

## CURRICULUM VITAE

October 2022

### VIVEK BHALLA, MD, FASN, FAHA

Department of Medicine, Division of Nephrology  
3180 Porter Drive, Stanford, CA 94304

T: 650-721-2471 | F: 650-721-3161  
vbhalla@stanford.edu

### 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-pres. Director, Pre-clinic Course- Renal Physiology  
Stanford University School of Medicine, Stanford, CA
- 6/14-pres. Director, 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 - Preclerkship Instruction, Nominee

## **LICENSES, CERTIFICATIONS, ETC.**

- 1999 Medical Board of California (License No. A070125)
- 1999 Drug Enforcement Agency (DEA No. BB6643109)
- 2001-pres. 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

## **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, 4-6 weeks  
Outpatient Nephrology Clinic, weekly

## TEACHING and MENTORING

### *Formal Teaching*

2004-2007	Renal Section, Organs Block	1 <sup>st</sup> Year Medical Students	Small Group Discussant
2004-2006	Mechanisms of Disease	4 <sup>th</sup> 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”,	1 <sup>st</sup> 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, 2 <sup>nd</sup> 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, 2 <sup>nd</sup> year Medical Students		
2019-pres.	Science of Medicine 222- “Nephrotic and Nephritic Syndromes” Class Lecturer, 2 <sup>nd</sup> 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”		
2016-pres.	Posters & Presenters, Networking with a Mentor, Experimental Biology Annual Meeting		
2017-pres.	Cardiology Fellows – Teaching Conference, Stanford University “Hypertension- General Principles”		
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-Pres.	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	Carmen Cajina	National Autonomous University of Nicaragua (UNAN-Managua)

*Graduate Students Supervised*

2005-2006	Marjolein Wijngaarden	Leiden University Medical Center (Netherlands)
2009	Simge Tektas	Yeditepe University
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
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
2011-2012	Carlos Francisco	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	Xiaohui Liao	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-Pres.	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.	Robin Lo	Stanford University

## PRIOR and CURRENT TRAINEES

<i>Predoctoral Trainees (27)</i>	<i>Dates</i>	<i>Current Appointment</i>
#Kamala Varadarajan	2022	Undergraduate student, UC Santa Barbara
#Shiraz Harel	2022-Pres.	Undergraduate student, Bryn Mawr University
†Enyinnaya Kamalu	2022-Pres.	Medical student, Howard University
#, †Carmen Cajina	2022-Pres.	4 <sup>th</sup> year Medical student, National Autonomous University of Nicaragua (UNAN-Managua)
#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
Demetri Maxim	2018-Pres.	Founder, Nephrogen
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; incoming 1 <sup>st</sup> year Medical student, UC San Diego
#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
#Aishu Venkataraman, MD	2012-2014	Residency, 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 at Pinterest
#Elizabeth C. Wendel, MD	2010-2011	Medical student, Harvard University; Urology residency, Emory University, GA
#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	2003-2006	Anesthesiology Residency: Univ. of Maryland

<i>Postdoctoral Trainees (24)</i>	<i>Dates</i>	<i>Current Appointment (*, tenure-track appointment)</i>
Robin Lo	2022-Pres.	Nephrology Fellow, Stanford University
#Yogita Sharma, PhD	2021-Pres.	Postdoctoral Fellow, Stanford University
Cory Sean Smith, MD	2021-Pres.	2 <sup>nd</sup> year Internal Medicine Resident, Stanford University
†Mario Funes Hernandez, MD	2020-Pres.	2 <sup>nd</sup> year Nephrology, Chief Fellow, Stanford University, American Kidney Fund Clinical Scientist, 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-Pres.	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	Senior Scientist, VAPAHCS, Stanford University
Gilad M. Jaffe, MD	2017-2019	Pulmonary Critical Care Fellow, UC Los Angeles
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	Staff Scientist, Single Cell Genomics, Berkeley Lights, Inc.
#, †Maria G. Velez, MD, PhD	2014-2015	Attending Physician, Nephrology, Denver, CO

Xiaoyi Zheng, PhD	2013-2021	Research Scientist, BriaCell
Evan Hall, MD	2013-2014	Hematology / Oncology Fellow, Stanford University School of Medicine
#,†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	Senior Scientist, Chai Biotechnologies

#Woman; †Underrepresented Minority or Disadvantaged

### **Prior Fellows/Trainees**

*Predoctoral Fellows (from 23 total)*

Alondra Valencia

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, PhD

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 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 19 total)*

Alexandre Gaudet, MD, PhD

Stipend: Fulbright France-United States Commission Award  
2019-2020

Dr. Gaudet 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 has a first-author manuscript ready for submission, a co-authored manuscript in revision, and has published one co-authored manuscript.

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-Current)  
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 (from 4 total)*

Demetri Maxim

Stipend: Stanford University SPARK grant

Mr. Maxim is performing 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 also received funding for translational research projects and will pursue 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.

