

CURRICULUM VITAE

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EDUCATION

09/90-05/94	University of California, Berkeley	BS	Elec Eng / Comp Sci
09/94-06/98	University of California, San Diego	MD	
06/98-06/99	Harbor-UCLA Medical Center	Internship	Internal Medicine
07/99-06/01	Harbor-UCLA Medical Center	Residency	Internal Medicine
07/01-06/03	University of California, San Francisco	Fellowship	Clinical Nephrology
07/03-08/05	University of California, San Francisco	Fellowship	Basic Science Nephrology

EMPLOYMENT

09/05-12/07	University of California, San Francisco	Adjunct Assistant Professor	Medicine
01/08-08/08	Stanford University	Acting Assistant Professor	Medicine
09/08-	Stanford University	Assistant Professor	Medicine
09/12-	Stanford University	Director, Pre-clinic Course-	Renal Physiology
06/14-	Stanford University	Director, Stanford Hypertension Center	

HONORS AND AWARDS

1992-1994	UC Berkeley	Tau Beta Pi, Engineering Honors Society
1992-1994	UC Berkeley	Eta Kappa Nu, Elec Eng Honors Society
1994	UC Berkeley	Phi Beta Kappa
1994	UC Berkeley	Graduation with Honors
1995	US Dept. HHS	Pre-Clinical Scholarship
2000	UC Los Angeles	Solomon Scholars Resident Research Award
2003	NIH / NIDDK	Ruth L. Kirschstein National Research Service Award (F32)
2003	ASN	Fellow
2005	NIH / NIDDK	Mentored Clinical Scientist Award (K08)
2006	UC San Francisco	Excellence in Small Group Instruction, Nominee
2007	UC San Francisco	Teaching Awardee, Halie T. Debas Academy of Medical Educators
2008	NKF	Shaul G. Massry Young Investigator Grant Recipient
2010	ASN	Carl W. Gottschalk Career Development Award
2012	Stanford University	Henry J Kaiser Family Foundation Award for Excellence in Preclinical Teaching
2017	AHA	Fellow
2017	Stanford University	School of Medicine Award for Outstanding Lecture / Presentation

LICENSES, CERTIFICATIONS, ETC.

1999	Medical Board of California	(License No. A070125)
1999	Drug Enforcement Agency	(DEA No. BB6643109)
2001-Present	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-Present	American Board of Internal Medicine, Subspecialty-	Nephrology #205268

2004 Advanced Cardiac Life Support Program, National Cognitive and Skills Examination
2015 American Society of Hypertension

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

Predoctoral Students Supervised

2003-2005	John Siu	UC Berkeley
2008-2009	Xiaoyu Xia	UC Los Angeles
2009-2010	Sriya Mallidi	UC San Diego
2010-2011	Elizabeth Change Wendel	Stanford University
2011-2013	Donald Goens III	Stanford University
2011-2014	Aishu Venkataraman	Stanford University
2012	Justin Charles	Cornell University
2012-2013	Brian Chang	University of the Pacific
2013	Neha Tammana	University of the Pacific
2015-Present	Sonali Iyer	UC Berkeley
2017	Claire Wang	Stanford University
2017-2018	Vianna Vo	Stanford University

Graduate Students Supervised

2005-2006	Marjolein Wijngaarden	Leiden University Medical Center (Netherlands)
2009	Simge Tektas	Yeditepe University (Turkey)
2014-Present	Fariborz Soroush	Temple University (co-mentor)
2015-2017	Inbar Raber	Stanford University School of Medicine

Postdoctoral Fellows Supervised

2008-2010	Sindhu Chandran	Stanford University
2008-2010	Jyothi Jayaram Vishnumanglam	Stanford University
2009-2011	Suresh S. Palaniyandi	Stanford University (co-mentor)
2010-2011	Puneeth Kumar Adishesha	Stanford University
2010-2012	Robert Bradley McClellan	Stanford University
2010-2014	Mariana Labarca	Stanford University
2011-2012	Carlos Francisco	Stanford University
2013-Present	Xiaoyi Zheng	Stanford University
2013-Present	Jonathan Nizar	Stanford University
2014-2015	Evan Hall	Stanford University
2014-2015	Gabriela Velez	Stanford University
2014-2015	Elisabeth Walczak	Stanford University
2015-2016	Robert Rope	Stanford University (co-mentor)
2015-2017	Aram Krauson	Stanford University
2017-Present	Gilad Jaffe	Stanford University

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

Informal Teaching through Professional Societies

2014-2017	American Society of Nephrology Annual Meeting, STARS Mentor
2016-2018	Experimental Biology Annual Meeting, Posters and Professors

Teaching Awards

2006	Excellence in Small Group Instruction, Nominee (1 st 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/sites/myncbi/1Rgp10wCrleA4/bibliography/47784616/public/?sort=date&direction=ascending>

Original Peer-Reviewed Articles (22)

