COBRE grant External Advisory Committee returns to Tulane

In late February, the COBRE investigators were pleased to welcome the External Advisory Committee members back to Tulane’s campus. We were fortunate that the entire Committee was able to attend at the same time. All five of the original members were present, Thomas Coffman, MD, from Duke University Medical Center, Allen Cowley, PhD, from the Medical College of Wisconsin, Ariel Gomez, MD, from the University of Virginia, Michael Klag, MD, from John Hopkins University, John McGiff, MD, from New York Medical College, and a new member, Norman Rosenblum MD, from the Hospital for Sick Children in Toronto, Ontario. The EAC is an important part of the COBRE grant; the members review the progress of the junior investigators and make recommendations to strengthen the investigator’s projects. This year, each of the junior investigators had submitted an RO1 grant application to NIH prior to the EAC meeting. The EAC members were able to evaluate the grant applications and offer constructive suggestions to increase the grant’s potential for funding.

The visit began in the evening on February 21st at the Hotel Monteleone in the French Quarter with presentations by Dr. Paul Whelton, Senior Vice-President of the Health Sciences Center, Dr. Ian Taylor, Dean of the School of Medicine, Dr. Laura Levy, Associate Senior Vice-President for Research, Dr. L. Lee Hamm, Director of the Hypertension and Renal Center and Chief of the Section of Nephrology, and Dr. L. Gabriel Navar, Co-Director of the Hypertension and Renal Center and Chairman of the Department of Physiology. On February 22nd, the five COBRE junior investigators presented their progress to the committee. The junior investigators were able to meet one-on-one with their EAC member to review their projects and grant applications in detail. The site visit proved very productive, producing several helpful suggestions for the junior faculty investigators on the COBRE.

Pictured from left: Dr. McGiff, Dr. Gomez, Dr. Coffman, Dr. Klag, Dr. Cowley and Dr. Rosenblum
News

Hypertension Center staff participates in employee benefits fair at Tulane University Health Sciences Center

One of the initiatives of the Hypertension and Renal Center is to increase awareness of high blood pressure and renal disease among the public. A part of this initiative is participating in health fairs and screenings that serve different populations of the public. The Center staff was pleased to participate in the employee benefits fair here at Tulane on March 8th, conducting blood pressure measurements for staff. Members of Dr. Al Dreisbach’s research project, Melissa Parenti, RN, Brian Mahl, RN, and Arthur Hess, volunteered to conduct the measurements. Center administrative staffers, Jose Alcaine and Kathryn Henderson, manned a table providing materials on basic health information and resources under the banner of the Hypertension and Renal Center. Attendance at the benefits fair was strong and the volunteers were kept very busy conducting blood pressure measurements with a continuous line of people waiting. The fair was also attended by the Tulane School of Medicine Section of Cardiology and the Tulane University Hospital.

Tulane COBRE Receives Research Recognition Award from Health Sciences Center

Tulane’s Center of Biomedical Research Excellence in Hypertension and Renal Biology Principal Investigator was recognized at the Health Sciences Center Research Recognition Awards on January 25, 2005. Dr. L. Gabriel Navar was presented with an award from the Tulane University Health Sciences Center and Board of Governors for outstanding achievement and commitment to excellence in total competitive research funding for the year 2003-2004. This is the second time that the Center has been recognized by Tulane and the Board of Governors for our success in receiving competitive funding.
Recent Publications


Saifudeen Z, Dipp S, Fan H, and El-Dahr SS. Combinatorial control of the bradykinin B2 receptor promoter by p53, CREB, KLF-4 and CBP: Implications for terminal nephron differentiation. *Am J Physiol (Renal Physiol)*. In press. [This article was selected for an Editorial Focus, which will appear in the same issue of the journal].


(Continued on page 6)
Tulane Investigators Participate in International, National, and Regional Meetings

Southern Medical Association 98th Annual Scientific Assembly, New Orleans, Louisiana, November 2004
Whelton, PK. "Clinical outcomes in ALLHAT Antihypertensive Trial Participants with type2 diabetes, impaired fasting glucose, and normoglycemia"

Resuscitation Science Symposium - American Heart Association National Meeting - November, 2004

American Society of Hypertension, Gulf Central Regional Chapter Meeting New Orleans, Louisiana, January 2005
Hamm, LL. "Hypertension in Patients with Kidney Disease"
Whelton, PK. "Benefits of Lifestyle Intervention in Prevention and Treatment of Hypertension"
Award: Whelton, PK. Presidential Award, for outstanding contributions to the field of hypertension

Southern Regional Meeting of the American Federation for Medical Research - February 24-26, 2005
Arise KK and Pandey KN, Transcriptional repression of guanylyl cyclase/natriuretic peptide receptor-A gene by vasoactive hormone angiotensin II

Newsom RR, Appleton SD, Johnson FK, Johnson RA. Neural endogenous carbon monoxide lowers blood pressure via suppression of peripheral sympathetic neurons.