*Postdoctoral Fellows (from 5 total)*

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.

Ying Shi, MD, PhD

Stipend: Fellowship Grant from the Larry L. Hillblom Foundation (2021-2024)

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 insulin signaling and SGLT2-mediated glucose transport in the setting of obesity and insulin resistance and is currently studying insulin receptor-dependent and independent post-translational regulation of SGLT2 in mouse and human.

Yogita Sharma, PhD

Stipend: Philanthropy (2021-2023)

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-HexNAc transferase) 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.

#### *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  
2016-2019 Experimental Biology Annual Meeting, Posters and Professors

#### *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

## PUBLICATIONS (in chronological order)

<https://www.ncbi.nlm.nih.gov/myncbi/1Rgp10wCrIeA4/bibliography/public/>

Citations: 2806, h-index: 25 (Google Scholar)

## Original Peer-Reviewed Articles (36)

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<sup>+</sup> 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<sup>+</sup> 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.
9. **Bhalla V**, Zhao B, Azar KM, Wang EJ, Choi S, Wong EC, Fortmann SP, Palaniappan LP. Racial/ ethnic differences in the prevalence of proteinuric and non-proteinuric diabetic kidney disease. *Diabetes Care*. 2013 May;36(5):1215-21.

10. Edinger RS, Coronello C, Bodnar AJ, Labarca M, **Bhalla V\***, LaFramboise WA, Benos PV, Ho J, Johnson JP, Butterworth MB. Aldosterone regulates microRNAs in the cortical collecting duct to alter sodium transport. *J Am Soc Nephrol*. 2014 Nov;25(11):2445-57. \*Developed a novel methodology for specific experiments performed in the manuscript.
11. \*Labarca M, Nizar JM, Walczak EM, Dong W, Pao AC, **Bhalla V**. Harvest and primary culture of the murine aldosterone-sensitive distal nephron. *Am J Physiol Renal Physiol*. 2015 Jun; 308(11): F1306-15. \*published as *Innovative Methodology*.
12. Moeller HB, Slengerik-Hansen J, Aroankins T, Assentoft M, MacAulay N, Moestrup SK, **Bhalla V\***, Fenton RA. Regulation of the water channel Aquaporin-2 via 14-3-3 $\sigma$  and  $\zeta$ . *J Biol Chem*. 2016 Jan;291(5):2469-84. \*Provided critical reagents. Participated in analysis and interpretation of the data. Made critical edits and revisions to the manuscript.
13. Nizar JM, Dong W, McClellan RB, Labarca M, Zhou Y, Wong J, Goens DG, Zhao M, Velarde N, Bernstein D, Pellizzon M, Satlin LM, **Bhalla V**. Na<sup>+</sup>-sensitive elevation in blood pressure is ENaC independent in diet-induced obesity and insulin resistance. *Am J Physiol Renal Physiol*. 2016 May; 310(9):F812-20.
14. Fung E, Anand S, **Bhalla V**. Pemetrexed-induced nephrogenic diabetes insipidus. *Am J Kidney Diseases*. 2016 Oct;68(4):628-32.
15. Liu GS, **Bhalla V**. Explaining the coincidence rule for estimating respiratory compensation in metabolic acid-base disorders. *Ann Intern Med*. 2017 Apr;166(8):610.
16. Zheng X, Soroush F, Long J, Hall ET, Adishesha PK, Bhattacharya S, Kiani MF, **Bhalla V**. Murine glomerular transcriptome links endothelial cell-specific molecule-1 deficiency with susceptibility to diabetic nephropathy. *PLoS One*. 2017 Sep;12(9):e0185250.
17. \*Nizar JM, Bouby, N, Bankir L, **Bhalla V**. Improved protocols for the study of urinary electrolyte excretion and blood pressure in rodents: use of gel food and stepwise changes in diet composition. *Am J Physiol Renal Physiol*. 2018 Jun;314(6):F1129-37. \*published as *Innovative Methodology*.
18. Raber I, Isom RT, Louie JD, Vasanaawala S, **Bhalla V**. A novel high-resolution magnetic resonance imaging protocol detects aldosterone-producing adenomas in patients with negative computed tomography. *Am J Hypertens*. 2018 Jul;31(8):928-32.
19. Tu W, Li R, **Bhalla V\***, Eckert GJ, Pratt JH. Age-related blood pressure sensitivity to aldosterone in blacks and whites. *Hypertension*. 2018 Jul;72(1):247-52. \*Participated in analysis and interpretation of the data. Drafted portions of the manuscript and made critical edits and revisions to the manuscript.
20. Nizar JM, Shepard BD, Vo VT, **Bhalla V**. Renal tubule insulin receptor modestly promotes elevated blood pressure and markedly stimulates glucose reabsorption. *JCI Insight*. 2018 Aug; 3(16). pii: 95107. doi: 10.1172/jci.insight.95107.
21. Anand S, Montez-Rath ME, Adasooriya D, Ratnatunga N, Kambham N, Wazil A, Wijetunge S, Badurdeen Z, Ratnayake C, Karunasena N, Schensul SL, Valhos P, Haider L, **Bhalla V\***, Levin A, Wise PH, Chertow GM, Barry M, Fire AZ, Nanayakkara N. Prospective biopsy-based study of chronic kidney disease of unknown etiology in Sri Lanka. *Clin J Am Soc Nephrol*. 2019 Jan 18. pii: CJN.07430618. doi: 10.2215/CJN.07430618. \*Assisted with conception and design of the study. Made critical edits and revisions to the manuscript.