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 15; 75(1): 66-71. PMID: 12544873.
2. **Vivek Bhalla**, Dorothee Daidié, Hongyan Li, Alan C. Pao, Lila P. LaGrange, Jian Wang, Alain Vandewalle, James D. Stockand, Olivier Staub, and David Pearce, “SGK1 regulates ubiquitin ligase Nedd4-2 by inducing interaction with 14-3-3”, *Molecular Endocrinology*, 2005 Dec;19(12): 3073-84. PMID: 16099816.
3. **Bhalla V**, Oyster NM, Fitch AC, Wijngaarden MA, Neumann D, Schlattner U, Pearce D, Hallows KR, “AMP-activated kinase inhibits the epithelial Na⁺ channel through functional regulation of the ubiquitin ligase Nedd4-2”, *Journal of Biological Chemistry*, 2006, Sep 8; 281(36): 26159-69. PMID: 16844684.
4. Pao AC, McCormick JA, Li H, Siu J, Govaerts C, **Bhalla V***, Soundararajan R, Pearce D, “The N-terminus of Serum and Glucocorticoid Regulated Kinase 1 Binds to Phosphoinositides and is Essential for Isoform-Specific Physiologic Functions”, *American Journal of Physiology, Renal Physiology*, 2007, Jun; 292(6):F1741-50. PMID: 173562130.
* 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 JNK1 as a Potentiator of Nedd4-2-Mediated Epithelial Na⁺ Channel Inhibition”, *Journal of Biological Chemistry*, 2010, Jul 9; 285(28): 21671-8. PMID: 20466724.
*- co-first author; ^- corresponding author
6. 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,” *Journal of Biological Chemistry*, 2011 Oct 28; 286(43):37830-40. PMID: 21900244.
7. Krishnan E, Lingala B, **Bhalla V**, “Low-level lead exposure and the risk for gout: Results from the NHANES study”, *Annals of Internal Medicine*, 2012, Aug 21; 157(4):233-241. PMID 2291093.
8. **Vivek Bhalla**, Beinan Zhao, Kristen M.J. Azar, Elsie J. Wang, Sarah Choi, Eric C. Wong, Stephen P. Fortmann, Latha P. Palaniappan, “Racial/Ethnic Differences in the Prevalence of Proteinuric and Non-proteinuric Diabetic Kidney Disease”, *Diabetes Care*, 2013, May; 36(5): 1215-21. PMID: 23238659.

9. 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", *Journal of the American Society of Nephrology*, 2014; 25(11):2445-57. PMID: 24744440
10. * Labarca M, Nizar JM, Walczak EM, Dong W, Pao AC, **Bhalla V**, "Harvest and Primary Culture of the Murine Aldosterone-Sensitive Distal Nephron", *American Journal of Physiology- Renal Physiology*, 2015, Jun 1; 308(11):F1306-15. PMID: 25810438.* published as *Innovative Methodology*.
11. 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 Theta (θ) and Zeta (ζ)", *Journal of Biological Chemistry*, J Biol Chem. 2016 Jan 29;291(5):2469-84. Epub 2015 Dec 8. PMID: 26645691.
12. 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**, "Sodium-Sensitive Elevation in Blood Pressure is ENaC Independent in Diet-Induced Obesity and Insulin Resistance", *American Journal of Physiology- Renal Physiology*, 2016 May 1; 310(9):F812-20, PMID: 26841823.
13. Fung E, Anand S, **Bhalla V**, "Pemetrexed-Induced Nephrogenic Diabetes Insipidus", *American Journal of Kidney Diseases*, 2016 Oct; 68(4): 628-32. PMID: 27241854.
14. Liu, GS, **Bhalla V**, "Explaining the coincidence rule for estimating respiratory compensation in metabolic acid-base disorders: a research letter", *Annals of Internal Medicine*, 2017, April 18; 166(8): 610. PMID: 28384697
15. 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 21;12(9):e0185250. PMID: 28934365.
16. *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", *American Journal of Physiology- Renal Physiology*, 2018 January 10, epub. <https://doi.org/10.1152/ajprenal.00474.2017>. PMID: 29357416.* published as *Innovative Methodology*.
17. I Raber, R T Isom, J D Louie, S Vasanawala, **V Bhalla**, "A Novel High-Resolution Magnetic Resonance Imaging Protocol Detects Aldosterone-Producing Adenomas in Patients with Negative Computed Tomography", *American Journal of Hypertension*, 2018, Apr 10, hpy054, <https://doi.org/10.1093/ajh/hpy054>, PMID: 29648568.
18. 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):247-252. doi: 10.1161/HYPERTENSIONAHA.118.11014, PMID: 29785962.
19. Nizar JM, Shepard BD, Vo VT, **Bhalla V**, "Renal tubule insulin receptor modestly promotes elevated blood pressure, and markedly stimulates glucose reabsorption", *Journal of Clinical Investigation Insight*, 2018, Aug 23;3(16). pii: 95107. doi: 10.1172/jci.insight.95107. [Epub ahead of print] PMID: 30135311.
20. 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, "Cardio-renal Syndrome: Classification, Pathophysiology, Diagnosis and Treatment Strategies- A Scientific Statement for Healthcare Professionals from the American Heart Association", *Circulation*, 2018, *manuscript accepted*.

