

June 12, 2010

**CURRICULUM VITAE**  
**Marc S Weinberg, M.D., F.A.C.P., F.A.S.N.**

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**EDUCATION**

Undergraduate: Boston University  
Boston, Massachusetts  
Chemistry, Medical Sciences  
B.A. 1977  
Magna Cum Laude

Medical School: Boston University School of Medicine  
Boston, Massachusetts  
M.D. 1977

**POSTGRADUATE TRAINING**

Internship: Georgetown University Hospital  
Washington, D.C.  
Internal Medicine  
1977 – 1978

Residency: Tufts - New England Medical Center Hospital  
Boston, Massachusetts  
Internal Medicine  
1978 – 1980

Fellowship: Boston University Medical Center  
Boston, Massachusetts  
Nephrology  
Clinical and Research  
1980 – 1983

**POSTGRADUATE HONORS AND AWARDS**

1987 Banice Feinberg Physician of the Year Award  
American Heart Association, RI Affiliate, RI

1995 Distinguished Service and Leadership Award  
American Heart Association, RI Affiliate, RI

2005 Induction into the Collegium and Academy of  
Distinguished Alumni of the Boston University

College and Graduate School of Arts and Sciences  
Alumni Association. (The highest honor bestowed  
upon alumni whose accomplishments in their  
professions, communities, or university service, or  
a combination thereof, have set them apart.)  
Boston University, Boston, MA

2007 National Distinguished Eagle Scout Award  
Boy Scouts of America, USA

2007–2008 Mentorship Award  
Roger Williams Medical Center  
Providence, RI

### **PROFESSIONAL LICENSES AND BOARD CERTIFICATION**

1978 Massachusetts License # 43058

1978 Rhode Island License #5402

1980 Diplomat of Internal Medicine  
American Board of Internal Medicine

1984 Diplomat in Nephrology  
American Board of Internal Medicine

1984 Fellow, American College of Physicians (FACP)

2005 Fellow, American Society of Nephrology (FASN)

### **ACADEMIC APPOINTMENTS**

#### **WARREN ALPERT SCHOOL OF MEDICINE OF BROWN UNIVERSITY (PROVIDENCE, RI)**

1983–1983 Instructor in Medicine

1983–1986 Assistant Professor of Medicine

1986–1993 Clinical Assistant Professor of Medicine

1993–2008 Clinical Associate Professor of Medicine

#### **BOSTON UNIVERSITY SCHOOL OF MEDICINE (BOSTON, MA)**

1980–1981 Clinical Associate in Medicine

1981–1983 Research Associate in Medicine

1987–2000 Clinical Instructor in Medicine

2000–Present Clinical Professor of Medicine

**HOSPITAL APPOINTMENTS**

1983–1995 Medical Staff  
Renal-Hypertension Section  
Veterans Administration Medical Center  
Providence, Rhode Island

1983–Present Medical Staff  
Division of Nephrology  
Roger Williams Medical Center  
Providence, Rhode Island

1983–1986 Assistant Director  
Hypertension Research Program  
Brown University  
Roger Williams Medical Center  
Providence, Rhode Island

1984–Present Medical Staff  
Division of Nephrology  
Rhode Island Hospital  
Lifespan  
Providence, Rhode Island

1985–Present Medical Staff  
Division of Nephrology  
The Miriam Hospital  
Lifespan  
Providence, Rhode Island

1985–Present Medical Staff  
Division of Nephrology  
Memorial Hospital of Rhode Island  
Pawtucket, Rhode Island

1985–Present Consulting Staff in Nephrology  
Sturdy Memorial Hospital  
Attleboro, Massachusetts

1985–Present Consulting Staff in Nephrology  
Women & Infants Hospital  
Care New England  
Providence, Rhode Island

1986–Present Director, Division of Nephrology,  
Dialysis Unit and Renal Teaching Program  
Department of Medicine  
Roger Williams Medical Center  
Providence, Rhode Island

1986–1990	Director Hypertension Research Program Brown University Roger Williams Medical Center Providence, Rhode Island
1986–Present	Consulting Staff in Nephrology Butler Hospital Lifespan Providence, Rhode Island
1994–Present	Consulting Staff in Nephrology Landmark Medical Center Woonsocket, Rhode Island
1995–Present	Consulting Staff in Nephrology Rehabilitation Hospital of Rhode Island North Smithfield, Rhode Island
1996–Present	Consulting Staff in Nephrology St. Joseph Health Services of Rhode Island Providence, Rhode Island

**OTHER APPOINTMENTS**

1985–Present	Medical Staff Dialysis Unit Rhode Island Renal Institute Warwick, Rhode Island
1986–Present	Medical Staff The Artificial Kidney Centers East Providence, Warwick, Woonsocket and Pawtucket, Rhode Island
1992–1996	Medical Director and Chief Executive Officer The Ren Center Dialysis Services Network Providence, Rhode Island
1992–1996	Regional Medical Director, New England Ren Corporation Nashville, Tennessee
1996–2001	Medical Director and Chief Executive Officer Gambro Health Services, Dialysis Facility Providence, Rhode Island
1997–2000	President New England Medical Information Systems Providence, RI

1998–2001	Chairman/Governing Body Gambro Healthcare Center–Providence Dialysis Center Providence, Rhode Island
2001–2004	Medical Director National Nephrology Associates Providence Dialysis Center Providence, Rhode Island
2003–Present	Medical Staff American Renal Associates, Dialysis Centers Providence and Pawtucket, Rhode Island
2003–2008	Co-Founder, Executive Vice President Chief Medical Officer Diversified Specialty Inc. (DSI Corp.) Nashville, TN
2004–2005	Medical Director Renal Care Group Dialysis Centers Providence and Pawtucket, Rhode Island
2004–2007	Consulting Staff in Nephrology Regcompliance Consultants 15006 Damson Terrace North Potomac, MD
2005–2006	Medical Director Fresenius Medical Care Providence and Pawtucket, Rhode Island
2006–2008	Chief Clinical Operating Officer, Eastern Region National Director of Clinical Research DSI Renal, Inc Nashville, TN.
2007–2008	National Director of Clinical Research DSI Renal, Inc Nashville, TN.
2007–2009	Kidney Care Partners Board of Directors Washington, D.C
2008–Present	Editorial Board Open Journal of Hypertension – to review Renal & Hypertension articles.

### **HOSPITAL COMMITTEES**

Roger Williams Medical Center

1984–1986	Safety Committee
1984–1987	Credentials Committee
1986–1988	Joint Conference Committee (Board – MEC Joint Committee)
1991–1993	Executive Committee
1991–1992	Physician's Advisory Ad Hoc Committee
1991–1998	Nominating Committee
1992–1993	Medical Staff Affairs Joint Committee Roger Williams Medical Center and The Miriam Hospital Roger Williams Medical Center Representative
1993–1997	Value Committee
1993–1996	Secretary, Treasurer of the Medical Staff Roger Williams Medical Center Providence, Rhode Island
1999–Present	Division Director's Committee Department of Medicine Division Chiefs' Meeting

The Miriam Hospital

1987–2004	Patient Care Committee
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Memorial Hospital of Rhode Island

1988–1995	Nutrition Committee
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**UNIVERSITY COMMITTEES**

Alpert Warren School of Medicine Brown University

1985–1986	Ad Hoc Committee on Student-Faculty Research Day
1990–1998	Advisory Committee Cancer Prevention Research Consortium University of Rhode Island The Miriam Hospital Brown University

**MEMBERSHIP IN SOCIETIES**

American Heart Association, Rhode Island Affiliate

1983–1995	High Blood Pressure Committee
1984–1986	Co-Chairman High Blood Pressure Committee
1984–1987	Chairman High Blood Pressure in Children Committee
1984–1988	Public Education and Awareness Committee
1986–1988	Chairman High Blood Pressure Committee
1986–1988	New England High Blood Pressure Council Executive Committee
1986–2009	Member, Board of Directors
1988–1990	Chairman Worksite Committee
1988, 1991, 1992, 1995, 1996, 1999	Nominations Committee
1990–1992	Chairman Program Council Committee
1991–1999	Executive Committee
1991–1993	President-Elect
1993–1995	President
1995–1997	Immediate Past President
1997	Board of Directors Leadership Commitment Award
1997–2001	Chairman Corporate Network Committee

**Rhode Island Kidney Foundation & RI-Mass National Kidney Foundation**

1989–1995	Executive Board of Directors
1990–1992	President
1992–1993	Immediate Past President

1996–1999	Member, Board of Directors
1999–2008	Medical Advisory Committee

**Blue Cross/Blue Shield of Rhode Island**

1990–Present	Member of the Corporation
1991–1995	Internal Medicine Special Advisory Committee
1996–Present	Member, Board of Directors
1997–2001	Legislative and Community Affairs Committee
1997–2001	Professional and Provider Affairs Committee
1998–2001	Human Resources Committee
2002–2004	Financial Affairs and Audit Committee
2004–2006	Vice Chairman of the Board of Directors
2004–2006	Chairman, PPAC (Professional and Providers Relations Committee)
2004–2006	Executive Committee, Board of Directors
2006–Present	Board of Directors, Emeritus Member

**Blue Chip - Coordinated Health Partners  
Blue Cross/Blue Shield of Rhode Island**

1991–Present	Member, Board of Directors
1992–1997	Nominating Committee
1992–1999	Chairman Professional Advisory Committee
1996–2000	Executive Committee

**Rhode Island Primary Care Physician Corporation**

1994–Present	Founding Father
1995–1997	Finance Committee
1996–1998	Computer Committee

**Other Membership in Societies**

1982–Present	International Society of Nephrology
1982–Present	American Society of Nephrology
1983–Present	American Heart Association, Rhode Island Affiliate
1983–1986	Providence Medical Society
1984–1990	Rhode Island Medical Society
1984–2008	Rhode Island/Massachusetts National Kidney Foundation
1986–2007	Pawtucket Medical Society
1987–1988	National Kidney Foundation
1989–1991	Executive Board of Directors Narragansett Council Boy Scouts of America Providence, Rhode Island
1991–1993	Delegate to Rhode Island Medical Society
1997, 1998 2000–2004	Pharmacy and Therapeutics Committee Pharmacare, Division of CVS Lincoln, Rhode Island
2000–2004	Rhode Island Leadership Council American Cancer Society RI Board Representative

## **PUBLICATIONS LIST**

### **ORIGINAL PUBLICATIONS IN PEER-REVIEWED JOURNALS**

1. Campano DD, Kantrowitz DR, Hoffman MZ, **Weinberg MS**. "Generation of Radicals in the Charge-Transfer Photochemistry of Coordination Complexes of Cobalt (III) in Aqueous Solution." *J Phys Chem.* 1974; 78:686-691.
2. **Weinberg MS**, Ellis CA, Levy SB. "Nutritionally Deficient Streptococcus: Investigation of the Hidden Culprit of Culture-Negative Endocarditis." *South Med Journal.* 1980; 73:1647-1649.
3. **Weinberg MS**, Quigg RJ, Krane RL. "Retroperitoneal Bleeding: A Hidden Culprit of Acute Renal Failure." *Urology.* 1983; 21:291-294.
4. **Weinberg MS**, Oza NB, Levinsky NG. "Components of the Kallikrein-Kinin System in Rat Urine." *Biochem Pharmacol.* 1984; 33:1779-1782.
5. **Weinberg MS**, Donohoe JF. "Hyponatremia in the Syndrome of Inappropriate Secretion of Antidiuretic Hormone: Rapid Correction with Osmotic Agents."

South Med Journal. 1985; 78:348-351.

6. **Weinberg MS**, Quigg RJ, Salant DJ, Bernard DB. "Acute Anuric Renal Failure Induced by Indomethacin and Triamterene." *Nephron*. 1985; 40:216-218.
7. **Weinberg MS**, Azar P, Trebbin WM, Solomon RJ. "Urinary Kininogen: A Possible Regulator of Kinin Generation." *Kidney Intern*. 1985; 28:975-981.
8. **Weinberg MS**, Trebbin WM, Solomon RJ. "Urinary Kininogen: A Possible Regulator of Kinin Formation in Normal Individuals and Subjects with Essential Hypertension, End-Stage Renal Disease and Liver Disease." *Adv Exp Biol. Kinins IV, Part B*. 1986; 119-126.
9. Solomon RJ, Stillman NS, **Weinberg MS**. "Thiazide-Induced Hypotension: The Role of Plasma Volume Reduction and the Urinary Kallikrein System." *Adv Exp Biol. Kinins IV, Part B*. 1986; 243-252.
10. **Weinberg MS**, Belknap S, Trebbin WM, Solomon RJ. "Effects of Changing Salt and Water Balance on Renal Kallikrein, Kininogen, and Kinin." *Kidney Intern*. 1987; 31:836-841.
11. Solomon RJ, **Weinberg MS**. Pinacidil versus Prazosin: "Effect on Blood Pressure, Plasma Volume, Renin and Kinins." *Journal of Clinical Hypertension*. 1987; 589-595.
12. **Weinberg MS**, Blonsky SL, Solomon RJ. "The Acute Effects of Intravenous Diuretic Administration on Components of the Urinary Kallikrein-Kininogen-Kinin System." *American Journal of Hypertension*. 1988; 1:27-30.
13. Isensee L, Griffiths W, Camara P, **Weinberg MS**, Solomon RJ, Trebbin WM. "Digoxin Levels in Dialysis Patients." *Hospital Physician*. June 1988; 50-52.
14. Solomon RJ, Azar P, Trebbin WM, **Weinberg MS**. "Deficiency of Urinary Kinin Excretion in Patients with Liver Disease: The Role of Kininogen." *Nephron*. 1988; 50:39-44.
15. **Weinberg MS**, Kolker JF, Trebbin WM, and Solomon RJ. "Reduction of Hyperlipidemia in Continuous Ambulatory Peritoneal Dialysis." *Dialysis & Transplantation*. 1988; 17:478-480.
16. Solomon RJ, **Weinberg MS**, Dubey A. "The Diurnal Rhythm of Plasma Potassium. Relationship to Diuretic Therapy." *Journal of Cardiovascular Pharmacology*. 1991; 17:854-859.
17. Turk PS, Leenan L, Darnowski JW, Belliveau J, **Weinberg MS**, Wanebo HJ. "Comparison of Isolated Pelvic Perfusion, Open Pelvic Perfusion, and Pelvic Arterial Infusion with Charcoal Perfusion in a Canine Model." *Rog Cancer Treat*. 1993; 1:1-3.
18. Turk PS, Belliveau JF, Darnowski JW, **Weinberg MS**, Leenan L, Wanebo HJ. "Isolated Perfusion for Unresectable Cancer using a Balloon Occlusion Technique." *Archives Surgery*. 1993; 128:533-539.

