Introduction

By W. Robert Taylor, MD, PhD

In this issue of the Cardiology Divisional Newsletter, we are going to focus on our educational mission. This is particularly appropriate giving the occurrence of “Switch Day” on July 1st at which time we welcomed 15 new fellows into our Clinical Cardiology Training program. We are also approaching an ACGME site visit. This event is a critical part of our re-accreditation process for the fellowship program and is the culmination of almost a year of work on the part of Dr. Zafari and the fellowship office. All three of our training programs (General Cardiology, Clinical Electrophysiology and Interventional Cardiology) are involved in this process.

It is also important for us all to realize that our educational program in Cardiology is not limited to the training of clinical cardiology fellows. In addition to the two defined research tracks for clinician scientists within our fellowship program, the cardiology division is the home for over 30 post doctoral fellows and 15 graduate students. Post doctoral fellows with either an MD or PhD background receive training at numerous clinical sites or in the basic science laboratories of the division. In addition, Cardiology is home to graduate students from the Molecular Systems Pharmacology program at Emory, the Nutrition program at Emory, the Biochemistry, Cell and Developmental Biology program at Emory, the Emory Georgia Tech Joint program in Biomedical Engineering, graduate programs in the Rollins School of Public Health as well as the Georgia Tech based program in Bioengineering. The net result is that this very unique group of graduate students and post doctoral trainees contribute in a very important way to the interdisciplinary research program within the division.

In terms of clinical training, our division has the largest clinical cardiology training program in the United States today with 64 ACGME certified positions. We offer a total of 31 clinical cardiology rotations at our four affiliated hospitals. In addition, we provide a significant amount of attending physician supervision of Internal Medicine residents throughout the system. In terms of medical school education, faculty members serve in a variety of roles from providing lectures, directing courses, supervising clinical rotations and well as participating in the new Medical School Societies. Our involvement in education clearly runs the gamut of experiences and involves trainees at all levels. It is indeed a very critical part of our mission at Emory.

In this newsletter, we have highlighted several of our current trainees. The purpose of this is two-fold: first, to provide examples of the spectrum of training provided by the division. Secondly, and perhaps more importantly, these brief vignettes highlight a few of the achievements of some of these very extraordinary trainees.

Education remains a critical component of our academic mission. Please join me in welcoming our incoming class our Cardiology fellows and celebrating the accomplishments of all of our pre-doctoral, doctoral and postgraduate trainees.

Atlanta Magazine - Emory Cardiologists recognized

Atlanta Magazine recently recognized 5 Emory cardiologists on its “Top Doctors” list in 2009. Drs. Javed Butler, Christopher Cates, David DeLurgio, John Douglas, Douglas Morris and Laurence Sperling were recognized in a list of city’s “Top Doctors” in its July 2009 issue. For more details please go to:
Selected Recent Fellow/Trainee Awards

**American Heart Association Grant Recipients**

**Post-Doctoral:**
- Angelica Amanso, PhD: Molecular Regulation of Nox4 Expression
- Neal Dickert, MD, PhD: Ethical Issues in Resuscitation Research Examining Community Views and the Process of Community Consultation
- Maria Gongora, MD: Role of renal medullary superoxide in hypertension
- Hyongbum Kim, MD, PhD: Therapeutic mechanisms and identification of novel angio-vasculogenic cells
- Riyaz Patel, MD: Genomics, Coronary Artery Disease and Vascular Function

**Pre-Doctoral:**
- David Brown: Nox4-derived H2O2 is necessary for KLF4 regulation of smooth muscle cell differentiation markers
- Li Li: Mechanisms of Endothelial GTP Cyclohydrolase I Regulation

**National Blood Foundation Grant Recipient**
- Ayaz Rahman, MD: The effects of fresh versus older RBC transfusions in subjects with cardiovascular disease

**American College of Cardiology Foundation Grant Recipient**
- Yolanda Hendley, MD: ACCF/Merck Research Fellowship in Cardiovascular Disease and Cardiometabolic Disorders

