "Coordinate Regulation of Sodium Transport by SGK1 and 14-3-3 Proteins" - LKEM-UCSF Alumni Meeting (pre-EB), San Francisco, CA
02/07 "Molecular Determinants of Distal Sodium Transport" – Stanford University, Division of Nephrology, Grand Rounds, Stanford, CA
03/07 "Mechanisms of Nedd4-2-Mediated Inhibition of Sodium Transport" – West Coast Salt and Water Club, Morro Bay, CA
05/07 "Molecular Determinants of Aldosterone-Sensitive Sodium Transport" – Oregon Health Sciences University, Division of Nephrology, Grand Rounds, Portland, OR
11/07 "Novel Regulation of Sodium Transport via Phosphorylation of Nedd4-2", - American Society of Nephrology, Annual Meeting, San Francisco, CA
07/08 "Regulation of ENaC-Mediated Sodium Transport via Phosphorylation of Nedd4-2", - Epithelial Physiology and Cell Biology, Annual Meeting, Telluride, CO
01/09 "Research Conundrums in Diabetic Kidney Disease", -Stanford University, Division of Endocrinology, Grand Rounds, Stanford, CA
04/10 "Phosphopeptide Screen Uncovers Novel Nedd4-2 Phosphorylation Sites that Potentiate its Inhibition of the Epithelial Na^+ channel (ENaC)", Featured Speaker, - Experimental Biology, Annual Meeting, Anaheim, CA

07/10 "Analysis of Nedd4-2 Phosphorylation Reveals Major Role for Minor Sites", - Epithelial Physiology and Cell Biology, Annual Meeting, Telluride, CO

09/10 "A Major Role for Minor Site Phosphorylation in 14-3-3 Mediated Regulation of Nedd4-2 and ENaC", Mass Spectrometry Users' Meeting, Stanford, CA

08/11 "Novel Method for Isolation and Culture of Murine Principal Cells", - Epithelial Physiology and Cell Biology, Annual Meeting, Telluride, CO

09/11 "Regulation of Ubiquitin Ligase Activity and Phosphorylation by SGK1"- 7th International Symposium on Aldosterone and ENaC/Degenerin Family of Ion Channels: Molecular Mechanisms and Pathophysiology, Quadrennial Meeting, Pacific Grove, CA

08/12 "Guyton's Kidney Factor: Influences of Obesity and Hyperinsulinemia on Epithelial Sodium Transport", - Epithelial Physiology and Cell Biology, Annual Meeting, Telluride, CO

09/12 "Guyton's Kidney Factor: Influences of Obesity and Hyperinsulinemia on Epithelial Sodium Transport", - Renal Research Conference, Mount Sinai School of Medicine, NY

03/13 "Modeling Obesity and Salt-sensitive Hypertension in Mice: Lessons learned", - Nephrology Grand Rounds, UCSF

03/14 "Diabetes and Kidney Disease", - Geriatric Research Education and Clinical Center (GRECC) Seminar, Stanford University

11/14 "Why Doesn't Everyone with Diabetes get Nephropathy? Interrogating Glomerular Leukocyte Infiltration in Mice", Biofluidics Laboratory Group, Temple University

11/14 "HTN Management Guidelines: What Are the Main Differences between ESH/ ESC, JNC 8, ASH/ISH, and the AHA/ACC/CDC Advisory?" American Heart Association Annual Meeting, Chicago, IL

04/15 "Why Doesn't Everyone with Diabetes get Nephropathy? Interrogating Glomerular Leukocyte Infiltration in Mice", Institut Pasteur de Lille, Institut National de la Sante et de la Recherche Médicale, Paris, France

04/15 "Implications of Potassium Handling in the Metabolic Syndrome", Le Centre de Recherche des Cordeliers (CRC), Institut National de la Sante et de la Recherche Médicale, Paris, France

07/15 "Novel CLC-Kb Pore Mutation in Mixed Bartter-Gitelman's Syndrome Associated with Defective Glycosylation, Distal Tubular Remodeling, and End-Stage Renal Disease", Epithelial Physiology and Cell Biology, Annual Meeting, Telluride, CO

01/16 "Diagnosis and Management of Resistant Hypertension", Preventive Cardiology Affinity Group Meeting, Stanford, University

07/16 "Role of IGF-1 receptor in Nephron segment-specific Renal Tubular Epithelial Cell Remodeling", Epithelial Physiology and Cell Biology, Annual Meeting, Telluride, CO

11/16 "Kidney Tubule Insulin Receptor in the Metabolic Syndrome", Medical College of Wisconsin, Department of Physiology Seminar

11/16 "Kidney Tubule Insulin Receptor in the Metabolic Syndrome", American Society of Nephrology, Annual Meeting, Chicago, IL

