Overview

The Division of Renal Diseases continued to experience significant growth in clinical and academic programs during the past two academic years. This was most obviously manifest by the addition of four new faculty to the division. Dr. Andrew Bostom was recruited from Pawtucket Memorial Hospital and joined the division in July 2001. Dr. Bostom has instituted a clinical practice devoted to the management of severe dyslipidemia among patients with established cardiovascular or renal disease, and those at high risk for de novo cardiovascular disease. His research program in the Division of Renal Diseases focuses on the identification and management of potential risk factors contributing to the excess incidence of arteriosclerotic outcomes in patients with chronic renal disease. He is the Principal Investigator for two National Institutes of Health grants supporting these research efforts. “Serum Total Homocysteine and C-Reactive Protein as Predictors of Arteriosclerotic Outcomes in The Irbesartan Type 2 Diabetic Nephropathy Trial (IDNT)” is an observational study funded by the National Heart, Lung, and Blood Diseases Institute. The study will determine baseline serum total homocysteine (tHcy) and C-reactive protein (CRP) concentrations in the IDNT to evaluate the potential independent relationship between these putative CVD risk factors and subsequent CVD morbidity and mortality, in this patient population. “The Folic Acid for Vascular Outcome Reduction In Transplantation (FAVORIT)”, is a multi-center, randomized, double-blind controlled clinical trial sponsored by the National Institute of Diabetes & Digestive & Kidney Diseases. This 8-year trial is designed to determine whether treatment with a standard multivitamin augmented with high doses of folic acid, vitamin B₆ and vitamin B₁₂ reduces the rate of cardiovascular disease outcomes in renal transplant (graft) recipients relative to participants receiving a similar multivitamin that contains no folic acid and lower (i.e., Estimated Average Requirement) amounts of vitamins B₆ and B₁₂. The FAVORIT trial will demonstrate whether or not tHcy-lowering treatment is effective in reducing CVD outcomes among renal transplant recipients. Moreover, the findings will be applicable to the much larger overall...
pool of patients who have chronic renal insufficiency. With 4000 participants drawn from 20 major North American and Canadian renal transplant centers, FAVORIT is the largest study of CVD prevention ever undertaken in the chronic renal disease patient population.

Dr. Purba Biswas is a physician-scientist who joined the faculty in April, 2003, following completion of a nephrology fellowship at Yale University followed by a post-doctoral fellowship in the laboratory of Dr. Peter Madri in the Pathology Department at Yale.

Dr. Biswas was recruited to establish an independent basic science research program and has office and laboratory space in the Aldrich Building on the Rhode Island Hospital campus. Her interests are in the area of endothelial biology, adhesion molecules and their role in acute and chronic renal disease.

Dr. Susie Lee Hu will be joining the division beginning August, 2003 having recently completed a nephrology fellowship at Tufts/New England Medical Center. Dr. Hu’s primary focus will be clinical nephrology with an emphasis on the care or patients with end stage renal disease. She will help supervise our outpatient dialysis program, direct the renal clinic at the Veteran’s Administration Hospital and attend on the inpatient services at Rhode Island Hospital, The Miriam Hospital and the VA. She will also participate in various clinical research projects involving patients with diverse types of renal disease.

Dr. Ali Nayer has also been recruited to join the division beginning September, 2003. Dr. Nayer received his residency training in Internal Medicine and Pathology in the Brown program at Memorial Hospital in Pawtucket and then completed a nephrology fellowship at Brigham & Women’s Hospital in Boston. Dr. Nayer will join the group conducting bench research in the division’s laboratory space in the Aldrich Building. Dr. Nayer has an interest in morphometric methods of assessing renal injury as well as in the biology of rejection in transplanted kidneys. His clinical work will focus on the care of patients with End Stage Renal Disease on dialysis.

During the past year, the Division continued to expand its clinical activities in providing renal replacement therapy to patients with acute and chronic renal disease. Use of Continuous Venovenous Hemodiafiltration (CVVHDF), which was introduced the preceding year, continued to grow in the intensive care units at Rhode Island Hospital and has now been successfully performed in the surgical and medical Intensive Care Units as well as in the Coronary Care Unit. CVVHDF is a form of continuous renal replacement therapy that is used primarily to treat hemodynamically unstable, critically ill patients with acute renal failure.

