Curriculum Vitae 2012

Ralph Rabkin

1079 Cathcart Way, Stanford, California 94305, USA

Degrees:	MB. ChB. (Cape Town), M.D. (Univ. Witwatersrand), Fellow American Heart Association.
Place of Birth:	Cape Town, South Africa
Citizenship:	U.S.A.

Education:

University of Cape Town, S. Africa.	M.B. Ch.B. - 1960 (equivalent to M.D. in USA).
University of Witwatersrand	M.D. - 1977 (equivalent to Ph.D.) Thesis entitled: "The relationship between the kidney and certain peptide hormones."

Professional Experience and Appointments:

Professor Medicine, Emeritus Active, Stanford University	2002 - present
Member, Stanford University IRB Human Subjects in Research	1999- 2011
Professor of Medicine, Stanford University, Stanford, CA.	1989 - 2002
Visiting Scientist, Genentech Inc., South San Francisco, CA	1991 – 1992 and 1998-9
Consultant Genentech Inc.	1992--2003
Chief, Nephrology, Palo Alto Veterans Affairs Medical Center,	1982 - 1995
NIH Fellowship Training Program Director, Division of Nephrology,	1986 - 1992

Stanford Medical School

Tenured Associate Professor of Medicine, Stanford University	1983 - 1989
Associate Professor of Medicine, Stanford University	1978 - 1983
Chief Nephrology, Santa Clara Valley Medical Center, San Jose, CA.	1978 - 1982
Associate Professor of Medicine, Division of Nephrology, University Tennessee Center for the Health Sciences, TN.	1975 - 1978
Principal Renal Physician and Head, Renal Division, University Witwatersrand, Johannesburg, South Africa.	1972 - 1975
Senior Specialist Physician and Senior Lecturer, Renal Unit, University of Cape Town, South Africa.	1970 - 1972
Specialist Physician and Lecturer, Renal Unit, University Cape Town	1969 - 1970
Senior, then Chief, Research Officer, University of Cape Town/ Medical Research Council, Renal Metabolic Research Unit,	1968 - 1969
Instructor of Medicine, Northwestern University, Chicago, IL., USA	1967 - 1968
Clinical Research Fellow, Renal Section, Northwestern University Medical School, Chicago, IL., USA.	1966 - 1967
Resident in Internal Medicine - General Hospital, Johannesburg, University of Witwatersrand, South Africa.	1964 - 1966
Resident in Pediatrics, King Edward VIII Hospital and Addington	1962 - 1963

Hospital, Durban, South Africa.

Rotating Internship: Internal Medicine at King Edward VIII Hospital, 1961 - 1962
(University of Natal), Ob/Gyn at Groote Schuur Hospital
(University of Cape Town). Surgery at Edendale Hospital,
Pietermaritzburg, Natal, S. Africa.

Medical Licenses and Certificates:
California State License - 1978

Active Research Interests:
Growth factors and kidney disease

Membership of Medical Societies and Colleges:
American Society for Clinical Investigation
Western Association of Physicians
Western Society for Clinical Research
International Society of Nephrology
American Heart Association
American Society of Nephrology
American Federation for Clinical Research
International Society of Nutrition and Metabolism in Renal Disease
International Insulin-like Growth Factor Society

National/International Committees:
1988: NIH Advisory Committee on Nutritional Influence on the Course of Chronic Renal Disease
1994-1998: Council Member - International Society Nutrition and Metabolism in Renal Disease

Awards:

1969	Glaxo-Allenbury Award for Research in Endocrinology and Metabolism.
1974	Charlotte Roberts Trust Fund Kidney Research Award.
1980	Elected to American Society Clinical Investigation
1982	Elected Fellow, Royal College of Physicians and Surgeons, Glasgow
1991	Juvenile Diabetes Foundation International - Training for Established Scientists
2003	Elected Fellow American Heart Association

Ad Hoc Reviewer:Journals
Journal of Clinical Investigation
American Journal of Physiology,
Kidney International,

Journal American Society Nephrology
Metabolism
Experimental Nephrology
Endocrinology
Growth Hormone and IGF Research

Reviewer Grants
NIH Diabetes and Digestive and Kidney Diseases Special Study Sections/ad hoc member 1988, 1989, 1990,1995, 1996.
Veterans Administration, Merit Review grant applications, ad hoc reviewer
United States –Israel Binational Science Foundation, ad-hoc reviewer

Publications in Jounals:

1. Rabkin R, Stables DP, Levin NW, Suzman MM. The prophylactic value of propranolol in angina pectoris. The American journal of cardiology. Sep 1966;18(3):370-383.
2. Rabkin RH, Goldberg B. Intermittent peritoneal dialysis in chronic renal failure. S Afr Med J. Oct 26 1968;42(41):1095-1098.
3. Rabkin R, Colwell JA. The renal uptake and excretion of insulin in the dog. J Lab Clin Med. Jun 1969;73(6):893-900.
4. Rabkin R, Simon NM, Steiner S, Colwell JA. Effect of renal disease on renal uptake and excretion of insulin in man. N Engl J Med. Jan 22 1970;282(4):182-187.
5. Keeton GR, Rabkin R, Thatcher G, Eales L. Blood priming for haemodialysis. Lancet. Aug 7 1971;2(7719):311.
6. Birkenstock WE, Rabkin R, Stables DP. Bilateral traumatic renal artery occlusion with survival after late reconstitution of arterial flow. Br J Surg. Nov 1972;59(11):915-917.
7. Birkenstock WE, Rabkin R, Stables DP. Traumatic renal artery occlusion. S Afr Med J. Jun 17 1972;46(25):849.
8. Jessop S, Rabkin R, Mumford G, Eales L. Renal tubular function in systemic lupus erythematosis. S Afr Med J. Jun 17 1972;46(25):848.
9. Kahn S, Sagel J, Eales L, Rabkin R. The significance of serum creatinine and the blood urea-serum creatinine ratio in azotaemia. S Afr Med J. Nov 25 1972;46(47):1828-1832.
10. Keeton GR, Rabkin R, Miller D, Eales L. Short-term follow-up of acute tubular necrosis. S Afr Med J. Jun 17 1972;46(25):849.
11. Rabkin R, Pimstone BL, Marks T, Eales L. Disappearnace of human growth hormone 125 I in the anephric non-uraemic and uraemic rat. Horm Metab Res. Nov 1972;4(6):467-469.
12. Rabkin R, Rubenstein AH, Colwell JA. Glomerular filtration and proximal tubular absorption of insulin 125 I. Am J Physiol. Nov 1972;223(5):1093-1096.
13. Rabkin R, Swann M, Isaacson LC. Gorwth hormone stimulation of ionic transport across toad skin. S Afr Med J. Jun 17 1972;46(25):851-852.
14. Jessop S, Rabkin R, Mumford G, Eales L. Renal tubular function in systemic lupus erythematosus. S Afr Med J. Jan 27 1973;47(4):132-135.
15. Rabkin R, Pimstone BL, Eales L. Autoradiographic demonstration of glomerular filtration and proximal tubular absorption of growth hormone 125-I in the mouse. Horm Metab Res. May 1973;5(3):172-175.
16. Rabkin R, Thatcher GN, Diamond LH, Eales L. The nephrotic syndrome, malignancy and immunosuppression. S Afr Med J. Apr 14 1973;47(14):605-606.
17. Milne FJ, Goldberg B, Meyers AM, et al. Experience with chronic haemodialysis in Johannesburg. S Afr Med J. Sep 7 1974;48(43):1821-1825.