**Fellowship Site Visit** On Wednesday, August 12, from 7:30 am to 1:00 pm, the Accreditation Council for Graduate Medical Education (ACGME), in collaboration with the Residency Review Committee (RRC), will perform its scheduled site visit of Emory’s Cardiovascular Disease Training Program. Dr. Laurence M. Russell will meet with the division director, the program director, the program coordinators, 6 key clinical faculty members (Drs. Joel Felner, Douglas Morris, Andro Kacharava, Charlie Searles, Dan Sorescu and Larry Sterling) and 15 peer-selected cardiovascular disease trainees (1st years: Drs. Tenecia Deans, Ben Mackie, Farheen Shirazi, James Stewart and Rob Morlend; 2nd years: Drs. Rob Cole, Chas Jackson, Ryan Jordan, Andy Kobylivker and Samir Satija; 3rd years: Drs. Ambar Bajpai, Matt Janik, Don Rowe, Heather Westmoreland and Alex Llanos). Dr. Russell is a board-certified family physician with 29 years of experience as a family physician, residency educator and medical administrator who joined the Accreditation Field Staff of the ACGME in April 2005 and has conducted more than 200 site visits. The Emory GME Office scheduled a mock site visit of our training program on Friday July 17, 2009, with Dr. Donald Lacey, a former ACGME Field Staff member. Our training program has been preparing for these site visits for a long time and we look forward to a successful review and outcome.

Welcome to our New Clinical Fellows - July 2009

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<td>Lovelock, Josh</td>
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New Cardiology Fellows - July 2010

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<td>Alan Cheng</td>
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<td>Ahmad Jeroudi</td>
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<td>Mihir Kanitkar</td>
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<td>Luis Mora</td>
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<td>Jonathan Patton</td>
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<td>Mazen Khalil</td>
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FACULTY AWARDS

Department of Medicine Faculty Awards Presented at June Grand Rounds

The “Outstanding Research Citation-Clinical Award” was presented to Paolo Raggi, MD for his paper “Coronary artery calcium to predict all-cause mortality in elderly men and women”


The “Golden Apple Teaching Award” was presented to Laurence Sperling, MD, to recognize his teaching contributions at Emory University Hospital.

Division of Cardiology Faculty Teaching Awards 2009 - As recognized by Cardiology fellows

Congratulations to the faculty receiving teaching awards in 2009 for their efforts and excellence in teaching our clinical fellows.

-J. Willis Hurst Teaching Award for Excellence in Teaching in Cardiology:
Andro Kacharava, MD, PhD

-Atlanta VA Medical Center: Heather Bloom, MD - Grady Memorial Hospital: Nanette Wenger, MD

-Emory University Hospital - Midtown: Dan Sorescu, MD - Emory University Hospital: Allen Dollar, MD

Welcome to our New Faculty

New Faculty Reception to be held in August 2009 (Date TBA)

We are excited to welcome several new faculty members to the division this summer. We will introduce the new faculty below at an upcoming reception. All faculty are encouraged to attend, details to follow.

Assistant Professors
Meenakshi Bhalla, MD – to be based primarily at Heart and Vascular Center at Cartersville

Michael McDaniel, MD – to be based primarily at Heart and Vascular Center at Eastside/Rockdale and Grady Memorial Hospital

Faisal Merchant, MD – to be based primarily at Heart and Vascular Center at Eastside and Rockdale

Modele Ogunniyi, MD, MPH – to be based primarily at Grady Memorial Hospital

Alejandra San Martin, PhD – Basic science research faculty--Woodruff Memorial Research Bldg

David Vadnais, MD – to be based primarily at Emory University Hospital Midtown

Instructors
Maan Jokhadar, MD – to be based primarily at Emory University Hospital

Zaur Mirzoyev, MD – to be based primarily at Emory University Hospital

Shaoyong Su, PhD – Genetic cardiovascular epidemiology research faculty – EPICORE
The Right Recipe - Michael Davis, PhD

Research Published in Nature Materials Oct/Nov 2008 and Featured in Emory Medicine 2009

A new micro-particle-drug combination may be key to reducing inflammation caused by heart attack and other diseases. Researchers believe that a number of anti-inflammatory drugs, if delivered directly into the heart following heart attack, could prevent permanent damage and prolong heart function. The challenge, however, is finding an effective way to deliver the drugs. Some drugs require such large doses that toxicity becomes a risk. Others must be injected daily. Certain drug delivery methods themselves can cause inflammation.

An Emory research team believes it has found the right recipe of ingredients to one day make safe, effective drug-laden micro-particles for heart attack patients.

The team, led by biomedical engineer Michael E. Davis, PhD, found that injecting animal hearts with micro-particles formulated with the polymer PCADK—poly(cyclohexane-1,4-diyacetone dimethylene ketone)—improved cardiac function after simulated heart attack. Unlike other “carrier” molecules, PCADK degrades into two benign substances: 1,4-cyclohexanedimethanol, an FDA-approved food additive, and acetone, an endogenous compound.