19. Oza NB, **Weinberg MS**, Oza MN. "Rk7-Kallikrein in Rat Kidney and Urine." *Immunopharmacology*. 1995; 32: 102-104.
20. Hricik DE, Levine BS, Adroque HJ, **Weinberg MS**, Goldstein R. "Evaluation of Enalapril/diltiazem ER in Hypertensive Patients with Coexisting Renal Dysfunction." *Journal of Human Hypertension*. 1996; 10:769-774.
21. Goldberg DI, Dillon MA, Slatopolsky EA, Garrett B, Gray JR, Marbury T, **Weinberg MS**, Wombolt D, Burke SK. "Effect of Renagel, and Nonabsorbed, Calcium and Aluminum Free Phosphate Binder, on Serum Phosphorus, Calcium and Intact Parathyroid Hormone in End Stage Renal Disease Patients." *Nephrol Dial Transplant*. 1998; 13: 2303-2310.
22. **Weinberg MS**, Weinberg AJ, Cord R, Zappe D. "The Effect of High-Dose Angiotensin II Receptor Blockade beyond Maximal Recommended Doses in Reducing Urinary Protein Excretion." *JRAAS*. 2001; Vol. 2: S196-198.
23. Izzo J, **Weinberg MS**, Hainer J, et al. "Antihypertensive Efficacy of Adding Candesartan Cilexetil to Lisinopril in Comparison to Up Titration of Lisinopril (AMAZE)." *Clinical Hypertension*, 2004; 6:485-493.
24. Weinberg AJ, Zappe DH, Aston M, **Weinberg MS**, "Safety and Tolerability of High-Dose Angiotensin Receptor Blocker therapy in Patients with Chronic Kidney Disease: A Pilot Study." *American Journal of Nephrology* 2004; 24: 340-345.
25. Weinberg AJ, Zappe DH, **Weinberg MS**, "Long Term Safety of High Dose Angiotensin Receptor Blockade (ARB) Therapy in Hypertensive Subjects with Chronic Kidney Disease." *Journal of Hypertension* 2006; 24:114-118.
26. Martin H, Goldstein R, Hologgitas J, **Weinberg MS**. "A Model of the Oral Glucose Tolerance Test That Defines The Gastric Emptying Process." *International Journal of Chemical Modeling*, 2009. Vol. 2 Issue 1.

#### **OTHER PEER-REVIEWED PUBLICATIONS**

1. **Weinberg MS**. "Renal Effects of Angiotensin-Converting Enzyme Inhibitors in Heart Failure: A Clinician's Guide to Minimizing Azotemia and Diuretic Induced Heart Electrolyte Imbalances." *Clinical Therapeutics*. 1993; 15:1, 3-17
2. **Weinberg MS**, Cottiero RA. "Microalbuminuria: An Assessment for Early Diabetic Nephropathy." *Dateline*. 1994; 1:3-5.
3. **Weinberg MS**, Weinberg AJ, Zappe D. "Effectively Targeting the Renin-Angiotensin-Aldosterone System in Cardiovascular and Renal Disease: Rationale for using Angiotensin II Receptor Blockers in Combination with Angiotensin Converting Enzyme Inhibitors." *JRAAS*. 2000; 1: 3: 217-233. 2000.
4. **Weinberg MS**, Kaperonis N, Bakris GL. "How High an ACE-Inhibitor or an Angiotensin Receptor Blocker Should be dosed in Patients with Diabetic

Nephropathy?" Current Hypertension Reports. 2003; 5:418-425.

5. Costa J, Crausman R, **Weinberg MS**. "Acute and Chronic Renal Failure." Journal of the American Podiatric Medical Association. 2004; 94:168-176.

#### **BOOK CHAPTERS**

1. **Weinberg MS**. "Acute Renal Failure." Practical Guide to the Care of the Medical Patient." Mosby/Elsevier. 2006; 7<sup>th</sup> ed.
2. **Weinberg MS**. "Acute Renal Failure." Practical Guide to the Care of the Medical Patient. Mosby/Elsevier. 2010; 8<sup>th</sup> ed.

#### **OTHER NON-PEER REVIEWED PUBLICATIONS**

1. **Weinberg MS**, Solomon RJ, Smith KJ, DeSantos D, Posner M. "Development of Radioimmunoassay to Bradykinin using Monoclonal Antibodies." Rhode Island Medical Journal. 1991; 74:477-479.
2. **Weinberg MS**, Yoburn DC, Cottiero RA. "Protecting the Kidneys in Hypertension." Rhode Island Medical Journal." 1993; 76:223-226.
3. **Weinberg MS**. "The Hidden Effects of Antihypertensive and Lipid-Lowering Agents on the Prevention and Regression of Atherogenesis: New Management Strategies." Rhode Island Medical Journal. 1995; 78:77-80

#### **CORPORATE AUTHORSHIP OR MULTICENTER TRIALS**

1. Jones PH, Davidson MH, Stein EA, Bays HE et al for the STELLAR Study Group. "Comparison of the Efficacy and Safety of Rosuvastatin Versus Atorvastatin, Simvastatin, and Pravastatin Across Doses (STELLAR\* Trial)." American J. Cardiology. 2003; 92:152-160. Site Investigator.
2. Julius S, Nesbitt SD, Egan BM, Weber MA et al for the Trial of Preventing Hypertension (TROPHY) Study Investigators. "Feasibility of Treating Prehypertension with an Angiotensin-Receptor Blocker" New England J of Medicine. 2006; 354:1685-97. Site Investigator.
3. Singh AK, Szczech L, Kezhen L et al for the CHOIR Investigators. "Correction of Anemia with Epoetin Alfa in Chronic Kidney Disease." New England J of Medicine. 2006; 355:2085-98. Site Investigator.
4. Brenner BM, Cooper ME, de Zeeuw D, et al for the RENAAL Study Investigators. "The Losartan Renal Protection Study – Rationale, Study Design and Baseline Characteristics of RENAAL (Reduction of Endpoints in NIDDM with the Angiotensin II Antagonist Losartan)" New England J of Medicine. 2001; 345:861-869. Site Investigator.

#### **PUBLICATIONS SUBMITTED OR IN PREPARATION**

1. Webber W, Weinberg DA, Hagberg S, **Weinberg, MS.** "Effectiveness of Pulsed Electromagnetic Field Therapy on Reducing Proteinuria in CKD." Submitted for publication, July, 2010.
2. Kolankiewicz LM, Melamed ML, Rothstein M, **Weinberg MS.** Effects of Erythropoietin Stimulating Agent (ESA) Automated Adjustment Protocols on Hemoglobin Levels and Mortality in End Stage Renal Disease Patients." Submitted for publication, July, 2010.

### **ABSTRACTS**

1. **Weinberg MS,** St. Martin CA, Azar P, Taylor MA, Trebbin WM, Solomon RJ. "Urokininogen: A Possible Regulator of the Kallikrein-Kinin System." Clinical Res. 1984; 32:459A. Presented at the Gordon Research Conference, Ventura, California, 1984.
2. Solomon RJ, Taylor MA, St. Martin CA, Stillman N, **Weinberg MS.** "Renal Kallikrein and the Hypotensive Response to Oral Diuretics." Presented at the 1st International Conference on Diuretics, Miami Beach, Florida. 1984.
3. Solomon RJ, Taylor MA, St. Martin CA, Stillman N, **Weinberg MS.** "Renal Kallikrein and the Hypotensive Response to Oral Diuretics." Presented at The National AFCR Meeting, Washington, D.C. Clinical Res. 1984; 32:399.
4. **Weinberg MS,** St. Martin CA, Azar P, Taylor MA, Stillman N, Solomon RJ. "Urokininogen Deficiency in Essential Hypertension." Presented at The IX International Congress of Nephrology. 1984; 466A.
5. Kolker JD, Galligan E, Trebbin WM, Solomon RJ, Hebert P, **Weinberg MS.** "Reduction of Hyperlipidemia in Continuous Ambulatory Peritoneal Dialysis." Peritoneal Dialysis Bulletin. 1984; 4:834.
6. **Weinberg MS,** St. Martin CA, Trebbin WM, Solomon RJ. "Urokininogen: A Possible Regulator of Kinin Formation." Presented at the International Congress of Kinins, Savannah, Georgia. 1984; 148.
7. Solomon RJ, Taylor MA, St. Martin CA, Stillman N, **Weinberg MS.** "Renal Kallikrein and the Hypotensive Response to Oral Diuretics." Presented at the International Congress of Kinins, Savannah, Georgia. 1984; 132.
8. **Weinberg MS,** Belknap S, Trebbin WM, Solomon RJ. "The Effect of Acute and Chronic Salt and Water Loading on Urinary Kininogen Excretion." Kidney Intern. 1986; 29:349.
9. Blonsky SL, Solomon RJ, **Weinberg MS.** "The Effect of Diuretics on Components of the Urinary Kallikrein-Kininogen-Kinin System." Kidney Intern. 1986; 29: 346.
10. Posner M, Smith KJ, Solomon RJ, **Weinberg MS.** "Development of a Radioimmunoassay to Bradykinin using Monoclonal Antibodies." Kidney Intern. 1986; 29:342.

11. Solomon RJ, DiPette D, Kirschenbaum MA, **Weinberg MS**. "The Effect of Synthetic PGE2 on Blood Pressure, Renal Hemodynamics, the Kallikrein-Kinin, Renin-Angiotension and Prostaglandin Systems." *Kidney Intern.* 1986; 29:346.
12. Turk PS, Belliveau J, Darnowski J, **Weinberg MS**, Wanebo HJ. "Comparison of a Hemoperfusion Charcoal Filter versus a Hemofiltration Dialyzer for Reducing Blood Levels of Cisplatin." Anastassopoulou, et al. 240-211. Presented at the 2nd International Symposium on Metal Ions in Biology and Medicine, Loutraki, Greece. 1992.
13. Turk PS, Belliveau J, Darnowski J, Cummings F, **Weinberg MS**, Wanebo HJ. "Isolated Pelvic Perfusion of 5-FU for Unresectable Malignancy: A Simplified Approach in Palliation." *The Society of Surgical Oncology.* 1992; 17.
14. Cottiero RA, Westrick E, **Weinberg MS**. "Mesangial Proliferative Glomerulonephritis Type I (MPGN I) Associated with Chronic Hepatitis Virus (HCV) Infection." *Journal of American Society of Nephrology* 1992; 33:309.
15. Turk PS, Belliveau J, Darnowski J, Cummings F, **Weinberg MS**, Wanebo HJ. "Localized Pelvic Infusion with Charcoal Hemofiltration of 5-FU and Cisplatin In the Canine Model: Potential for Selective Therapy of Pelvic Malignancy." *American Association of Cancer Research.* 1992; 33(2670): 447.
16. Turk PS, **Weinberg MS**, Darnowski J, Belliveau J, Kelly L, Wanebo HJ. "Hemofiltration versus Charcoal Hemoperfusion for Venous Extraction of Regional Chemotherapy." Presented at The 25th Annual Meeting of the Society of Nephrology JASN. 1992; 3:399.
17. **Weinberg MS**. "Angiotensin-Converting Enzyme Inhibitors (ACEI) and Lipid-Lowering Agents: Hidden Culprits Preventing Atherogenesis." Presented at the VII Annual Meeting of Isar (India) International Symposium, SASAT (South Asian Society for Arteriosclerosis and Thrombosis) (Abstract and Invited Keynote Speaker). Bombay, India, December 1994; 31.
18. Oza NB, **Weinberg MS**, Oza MN. "K7-Kallikrein in Radiotherapy Kidney and Urine." Presented at the International Congress of Kinins, Denver, Colorado. September 1995.
19. Hricik DE, Levine BS, Adroque HJ, **Weinberg MS**. "Evaluation of an Enalapril and Diltiazem ER Combination in Hypertensive Patients with Renal Dysfunction." Presented at the 28th Annual Meeting of the American Society Of Nephrology. JASN. 1995; 642.
20. Slatopotsky E, Garrett B, Gray J, Marbury T, **Weinberg MS**, Wombolt D, Burke S, Goldberg D, Bonventre J. "Effect of Renagel, A Novel Phosphate Binder on Serum Phosphorus and Parathyroid Hormone Levels in End-Stage Renal Disease (ESRD) Patients." Presented at the 31st Annual Meeting of The American Society of Nephrology. JASN. 1996; Volume 7: 9.
21. Agarwal K, Miech R, **Weinberg MS**. "New insights into the Mechanism of Action of the Angiotensin Converting Enzyme Inhibitor (ACEI) Enalapril: A

Human Platelet Model." Presented at the Meeting of Experimental Biology, FASEB. April 1998 in San Francisco, California.