18. Myburgh JA, Maier G, Smit JA, et al. Presensitization and clinical kidney transplantation. II. Correlative studies of humoral and cellular immunity and clinical course. Transplantation. Sep 1974;18(3):213-222.
19. Myburgh JA, Maier G, Smit JA, et al. Presensitization and clinical kidney transplantation. I. Favourable course of a substantial number of patients. Transplantation. Sep 1974;18(3):206-212.
20. Rabkin R, Swann M, Shapiro DJ, Isaacson L. Effect of growth hormone on sodium transport and osmotic water flow across toad skin. Horm Metab Res. Mar 1974;6(2):129-132.
21. Distiller LA, Morley JE, Sagel J, Pokroy M, Rabkin R. Pituitary-gonadal function in chronic renal failure: the effect of luteinizing hormone--releasing hormone and the influence of dialysis. Metabolism. Jun 1975;24(6):711-720.
22. Salant DJ, Rabkin R. An unusual hormonal cause of hypertension and hypokalaemia. S Afr Med J. Aug 30 1975;49(37):1525-1526.
23. Sher R, Anderson R, Meyers AM, Rabkin R, Koornhof HJ. The qualitative nitroblue tetrazolium (NBT) test as a means to differentiate between infection and rejection in renal transplant patients. Clin Nephrol. Jul 1975;4(1):8-12.
24. Smith JD, Rabkin R, Stables D, Thatcher GN, Eales L. Analgesic renal papillary necrosis. S Afr Med J. Oct 18 1975;49(44):1819-1822.
25. Torrance JD, Milne FJ, Hurwitz S, Zwi S, Rabkin R. Changes in oxygen delivery during hemodialysis. Clin Nephrol. Feb 1975;3(2):54-59.
26. Epstein S, Le Roith D, Rabkin R. The effect of different preparations of human growth hormone on plasma renin activity in normal males. J Clin Endocrinol Metab. Feb 1976;42(2):390-392.
27. Goldberg RB, Judelman JJ, Mindel A, et al. Hyperlipidaemia in renal transplant patients. S Afr Med J. Jul 31 1976;50(33):1291-1294.
28. Meyers A, Salant D, Rabkin R, Milne J, Botha R, Myburgh J. Lymphocoeles in renal homograft recipients. Proc Eur Dial Transplant Assoc. 1976;12:452-460.
29. Meyers AM, Rice GC, Kaye S, Myburgh JA, Rabkin R. Kaposi's sarcoma in an immunosuppressed renal allograft recipient. S Afr Med J. Jul 31 1976;50(33):1299-1300.
30. Meyers AM, Shapiro DJ, Milne FJ, Myburgh JA, Rabkin R. Strongyloides stercoralis hyperinfection in a renal allograft recipient. S Afr Med J. Jul 31 1976;50(33):1301-1302.
31. Salant DJ, Glover AM, Anderson R, et al. Depressed neutrophil chemotaxis in patients with chronic renal failure and after renal transplantation. J Lab Clin Med. Oct 1976;88(4):536-545.

32. Salant DJ, Glover AM, Anderson R, et al. Polymorphonuclear leucocyte function in chronic renal failure and after renal transplantation. Proc Eur Dial Transplant Assoc. 1976;12:370-379.
33. Rabkin R, Jones J, Kitabchi AE. Insulin extraction from the renal peritubular circulation in the chicken. Endocrinology. Dec 1977;101(6):1828-1833.
34. Morley JE, Distiller LA, Unterhalter S, Myers JB, Rabkin R, Katz M. Effect of renal transplantation on pituitary gonadal function. Metabolism. Jul 1978;27(7):781-785.
35. Rabkin R, Kitabchi AE. Factors influencing the handling of insulin by the isolated rat kidney. J Clin Invest. Jul 1978;62(1):169-175.
36. Rabkin R, Ross BD, Mako ME, Rubenstein AH. The handling of insulin, proinsulin, and C-peptide by the isolated rat kidney. Diabetes. 1978;27 Suppl 1:192-196.
37. Rabkin R, Share L, Payne PA, Young J, Crofton J. The handling of immunoreactive vasopressin by the isolated perfused rat kidney. J Clin Invest. Jan 1979;63(1):6-13.
38. Rabkin R, Unterhalter SA, Duckworth WC. Effect of prolonged uremia on insulin metabolism by isolated liver and muscle. Kidney Int. Oct 1979;16(4):433-439.
39. Rabkin R, Ghazeleh S, Share L, Crofton J, Unterhalter SA. Removal of immunoreactive arginine vasopressin by the perfused rat liver. Endocrinology. Mar 1980;106(3):930-934.
40. Rabkin R, Gottheiner TI, Fang VS. Removal and excretion of immunoreactive rat growth hormone by the isolated kidney. Am J Physiol. Apr 1981;240(4):F282-287.
41. Rabkin R, Gottheiner TI, Tsao TS. Metabolic characteristics of renal insulin uptake. Diabetes. Nov 1981;30(11):929-934.
42. Sacks H, Rabkin R, Kitabchi AE. Reversible hyperinsulinuria in diabetic ketoacidosis in man. Am J Physiol. Nov 1981;241(5):E396-405.
43. Petersen J, Kitaji J, Duckworth WC, Rabkin R. Fate of [125I]insulin removed from the peritubular circulation of isolated perfused rat kidney. Am J Physiol. Aug 1982;243(2):F126-132.
44. Rabkin R, Gottheiner TI, Tsao TS. Amino acids enhance renal tubular absorption of the los-molecular-weight proteins insulin and growth hormone. Am J Physiol. Jun 1982;242(6):F745-749.
45. Rabkin R, Petersen J, Mamelok R. Binding and degradation of insulin by isolated renal brush border membranes. Diabetes. Jul 1982;31(7):618-623.
46. Rabkin R, Kitaji J. Renal metabolism of peptide hormones. Miner Electrolyte Metab. 1983;9(4-6):212-226.
47. Rabkin R, Petersen J. Peritubular uptake and processing of insulin. Contrib Nephrol. 1984;42:38-48.
48. Rabkin R, Ryan MP, Duckworth WC. The renal metabolism of insulin. Diabetologia. Sep 1984;27(3):351-357.