22. Rangaswami J, **Bhalla V\***, Blair JEA, Chang TI, Costa S, Lentine KL, Lerma E, Mezue K, Molitch M, Mullens W, Ronco C, Tang WHW, McCullough PA; American Heart Association Council on the Kidney in Cardiovascular Disease and Council on Clinical Cardiology. Cardiorenal Syndrome: Classification, Pathophysiology, Diagnosis and Treatment Strategies: A Scientific Statement from the American Heart Association. *Circulation*. 2019 Apr;139(16):e840-78. \*Invited Member of the Writing Group. Drafted written sections and illustrations on diuretic therapy and mechanisms. Assisted with revision to the manuscript.
23. Cheng RZ, **Bhalla V\***, Chang TI. Comparison of routine and automated office blood pressure measurement. *Blood Press Monit*. 2019 Aug;24(4):174-8. \*Assisted with conception and design of the study. Made critical edits and revisions to the manuscript.
24. Ho PY, Li H, Cheng L, **Bhalla V\***, Fenton RA, Hallows KR. AMPK phosphorylation of the  $\beta_1$ Pix exchange factor regulates the assembly and function of an ENaC inhibitory complex in kidney epithelial cells. *Am J Physiol Renal Physiol*. 2019 Dec 1;317(6):F1513-F1525. \*Assisted with design of the study. Made critical edits and revisions to the manuscript.
25. Gunasekaran PM, Chertow GM, **Bhalla V\***, Byrd JB. Current Status of Angiotensin Receptor Blocker Recalls. *Hypertension*. 2019 Dec;74(6):1275-1278. \*Made critical edits and revisions to the manuscript.
26. Anand S, Caplin B, Gonzalez-Quiroz MA, Schensul SL, **Bhalla V\***, Parada X, Nanyakkara N, Fire AZ, Levin A, Friedman DJ. Epidemiology, Molecular, and Genetic Methodologies to Evaluate Causes of CKDu Around the World: Report of Working Group from ISN International Consortium of Collaborators on CKDu. *Clin J Am Soc Nephrol*. 2019 Dec;9(6):1254-1260. \*Assisted with conception and design of this report. Made critical edits to the manuscript.
27. Casey D, Thomas RJ, **Bhalla V\***, Commodore-Mensah Y, Heidenreich PA, Kolte D, Muntner P, Smith SC, Spertus J, Windle J, Wozniak GD, Ziaeian B. 2019 ACC/AHA Clinical Performance and Quality Measures for Adults with High Blood Pressure: Report of the American College of Cardiology/American Heart Association Task Force on Performance Measures. *J Am Coll Cardiol*. 2019 Nov 26;74(21):2661-2706. PMID: 31732293. \*Invited Member of the Writing Group. Drafted structural measures related to mobile and telehealth approaches to hypertension care. Assisted with revisions of the manuscript.
28. Zanetti D, Bergman H, Burgess S, Assimes TL, **Bhalla V\***, Ingelsson E. Urinary biomarkers and cardiovascular outcomes in the UK Biobank: observational and Mendelian randomization analyses. *Hypertension*. 2020 Mar;75(3):714-722. \*Assisted with analysis of the data. Made critical edits to the manuscript.
29. \*†Jaffe G, Gray Z, Krishnan G, Stedman M, Zheng Y, Han Jialin, Chertow GM, Leppert JT, and **Bhalla V**, Screening Rates for Primary Aldosteronism in Resistant Hypertension- A Cohort Study, *Hypertension*. 2020 Mar;75(3):650-659. PMID: 32008436.  
\*Highlighted in New England Journal of Medicine Journal Watch, March, 25, 2020, <https://www.jwatch.org/na51110/2020/03/25/screening-primary-aldosteronism-rare>  
†Named among Hypertension Editor's Picks for 2018-2020, Hyperaldosteronism, *Hypertension*. 2021 Feb;77(2):e17-e28. PMID: 33439730.

