



FYI: THE NEWSLETTER OF THE DAVIS HEART AND LUNG RESEARCH INSTITUTE AT OSU

August 2006

OSU Sleep-Heart Research Program Announced

The OSU Sleep-Heart Program is a multidisciplinary clinical and research program lead by Dr. William Abraham, Director of Cardiovascular Medicine. Active leadership in this program is also provided by Drs. Phil Binkley and Garrie Haas from Cardiovascular Medicine (CVM), and Rami Khayat from Pulmonary, Critical Care, Sleep, and Allergy Medicine (PCCSAM). The program spans the Ross Heart Hospital, the Sleep Disorders Center at University Hospital East, The OSU School of Public Health, and the Davis Heart and Lung Research Institute (DHLRI).

The research arm of the program will examine translational and clinical questions with focus on the relation between respiratory disorders of sleep and cardiovascular diseases.

Active research tracks (and the principal investigator) include:

- Sleep apnea and autonomic control in patients with heart failure (Phil Binkley, CVM)
- Effects of intermittent hypoxia on the heart (Tom Clanton, DHLRI)
- Clinical outcomes of treatment of sleep apnea and heart failure (David Jarjoura, OSU Center of Biostatistics)
- Vascular consequences of oxidative stress in Sleep Apnea (AJ Cardounel, DHLRI)
- Lipid metabolism in Sleep Apnea (Uly Magalang, PCCSAM)

The Sleep-Heart Program, with its multidisciplinary team, is positioned to investigate timely questions in the area of the cardiovascular consequences of sleep disorders. For more information about the OSU Sleep-Heart Research Program please contact Dr. Yousef Khan, Clinical Research Coordinator, at 614/247-7732.

Twist on Chest Pain Drug Improves Heart Attack Outcome

A new study in rat hearts suggests that combining antioxidants with a drug used to treat severe chest pain may help improve how a heart recovers from a heart attack.

The primary goal after a heart attack is to return blood flow to blocked arteries as quickly as possible. But that sudden blood flow, or reperfusion, could further damage the tissue surrounding those arteries. "This sudden rush of blood through vessels that are used to little or no blood flow creates a burst of cell-damaging free radicals," said Periannan Kuppusamy, study co-author.

Results showed that the rat hearts pre-treated with antioxidant-laced medications actually functioned better and had less tissue damage during reperfusion. "That's because antioxidants scavenge free radicals that flourish during reperfusion," Kuppusamy said.

The results appear in a recent issue of [*The Journal of Pharmacology and Experimental Therapeutics*](#). The study's lead author, Vijay Kutala, is a research scientist at the Institute. For the complete story, see the OSUMC press release at researchnews.osu.edu/archive/bloodflo.htm.

Differences Found in Approach to Asthma Treatment

New research shows that differences in diagnostic testing for asthma among pulmonologists and family physicians may lead to inaccurate or missed diagnoses.

The study in the *Journal of Asthma* suggests that pulmonologists are much more likely to order special testing than family physicians when exercise-induced asthma is suspected, according to Dr. Jonathan Parsons, a pulmonologist at Ohio State University Medical Center and lead author of the study.

The findings, drawn from a survey of 500 physicians, concluded that family physicians are much less likely to use objective methods for diagnosing exercise-induced asthma (EIA) than pulmonologists, which may be due to pulmonologists having more access to equipment needed for diagnostic testing. “This difference may lead to inaccurate or missed diagnoses and unnecessary morbidity,” says Parsons.

Along with Parsons, other Ohio State researchers involved in the study were James O’Brien, Maria Lucarelli and John Mastronarde. For the complete story, see the news article under the Research tab of [OneSource](#).

OSUMC Named ‘Best’ In Nine Specialties

OSUMC leads the region with nine specialties named as among the best in America in the latest U.S. News & World Report magazine. OSUMC is among only a handful of hospitals in the country ranked in multiple specialties.

This is the 14th consecutive year the magazine has named OSUMC one of “America’s Best Hospitals.”

In this year’s rankings, which appear in the magazine’s current (July 17) issue, Ohio State is recognized as a leader in cancer care, ear, nose & throat, endocrinology, gynecology, kidney disease, neurology & neurosurgery, orthopedics, respiratory disorders and rehabilitation.

The continual presence of Ohio State in the magazine’s annual survey validates the skill and hard work of staff members and the growing strength of the medical center and its mission to excel in clinical care, research and medical education

JCAHO Accreditation for Lung Volume Reduction Surgery

The Lung Volume Reduction Surgery (LVRS) program has been awarded a two-year certification of distinction by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO).

Faculty and staff of this program underwent an extensive on-site evaluation by a team of JCAHO staff. OSUMC is the first healthcare organization in the country to earn this recognition. The certification represents our organization's commitment to comply with the highest national standards for safety and quality of care.