49. Kearns PJ, Polhemus RJ, Oakes D, Rabkin R. Hepatorenal syndrome managed with hemodialysis, then reversed by peritoneovenous shunting. J Clin Gastroenterol. Aug 1985;7(4):341-343.
50. Kaysen GA, Myers BD, Couser WG, Rabkin R, Felts JM. Mechanisms and consequences of proteinuria. Lab Invest. May 1986;54(5):479-498.
51. Rabkin R, Hirayama P, Roth RA, Frank BH. Effect of experimental diabetes on insulin binding by renal basolateral membranes. Kidney Int. Sep 1986;30(3):348-354.
52. Rabkin R, Reaven GM, Mondon CE. Insulin metabolism by liver, muscle, and kidneys from spontaneously diabetic rats. Am J Physiol. May 1986;250(5 Pt 1):E530-537.
53. Duckworth WC, Hamel FG, Liepnieks J, Frank BH, Yagil C, Rabkin R. High performance liquid chromatographic analysis of insulin degradation products from a cultured kidney cell line. Endocrinology. Dec 1988;123(6):2701-2708.
54. Herrman J, Simmons RE, Frank BH, Rabkin R. Differences in renal metabolism of insulin and cytochrome c. Am J Physiol. Apr 1988;254(4 Pt 1):E419-428.
55. Mahoney CA, Simmons RE, Hjelle JT, Rabkin R. Intrarenal pathways of calcitonin degradation. Contrib Nephrol. 1988;68:12-18.
56. Petersen J, Ross J, Rabkin R. Effect of insulin therapy on established diabetic nephropathy in rats. Diabetes. Oct 1988;37(10):1346-1350.
57. Simmons RE, Hjelle JT, Mahoney C, et al. Renal metabolism of calcitonin. Am J Physiol. Apr 1988;254(4 Pt 2):F593-600.
58. Yagil C, Ehmann UK, Frank BH, Rabkin R. Insulin binding, internalization, and degradation by a cultured kidney cell line. Am J Physiol. May 1988;254(5 Pt 1):E601-608.
59. Yagil C, Frank BH, Rabkin R. Effect of bacitracin on binding and processing of insulin by established renal cell line. Diabetes. Jun 1988;37(6):800-805.
60. Yagil C, Frank BH, Rabkin R. Internalization and catabolism of insulin by an established renal cell line. Am J Physiol. Jun 1988;254(6 Pt 1):C822-828.
61. Dahl DC, Tsao T, Duckworth WC, Mahoney MJ, Rabkin R. Retroendocytosis of insulin in a cultured kidney epithelial cell line. Am J Physiol. Aug 1989;257(2 Pt 1):C190-196.
62. Duckworth WC, Hamel FG, Liepnieks J, Peavy D, Frank B, Rabkin R. Insulin degradation products from perfused rat kidney. Am J Physiol. Feb 1989;256(2 Pt 1):E208-214.
63. Mondon CE, Reaven GM, Azhar S, Lee CM, Rabkin R. Abnormal insulin metabolism by specific organs from rats with spontaneous hypertension. Am J Physiol. Oct 1989;257(4 Pt 1):E491-498.
64. Rabkin R, Dahl DC, Mahoney CA, Tsao T. Protein catabolism in cultured kidney cells. Kidney Int Suppl. Nov 1989;27:S11-14.