21. Shuchi Anand, Maria E. Montez-Rath, Dinuka Adasooriya, Neelakanthi Ratnatunga, Neeraja Kambham, Abdool Wazil, Sulcohana Wijetunge, Zeid Badurdeen, Charaka Ratnayake, Nishamani Karunasena, Stephen L. Schensul, Penny Valhos, Lalarukh Haider, **Vivek Bhalla**, Adeera Levin, Paul H. Wise, Glenn M. Chertow, Michele Barry, Andrew Z. Fire, Nishantha Nanayakkara, "Characterizing chronic kidney disease of unknown etiology in Sri Lanka: common clinical features in a prospective biopsy-based study", *Clinical Journal of the American Society of Nephrology*, 2018, manuscript accepted.
22. Dominiczak AF, Kuo D, **Bhalla V**, Granger JP, Griffin KA, "Celebrating 40 years of Accomplishments", *Hypertension*, 2019 Jan;73(1):3-6. doi: 10.1161/ HYPERTENSIONAHA.118.12252. PMID: 30571572

Review articles (8)

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. PMID: 15772302.
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", *American Journal of Physiology, Renal Physiology*, 2006, Oct; 291(4): F714-21. PMID: 16720863.
3. **Bhalla V**, Hallows KR, "Mechanisms of ENaC Regulation and Clinical Implications", *Journal of the American Society of Nephrology*, 2008, October; 19(10): 1845-54. PMID: 18753254.
4. **Bhalla V**, Grimm PC, Chertow GM, Pao AC, "Melamine Nephrotoxicity- An Emerging Epidemic in the Era of Globalization", *Kidney International*, 2009, Apr; 75 (8): 774-9. PMID: 19212415.
5. Prakash S, Hernandez G, Dujaili I, **Bhalla V**, "Lead poisoning from an Ayurvedic herbal medicine in a patient with chronic kidney disease", *Nature Reviews Nephrology*, 2009, May, 5(5): 297-300. PMID: 19384331.
6. MG Velez, **Bhalla V**, "The Role of the Immune System in the Pathogenesis of Diabetic Nephropathy", *Journal of Nephrology and Therapeutics*, March 2012.
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", *American Journal of Physiology- Renal Physiology*, 2016 Jan 20:ajprenal.00577.2015. doi: 10.1152/ajprenal.00577.2015. [Epub ahead of print] PMID: 26792067.
8. Nizar JM, **Bhalla V**, "Molecular Mechanisms of Sodium-Sensitive Hypertension in the Metabolic Syndrome", *Current Hypertension Reports*, 2017 Aug; 19(8):60, PMID: 28676941.

Editorials (5)

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", *Evidenced Based Medicine*, 2011, Feb; 16(1): 14-5. PMID: 21047842.
2. **Bhalla V**, Velez MG, Chertow GM, "A Transcriptional Blueprint for Human and Murine Diabetic Kidney Disease", *Diabetes*, 2013 Jan; 62(1):31-3. PMID: 23258910
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. PMID: 25146471.

4. Zheng X, **Bhalla V**, “The Missing Link- Studying the alternative TGF- β pathway provides a unifying theory for different components of diabetic nephropathy”, *Diabetes*, 2015, Jun; 64(6):1898-900. PMID: 25999532.
5. Nizar JM, **Bhalla V**, “Insights from direct renal insulin infusion: a new hammer for an age-old nail”, *American Journal of Physiology- Renal Physiology*, 2018 May 1;314(5):F926-F927. doi: 10.1152/ajprenal.00532.2017, PMID: 29141941.

Book Chapters (1)

1. David Pearce, **Vivek Bhalla**, John Funder, John Stokes, “Aldosterone Regulation of Solute Transport”, Brenner and Rector's *The Kidney*, 9th edition, Section 1, Chapter 6, 2011, 2014, 2018.

Non peer-reviewed academic publications (1)

1. **Vivek Bhalla**, Anupam Agarwal, Kurt Amsler, Christian Faul, Kenneth Hallows, Alicia McDonough, Lilach Lerman, James McCormick, Jeffrey Miner, and 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*, February 2016, Volume 8, Number 2, Page 7.

Abstracts not also appearing as full papers (28)