Opay, AL, JJ Mullins, and KD Mitchell. Blood pressure and renal functional responses to COX-1 and COX-2 inhibition in Cyp1a1-Ren2 rats with inducible malignant hypertension

Patterson, ME, CR Mouton, JJ Mullins, and KD Mitchell. Interactive effects of Neuronal NOS and COX-2 on renal hemodynamics in Cyp1a1-Ren2 transgenic rats with malignant hypertension

Awards:
Kiran K. Arise (graduate student) - SAFMR/SSCI Student Research Award winner - mentor Dr. Kailash Pandey
Keith E. Jackson, PhD - SAFMR/SSCI Trainee Research Award winner - research supported by NRSA Fellowship and COBRE grant
Robert R. Newsom III (T2 medical student)- SAFMR/SSCI Student Research Award winner - research supported by American Heart Association summer student fellows
Allison L. Opay (T3 medical student)- SAFMR/SSCI Student Research Award winner - mentor Dr. Kenneth D. Mitchell
Matthew E. Patterson (T2 medical student)- SAFMR/SSCI Student Research Award winner - mentor Dr. Kenneth D. Mitchell
Blake K. Stevenson (T2 medical student)- SAFMR/SSCI Student Research Award winner - research supported by COBRE grant
Frank C Cruz, M.D., Fellow, Section of Nephrology and Hypertension - SAFMR/SSCI Trainee Research Awards  "Treatment of Catheter-Associated Bacteremia in Patients Undergoing Hemodialysis.

Monica R Ianosi-Irimie, M.D., Ph.D., Section of Nephrology and Hypertension - SAFMR/SSCI Trainee Research Awards "Role of Nitric Oxide in the Pathogenesis of a Preecalmpsia-Like Syndrome in Rats.

Candice A Pridjian, Student - SAFMR/SSCI Student Research Awards "Altered Expression of Renal Na/KATPase in Hypertensive Pregnant Rats Treated with Metolazone." Dr Jules Puschett, mentor

Ivo Lukitsch, M.D., Fellow, Section of Nephrology and Hypertension - SSCI Nephrology Young Investigator Scholar Award Winner for "Growth Factor Stimulation of Migration of Human Renal Proximal Tubule Cells After Oxidant Stress"

American Society of Clinical Pharmacology and Therapeutics annual meeting, March 2-5, 2005 in Orlando, Florida

Dreisbach, A. “Prevalence of CYP2C8, 2C9, 2J2, and Soluble Epoxide Hydrolase Polymorphisms in African-Americans with Hypertension”

Dreisbach, A. “Prevalence of CYP2C9, 2J2, and Soluble Epoxide Hydrolase Polymorphisms in African-Americans on Hemodialysis”

Seventeenth Annual Tulane Research Days - March 9-10, 2005

Johnson FK. Heme oxygenase-1-mediated endothelial dysfunction during hypertension - The “Tulane University Health Sciences Center Auxiliary Endowment for Excellence in Research Award” Lecture

Arise K and Pandey KN. “Transcriptional repression of guanylyl cyclase/natriuretic peptide receptor-A gene by vasoactive hormone expression”

Bellew C and El-Dahr SS. “Spatiotemporal expression of histone deacetylases during murine organogenesis and kidney development”

Feng M-G and Navar LG. Nitric oxide synthase inhibition recruits Ltype Ca2+ channels in postglomerular arterioles”

Fuller AJ, Hauschild BC, Awayda M, Gonzalez-Villalobos R, Imig JD, Inscho EW, and Navar LG. “Early activation of calcium and chloride channel activation by angiotensin II (ANG-II)-AT1 receptors in preglomerular vascular smooth muscle cells”

Galassi A, Reynolds K and He J. “Metabolic syndrome and cardiovascular disease: a meta-analysis of observational studies”

Gonzalez-Villalobos R, Klassen RB, Allen PL, Johanson K, Navar LG, and Hammond TG. “Interaction between megalin and angiotensin peptides”

Graciano ML, Mouton C, Patterson ME, Mullins JJ and Mitchell KD. “Renal vascular and tubulointerstitial inflammation and proliferation in CYP1A1-REN2 transgenic rats with malignant hypertension”