For the rest of the story go to:
http://whsc.emory.edu/home/publications/medicine/emory-medicine/summer2009/right-recipe.html
In Appreciation - Dr. Kacharava
Dr. Andro Kacharava has been a teaching faculty in the Cardiology Division at Emory since March 2002, supervising fellows on CCU and Consultation services, initially at Grady Memorial Hospital and subsequently at the Atlanta VAMC. Dr. Kacharava also supervises fellows in the cardiac catheterization and echocardiography laboratories. He has received the Atlanta VAMC teaching award for five consecutive years from 2003-2007 and the J. Willis Hurst Award for Excellence in Teaching this past year. Furthermore, he has compiled a pocket book for teaching clinical echocardiography to cardiology fellows which is annually updated since 2005. He has written several case reports and reviews with cardiology fellows on different subjects in peer-reviewed journals. Finally, Dr. Kacharava is a regular lecturer at the weekly core curriculum conference and organizes a monthly online cardiovascular literature update on Blackboard for our cardiovascular training program.

Dr. Sorescu’s trip to China
Dan Sorescu, MD shared his heart failure expertise with cardiologists, residents and staff at Shanghai First People’s Hospital of Jiao Tong University during a month-long trip to Shanghai, China in June. Throughout this visit, he conducted two-hour lectures on heart failure, echocardiography and general cardiology each day, and offered bedside teaching during in-patient and out-patient rounds. He was also a guest lecturer during a two-day Heart Failure Forum at the 2009 Oriental Congress of Cardiology (OCC). His topic was entitled “Cardiorenal syndrome in acutely decompensated heart failure.” “The entire trip was a great opportunity to help fellow colleagues in China to advance their understanding and treatment of heart failure,” says Dr. Sorescu.

Dr. Khan named Fulbright Scholar
Bobby V. Khan, MD, PhD has been named a Fulbright Scholar. The Fulbright Program is the flagship international educational exchange program sponsored by the U.S. government and is designed to “increase mutual understanding between the people of the United States and the people of other countries.” In his role as a Fulbright Scholar, Dr. Khan will serve as a Visiting Professor at the University of Prince Edward Island in Canada, during the 2009-2010 academic year. His research and teaching will address global health and preventive forms of medicine, specifically those related to cardiovascular health.
Faculty Development Events and Reminders

Career Conference Reports Due August 28, 2009
For information on the Department of Medicine policy concerning annual review requirements, visit http://medicine.emory.edu/faculty_staff/faculty/index.cfm. If you are due for review, you will be contacted by Dr. Bob Taylor’s assistant, Melanie Elder, who will schedule an appointment. Entire Part I must be completed prior to your review. Please remember that this is required by the Dean’s Office.

Faculty Research Day
November 5, 2009
8 am at Woodruff Health Sciences Center Administration Building (WHSCAB). This event will highlight the research of our early career faculty members and provide opportunities for networking and collaboration. Keynote speaker is Joseph Loscalzo, MD, PhD, Hersey Professor of Theory and Practice of Medicine at Harvard Medical School, Chairman of the Department of Medicine and Physician-in-Chief at Brigham and Women’s Hospital. He is currently editor-in-chief of Circulation, a senior editor of Harrison’s Principles of Internal Medicine, a member of the Advisory Council of the National Heart, Lung and Blood Institute, and a member of the Council of Councils of the National Institutes of Health.

Project SEED
Staff Awards and Recognition Celebration
Thursday, August 13, at 3 pm in the Cox Hall ballroom. RSVP to domsdev@emory.edu by July 31. All Department of Medicine staff are urged to attend. Refreshments will be served.

Cardiothoracic Surgery Research Seminar Series
August 27, 2009
Eric Olson, PhD, will present “MicroRNA Control of Cardiovascular Development and Disease.” Dr. Olson is the Robert A. Welch Distinguished Chair in Science, Annie and Willie Nelson Professorship in Stem Cell Research, Pogue Distinguished Chair in Research on Cardiac Birth Defects and Chairman, Department of Molecular Biology, UT Southwestern Medical Center, Dallas, TX. More details will be sent by email.

Emory HeartWise Risk Reduction Program
July/August 2009
Free Lecture Series
Located in the 5th floor Conference Room of The Emory Clinic at 1525 Clifton Rd. map Parking validated.
Call today to reserve your seat: 404-778-2850 or register online.

Cholesterol Medications
Presented by Cathy Johnson, RN
Tuesday, July 21, 8:45-9:15 am

Nutrition 101: Healthy Eating Made Easy
Presented by Cheryl Williams RD/LD
Tuesday, July 28, 8:45-9:15 am

Fats: The Good, the Bad, the Ugly
Presented by Cheryl Williams, RD/LD
Tuesday, August 4, 12:15 pm

Healthy Cooking Demo
Presented by Cheryl Williams RD/LD
Wednesday, August 19, 12:15 pm

Blood Pressure and Nutrition
Presented by Cheryl Williams RD/LD
Tuesday, August 25, 8:45 am
Volunteer physicians needed at the Open Door Clinic

For the past decade or more, sophomore medical students from Emory have coordinated a small weekly medical clinic serving the homeless of Atlanta. Each clinic session is presided over by an attending physician (most have been from Emory) assisted by the sophomore medical student coordinators and two rotating freshman medical student volunteers. We are currently running short of volunteer attending physicians and are asking if you would consider volunteering some time to help out.

