|  |
| --- |
| **BIOGRAPHICAL SKETCH**Provide the following information for the key personnel and other significant contributors.Follow this format for each person.  **DO NOT EXCEED FOUR PAGES.** |
|  |
| NAMEWeiner, I. David | POSITION TITLEProfessor of Medicine and Physiology |
| eRA COMMONS USER NAMEDavidweiner |
| EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)* |
| INSTITUTION AND LOCATION | DEGREE*(if applicable)* | YEAR(s) | FIELD OF STUDY |
| Vanderbilt University, Nashville, TN | B.S. | 1980 | Mathematics, Computer Science (double major) |
| Vanderbilt University, Nashville, TN | M.D. | 1984 | Medicine |

**A. Personal Statement**

I am a clinician-scientist with a long history of extra-mural (NIH, American Heart Association, Department of Veterans Affairs and National Kidney Foundation) funding and am committed to developing individuals for careers as biomedical scientists. I have mentored multiple individuals who currently have active careers in academic medicine. I am committed to assisting in the development of junior scientists, using my experience as a VA-funded investigator, an NIH-funded investigator, extensive grant review service (current NIH Cellular and Molecular Biology of the Kidney (CMBK) permanent study section member, member for four years and chairperson for two years of the VA Merit Review Subcommittee for Nephrology).

**B. Positions and Honors.**

**Positions and Employment**

1984 – 1987, Internal Medicine Residency, University of Texas Health Science Center at San Antonio

1987 – 1990, Fellowship in Nephrology, Washington University School of Medicine, St. Louis, MO

1990 to 1995, Assistant Professor of Medicine, University of Florida, Gainesville, Fla.

1995 to 2005, Associate Professor of Medicine, University of Florida, Gainesville, Fla.

1990 to present, Staff Physician, NF/SGVHS, Gainesville, Fla.

2004 to present, Chief, Nephrology and Hypertension Section, NF/SGVHS, Gainesville, Fla.

2005 to present, Professor of Medicine and Physiology and Functional Genomics, University of Florida College of Medicine, Gainesville, Fla.

2009 to present, Co-holder, C. Craig and Audrae Chair in Nephrology, University of Florida College of Medicine, Gainesville, FL

**Other Experience and Professional Memberships**

NIH CMBK Study Section, Permanent member, October 2010 - present; Ad hoc, 2008

NIH KUGD Study Section, 2007

NIH GMB Special Study Section, 2003

NIH GMB Study Section, June 2001

VA Merit Review (Nephrology) Study Section, Member, 2001-2005; Chairperson, 2003 – 2005.

VA Career Development Study Section, Member 2009 - present

Medical Education Committee, Department of Medicine, University of Florida College of Medicine, 2006 - present.

**Honors**

C. Craig and Audrae Tisher Chair in Nephrology, University of Florida, 2009-present

University of Florida Research Foundation Professor, 2007

Master Clinician Program, University of Florida College of Medicine, 2006.

Exemplary Teacher Award, University of Florida College of Medicine, 2003.

Chairperson, Pharmacy & Therapeutics Committee, Shands Hospital at University of Florida, 2011 - present; member, 2002 - Present

Clinical Advisory Committee, Shands Hospital at University of Florida, 2010 - present.

American Physiological Society Epithelial Transport Group Steering Committee, 2008 – present.

American Physiological Society Joint Program Committee, 2009 – present.

American Physiological Society Renal Section Steering Committee, 2009 – present.

**C. Selected peer-reviewed publications (in chronological order).**

(Publications selected from 60 peer-reviewed publications, 24 chapters and 1 text-book)