02/17 "Single cell resolution of highly diverse subpopulations in the mammalian kidney achieved with high throughput single cell RNA-sequencing", Advances in Genome Biology and Technology, Annual Meeting, Hollywood, FL

04/17 "Update on the Pathophysiology of Diabetic Kidney Disease", National Kidney Foundation, Spring Clinical Meeting

04/17 "Rebuff the Cuff- Novel Ways to Measure Blood Pressure", National Kidney Foundation, Spring Clinical Meeting

04/17 "Metabolic syndrome, Insulin, and Renal Sodium Handling", Experimental Biology Annual Meeting, Chicago, IL

06/17 "Single-cell resolution of highly diverse subpopulations in the mammalian kidney achieved with high throughput single-cell RNA-sequencing", Festival of Genomics, San Diego, CA

10/17 "Renal tubule insulin receptor promotes elevated blood pressure and glucose reabsorption", Molecular Cell Biology Seminar Series, University of Merced, Merced, CA

12/17 "Renal tubule insulin receptor promotes elevated blood pressure and glucose reabsorption", Cellular and Molecular Basis of Disease Series, University of New Mexico, Albuquerque, NM

01/18 "Renal Mechanisms of Hypertension in Obesity and Insulin Resistance", -Stanford University, Division of Endocrinology, Grand Rounds, Stanford, CA

02/18 "Novel CLC-Kb Pore Mutation in Mixed Bartter-Gitelman's Syndrome Associated with Defective Glycosylation, Distal Tubular Remodeling, and End-Stage Renal Disease", Ion Channel Journal Club, Stanford University, Stanford, CA

10/18 "Endothelial cell-specific molecule-1 (Esm-1) and its Role(s) in Diabetic Kidney Disease", Stanford Diabetes Research Center- Work in Progress Seminar

12/18 "Endothelial cell-specific molecule-1 (Esm-1) and its Role(s) in Diabetic Kidney Disease", Pasteur Institute, Lille, France

03/19 "From Chemistry to Crisis: the ARB Recall", -Stanford University, Division of Cardiology, Grand Rounds, Stanford, CA

03/19 "Germline and Somatic Mutations Associated with Hypertension and Hypotension", -Stanford Center for Inherited Cardiovascular Disease, Stanford, CA

05/19 "Diverse nephron cell type-specific adaptation to furosemide revealed by single cell analysis ", -Department of Medicine Research Seminar, Stony Brook University, Stony Brook, NY

05/19 "Digital Monitoring of Blood Pressure", -Seventh Annual Kidney Health Initiative Stakeholder's Meeting, Washington, DC

06/19 "Role of Kidney Insulin Receptors in Obesity and Insulin Resistance- A Journey from Savory to Sweet", -2019 APS/ASN Control of Renal Function in Health and Disease, Charlottesville, VA

07/19 "Diverse nephron cell type-specific adaptation to furosemide revealed by single cell analysis", - Epithelial Physiology and Cell Biology, Annual Meeting, Telluride, CO

09/19 "Endothelial cell-specific molecule-1 (Esm-1) and its Role(s) in Inflammation and Diabetic Kidney Disease", - University of South Florida Department of Molecular Pharmacology & Physiology, Tampa, FL

09/19 "Novel Targets in Kidney- Through the Prism of Aldosterone Sensitivity", HTN/HFpEF symposium, University of Maryland, Baltimore, MD

10/19 "Novel Mechanisms of Diuretic Resistance Revealed by Single Cell Analysis", 9th International Symposium on Aldosterone and ENaC in Health and Disease: The Kidney and Beyond, Quadrennial Meeting, Estes Park, CO

12/19 "Mechanisms of Diuretic-induced Tubular Remodeling Revealed by Single Cell Analysis", Division of Nephrology and Hypertension, USC Keck School of Medicine, Los Angeles, CA

12/19 "Hypertension and Electrolyte Management in the Metabolic Syndrome: Preclinical Studies and Clinical Correlations", 4th Annual Southern California Kidney Symposium: Updates in Kidney Transplantation and Hypertension, USC Keck School of Medicine, Los Angeles, CA

01/20 "Loops, Tubules, and Channels, DKD-Basic Science", Bayer Clinical Immersion Program, Stanford, CA

06/20 "What can we learn from studying diuretic use?", Stanford Pathways of Distinction Seminar, Stanford, CA

11/20 "Contribution of vascular endothelial cell-specific molecule-1 (Esm-1) to Diabetic Kidney Disease", Stanford Diabetes Research Symposium

12/20 "Proximal and Distal Nephron-specific Adaptation to Furosemide Revealed by Single Cell Analysis", Massachusetts General Hospital, Nephrology Grand Rounds, Boston, MA