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. Kiran Khush, **Vivek Bhalla**, Celia Rifkin, Dana McGlothlin, Flavio Vincenti, Charles Hoopes, Teresa De Marco, “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. Kiran Khush, **Vivek Bhalla**, Celia Rifkin, Dana McGlothlin, Flavio Vincenti, Charles Hoopes, Teresa De Marco, “Combined Heart-Kidney Transplantation in Patients with End-Stage Heart and Kidney Failure”, *International Society for Heart and Lung Transplant Annual Meeting*, 2006.
4. Suresh Selvaraj Palaniyandi, Marie-Helene Disatnik, Lihan Sun, Jyothi Jayaram Vishnumangalam, Xiaoyu Xia, Aleksandra Pavlovic, **Vivek Bhalla**, Euan Ashley, Daria Mochly-Rosen, “Aldehyde dehydrogenase activator attenuates diabetic cardiomyopathy; a role in improving the quality of resident cardiac stem cells?”, *FASEB*, 2010.
5. Robert B. McClellan, Wuxing Dong, Michael Pellizzon, **Vivek Bhalla**, “Characterization of Blood Pressure and Urine Sodium Retention in Mouse Models of Insulin Resistance”, *American Society of Nephrology Annual Meeting*, 2011.
6. Mariana Labarca, Donald Goens, Wuxing Dong, **Vivek Bhalla**, “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. **Vivek Bhalla**, Elsie Wang, Kristen Azar, Katelyn Taylor, Alison Nomura, M. Laura Parnas, Latha Palaniappan, “Validation of Biomarkers for Diabetic Nephropathy in a Community-Based Healthcare Setting”, *Stanford School of Medicine- Community Health Annual Symposium*, 2012.
8. Xiaoyi Zheng, Wuxing Dong, **Vivek Bhalla**, “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. Jonathan Nizar, Wuxing Dong, Robert McClellan, Mariana Labarca, Yuehan Zhou, Lisa Satlin, **Vivek Bhalla**, "ENaC-independent impaired natriuresis and increased blood pressure in mouse models of diet-induced hyperinsulinemia", *West Coast Salt and Water Conference*, 2014.
10. Mariana Labarca, Donald Goens, Wuxing Dong, **Vivek Bhalla**, "Molecular determinants of the critical interaction between E3 ligase Nedd4-2 and ENaC", *Experimental Biology Annual Meeting*, 2014.
11. Jonathan Nizar, Wuxing Dong, Robert McClellan, Mariana Labarca, Yuehan Zhou, Lisa Satlin, **Vivek Bhalla**, "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⁺-ATPase via 14-3-3 proteins", April 2015. *The FASEB Journal*, vol. 29 no. 1 Supplement 969.23.
13. Fariborz Soroush, Xiaoyi Zheng, **Vivek Bhalla**, Mohammad F. Kiani, "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. Inbar Raber, Robert T. Isom, John D. Louie, Shreyas Vasanaawala, **Vivek Bhalla**, "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. Xiaoyi Zheng, Fariborz Soroush, Sanchita Bhattacharya, Mohammad F. Kiani, and **Vivek Bhalla**, "Dynamic Regulation of Endothelial Specific Molecule 1 in Diabetic Mouse Kidney", *American Society of Nephrology Annual Meeting*, 2015.
16. Jonathan Nizar, Elisabeth Walczak, Wuxing Dong, Lise Bankir, **Vivek Bhalla**, "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. Xiaoyi Zheng, Fariborz Soroush, Sanchita Bhattacharya, Mohammad F. Kiani, and **Vivek Bhalla**, "Dynamic Regulation of Endothelial Specific Molecule 1 in Diabetic Mouse Kidney", *Experimental Biology Annual Meeting*, 2016.
18. Elisabeth Walczak, Aram J Krauson, Sonali Iyer, Jonathan Nizar, Wuxing Dong, **Vivek Bhalla**, "Role of IGF1R in Tubular Remodeling of the Mouse Kidney", *Experimental Biology Annual Meeting*, 2016.
19. Jonathan Nizar, Lise Bankir, **Vivek Bhalla**, "Sodium intake affects excretion over short time periods in steady-state C57Bl/6J mice", *American Society of Nephrology Annual Meeting*, 2016.
20. Elisabeth M. Walczak, Gwendolyn Holdgate, Jue Fan, Aram Krauson, Xiaoyi Zheng, **Vivek Bhalla**, H. Christina Fan, "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. Aram Krauson, Elisabeth Walczak, Sonali Iyer, Nona Velarde, Jonathan Nizar, **Vivek Bhalla**, "Chronic Loop Diuretic Treatment Mediates Segment-Specific Hypertrophy in the Nephron", *Experimental Biology Annual Meeting*, 2017.

22. Xiaoyi Zheng, Lauren Higdon, Jonathan Maltzman, **Vivek Bhalla**, “Endothelial Specific Molecule 1 (Esm-1) Inhibits Macrophage Infiltration in a Mouse Model of Goodpasture’s Syndrome”, *Experimental Biology Annual Meeting*, 2017.
23. Gilad Jaffe, Gomathi Krishnan, Margaret Stedman, GM Chertow, JT Leppert, **Vivek Bhalla**, “Screening Rates for the Diagnostic Workup of Resistant Hypertension”, *Hypertension Blood Pressure Research (AHA) Annual Meeting*, 2017.
24. Aram Krauson, Elisabeth Walczak, Sonali Iyer, Nona Velarde, Jonathan Nizar, **Vivek Bhalla**, “Loop Diuretic Induces Tubular Remodeling via IGF-1R Dependent and IGF-1R Independent Signaling”, *American Heart Association Scientific Sessions*, 2017.
25. Gwendolyn Holdgate, Elisabeth M. Walczak, Devon Jensen, Aram Krauson, **Vivek Bhalla**, H. Christina Fan, “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. Jonathan Nizar, Vianna Vo, **Vivek Bhalla**, “High Fat Diet Enhances K-mediated Sensitivity to Thiazides”, *Experimental Biology Annual Meeting*, 2018.
27. Jonathan Nizar, Vianna Vo, **Vivek Bhalla**, “Acute and Chronic High K Diet Decrease NCC Activity by Distinct Mechanisms”, *Experimental Biology Annual Meeting*, 2018.
28. Xiaoyi Zheng, Lauren Higdon, Nazish Sayed, Chun Liu, Joseph C. Wu, Jonathan Maltzman, **Vivek Bhalla**, “Endothelial Cell-Specific Molecule-1 Reduces Leukocyte Infiltration and Albuminuria in Diabetic Nephropathy”, *Stanford Diabetes Research Center Symposium*, 2018.

RESEARCH SUPPORT

Awarded

- 09/18-08/23 Funder: NIH/NIDDK, Parent Grant Program (R01) (DK110385-01A1)
 Title: Mechanisms and Consequences of Defective Flow-induced Potassium Secretion in the Metabolic Syndrome
 Role: Principal Investigator
 Description: The PI will test the hypothesis that insulin resistance in the distal nephron is a phenocopy for BK channel deficiency with decreased insulin signaling leading to disrupted calcium (Ca²⁺)-activated BK channel activity, and thus, defective FIKS and K adaptation, with consequent hyperkalemia.
- 07/18-06/22 Funder: US-Israel Binational Science Foundation
 Title: The Role of Ferritin as a Ferric Iron Exporter in Kidney Iron Homeostasis
 Role: co-Principal Investigator
 Description: 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.
- 12/18-11/19 Funder: NIH/NIDDK, University of Pittsburgh / Mount Sinai George O’Brien Kidney Center (P30 DK079307)
 Title: Wnt4(+) Cell Fate Mapping and ENaC Activity in Furosemide-treated Mice
 Role: Principal Investigator
 Description: The PI will test the role of Wnt4(+) cells to reprogram towards principal cells in the setting of diuretics.