The Harriet Tubman Clinic resides within the Open Door Community at 910 Ponce near the intersection of Freedom Parkway and Ponce. The clinic is open one evening weekly and typically a dozen or so patients are seen for very basic medical care. We have the ability to treat hypertension and minor episodic illnesses.

The clinic is open weekly on Wednesday evenings from 7-9 pm with a wonderful optional dinner with the staff and residents of the Open Door Community at 6pm. We would appreciate any level of commitment you are able to make—perhaps one night a quarter or every other month would be great. One night a month would be even better!

This is a wonderful opportunity to serve the neediest of Atlanta and support volunteerism amongst our medical students. If you are interested or would like more details, please contact Allen Dollar, MD at allen.dollar.emory.edu.

Reminders

-**Quarterly Faculty Meeting**: 6 pm Wed. July 29, 2009 in Hurst Conference Room, EUH 450, broadcast to Midtown
  
  Preliminary agenda includes:
  - Funds flow and finances in the Cardiology Division
  - New CMS rate changes
  - Enhancing development efforts in the Division

-**Fellowship accreditation site visit**: Wednesday August 12, 2009

Recent Grants

Congratulations to faculty and fellows who have published articles and received grants recently. We are proud to have such a productive group! Please let us know about new publications and grants by email at kbrill@emory.edu.

**David G. Harrison** - NIH Training Grant - Research Training in Academic Cardiology - NIH T32HL007745-16

**Young-sup Yoon** - Identification of bone marrow-derived lymphatic endothelial progenitor cells and its therapeutic application in lymphedema - Department of Defense Grant # W81XWH-09-1-0278

**Neal Dickert** - Patient’s Experiences in Emergency Research - Greenwall Foundation

**Khusrrow Niazi** - The Complete® SE SFA Study: The Medtronic Complete Self-Expanding SFA Stent System for the Treatment of Atherosclerotic Lesions in the Superficial Femoral and/or Proximal Popliteal Arteries - Medtronic Vascular

**Michele Voeltz** - Patient Related Outcomes With Endeavor Versus Cypher Stenting Trial: PROTECT Continued Access Post Marketing Surveillance Trial - Medtronic Vascular

**Newsletter Ideas?** Please email kbrill@emory.edu with any suggestions or feedback.
Recent Publications

1: Hydrogen Peroxide Down-Regulates Inositol 1,4,5-Trisphosphate Receptor Content Through Proteasome Activation.
Garrido AM, Boyano-Adánez MC, Alique M, Calleros L, Serrano I, Griera M, Rodriguez-Puyol D, Griendling KK, Rodríguez-Puyol M.

2: Poldip2, a Novel Regulator of Nox4 and Cytoskeletal Integrity in Vascular Smooth Muscle Cells.

3: Bone marrow mobilization with granulocyte macrophage colony-stimulating factor improves endothelial dysfunction and exercise capacity in patients with peripheral arterial disease.
Am Heart J. 2009 Jul;158(1):53-60.e1. PMID: 19540392

4: Pharmacotherapy of coronary atherosclerosis.
Finn AV, Kramer MC, Vorpahl M, Kolodgie FD, Virmani R.
Expert Opin Pharmacother. 2009 Jul;10(10):1587-603. PMID: 19527187

5: Risk factors for early pulmonary valve replacement after valve disruption in congenital pulmonary stenosis and tetralogy of Fallot.

6: A rare case of isolated right ventricular infarction.
Sawaya F, Morris D.

Oza-Frank R, Ali MK, Vaccarino V, Narayan KM.

8: SLC30A3 (ZnT3) oligomerization by dityrosine bonds regulates its subcellular localization and metal transport capacity.
Salazar G, Falcon-Perez JM, Harrison R, Faundez V.

9: Drug eluting or bare metal stent for acute myocardial infarction: an issue of safety?
Finn AV, Nakazawa G, Kolodgie F, Virmani R.

10: Emergency stenting of the left main coronary artery after diagnostic coronary angiography.
Khalid MR, Morris DC, Rab ST.

11: Rapid onset and resolution of cardiogenic shock in a patient with pheochromocytoma.

12: Bone Marrow Mononuclear Cells Have Neurovascular Tropism and Improve Diabetic Neuropathy.
Stem Cells. 2009 Apr 9;27(7):1686-1696. [Epub ahead of print] PMID: 19544451