



The University of Iowa
Roy J. and Lucille A. Carver
College of Medicine

CARDIOVASCULAR RESEARCH CENTER

NEWSLETTER

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HONORS AND AWARDS



Francois M. Abboud, M.D. (*Internal Medicine*) was the 2006 recipient of the Award for Distinguished Research in the Biomedical Sciences from the Association of American Medical Colleges (AAMC) at the AAMC Annual Meeting in Seattle, WA on October 28, 2006.

Dianne L. Atkins, M.D., (*Pediatric Cardiology*) accepted the 2006 Distinguished Achievement Award from the Council on Cardiovascular Disease in the Young during the American Heart Association's Scientific Sessions held November 12-15, 2006 in Chicago, IL.

Kevin P. Campbell, Ph.D. (*Molecular Physiology & Biophysics*) was the designated 2007 University of Iowa Presidential Lecture honoree, giving a presentation titled "Molecular Basis of Muscular Dystrophy and Approaches to Therapy" on February 25, 2007.

Beverly I. Davidson, Ph.D. (*Internal Medicine*) was one of four University of Iowa faculty members awarded the distinction of 2006 Fellow of the American Association for the Advancement of Science (AAAS) in November 2006.

Allyn L. Mark, M.D. (*Internal Medicine*) is recipient of the Carver College of Medicine's Distinguished Achievement Award for 2007.

William Stanford, M.D. (*Radiology*) was recently awarded the North American Society of Cardiac Imaging (NASCI) Gold Medal for his outstanding contributions in the field of cardiac imaging at the Society's annual meeting in Las Vegas, NV. Dr. Stanford was recognized for his research in Electron Beam CT and Helical CT imaging of coronary artery disease and especially coronary artery calcification.



Dr. Stanford (right) receives NASCI Gold Medal.

Joel N. Gordon, M.D. (*Internal Medicine*) has been named the Sahai Family Professor of Medical Education, a renewable appointment that lasts three years.

Kevin C. Kregel, Ph.D. (*Integrative Physiology*) was appointed as a regular member of the NIH Aging Systems and Geriatrics Study Section.

James B. Martins, M.D. (*Internal Medicine*) is the new director of the University of Iowa Arrhythmia Service, replacing **Brian Olshansky, M.D.** (*Internal Medicine*) who will continue to participate in the arrhythmia service, but will be able to devote more time to writing and research.

Paul B. McCray, Jr., M.D. (*Pediatrics*) was named Roy J. Carver Chair in Pulmonary Research.

Jeffrey C. Murray, M.D. (*Pediatrics*) was named Roy J. Carver Chair in Perinatal Health.

Arthur A. Spector, M.D. (*Biochemistry*) was 1) named Chair, NIH CSR Special Emphasis Panel in Vascular Biology, Washington, DC, February 27, 2007; 2) named Member, Organizing Committee, 9th Winter Eicosanoid Conference, Baltimore, MD, March 11-14, 2007; 3) was re-appointed to Scientific Advisory Board, Arête Therapeutics, Hayward, CA.

Rama K. Mallampalli, M.D. (*Internal Medicine*) was appointed to NIH Lung Injury, Repair, and Remodeling Study Section for the term, July 2007 through June 2011.

APPOINTMENTS

Zuhair K. Ballas, M.D. (*Internal Medicine*) was elected to the Board of Directors of the American Academy of Allergy, Asthma and Immunology for a 4-year term.

Gail A. Bishop, Ph.D. (*Microbiology*) was appointed to the NIH TTT (Tumors, Tolerance, and Transplantation) Study Section for 2007-2010.

Gerald F. DiBona, M.D. (*Internal Medicine*) was recently appointed Member, Task Force on Meetings, American Physiological Society.

John F. Engelhardt, Ph.D. (*Anatomy and Cell Biology*) was recently named Head of Anatomy and Cell Biology.

Francois M. Abboud, M.D.
Director

Donald D. Heistad, M.D.
Deputy Director

Allyn L. Mark, M.D.
Assistant Director

Lori F. Bassler
Administrator

Dianna L. Penny
Newsletter Editor

616 Medical Research Center
Iowa City, Iowa 52242-1182

Gary M. Hunninghake, M.D. (*Internal Medicine*) was recently named Associate Dean in the Carver College of Medicine, as the college's Senior Associate Dean for Clinical and Translational Sciences.