04/21 "Contribution of endothelial cell-specific molecule-1 (Esm-1) to Diabetic Kidney Disease", UT Southwestern, George O'Brien Kidney Center Seminar Series

06/21 "Novel CLC-Kb Pore Mutation Associated with Defective Glycosylation, Distal Tubular Remodeling, and ESRD", Emory Renal Physiology and Research Seminar

09/21 "Hypertension Clinical Pathologic Case Conference", American Heart Association Hypertension Sessions, virtual format

11/21 "Diuretic-Induced Tubular Remodeling in the Proximal and Distal Nephron", American Society of Nephrology Kidney Week, virtual format

11/21 "Why Primary Aldosteronism is Under-Diagnosed in Clinical Settings", American Heart Association Scientific Sessions, virtual format

03/22 "Implications of Diuretic-Induced Tubular Remodeling- Unexpected Insights from Single Cell Analysis of the Kidney", University of Florida, Hypertension Seminar

03/22 "Resistant Hypertension: Who is at risk? Detection, Evaluation and Treatment", Preventive Cardiovascular Nurses Association, Las Vegas, NV

05/22 "Implications of Diuretic-Induced Tubular Remodeling- Unexpected Insights from Single Cell Analysis of the Kidney", International Symposium of the Collaborative Kidney Research Center SFB1350, Regensberg University, Germany

06/22 "Novel CLC-Kb Pore Mutation Associated with Defective Glycosylation, Distal Tubular Remodeling, and ESRD", Friedrich-Alexander-Universität, Erlangen-Nürnberg (FAU), Germany, Invited Seminar

08/22 "Diuretic Use in Hypertension", Curso Superior Bienal de Hipertensión Arterial, Sociedad de Argentina Hiypertensión Arterial- International Society of Hypertension

01/23 "Implications of Diuretic-Induced Tubular Remodeling- Unexpected Insights from Single Cell Analysis of the Kidney", University of Pittsburgh Invited Seminar

04/23 "Mechanisms of DKD Susceptibility", Endocrine Grand Rounds, Stanford University

09/23 "Case Based Learning: Resistant Hypertension", American Heart Association Hypertension Sessions

11/23 "Renovascular Disease: Overview of Definitions, Subtypes, and Prevalence", American Heart Association Scientific Sessions symposium

03/24 "Why I'm obsessed with measuring aldosterone: leaning into more definitive diagnoses of hypertension", Clinical Pharmacology Grand Rounds, Vanderbilt University

05/24 "Mechanisms of DKD Susceptibility", Nephrology Grand Rounds, Emory University

COMMUNITY SERVICE

03/09 "Diabetes and Kidney Disease", Bay Area Association of Kidney Patients, Featured Speaker, Palo Alto, CA

06/12 "Diabetic Kidney Disease", Stanford Nephrology Clinical Update, 49ers Day, Santa Clara, CA

09/12 "Diabetes and Kidney Disease", Bay Area Association of Kidney Patients, Featured Speaker, Palo Alto, CA

09/13 "Diabetes and Kidney Disease", National Kidney Foundation, Annual Symposium, Featured Speaker, Foster City, CA

08/15 "A Stanford Team Approach to Hypertension Management", Community Meet and Greet, Palo Alto, CA

11/16 "A Stanford Team Approach to Hypertension Management", Stanford Nephrology: Updates on Patient Programs Faculty Network, Los Gatos, CA

01/18 "Diagnostic Work-up of Resistant Hypertension", Stanford Nephrology, Updates in Kidney Disease, San Jose, CA

04/18 "Establishing a Comprehensive Care Center for Hypertension", Fresno, CA

04/18 "Diagnostic Work-up of Resistant Hypertension", Stanford Nephrology, Updates in Kidney Disease, Walnut Creek, CA

04/18 "Diagnostic Work-up of Resistant Hypertension", Stanford Nephrology, Provider Education Talk, Cisco Systems, San Jose, CA

06/18 "Review of 2017 AHA/ACC Guidelines for Blood Pressure Management", Nephrology Symposium, Fresno Madera Medical Society, Fresno, CA

06/18 "Diagnostic Work-up of Resistant Hypertension", Nephrology Symposium, Fresno Madera Medical Society, Fresno, CA

09/18 "Diabetes and Kidney Disease", Diabetic Night, IMPACT Seminar, Stanford, CA

06/19 "High Blood Pressure: What We Know Now and What We Need to Know" (https://www.youtube.com/watch?v=zsEIxBjTKEs), > 1 million views

08/21 "Diabetes and Hypertension", Project ECHO, Stanford, CA

01/22 "Hypertension: General Principles", Stanford Cardiovascular Medicine, Preventive Cardiology Affinity Group

03/22 "Diabetes and Hypertension", Project ECHO, Stanford, CA

05/22 "Resistant Hypertension Management Options", American Heart Association Live Webinar