22. Blayer A, Bolin P, **Weinberg MS**, Wilkes B, Zeig S. "A Long-Term Study of the Effectiveness of Sevelamer Hydrochloride (Renagel) in Hemodialysis Patients." Presented at the 31st Annual Meeting of the American Society of Nephrology. JASN. 1998; A2820, Volume 9: 552A.
23. **Weinberg MS**, Weinberg AJ, Cord R, Zappe D. "Regression of Proteinuria Using High Dose Candesartan Cilexetil Beyond Maximal Recommended Doses in Diabetic Patients with Nephrotic Syndrome." Presented at the Tenth European Society of Hypertension. Goteborg, Sweden. Journal of Hypertension. 2000; Vol 18 (suppl2).
24. Weinberg AJ, **Weinberg MS**, Cord R, Zappe D. "The Effect of High Dose Candesartan Cilexetil beyond Maximal Recommended Doses in Reducing Urinary Protein Excretion." Presented at the Sixth Annual Research Forum. Student Faculty Research Day, Andrews Hall, Brown University Medical School. June 2000.
25. **Weinberg MS**, Weinberg AJ, Cord R, Zappe D. "The Effect of High Dose Candesartan Cilexetil beyond Maximal Recommended Doses in Reducing Urinary Protein Excretion." Presented at the 33rd Annual Meeting of the American Society of Nephrology, Toronto, Canada; JASN. 2000; Vol 2: 79A
26. **Weinberg MS**, Weinberg AJ, Cord R. "Reduction of Proteinuria through High Dose All Inhibition." Presented at the 7<sup>th</sup> National Scientific Sessions of the Consortium for Southeastern Hypertension Control, COSEHC." November 2000.
27. **Weinberg MS**. Weinberg AJ, Cord R, Zappe D. "The Effect of High Dose Candesartan Cilexetil beyond Maximal Recommended Doses in Reducing Urinary Protein Excretion." Presented at the Angiotensin II Receptor Blockade: Effects Beyond Blood Pressure Control Meeting. The International Candesartan Cilexetil Investigators Meeting. Prague, Czech Republic. JRAAS. 2001; 1:S196-198.
28. **Weinberg MS**, Weinberg AJ. "The Use of Supramaximal Doses of Angiotensin II Receptor Blockers and Combination Therapy for Optimal Reduction of Proteinuria in Humans." Presented at the Japanese Nephrology Society. Tokyo, Japan. May 27-29, 2001.
29. Weinberg AJ, **Weinberg MS**, Cord R, Zappe D. "The Effect of High Dose Candesartan Cilexetil beyond Maximal Recommended Doses in Reducing Urinary Protein Excretion." Presented at the 7<sup>th</sup> Annual Development of Medicine Research Forum. Student Faculty Research Day, Andrews Hall, Brown University School of Medicine and Biology. June 2001.
30. **Weinberg MS**, Weinberg AJ, Cord RB, Martin H. "The Role of High Dose Angiotensin Receptor Blockade in the Management of Patients with Dilated Aortic Roots". American College of Cardiology, March 2003.
31. Weinberg AJ, Haneiwich R, **Weinberg MS**. "The Safety and Efficacy of

Supramaximal Doses of Candestartan Cilexetil (160mg) in Subjects with a History of Hypertension and Chronic Renal Disease that are Naïve to Angiotensin Receptor Blockade Therapy". Presented at the American Society of Hypertension. New York, NY. March 2003. American Journal of Hypertension (4) A. 5 part II – 103A.

32. **Weinberg MS**, Weinberg AJ, Cord RB, Martin H. "Regression of Dilated Aortic Roots using Supramaximal and Usual Doses of Angiotensin Receptor Blockers". Presented at the American Society of Hypertension. American Journal of Hypertension 16(4) A. 5 part II – 259A. New York, New York March 2003.
33. Weinberg AJ, Cord RB, Martin H, **Weinberg MS**. "Regression of Dilated Aortic Roots Following Therapy with Supramaximal and Usual Doses of Angiotensin Receptor Blockers." Presented at the Brown University 9<sup>th</sup> Annual Medicine Research Development Forum. Brown University, Andrews Hall. June 2003.
34. Weinberg AJ, Haneiwich R, Oza N, **Weinberg MS**. "The Safety of Supramaximal Doses of Candestartan Cilexetil (160mg) in the Reduction of Proteinuria in Chronic Renal Disease." Presented at the European Society of Hypertension. Milan, Italy. June 2003.
35. Braiser JL, Weinberg AJ, Haneiwich R, **Weinberg MS**. "The Safety and Efficacy of Supramaximal Doses of Candesartan Cilexetil (160mg) in Reducing Proteinuria in Hypertensive Subjects With Renal Disease." Presented at the American College of Physicians, Providence, RI Chapter. 2003; Vol. 87 No. 1 Page 5.
36. **Weinberg MS**, Weinberg AJ, Zappe DH, Haneiwich R, Ljunggren A. "The Safety of Supramaximal Doses of Candesartan Cilexetil (160mg) in Hypertensive Subjects with Chronic Renal Disease." Presented at the 36<sup>th</sup> Annual Meeting of the American Society of Nephrology 2003; Journal of American Society of Nephrology. 2003; 14:763A.
37. **Weinberg MS**, Weinberg AJ, Zappe DH, Haneiwich R, Ljunggren A. "The Tolerability and Safety of high doses of Candesartan Cilexetil (160mg) in hypertensive individuals with Chronic Renal Failure." Presented at the Workshop on Angiotensive II Receptor Blockade, Chateau de Montvillargenne; Paris, France. April 2005.
38. **Weinberg MS**, Weinberg AJ, Zappe DH. "The Long Term Safety and Tolerability (up to 80 months) of Supramaximal Doses of ARB's in Hypertensive Individuals with Chronic Kidney Disease." Presented at the Workshop on Angiotensive II Receptor Blockade, Chateau de Montvillargenne; Paris, France. April 2005
39. **Weinberg MS**, Weinberg AJ, Zappe DH. "Long-term Safety of High Dose ARB Therapy: Effects on Renal Function." American Society of Hypertension, 20<sup>th</sup> Annual Scientific Meeting, San Francisco, CA, May 2005. American Journal of Hypertension (18) 5 Part 2 – 137A-138A.
40. **Weinberg MS**, Weinberg AJ, Kumi M, **Weinberg D**, Ferri V. "Long-term safety and tolerability up to 100 months of high dose ARB therapy: Effects of

Renal Function". Brown University Department of Medicine, Eleventh Annual Research Forum, June 14, 2005.

41. Kolankiewicz LM, Tannenbaum JS, Rothstein M, **Weinberg MS**. "Effects of Erythropoietin Adjust Automated Protocols on Hemoglobin Levels in ESRD Patients. American College of Physicians. February 29, 2008.
42. Mitri J, **Weinberg MS**. "Refractory Hypertension and Elevated Catecholamines without Distinguive Radiographic Findings for Pheochromocytoma. Presented at the American College of Physicians. March 20, 2009.
43. Morales E, **Weinberg MS**. "Marantic Endocarditis Masquerading as Ptosis, Delirium and Acute Renal Failure". Presented at the American College of Physicians, Providence, RI Chapter. March 20, 2009.
44. Webber W, Mitri J, **Weinberg MS**. "Atypical Imaging Modalities of Pheochromocytoma Tumors". Presented at the American College of Physicians, Providence, RI Chapter. May 30, 2009.
45. Webber W, Morales E, **Weinberg MS**. "Acute Renal Failure from a Marantic Endocarditis". Presented at the American College of Physicians, Providence, RI Chapter. May 30, 2009.
46. Webber W, Weinberg DA, Hagberg S, **Weinberg, MS**. "Effects of Pulsed Electromagnetic Field Therapy (PEMF) on Reducing Proteinuria (P) in CKD." Presented at the National Kidney Foundation, Orlando, Florida. April 13, 2010.
47. Kolankiewicz LM, Melamed ML, Rothstein M, **Weinberg MS**. "Effects of Erythropoietin Stimulating Agent (ESA) Automated Adjustment Protocols on Hemoglobin (Hgb) Levels and Mortality in ESRD Patients." Presented at the National Kidney Foundation, Orlando, Florida. April 13, 2010.
48. Webber W, Weinberg DA, Hagberg S, **Weinberg, MS**. "Efficacy of Pulsed Electromagnetic Field Therapy on Reducing Proteinuria." Presented at the American College of Physicians, Providence, RI Chapter. Providence, RI. May 13, 2010.

## **SCHOLARLY WORK PUBLISHED IN OTHER MEDIA**

### PEER-REVIEWED

1. **Weinberg MS**. Moderator of Satellite Symposium at the 33<sup>rd</sup> Annual American Society of Nephrology and Published on-line, available at HDCN.com (Hypertension, Dialysis and Clinical Nephrology). "The use of Supramaximal Doses of Angiotensin Receptor Blockers for Optimal Reduction of Proteinuria in Humans." Online Slide/Audio Symposium as a continuing education CME Program sponsored by The France Foundation. October, 2000.

2. **Weinberg MS.** Satellite Symposium at the 40th Annual American Society of Nephrology and published on-line, available at AHA.org. "A SMARTer Approach to Renal Disease." Online Slide/Audio Symposium as a continuing education CME program sponsored by AstraZeneca, Canada. San Francisco, California. November, 2007.
3. **Weinberg MS.** Satellite Symposium at the 40th Annual American Society of Nephrology and published on-line, available at Medscape.com. "A SMARTer Approach to Renal Disease." Online Slide/Audio Symposium as a continuing education CME program sponsored by AstraZeneca, Canada. San Francisco, California. November, 2007.

NON-PEER-REVIEWED

1. **Weinberg MS.** Guest Speaker at Science of Electroceuticals Second Annual Symposium. "Intracellular Mediators of Vascular Responses; Additive Pharmacologic and Non-Pharmacologic Mechanisms." Live Online Slide/Audio Webcast Symposium sponsored by IVIVI Technologies, Inc. World Trade Center, New York, New York. November 9, 2007

#### **INVITED PRESENTATIONS**

1. "The Kallikrein-Kinin System in Health and Disease." Renal Physiology Research Conference, Brown University, Providence, Rhode Island. May 1982. (Regional)
2. "Normal Components of the Rat Urinary Kallikrein-Kinin System." **Visiting Professor**, University Hospital, Boston, Massachusetts. March 1983. (Regional)
3. "The Physiological Role of the Renal Kallikrein-Kinin System in Human Disease." Rhode Island Hospital, Providence, Rhode Island. April, 1983. (Regional)
4. "Do Urinary Enzymes Regulate Blood Pressure?" **Keynote Speaker** for Department of Chemistry Symposium. Boston University, Boston, Massachusetts. May, 1983. (Regional)
5. "The Treatment of Refractory Hypertension." Newport Hospital, Medical Grand Rounds, Newport, Rhode Island. September 1983. (Regional)
6. "The Role of Kininogen in the Regulation of Kinin Formation." **Visiting Professor**, Medical Grounds Rounds, University of Munich, Munich, Germany. October, 1983. (International)
7. "The Physiological Significance of the Kininogen-Kinin Interaction in Human Diseases." Physiology Research Conference. **Visiting Professor**, Institute National De La Sante ET De La Recherche Medicale, Paris, France. October, 1983. (International)
8. "The Role of Kininogen in Regulation the Activity of the Renal Kallikrein-Kinin System." Physiology Research Conference. **Visiting Professor**, King's College

- Hospital Medical School, University of London, London, England. October, 1983. (International)
9. "Analytical Methods for Kallikrein Activity." Physiology Research Conference. **Visiting Professor**, King's College Hospital Medical School, University of London, London, England. November, 1983. (International)
  10. "Management of the Complicated Hypertensive." **Visiting Professor**, Lykes Hospital, Medical Grand Rounds, Brooksville, Florida. November, 1983. (National)
  11. Potassium Conserving Agents in the Treatment of Essential Hypertension." **Visiting Professor**, St. Elizabeth's Hospital, Medical Grand Rounds, Youngstown, Ohio. December, 1983. (National)
  12. "The Role of the Kallikrein-Kinin System in Health and Disease." **Visiting Professor**, Coney Island Hospital, Medical Grand Rounds, Bronx, New York. January, 1984. (National)
  13. "Left Ventricular Hypertrophy in the Elderly." **Visiting Professor**, Peninsula Hospital, Medical Grand Rounds, Far Rockaway, Long Island, New York. February, 1984. (National)
  14. "Left Ventricular Hypertrophy: An Albatross of Hypertension." Veterans Administration Medical Center, Medical Grand Rounds, Providence, Rhode Island. February, 1984. (Regional)
  15. "The Role of Angiotensin-Converting Enzyme Inhibitors in Blood Pressure Regulation." Kent County Memorial Hospital, Medical Grand Rounds, Warwick, Rhode Island. March, 1984. (Regional)
  16. "Kidney Transplantation and ESRD." Symposium on End-Stage Renal Disease. Rhode Island Hospital, Medical Grand Rounds, Providence, Rhode Island. March, 1984. (Regional)
  17. "The Potential Adverse Metabolic Effects of Antihypertensive Agents." **Guest Lecturer**, Two-Day Cardiovascular Didactic Program. Duke University School Of Medicine, Medical Grand Rounds, Durham, North Carolina. March, 1984. (National)
  18. "The Use of Beta Blockers in the Elderly." Rhode Island Medical Center, General Hospital, Medical Grand Rounds, Cranston, Rhode Island. April, 1984. (Regional)
  19. "Role of the Kallikrein-Kinin System in the Action of Antihypertensive Agents." Hoechst-Roussel, Division of American Hoechst, Physiology Research Conference, Somerville, New Jersey. April, 1984. (National)
  20. "The Role of the Kallikrein-Kinin System in the Regulation of Renal Hemodynamics." Student Faculty Research Day, Brown University Medical School and Medical Grand Rounds, Providence, Rhode Island. May 1984.