30. Rangaswami J, **Bhalla V\***, de Boer IH, Staruschenko A, Sharp JA, Singh RR, Lo KB, Tuttle K, Vaduganathan M, Ventura H, McCullough PA. Cardiorenal Protection With the Newer Antidiabetic Agents in Patients With Diabetes and Chronic Kidney Disease: A Scientific Statement From the American Heart Association. *Circulation*. 2020 Oct 27;142(17):e265-e286. doi: 10.1161/CIR.0000000000000920. Epub 2020 Sep 28. PubMed PMID: 32981345. \*Invited Member of the Writing Group. Drafted written sections and illustrations on mechanisms of SGLT2 inhibitors and GLP-1 agonists. Assisted with revision to the manuscript.
31. Boyle R, Baker JE, Charu V, Rainey WE, **Bhalla V**. Masking by Hypokalemia- Primary Aldosteronism with Undetectable Aldosterone: A Case Report. *Clinical Kidney Journal*. 2021 Apr;14(4):1269-1271. doi: 10.1093/ckj/sfaa150. eCollection 2021 Apr. PubMed PMID: 33841871; PMCID: PMC8023175.
32. Cohen JB, Cohen DL, Herman DS, Leppert JT, Byrd JB, **Bhalla V**. Testing for Primary Aldosteronism and Mineralocorticoid Receptor Antagonist Use Among US Veterans: A Retrospective Cohort Study. *Annals of Internal Medicine*. 2021 Mar;174(3):289-297. PMID: 33370170; PMCID: PMC7965294.
33. Wang KM, Li J, **Bhalla V\***, Jardine MJ, Neal B, de Zeeuw D, Fulcher G, Perkovic V, Mahaffey KW, Chang TI. Canagliflozin, serum magnesium and cardiovascular outcomes-Analysis from the CANVAS Program. *Endocrinol Diabetes Metab*. 2021 Mar 13;4(3):e00247. doi: 10.1002/edm2.247. PMID: 34277971; PMCID: PMC8279612. \*Assisted with analysis of the data. Made critical edits to the manuscript.
34. Funes Hernandez M, **Bhalla V\***, Isom RT\*. Self-limited Hypertension Due to Kidney Infarction: A Case Report. *Kidney Medicine*, 2022. Mar 31;4(5):100454. doi: 10.1016/j.xkme.2022.100454 PMID: 35509677. \*- co-senior author
35. Zheng X, Higdon LE, Gaudet A, Shah M, Balistieri A, Li C, Nadai P, Palaniappan L, Yang X, Santo B, Ginley B, Wang X, Myakala K, Nallagatla P, Levi M, Sarder P, Rosenberg A, Maltzman J, de Freitas Caires N, **Bhalla V**. Endothelial Cell-Specific Molecule-1 Inhibits Albuminuria in Diabetic Mice. *Kidney360*. 2022 July. DOI: <https://doi.org/10.34067/KID.0001712022>
36. Kohler J, Omachi K, Charu V, Miner JH, **Bhalla V**, “A COL4A4-G394S variant and impaired collagen IV trimerization in a patient with mild Alport syndrome”, *Kidney360*. 2022 October.

#### Review articles (12)

1. McCormick JA, **Bhalla V\***, Pao AC, Pearce D. SGK1: A Rapid Aldosterone-Induced Regulator of Renal Sodium Reabsorption. *Physiology*. 2005 Apr;20:134-9. \*Made critical edits and revisions to the intellectual concepts of the manuscript.
2. **Bhalla V**, Soundararajan R, Pao AC, Li H, Pearce D. Disinhibitory Pathways for Control of Sodium Transport: Regulation of ENaC by SGK1 and GILZ. *Am J Physiol Renal Physiol*. 2006 Oct; 291(4): F714-21.

3. **Bhalla V**, Hallows KR. Mechanisms of ENaC Regulation and Clinical Implications. *J Am Soc Nephrol*. 2008 Oct;19(10):1845-54.
4. **Bhalla V**, Grimm PC, Chertow GM, Pao AC. Melamine Nephrotoxicity: An Emerging Epidemic in the Era of Globalization. *Kidney Int*. 2009 Apr;75(8):774-9.
5. Prakash S, Hernandez G, Dujaili I, **Bhalla V**. Lead poisoning from an Ayurvedic herbal medicine in a patient with chronic kidney disease. *Nat Rev Nephrol*. 2009 May;5(5):297-300.
6. Velez MG, **Bhalla V**. The Role of the Immune System in the Pathogenesis of Diabetic Nephropathy. *J Nephrol Therapeutic*. 2012 May;S2. doi: 10.4172/2161-0959.S2-007. [5 pgs]
7. Zaika O, Tomilin V, Mamenko M, **Bhalla V\***, Pochynyuk O. New perspective of ClC-Kb/2 chloride channel physiology in the distal renal tubule. *Am J Physiol Renal Physiol*. 2016 May;310(10): F923-30. \*Made critical edits and revisions to the intellectual concepts of the manuscript.
8. Nizar JM, **Bhalla V**. Molecular Mechanisms of Sodium-Sensitive Hypertension in the Metabolic Syndrome. *Curr Hypertens Rep*. 2017 Aug;19(8):60.
9. Rao R, **Bhalla V\***, Pastor-Soler N. Intercalated Cells of the Kidney Collecting Duct in Kidney Physiology. *Semin Nephrol*. 2019 Jul;39(4):3353-67. \*Drafted sections of the manuscript. Made critical edits and revisions to the intellectual concepts of the manuscript.
10. Gray Z, Tu, W, Chertow GM, **Bhalla V**. Aldosterone sensitivity: an opportunity to explore the pathogenesis of hypertension. *Am J Physiol Renal Physiol*. 2021 25 Jan 2021, PMID: 33491565. <https://doi.org/10.1152/ajprenal.00415.2020>
11. Funes M, **Bhalla V\***, Isom RT. Hypothesis: Accessory Renal Arteries may be an Overlooked Cause of Renin-Dependent Hypertension. *J Hum Hypertens*. November 2021, PMID: 34785773. <https://doi.org/10.1038/s41371-021-00632-2> \*Assisted with design and outline and made critical edits and revisions to the intellectual concepts of the manuscript.
12. **Bhalla V**, Textor SC, Beckman JA, Casanegra AI, Cooper CJ, Kim ESH, Luther JM, Misra S, Oderich GS, Revascularization for Renovascular Disease- A Scientific Statement from the American Heart Association, Hypertension. 2022 2022 Aug;79(8): e128-e143. PMID: 35708012.