Continued growth of the program particularly during the aftermath of the Station Nightclub fire necessitated the purchase of a third CVVHDF machine this past year. The inpatient dialysis units at both the Rhode Island and Miriam Hospitals also remain quite busy and perform approximately 8000 dialysis treatments per year, primarily to hospitalized patients with acute and chronic renal disease.

The Dialysis Unit at Rhode Island Hospital also provides plasmapheresis to patients with a variety of renal, hematologic and neurologic disorders.

Until recently, the Division had played a rather limited role in outpatient dialysis programs across the state. This changed significantly in January, 2003, with the initiation of a new agreement between Fresenius Medical Care, the largest provider of dialysis services in the United States and the University Medicine Foundation by virtue of which Dr. Lance Dworkin became Medical Director of all Fresenius operated dialysis programs in Rhode Island. As a result, Division faculty now provide medical leadership at four outpatient dialysis centers in East Providence, North Providence, Warwick and Woonsocket that care for approximately 350 patients with end stage renal disease. We also direct the inpatient dialysis programs at six additional institutions including The Miriam Hospital, Memorial Hospital, Newport Hospital, and Landmark Hospital. This has greatly expanded opportunities for division faculty to teach and conduct research in this important patient population. In addition, it should allow for significant growth in our outpatient dialysis practice.

The Division has ongoing active programs in both basic and clinical research. Major expansion in the clinical research program occurred with the recruitment of Dr. Bostom as discussed above. Ongoing is the Folic Acid for Vascular Outcome Reduction in Transplantation (FAVORIT) study, of which division member Andrew Bostom is the principal investigator. FAVORIT will determine whether or not lowering homocysteine levels by vitamin supplementation reduces adverse cardiovascular events in renal transplant recipients. Transplant physicians Reg Gohh and Angelito Yango are also actively involved in this project. In addition to Dr. Bostom’s large trial, Dr. Dworkin is the study chair for a large consortium of investigators (80 enrolling centers) that recently resubmitted a proposal for a large multicenter clinical trial designed to determine the best therapy for patients with renal vascular disease. The CORAL
study will compare the effects of renal artery angioplasty and stenting versus optimal medical therapy on combined cardiovascular and renal outcomes in 1100 patients with atherosclerotic renal vascular disease and hypertension. The application consisting of a cluster of 5 RO1 applications with a combined budget of approximately $27 million dollars for the 6 six year project was submitted to NHLBI in June, 2003. Other funded clinical studies currently underway include protocols examining the effects of newer immunosuppressive agents on the course of IgA nephropathy.

The Division currently employs 3 full-time research coordinators and, on average, more than a dozen clinical trials are underway at any given time involving division faculty and fellows. These trials have enrolled patients with diverse diseases, including acute and chronic renal failure, hypertension, diabetes as well as dyslipidemia. The clinical research program includes NIH, industry and investigator initiated, internally funded trials that have lead to numerous presentations and peer-reviewed publications in the past year.

Dr. Lance Dworkin directs the basic science research program, which involves close collaboration with Abdallah Rifai, a PhD investigator in the Department of Pathology. The main thrust of the laboratory program is investigation of the mechanisms of progression of chronic kidney disease. The NIH funded laboratory program incorporates a variety of techniques, from physiologic studies in whole animal models of chronic kidney disease, to cell culture, to advanced molecular methods including gene profiling. The laboratory has consistently produced data that has been presented at national and international meetings. There is an important educational component to the laboratory program as well, which provides opportunities for students, residents, renal fellows, and post-doctoral research fellows to gain experience in laboratory investigation.

The Division of Renal Diseases performs between 100 and 200 biopsies annually of native or transplanted kidneys. Typically, this procedure incorporates ultrasound localization of the kidney, which, in the past, was performed in collaboration with the radiology department. Recently, the Division acquired its own ultrasound machine, enabling us to perform kidney biopsies at the bedside. This has resulted in increased efficiency and convenience for our patients, and has significantly enhanced our ability to perform this important procedure particularly in renal transplant patients. In this patient population, subclinical chronic allograft rejection is an important problem leading ultimately to graft loss. Subclinical rejection can be detected by performing protocol driven renal biopsies on a regular schedule and such a biopsy program is being implemented in our transplant population facilitated by the availability of bedside ultrasound. The ultrasound machine will also be used to localize vessels for the placement of dialysis catheters, a technique that has been shown to reduce complications and improve success rates for this procedure. The availability of ultrasound also enhances our training programs by allowing fellows to gain expertise in this important technique.