(Regional)

21. "Diuretic-Induced Hypokalemia and Sudden Death." **Visiting Professor**, Metro General Hospital, Medical Grand Rounds, Cleveland, Ohio. May, 1984.  
(National)
22. **Moderator of Symposium**: "The Effect of Antihypertensive Agents on Sudden Death Symposium." Roger Williams Medical Center, Brown University Medical School, Regional New England Symposium, Providence, Rhode Island. September, 1984. (Regional)
23. "The Effect of Antihypertensive Agents on Left Ventricular Hypertrophy." **Visiting Professor**, Southside Hospital, Medical Grand Rounds, Pittsburgh, Pennsylvania. September, 1984. (National)
24. "The Effect of Prostaglandin Inhibition on Renal Hemodynamics." Humana Hospital, Medical Grand Rounds, Westminster, California. October, 1984.  
(National)
25. "Is All Aspirin, Aspirin?" Keiser Hospital, Harbor City, Los Angeles, California. November, 1984. (National)
26. "Hemodynamic Regulation of Renal Plasma Flow by Renal Hormonal Systems." **Visiting Professor**, Long Beach Veterans Administration Hospital, Medical Grand Rounds, Long Beach, California. November, 1984. (National)
27. "Diuretic-Induced Sudden Death." St. Joseph's Hospital, Medical Grand Rounds, Providence, Rhode Island. December, 1984. (Regional)
28. "Pathophysiology of Congestive Heart Failure in the Elderly." Rhode Island Medical Center, General Hospital, Cranston, Rhode Island. December, 1984.  
(Regional)
29. "Kinins, Kininogen and Hypertension." Brown University Department of Medicine, Program in Medicine Lecture Series, Providence, Rhode Island. February, 1985. (Regional)
30. "Potassium Metabolism and Diuretic-Induced Sudden Death." Lawrence Memorial Hospital, New London, Connecticut. March, 1985. (Regional)
31. "Potassium Metabolism and Diuretic-Induced Sudden Death." **Guest Lecturer**, Two-Day Cardiovascular Didactic Program. Duke University School of Medicine, Durham, North Carolina. March, 1985. (National)
32. "Converting Enzyme Inhibitors - Where are we going?" St. Joseph's Hospital, Medical Grand Rounds, Providence, Rhode Island. May, 1985. (Regional)
33. "Renal Nephrotoxic Syndromes of Prostaglandin Inhibition." Roger Williams Medical Center, Medical Grand Rounds, Providence, Rhode Island. June, 1985.  
(Regional)

34. "The Effect of Acute and Chronic Salt and Water Loading on Kininogen Excretion." Brown University Clinical Research Center, Scientific Committee, From NIH. Site Visit. July, 1985. (Regional)
35. "Converting Enzyme Inhibitors as Monotherapy in Hypertension." Rhode Island Hospital, Medical Grand Rounds, Providence, Rhode Island. August, 1985. (Regional)
36. "Diuretic-Induced Sudden Death." Rhode Island Medical Center, General Hospital, Cranston, Rhode Island. October, 1985. (Regional)
37. "Prostaglandins and Hypertension." Veterans Administration Medical Center, Medical Grand Rounds, Providence, Rhode Island. October, 1985. (Regional)
38. "Nephrotoxic Syndromes Induced by Prostaglandin Inhibitors." Memorial Hospital of Rhode Island, Medical Grand Rounds, Pawtucket, Rhode Island. November, 1985. (Regional)
39. "Comparative Effects of Pinacidil and Prazosin on Blood Pressure, Weight, Plasma Volume, and Humoral Mediators of Sodium Retention." Results of Clinical Trials in Hypertension. Pinacidil Investigators Symposium, Arlington, Virginia. November, 1985. (National)
40. "Converting Enzyme Inhibitors: A Hypertensive Inroad." Roger Williams Medical Center, Medical Grand Rounds, Providence, Rhode Island. December, 1985. (Regional)
41. "Nephrotoxic Syndromes Induced by Prostaglandin Inhibitors." The Miriam Hospital, Medical Grand Rounds, Providence, Rhode Island. April, 1986. (Regional)
42. "Angiotensin-Converting Enzyme Inhibitors in Hypertension and Congestive Heart Failure." Memorial Hospital of Rhode Island, Medical Grand Rounds, Pawtucket, Rhode Island. December, 1986. (Regional)
43. "Converting Enzyme Inhibitors: A Hypertensive Inroad." Rhode Island Medical Center, General Hospital, Medical Grand Rounds, Cranston, Rhode Island. June, 1987. (Regional)
44. "Diuretic-Induced Sudden Death: An Albatross of the 1950s." Roger Williams Medical Center, Medical Grand Rounds, Providence, Rhode Island. October, 1987. (Regional)
45. "Controversies in Hypertension." Brown University School of Medicine, Continuing Education. Medical Grand Rounds, September, 1988. (Regional)
46. "Hypertension, Genomes and Growth Factors." Kent County Memorial Hospital, Medical Grand Rounds, Warwick, Rhode Island. March, 1989. (Regional)
47. "Pathophysiology of Renal Vascular Hypertension." Roger Williams Medical Center, Urology Grand Rounds, Providence, Rhode Island. June, 1989.

(Regional)

48. "Acute Renal Failure in the Surgical Patient." Roger Williams Medical Center, Surgical Grand Rounds, Providence, Rhode Island. January 1990. (Regional)
49. "Alterations in the Kallikrein-Kinin-Kininogen System in the Hepato-Renal Syndrome." Rhode Island Hospital, Gastroenterology Physiology Lecture Series, Providence, Rhode Island. February 1990. (Regional)
50. **The Keynote Speaker**: "Heart Rx: A Prescription for Success." National American Heart Association Convention and Meeting, Dallas, Texas. August, 1990. (National)
51. "LDL and Hypertension: Pathophysiologic Implications and Therapeutic Strategies." Roger Williams Medical Center, Medical Grand Rounds. August, 1991. (Regional)
52. "Atherogenesis: Regression and Prevention in Management of Cardiovascular Disease." Annual Meeting, Rhode Island, Osteopathic Society. September, 1991. (Regional)
53. "Management of Hypertension in Diabetic Nephropathy." **Moderator** of a Workshop of the American Diabetes Association, Rhode Island Affiliate, Brown University, Providence, Rhode Island. October, 1991. (Regional)
54. "LDL and Hypertension: Vascular Damage and Atherogenesis." **Visiting Professor**, Reading Medical Center, Reading, Pennsylvania. October, 1991. (National)
55. "The Cutting Edge - Congestive Heart Failure; Pathophysiologic Concepts and Future Therapeutic Strategies in Vasodilator Research." **Moderator**, American Heart Association, Rhode Island Affiliate, Providence, Rhode Island. November, 1991. (Regional)
56. "General Chemistry and High Blood Pressure: Cause or Effect?" **Keynote Speaker**, Boston University, Chemistry Department Lecture Series, Boston, Massachusetts. December, 1991. (Regional)
57. "Angiotensin-Converting Enzyme Inhibitors and Lipid-Lowering Agents: Hidden Culprits Preventing Atherogenesis." **Keynote Speaker** and **Junior Investigator** at the VII Annual Meeting of Isar and Parel Medical Institute, Bombay, India and SASAT, (South Asian Society of Atherosclerosis and Thrombosis). December, 1994. (International)
58. "The Hidden Effects of Antihypertensive and Lipid-Lowering Agents on the Prevention and Regression of Atherogenesis: New Management Strategies." Rhode Island Hospital, Renal Grand Rounds, Providence, Rhode Island. February, 1995. (Regional)
59. "New Management Strategies to Induce Regression of Atherogenesis using Anti-Lipid and Antihypertensive Therapy." Roger Williams Medical Center, Medical Grand Rounds, Providence, Rhode Island. May, 1995. (Regional)

60. **Moderator of Symposium:** "Hypertension in the Challenging Hypertensive Patient." Newport, Rhode Island. April, 1996. (Regional)
61. "Angiotensin Receptor Blockers; A New Road to Rome." Roger Williams Medical Center, Medical Grand Rounds, Providence, Rhode Island. June, 1996. (Regional)
62. **Moderator of Symposium:** "Emerging Concepts for Combination Antihypertensive Therapy with Calcium Channel Blockers and ACE Inhibitors." Museum of Science, Boston, Massachusetts. April, 1997. Sponsored by Astra Zeneca Pharmaceutical, Inc. (Regional)
63. "Renovascular Hypertension and Ischemic Nephropathy." Brown University, Roger Williams Medical Center, Urology Grand Rounds, Providence, Rhode Island. October, 1998. (Regional)
64. "New Guidelines, New Paradigms: Emerging Opportunities of Angiotensin Receptor Blockers." Roger Williams Medical Center, Medical Grand Rounds, Providence, Rhode Island. January, 1999. (Regional)
65. "New Guidelines, New Strategies: Angiotensin Receptor Blockers as Cutting Edge Therapy for the Millennium." Memorial Hospital, Cardiology Grand Rounds, Pawtucket, Rhode Island. February, 1999. (Regional)
66. "Beyond Blood Pressure Reduction, Therapeutic Implications of Renin-Angiotensin Blockade." Memorial Hospital, Medical Grand Rounds, April, 1999. (Regional)
67. "Role of Renin - Angiotensin System in Diabetes, Renal Disease and Heart Failure." **Moderator** of and **Speaker** at a Cardiovascular Disease Update Symposium." Meridian Hotel, Boston, MA. December, 1999. Sponsored by Astra Zeneca Pharmaceuticals, Inc. for Cardiovascular Physician Specialists. (National)
68. "High Dose AT1, Blockade: The Future of Renoprotection." Roger Williams Hospital, Urology Grand Rounds. February, 2000. (Regional)
69. "The Role of the Renin-Angiotensin System and Tissue Growth Factors in Vascular Diseases and Angiogenesis." Roger Williams Medical Center, Surgery Grand Rounds. May, 2000. (Regional)
70. "The Effect Of High Dose Candesarten Cilexetil Beyond Maximal Recommended Doses in Reducing Urinary Protein Excretion." Invited Presentation at the Sixth Annual Faculty Student Research Forum, Brown University Department of Medicine, Providence, Rhode Island. June, 2000. (Regional)
71. **Co- Chairman and Moderator of a Symposium**, American Society of Nephrology: "The Effect of High Dose Candesartan Cilexetil beyond Maximal Recommended Doses in Reducing Urinary Protein Excretion." At the 33rd Annual Meeting of the American Society of Nephrology: "The Role of Intrarenal