#### Editorials (13)

1. **Bhalla V**. In diabetic nephropathy, high doses of vitamin B decrease glomerular filtration rate and increase risk of the composite outcome of a vascular event or all-cause mortality compared with placebo. *Evid Based Med*. 2011 Feb;16(1):14-5.
2. **Bhalla V**, Velez MG, Chertow GM. A Transcriptional Blueprint for Human and Murine Diabetic Kidney Disease. *Diabetes*. 2013 Jan;62(1):31-3.

3. Hall ET, **Bhalla V**. Is there a sweet spot for nrf2 activation in the treatment of diabetic kidney disease? *Diabetes*. 2014 Sep;63(9):2904-5.
4. Zheng X, **Bhalla V**. The Missing Link- Studying the alternative TGF- $\beta$  pathway provides a unifying theory for different components of diabetic nephropathy. *Diabetes*. 2015 Jun;64(6):1898-900.
5. Nizar JM, **Bhalla V**. Insights from direct renal insulin infusion: a new hammer for an age-old nail. *Am J Physiol Renal Physiol*. 2018 May;314(5):F926-7.
6. Dominiczak AF, Kuo D, **Bhalla V\***, Granger JP, Griffin KA. Celebrating 40 years of Accomplishments. *Hypertension*. 2019 Jan;73(1):3-6. \*Assisted with edits and revisions to the manuscript.
7. \*Byrd JB, Chertow GM, **Bhalla V**. Hypertension Hot Potato - Anatomy of the Angiotensin Receptor Blocker Recalls. *N Engl J Med*. 2019 Apr;380(17):1589-91.  
\*Among Top 10 Most-Viewed Articles on *N Engl J Med* Jan-June 2019  
<https://cdn.nejm.org/pdf/Top-10-Most-Viewed.pdf>
8. Sparks MA, South A, Welling P, Luther JM, Cohen J, Byrd JB, Burrell LM, Battle D, Tomlinson L, **Bhalla V\***, Rheault MN, Soler MJ, Swaminathan S, Hiremath S. Sound Science before Quick Judgement Regarding RAS Blockade in COVID-19. *Clin J Am Soc Nephrol*. 2020 Mar 27, PMID: 32220930. \*Assisted with conception and design and made critical edits to the manuscript
9. Chang TI, **Bhalla V**. Kidney Case Conference Series: How We Manage Hypertension in a Patient with a Recent Stroke. *Clin J Am Soc Nephrol*. 2020 Sep 7;15(9):1352-1354. doi: 10.2215/CJN.00030120. Epub 2020 May 11. PubMed PMID: 32393466; PubMed Central PMCID: PMC7480561.
10. Staruschenko A, **Bhalla V**, Rangaswami J. SGLT2 inhibitors: diabetic kidney disease and beyond. *Am J Physiol Renal Physiol*. 2020 Nov 1;319(5):F780-F781. doi: 10.1152/ajprenal.00518.2020. Epub 2020 Oct 5. PubMed PMID: 33017191; PubMed Central PMCID: PMC7789985.
11. **Bhalla V**, Blish CA, South AM. A historical perspective on ACE2 in the COVID-19 era. *J Hum Hypertens*. 2020 Dec 14. doi: 10.1038/s41371-020-00459-3. Epub ahead of print. PMID: 33318644
12. D'Costa MR, Taler SJ, Dominiczak AF, Touyz RM, Carey RM, Basile JN, Bursztyn M, **Bhalla V**, Schwartz GL. Uncontrolled Hypertension in an Elderly Man on Multiple Antihypertensive Drugs. *Hypertension*. 2020 Dec;76(6):1658-1663. doi: 10.1161/HYPERTENSIONAHA.120.15310. Epub 2020 Oct 26. PubMed PMID: 33100046.
13. Rangaswami J, **Bhalla V**, Chertow GM, Harrington R, Staruschenko A, Tuttle K, Braunwald E, Changing the Trajectory of Heart Failure and Kidney Disease. *Clin J Am Soc Nephrol*. 2022 May;17(5):742-745. PMID: 35232819.