The renal fellowship at Brown University has been in existence for more than 30 years. During the past 2 years, we continued to experience increased interest in our nephrology training program, which enrolls three fellows each year and this past year received over 150 applications before the selection process was completed in early January, 2003. The recruitment seasons in 2001-2003 were highly successful with applications from residents from our own program as well as from other first rate academic institutions. Our fellows now rotate through Rhode Island Hospital, The Miriam Hospital, and the VA Hospital where they contribute significantly to patient care as well as resident and medical student education.

Transplantation

The Division of Organ Transplantation continues to be extremely active, with a total of 84 kidneys transplanted during the past calendar year. This represents the most transplants ever performed by a single center in New England. This accounts for almost 1100 clinic visits to the transplant nephrologists at Rhode Island Hospital, providing ample experience for training fellows. Another milestone recently reached was the completion of 400th transplant performed at Rhode Island Hospital since the programs inception 6 years ago. This year also saw the introduction of pancreas transplantation to the program. This procedure, performed typically in individuals that have also received a kidney transplant, markedly improves quality of life for patients with insulin dependant diabetes mellitus.

Transplant Research

The Transplant Division continues to participate in a number of pharmaceutical company sponsored studies evaluating the efficacy of various drug regimens in preventing renal allograft rejection. We also participate in two NIH-sponsored studies
including the FAVORIT study and Dr. Roy Aaron’s study (Identification and Treatment of Osteonecrosis of the Hip). Dr. Gohh also conducts independent research on the prevention and treatment of recurrent FSGS in renal transplant recipients and the safety and feasibility of renal transplantation in HIV infected individuals (in conjunction with Dr. Stacy Fischer of the Division of Infectious Diseases). The division is also currently participating in an NIH sponsored trial investigating the utility of intravenous immunoglobulin as an agent to reduce anti-HLA antibodies and improve transplantation results in cross match positive living donor kidney allograft recipients. Dr. Yango has recently introduced a program for protocol renal biopsies for all transplant recipients in our center for primary and secondary prevention of chronic allograft nephropathy. In addition, we are also actively conducting pilot studies in the area of inducing specific unresponsiveness with donor specific peripheral blood mobilized bone marrow stem cells in recipients of living donor mismatched renal allografts.

Faculty Members

FULL-TIME FACULTY
(Hospital and Foundation Based)
Lance D. Dworkin, M.D., Director, Professor, Rhode Island Hospital, University Medicine Foundation
J. Gary Abuelo, M.D., Associate Professor, Rhode Island Hospital, University Medicine Foundation
Andrew J. Beaulieu, M.D., Assistant Professor, Rhode Island Hospital, University Medicine Foundation
Purba Biswas, M.D., Assistant Professor, Rhode Island Hospital, University Medicine Foundation
Andrew G. Bostom, M.D., M.S., Associate Professor, Rhode Island Hospital, University Medicine Foundation
Reginald Gohh, M.D., Assistant Professor, Rhode Island Hospital, University Medicine Foundation
Douglas Shemin, M.D., Clinical Associate Professor, Rhode Island Hospital, University Medicine Foundation
Angelito Yango, Jr., M.D., Clinical Assistant Professor, Rhode Island Hosp., University Medicine Foundation

VOLUNTEER FACULTY
Joseph Chazan, M.D., Clinical Professor, Rhode Island Hospital
Jeffrey Clement, M.D., Clinical Assistant Professor, Miriam Hospital
Christopher Cosgrove, M.D., Clinical Instructor, Rhode Island Hospital
Richard Cottiero, M.D., Clinical Associate Professor, Miriam Hospital
Raymond Endreny, M.D., Clinical Associate Professor, Rhode Island Hospital
Boyd P. King, M.D., Clinical Associate Professor, Rhode Island Hospital
Thomas Krahn, M.D., Clinical Assistant Professor, Rhode Island Hospital
George Lee, M.D., Clinical Instructor, Rhode Island Hospital
Charles E. McCoy, M.D., Clinical Associate Professor, Rhode Island Hospital
Ildiko Medve, M.D., Clinical Instructor, Rhode Island Hospital
Mark Siskind, M.D., M.S., Clinical Assistant Professor, Rhode Island Hospital
Michael Thursby, D.O., Clinical Instructor, Rhode Island Hospital
Marc Weinberg, M.D., Clinical Associate Professor, Miriam Hospital
David C. Yoburn, M.D., Clinical Associate Professor, Memorial Hospital of Rhode Island
Steven Zipin, M.D., Clinical Assistant Professor, Miriam Hospital