- Angiotensin II in the Pathophysiology of Hypertension Evidence from Basic and Clinical Studies was examined." Toronto, Canada. October, 2000. (International)
72. "Reduction of Proteinuria through High Dose Angiotensin II Inhibition" Invited at the Seventh National Scientific Sessions of the Consortium for Southeastern Hypertension Control, Cardiovascular Healthcare 2000: A New Agenda. COSEC Meeting. **Keynote Speaker**, Savannah, Georgia, November, 2000. (National)
  73. "The Power of ARB's: Optimizing Treatment Through Complete RAS Blockade." **Keynote Speaker** at the National Cardiovascular Consultants Meeting on Emerging Strategies for Hypertension Management, San Antonio, Texas. Sponsored by Astra Zeneca Pharmaceuticals, Inc. December, 2000. (National)
  74. "Cardiovascular Disease; The Promise of Prevention and Reversal of Target Organ Damage." **Keynote Speaker**, 2001 National Consultants Conference, Palm Springs, California. Sponsored by Astra Zeneca Pharmaceuticals, Inc. March, 2001. (National)
  75. "The Use of Supramaximal Doses of ARB's and Combination Therapy for Optimal Reductions in Proteinuria." **Visiting Professor**, Municipal Hospital De San Juan, Medical Grand Rounds; San Juan, Puerto Rico. March, 2001. (International)
  76. "Renal Consideration in the Treatment of High Blood Pressure." **Visiting Professor**, Asociación Medica De Puerto Rico. Casa Del Medico Del Oeste. Mayagüez, Puerto Rico. March, 2001. (International)
  77. "The Use of Supramaximal Doses of ARB's and Combination Therapy for Optimal Reductions in Proteinuria." **Visiting Professor**, Veterans Hospital, de San Juan, Medical Grand Rounds, San Juan, Puerto Rico. March, 2001. (International)
  78. "Renal Considerations in the Treatment of High Blood Pressure and Cardiovascular Prevention." **Keynote Speaker**, Casa Del Medico Oeste, Puerto Rico Medical Association, San Juan, Puerto Rico. March, 2001. (International)
  79. "The Use of Supramaximal Doses of Angiotensin II Receptor Blockers and Combination Therapy for Optimal Reduction of Proteinuria in Humans." **Keynote Speaker**, The 44<sup>th</sup> Annual Japanese Nephrology Society, Tokyo, Japan. May, 2001. (International)
  80. "Optimal Renal Protection by RAS Blockade" The 44<sup>th</sup> Annual Japanese Nephrology Society, Tokyo, Japan. **Visiting Professor** and **Invited Presentation** with Professor Toshiro Fujita, Tokyo University. May, 2001. (International)
  81. "Optimal Blockade of the RAS Using Supramaximal Doses of ARBs and/or in Combination Therapy with ACEIs." The **Keynote Speaker** delivering an 'Expert conference' to Takeda Pharmaceuticals, International, Administrative,

Marketing and Research Divisions, Tokyo, Japan. May 2001. (International)

82. "New Uses of ARBs in Supramaximal Doses for Optimal Renoprotection, Vasculoprotection and Cardioprotection." The **Keynote Speaker** delivering an 'Expert conference' to International Sankyo Pharmaceutical Marketing, Research; Corporate and Administrative Drug Development Teams. Tokyo, Japan. May, 2001. (International)
83. "The Use of Supramaximal Angiotensin Blockers for Maximal Cardioprotection, Renoprotection and Vasculoprotection for the Prevention of Atherogenesis." Brown-Wide, Cardiology Grand Rounds, Brown Medical School, Pawtucket Memorial Hospital, Pawtucket, Rhode Island. June, 2001. (Regional)
84. "Optimal Inhibition of the Renin – Angiotensin System; Supramaximal ARB's in Combination ARB's and ACEI". Renal Grand Rounds, Rhode Island Hospital. November, 2001 (National)
85. "Optimal Blockade of the RAS using Supramaximal Doses of ARB's". Medical Grand Rounds, Baystate Medical Center, Springfield, Massachusetts. August, 2002. (National)
86. "Optimal Blockade of the RAS using combination and/or higher doses of ARB Therapy". Invited **Keynote speaker** at an ARB Symposium. Toronto, Canada. October, 2002. (International)
87. "Blockade of the RAS using Supramaximal doses of ARB's". Invited **Keynote speaker** at an ARB **Satellite Symposium**. At the 35<sup>th</sup> Annual Meeting of the American Society of Nephrology. Sponsored by Astra Zeneca Pharmaceuticals, Inc of Canada. Philadelphia, Pennsylvania. November, 2002. (International)
88. "ARB's–High Dose Therapy and Diabetes." Medical Grand Rounds, Pawtucket Memorial Hospital, Pawtucket, Rhode Island. December, 2002. (Regional)
89. "Use of Supramaximal Doses of ARB's for Optimal Blockade of the RAS for the Reduction of Proteinuria". **Visiting Professor**, Presenting four Research Conferences at Novartis Headquarters, East Hanover, New Jersey. December, 2002. (International)
90. "A 2003 Template for strategies of High Dose Monotherapy using ARBs". Medical Grand Rounds, Roger Williams Medical Center, Providence, Rhode Island. January, 2003. (National)
91. "New Strategies for Designer ARBs". **Keynote Speaker** and **Consultant** to the Steering Committee for the Supramaximal Dose Candesartan Cilexetil. Investigators Meeting. (High Dose Proteinuria SMART Study) Toronto, Canada. January, 2003. (International)
92. "New Strategies for Optimal Blockade of the Tissue Renin-Angiotensin-System." Invited **Keynote Speaker** for the Connecticut PA-C Society. Goat Island Hyatt Regency Hotel, Newport, Rhode Island. January, 2003. (National)

93. "How High Should the Doses of an ACEI or ARB be to Prevent the Development of Atherogenesis and Diabetic Nephropathy". Invited **Keynote Speaker** for "Chemia". The Undergraduate Chemistry Organization, Boston University Department of Chemistry. April, 2003. (National)
94. "2004 Update on the Value of Combination ACEI/ARB versus Supramaximal Doses for the Reduction of Proteinuria and the Reduction of Endothelial Diseases." **Keynote Speaker** and **Consultant** to Steering Committee of the SMART Study. Toronto, Canada. January, 2004.
95. "Let's Be Smart: Going Beyond Blood Pressure Lowering for Greater Renoprotection." Invited **Guest Speaker** for the National Kidney Foundation of Western Pennsylvania. The University of Pittsburg Medical Achievement Lecture Series and Nephrology Update of the National Kidney Foundation of Western Pennsylvania. November, 2004. (National)
96. "Tissue Protection Using High Dose ARBs: The RWMC Ten Year Safety Experience." Medical Grand Rounds, Roger Williams Medical Center, Providence, Rhode Island. October, 2005 (National)
97. "The Ten Year Safety Experience of High dose ARBs: How SMART is our dosing?" **Keynote Speaker** at the Canadian Advisory Committee for SMART Study, American Society of Nephrology Symposium. November, 2006. (International).
98. "The Paradigm Shift to Optimal Vascular and Renal Protection Using Very High Dose ARBs: The Ten Year Safety Study Experience." **Keynote Speaker** at the DSI Renal, Inc. 3<sup>rd</sup> Annual Nephrology Symposium. Half Moon Bay, California. April, 2007. (National)
99. "A SMARTer Approach to Renal Disease." **Expert Panel Member for** Internet Journal Panel Discussion for the American Heart Association.org at the 40th Annual Meeting of the American Society of Nephrology, San Francisco, California. November, 2007. (International)
100. "A SMARTer Approach to Renal Disease." **Expert Panel Member for** Internet Journal for MedScape at the 40th Annual Meeting of the American Society of Nephrology, San Francisco, California. November, 2007. (International)
101. "Intracellular Mediators of Vascular Responses; Additive Pharmacologic and Non-Pharmacologic Mechanisms" at IVIVI.com. Science of Electroceuticals Second Annual Symposium sponsored by IVIVI Technologies, Inc. Internet Site Slide/Audio Webcast. World Trade Center, New York, New York. November, 2007. (International)
102. "Practice Pattern Changes Following the Food and Drug Administration ESA Label Change: Lessons from DSI Renal, Inc." Amgen Canada CQI Advisory Board Meeting, Lake Louise, Alberta, Canada. February, 2008. (International)

## **GRANTS**

### **RESEARCH GRANTS—"PRINCIPAL INVESTIGATOR"**

1. 1981-1982 American Heart Association  
Research Award  
Massachusetts Affiliate  
Cape Cod Division
2. 1982-1983 National Research Service Award  
Boston University Medical Center  
Boston, Massachusetts
3. 1983-1984 "Double-Blind, Placebo-Controlled, Dose  
Finding Study with Oral Piretanide in Patients with  
Mild to Moderate Hypertension." Hoechst-Roussel  
Pharmaceutical, Inc. \$35,000. Principal  
Investigator
4. 1984-1985 "Mechanism of Action of CL115, 347 Administered  
Transdermally." American Cyanamid Company,  
Lederle Laboratories, Inc. \$24,000. Principal  
Investigator
5. 1984-1985 "A Randomized, Evaluator Blind Study for  
Up To Three Months for the Safety and  
Efficacy of CL115, 347 Administered  
Transdermally Either As a Sole Agent or in  
Combination with Hydrochlorothiazide in  
Mild to Moderate Hypertension." American  
Cyanamid Company, Lederle Laboratories,  
Inc. \$56,000. Principal Investigator
6. 1985-1986 "An Open-Label Study to Evaluate the Use of  
Enalapril in Patients with Hypertension Associated  
with Various Collagen Diseases who  
Have been Inadequately Controlled on  
Conventional Therapy."  
Merck Sharpe & Dohme. \$35,000. Principal  
Investigator
7. 1985-1986 "Evaluation of the Antihypertensive Effect of  
Lisinopril Plus Hydrochlorothiazide Plus Hydralazine  
Compared to Metoprolol Plus Hydrochlorothiazide  
plus Hydralazine in Patients with Moderate to  
Severe Essential Hypertension." Merck Sharpe &  
Dohme. \$36,000. Principal Investigator
8. 1985-1986 "Evaluation of the Mechanism of Action of Lisinopril  
in Patients with Moderate to Severe Essential  
Hypertension." Merck Sharpe & Dohme. \$35,000.  
Principal Investigator

9. 1985–1986 "CGS13945 Double-Blind Placebo and Positive-Controlled Study in Mild to Moderate Hypertension with Once Daily Dosing." Ciba-Geigy. \$58,000. Principal Investigator
10. 1985–1986 "Comparative Study of Efficacy, Safety and Effect on Quality of Life of Nitrendipine, Atenolol and Hydrochlorothiazide in Combination with Hypertensive Patients." Miles Pharmaceuticals. \$65,430. Principal Investigator
11. 1985–1986 "Hemodynamic and Physiological Importance of Urinary Kininogen." Research Support Matrix of Brown University, Roger Williams Medical Center, Providence, Rhode Island. \$10,000. Principal Investigator
12. 1985–1986 "Daily Fluctuations in Serum Potassium and Magnesium: The Effects of Diuretic Treatment." Merck Sharpe & Dohme. \$36,369. Principal Investigator
13. 1985–1986 "Comparative Efficacy and Safety of Pinacidil, Alpha-Methyldopa and Placebo in Patients with Hypertension." Eli Lilly. \$60,720. Principal Investigator
14. 1985–1986 "An Open-Label Pilot Study to Investigate Sodium Balance in Patients with Congestive Heart Failure who are Transferred from Therapy with Furosemide Alone to Enalapril." Merck Sharpe & Dohme. \$34,519. Principal Investigator
15. 1988–1989 "Evaluation of Diltiazem HCl SR/HCTZ versus Diltiazem HCl SR versus Placebo in Mild to Moderate Essential Hypertension." Marion Laboratories. \$40,000. Principal Investigator
16. 1989–1990 "A Phase III Open-Label, Long-Term Study Of Efficacy and Safety of Perindopril Tert Butylamine in Patients with Mild to Moderate Hypertension." McNeil Laboratories. \$64,785. Principal Investigator
17. 1990–1991 "A Multicenter Trial to Evaluate Efficacy, Safety and Lipid Effects of Doxazosin as Initial Therapy in Mild to Moderate Essential Hypertension." Pfizer, Inc., Roerig Division. \$36,222. Principal Investigator
18. 1991–1992 "A Multicenter Randomized, Double-Blind, Placebo-

- Controlled Parallel, Outpatient Evaluation to Determine the Dose Response Relationship of Diltiazem Extended Release (MODS 12-Hour Formulation when given in Monotherapy Form to Patients with Mild to Moderate Hypertension." Merck Sharpe & Dohme. \$33,097. Principal Investigator
19. 1991–1992 "A Double-Blind Study of the Efficacy and Safety of Schedule 42495 versus Placebo in Outpatients with Mild to Moderate Hypertension." Schering-Plough. \$28,603. Principal Investigator
20. 1991–1992 "Efficacy and Tolerability of Extended Release Felodipine in Adult Patients with Mild to Moderate Uncomplicated Essential Hypertension." Merck Sharpe & Dohme. \$24,000. Principal Investigator
21. 1991–1992 "Comparison of the Efficacy and Tolerability of Felodipine Extended Release and Nifedipine Extended Release in Mild to Moderate Uncomplicated Essential Hypertension." Merck Sharpe & Dohme. \$33,097. Principal Investigator
22. 1991–1994 "A Randomized, Placebo-Controlled, Double-Blind Parallel Study of the Safety and Antihypertensive Efficacy of Losartan Monotherapy as Compared to HCTZ and to The Combination of Losartan and HCTZ Monotherapy in Patients with Mild to Moderate essential Hypertension." Merck Sharpe & Dohme. \$134,150. Principal Investigator
23. 1992–1994 "A Randomized, Double-Blind, Placebo-Controlled, Multicenter Study of the Safety And Antihypertensive Efficacy of Concomitant Treatment with Felodipine ER and Enalapril in Patients with Mild to Moderate Essential Hypertension." Merck Sharpe & Dohme. \$52,985. Principal Investigator
24. 1992–1994 "A Randomized, Double-Blind, Multicenter Parallel Study to Evaluate the Efficacy, Safety And Tolerability of Enalapril/Diltiazem Extended Release (ER) Combination in Mild to Moderate Hypertensive Patients with Various Degrees of Renal Impairment." Merck Sharpe & Dohme. \$58,455. Principal Investigator
25. 1993–1994 "An Open-Label Study of Fluvastatin in the