### Book Chapters (3)

1. Pearce D, **Bhalla V\***, Funder J, Stokes J. Aldosterone Regulation of Solute Transport. (2011) Taal M, Chertow G, Marsden P, Skorecki K, Yu A, Brenner B (eds.) Brenner and Rector's The Kidney, 9th Edition. Vol. 1, Ch. 6. Saunders: Philadelphia, PA. ISBN: 9781416061939 \*Wrote and edited sections of the chapter.
2. Pearce D, **Bhalla V\***, Funder J. Aldosterone and Mineralocorticoid Receptors: Renal and Extrarenal Roles. (2015) Skorecki K, Chertow G, Marsden P, Taal M, Yu A(eds.). Brenner and Rector's The Kidney, 10th Edition. Vol. 1, Ch. 12. Saunders: Philadelphia, PA. ISBN: 9781455748365. \*Wrote and edited sections of the chapter.
3. Pearce D, **Bhalla V\***, Funder J. Aldosterone and Mineralocorticoid Receptors: Renal and Extrarenal Roles. (2019) Yu ASL, Chertow GM, Luyckx V, Marsden PA, Skorecki K, Taal MW (eds.) Brenner and Rector's The Kidney, 11th Edition. Vol. 1, Ch. 12. Saunders: Philadelphia, PA. ISBN: 9781455748365. \*Wrote and edited sections of the chapter.

<https://www.ncbi.nlm.nih.gov/myncbi/vivek.bhalla.1/bibliography/public/>

### Non peer-reviewed academic publications (2)

1. **Vivek Bhalla**, Anupam Agarwal, Kurt Amsler, Christian Faul, Kenneth Hallows, Alicia McDonough, Lilach Lerman, James McCormick, Jeffrey Miner, Pamela Tran; on behalf of the Biosciences Research Advisory Group of the American Society of Nephrology, "Advocacy for Basic Research in Nephrology", *ASN Kidney News*, Feb 2016;8(2):7.
2. Carmen Cajina, **Vivek Bhalla**, "Potassium Supplementation in Chronic Kidney Disease", *ASN Kidney News*, Oct 2022.

### Abstracts not also appearing as full papers (34)

1. LaGrange LP, **Bhalla V**, Pearce D, Toney GM, Stockand JD. Activation of the epithelial sodium channel by 14-3-3 proteins. *Experimental Biology*, 2005.
2. Khush K, **Bhalla V**, Rifkin C, McGlothlin D, Vincenti F, Hoopes C, De Marco T. Combined Heart-Kidney Transplantation Reduces Costs and Improves Survival Compared to LVAD Destination Therapy for Patients with Concomitant Heart and Kidney Failure. International Society for Heart and Lung Transplant Annual Meeting, 2006.
3. Khush K, **Bhalla V**, Rifkin C, McGlothlin D, Vincenti F, Hoopes C, De Marco T. Combined Heart-Kidney Transplantation in Patients with End-Stage Heart and Kidney Failure. *International Society for Heart and Lung Transplant Annual Meeting*, 2006.
4. Palaniyandi SS, Disatnik MH, Sun L, Vishnumangalam JJ, Xia X, Pavlovic A, **Bhalla V**, Ashley E, Mochly-Rosen D. Aldehyde dehydrogenase activator attenuates diabetic cardiomyopathy; a role in improving the quality of resident cardiac stem cells? *FASEB*, 2010.