FACULTY TRANSITIONS

New Faculty

<table>
<thead>
<tr>
<th>Name</th>
<th>Former Position</th>
<th>Faculty Rank</th>
</tr>
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<tbody>
<tr>
<td>Purba Biswas, M.D.</td>
<td>Yale Univ. Sch Med, Depts Medicine &amp; Pathology</td>
<td>Assistant Prof.</td>
</tr>
<tr>
<td>Andrew G. Bostom, M.D., M.S.</td>
<td>Memorial Hospital of Rhode Island</td>
<td>Associate Prof.</td>
</tr>
<tr>
<td>Christopher Cosgrove, M.D.</td>
<td>Yale New Haven Hospital</td>
<td>Clinical Instr.</td>
</tr>
<tr>
<td>Michael Thursby, D.O.</td>
<td>Nephrology Fellow, Rhode Island Hospital</td>
<td>Clinical Instr.</td>
</tr>
<tr>
<td>Angelito Yango, Jr., M.D.</td>
<td>Nephrology Fellow, Rhode Island Hospital</td>
<td>Clin. Assist. Prof.</td>
</tr>
</tbody>
</table>
National and International Honors and Recognition of Faculty

J. Gary Abuelo, M.D.
Invited Presentations:
• “Resistant Hypertension and Hypertensive Emergencies”. Luis E. Aybar Hospital, 5th International Congress, Santo Domingo, May 2003

Purba Biswas, M.D.
• American Heart Association Fellowship Award

Andrew G. Bostom, M.D., M.S.
Invited Presentations:
• “The Kidney and Homocysteine Metabolism”, ASN/ISN World Congress of Nephrology, San Francisco, CA
• “Management of Dyslipidemia in Chronic Renal Disease”, Renal Grand Rounds, Rhode Island Hospital, Providence, RI
• “Measurement and Parameters and Methodologies in Chronic Renal Disease, ASN Renal Week, Philadelphia, PA

Lance D. Dworkin, M.D.
• Fellow, American College of Physicians/American Society of Internal Medicine
• Member, Editorial Board, Clinical Nephrology
• Visiting Professor, Tokai and Osaka Universities, Japan
• Medical Director, Artificial Kidney Centers of Rhode Island (East Providence, North Providence, Woonsocket, Warwick Outpatient Dialysis Centers, Inpatient Dialysis Programs).
• 5th Congreso Internacional Dr. Marieni Cabral, Santo Domingo, DR, Invited Speaker, May 2003

Reginald Gohh, M.D.
Appointed to Medical Staff, Artificial Kidney Center of Rhode Island, Providence, Rhode Island
Three abstracts accepted for poster presentation:

Douglas Shemin, M.D.
• Named Chairman Elect, End Stage Renal Disease Network of New England
• Named Associate Medical Director, Artificial Kidney Center of North Providence, and Associate Medical Director, Artificial Kidney Center of Warwick.
• Named “One of Rhode Island’s Top Doctors”, Rhode Island Monthly magazine

Angelito Yango, Jr., M.D.
Invited Presentation:
• Transplant Grand Rounds, “Humoral Immune Response in Transplant Recipients”
• Transplant Grand Rounds, “Hepatitis C in Kidney Transplantation”
• Nurse’s Lecture Series, “Medical Aspects of Kidney Transplantation”

