

BIOGRAPHICAL SKETCH

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NAME Richard J. Johnson		POSITION TITLE Professor of Medicine and Chief	
eRA COMMONS USER NAME RJJOHNSON			
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Wisconsin, Madison Wisconsin	B.S. Honors	1971-1975	Anthropology
University of Minnesota	M.D.	1975-1979	Medicine
University of Washington	Residency	1980-1982	Internal Medicine
University of Washington	Fellow	1982-1986	Nephrology, Infectious Disease

A. Positions and Honors**Positions and Employment**

1987-1991	Assistant Professor of Medicine, Div of Nephrology, University of Washington, Seattle WA
1991-1996	Associate Professor of Medicine, Div of Nephrology, University of Washington, Seattle WA
1996-2000	Professor of Medicine and Adjunct Professor of Pathology, Division of Nephrology, University of Washington, Seattle WA
2000-8/2003	Professor of Medicine, Section of Nephrology, Baylor College of Medicine, Houston TX
2001-8/2003	Adjunct Professor of Pathology, Baylor College of Medicine, Houston TX
9/2003-8/2005	Adjunct Professor of Medicine, Baylor College of Medicine, Houston, TX
9/2003-present	J Robert Cade Professor of Medicine, Physiology and Functional Genomics and Chief, Section of Nephrology, Hypertension and Transplantation, University of Florida, Dept of Medicine, Division of Florida, Gainesville, FL

Other Experience and Professional Memberships

9/01 - present	ISN COMGAN Research Committee – National / International
1998-2000	ASN Young Investigator Award committee, Carl Gottschalk Committee, Fellowship Award Committee
2000 - 2003	NKF Young Investigator Award Committee, Co-Chairman
2005	ISN Program Committee, Singapore
2002 - 2004	Chair, Basic Science Review Board, National Kidney Foundation
2005	ISN Councilor

Honors

1974	Phi Beta Kappa (junior year), University of Wisconsin
1975	B.S. with honors, University of Wisconsin
1978	Alpha Omega Alpha (junior year), University of Minnesota
1992	Research Career Development Award, NIH
1993	Kidney International Forum Speaker
1994	Young Investigator Award, ASN and American Heart Association, Orlando, Florida
1995	American Society of Clinical Investigation
2003	Barry Brenner Lectureship, American Society of Nephrology
2004	Elected by Web of Science to ISIhighlycited.com as one of the 250 most cited researchers in the field of Clinical Medicine for 1982-2003, (>11,000 citations)

B. Selected peer-reviewed publications

(Selected from >350 articles and chapters. Also coedits Comprehensive Clinical Nephrology with J Feehally, 2nd ed. Mosby)

1. Johnson RJ, Herrera-Acosta J, Schreiner GF, Rodríguez-Iturbe B: Subtle acquired renal injury as a mechanism of salt-sensitive hypertension. *New Engl J Med* 2002 Mar;346 (12): 913-923.
2. Mazzali M, Hughes J, Kim YG, Jefferson JA, Kang D-H, Gordon KL, Lan HY, Kivlighn S, Johnson RJ: Elevated uric acid increases blood pressure in the rat by a novel crystal-independent mechanism. *Hypertension* 2001 Nov;38(5):1101-1106.