- Treatment of Patients with Hypercholesterolemia in Clinical Practice Settings."  
Sandoz Pharmaceuticals. \$2,700. Principal Investigator
26. 1993–1994 "A Multicenter, Prospective, Double-Blind, Randomized, Parallel Comparison Study of the Quality of Life and the Efficacy and Tolerability Of 40mg of Lovastatin Versus 40mg of Pravastatin in Male Patients with Primary Hypercholesterolemia (Types IIA and IIB)." Merck Sharpe & Dohme. \$34,000. Principal Investigator
27. 1993–1995 "An Open-Label, Multicenter Study of the Efficacy of Losartan in Combination with Hydrochlorothiazide (HCTZ) in Hypertensive Patients with Mild to Moderate Renal Impairment." Merck Sharpe & Dohme. \$36,958. Principal Investigator
28. 1994–1995 "A Randomized, Placebo-Controlled, Single-Blind Study of Potassium Balance in Hypertensive Subjects with End-Stage Renal Disease to Compare Serum Potassium Levels Using Diltiazem CD, Enalapril or Placebo." Marion Laboratories. \$44,000. Principal Investigator
29. 1994–1995 "A Prospective, Double-Blind, Randomized Comparison of Two Treatment Regimens: Cozaar and Hyzaar versus Vasotec and Vasotec Plus 25mg HCTZ in Patients with Mild to Moderate Hypertension." Merck & Co., Inc. \$10,000. Principal Investigator
30. 1994–1995 "A Phase II, Double-Blind, Placebo-Controlled, Dose Range and Short-Term Efficacy Study of UP 269-6 in Hypertensive Patients." Laboratories UPSA. \$60,000. Principal Investigator
31. 1994–1995 "A Randomized, Multicenter, Double-Blind, Parallel Study to Evaluate the Safety, Efficacy And Tolerability of Two Combinations of Moexipril and Hydrochlorothiazide and to Compare These Agents to Each Agent Given Alone." Schwarz Pharmaceuticals. \$31,342. Principal Investigator
32. 1994–1996 "An Open-Label Extension of the Dose Range And Short-Term Efficacy Study of UP 269-6 in Hypertensive Patients." Laboratories UPSA. \$32,574. Principal Investigator

33. 1994–1996 "Factorial Trial of the Efficacy and Safety Of Multiple Dosages of SR 47436 (BMS-186295) and Hydrochlorothiazide in Mild to Moderate Hypertension."  
Bristol-Myers Squibb. \$80,720. Principal Investigator
34. 1995–1996 "A Phase II, Double-Blind, Placebo-Controlled Study of the Dose Response Relationship and Antihypertensive Efficacy of UP 269-6 by 24-Hour Ambulatory Blood Pressure Monitoring in Hypertensive Patients."  
Laboratories UPSA. \$31,500. Principal Investigator
35. 1995–1996 "An Open-Label Dose Titration Study of Renagel in Hemodialysis Patients."  
Gel Tex Pharmaceuticals, Inc. \$44,100. Principal Investigator
36. 1995–1996 "A 12-Week, Multicenter, Double-Blind, Placebo-Controlled Dose Response Study Assessing the Safety, Tolerability, and Efficacy of BRL 49653C In Patients with Non-Insulin-Dependent Diabetes Mellitus (NIDDM)."  
SmithKline Beecham. \$51,400. Principal Investigator
37. 1995–1996 "An 8-Week, Double-Blind, Parallel, Dose Range, Multicenter Comparison of SK&F 108566 - 400mg, 600mg, 800mg and 1200mg Once Daily with Placebo in Patients with Essential Hypertension (DBP > 95 and < 114 mmHg)."  
SmithKline Beecham. \$35,650. Principal Investigator
38. 1995–1996 "A Multicenter, Randomized, Titration and Goal Comparison of Simvastatin and Fluvastatin in Patients with Primary Hypercholesterolemia (Type IIA)."  
Merck & Co., Inc. \$22,194. Principal Investigator
39. 1995–1997 "The Long-Term Antihypertensive Activity and Safety of Irbesartan (BMS - 186295) in Mild to Moderate Hypertension."  
Bristol-Myers Squibb. \$83,663. Principal Investigator
40. 1996–1997 "A Long-Term, Open-Label, Multicenter Study Of Once Daily Oral SK&F 108566 in Patients With Essential Hypertension."  
SmithKline Beecham. \$26,700. Principal Investigator

41. 1996–1997 "A Multicenter Trial of the Antihypertensive Activity and Safety of Irbesartan in Patients With Mild to Moderate Hypertension." Bristol-Myers Squibb. \$83,663. Principal Investigator
42. 1996–1997 "A Multicenter, Randomized, Double-Blind, Placebo-Controlled, Parallel Group, Comparative Trial of the Antihypertensive Activity and Safety of Irbesartan and Losartan In Subjects with Mild to Moderate Hypertension." Bristol-Myers Squibb. \$36,660. Principal Investigator
43. 1996–1997 "A 6-Week, Double-Blind Study to Compare the Effects of Eprosartan and Placebo on Proteinuria In Patients with Type II Diabetes Mellitus." SmithKline Beecham. \$21,930. Principal Investigator
44. 1996–1997 "An 8-Week Double-Blind, Double-Dummy, Placebo-Controlled, Parallel, Multicenter Comparison of Regimens of Oral SK&F 108566 and Hydrochlorothiazide Given in Combination in Patients with Mild to Moderate Hypertension." SmithKline Beecham. \$34,300. Principal Investigator
45. 1996–1997 "An Open-Label Dose Titration Study of Renagel in Hemodialysis Patients." (Protocol #GTC10-202a). Gel Tex Pharmaceuticals, Inc. \$44,000. Principal Investigator
46. 1996–1997 "Effect of Renagel, a Novel Phosphate Binder, on Serum Phosphorus and Parathyroid Hormone Levels in End-Stage Renal Disease (ESRD)." Gel Tex Pharmaceuticals, Inc. \$50,400. Principal Investigator
47. 1996–1997 "An Open-Label, Multicenter, Active Comparison Study, to Evaluate the Effect of BRL 49653C on Cardiovascular Function In Patients with Non-Insulin Dependent Diabetes Mellitus." Smith-Kline Beecham \$21,900. Principal Investigator
48. 1996–2001 "A Double-Blind, Randomized, Placebo Controlled Study to Evaluate the Renal Protective Effects of Losartan in Patients

- With Non-Insulin Dependent Diabetes Mellitus and Nephropathy."  
Merck & Company \$45,648. Principal Investigator
49. 1996–1997 "The Efficacy and Safety of Irbesartan Plus Hydrochlorothiazide in the Treatment of Subjects with Severe Hypertension."  
Bristol Myers Squibb \$30,000. Principal Investigator
50. 1996–1997 "A Multicenter, Randomized, Double-Blind Trial of the Antihypertensive Efficacy and Safety of Irbesartan in Elderly Subjects With Mild to Moderate Hypertension."  
Bristol Myers Squibb \$35,000. Principal Investigator
51. 1997–1998 "A 54-Week Open Label Assessment of the Safety and Efficacy Profile of Atorvastatin As Compared to Simvastatin When Used to Optimally Control Patients with Mixed Dyslipidemia."  
Parke Davis/Pfizer \$23,000. Principal Investigator
52. 1997–1998 "A Multicenter, Open Label, 12-Week, Prospective Study to Evaluate the Effectiveness and Tolerability of Lexxel in Hypertensive Patients Participating in the General Registry Program Who Have Not Adequately Responded to Angiotensin Converting Enzyme Inhibitor Monotherapy."  
Astra Pharmaceuticals, Inc. \$16,000. Principal Investigator
53. 1997–1998 "A Multicenter, Double-Blind 12-Week Randomized Parallel Group Comparative To Evaluate the Efficacy and Tolerability of Lexxel versus Lisinopril 20mg in Hypertensive Patients who have not Adequately Responded to Lisinopril 10mg Mono-Therapy."  
Astra Pharmaceuticals, Inc. \$22,800. Principal Investigator
54. 1997–1997 "A Multicenter, Randomized, Double-Blind, Placebo and Active-Controlled, Parallel 12-Week-Dose-Ranging Study of the Dual Metalloprotease Inhibitor BMS-186716, in The Treatment of Mild to Moderate Hypertension."  
Bristol Myers Squibb \$46,000. Principal Investigator

55. 1997–1998 "Open-Label, Long-Term Study of the Antihypertensive Activity and Safety of BMS-186716, a Dual Metalloprotease Inhibitor, in the Treatment of Hypertension."  
Bristol Myers Squibb \$126,000. Principal Investigator
56. 1997–1998 "Evaluation of the Antihypertensive Effect Of Candesartan Cilexetil in Comparison to Losartan: A Double-Blind, Multicenter, Parallel Design, Randomized Study."  
Astra Pharmaceuticals, Inc. \$16,000. Principal Investigator
57. 1998–1998 "A Multicenter, Randomized, Double-Blind, Placebo-Controlled, Parallel 9 week study of Omapatrilat (BMS-186716) in the Treatment of Mild to Moderate Hypertension."  
Bristol Myers Squibb \$54,600. Principal Investigator
58. 1998–1999 "Safety and Efficacy of Metformin/Glyburide Combination Products in NIDDM Patient who have Failed Glycemic Control with Diet, Exercise and Maximum Doses of Sulfonylurea Therapy."  
Bristol Myers Squibb \$34,400. Principal Investigator
59. 1998–1999 "A Double-Blind, Randomized, Parallel Effectiveness Study of Two Hypertensive Treatment Regimens; Losartan versus Valsartan in Patients with Mild to Moderate Essential Hypertension."  
Merck & Co., Inc. \$16,750. Principal Investigator
60. 1998–1998 "Clinical Investigation of the Safety and Effectiveness of the AM-BIO Series Dialyzer."  
Asahi LTD. Tokyo, Japan \$61,000.  
Principal Investigator
61. 1998–1999 "A Prospective, Multinational, Multicenter Double-Blind Randomized Active-Controlled Trial in Patients with Essential Hypertension To Compare the Effect Of Valsartan 80mg and 160mg with or without The Addition of HCTZ, Once Daily to that of Amlodipine 5mg and 10mg Once Daily, with or without the Addition of HCTZ, on Cardiovascular Morbidity and Mortality, Value 405." Norvartis \$119,101. Co- Investigator

62. 1998–1999 "Thirteen Week Double-Blind Placebo Controlled Parallel Multicenter Study of Teveten Given in Titrated Doses of 600mg or 1200mg Once Daily in Patients with Isolated Systolic Hypertension." Smith Kline Beecham \$36,200. Principal Investigator
63. 1998–1999 "A Placebo-Controlled Study of Higher Doses of Omapatrilat in Subjects with Mild to Moderate Hypertension." Bristol Myers Squibb \$30,192. Principal Investigator
64. 1998–1999 "An Open-Label Community-Based Clinical Practice Study of Niaspan in Patients with Hyperlipidemia." Kos Pharmaceuticals, Inc. \$10,000. Principal Investigator
65. 1998–2000 "Safety and Efficacy of Intravenous HMR4396 And Epogen for the Management of Anemia in Subjects with Chronic Renal Failure Requiring Hemodialysis." Hoechst Marion Roussel \$175,670. Principal Investigator
66. 1998–1999 "A Placebo-Controlled Study of Omapatrilat in Subjects with Isolated Systolic Hypertension." Bristol Myers Squibb \$34,856. Principal Investigator
67. 1998–1998 "A Multicenter, Randomized, Double-Blind Study of the Efficacy and Safety of Omapatrilat And Enalapril the Treatment of Subjects with Severe Hypertension." Bristol Myers Squibb \$35,370. Principal Investigator
68. 1998–1999 "A Placebo-Controlled Study of Higher Doses Of Omapatrilat in Subjects with Mild to Moderate Hypertension." Bristol Myers Squibb \$60,000. Principal Investigator
69. 1999–1999 "An Open-Label, Dose Titration Study of Sevelamer Hydrochloride in Chronic Renal Failure Patients not requiring Dialysis." Gel Tex Pharmaceuticals \$41,800. Principal Investigator
70. 1999–1999 "A Randomized, Double-Blind, Study of the Antihypertensive Efficacy and Safety of