65. Rabkin R, Yagil C, Frank B. Basolateral and apical binding, internalization, and degradation of insulin by cultured kidney epithelial cells. Am J Physiol. Dec 1989;257(6 Pt 1):E895-902.
66. Dahl DC, Tsao T, Duckworth WC, Frank BH, Rabkin R. Effect of bacitracin on retroendocytosis and degradation of insulin in cultured kidney epithelial cell line. Diabetes. Nov 1990;39(11):1339-1346.
67. Dahl DC, Tsao T, Rabkin R. Alternate pathways for the renal processing of insulin. Contrib Nephrol. 1990;83:53-59.
68. Rabkin R, Dahl DC. Factors controlling intracellular protein turnover in the kidney. Semin Nephrol. Sep 1990;10(5):472-480.
69. Tsao TC, Shi JD, Mortimore GE, Cragoe EJ, Jr., Rabkin R. Modulation of kidney cell protein degradation by insulin. J Lab Clin Med. Sep 1990;116(3):369-376.
70. Najjar SM, Hampp LT, Rabkin R, Gray GM. Sucrase-alpha-dextrinase in diabetic BioBreed rats: reversible alteration of subunit structure. Am J Physiol. Feb 1991;260(2 Pt 1):G275-283.
71. Rabkin R, Tsao T, Shi JD, Mortimore G. Amino acids regulate kidney cell protein breakdown. J Lab Clin Med. Jun 1991;117(6):505-513.
72. Dahl DC, Tsao T, Rabkin R. Ammonium chloride increases kidney cell protein content. Miner Electrolyte Metab. 1992;18(2-5):104-107.
73. Fawcett J, Frank B, Rabkin R. Renal cortical endosomes participate in the degradation of insulin. Miner Electrolyte Metab. 1992;18(2-5):80-83.
74. Najjar SM, Hampp LT, Rabkin R, Gray GM. Altered intestinal and renal brush border amino-oligopeptidase structure in diabetes and metabolic acidosis: normal and biobreed (BB) rats. Metabolism. Jan 1992;41(1):76-84.
75. Fawcett J, Rabkin R. Degradation of insulin by isolated rat renal cortical endosomes. Endocrinology. Oct 1993;133(4):1539-1547.
76. Fawcett J, Rabkin R. Endosomes degrade insulin. Contrib Nephrol. 1993;101:61-65.
77. Rabkin R, Palathumpat M, Tsao T. Ammonium chloride alters renal tubular cell growth and protein turnover. Lab Invest. Apr 1993;68(4):427-438.
78. Rabkin R, Tsao T, Elliot SJ, Striker LJ, Striker GE. Insulin uptake and processing by cultured mouse glomerular endothelial cells. Am J Physiol. Aug 1993;265(2 Pt 1):C453-459.
79. Clark R, Mortensen D, Rabkin R. Recovery from acute ischaemic renal failure is accelerated by des-(1-3)-insulin-like growth factor-1. Clin Sci (Lond). Jun 1994;86(6):709-714.
80. Shechter P, Boner G, Rabkin R. Tubular cell protein degradation in early diabetic renal hypertrophy. J Am Soc Nephrol. Feb 1994;4(8):1582-1587.

81. Shechter P, Shi JD, Rabkin R. Renal tubular cell protein breakdown in uninephrectomized and ammonium chloride-loaded rats. J Am Soc Nephrol. Nov 1994;5(5):1201-1207.
82. Fawcett J, Rabkin R. The processing of insulin-like growth factor-I (IGF-I) by a cultured kidney cell line is altered by IGF-binding protein-3. Endocrinology. Apr 1995;136(4):1340-1347.
83. Fawcett J, Rabkin R. Sequential processing of insulin by cultured kidney cells. Endocrinology. Jan 1995;136(1):39-45.
84. Rabkin R. Insulin-like growth factor-I treatment of acute renal failure. J Lab Clin Med. Jun 1995;125(6):684-685.
85. Rabkin R, Brody M, Lu LH, Chan C, Shaheen AM, Gillett N. Expression of the genes encoding the rat renal insulin-like growth factor-I system. J Am Soc Nephrol. Nov 1995;6(5):1511-1518.
86. Tsao T, Wang J, Fervenza FC, et al. Renal growth hormone--insulin-like growth factor-I system in acute renal failure. Kidney Int. Jun 1995;47(6):1658-1668.
87. Fervenza FC, Tsao T, Rabkin R. Response of the intrarenal insulin-like growth factor-I axis to acute ischemic injury and treatment with growth hormone and epidermal growth factor. Kidney Int. Feb 1996;49(2):344-354.
88. Rabkin R, Fervenza FC. Renal hypertrophy and kidney disease in diabetes. Diabetes Metab Rev. Oct 1996;12(3):217-241.
89. Rabkin R, Fervenza FC, Maidment H, et al. Pharmacokinetics of insulin-like growth factor-1 in advanced chronic renal failure. Kidney Int. Apr 1996;49(4):1134-1140.
90. Rabkin R, Hamik A, Yagil C, Hamel FG, Duckworth WC, Fawcett J. Processing of 125I-insulin by polarized cultured kidney cells. Exp Cell Res. Apr 10 1996;224(1):136-142.
91. Rabkin R, Shechter P, Shi JD, Boner G. Protein turnover in the hypertrophying kidney. Miner Electrolyte Metab. 1996;22(1-3):153-156.
92. Fervenza FC, Tsao T, Hoffman AR, Rabkin R. Regional changes in the intrarenal insulin-like growth factor-I axis in diabetes. Kidney Int. Mar 1997;51(3):811-818.
93. Hsu FW, Tsao T, Rabkin R. The IGF-I axis in kidney and skeletal muscle of potassium deficient rats. Kidney Int. Aug 1997;52(2):363-370.
94. Ike JO, Fervenza FC, Hoffman AR, et al. Early experience with extended use of insulin-like growth factor-1 in advanced chronic renal failure. Kidney Int. Mar 1997;51(3):840-849.
95. Li W, Fawcett J, Widmer HR, Fielder PJ, Rabkin R, Keller GA. Nuclear transport of insulin-like growth factor-I and insulin-like growth factor binding protein-3 in opossum kidney cells. Endocrinology. Apr 1997;138(4):1763-1766.

