MISSISSIPPI CENTER FOR OBESITY RESEARCH

OBESITY RESEARCH NEWS

AT THE UNIVERSITY OF MISSISSIPPI MEDICAL CENTER

Vol. 3 Issue 1 | SUMMER 2015

MCOR answers call for action on obesity epidemic

The MCOR continues to make progress in its mission of improving lives through research, discoveries, innovation, education, improved patient care and prevention of obesity and related disorders.

This newsletter highlights a few of the activities of the MCOR during the past several months. Additional information on papers published, extramural funding and other news can be found on the MCOR website at http://www.umc.edu/MCOR/.

The adverse impact of obesity on the lives of Mississippians and the challenge to our health-care system, unfortunately, continue to grow. A recent report of data from the National Health and Nutrition Examination Survey (L. Yang and GA Colditz, Journal of the American Medical Association Internal Medicine, published June 22, 2015) indicates that obesity prevalence has not abated and, in fact, increased despite much attention and effort aimed at lifestyle modification of Americans. Especially alarming is the fact that more people are progressing from being overweight to increasingly severe stages of obesity (Class 3, high-risk obesity with BMI >40).

The authors of the NHANES study, like many health-care professionals, have called for action by physicians to prevent and treat obesity using evidence-based tools that we currently have. Unfortunately, the available tools are inadequate, and there is still a major gap in our understanding of the fundamental mechanisms that regulate energy balance, making it difficult for health-care professionals and patients to manage and prevent obesity.

We need novel research paradigms and outcomes research aimed at testing which approaches to prevention and treatment are most effective. Although four new drugs have been approved for pharmacological treatment of obesity in the past three years, many physicians are reluctant to prescribe these drugs because they are not effective for many obese patients and often have important adverse effects. New drugs that are safe and effective in treating obesity are desperately needed.

Bariatric surgery is an important and effective therapeutic option for some patients with severe obesity, and the **UMMC Bariatric Surgery Program**, led by **Dr. Kenneth Vick,** is making progress toward receiving a Center of Excellence accreditation (page 2). The Bariatric Surgery Program will also provide important research opportunities for MCOR investigators, since we still do not understand why some types of bariatric surgery produce rapid resolution of metabolic disorders, such as diabetes, even before major weight loss occurs.

We are especially pleased that **Dr. Dan Jones** will join MCOR as director of clinical and population sciences and the **Mr. and Mrs. Joe F. Sanderson Jr. Endowed Chair in Obesity, Metabolic Diseases and Nutrition**. Dr. Jones' ability to build clinical programs and collaborative relationships among basic scientists, clinicians and population scientists will be a major asset to the MCOR (see page 3).

Dr. John Hall

Investigators in the MCOR research program have been successful in gaining major extramural grants from the National Institutes of Health this past year. Core facilities, research of early stage investigators and pilot grants were funded by a Center of Biomedical Research Excellence (COBRE) grant from the National Institutes of General Medical Sciences. Investigators in the Department of Physiology and Biophysics were successful in renewing their National Heart, Lung and Blood Institute Program Project Grant (page 4). This grant is currently focused on three areas: 1) central nervous system mechanisms of obesity-induced hypertension, 2) the role of obesity in increasing the risk for pregnancy-induced hypertension, and 3) factors that lead to hypertension in polycystic ovary syndrome (PCOS), which is characterized by increased visceral obesity and associated metabolic disorders.

We are grateful for support from our MCOR benefactors this past year, and we are fortunate to have strong support from the National Institutes of Health for our research programs. The outstanding work of the researchers, health-care professionals and support staff members who are working hard to improve lives is greatly appreciated.

I hope you enjoy reading the MCOR highlights in this newsletter. Thank you for your support of the MCOR.

John E. Hall, Ph.D.
Arthur C. Guyton Professor and Chair
Director, Mississippi Center for Obesity Research

Bariatric surgery program makes progress

Even though he's battled obesity all his life, Nick Whittington didn't like the idea of having a bariatric procedure – and he didn't want his wife, Hope, with weight problems of her own, to have one, either.