Pending

01/19-12/20 Funder: Stanford Medicine Translational and Clinical Innovation Fund
Title: Exploiting Sugars to Elude a Genetic Defect- Precision Therapy for Precision Medicine
Role: co-Principal Investigator
Description: In this precision medicine initiative, we will test the hypothesis that glycosylation is critical for CLC-Kb and may represent a modifiable component of this channel to rescue this mutant and other mutations in patients with sodium wasting defects.

Past

01/17-12/17 Funder: Stanford Diabetes Research Center Pilot Grant
Title: Validation of cell free RNA associated with human diabetic kidney disease
Role: co-Principal Investigator

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

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

10/14-09/15 Funder: Cardiovascular Institute Seed Grant
Title: Validation of Novel Antibody Biomarkers for Human Diabetic Kidney Disease
Role: Principal Investigator

10/13-09/14 Funder: NIH/AMDCC Pilot & Feasibility Program
Title: The Influence of Esm-1 on Leukocyte Infiltration in Diabetic Nephropathy
Role: Principal Investigator

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

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

03/11-04/13 Funder: Abbott Renal Care, Investigator-Initiated Study
Title: Oxidative/Carbonyl Stress and Vitamin D in Diabetic Nephropathy
Role: Principal Investigator

06/10-12/12 Funder: NIH/AMDCC Pilot & Feasibility Program
Title: Reduction of Carbonyl Stress for the Prevention of Diabetic Kidney Disease
Role: Principal Investigator

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

- 07/10-06/12 Funder: NIH/NIDDK, Small Grant Program (R03) (1DK083613)
Title: Molecular Mechanisms of Distal Sodium Transport in Insulin Resistance
Role: Principal Investigator
- 09/10-08/11 Funder: American Society of Nephrology – Carl W. Gottschalk Research Grant
Title: Molecular Mechanisms of Salt-Sensitive Hypertension in Insulin Resistance
Role: Principal Investigator
- 09/08-09/10 Funder: National Kidney Foundation, Shaul G. Massy Young Investigator Grant (YIB787)
Title: Isoform-Specific Roles of 14-3-3 Proteins in Sodium Transport
Role: Principal Investigator
- 09/05-08/12 Funder: NIH/NIDDK, Mentored Clinical Scientist Award (K08) (1DK071648)
Title: Role of Nedd4-2, SGK1, and 14-3-3 in ENaC Trafficking
Role: Principal Investigator
- 07/04-08/05 Funder: NIH/NIDDK, Ruth L. Kirschstein National Research Service Award (F32) (1F32DK066968)
Title: Sgk1-Mediated Effects on Sodium Transport in the Kidney
Role: Principal Investigator

BASIC and TRANSLATIONAL RESEARCH PROGRAMS

1. “Molecular Mechanisms of Solute Transport in Insulin Resistance”
Principal Investigator, 2008-Present
Collaborator(s): Dan Bernstein, MD, Stanford University
Fredric Kraemer, MD, Stanford University
Ralph Rabkin, MD, Stanford University
Lisa M Satlin, MD, Mount Sinai School of Medicine
Lise Bankir, PhD, INSERM, Paris
Timo Rieg, PhD, University of South Florida
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”
Principal Investigator, 2014-Present
Collaborator(s): Elisabeth Walczak, PhD, BD Biosciences
Ralph Rabkin, MD, Stanford University
Purvesh Khatri, PhD, Stanford University
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 Leukocyte Infiltration”
Principal Investigator, 2013-Present
Collaborator(s): Mohammad Kiani, PhD, Temple University
Stefanie Jeffrey, MD, PhD, Stanford University
Jonathan Maltzman, MD, PhD, Stanford University
Justin Annes, MD, PhD, Stanford University
Phillippe Lassalle, MD, INSERM, Lille, France
Nathalie de Freitas Caires, PhD, INSERM, Lille, France
Ralf Adams, PhD, Max Planck University, Münster, Germany
Identifying mechanisms of Esm-1-mediated inhibition of leukocyte infiltration *in vivo* and *in vitro*