Research and Other Scholarly Activities

Faculty Members of Study Sections and Advisory Committees

Lance D. Dworkin, M.D.
• National Kidney Foundation Executive Committee of the Council on Hypertension
• Medical Advisory Board, National Kidney Foundation of Massachusetts, Rhode Island, New Hampshire & Vermont
• Homer W. Smith Award Committee, American Heart Association, American Society of Nephrology
• American Society of Nephrology, Government Relations Committee
• National Institute of Health, General Medicine B Study Section & Urology Special Emphasis Panel
• Chairman, American Society of Nephrology Ad-hoc Public Policy Priorities Working Group on Increasing R01 grants for kidney disease research
• Harvard Medical School, Intensive Board Review and Contemporary Issues in Nephrology

Reginald Gohh, M.D.
• Medical Advisory Board, National Kidney Foundation – Regional Board of Directors of Massachusetts and Rhode Island
• Board of Directors and Chairman of Transplant Committee, ESRD Network of New England

Douglas Shemin, M.D.
• American Society of Nephrology, 2003 Annual Meeting Abstract Reviewer

TEACHING ACTIVITIES

EDUCATION HONORS

Lance D. Dworkin, M.D.
• Brown Medical School Dean’s Teaching Excellence Award

Angelito Yango, Jr., M.D.
• Phi Sigma Biological Honor Society
• Leo Davidoff Award for Excellence in Teaching
• Young Investigator’s Award

TEACHING RESPONSIBILITIES

J. Gary Abuelo, M.D.
• Co-Course Leader, Renal Pathophysiology, Brown Medical School

Andrew Beaulieu, M.D.
• Lecturer/Small Group Facilitator, Renal Pathophysiology Course, Brown Medical School
• Involved in teaching of Internal Medicine Residents, Brown Medical Students, and Internal Medicine Staff through teaching rounds and noon conferences
• Attending Rounds, Rhode Island Hospital
• Medical Director, Providence VA Hemodialysis Unit; Provide instruction to second-year renal fellows on hemodialysis over a six month period

Lance D. Dworkin, M.D.
• Small Group Leader, Renal Pathophysiology, Brown Medical School
• Noon Conference Lecture Series, Rhode Island and Miriam Hospitals
• Renal ICU Rounds, Miriam Hospital, Lecturer
• Physiology Conference, Lecturer
• Hypertension Lecture, Ambulatory Block Rotation Medical Residency
• Preceptor with medical students

Reginald Gohh, M.D.
• Lecturer/Small Group Leader, Renal Pathophysiology (Biomed 281)
• Longitudinal Clinic Preceptor, Precept a 3rd year medical student on a weekly basis
• Provide lectures on renal pathophysiology and transplant related issues to residents and fellows including morning report, noon conferences.
• Attending physician on both the renal and transplant electives during which all consults and admissions are discussed in detail
• Organizer of monthly CME activity – Transplant Conference
• Organizer of renal pathophysiology lecture series for students/residents taking renal elective – Rotator Conference
• Teaching attending for inpatient ward team
• Clinic attending – attend the transplant clinic in conjunction with the renal fellows

Douglas Shemin, M.D.
• Co-Course Leader, Renal Pathophysiology, Brown Medical School
• Preceptor, Internal Medical Clerkship, Rhode Island Hospital
• Instructor, Advanced Human Pathophysiology, University of Rhode Island College of Pharmacy
• Chairman, Department of Medicine Curriculum Committee, Brown University School of Medicine

Angelito Yango, M.D.
• Lecturer/Small Group Leader, Renal Pathophysiology (Biomed 281)
• Resident lecture series on renal physiology/acid base problems/renal transplantation
• Attending physician on both renal and transplant electives for fellows, residents and medical students
• Teaching attending for inpatient ward team
• Clinic attending with renal fellows for general nephrology and transplant clinics
PUBLICATIONS

J. Gary Abuelo, M.D.
- Abuelo, J. Gary. Review article: Normotensive ischemic acute renal failure. Accepted for publication. RI Medical Journal 2003

Purba Biswas, M.D.

Andrew Bostom, M.D.

Lance D. Dworkin, M.D.