"I was skeptical," said Nick, 40, a Brandon resident and insurance agent. "I'm not a big surgery guy. I hadn't been in the hospital since I was born."

But after his wife asked him to accompany her to a seminar sponsored by the Medical Center's bariatric surgery program, his attitude changed. "My wife wanted to get more information, and next thing I know, my name is signed up for it, too."

He said Hope wanted him to have a gastric sleeve at UMMC as her gift for his 40th birthday. They both ended up having the procedure – Hope on Sept. 15, 2014, and Nick on Oct. 13, 2014.

Nick went into surgery at 375 pounds. Today, he weighs 250. His goal is 210.

Bariatric surgery offers the morbidly obese the option of weight loss that's more rapid than with conventional diets, and it can save the lives of patients who suffer from obesity-related diseases such as type 2 diabetes, high blood pressure and heart disease. Life expectancy and the quality of life are dramatically improved, and other related conditions, such as acid reflux and sleep apnea, can disappear altogether.

Hope has dropped 65 pounds post-surgery and continues to lose.

"We never talked about her beginning weight," Nick said. He and Hope, who's 39 and a preschool teacher, now enjoy regular exercise. Their diets are much healthier than before surgery.

"I'd do it again tomorrow," Nick said of the surgery. "I'm now about what I weighed in sixth or seventh grade."

The Medical Center's bariatric surgery program, in collaboration with its Mississippi Center for Obesity Research, completed 23 procedures from late 2013 through 2014 while impacting the understanding and treatment of obesity. As of June 23, 93 vertical sleeve gastrectomy and three adjustable gastric band procedures have been completed, said Adam Dungey, administrator of weight management services for the bariatric program.

The program briefly went on hiatus so that physicians could develop other resources for Mississippi's obese population, but became fully operational in late 2013. Dr. Kenneth Vick, associate professor of surgery, is leading the program.

Those selected have a gastric sleeve, the less invasive and lower-risk laparoscopic surgery, or either gastric bypass or gastric banding. All are performed on the stomach and/or intestines.

The surgery requires a lifestyle change in diet and exercise, and often results in changes in the way the digestive system processes food. Patients must take care not to eat too much or eat the wrong foods, which can cause vomiting and other digestive problems.

Most of the procedures performed at UMMC are gastric sleeve, Dungey said, and the results are impressive. The average weight loss at six weeks is 46 pounds and at six months is 73 pounds, he said. The average body mass index change is 11.16, he said.

Dungey said the program is working to receive Center of Excellence accreditation. A preliminary application was submitted in December 2014, and a full application was submitted in June. "We expect a site survey in late July or early August, with a final decision by late September," Dungey said.

Vick and the bariatric team are bringing their services to neighboring communities that include Meridian, Morton, Forest, Laurel, Grenada and Greenville. The program also is continuing its partnership with MCOR.

"We began working with Dr. Angela Subauste and her team for a specific research protocol," Dungey said, "and we are collecting lab and tissue (samples) from our surgical candidates, with patient approval."

Nick Whittington suffered from sleep apnea and acid reflux before his surgery. He no longer goes to bed with a machine that helps him breathe more easily, and his acid reflux has eased.

"My wife was on blood pressure medicine and some others. She's been able to back down on them," Nick said.

Before the surgery, Nick skipped breakfast but consumed a huge lunch and dinner. Today, he eats five small healthy meals a day.

"I haven't had pasta or rice in months," he said. "When my wife and I go out to eat, we split everything. Her mom has lost 40 pounds just hanging out with us."

He can now do the simple things that most people take for granted.

"I couldn't get seat belts around me and locked down in a car. On an airline flight, I needed an extension belt.

"I've been through so many procedures and diets. This is the one thing that is working," Nick said. "I'm never going back to where I was."