4. "Genetic Defects in Ion Channels – Implications for Blood Pressure, Fluid/Electrolyte Homeostasis"
Principal Investigator, 2012-Present
Collaborator(s): Merritt Maduke, PhD, Stanford University
Neeraja Kambham, MD, Stanford University
Kerim Mutig, PhD, Institut fuer Vegetative Anatomie
Charité – Universitaetsmedizin Berlin
Oleh Pochynyuk, PhD, University of Texas Health Science Center
Sharon Pitteri, PhD, Stanford University
Using novel genetic mutations to characterize the function of human chloride channels in the kidney
5. "Functional Genomic Approach to the Study of Diabetic Glomeruli"
Principal Investigator, 2008-2017
Collaborator(s): Timothy W. Meyer, MD, Stanford University
Sanchita Bhattacharya, PhD, Stanford University
Mohammad Kiani, PhD, Temple University
Identifying difference in glomerular gene expression between inbred strains of mice with varied susceptibility to hyperglycemia
6. "Oxidative/Carbonyl Stress in Diabetic Kidney Disease"
Principal Investigator, 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
7. "Mechanisms of Functional Interaction between Nedd4-2, 14-3-3, and ENaC"
Principal Investigator, 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
8. "Regulation of Nedd4-2 by JNK1 Phosphorylation"
Principal Investigator, 2005-2010
Collaborator(s): Kenneth Hallows, MD, PhD, University of Pittsburgh
Robert Chalkey, PhD, Alma Burlingame, PhD; UCSF
Identified sites of regulatory phosphorylation of the E3 HECT-domain ubiquitin ligase Nedd4-2, and elucidating the mechanisms of regulation
9. "Isoform-Specific Roles of 14-3-3 Proteins in Sodium Transport"
Principal Investigator, 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
10. "Role of Nedd4-2, SGK1, and 14-3-3 in ENaC Trafficking"
Principal Investigator, Mentored Clinical Scientist Award (K08), 2005-2010
Mentors: David Pearce, MD, UCSF (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)
11. "Mechanism of AMP kinase (AMPK)-mediated Regulation of Sodium Transport"
Principal Investigator, 2005-2006
Mentor: David Pearce, MD, UCSF
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

12. "The Role of 14-3-3 Proteins in SGK1-Mediated Sodium Transport"
Principal Investigator, Ruth L. Kirschstein National Research Service Award (F32), 2004-2005
Mentor: David Pearce, MD, UCSF
Characterized the molecular mechanisms by which SGK1 stimulates ENaC-mediated sodium transport in the distal nephron
13. "Effects of Insulin Resistance on Glucose Disposal in Skeletal Muscle"
Principal Investigator, Independent Study Project (ISP), UCSD School of Medicine, 1996-1998
Mentor: Robert R. Henry, MD, UCSD 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. "Biomarker Discovery for Diabetic Kidney Disease"
Co-Principal Investigator, 2009-Present
Collaborator(s): Minnie Sarwal, MD, PhD, MRCP, UCSF
Glenn Chertow, MD, MPH, Stanford University
Latha Palaniappan, MD, MPH, PAMF, Stanford University
Michael Snyder, PhD, Stanford University
Discovering candidate biomarkers for the onset and progression of diabetic kidney disease in adults using antibody-omics and bioinformatics
2. "Screening Practices for Resistant Hypertension"
Principal Investigator, 2017-Present
Collaborator(s): Glenn Chertow, MD, MPH, Stanford University
Margaret Stedman, PhD, Stanford University
John Leppert, MD, Stanford University
Gomathi Krishnan, PhD, Stanford University
Using the electronic health record to better understand the nature of screening tests for secondary causes of hypertension
3. "Chronic Kidney Disease of Uncertain Etiology"
Principal Investigator, 2015-Present
Collaborator(s): Shuchi Anand, MD, MS, Stanford University
Andrew Fire, MD, PhD, Stanford University
Neeraja Kambham, MD, Stanford University
Maria Montez-Rath, PhD, Stanford University
Paul Wise, MD, Stanford 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
4. "Pb²⁺ as a risk factor for hyperuricemia, gout, and progression of kidney disease"
Co-Principal Investigator, 2012-2013
Collaborator(s): German Hernandez, MD, Texas Tech University
Marcia Stefanick, PhD, Stanford University
Eswar Krishnan, MD, Stanford University
Using longitudinal, well-phenotyped cohorts to better understand the role of Pb²⁺ exposure in hyperuricemia, gout, bone disease, and the progression of diabetic kidney disease

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

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

PROFESSIONAL ORGANIZATIONS

Memberships

2001-Present American Heart Association, Kidney and Cardiovascular Council; Hypertension Council
 2001-Present Renal Physicians Association
 2001-Present American Society of Nephrology (Fellow, Investigator Track)
 2004-Present American Society of Cell Biology
 2006-Present National Kidney Foundation
 2009-Present Cardiovascular Institute, Stanford University
 2011-Present Child Health Research Institute, Stanford University
 2014-Present Bio-X, Stanford

Service to Professional Societies

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

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 American Heart Association- Hypertension Research Annual Meeting, Moderator
 2017 American Society of Nephrology Annual Meeting, Abstract Reviewer
 2017 American Society of Nephrology Annual Meeting, Moderator
 2018 Vice-Chair, Program Committee, Hypertension Scientific Sessions, American Heart Association

Study Sections

07/08 National Institutes of Health, Adhoc 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, Adhoc 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-Present Child Health Research Institute, Stanford University
 06/14 2014/10 ZDK1 GRB-G (O1) 1 - NIDDK-KUH-Fellowship Review
 04/15-Present American Heart Association- Cardiorenal 1/3- Peer Review Committee
 05/15 VA-Merit Review, Nephrology Panel (*invited, but recused myself due to professional conflict of interest*)
 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