NEPHROLOGY FELLOWSHIP PROGRAM

Departing Fellows

<table>
<thead>
<tr>
<th>Name</th>
<th>Medical School</th>
<th>Residency</th>
<th>Post Graduate Plans</th>
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<tbody>
<tr>
<td>Eleas Chafouleas</td>
<td>SUNY HSC Syracuse Medical School</td>
<td>Fletcher Allen Health Care</td>
<td>Clinical practice in CT</td>
</tr>
<tr>
<td>Elkin Estrada</td>
<td>Howard University</td>
<td>Brown University</td>
<td>Joined private practice in Providence, Hypertension &amp; Nephrology Assoc.</td>
</tr>
<tr>
<td>Paul Shin</td>
<td>UMDNJ Medical School</td>
<td>Brown University</td>
<td>Clinical practice in IL</td>
</tr>
<tr>
<td>Brendan Smyth</td>
<td>Medical University of South Carolina</td>
<td>University of Nebraska Medical Center</td>
<td>Joined Univ. of Pennsylvania School of Medicine, Renal Electrolyte &amp; Hyperten. Div.</td>
</tr>
<tr>
<td>Michael Thursby</td>
<td>Midwestern University, Chicago, College of Osteopathic Med.</td>
<td>Brown University</td>
<td>Joined a private practice in East Providence, Nephrology Associates</td>
</tr>
<tr>
<td>Martin Tran</td>
<td>Kirksville Osteopathic Medical School</td>
<td>Evanston NW Health Care</td>
<td>Clinical practice in TN</td>
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Current Fellows

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<thead>
<tr>
<th>Name</th>
<th>Medical School</th>
<th>Residency</th>
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<tr>
<td>Michael Capicotto</td>
<td>SUNY Brooklyn, NY</td>
<td>Brown Medical School</td>
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<tr>
<td>Patricia Zuniga</td>
<td>UniversityRovira/Virgili, Spain</td>
<td>Pinnacle Health Hospitals, PA</td>
</tr>
<tr>
<td>Natalie Hsu</td>
<td>Brown University</td>
<td>RI and Miriam Hospitals</td>
</tr>
</tbody>
</table>


Reginald Gohh, M.D.


Douglas Shemin, M.D.


• Shemin D. Early initiation of dialysis does not significantly increase survival in end stage renal disease. J Evidence Based Health Care 2002; 6: 89-90.


• Shemin D. Dialysis in Pregnant Women with Chronic Kidney Failure. Accepted by Seminars in Dialysis.

Angelito Yango, M.D.


**BASIC RESEARCH**

Lance Dworkin, M.D.
- Physiologic & Pathogenic Actions of Renal HGF/c-met, NIH/National Institute of Diabetes and Digestive and Kidney Diseases
- Candesartan in Spontaneously Hypertensive Rats, Astra Pharmaceutical

**CLINICAL RESEARCH**

Andrew Bostom, M.D.
- Serum Total Homocysteine and C-Reactive Protein As Pred*, NIH/National Heart Lung & Blood Institute
- A Randomized Controlled Trial of Homocysteine, NIH/National Institute of Diabetes and Digestive and Kidney Diseases

Andrew Brem, M.D.
- Pilot Study of Mycophenolate Mofetil in Children with Steroid-Dependent Nephrotic Syndrome, Medical City Dallas Hospital
- Study of Blood Pressure Reduction with Fosinopril in Children and Adolescents, Bristol-Myers Squibb, Incorporated