3. Mazzali M, Kanellis J, Han L, Feng L, Xia Y-Y, Chen Q, Kang D-H, Gordon KL, Watanabe S, Nakagawa T, Lan HY, Johnson RJ: Hyperuricemia induces a primary renal arteriopathy in rats by a blood pressure-independent mechanism. *Am J Physiol Renal Physiol* June 2002;282(6):F991-997.
4. Watanabe S, Kang D-H, Feng L, Nakagawa T, Kanellis J, Lan H, Mazzali M, Johnson RJ: Uric acid, hominoid evolution, and the pathogenesis of salt-sensitivity. *Hypertension* Sep 2002;40(3):355-360.
5. Sánchez-Lozada LG, Tapia E, Avila-Casado C, Soto V, Franco M, Santamaría J, Nakagawa T, Rodríguez-Iturbe B, Johnson RJ, Herrera-Acosta J: Mild hyperuricemia induces glomerular hypertension in normal rats. *Am J Physiol Renal Physiol* 2002 Nov;283(5):F1105-F1110.
6. Kang D-H, Nakagawa T, Feng L, Watanabe S, Han L, Mazzali M, Truong L, Harris R and Johnson RJ: A role for uric acid in the progression of renal disease. *J Am Soc Nephrol* 2002 Dec;13(12):2888-2897.
7. Nakagawa T, Mazzali M, Kang D-H, Kanellis J, Watanabe S, Sanchez-Lozada LG, Rodríguez-Iturbe B, Herrera-Acosta J, and Johnson RJ: Hyperuricemia causes glomerular hypertrophy in the rat. *Am J Nephrol* 2003 Jan-Feb;23(1):2-7.
8. Hare JM, Johnson RJ: Uric acid predicts clinical outcomes in heart failure: insights regarding the role xanthine oxidase and uric acid in disease pathophysiology. *Circulation* 2003 Apr 22;107(15):1951-1953 (editorial).
9. Kanellis J, Watanabe S, Li JH, Kang D-H, Li P, Nakagawa T, Wamsley A, Sheikh-Hamad D, Lan HY, Feng L, Johnson RJ: Uric acid stimulates monocyte chemoattractant protein-1 production in vascular smooth muscle cells via mitogen-activated protein kinase and cyclooxygenase-2. *Hypertension* 2003;41(6):1287-1293.
10. Feig DI, Johnson RJ: Hyperuricemia in childhood essential hypertension. *Hypertension* 2003; 42:247-252.
11. Johnson RJ, Kang D-H, Feig D, Kivlighn S, Kanellis J, Watanabe S, Tuttle KR, Rodríguez-Iturbe B, Herrera-Acosta J, Mazzali M: Is there a pathogenetic role for uric acid in hypertension and cardiovascular and renal disease? *Hypertension* 2003 Jun;41(6):1183-1190.
12. Kanellis J, Johnson RJ. Editorial Comment: Elevated uric acid and ischemic stroke: accumulating evidence that it is injurious and not neuroprotective. *Stroke* 2003 August 34:1956-1957.
13. Kang D-H, Finch J, Nakagawa T, Karumanchi, Kanellis J, Granger J, Johnson RJ: Uric acid, endothelial dysfunction, and preeclampsia: searching for a pathogenetic link. *J Hypertens* 2004; 22:229-235
14. Johnson RJ, Rideout B: Uric acid and diet: insights into the Epidemic of Cardiovascular Disease. *N Engl J Med* (editorial) 2004; 350:1071-1074
15. Rodríguez-Iturbe B, Vaziri ND, Herrera-Acosta J, Johnson RJ: Oxidative stress, renal infiltration of immune cells, and salt-sensitive hypertension: all for one and one for all *Am J Physiol Renal Physiol* 2004; 286:F606-616.
16. Feig DI, Nakagawa T, Karumanchi SA, Oliver WJ, Kang D-H, Finch J, Johnson RJ: Uric acid, nephron number, and the pathogenesis of essential hypertension *Kidney International* 2004; 66:281-287
17. Johnson RJ, Srinivas T, Cade JR, Rideout BA, Oliver WJ. Uric acid, evolution and primitive cultures. In *Uric acid in Cardiovascular and Renal Disease*. Eds Johnson R and Cameron JS. *Semin Nephrol* 2005; 25:3-8
18. Sanchez-Lozada LG, Tapia E, Rodríguez-Iturbe B, Johnson RJ, Herrera-Acosta J. Hemodynamics of hyperuricemia. In *Uric acid in Cardiovascular and Renal Disease*. Eds Johnson R and Cameron JS. *Semin Nephrol* 2005; 25:19-24.
19. Srinivas TR, Herrera-Acosta J, Feig DI, Kang DH, Segal MS, Johnson RJ. Diuretic induced hyperuricemia does not decrease cardiovascular risk *J Hypertens* 22:1415-1417, 2004
20. Khosla UM, Zharikov S, Finch JL, Nakagawa T, Roncal C, Mu W, Krotova K, Block ER, Prabhakar S, Johnson RJ. Hyperuricemia induces endothelial dysfunction. *Kidney Int* 2005; 67:1739-1742
21. Sanchez-Lozada LG, Tapia E, Santamaria J, Avila-Casado C, Nepomuceno T, Rodríguez-Iturbe B, Johnson RJ, Herrera-Acosta J. Mild hyperuricemia induces severe cortical vasoconstriction and perpetuates glomerular hypertension in normal rats and in experimental chronic renal failure. *Kidney*