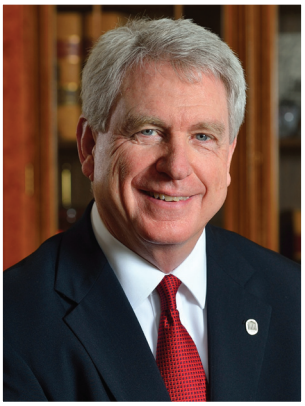
— Ruth Cummins

UM chancellor to lead obesity research programs

For more than two years, Dr. John Hall, MCOR director, has conducted a national search for the right person to lead the development of obesity clinical research programs at the Medical Center.

During a national search, he interviewed several high-profile scientists, but did not find the right person until it occurred to him that the "nationally prominent clinician scientist with proven leadership skills" that he was seeking to fill the role was closer than he had imagined: Dr. Dan Jones, University of Mississippi chancellor.

Hall announced on June 5 that Jones will join the Medical Center faculty next fall as the MCOR's director of clinical and population sciences.



Jones

In that role, Jones will be asked to tackle Mississippi's most pernicious and consequential health problem, one that costs the state an estimated $1 billion in annual direct health-care expense. And yet the science of obesity is still poorly understood, and the means of preventing it or safely treating it have proven largely ineffective.

An internal medicine physician by training and a tenured professor at UMMC, Jones is currently on leave from his position as University of Mississippi chancellor and will officially end his tenure on Sept. 14 after six years at the helm.

"Because Dan Jones has been in university administration for the last 13 years, not everyone remembers that he is an eminent physician-scientist who was the original principal investigator of the Jackson Heart Study and served as president of the American Heart Association," said Hall. "He is uniquely qualified for this position in so many different ways."

A graduate of its medical school, Jones joined the UMMC faculty in 1992 and was heavily involved in clinical and population research related to hypertension and other cardiovascular risk factors until he became associate vice chancellor for health affairs in 2002. He was named vice chancellor and dean of the medical school in 2003 and left Jackson to become chancellor of the university in 2009.

"This is a welcome opportunity for the next stage of my career," said Jones. "Over the last several weeks, I have explored several good opportunities in universities outside Mississippi. As I examined options, it became clear to me that my first priority was to seek a position where I could work on important issues where there was a real need.

"The invitation from Dr. Hall to fill this position in the center allows me to do this in the state of Mississippi I love so much."

Jones' primary faculty appointment will be in the Department of Physiology and Biophysics, with a joint appointment in the Department of Medicine. Jones will be the first person to hold the Mr. and Mrs. Joe F. Sanderson Jr. Endowed Chair in Obesity, Metabolic Diseases and Nutrition.

Hall said although Jones is best known in the scientific community for his work in hypertension, obesity and weight management are common threads in his published papers and the clinical trials he has overseen.

"He has great expertise on clinical aspects of obesity management and why this is an effective approach to preventing and treating many chronic diseases, such as hypertension, heart attack, stroke, kidney disease, diabetes and dementia," Hall said.

Beyond his scientific and research expertise, Jones has a proven ability to build programs, win grant support and private funding, and establish collaborative relationships that will be critical to making inroads against obesity in Mississippi and elsewhere, Hall said.

"When I worked as an administrator on the formation of this center, I never dreamed I would have the opportunity to return to the Medical Center in my role as a physician-scientist," Jones said. "I'm grateful to Dr. Hall and Dr. LouAnn Woodward (UMMC vice chancellor for health affairs) for their confidence in asking me to fill this role and to make a difference in Mississippi."

"I completely support Dr. Hall's decision and consider this a crucial step forward in our state's efforts to battle the public health epidemic of obesity," said Woodward. "This is a difficult, challenging job, and we are extremely fortunate that a scientist and leader of Dr. Jones' caliber is willing to take it on."

Physiological society elects ninth president with UMMC, MCOR ties

Reckelhoff

On April 1, Dr. Jane Reckelhoff became the ninth person who trained or worked at UMMC to serve as president-elect of the American Physiological Society.

It is a factor she said is largely due to her department's encouragement of junior faculty members or trainees to get involved with this prestigious organization.

Reckelhoff, a professor of physiology and biophysics, has previously served on the APS Council for three years and headed one of the organization's sections. In her new role, she will help shape how the group continues its long-term goals.