Lance Dworkin, M.D.
- Multicentered Randomized Double Blind Placebo Controlled Efficacy and Safety Study of the Effects of Oral Tolvaptan in Patients with Hyponatremia, Otsuka America Pharmaceuticals Incorporated
- A Multi-Center Double Blind Randomized Parallel Group Study to Evaluate the Effects of Diovan on Microalbuminuria in Hypertensive Subjects with Type 2 Diabetes Mellitus (DM), Novartis Pharmaceutical Corporation
- Clinical Protocol for a Multi-Center Placebo Run-In, Randomized, Double-Blind Parallel Group Trial to Evaluate the Effects of Eplerenone vs. Eplerenone/Lisinopril in Patients with Renal Insufficiency, Pharmacia, Incorporated
- A Double Blind Multi-Center Randomized Placebo-Controlled Parallel Group Study of the Effects of Nebivolol on Safety and Efficacy in Patients With Mild to Moderate Hypertension, Bertek Pharmaceuticals, Incorporated
- A Prospective Multinational Multicenter Double Blind Randomized Active Controlled Trial in Patients with Essential Hypertension to Compare the Effect of Valsartan 80 and 160 mg with or without the addition of Hydrochlorothiazide, Once Daily to that of Amlodipine 5 & 10mg Once Daily, With or Without the Addition of Hydrochlorothiazide, on Cardiovascular Morbidity and Morality, Novartis Pharmaceutical Corporation
- Clinical Protocol for a Long-Term, Open Label Study of the Safety and Efficacy of Eplerenone Protocol, Covance
- A Randomized Controlled Trial of Mycophenolate Mofetil in Patients with IgA Nephropathy, Medical City Dallas Hospital
- A Randomized, Placebo-Controlled, Multicentered Trial Evaluating A) Alternative Day Prednisone B) Fish Oil Supplements in Young Patients with IgA Nephropathy, Medical City Dallas Hospital
- Antihypertensive Efficacy of Adding Candesartan Cilexetil to Lisinopril in Comparison to Up-Titration, Astra Zeneca/OMNI
- A Double Blind Multi-Center Randomized Placebo and Active Controlled Comparison Study of the Antihypert. Covance, Incorporated, Searle
- The Effect of Irbesartan on Morbidity and Mortality in Hypertensive Patients with Type II Diabetes and Diabetic Neuropathy, Bristol-Myers Squibb Pharmaceutical Research
- A Multicenter, Randomized Double Blind Parallel Group Study to Evaluate the Tolerability and Efficacy of the Co-Administration of Simvastatin 20 mg/day and Fenofibrate 160 mg/day Compared to Simvastatin 20 mg/day Alone for 12 Weeks of Treatment in Patients with Combined Hyperlipidemia, Merck & Co
- 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, 25mg, and 50mg of M 100240, Aventis Pharmaceuticals Products, Incorporated

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<th></th>
<th>Direct</th>
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<tr>
<td><strong>Total Basic Research Expenses</strong></td>
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<tr>
<td>Academic Year 2002</td>
<td>$176,274</td>
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<td>Academic Year 2003</td>
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<tr>
<td><strong>Total Clinical Research Expenses</strong></td>
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<tr>
<td>Academic Year 2002</td>
<td>$1,300,341</td>
<td>$236,711</td>
<td>$1,537,052</td>
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<tr>
<td>Academic Year 2003</td>
<td>$2,346,628</td>
<td>$754,330</td>
<td>$3,100,958</td>
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</table>
Reginald Gohh, M.D.

- Rapamune Outcomes Assessment Registry, Syreon Corporation
- A Multicenter, Randomized, Open label Trial of Simulect with Rapid Steroid Withdrawal vs Simulect wi, Deaconess Hospital
- An Open Label Multicenter Study to Further Characterize the Clinical Utility and Safety of RapamuneR, Wyeth-Ayerst Research
- A Comparative Open Label Study to Evaluate Graft Function in De Novo Renal Allograft Recipients Treated with Either a “Reduced Dose” or a “Standard Dose” of Cyclosporine in Combination with Rapamune (Sirolims) + Corticosteroids, Pharmaceutical Product Development
- A Randomized Open-Label Preference Study of Gengraf Compared to Neoral in Stable Solid-Organ Transplant, Pharmaceutical Product Development
- Pilot Study to Induce Specific Unresponsiveness with Donor-Specific Peripheral Blood Mobilized Bone Marrow Stem Cells (PBSCs) in Recipients of Living Donor Mismatched Renal Allografts Treated with Thymoglobulin and Standard Cyclosporine Based Immunosuppression, Beth Israel Deaconess Medical
- Multicenter, Double-Blind, Randomized, Parallel Group Study on Tolerability and Safety of ERI080A, Novartis Pharmaceuticals Corporation

Douglas Shemin, M.D.

- 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, Rhode Island Clinical Research Center
- Disease/Case Management of Patients Receiving Aranesp (darbepoetin alfa) to Treat the Anemia of Chronic Renal Insufficiency (CRI), Amgen
- Correction of Hemoglobin & Outcomes in Renal Insufficiency (CHOIR), Carestat
- A Randomized Double Blind Parallel Group Evaluation of Usual Care Plus Cervistatin 0.4mg, Once Daily, Bayer Corporation
- Mahurkar Triple Lumen Catheter, Tyco Healthcare Group