Service to Professional Publications

8/04-Present European Molecular Biology Organization (EMBO) Journal - Manuscript reviewer
 4/05-Present Journal of the American Society of Nephrology - Manuscript reviewer
 5/05-Present American Journal of Physiology, Renal Physiology - Manuscript reviewer
 - Editorial Board
 8/09-Present Pediatric Nephrology -Manuscript reviewer
 12/09-Present Nephron -Manuscript reviewer
 12/09-Present Proceedings of the National Academy of Sciences -Manuscript reviewer
 01/10-Present PPAR Reviews -Manuscript reviewer
 02/10-Present Growth Hormone and IGF-1 Research -Manuscript reviewer
 05/10-Present Frontiers in Physiology – Renal and Epithelial Physiology -Editorial Board
 07/11-Present American Journal of Kidney Diseases -Manuscript reviewer
 09/11-Present Diabetes -Manuscript reviewer
 10/12-Present Journal of the American Medical Association -Manuscript reviewer
 01/13-Present European Journal of Clinical Investigation - Editor
 04/14-Present American Journal of Physiology, Cell -Manuscript reviewer
 06/14-Present American Journal of Physiology, Endocrinology -Manuscript reviewer
 12/14-Present Journal of the American Society of Nephrology -Manuscript reviewer
 05/16-Present Circulation – Cardiovascular Genetics -Manuscript reviewer
 07/16-Present American Heart Journal -Manuscript reviewer
 02/17-Present International Journal of Molecular Sciences -Manuscript reviewer
 05/18-Present Endocrinology -Manuscript reviewer
 2019 Current Opinion Nephrology and Hypertension -Section Editor

Consultations

2007-2011 Medical Advisory Board, Viscira
 2011-2012 Consulting Investigator, Palo Alto Medical Foundation Research Institute (PAMFRI)
 2017-Present Maxim Integrated
 2017-Present Medical Advisory Board, Oraxion Therapeutics
 2017-Present Medical Advisory Board, PyrAmes
 2018 Medical Advisory Board, Relypsa

Clinical Trials

2010 Ardian, Symplicity HTN-2 -Data Safety Monitoring Board
 2012 Reata Pharmaceuticals, Protocol 402-C-0903 -Site-Principal Investigator
 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-Present IMPACT, Stanford University -Data Safety Monitoring Board
 2016-Present Tolerance Induction Trial, Stanford University -Data Safety Monitoring Board
 2016-Present STRONG-D, Stanford University -Data Safety Monitoring Board
 2018-Present CALM-2 -Site-co-Principal Investigator

INVITED PAPERS, LECTURES, PRESENTATIONS

Renal Grand Rounds, UCSF

- 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, UCSF

- 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

- 09/11 "Oxidative Stress in DKD: Overcoming Obstacles"
- 03/14 "Aberrant Ion Handling in Insulin-Resistant Mice: Implications for Blood Pressure"

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"

Invited Presentations (44)

- 10/00 "Recurrent and De Novo Diabetic Nephropathy in Renal Allografts" - American Society of Nephrology Annual Meeting, Toronto, Canada
- 11/03 "Mechanisms of SGK1-Mediated Transport through Nedd4-2 Inhibition" - American Society of Nephrology Annual Meeting, Free Communication, San Diego, CA
- 05/04 "SGK1-Mediated Regulation of Sodium Transport" - National Kidney Foundation Young Investigator Forum; San Francisco, CA
- 11/04 "The Role of 14-3-3 Proteins in SGK1-Mediated Sodium Transport" - American Society of Nephrology Annual Meeting, St. Louis, MO
- 12/04 "The Role of 14-3-3 Proteins in SGK1-Mediated Sodium Transport" - American Society of Cell Biology Annual Meeting, Washington, DC
- 03/05 "14-3-3 Proteins Propagate SGK1 Regulation of Na⁺ Transport" - Oregon Health Sciences University, Division of Nephrology, Renal Research Conference, Portland, OR
- 04/05 "Coordinate Regulation of Sodium Transport by SGK1 and 14-3-3 Proteins" - Research in Progress Seminar, UC San Francisco, San Francisco, CA
- 04/06 "Coordinate Regulation of Sodium Transport by SGK1 and 14-3-3 Proteins" - LKEM-UCSF Alumni Meeting (pre-EB), San Francisco, CA
- 02/07 "Molecular Determinants of Distal Sodium Transport" – Stanford University, Division of Nephrology, Grand Rounds, Stanford, CA
- 03/07 "Mechanisms of Nedd4-2-Mediated Inhibition of Sodium Transport" – West Coast Salt and Water Club, Morro Bay, CA