- Omapatrilat Compared to Losartan."  
Bristol Myers Squibb \$29,192. Principal Investigator
71. 1999–2001 "An Open-Label, Randomized, Multicenter, Phase III, Comparator Controlled Parallel Group Study to Assess the Long-Term Safety And Efficacy of Lanthanum Carbonate in Chronic Renal Failure Patients Receiving Hemodialysis."  
Shire Laboratories, Inc. \$90,000. Principal Investigator
72. 1999–1999 "OVERTURE: Omapatrilat Versus Enalapril Randomized Trial of Utility in Reducing Events."  
Bristol Myers Squibb \$60,000. Principal Investigator
73. 1999–1999 "A Multicenter, Randomized, Double-Blind, Placebo-Controlled, Parallel 9-Week Study of BMS-189921 in the Treatment of Mild to Moderate Hypertension."  
Bristol Myers Squibb \$43,120. Principal Investigator
74. 2000–2001 "A Multicenter, Randomized, Double-Blind Active-Control Trial to Evaluate the Safety and Efficacy of Metformin/Glyburide Tablets as First-Line Therapy in Patients with Type II Diabetes Mellitus who have Inadequate Glycemic Control with Diet and Exercise."  
Bristol Myers Squibb \$46,000. Principal Investigator
75. 2000–2000 "An Elective Titration Study of Vanlev in Subjects with Uncontrolled Hypertension."  
Bristol Myers Squibb \$46,000. Principal Investigator
76. 2000–2001 "Omapatrilat in Persons with Enhanced Risk of Atherosclerotic Events: the "OPERA" Study."  
Bristol Myers Squibb \$55,000. Principal Investigator
77. 2000–2001 "A Double-Blind, Randomized Study to Evaluate the Effects of Fixed Combination Metformin/Glipizide Therapy in Subjects with Type II Diabetes Mellitus who have Inadequate Glycemic Control on Half-Maximum to Maximum of the Labeled Doses of Sulfonylurea Monotherapy."  
Bristol Myers Squibb \$30,000. Principal Investigator

78. 2000–2001 "A Double-Blind, Comparison of 80mg and 160mg Doses of Pravastatin with Placebo in Hypercholesterolemic Subjects."  
Bristol Myers Squibb \$50,600. Principal Investigator
79. 2000–2001 "A Multicenter, Randomized, Double-Blind, Placebo-Controlled Study of the Effects on Blood Pressure of Treatment with Nebivolol or Hydrochlorothiazide Alone and in Combination In Subjects with Mild to Moderate Hypertension."  
Mylan Pharmaceuticals \$36,000. Principal Investigator
80. 2000–2001 "Omapatrilat Cardiovascular Treatment Assessment versus Enalapril, (Octave)."  
Bristol Myers Squibb \$22,500. Principal Investigator
81. 2000–2004 "A Double-Blind Randomized Comparison Study of the Long-Term Two-Year Safety and Efficacy of Pioglitazone HCl or Glyburide in Subjects with Type II Diabetes Naive to Pharmacologic Therapy."  
Takeda Pharmaceuticals America, Inc. \$43,524. Principal Investigator
82. 2000–2003 "A Study Evaluating the Initiation and Titration Of Fixed Doses of Novel Erythropoiesis Stimulating Protein (NESP) Therapy in Subjects with Chronic Renal Insufficiency (CRI)."  
Amgen, Inc. \$15,088. Principal Investigator
83. 2000–2001 "Nested Case-Controlled Study of Potential Risk Factors for Angioedema and Angioedema-Like Events in Subjects Previously Exposed to Omapatrilat."  
Bristol-Myers Squibb \$12,500. Principal Investigator
84. 2001–2001 "A Six-week, Open-Label, Dose-comparison Study to Evaluate the Safety and Efficacy of Rosuvastatin Versus Atorvastatin, Cerivastatin, Pravastatin, and Simvastatin in Subjects with Hypercholesterolemia."  
Astra Zeneca Pharmaceuticals, Inc. \$150,000. Principal Investigator
85. 2001–2002 **National Principal Investigator** of a National Study, "Antihypertensive Efficacy of Adding Candesartan Cilexetil to Lisinopril in Comparison To

- Up-Titration of Lisinopril: A Multi-Center Trial Using Atacand-Zextril vs. Zestril to Evaluate the Effects on Lowering Blood Pressure.” (AMAZE) Astra Zeneca Pharmaceutical, L.P. \$150,000.
86. 2001–2003 “A Multicenter, Randomized, Placebo-controlled, Double-Blind, 12 month Study to Assess the Effects of an Oral Calcimimetic Agent (AMG073) on Renal Osteodystrophy in Hemodialysis Patients with Secondary Hyperparathyroidism.” Amgen, Inc. \$23,000. Principal Investigator
87. 2001–2003 “A Double-Blind, Randomized, Placebo and Active-Controlled, Parallel Group, Dose-finding Study to Evaluate the Efficacy and Safety of Once Daily Oral Administration of 5mg, 10mg, and 50mg, of M100240 for 8 weeks in Subjects with Mild-to Moderate Essential Hypertension.” Aventis Pharmaceuticals, Inc. \$58,000. Principal Investigator
88. 2001–2003 “An Open-Label, Dose Titration Study, Comparing the Safety and Efficacy of a Supramaximal Dose of Candesartan Cilexetil in Subjects with a History of Hypertension and Chronic Renal Disease that are Naïve to Angiotensin Receptor Blockade Therapy.” An Independent **Academic Study** Written By Marc S. Weinberg, M.D. **An IND # was required by the FDA.** Funded by AstraZeneca Pharmaceuticals, Inc. \$103,000. Principal Investigator
89. 2001–2002 “An Open-Label, Randomized, Multi-Center, Phase IIIb, Parallel Group Switching Study to Compare the Efficacy and Safety of Lipid Lowering Agents Atorvastatin and Simvastatin with Rosuvastatin in High Risk Subjects with Type IIa and IIb Hypercholesterolemia” AstraZeneca Pharmaceuticals, Inc. \$40,000. Principal Investigator
90. 2002–2003 “PROO-06-014”: Correction of Hemoglobin and Outcomes in Renal Insufficiency” OrthoBiotech Products, L.P. (CHOIR) \$186,360. Principal Investigator
91. 2002–2003 “Maintenance Phase Treatment of Procrit” OrthoBiotech Products, L.P. (PROMPT) \$39,000. Principal Investigator
92. 2002–2003 “Systolic and Pulse Pressure Hemodynamic Improvement by Restoring Elasticity (The Sapphire

- Study)"  
Alteon \$50,960. Principal Investigator
93. 2002–2003 "Long-Term, Open-Label Extension Study of Protocols LAM-IV-301, LAM-IV-303, LAM-IV-307, and LAM-IV-308". (Lanthanum 309 Extension Study).  
Shire Pharmaceuticals \$17,400. Principal Investigator
94. 2002–2003 "A Randomized, Double-Blind, Multicenter, Positive-Controlled, Parallel Group Study to Evaluate the Safety and Efficacy of Lotrel (Amlodipine/Benazepril) Compared to Zestoretic (Lisinopril/Hydrochlorothiazide) in Hypertensive Patients". (Lotrel Study 2302)  
Novartis Pharmaceuticals \$77,930. Principal Investigator
95. 2002–2003 "A Multicenter, Double-Blind, Randomized, Parallel Group Study to Evaluate the Effects of Diovan on Microalbuminuria in Hypertensive Subjects with Type II Diabetes Mellitus (DM)". (DROP STUDY)  
Novartis Pharmaceuticals \$39,686. Principal Investigator
96. 2002–2003 "A Placebo-Controlled, Double-Blind, Multicenter Study to Assess the Efficacy and Safety of an Oral Calcimimetic Agent (AMG 073) in Secondary Hyperparathyroidism of Chronic Kidney Disease (Hemodialysis and Peritoneal Dialysis)." Amgen Protocol No. AMG 073 20000188. AMGEN \$20,000.  
Principal Investigator
97. 2002–2003 "A Multicenter, Randomized, Double-Blind, Double-Dummy Study evaluating the Safety and Efficacy of the Addition of Amlodipine to Quinapril or Losartan in the Treatment of Diabetic Hypertensive Subjects." (ADHERE)  
Pfizer Pharmaceuticals \$28,800. Principal Investigator
98. 2003–2003 "A Randomized, Open-Label, Parallel Design of Sevelamer Hydrochloride (Renagel) in Chronic Kidney Disease Patients." Protocol GTC-68-208.  
Gel Tex Pharmaceuticals, Inc. \$10,000. Principal Investigator
99. 2003–2004 "A 26-Week, Double-Blind, Randomized, Multicenter, Phase IIIb, Parallel Group Study to Compare the Efficacy and Safety of Rosuvastatin (40mg) with Atorvastatin (80mg) I Subjects with

- Hypercholesterolemia and Coronary Heart Disease or CHD Risk Equivalents". (POLARIS). Astra Zeneca Pharmaceuticals \$30,000. Principal Investigator
100. 2003–2004 "A Prospective, Randomized, Double-Blind, Double-Dummy, Forced-Titration, Multicenter, Parallel Group, One Year Treatment Trial to Compare MICARDIS (Telmisartan) 80mg Versus COZAAR (Losartan) 100mg, in Hypertensive Type 2 Diabetic Patients with Overt Nephropathy". (AMADEO) Boehringer Ingelheim Pharmaceuticals \$35,000. Principal Investigator
101. 2003–2004 "A Randomized, Double-Blind, Multicenter, Placebo-Controlled, Parallel Group Study to Evaluate and Safety of Valsartan (320mg) and Hydrochlorothiazide (12.5 and 25mg) Combined and Alone, Valsartan 160mg/Hydrochlorothiazide 12.5mg in Hypertensive Patients". Novartis Pharmaceuticals \$40,000. Principal Investigator
102. 2003–2004 "A Multicenter, Double-Blind, Randomized, Parallel Group, 6-Week Study to Evaluate the Efficacy and Safety of Ezetimibe/Simvastatin Combination Tablets Versus Atorvastatin in Patients with Hypercholesterolemia". (VICTORY). Merck Pharmaceuticals \$17,000. Principal Investigator
103. 2003–2004 "A Prospective, Multinational, Multicenter, Double-Blind Randomized, Active-Controlled Trial to Compare the Effects of Lotrel (Amlodipine/Benazepril) to Benazepril and Hydrochlorothiazide Combined on the Reduction of Cardiovascular Morbidity and Mortality in Patients with High Risk Hypertension." (ACCOMPLISH) Norvartis Pharmaceuticals \$56,000. Principal Investigator
104. 2003–2004 "A Phase II, Open-Label, Randomized, Parallel, Titration Study to Determine the Safety and Efficacy of MCI-196 in End-Stage Renal Disease (ESRD) Patients with Hyperphosphatemia on Chronic Hemodialysis that have Type II Diabetes." MCI-196-A03 Mitsubishi \$110,000. Principal Investigator
105. 2003–2004 "A Phase II, Open-Label, Randomized, Parallel, Titration Study to Determine the Safety and Efficacy of MCI-196 in Non- Diabetic End-Stage

- Renal Disease (ESRD) Patients with Hyperphosphatemia on Chronic Hemodialysis." MCI-196-A01 Mitsubishi \$110,000. Principal Investigator
106. 2003–2004 "A Phase IIIb, Multicenter, Two-Cohort, Randomized Study, with an Open-Label Run-In and a Long-Term Extension Phase, Assessing an Extended Dose Range of Lanthanum Carbonate in End-Stage Renal Disease Subjects Receiving Hemodialysis." (F.O.R.E.S.E.E). - SPD405-312 Shire Pharmaceutical Development Inc. \$70,000. Principal Investigator
107. 2004–2005 "A Multi-Center, Single-Arm Study Evaluating De Novo Once Every Two Week Darbepoetin Alfa Dosing in Subjects with Chronic Kidney Disease Not Receiving Dialysis." Darboepoetin alfa 20030237 Amgen. \$140,000. Principal Investigator.
108. 2004–2005 "An Open-Label, Clinical Evaluation of the Initiation of Every 2 Week PROCRT (epoetin alfa) in the Treatment of Subjects with Anemia in Chronic Kidney Disease." PRO3-06-001 Ortho Biotech Clinical Affairs, LLC \$35,000. Principal Investigator.
109. 2004–2005 "Trial to Reduce Cardiovascular Events with Aranesp Therapy." (TREAT) 20010184 Amgen Inc. \$112,000. Principal Investigator.
110. 2004–2005 "A Multicenter, Randomized, Double-Blind Study to Evaluate the Safety of MK-0431 Monotherapy in Patients with Type 2 Diabetes Mellitus and Chronic Renal Insufficiency who have Inadequate Glycemic Control. MK-0431-028 Merck & Co., Inc. \$20,000. Principal Investigator.
111. 2004–2005 "A Multicenter, Double-Blind, Randomized Study to Evaluate the Safety and Efficacy of the Addition of MK-0431 Compared with Sulfonylurea Therapy in Patients with Type 2 Diabetes with Inadequate Glycemic Control on Metformin Monotherapy." MK-0431-024 Merck & Co., Inc. \$18,000. Principal Investigator.
112. 2004–2005 "An Eight-Week, Randomized, Double-Blind Placebo-Controlled, Parallel-Group, Multicenter Study comparing Aliskiren 150mg, 300mg, and 600mg to Placebo in Patients with Essential