96. Maestri M, Dafoe DC, Adams GA, et al. Insulin-like growth factor-I ameliorates delayed kidney graft function and the acute nephrotoxic effects of cyclosporine. Transplantation. Jul 27 1997;64(2):185-190.
97. Miller SB, Rabkin R. The use of growth factors to increase glomerular filtration rate in chronic renal failure patients. Curr Opin Nephrol Hypertens. Jul 1997;6(4):401-404.
98. Rabkin R. Nutrient regulation of insulin-like growth factor-I. Miner Electrolyte Metab. 1997;23(3-6):157-160.
99. Tsao T, Hsu FW, Rabkin R. IGF-I receptor binding, autophosphorylation, and kinase activity in kidney and muscle of acutely uremic rats. Am J Physiol. Mar 1997;272(3 Pt 2):F325-332.
100. Yap J, Tsao T, Fawcett J, Fielder PJ, Keller GA, Rabkin R. Effect of insulin-like growth factor binding proteins on the response of proximal tubular cells to insulin-like growth factor-I. Kidney Int. Nov 1997;52(5):1216-1223.
101. Fervenza FC, Friedlaender MM, Ike JO, Rabkin R. Insulin-like growth factor-I treatment to enhance renal function in advanced chronic renal failure. Ren Fail. Mar 1998;20(2):349-356.
102. Friedlaender MM, Fervenza FC, Tsao T, Hsu F, Rabkin R. The insulin-like growth factor-I axis in acute renal failure. Ren Fail. Mar 1998;20(2):343-348.
103. Maestri M, Adams G, Gaspari A, et al. Role of insulinlike growth factor I in renal transplantation: evaluation of intra- and postoperative effects. Transplant Proc. Aug 1998;30(5):2019-2023.
104. Fervenza FC, Hsu FW, Tsao T, Friedlaender MM, Rabkin R. Response to growth hormone therapy in experimental ischemic acute renal failure. J Lab Clin Med. May 1999;133(5):434-439.
105. Fervenza FC, Tsao T, Hsu F, Rabkin R. Intrarenal insulin-like growth factor-1 axis after unilateral nephrectomy in rat. J Am Soc Nephrol. Jan 1999;10(1):43-50.
106. Fawcett J, Hsu FW, Tsao T, Rabkin R. Effect of metabolic acidosis on the insulin-like growth factor-I system and cathepsins B and L gene expression in the kidney. J Lab Clin Med. Dec 2000;136(6):468-475.
107. Chen Y, Fervenza FC, Rabkin R. Growth factors in the treatment of wasting in kidney failure. J Ren Nutr. Apr 2001;11(2):62-66.
108. Fervenza F, Tsao T, Rabkin R. Paradoxical body and kidney growth in potassium deficiency. Ren Fail. May-Jul 2001;23(3-4):339-346.
109. Rabkin R. Growth factor insensitivity in renal failure. Ren Fail. May-Jul 2001;23(3-4):291-300.
110. Rabkin R, Fervenza F, Tsao T, et al. Hepatocyte growth factor receptor in acute tubular necrosis. J Am Soc Nephrol. Mar 2001;12(3):531-540.