Thomas D. Scholz, M.D. (*Pediatrics*) was appointed to the Children's Miracle Network Professorship of Pediatric Cardiology.

Curt D. Sigmund, Ph.D. (*Internal Medicine*) 1) completed a 6-year term as Associate Editor of *Physiological Genomics* on March 1, 2007 and 2) was named Chair, Task Force on Meetings, American Physiology Society.

SPECIAL PRESENTATIONS AND SEMINARS



Kevin P. Campbell, Ph.D. (*Molecular Physiology & Biophysics*) was the featured speaker in the following recent presentations:

- "Maintenance of Muscle Cell Membrane Integrity," HHMI Science Meeting, Janelia Farm Research Campus, Ashburn, VA, October 23, 2006.
- "Maintenance of Muscle Cell Membrane Integrity," UT Southwestern Grand Rounds, UT Southwestern, Dallas, TX, November 10, 2006.
- "Maintenance of Cell Membrane Integrity and the Pathogenesis of Muscular Dystrophy," Neuromuscular Plasticity Symposium, University of Florida, Gainesville, FL, December 1, 2006.
- "Maintenance of Muscle Cell Membrane Integrity," Keystone Symposium: Molecular Pathways in Cardiac Development and Dis-

ease, Breckenridge, CO, January 26, 2007.

- "Maintenance of Cell Membrane Integrity and the Pathogenesis of Muscular Dystrophy," Neurosciences Seminar Series, Stanford University, Stanford, CA, February 8, 2007.

Mark W. Chappleau, Ph.D. (*Internal Medicine*), as an Invited Speaker, gave a talk at the International Conference on Cardiopulmonary Regulation in Health and Disease at the University of Delhi, Delhi, India, February 22-24, 2007. The title of his presentation was "ROS Signaling in Baroreceptors and Sympathetic Ganglia: From Disease to Ion Channel."

Gerald F. DiBona, M.D. (*Internal Medicine*) was Invited Speaker with a presentation titled "Pathophysiology of Acute Renal Failure," Postgraduate Educational Conference, "Acute Nephrology in the Intensive Care Unit," Department of Anesthesiology and Intensive Care, Karolinska Institute and Hospitals, Stockholm, Sweden, February 5-6, 2007.

Dr. DiBona is also set to give a talk as Invited Speaker at the International Society of Nephrology Nexus Symposium: Hypertension and the Kidney, November 29-December 2, 2007 in Vienna, Austria.

Steven H. Green, Ph.D. (*Biological Sciences*) participated in The 7th International Academic Conference of Immunobiology in Otorhinolaryngology: Bionics and Regenerations of the Ear, Melbourne, Australia, November 12-14, 2006, as follows:

- Session Chair, Plenary Session – Protection of the Ear in Surgery, Cochlear Implantation and Medical Disease – II.
- Speaker, in a presentation titled "Connecting the Auditory Nerve to its Targets *In Vitro*: Regeneration of the Peripheral Process."

Allyn L. Mark, M.D. (*Internal Medicine*) gave the following recent seminar presentations:

- "The Obesity Epidemic: Challenges to Prevailing Stereotypes about the

Causes and Treatment of Obesity," Department of Medicine Grand Rounds, New Jersey Medical School, UMDNJ, Newark, NJ, February 6, 2007.

- "Autonomic and Cardiovascular Actions of Leptin and the Concept of Selective Leptin Resistance: Implications for Obesity Induced Hypertension," Department of Cell Biology and Molecular Medicine, New Jersey Medical School, UMDNJ, Newark, NJ, February 6, 2007.
- "The Obesity Epidemic: Genes and Environment," Clinical Hypertension Review Course, American Society of Hypertension, Las Vegas, NV, February 23, 2007.
- "The Bezold Jarisch Reflex Revisited: Clinical Implications of Reflexes Originating in the Heart," Cardiology Grand Rounds, Albert Einstein College of Medicine, Bronx, NY, February 26, 2007.
- "Autonomic and Cardiovascular Actions of leptin and the Concept of Selective Leptin Resistance: Implications for Obesity Induced Hypertension and the Cardiovascular Consequences of Obesity," Cardiology Research Seminar, Albert Einstein College of Medicine, Bronx, NY, February 26, 2007.
- On May 7, 2007, Dr. Mark will give a presentation titled "Dietary Therapy of Obesity: An Emperor with No Clothes" at the Plenary Session, XVII Inter-American Society of Hypertension Scientific Sessions in Miami, FL.