1. KH Han, HW Lee, ME Handlogten, JM Bishop, M Levi, J Kim, JW Verlander and **ID Weiner**. Effect of hypokalemia on renal expression of the ammonia transporter family members, Rh B Glycoprotein and Rh C Glycoprotein, in the rat kidney. *Am J Physiol Renal* (July 10, 2011) doi:10.1152/ajprenal.00266.2011.
2. **ID Weiner** and JW Verlander. Role of NH3 and NH4+ transporters in renal acid-base transport. *Am J Physiol Renal* 300:F11-F23, 2011.
3. Han KH, SY Lee, WY Kim, JA Shin, J Kim and **ID Weiner**. Expression of the ammonia transporter family members, Rh B Glycoprotein and Rh C Glycoprotein in the developing rat kidney. *Am J Physiol Renal* 299:F187-F199, 2010.
4. **ID Weiner** and JW Verlander. Molecular physiology of the Rh ammonia transport proteins. *Curr Opinion Nephrol Hypert* 19:471-7, 2010.
5. HY Lee, JW Verlander, JM Bishop, RD Nelson, ME Handlogten and **ID Weiner**. Effect of intercalated cell-specific Rh C Glycoprotein deletion on basal and metabolic acidosis-stimulated renal ammonia excretion. *Am J Physiol Renal* 299:F369-F379, 2010.
6. JM Bishop, JW Verlander, HW Lee, RD Nelson, AJ Weiner, ME Handlogten and **ID Weiner**. Role of the Rhesus Glycoprotein, Rh B Glycoprotein in renal ammonia excretion. *Am J Physiol Renal* (August 18, 2010). *Am J Physiol Renal* 299:F1065-77, 2010.
7. Lee HW, JW Verlander, JM Bishop, P Igarashi, ME Handlogten, and **ID Weiner**. Collecting duct-specific Rh C Glycoprotein deletion alters basal and acidosis-stimulated renal ammonia metabolism. *Am J Physiol Renal Physiol* 296:F1364-75, 2009.
8. Han KH, K Mekala, V Babida, HY Kim, ME Handlogten, JW Verlander, and **ID Weiner**. Expression of the gas transporting proteins, Rh B Glycoprotein and Rh C Glycoprotein, in the murine lung. *AJP - Lung Cellular and Molecular Physiology* 297:L153-163, 2009.
9. KH Han, HY Kim and **ID Weiner**. Expression of Rh glycoproteins in mammalian kidney. *Electrolyte and Blood Pressure* 7:14-9, 2009.
10. Kim HY, JW Verlander, JM Bishop, BD Cain, KH Han, P Igarashi, HW Lee, ME Handlogten and **ID Weiner**. Basolateral expression of the ammonia transporter family member, Rh C Glycoprotein, in the mouse kidney. *Am J Physiol Renal* 296:F545-F555, 2009.
11. Lynch IJ, A Rudin, SL Xia, LR Stow, GE Shull, **ID Weiner**, BD Cain, and CS Wingo. Impaired acid secretion in cortical collecting duct intercalated cells from H,K-ATPase-deficient mice: role of HKα Isoforms. *Am J Physiol Renal Physiology* 294:F621-F627, 2008.
12. Lim SW, KO Ahn, WY Kim, DH Han, C Li, JY Ghee, KH Han, HY Kim, ME Handlogten, J Kim, CW Yang, and **ID Weiner**. Expression of ammonia transporters, Rhbg and Rhcg, in chronic cyclosporine nephropathy in rats. *Nephron Experimental Nephrology* 110:e49-e58, 2008.
13. **ID Weiner** and LL Hamm. Molecular mechanisms of renal ammonia transport. *Annual Review of Physiology* 69:317-40, 2007.
14. Zheng W, JW Verlander, M Cash, IJ Lynch, **ID Weiner**, BD Cain and CS Wingo. Cellular distribution of the potassium channel, KCNQ1, in normal mouse kidney. *Am J Physiol Renal Physiol* 292:F456-66, 2007.
15. JD Schold, TR Srinivas, GI Guerra, AI Reed, RJ Johnson, **ID Weiner**, R Oberbauer, JS Harman, AW Hemming, HU Meier-Kriesche. A “Weight-Listing” Paradox for Management of Candidates for Renal Transplantation. *Am J Transplantation* 7:550-9, 2007.
16. Kazory A and **ID Weiner**. Primary hyperaldosteronism in a patient with end stage renal disease. *Nephrol Dial Transplant* 22:917-9, 2007.
17. Han KH, HY Kim, BP Croker, S Reungjui, SY Lee, J Kim, ME Handlogten, CA Adin, and **ID Weiner**. Effects of Ischemia-reperfusion Injury on Renal Ammonia Metabolism and the Collecting Duct. *Am J Physiol Renal Physiology* 293:F1342-F1354, 2007.
18. Kim HY, C Baylis, JW Verlander, KH Han, S Reungjui, ME Handlogten, and **ID Weiner**. Effect of Reduced Renal Mass on Renal Ammonia Transporter Family, Rh C Glycoprotein and Rh B Glycoprotein, Expression. *Am J Physiol Renal Physiology* 293:F1238-F1247, 2007.
19. Mak DD, B Dang, **ID Weiner**, JK Foskett, and CM Westhoff. Characterization of transport by the kidney Rh glycoproteins, RhBG and RhCG. *Am J Physiol Renal Physiol*  290: F297-F305, 2006.
20. RM Seshadri, JD Klein, SD Kozlowski, JM Sands, YH Kim, KH Han, ME Handlogten, JW Verlander and **ID Weiner**. Renal expression of the ammonia transporters, Rhbg and Rhcg, in response to chronic metabolic acidosis. *Am J Physiol Renal Physiol* 290: F397-F408, 2006.