5. McClellan RB, Dong W, Pellizzon M, **Bhalla V**. Characterization of Blood Pressure and Urine Sodium Retention in Mouse Models of Insulin Resistance. *American Society of Nephrology Annual Meeting*, 2011.
6. Labarca M, Goens D, Dong W, **Bhalla V**. Neural Precursor Cell Expressed, Developmental Down-Regulated 4 Like Protein, Serum- and Glucocorticoid-Induced Protein Kinase 1, and 14-3-3 proteins Differentially Regulate the Cleaved and Uncleaved Forms of the Epithelial Sodium Channel. *American Society of Nephrology Annual Meeting*, 2012.
7. **Bhalla V**, Wang E, Azar K, Taylor K, Nomura A, Parnas ML, Palaniappan L. "Validation of Biomarkers for Diabetic Nephropathy in a Community-Based Healthcare Setting". *Stanford School of Medicine- Community Health Annual Symposium*, 2012.
8. Zheng X, Dong W, **Bhalla V**. Low Dose of Vitamin D Analog, Paricalcitol, May Promote Carbonyl Stress and Kidney Disease in Diabetic Mice. *American Society of Nephrology Annual Meeting*, 2013.
9. Nizar J, Dong W, McClellan R, Labarca M, Zhou Y, Satlin L, **Bhalla V**. ENaC-independent impaired natriuresis and increased blood pressure in mouse models of diet-induced hyperinsulinemia. *West Coast Salt and Water Conference*, 2014.
10. Labarca M, Goens D, Dong W, **Bhalla V**. Molecular determinants of the critical interaction between E3 ligase Nedd4-2 and ENaC. *Experimental Biology Annual Meeting*, 2014.
11. Nizar J, Dong W, McClellan R, Labarca M, Zhou Y, Satlin L, **Bhalla V**. ENaC-independent impaired natriuresis and increased blood pressure in mouse models of diet-induced hyperinsulinemia. *Experimental Biology Annual Meeting*, 2014.
12. Al-bataineh MM, Li H, Marciszyn AL, **Bhalla V**, Hallows KR, Pastor-Soler N. AMPK regulates the vacuolar H<sup>+</sup>-ATPase via 14-3-3 proteins. April 2015. *FASEB J.* 29(1 Suppl) 969.23.
13. Soroush F, Zheng X, **Bhalla V**, Kiani MF. Characterization of Endothelial Cell-Specific Molecule 1 as a Novel Anti-Inflammatory Therapeutic Using a Bioinspired Microfluidic Assay. *Biomedical Engineering Society Annual Meeting*, 2015.
14. Raber I, Isom RT, Louie JD, Vasanaawala S, **Bhalla V**, High density adrenal MRI detects clinically relevant aldosterone-producing adenomas with higher precision than computer tomography. *Hypertension Blood Pressure Research (AHA) Annual Meeting*, 2015.
15. Zheng X, Soroush F, Bhattacharya S, Kiani MF, **Bhalla V**. Dynamic Regulation of Endothelial Specific Molecule 1 in Diabetic Mouse Kidney. *American Society of Nephrology Annual Meeting*, 2015.
16. Nizar J, Walczak E, Dong W, Bankir L, **Bhalla V**. Inducible Renal tubule-specific Insulin Receptor Knockout Mice Have Decreased NCC-mediated Sodium Reabsorption and Reduced Sensitivity to Mineralocorticoid-induced Hypertension in Obesity and Insulin Resistance. *Experimental Biology Annual Meeting*, 2016.
17. Zheng X, Soroush F, Bhattacharya S, Kiani MF, **Bhalla V**. Dynamic Regulation of Endothelial Specific Molecule 1 in Diabetic Mouse Kidney. *Experimental Biology Annual Meeting*, 2016.
18. Walczak E, Krauson AJ, Iyer S, Nizar J, Dong W, **Bhalla V**. Role of IGF1R in Tubular Remodeling of the Mouse Kidney. *Experimental Biology Annual Meeting*, 2016.

19. Nizar J, Bankir L, **Bhalla V**. Sodium intake affects excretion over short time periods in steady-state C57Bl/6J mice. *American Society of Nephrology Annual Meeting*, 2016.
20. Walczak EM, Holdgate G, Fan J, Krauson A, Zheng X, **Bhalla V**, Fan HC. 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*, 2017.
21. Krauson A, Walczak E, Iyer S, Velarde N, Nizar J, **Bhalla V**. “Chronic Loop Diuretic Treatment Mediates Segment-Specific Hypertrophy in the Nephron”. *Experimental Biology Annual Meeting*, 2017.
22. Zheng X, Higdon L, Maltzman J, **Bhalla V**. “Endothelial Specific Molecule 1 (Esm-1) Inhibits Macrophage Infiltration in a Mouse Model of Goodpasture’s Syndrome”. *Experimental Biology Annual Meeting*, 2017.
23. Jaffe G, Krishnan G, Stedman M, Chertow GM, Leppert JT, **Bhalla V**. “Screening Rates for the Diagnostic Workup of Resistant Hypertension”. *Hypertension Blood Pressure Research (AHA) Annual Meeting*, 2017.
24. Krauson A, Walczak E, Iyer S, Velarde N, Nizar J, **Bhalla V**. “Loop Diuretic Induces Tubular Remodeling via IGF-1R Dependent and IGF-1R Independent Signaling”. *American Heart Association Scientific Sessions*, 2017.
25. Holdgate G, Walczak EM, Jensen D, Krauson A, **Bhalla V**, Fan HC. “Leveraging single cell whole transcriptome data for targeted RNA sequencing panel design: Applications in single cell renal physiology”. *Advances in Genome Biology and Technology*, 2018.
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 manuscript.
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.*

## RESEARCH SUPPORT

### Awarded

- 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.
- 01/28/21-12/31/25 NIH NIDDK R01DK127138  
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.
- 07/01/20-06/30/24 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.

- 04/01/20-  
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) (NCE: 12/31/2022)  
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 (Ca<sup>2+</sup>)-activated BK channel activity, and thus, defective FIKS and K adaptation, with consequent hyperkalemia.