Curt D. Sigmund, Ph.D. (*Internal Medicine*) was an Invited Speaker at Yale University, Department of Molecular and Cellular Physiology, January 2007.

Arthur A. Spector, M.D. (*Biochemistry*) gave a talk titled "EETs – Function and Mechanism of Action" at the Medical College of Georgia, Department of Physiology, Augusta, GA, February 1, 2007.

NOTABLE PUBLICATIONS



Grueter CE, Abiria SA, Dzhura I, Wu Y, Ham, A-JL, Mohler PJ, **Anderson ME**, and Colbran RJ. L-type Ca^{2+} channel facilitation mediated by phosphorylation of the β subunit by CaMKII. *Molecular Cell* 23:1-10, 2006.

Sakai K, Agassandian K, Morimoto S, Sinnayah P, Cassell MD, Davisson RL, and **Sigmund CD**. Local production of angiotensin-II in the subfornical organ causes elevated drinking. *J Clin Invest* (in press) 2007.

NEWS RELATING TO PROJECTS



The University of Iowa Hospitals and Clinics is one of the first medical centers in the U.S. participating in a novel clinical trial investigating whether or not a patient's own stem cells can treat a form of severe coronary artery disease.

Mark E. Anderson, M.D., Ph.D. (*Internal Medicine*) and colleagues from both the Division of Cardiology and the Department of Pathology are collaborating to enroll participants in the Autologous Cellular Therapy CD34-Chronic Myocardial Ischemia (ACT34-CMI) Trial. ACT34-CMI is the first human Phase II adult stem cell therapy study in the United States designed to investigate the efficacy, tolerability and safety of blood-derived, selected CD34+ stem cells to improve symptoms and clinical outcomes in subjects with chronic myocardial ischemia (CMI), a severe form of coronary artery disease.

ACT34-CMI is a prospective, randomized, double-blind, placebo-controlled study that involves adult subjects with severe coronary artery disease who are currently on maximal medical therapy and are not suitable candidates for conventional procedures to improve blood flow to the heart, such as angioplasty, stents or coronary artery bypass surgery.

University of Iowa News
October 13, 2006



A research team, led by **Beverly L. Davidson, Ph.D.** (*Internal Medicine*) have made a discovery that broadens understanding of a rapidly developing area of biology known as functional genomics and sheds more light on the mysterious, so-called "junk DNA" that makes up the majority of the human genome.

This team has discovered a new mechanism for the expression of microRNAs – short segments of RNA that do not give rise to a protein, but do play a role in regulating protein production. In this study, Dr. Davidson and colleagues not only discovered that microRNAs could be expressed in a different way than previously known, they also found that some of the junk DNA is not junk at all, but instead consists of sequences that can generate microRNAs.

The study is published in *Nature Structural and Molecular Biology Advanced Online Publication (AOP)* on November 12, 2006.

University of Iowa News
November 13, 2006



A study led by **Andrew F. Russo, Ph.D.** (*Molecular Physiology and Biophysics*) may provides an explanation for why some people get migraine headaches while others do not. Dr. Russo's research team found that too much of a small protein called RAMP1 appears to "turn up the volume" of a nerve cell receptor's response to a Neuropeptide thought to cause migraines.

The Neuropeptide is called CGRP (calcitonin gene-related peptide) and studies have shown that it plays a key role in migraine headaches. In particular, CGRP levels are elevated in the blood during a migraine attack, and drugs that either reduce the levels of CGRP or block its action significantly reduce the pain of migraine headaches.

These study findings are published in the March 7 2007 issue of the *Journal of Neuroscience*.

University of Iowa News
March 8, 2007



RESEARCH GRANTS



Gail A. Bishop, Ph.D. (*Microbiology*) was awarded competitive renewal funding of an NIH R01 grant (Years 15-20) from the NIAID for the period, March 2007 through February 2012. The title of her grant is "Roles of TRAF3 in Lymphocyte Activation."