21. Kazory A, K Dibadj, and **ID Weiner**. Rhabdomyolysis and acute renal failure in a patient treated with daptomycin. *J Antimicrob Chemother* 57: 578-9, 2006.
22. Seshadri RM, JD Klein, T Smith, JM Sands, ME Handlogten, JW Verlander and **ID Weiner**. Changes in the subcellular distribution of the ammonia transporter, Rhcg, in response to chronic metabolic acidosis. *Am J Physiol Renal Physiol* 290: F1443-52, 2006.
23. **Weiner ID**. Expression of the non-erythroid Rh glycoproteins in mammalian tissues. *Transfusion Clinique et Biologique* 13:159-63, 2006.
24. Han KH, BP Croker, WL Clapp, D Werner, M Sahni, J Kim, HY Kim, ME Handlogten and **ID Weiner**. Expression of the ammonia transporter, Rh C Glycoprotein, in normal and neoplastic human kidney. *J Am Soc Nephrol* 17:2670-9, 2006.
25. ME Handlogten, SP Hong, L Zhang, AW Vander, ML Steinbaum, M Campbell-Thompson, **ID Weiner**. Expression of the ammonia transporter proteins, Rh B Glycoprotein and Rh C Glycoprotein, in the intestinal tract. *Am J Physiol Gastrointest Liver Physiol* 288(5):G1036-G1047, 2005.
26. ME Handlogten, SP Hong, CM Westhoff, **ID Weiner**. Apical ammonia transport by the mouse inner medullary collecting duct, mIMCD-3, cell. *Am J Physiol Renal Physiol* (2005 March 29) 289:F347-58, 2005.
27. Kim YH, JW Verlander, SW Matthews, I Kurtz, WK Shin, **ID Weiner**, LA Everett, ED Green, S Nielsen, and SM Wall. Intercalated cell H+/OH- transporter expression is reduced in Slc26a4 null mice. *Am J Physiol Renal Physiol*  289: F1262-72, 2005.
28. ME Handlogten, SP Hong, CM Westhoff, **ID Weiner**. Basolateral ammonium transport by the mouse inner medullary collecting duct cell (mIMCD-3). *Am J Physiol Renal Physiol* 287: F628-38, 2004.
29. **ID Weiner**. The Rh gene family and renal ammonium transport. *Current Opinions in Nephrology and Hypertension* 13: 533-40, 2004.
30. Verlander JW, RT Miller, AE Frank, IE Royaux, YH Kim, **ID Weiner**. Localization of the ammonium transporter proteins, Rh B Glycoprotein and Rh C Glycoprotein, in the mouse kidney. *Am J Physiol Renal Physiol* 284:F323-37, 2003.
31. **ID Weiner**, RT Miller and JW Verlander. Localization of the ammonium transporters, Rh B Glycoprotein and Rh C Glycoprotein, in the mouse liver. *Gastroenterology* 124:1432-40, 2003.
32. **ID Weiner** and JW Verlander. Renal and hepatic expression of the putative ammonium transporter proteins, Rh B Glycoprotein and Rh C Glycoprotein. *Acta Phys Scand* 179:331-8, 2003.
33. AE Frank, CS Wingo, PM Andrews, S Ageloff, MA Knepper and **ID Weiner**. Mechanisms through which ammonia regulates cortical collecting duct net proton secretion. *Am J Physiol Renal Physiol.* 282: F1120-8, 2002.
34. Frank AE, **ID Weiner**. Effects of ammonia on acid-base transport by the B-type intercalated cell. *Journal of the American Society of Nephrology* 12:1607-14, 2001.
35. Frank AE, CS Wingo and **ID Weiner**. Effects of ammonia on bicarbonate transport in the cortical collecting duct. *Am J Physiol Renal Physiol.* 278: F219-F226, 2000.
36. Milton AE, **ID Weiner**. Regulation of B-type intercalated cell apical Cl/base exchange activity by CO2/HCO3-. *Am J Phys: Renal* 274: F1086-F1094, 1998.
37. **ID Weiner,** CS Wingo. Hyperkalemia: a potential silent killer. *J Am Soc Nephrol* 9:1535-1543, 1998.
38. **ID Weiner**, CS Wingo. Hypokalemia - consequences, causes and correction. *J Am Soc Nephrol* 8:1179-1188, 1997.
39. **Weiner ID**, AE Milton. H+-K+-ATPase in rabbit cortical collecting duct B-type intercalated cell. *Am J Physiol: Renal* 270:F518-F530, 1996.
40. **Weiner ID**, AR New, AE Milton and CC Tisher. Regulation of luminal alkalinization and acidification in the cortical collecting duct by angiotensin II. *Am J Physiol: Renal* 269:F730-F738, 1995.
41. **Weiner ID**, AE Weill and AR New. Distribution of Cl-/HCO3- exchange and intercalated cells in the rabbit cortical collecting duct. *Am J Physiol: Renal* 267: F952-F964, 1994.
42. Weiner ID, Hamm LL. Regulation of Cl-/HCO3- exchange in the rabbit cortical collecting tubule. *J Clin Invest* 85: 1553-1558, 1991.
43. Weiner ID, Hamm LL. Intracellular pH regulation in the rabbit cortical collecting tubule. *J Clin Invest* 85: 274-281, 1990.
44. Weiner ID, Hamm LL. Use of fluorescent dye BCECF to measure intracellular pH in rabbit cortical collecting tubule. *Am J Physiol: Renal* 256: F957-F964, 1989.