Drs. Philip Diaz and Patrick Ross have been involved with the program since its inception in 1995. Two years later, OSUMC was one of 18 centers across the nation chosen to participate in clinical trials testing the effectiveness of the procedure

Heart Walk Aims to Lower Cardiovascular Death and Disability

The 2006 Heart Walk is set for Saturday, Aug. 26 at COSI/Genoa Park at 8 a.m. Sign up now and help the community with fundraising while having fun with family, friends and co-workers. The Heart Walk is the American Heart Association's largest community event in the Columbus area. OSU Medical Center supports the Heart Walk and the AHA's goal to reduce death and disability from cardiovascular disease and stroke by 25 percent by the year 2010. Last year, the AHA provided more than \$900,000 to research investigators at critical points in their careers.

To join the OSU Medical Center team for the Heart Walk, register online at <http://heartwalk.kintera.org/columbusoh>. Both the Institute and the Division of Cardiovascular Medicine are forming teams to participate in this event. All registered walkers will receive a team hat. By wearing your scarlet and gray on walk day, you also show your support of the AHA's goal and the Medical Center team.

August 20 – 26 Is Faculty and Staff Appreciation Week

August 20-26 is Faculty and Staff Appreciation Week, a time to recognize the outstanding efforts of our faculty and staff across the Medical Center. Becoming a top tier academic medical center is only possible through teamwork and collaboration, and this is a time to recognize and celebrate that teamwork. OSUMC has a unique mission to improve people's lives through innovation in research, education and patient care.

Visit OneSource for more information on activities planned for Faculty and Staff Appreciation Week. Thank you for all the contributions you make to OSU Medical Center. Through your work we are truly improving people's lives.

New Members

Membership for the following individual was recently approved. Please join us in welcoming him to the institute!

John Lannutti, PhD; Member (Materials Science and Engineering)

Jill Rafael-Fortney, PhD; Associate Investigator (Molecular & Cellular Biochemistry)

Jack Rall, PhD; Investigator (Physiology & Cell Biology)



Recent Publications

Boudoulas KD, Montague CR, Goldschmidt-Clermont PJ, Cooke GE. Physiological Estradiol Increases Aggregation of P1^{A1/A1} Platelets. *Am Heart J* 2006; 152(1): 136-139.

Butler J, Young JB, Abraham WT, Bourge RC, Adams KF Jr, Clare R, O'Connor C; ESCAPE Investigators. Beta-blocker use and outcomes among hospitalized heart failure patients. *J Am Coll Cardiol*. 2006 Jun 20;47(12):2462-9.

Martin, M.M., Lee, E.J., Buckenberger, J.A., Schmittgen, T.D. and Elton, T.S. MicroRNA-155 regulates human angiotensin II type 1 receptor expression in fibroblasts. *Journal of Biological Chemistry* 281:18277-18284, 2006.

Simonetti OP, Cook S. Technical Aspects of Pediatric CMR. *J Cardiovasc Mag Reson.* 2006; 8: 581-593.

De Luca L, Abraham WT, Fonarow GC, Gheorghlade M. Congestion in Acute Heart Failure Syndromes: Importance of early recognition and Treatment. *Reviews in Cardiovascular Medicine.* 2006; 7(2): 69-74.

University Revises Non-Smoking Policy

Effective July 7, 2006, the use of tobacco products is prohibited on the grounds surrounding Health Sciences Colleges that are contiguous to the Medical Center including Fry Hall (Optometry), Newton Hall (Nursing), Parks Hall (Pharmacy) and Postle Hall (Dentistry), as well as all Biological Sciences buildings (Aronoff Lab, Biological Sciences Building, Biological Sciences Greenhouse, General Biology Annex, Jennings Hall, and Riffe Building). This includes inside and outside areas of buildings and in parking areas, except for specifically designated smoking areas. Please note that on July 1, 2006, smoking or the use of other tobacco products was also prohibited anywhere in the Medical Center.

The university's revised Nonsmoking Policy (Policy #7.20), and corresponding answers to Frequently Asked Questions (FAQs) can be found online at <http://hr.osu.edu/policy/policy720.pdf>

A "Tobacco Free Zone," has been created and the ban on the use of tobacco products within this zone applies to all individuals, including faculty, staff, students, patients, and visitors. For specific geographical boundaries, see the Tobacco-Free Zone Map at: hr.osu.edu/policy/resources/720map.pdf

Additional questions can be addressed by contacting Organization and Human Resource Consulting (OHRC) at 614-292-2800 or ohrc@hr.osu.edu.

ULAR Headquarters Move

The University Laboratory Animal Resources administrative offices have moved. ULAR is now located at 150 Pressey Hall, 1070 Carmack Road, Columbus Ohio 43210. (The old headquarters were at 1960 Kenny Road). All other contact information remains the same.

DHLRI Faculty & Staff Town Meeting

The next DHLRI Faculty and Staff Town Meeting is scheduled for August 17 at 3:00 PM in the auditorium (room 170). Join us for an update on current activities including: thematic program updates, the BRT building plan, Ross Heart Hospital expansion, small animal MRI imaging facilities, announcements of recent awards, and reports from the Director's Executive Cabinet and the education and core operations committees. Refreshments will be served following the meeting.