111. Schaefer F, Chen Y, Tsao T, Nouri P, Rabkin R. Impaired JAK-STAT signal transduction contributes to growth hormone resistance in chronic uremia. J Clin Invest. Aug 2001;108(3):467-475.
112. Tsao T, Fawcett J, Fervenza FC, et al. Expression of insulin-like growth factor-I and transforming growth factor-beta in hypokalemic nephropathy in the rat. Kidney Int. Jan 2001;59(1):96-105.
113. Fervenza FC, Rabkin R. The role of growth factors and ammonia in the genesis of hypokalemic nephropathy. J Ren Nutr. Jul 2002;12(3):151-159.
114. Tsao T, Fervenza F, Friedlaender M, Chen Y, Rabkin R. Effect of prolonged uremia on insulin-like growth factor-I receptor autophosphorylation and tyrosine kinase activity in kidney and muscle. Exp Nephrol. 2002;10(4):285-292.
115. Rabkin R. Diabetic nephropathy. Clin Cornerstone. 2003;5(2):1-11.
116. Rabkin R, Schaefer F. New concepts: growth hormone, insulin-like growth factor-I and the kidney. Growth Horm IGF Res. Aug 2004;14(4):270-276.
117. Schaefer F, Yoon SA, Nouri P, et al. Growth hormone-mediated janus associated kinase-signal transducers and activators of transcription signaling in the growth hormone-resistant potassium-deficient rat. J Am Soc Nephrol. Sep 2004;15(9):2299-2306.
118. Stephan JP, Mao W, Filvaroff E, Cai L, Rabkin R, Pan G. Albumin stimulates accumulation of extracellular matrix in renal tubular epithelial cells. Am J Nephrol. Jan-Feb 2004;24(1):14-19.
119. Sun DF, Zheng Z, Tummala P, Oh J, Schaefer F, Rabkin R. Chronic uremia attenuates growth hormone-induced signal transduction in skeletal muscle. J Am Soc Nephrol. Oct 2004;15(10):2630-2636.
120. Rabkin R, Sun DF, Chen Y, Tan J, Schaefer F. Growth hormone resistance in uremia, a role for impaired JAK/STAT signaling. Pediatr Nephrol. Mar 2005;20(3):313-318.
121. Tan JC, Rabkin R. Suppressors of cytokine signaling in health and disease. Pediatr Nephrol. May 2005;20(5):567-575.
122. Zheng Z, Sun DF, Tummala P, Rabkin R. Cardiac resistance to growth hormone in uremia. Kidney Int. Mar 2005;67(3):858-866.
123. Greenstein J, Guest S, Tan JC, Tummala P, Busque S, Rabkin R. Circulating growth hormone binding protein levels and mononuclear cell growth hormone receptor expression in uremia. J Ren Nutr. Apr 2006;16(2):141-149.
124. Sun DF, Chen Y, Rabkin R. Work-induced changes in skeletal muscle IGF-1 and myostatin gene expression in uremia. Kidney Int. Jun 28 2006.
125. Zahn JM, Sonu R, Vogel H, et al. Transcriptional profiling of aging in human muscle reveals a common aging signature. PLoS Genet. Jul 2006;2(7):e115.
126. Berger I, Piecha G, Rabkin R, et al. Growth hormone treatment prevents osteoporosis in uremic rats. Histol Histopathol. Nov 2007;22(11):1231-1239.

127. Chen Y, Sun D, Krishnamurthy VM, Rabkin R. Endotoxin attenuates growth hormone-induced hepatic insulin-like growth factor I expression by inhibiting JAK2/STAT5 signal transduction and STAT5b DNA binding. Am J Physiol Endocrinol Metab. Jun 2007;292(6):E1856-1862.
128. Chen Y, Sood S, Biada J, Roth R, Rabkin R. Increased workload fully activates the blunted IRS-1/PI3-kinase/Akt signaling pathway in atrophied uremic muscle. Kidney Int. Apr 2008;73(7):848-855.
129. Rabkin R, Awwad I, Chen Y, et al. Low-dose growth hormone is cardioprotective in uremia. J Am Soc Nephrol. Sep 2008;19(9):1774-1783.
130. Chen Y, Sood S, Krishnamurthy VM, Rotwein P, Rabkin R. Endotoxin-induced growth hormone resistance in skeletal muscle. Endocrinology. Aug 2009;150(8):3620-3626.
131. Landau D, Eshet R, Troib A, et al. Increased renal Akt/mTOR and MAPK signaling in type I diabetes in the absence of IGF type 1 receptor activation. Endocrine. 2009;36(1):126-134.
132. Chen Y, Biada J, Sood S, Rabkin R. Uremia attenuates growth hormone-stimulated insulin-like growth factor-1 expression, a process worsened by inflammation. Kidney international. 2010;78(1):89-95.
133. Chen Y, Sood S, McIntire K, Roth R, Rabkin R. Leucine stimulated mTOR signaling is partly attenuated in skeletal muscle of chronically uremic rats especially when work overloaded. American journal of physiology. Endocrinology and metabolism. 301, E873-871, 2011.
134. Landau D, Biada J, Chen Y, Sood, S , Yakar, S , Leroith, D, Segev, Y and R .Rabkin. A marked deficiency in circulating and renal IGF-I peptide does not inhibit compensatory renal enlargement in uninephrectomized mice. Growth Horm IGF Res. 2011; 21:279-284.
135. Troib A, Landau D, Youngren JF, Kachko L, Rabkin R, and Segev Y. The effects of type 1 IGF receptor inhibition in a mouse model of diabetic kidney disease. Growth Horm IGF Res. 2011;21(5):285-291.
136. Troib A, Landau D, Kachko L, Rabkin R, and Segev Y.Decreased epiphyseal growth plate growth hormone receptor signaling in chronic kidney disease related growth retardation. Kidney International 2013, In Press,
137. McIntire K, Chen Y, Sood S and R. Rabkin. Acute uremia suppresses leucine induced signal transduction in skeletal muscle. Kidney International . 2013 In press