*Books:*

1. **ID Weiner** and C Adamec. *The Encyclopedia of Kidney Diseases and Disorders.* Facts on File, Inc., New York, NY. (In press).

*Book Chapters:*

1. **ID Weiner**. Renal acid-base regulation via ammonia transport in mammals. In Epithelial Transplant Physiology, ed. by G Gerencser. Humana Press. New York, NY, 2010, pp. 299-322.
2. **ID Weiner**, S Linus and CS Wingo. Disorders of Potassium Metabolism. In: Comprehensive Clinical Nephrology, 4th Edition, ed. by R Johnson, J Fluege and J Feehally. Saunders Elsevier, 2010, pp 118-129.
3. **ID Weiner** and CS Wingo. Endocrine causes of hypertension: aldosterone. In: Comprehensive Clinical Nephrology, 4th Edition, ed. by R Johnson, J Fluege and J Feehally. Saunders Elsevier, 2010, pp 469-476.
4. V Lapsia and **ID Weiner**. Acid-Base Disorders. In: The Principles and Practices of Hospital Medicine, ed., by S McKean and JJ Ross. McGraw-Hill, Inc. (In press).
5. **ID Weiner** and JW Verlander. Renal Acidification Mechanisms. In: Brenner and Rector’s The Kidney, 9th Ed. Wm. B. Saunders Press. (In press).
6. **ID Weiner**, JW Verlander and CS Wingo. Renal Acidification Mechanisms. In: Core concepts in the disorders of fluid, electrolytes, and acid-base, ed. By D Mount and A Singh. Springer Publishing (In press).

**D. Research Support**

**Ongoing**

Grant: H/HCO3 transport by the collecting duct, NIH R01 DK-45788-14 (6/1/2009-5/31/2014), 30% time commitment

PI: I. David Weiner, M.D.

The purpose on this project is to define the role of Rhcg in the renal response to metabolic acidosis and hypokalemia using organ and cell-specific Rhcg gene deletion.

Grant: Molecular mechanisms of renal ammonia metabolism, Department of Veterans Affairs Merit Review Program, 7/1/2011- 6/30/2015, 25% time commitment

PI: I. David Weiner, M.D.

The purpose of this project is to define the role of Rhbg in basal, metabolic acidosis-stimulated and hypokalemia-stimulated renal ammonia metabolism using cell-specific gene deletion.

**Completed**

Grant: H/HCO3 transport by the collecting duct, NIH R56 DK-45788 (5/1/08 – 1/31/09) – 25% time commitment

PI: I. David Weiner, M.D.

This was an NIH Bridge Funding that enabled further studies examining the effect of targeted, cell-specific Rhcg gene deletion on the response to metabolic acidosis and hypokalemia.

Grant: Regulation of H/HCO3 transport by the collecting duct. DVA Merit Review Grant. 10/1/08 – 9/30/12

PI: I. David Weiner, M.D.

Funding declined because of overlap with NIH R01-KD45788-13.