Gerald F. DiBona, M.D. (*Internal Medicine*) is recipient of the following recent awards:

- Research Grant, The Royal Society of Arts and Sciences in Göteborg, Göteborg, Sweden, December 1, 2006-April 30, 2007, in the amount of \$35,000
- Research Grant, Karolinska Institute, Stockholm, Sweden, December 1, 2006-April 30, 2007, in the amount of \$20,000.

Madhavan L. Raghavan, Ph.D. (*Biomedical Engineering*) was awarded \$221,250 by NIH for the period, January 2007 – December 2008 for the study of design variables of the endovascular graft.

Curt D. Sigmund, Ph.D. (*Internal Medicine*) has been granted competitive renewal of his Program Project Grant titled "Genetic and Signaling Mechanisms in the Central Regulation of Blood Pressure," which will be funded by NIH this spring.

Also Dr. Sigmund has received a five-year, \$1.8 million MERIT Award from NHLBI to continue investigating renin, an enzyme that contributes to hypertension.

Robert J. Tomanek, Ph.D. (*Anatomy and Cell Biology*) was recently awarded \$97,153 by the Institut de Recherches Int. Servier in support of work titled "Effects of Ivabradine on Angiogenesis and Function of Ischemic Myocardium."

Mark A. Yorek, Ph.D. (*Internal Medicine*) has been granted renewal funding of his VA Merit Review grant titled "Pathology of Type 2 Diabetes."

OTHER NEWS



➤ **Gail A. Bishop, Ph.D.** (*Microbiology*) met with the Director of NIH Center for Scientific Review, Dr. Toni Scarpa, in January 2007 as Head of a subcommittee of the FASEB Science Policy Committee on changes in NIH grant review.

➤ **Jean E. Robillard, M.D.** (*Dean, Carver College of Medicine*) was named UI Vice President for Medical Affairs for a three-year term, during which he will remain Dean of the Carver College of Medicine.

➤ Effective January 1, 2007, **Janet Fairley, M.D.** was named Head of the Department of Dermatology.

➤ The Department of Physiology and Biophysics was recently renamed Molecular Physiology and Biophysics.



➤ Listed alphabetically by specialty, the 'Best Doctors in America' for 2006 include the following from the University of Iowa Cardiovascular Center:

Allergy/Immunology:

Zuhair K. Ballas, M.D. (*Internal Medicine*)

Cardiovascular Disease:

Richard E. Kerber, M.D. (*Internal Medicine*)

James B. Martins, M.D. (*Internal Medicine*)

Brian Olshansky, M.D. (*Internal Medicine*)

James D. Rossen, M.D. (*Internal Medicine*)

Infectious Disease:

William M. Nauseef, M.D. (*Internal Medicine*)

Nephrology:

Christie P. Thomas, M.D. (*Internal Medicine*)

Neurology:

Harold P. Adams, Jr., M.D. (*Neurology*)

Mark E. Dyken, M.D. (*Neurology*)

William T. Talman, M.D. (*Neurology*)

Pediatric Specialist:

Richard C. Ahrens, M.D. (*Pediatrics*)

Michael Artman, M.D. (*Pediatrics*)

Dianne L. Atkins, M.D. (*Pediatric Cardiology*)

Larry T. Mahoney, M.D. (*Pediatric Cardiology*)

Jeffrey Segar, M.D. (*Pediatrics*)

Miles M. Weinberger, M.D. (*Pediatrics*)

Pulmonary & Critical Care Medicine:

Gary W. Hunninghake, M.D. (*Internal Medicine*)

Thoracic Surgery:

Wayne E. Richenbacher, M.D. (*Surgery*)

➤ UI Provost Michael J. Hogan announced that Jordan L. Cohen, Dean of the UI College of Pharmacy, will retire from the University effective August 1, 2007.



FELLOWS / STUDENTS

Rasna Sabharwal, Ph.D. (*Internal Medicine*), Postdoctoral Research Fellow, received the following awards associated with the 2007 Experimental Biology Meeting to be held in Washington, DC, April 28-May 2, 2007:

- Liaison with Industry Postdoctoral Novel Disease Model Award
- Carolyn tum Suden/Francis A. Hellebrandt Professional Opportunity Award.