Past

- 03/01/21-  
06/30/22 Stanford SPARK Program in Translational Research  
Gene Therapy for Autosomal Dominant Polycystic Kidney Disease (ADPKD)  
PI  
The aim of this project is to develop and optimize reagents for gene-editing to over-express polycystin genes in vitro and to develop reagents for adenoviral-mediated delivery of polycystin genes in an in vivo model of ADPKD.
- 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**

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
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

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

Using novel genetic mutations to characterize the function of human chloride channels in the kidney

5. “Gene Therapy for Autosomal Dominant Polycystic Kidney Disease”

PI, 2019-Pres.

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

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  
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 Garica, 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; Jason Lee, Stanford  
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. “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
6. “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

7. “Biomarker Discovery for Diabetic Kidney Disease”

Co-PI, 2009-pres.

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. “Pb<sup>2+</sup> 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 Pb<sup>2+</sup> 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

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-pres.	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
2021	CinCor-Pharma	-Site-Co-PI

## EDITORIAL SERVICE

8/04-pres.	European Molecular Biology Organization (EMBO) Journal-	Manuscript reviewer
4/05-pres.	Journal of the American Society of Nephrology	- Manuscript reviewer
5/05-pres.	American Journal of Physiology, Renal Physiology	- Manuscript reviewer
		- Editorial Board
8/09-pres.	Pediatric Nephrology	-Manuscript reviewer
12/09-pres.	Nephron	-Manuscript reviewer
12/09-pres.	Proceedings of the National Academy of Sciences	-Manuscript reviewer
01/10-pres.	PPAR Reviews	-Manuscript reviewer
02/10-pres.	Growth Hormone and IGF-1 Research	-Manuscript reviewer
05/10-pres.	Frontiers in Physiology – Renal and Epithelial Physiology	-Editorial Board
07/11-pres.	American Journal of Kidney Diseases	-Manuscript reviewer
09/11-pres.	Diabetes	-Manuscript reviewer
10/12-pres.	Journal of the American Medical Association	-Manuscript reviewer
01/13-pres.	European Journal of Clinical Investigation	- Editor
04/14-pres.	American Journal of Physiology, Cell	-Manuscript reviewer
06/14-pres.	American Journal of Physiology, Endocrinology	-Manuscript reviewer
12/14-pres.	Journal of the American Society of Nephrology	-Manuscript reviewer
01/16-pres.	Physiologic Reports	-Editorial Board
05/16-pres.	Circulation – Cardiovascular Genetics	-Manuscript reviewer
07/16-pres.	American Heart Journal	-Manuscript reviewer
02/17-pres.	International Journal of Molecular Sciences	-Manuscript reviewer
2017-pres.	Journal of Clinical Investigation	-Manuscript reviewer
05/18-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

## 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
02/19-01/23	National Institutes of Health, DDK-D Fellowship Application Review Committee

04/20 American Heart Association- COVID-19 Rapid Response Grant Review Committee

## 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 21<sup>st</sup> 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, American Heart Association, Hypertension Council  
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

*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
- 2019-2020 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 Hypertension Scientific Sessions, American Heart Association, Abstract Reviewer
- 2022 Scientific Sessions, American Heart Association, 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 Medical Advisory Borad, Janssen Pharmaceuticals

**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”

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”

04/22 “Why I’m obsessed with measuring Aldosterone- Leaning into definitive diagnoses of hypertension”

Invited Presentations (69)

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<sup>+</sup> 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<sup>+</sup> 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”- 7<sup>th</sup> 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
- 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
- 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, Regensburg 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
- 01/23 05/22 “Implications of Diuretic-Induced Tubular Remodeling- Unexpected Insights from Single Cell Analysis of the Kidney”, University of Pittsburgh Invited Seminar

## **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
- 09/18 “Diabetes and Kidney Disease”, Diabetic Night, IMPACT Seminar, Stanford, CA
- 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

## PRESS RELEASES

- 12/14 [https://med.stanford.edu/content/dam/sm/medicineandthemuse/documents/HP17.1\\_Winter2014\\_finalforprinters\\_cropsandbleeds.pdf](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://mendelspan.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/>
- 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/aHR0cHM6Ly9oZWYdHN1Y2Nlc3N0ZWftLmxpYnN5bi5jb20vcnNz/episode/MGZmNjdiNTAtMzNhMy00NzQxLTgyZTctZTZkYTA5Mjg3NGFk?sa=X&ved=0CAUQkfYCahcKEwign82qxY\\_uAhUAAAAAHQAAAAAQAAQ](https://podcasts.google.com/feed/aHR0cHM6Ly9oZWYdHN1Y2Nlc3N0ZWftLmxpYnN5bi5jb20vcnNz/episode/MGZmNjdiNTAtMzNhMy00NzQxLTgyZTctZTZkYTA5Mjg3NGFk?sa=X&ved=0CAUQkfYCahcKEwign82qxY_uAhUAAAAAHQAAAAAQAAQ)
- 02/21 [https://www.youtube.com/watch?v=zhjMr\\_1XMco](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/>