Int 2005; 67:237-247

22. Nakagawa T, Lan HY, Glushakova O, Zhu HJ, Kang D-H, Schreiner GF, Johnson RJ, Sautin Y. Role of ERK1/2 and p38 Mitogen-Activated Protein Kinases in the Regulation of Thrombospondin-1 by TGF- β 1 in Rat Proximal Tubular Cells and Mouse Fibroblasts. *J Am Soc Nephrol* 2005;16(4):899-904
23. Johnson RJ, Rodriguez-Iturbe B, Kang DH, Feig DI, Herrera-Acosta J. A unifying pathway for essential hypertension. *Am J Hypertens* 2005; 18:431-40
24. Short RA, Johnson RJ, Tuttle KR. Uric acid, microalbuminuria, and cardiovascular events in high risk patients. *Am J Nephrol* 2005 Feb 21;25(1):36-44
25. Johnson RJ, Feig DI, Kang DH, Herrera-Acosta J. Resurrection of uric acid as a causal risk factor for essential hypertension. *Hypertension* 2005; 45:18-20
26. Johnson RJ, Rodriguez-Iturbe B, Nakagawa T, Kang DH, Feig DI, Herrera-Acosta J. Subtle renal injury is likely a common mechanism for salt-sensitive essential hypertension. *Hypertension* 2005; 45:326-330
27. Hediger MA, Johnson RJ, Miyazaki H, Endou H. Molecular physiology of urate transport. *Physiology* 2005; 20:125-133
28. Long DA, Mu W, Prabhakar SS, Price KL, Truong LD, Feng L, Newaz MA, Oyekan AO, Johnson RJ. Loss of Nitric Oxide and Endothelial Derived Hyperpolarizing Factor Mediated Responses in Aging. *Kidney Int* 2005 Nov; 68:2154-63.
29. Kang D-H, Park SK, Lee IK, Johnson RJ: Uric acid induced C-Reactive Protein (CRP) expression: Implication on Cell Proliferation and Nitric Oxide Production in Human Vascular Cells *J Am Soc Nephrol* (in press)
30. Sadlier DM, Ouyang X, McMahon B, Mu W, Ohashi R, Rogers K, Murray D, Nakagawa T, Godson C, Doran P, Brady HR, Johnson RJ. Use of Microarray and Bioinformatics to identify novel and established genes in experimental mesangial proliferative glomerulonephritis. *Kidney Int* (in press)
31. Johnson RJ, Segal MS, Srinivas TR, Ejaz A, Mu W, Roncal C, Sanchez-Lozada LG, Gersch M, Rodriguez-Iturbe B, Kang DH, Herrera-Acosta J. Essential hypertension, progressive renal disease and uric acid: A pathogenetic link? *J Am Soc Nephrol* 2005;16:1909-19
32. Mu W, Ouyang X, Agarwal A, Long DA, Cruz PE, Roncal CA, Glushakova OY, Chiodo VA, Atkinson MA, Hauswirth WW, Flotte TR, Rodriguez-Iturbe B, Johnson RJ. Interleukin-10 suppresses chemokines, inflammation and fibrosis in a model of chronic renal disease *J Am Soc Nephrol* in press
33. Ouyang X, Le TH, Roncal C, Gersch C, Herrera-Acosta J, Rodriguez-Iturbe B, Coffman TM, Johnson RJ, Mu W. Th1 inflammatory response with altered expression of profibrotic and vasoactive mediators in AT1A and AT1B double-knockout mice *Am J Physiol Renal Physiol* 2005 Oct; 289(4):F902-10.
34. Kang DH, Han L, Ouyang X, Kahn AM, Kanellis J, Li P, Feng L, Nakagawa T, Watanabe S, Hosoyamada M, Endou H, Lipkowitz M, Abramson R, Mu W, Johnson RJ. Uric acid causes vascular smooth muscle cell proliferation by entering cells via a functional urate transporter. *Am J Nephrol* 2005; 25:425-433
35. Nakagawa T, Hu H, Zharikov S, Tuttle KR, Short RA, Glushakova O, Ouyang X, Feig DI, Block ER, Herrera-Acosta J, Johnson RJ. Uric acid is a causal factor in fructose-induced metabolic syndrome. *Am J Physiol Renal Physiol* (Oct 18 2005 Epub, in press)
36. Nakagawa T, Tuttle KR, Short RA, Johnson RJ. Fructose-induced hyperuricemia as a causal mechanism for the epidemic of the metabolic syndrome. *Nature Clinical Practice Nephrology*. 2005;1: 80-86
37. Sanchez-Lozada LG, Nakagawa T, Kang DH, Feig DI, Franco M, Johnson RJ, Herrera-Acosta J. Hormonal and cytokine effects of uric acid. *Current Opin Nephrol Hypertens* (in press)
38. Thadhani R, Johnson RJ, Karumanchi SA. Hypertension during pregnancy: A disorder begging for pathophysiologic effect. *Hypertension* (Editorial) (in press)

C. Research Support