Green T, Rodriguez J, and Navar LG. “Renal hemodynamic responses to cyclooxygenase-2 inhibition in rats during acute and chronic ace inhibition”

Haque MZ, Castillo A, and Majid DSA. “Attenuated renal vasoconstrictor response to NO blockade in GP91phox knockout mice”

Hyre AD, Muntner P, DeSalvo K, Whelton PK, and He J. “Factors associated with hypertension awareness in the US adult population”

Kawasaki L, Muntner P, Hampton K, Sanne S, and DeSalvo K. “Group visits-if you build it, who will
Presentations continued


Licea H, Harrison-Bernard LM, Oliverio MI, Coffman TM and Navar LG. “Hypotension persists in mature AT1A receptor deficient mice”

Patterson ME, Mouton CR, Mullins JJ, and Mitchell KD. “Interactive effects of neuronal NOS and COX-2 on renal hemodynamics in CYP1A1-REN2 transgenic rats with malignant hypertension”

Prieto-Carrasquero M, Botros F, Cabrera MA, Rauv ML and Navar LG. “Collecting duct renin expression in goldblatt hypertensive rats”

Saifudeen Z, Stefkova J, and El-Sahr SS. “P53 regulates multiple steps of renal development”

Shen B and El-Dahr SS. “The Bradykinin B2 receptor (B2R) in an angiotensin II (ANG-II)-regulated gene in renal collecting duct cells”


Vellaichamy E and Pandey KN. “Enhanced expression and activation of matrix metalloproteinases accompanied with cardiac hypertrophy and fibrosis in mice lacking guanylcyclase/natriuretic peptide receptor –A role of CGMP signaling”

Awards:
Fruzsina K. Johnson, MD - Tulane University Health Sciences Center Auxiliary Endowment for Excellence in Research Award
Miguel Graciano, PhD—Senior Vice-President for Health Sciences Award for Excellence in Research and Presentation by a Postdoctoral Fellow
Torrance Green—Basic Sciences Research Award in Integrated Biology by a Graduate Student
Matthew A. Patterson—Dean of School of Medicine Award for Excellence in Research and Presentation by a Medical Student

Invited Speakers:
PK Whelton, Tulane University Health Sciences Center, “170 years as a community resource”, January 2005
PK Whelton, New Orleans Rotary Club, “Tulane University Health Sciences Center: An economic engine for the community”, January 2005

Publications continued


Conferences are held every other Thursday at 4:00 pm in the Medical School Building room 4700.
Other happenings

**Dr. L. Lee Hamm** appeared on the WTIX 690 Radio show “Health Connections” with Susan Bernecker to discuss hypertension in December.

**Dr. Samir El-Dahr** has been appointed Chief of the Section of Pediatric Nephrology. He has also joined the editorial boards of two major renal journals: the *American Journal of Physiology (Renal)* and *Pediatric Nephrology*.

**Dr. L. Lee Hamm** will begin his duties as the Interim Chair of Medicine on July 1, 2005 when outgoing chair, **Dr. Jules Puschett** assumes his responsibilities as the Associate Dean developing Tulane on the North Shore. **Dr. Vecihi Batuman** will serve as the Interim Chief of the Nephrology and Hypertension Section during Dr. Hamm’s tenure as Interim Chair of Medicine. Also, **Dr. Eric Simon** will be Program Director of the Nephrology and Hypertension Fellowship Program.

**Dr. Al Driesbach** received the Paul Teschan Research Grant from Dialysis Clinic Inc. entitled "The Effect of Genetic Polymorphisms in Epoxygenase Pathway on Salt Loading in Salt-Sensitive and Salt-Resistant Hypertension" for $50,000/yr for two years starting in March 2005.

**Dr. L. Gabriel Navar** has been appointed to the Administrative Board of the Council of Academic Societies, a part of the Association of American Medical Colleges.

**Ms. Bing Shen** received the Endocrinology and Metabolism Section Research Recognition Award of the American Physiological Society for her abstract “Bradykinin B2 Receptor (B2) is an angiotensin II (ANG II)-responsive gene in renal collecting duct cells.” The award will be presented at the Endocrinology and Metabolism business meeting and awards reception April 3rd in San Diego, CA.

We would like to thank **Takeda** for their continuing support.

The directors invite faculty members interested in participating in the activities of the T.H.R.C.E. to submit your name, phone number, fax number, and e-mail address to the Program Coordinator by e-mail at khender@tulane.edu or regular mail to the address provided. Also, please forward all information (awards, publications, presentations) to this email address for inclusion in the next newsletter.