- Hypertension.” CSPP100A2308  
 Novartis Pharmaceuticals Corporation. \$25,000.  
 Principal Investigator.
113. 2004–2005  
 “A Multi-Center, Open Label, Randomized, Parallel Group Pilot Study to Assess the Efficacy and Safety of Lanthanum Carbonate and Sevelamer Hydrochloride in Patients Receiving Hemodialysis for End Stage Renal Disease”.  
 Shire Pharmaceutical Development Ltd. \$60,000.  
 Principal Investigator.
114. 2004–2005  
 “A Randomized, Double-Blind, Multi-Center Study Comparing the Effects of Administration of Modified Release COREG or Placebo on Blood Pressure in Essential Hypertension Patients”.  
 GlaxoSmithKline. \$36,000. Principal Investigator.
115. 2005–2006  
 “An Open-Label, Single-Arm Study to Assess the Safety of Epoetin Alfa Manufactured by a Deep Tank Technology in subjects with Chronic Kidney Disease receiving Dialysis.  
 Amgen, Inc. \$201,240. Principal Investigator.
116. 2005–2006  
 “A Randomized, Open-Label Study to Assess the Safety of Epoetin Alfa Manufactured by Deep Tank Technology and Epoetin Alfa Manufactured by Roller Bottle Technology in subject with Kidney Disease not on Dialysis.”  
 Amgen, Inc. \$152,000. Principal Investigator.
117. 2005–2006  
 “An Open-Label, Clinical Evaluation of the Initiation of Every Two Week Procrit (Epoetin Alfa) in the treatment of subjects with the Anemia of Chronic Kidney Disease (CKD).”  
 Orthobiotech, Inc. \$58,000. Principal Investigator.
118. 2005–2006  
 “A Multi-Center Label, Randomized, Parallel Group Pilot Study to assess the Efficacy and Safety of Lanthenum Carbonate and Sevelamer Hydrochloride in patients receiving Hemodialysis for End Stage Renal Disease.”  
 Shire Pharmaceutical Development Inc. \$132,000.  
 Principal Investigator.
119. 2006–2006  
 “An 8 week, Multicenter, Randomized, Double-Blind, Parallel-Group Study to Evaluate the Efficacy and Safety of the Combination Valsartan/HCTZ/Amlodipine Compared to Valsartan/HCTZ, and HCTZ/Amlodipine in Patients

with Moderate to Severe Hypertension.  
Novartis Pharmaceuticals Corporation. Principal Investigator<sup>®</sup>

120. 2006–2006  
“A Randomized, Double-Blind, 52-week, Parallel-Group, Multicenter, Phase IIB Study to Evaluate the Effects of Rosuvastatin 10mg, Rosuvastatin 40mg, and Atorvastatin 80mg on Urinary Protein Excretion in Hypercholesterolaemic Diabetic Patients with Moderate Proteinuria.” PLANET I. AstraZeneca Pharmaceuticals, Inc. Principal Investigator<sup>®</sup>
121. 2006–2006  
“A Randomized, Double-Blind, 52-Week, Parallel-Group, Multicenter, Phase 11B Study to Evaluate the Effects of of Rosuvastatin 10mg, Rosuvastatin 40mg, and Atorvastatin 80mg on Urinary Protein Excretion in Hypercholesterolaemic Diabetic Patients with Moderate Proteinuria.” PLANET II. AstraZeneca Pharmaceuticals, Inc. Principal Investigator<sup>®</sup>
122. 2006–2006  
“A Multicenter, Randomized, Double-Blind, Parallel Group, 12 Week Study to Evaluate the Efficacy and Safety of MK – 0524B (Dosed as Co Administered MK-0524A and Simvastatin Tablets) Versus Atorvastatin in Patients With Mixed Hyperlipidemia. Merck and Co. Principal Investigator<sup>®</sup>
123. 2006–2006  
“A Randomized, Open-Label, Multicenter Study of Epoetin Alfa Comparing Two Extended Dosing Regimens, Once-Weekly and Every-Two Weeks, with the Three-Times-Weekly Dosing Regimen for Initiation and Maintenance Treatment in Anemic Subjects With Chronic Kidney Disease.” Johnson and Johnson, Inc. Principal Investigator<sup>®</sup>
124. 2006–2006  
“A Randomized, Open-Label, Multicenter Study of Epoetin Alfa Comparing Two Extended Dosing Regimens, Once Every-Two-Weeks, With the Once-Weekly Dosing Regimen for Maintenance Treatment in Anemic Subjects With Chronic Kidney Disease.” Johnson and Johnson, Inc. Principal Investigator<sup>®</sup>
125. 2006–2006  
“Evaluation of Cinacalcet HCL Therapy to Lower Cardiovascular Events EVOLVE.” Amgen, Inc. Principal Investigator<sup>®</sup>

<sup>®</sup> Final Grant Amounts were unknown since Dr. Weinberg joined DSI Renal, Inc. before studies were completed.

DSI-NATIONAL DIRECTOR OF CLINICAL RESEARCH AND PROTOCOLS

1. 2007-2007 "A Phase III Study of the Safety and Efficacy of Ferumoxytol (compared to oral iron) as an Iron Replacement Therapy in Hemodialysis Patients Who are Receiving Supplemental Erythropoietin Therapy." 62, 745-5 Advanced Magnetics, Inc.\*
2. 2007-2008 "Computed Tomography Laser Mammography (CTLM) Breast Imaging Device Model 1020." Imaging Diagnostics Systems, Inc.\*
3. 2007-2007 "RHEO-AND, Safety and Effectiveness in a Multicenter, Randomized, Sham-controlled Investigation for Dry, Non-exudative, Age-Related Macular Degeneration (AMD) Using Rheophoresis." Occulogix, Inc.\*
4. 2007-2007 "A Two-Arm, Randomized, Open-Label, Multicenter Study of Safety and Efficacy of Monthly Injections of RO0503821 Versus Epoetin Alfa in Peritoneal Dialysis Patients who Self Inject or Receive In-Center Injections." Protocol ML20338 Roche Laboratories, Inc.\*
5. 2007-2007 "A Prospective, Randomized, Open-Label, Multicenter, Pharmacoeconomic Evaluation (Time and Motion) Comparing RO0503821 to Epoetin Alfa in Patients with Chronic Kidney Disease (CDK) Stage V on Dialysis." Roche Laboratories, Inc.\*
6. 2007-2008 "A Prospective, Multicenter, Open-Label, Randomized, Cross-Over Study to Compare the Efficacy and Safety of Fosrenol and Sevelamer Hydrochloride in Patients Receiving Hemodialysis for End Stage Renal Disease." Shire Pharmaceutical Development, Inc.\*
7. 2007-2007 "A Prospective, Open-Label, Randomized, Multicenter Study to Demonstrate the Efficacy and Safety of Intravenous (IV) RO0503821 for Hemoglobin Control in Patients Transitioning from Chronic Kidney Disease Stage 4 Through Dialysis." Roche Laboratories, Inc.\*
8. 2007-2008 "A Phase 3, Randomized, Active-controlled, Open-label, Multi-center Study of the Safety and Efficacy of AF37702 Injection for the Maintenance Treatment of Anemia in Hemodialysis Patients Previously Treated with Epoetin." Protocol AFX01-

14 Affymax, Inc.\*

9. 2007–2008 "A double-blind, randomized, sham-controlled trial of Pulsed Electromagnetic Field Therapy in ESRD-related Diabetic Ulcer Patients (PEDUP Study) to Assess the Effectiveness of a 16 Week Course of Pulsed Electromagnetic Field (PEMP) Therapy as an Adjunct to Standard Care on the Healing of Lower Limb Ulcers in Diabetic ESRD Patients on Dialysis." DSI Renal, Inc. and IVIVI Technologies, Inc.\*
10. 2007–2008 "A Randomized, Double-blind, Parallel group, Placebo Controlled, Multi-centre Trial. Outcome Trial Evaluating the Efficacy and Safety of Norditropin in Adult Patients on Chronic Haemodialysis." Novo Nordisk\*

\*Grant compensation for DSI Renal, Inc. is confidential.

### **UNIVERSITY TEACHING ROLES**

#### Brown University Teaching Roles

1. Brown medical school physical diagnosis for medical students (1983-1986) 3-6 months/yr (10 hours/week) teaching physical diagnosis, and laboratory interpretation (urinalysis, interpretation of peripheral smears, etc.).
2. Preceptor in Medicine, Third-Year Students (Brown University Clinical Nephrology Course for medical students, housestaff and fellows (1983-2007). 3-9 months/yr (10-20 hrs/week) teaching renal-hypertensive diseases, dialysis and kidney transplantation, interpretation of renal biopsies and urinalysis. Individual supervision of Brown Medical Students, housestaff and fellows during renal clinic, outpatient nephrology in my office and dialysis rounds in our facility for renal replacement therapy (1-5 hours/wk).
3. Integrated Medical Sciences, Nephrology #375, RenalPathology/Nephrology Diseases of the Kidney (1983 - 1986, 1988,1993) 1-2 months/yr (2-20 hrs/wk) These courses were to guide Brown University 2<sup>nd</sup> and 3<sup>rd</sup> year medical students in learning renal physiology and pathology.
4. Office preceptor in Internal Medicine (1983-2006). For the past several years, initially residents would rotate one month at a time in our office for outpatient experience in nephrology or internal medicine. In addition, during (2001-2007), residents from several of the area hospitals would rotate for longer periods of time 4-8 hrs/wk for 3-12 months.
5. Clinical Pharmacology Lecture Series for second-year medical students' course (1984-1986) 3 hours/wk for 2-3 wks. I taught Renal pharmacology to Brown Medical Students with special emphasis on both renal physiology and pharmacology
6. Brown Board Review Course in Internal Medicine/Nephrology for residents for

the internal medicine boards (1986, 1988) 2-4 hrs/wk for 2 wks; In 1987 I served as Chairman, Nephrology Section, for the Brown Board Review Course. All aspects of glomerular diseases in normal and pathologic syndromes of disease, renal biopsies, hypertension, acute renal failure, acid-base and other metabolic disorders were reviewed to enhance their knowledge of chemical nephrology.

7. Brown University Affinity Program (2001) 5 hours. Two lectures were delivered to highlight the economics of medical practice with a fully integrated EMR (paperless medical record system).
8. Two Year Parallel Ambulatory Medicine and Renal Office Electives for two Brown Medical House Officers from Pawtucket Memorial Hospital, 2003 to 2006; 5 hr/wk
9. Brown Medical School – Doctoring Course managed by Dr. Fred Ferri. (September 2005–2006 4hrs/wk)

### **Hospital Teaching Roles**

1. Supervised third year Brown Medical Students as their preceptor in their clerkship in medicine Biomed #301 (1983–1995) 5-10 hr/wk for 2-5 months. We reviewed patient presentations, history and physicals, physical diagnosis and assessments of cases. Students were asked to review the medical literature and deliver presentations to the medical team.
2. Supervised fourth year Brown Medical students as their instructor during their medical clerkship for Biomed #302C (1983–1995) 5-15 hr/wk for 3-6 months. Patient presentations (oral and written), history and physicals, physical diagnosis and assessments of cases were emphasized. Students were asked to review the medical literature and deliver presentations to the medical team with emphasis on rational, while developing cost effective management plans.
3. Clinical Research Center Elective at the Roger Williams Medical Center (1984-1986) for 10-30 hrs/wk 1-6 months/yr. Instructed Fellows in nephrology or medical residents how to perform metabolic research studies. Human subjects were enrolled and treated with various high and low salt diets, received acute and chronic salt and water loading, and vasoactive peptides in blood and urine were measured.
4. Director of the Renal House Staff Conferences, Teaching Program for Residents and Students and Divisional Director at the Roger Williams Medical Center while the RWMC was part of the Brown Medical Program (and later the Boston University Medical program) for 2-20hrs/wk for 12 months/yr.
5. Renal noon house officer teaching conferences (1983–present) were presented yearly (6-12/year). Conferences are delivered at various teaching hospitals in the R.I. area for housestaff. Participation of the residents is stressed rather than formal lecture presentations without interaction. (Note that conferences during 2006–Present were located at the Roger Williams Medical Center)
6. Medical Ward Attending (1988-present). Initially I attended at 3 hospitals for

4-5 months per year. Since 2006, I have been attending 1-2 months per year at the Roger Williams Medical Center. Formal attending rounds are 3 days/wk (1-1.5 hrs/session) while teaching and diagnosis rounds on the wards occur 1-2 days /wk (1 hr/session). When rounding on my private patients, I make every effort to teach the house staff and remain active at the Miriam, Rhode Island, Pawtucket Memorial and Roger Williams Hospitals.

7. Renal Consult Service (1983-present). During the past 20 years I have rounded with residents on elective at four area hospitals and rounded with the fellows from the RIH program at the Miriam Hospital during the week and weekends. In addition to lifespan, I supervised fellows from the VAH and RWMC previously. My attending schedule was initially 2 then 6 months yearly. Although my time commitment to working with fellows and renal residents was substantial, since my two year sabbatical (2006-2008) my teaching time has been more limited to inpatient interactions or outpatient research protocols for residents.
8. Dialysis rounds have been performed in the hospital as well as our outpatient dialysis units. Before 2007, I rounded weekly for 0.5-2 hours for 10-12 months/yr with fellows and/or medical residents on elective from area Brown Affiliated Hospitals.
9. Office preceptor in Internal Medicine (1983-2006; 2008-Present)  
For the past several years, initially residents would rotate one month at a time in our office for outpatient experience in nephrology or internal medicine, although for the past 5 years we have had residents from several of the area hospitals (including the Memorial Hospital and The Miriam Hospital) rotate for longer periods of time 4-8 hrs/wk for 3-12 months. Currently I have had residents perform nephrology and research projects in my office.