Book Chapters

Hormones and the kidney**. Rabkin,** R. and C. Mahoney. in: Diseases of the Kidney, 4th edition. R.W. Schrier and C.W. Gottschalk, eds., (Little, Brown & Co.), 1987.

Role of the kidney in hormone metabolism. **Rabkin**, R. and RE. Simmons. In: Textbook of Nephrology, Second Ed. S G. Massry and R. Glassock, eds, (Williams & Wilkins) 1:151-59; 1989.

Renal metabolism of hormones. **Rabkin**, R., and R Simmons, in; Principles and Practice of Endocrinology and Metabolism. KL. Becker, ed, (Lippincott)1523-29, 1990.

Hormones and the kidney. **Rabkin**, R and DC. Dahl. in: Diseases of the Kidney, 5th ed. RW Schrier and CW Gottschalk, eds, (Little, Brown & Co), 283-334, 1993.

Renal uptake and disposal of proteins and peptides. R. **Rabkin** and D. C. Dahl. In: Pharmaceutical Biotechnology, Vol. 5; Biological Barriers to Protein Delivery. Raub, T.J. and K.L. Audus, eds., Plenum Press. 299-337, 1993.

Role of the kidney in hormone metabolism. **Rabkin**, R. and DC. Dahl. :Textbook of Nephrology, Third ed. SG. Massry, and R. Glassock, eds, (Williams & Wilkins),161-171,1995.

Renal metabolism of hormones. **Rabkin**, R., and D.C. Dahl, in; Principles and Practice of Endocrinology and Metabolism. K.L. Becker, ed., (Lippincott & Co.), 1746-1753, 1995.

Growth factors in kidney development and disease. **R Rabkin** and F Fervenza, in, Nephrology.R.Wilkinson and R L Jamison Eds. (Chadmus), 171-176, 1999

Renal metabolism of hormones. **Rabkin**, R. and Haussman M, in; Principles and Practice of Endocrinology and Metabolism. KL. Becker, ed, (Lippincott) 1895-1901, 2000.

Role of the kidney in hormone metabolism. Haussman M **and R Rabkin** : Textbook of Nephrology, Third ed. SG Massry and R Glassock, eds, (Williams & Wilkins) 141-150, 2000

Insulin-like Growth Factor and the Kidney. Schaefer FS and **R Rabkin** in: Insulin-like Growth Factor, edited by D. Le Roith, W. Zumkeller and RC. Baxter. Kluwer Academic/Plenum Publishers. 244-261, 2003

Therapeutic use of growth factors in renal disease. **Rabkin R:** Nutritional Management of Renal Disease, Second Ed. JD Kopple and SG Massry eds. (Lippincott, William and Wilkins) 581-592, 2004

The Kidney and the Insulin-like Growth Factor-I in Health and Disease. **Rabkin R,** S Guest and FS Schaefer; Nutrition and the Insulin-like Growth Factor System, S Houston, J Holly and E Feldman Eds (Humana Press) , 227-248, 2004

Effect of Nutritional Status and Changes in Protein Intake on Renal Function. Landau D and **R. Rabkin**. In Nutritional Management of Renal Disease, Ed. Joel D. Kopple, Shaul G. Massry, and Kamyar Kalantar-Zadeh eds. (Elsevier), 197-208, 2013.

Therapeutic use of growth factors in renal disease. B Feldt-Rasmussen and **R Rabkin :** in Nutritional Management of Renal Disease,Ed. J D. Kopple, SG. Massry, and K Kalantar-Zadeh eds. (Elsevier) , 685-698, 2013.