- 05/07 "Molecular Determinants of Aldosterone-Sensitive Sodium Transport" – Oregon Health Sciences University, Division of Nephrology, Grand Rounds, Portland, OR
- 11/07 "Novel Regulation of Sodium Transport via Phosphorylation of Nedd4-2", - American Society of Nephrology, Annual Meeting, San Francisco, CA
- 07/08 "Regulation of ENaC-Mediated Sodium Transport Via Phosphorylation of Nedd4-2", - Epithelial Physiology and Cell Biology, Annual Meeting, Telluride, CO
- 01/09 "Research Conundrums in Diabetic Kidney Disease", -Stanford University, Division of Endocrinology, Grand Rounds, Stanford, CA
- 04/10 "Phosphopeptide Screen Uncovers Novel Nedd4-2 Phosphorylation Sites that Potentiate its Inhibition of the Epithelial Na⁺ channel (ENaC)", Featured Speaker, - Experimental Biology, Annual Meeting, Anaheim, CA
- 07/10 "Analysis of Nedd4-2 Phosphorylation Reveals Major Role for Minor Sites", - Epithelial Physiology and Cell Biology, Annual Meeting, Telluride, CO
- 09/10 "A Major Role for Minor Site Phosphorylation in 14-3-3 Mediated Regulation of Nedd4-2 and ENaC", Mass Spectrometry Users' Meeting, Stanford, CA
- 08/11 "Novel Method for Isolation and Culture of Murine Principal Cells", - Epithelial Physiology and Cell Biology, Annual Meeting, Telluride, CO
- 09/11 "Regulation of Ubiquitin Ligase Activity and Phosphorylation by SGK1"- 7th International Symposium on Aldosterone and ENaC/Degenerin Family of Ion Channels: Molecular Mechanisms and Pathophysiology, Quadrennial Meeting, Pacific Grove, CA
- 08/12 "Guyton's Kidney Factor: Influences of Obesity and Hyperinsulinemia on Epithelial Sodium Transport", - Epithelial Physiology and Cell Biology, Annual Meeting, Telluride, CO
- 09/12 "Guyton's Kidney Factor: Influences of Obesity and Hyperinsulinemia on Epithelial Sodium Transport", - Renal Research Conference, Mount Sinai School of Medicine, NY
- 03/13 "Modeling Obesity and Salt-sensitive Hypertension in Mice: Lessons learned", - Nephrology Grand Rounds, UCSF
- 03/14 "Diabetes and Kidney Disease", - Geriatric Research Education and Clinical Center (GRECC) Seminar, Stanford University
- 11/14 "Why Doesn't Everyone with Diabetes get Nephropathy? Interrogating Glomerular Leukocyte Infiltration in Mice", Biofluidics Laboratory Group, Temple University
- 11/14 "HTN Management Guidelines: What Are the Main Differences between ESH/ ESC, JNC 8, ASH/ISH, and the AHA/ACC/CDC Advisory?". American Heart Association Annual Meeting, Chicago, IL
- 04/15 "Why Doesn't Everyone with Diabetes get Nephropathy? Interrogating Glomerular Leukocyte Infiltration in Mice", Institut Pasteur de Lille, Institut National de la Sante et de la Recherche Médicale, Paris, France
- 04/15 "Implications of Potassium Handling in the Metabolic Syndrome", Le Centre de Recherche des Cordeliers (CRC), Institut National de la Sante et de la Recherche Médicale, Paris, France
- 07/15 "Novel CLC-Kb Pore Mutation in Mixed Bartter-Gitelman's Syndrome Associated with Defective Glycosylation, Distal Tubular Remodeling, and End-Stage Renal Disease", Epithelial Physiology and Cell Biology, Annual Meeting, Telluride, CO
- 01/16 "Diagnosis and Management of Resistant Hypertension", Preventive Cardiology Affinity Group Meeting, Stanford, University
- 07/16 "Role of IGF-1 receptor in Nephron segment-specific Renal Tubular Epithelial Cell Remodeling", Epithelial Physiology and Cell Biology, Annual Meeting, Telluride, CO
- 11/16 "Kidney Tubule Insulin Receptor in the Metabolic Syndrome", Medical College of Wisconsin, Department of Physiology Seminar
- 11/16 "Kidney Tubule Insulin Receptor in the Metabolic Syndrome", American Society of Nephrology, Annual Meeting, Chicago, IL
- 02/17 "Single cell resolution of highly diverse subpopulations in the mammalian kidney achieved with high throughput single cell RNA-sequencing", Advances in Genome Biology and Technology, Annual Meeting, Hollywood, FL
- 04/17 "Update on the Pathophysiology of Diabetic Kidney Disease", National Kidney Foundation, Spring Clinical Meeting

- 04/17 “Rebuff the Cuff- Novel Ways to Measure Blood Pressure”, National Kidney Foundation, Spring Clinical Meeting
- 04/17 “Metabolic syndrome, Insulin, and Renal Sodium Handling”, Experimental Biology Annual Meeting, Chicago, IL
- 06/17 “Single-cell resolution of highly diverse subpopulations in the mammalian kidney achieved with high throughput single-cell RNA-sequencing”, Festival of Genomics, San Diego, CA
- 10/17 “Renal tubule insulin receptor promotes elevated blood pressure and glucose reabsorption”, Molecular Cell Biology Seminar Series, University of Merced, Merced, CA
- 12/17 “Renal tubule insulin receptor promotes elevated blood pressure and glucose reabsorption”, Cellular and Molecular Basis of Disease Series, University of New Mexico, Albuquerque, NM
- 01/18 “Renal Mechanisms of Hypertension in Obesity and Insulin Resistance”, -Stanford University, Division of Endocrinology, Grand Rounds, Stanford, CA
- 02/18 “Novel CLC-Kb Pore Mutation in Mixed Bartter-Gitelman’s Syndrome Associated with Defective Glycosylation, Distal Tubular Remodeling, and End-Stage Renal Disease”, Ion Channel Journal Club, Stanford University, Stanford, CA
- 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
- 12/18 “Endothelial cell-specific molecule-1 (Esm-1) and its Role(s) in Diabetic Kidney Disease”, Pasteur Institute, Lille, France

UNIVERSITY / COMMUNITY SERVICE

- 03/09 “Diabetes and Kidney Disease”, Bay Area Association of Kidney Patients, Featured Speaker, Palo Alto, CA
- 2010-2011 Department of Medicine Physician-Scientist Advisory Committee
- 2011-Present Candidate Interviewer, Internal Medicine Residency Selection Committee
- 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
- 2017-2018 Educational Planning Executive Committee Meeting, Foundations Subcommittee, Co-Chair
- 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

PRESS RELEASES

- 12/14 https://med.stanford.edu/content/dam/sm/medicineandthemuse/documents/HP17.1Winter2014forfinalprinters_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/>