Cardiac MRI and Cardiac CT CME Courses

Dr. Subha Raman and Dr. Orlando Simonetti will be offering CME accredited courses in Cardiac MRI (Sept. 28 - 30) and Cardiac CT (October 1 - 2) at The Ross Heart Hospital. These courses can be taken together or separately. The programs include didactic lectures covering technology and clinical applications, as well as scanning demonstrations and hands-on sessions in image interpretation and analysis. Lecture sessions are open to OSU faculty, staff, and students free of charge.

Case review, image processing and scanning demonstrations require paid registration, discounted for OSU personnel. More information is available at www.cardioimaging.osu.edu. Please notify Beth McCarthy (beth.mccarthy@osumc.edu) if you plan to attend.



August Programs and Events

August 4: Research in Progress; Christopher M. Hadad, PhD, Chemistry.*

August 11: Research in Progress; TBD.*

August 17: DHLRI Faculty and Staff Town Meeting; 3:00 pm, 170 Davis Heart and Lung.

August 18: Research in Progress; James O'Brien, MD, Pulmonary, Critical Care, & Sleep Medicine.*

August 25: Research in Progress; Keith Gooch, PhD, Biomedical Engineering.*

**Research in Progress presentations are held at noon on Fridays in 165 Davis Heart & Lung.*



Grants Office Tip of the Month: What are Person Months?

As part of the conversion to electronic applications, NIH now requires that **effort be calculated in person months**.

- Number of months spent on a particular project
- Calculated as **calendar** (12) months, **academic** (9) months, or **summer** (3) months

How to convert from percent effort to person months

- 12-month appointmentees: % effort x 12 months = #calendar months
- 9-month appointmentees: % effort x 9 months = # academic months
- Summer appointmentees: % effort x 3 months = # summer months

Where do I use person months?

- Budget justification pages in proposals
- Other support pages for just-in-time submissions
- Progress reports (key personnel effort page)
 - Convert each month's effort from percent to person months, then add to determine effort for each key person

(tip continued on next page)

Hint

Although you must use person months on NIH forms, there is no prohibition from also providing percent efforts.

Please see Karla Gengler-Nowak or Elaine Wakely in the DHLRI Grants Office (110 DHLRI) with any questions about this tip.

New Awards: Federal, State, Foundations

PI: Mark Angelos
Title: Hypoxic reperfusion and induction of myocardial reactive oxygen species
Sponsor: American Heart Association, Ohio Valley Affiliate
Amount: \$60,500
Start date: 7/1/06 End date: 6/30/07

PI: Yeong-Renn Chen
Co-PIs: Jay Zweier, Pravin Kaumaya
Title: Myocardial injury associated with mitochondria-derived oxygen free radical(s)
Sponsor: NHLBI, Award No. 1R01 HL0083237-01
Amount: \$1,875,000
Start date: 8/1/05 End date: 7/31/10

PI: Mark Hall, Children's Research Institute
Mentor: Mark Wewers
Title: Monocyte Pypin Expression in Human Sepsis
Sponsor: NHLBI, 1 K08 HL085525-01
Amount: \$400,000
Start date: 7/24/2006 End date: 6/30/2011

PI: Terry Elton
Title: Human angiotensin II receptor gene regulation
Sponsor: NHLBI, Award No. 2 R01 HL048848-14
Amount: \$1,046,500
Start date: 7/7/06 End date: 6/30/09

PI: Cameron Rink
Co-I: Chandan Sen
Title: The significance of vitamin E in stroke and 12-lipoxygenase
Sponsor: American Heart Association, Ohio Valley Affiliate
Amount: \$42,000
Start date: 7/1/06 End date: 6/30/07

New Industry Contracts

PI: Jim Allen
Title: PIPF trial
Sponsor: InterMune Inc.
Start date: 6/27/06 End date: 7/1/09

PI: Garrie Haas
Title: ROCIT
Sponsor: Medtronic
Start date: 6/22/06 End date: 6/21/07

PI: Rami Khayat
Co-I: William Abraham
Title: The role of diagnosis and treatment of sleep apnea in the acute exacerbation of heart failure
Sponsor: Respiroics
Amount: \$167,250
Start date: 6/22/06

PI: Ray Magorien
Title: TC-WYRE
Sponsor: Boston Scientific
Start date: 6/1/06 End date: 5/31/09

PI: Subha Raman
Title: SPARC trial
Sponsor: Brigham & Women's Hospital
Start date: 7/19/06 End date: 4/15/09

PI: Sashwati Roy
Co-I: Savita Khanna
Title: Regulator of diabetic wound healing
Sponsor: InterHealth Nutraceuticals
Amount: \$165,000
Start date: 6/1/06 End date: 5/30/07

For more information on this newsletter, contact the editor at Chris.Brakenbury@osumc.edu. The newsletter is also available online at <http://heartlung.osu.edu>. To unsubscribe, please contact Chris via e-mail.