06/22 "Resistant Hypertension: Who is at Risk? Detection, Evaluation and Treatment", Kaiser CME Hospital Wide Grand Rounds

10/22 "The Importance of Hypertension After Transplant-No Pressure at All!", Stanford Health Care, Heart Transplant Virtual Symposium (https://www.youtube.com/watch?v=gZruWtIqUY0)

11/22 "Why I'm obsessed with measuring Aldosterone- Leaning into definitive diagnoses of hypertension", Kaiser CME Hospital Wide Grand Rounds

03/23 "The Curious Case of Labile Hypertension-Diagnostic and Therapeutic Dilemmas", AHA Certified Hypertension Center Consortium

03/23 "Revascularization for Renovascular Disease: A Scientific Statement From the American Heart Association", AHA Webinar #HYPED Series

06/23 "Why I'm obsessed with measuring Aldosterone- Leaning into definitive diagnoses of hypertension", Nephrology Symposium, Fresno Madera Medical Society, Fresno, CA

12/23 "Primary Aldosteronism: Screening and Interpretation", American Heart Association Live Webinar

PRESS RELEASES

12/14 https://med.stanford.edu/content/dam/sm/medicineandthemuse/documents/HP17.1 Winter2014 finalforprinters_cropsandbleeds.pdf

2/17 https://www.rna-seqblog.com/early-access-program-for-new-single-cell-gene-expression-platform-announced/

6/17 http://www.frontlinegenomics.com/review/12717/the-type-of-sequencing-we-do-can-be-improved/

6/17 https://med.stanford.edu/news/all-news/2017/06/annual-awards-honor-outstanding-teaching-patient-care.html

8/18 https://www.mercurynews.com/2018/08/15/recall-of-tainted-blood-pressure-drugs-alarms-some-consumers/

8/18 https://scopeblog.stanford.edu/2018/08/23/insulin-resistance-affects-the-kidneys-stanford-study-finds/

9/18 https://mendelspod.com/podcasts/single-cell-sequencing-tailor-made-nephrology-says-vivek-bhalla-stanford/

01/19 https://medicine.stanford.edu/2019-report/tackling-a-fundamental-disease.html

04/19 https://www.usatoday.com/story/news/health/2019/04/24/blood-pressure-drugs-some-tainted-version-losartan-ok-fda/3550805002/

10/19 https://www.neurologylive.com/view/how-much-is-too-much-debating-blood-pressure-control-for-stroke

03/20 https://www.jwatch.org/na51110/2020/03/25/screening-primary-aldosteronism-rare

05/20 https://www.aacc.org/publications/cln

08/20 https://www.healio.com/news/cardiology/20200830/dapagliflozin-cuts-renal-cv-events-in-ckd-regardless-of-diabetes-status

09/20 https://consumer.healthday.com/circulatory-system-information-7/blood-pressure-news-70/blood-pressure-meds-can-affect-covid-19-care-761168.html

09/20 https://www.comhs.org/about-us/newsroom/health-library/2020/09/10/do-fatter-legs-mean-lower-blood-pressure

09/20 https://www.medscape.com/viewarticle/937189

01/21 https://podcasts.google.com/feed/aHR0cHM6Ly9oZWFydHN1Y2Nlc3N0ZWFtLmxpYnN5bi5jb20vcnNz/episode/MGZmNjdiNTAtMzNhMy00NzQxLTgyZTctZTZkYTA5Mjg3NGFk?sa=X&ved=0CAUQkfYCahcKEwign82qxY_uAhUAAAAAHQAAAAAQAQ

02/21 https://www.youtube.com/watch?v=zhjMr_1XMco
03/21 https://www.verywellhealth.com/beta-blockers-depression-link-5118448
05/21 https://www.tctmd.com/news/final-sprint-results-endorse-intensive-bp-control
01/22 https://medicine.stanford.edu/news/current-news/standard-news/nih-grants-for-ckdu.html
02/22 https://undark.org/2022/02/09/doctors-overlook-a-curable-cause-of-high-blood-pressure/
06/22 https://www.emjreviews.com/nephrology/article/interview-vivek-bhalla-j120121/
04/23 https://pcna.net/podcast/resistant-hypertension-detection-management/
06/23 https://www.healio.com/news/nephrology/20230605/increased-screening-for-elevated-blood-pressure-selfmonitoring-may-reduce-risk-of-ckd
08/23 https://www.everydayhealth.com/coronavirus/covid-19-linked-with-new-onset-high-blood-pressure/
11/23 https://medicine.stanford.edu/news/current-news/standard-news/team-player-benefits.html
04/24 https://www.medicalnewstoday.com/articles/how-high-blood-pressure-can-raise-the-risk-of-uterine-fibroids