The elected position requires a three-year commitment, said Reckelhoff, who will take over as president of the society after the Experimental Biology 2015 meeting in Boston. She also will be the first female from UMMC to hold the office.

It's a journey that was recently concluded by Dr. Joey Granger, professor of physiology and biophysics and dean of the School of Graduate Studies in the Health Sciences, who served as APS president in 2010-11.

In 2001, the APS president was Dr. John Hall, the Arthur C. Guyton Professor and Chair of Physiology and Biophysics at UMMC.

"We are delighted and proud that Dr. Reckelhoff has been elected by the 10,000-plus members of the American Physiological Society as their next president," said Hall. "This is a high honor that recognizes her enormous contributions to the science of physiology as well as her national service and leadership.

"Janie continues the long line of nine APS presidents who were faculty members or trainees of the Department of Physiology and Biophysics at UMMC. Janie's accomplishments bring great recognition to UMMC as a place of excellence in research and discovery."

While championing research, Reckelhoff said APS also focuses on educating professionals and students about physiology and research.

Reckelhoff follows in the footsteps of the late Dr. Arthur C. Guyton, APS president in 1974-75, who was the first chair of the UMMC physiology department and one of the world's most preeminent cardiovascular physiologists.

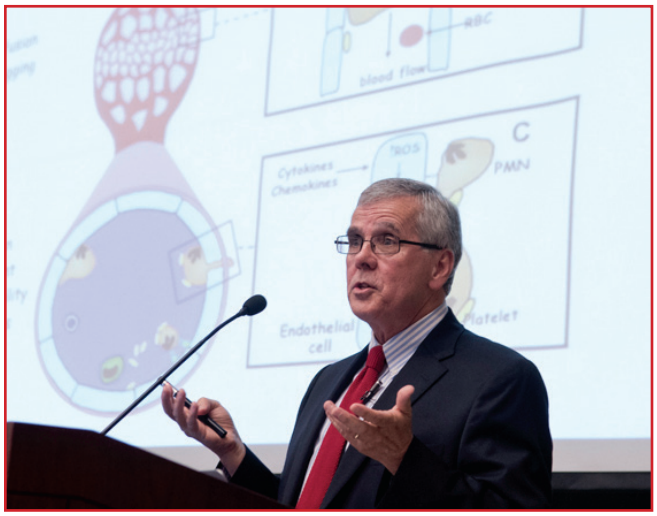
Guyton is credited with finalizing the "sectionalization" of the society, which gave members the opportunity to meet in smaller groups with other members who shared their research interests. Today, the society has 12 sections and six groups and oversees 14 scholarly journals.

— Dustin Barnes

Obesity **Research** News

UMMC alum delivers Guyton Lecture

One of the Medical Center's brightest scientists returned to his alma mater to present his recent research at one of the school's most prestigious lectureships on April 29.



Dr. D. Neil Granger delivers the Arthur C. Guyton Distinguished Research Lecture.

The Arthur C. Guyton Distinguished Research Lecture - named in honor of the former chair of the Department of Physiology and one of UMMC's most prolific scholars and mentors - is reserved for the most distinguished physiologists and contributors to medicine, said Dr. John Hall, the Arthur C. Guyton Professor and Chair of Physiology and Biophysics.

Dr. D. Neil Granger, a 1977 UMMC graduate, was chosen as the 2015 distinguished lecturer because of his research in various fields, including ischemia reperfusion injuries, a form of tissue damage that can occur during a stroke.

"He's published more than 600 papers, more than 100 book chapters and seven books," said Hall. "His research papers have been cited more than 57,000 times. But it would be fair to say the contribution he's most proud of is his mentoring of young investigators."

Hall said Granger has mentored more than 60 post-doctoral fellows during his career.

"He is one of three Granger siblings to graduate from UMMC, including Dr. Joey Granger, the current dean of the School of Graduate Studies in the Health Sciences," said Hall.

"I'm very pleased to be here on this day, one where we recognize Dr. Arthur Guyton," said Neil Granger. During his studies at UMMC, he learned under Dr. Aubrey Taylor, one of Guyton's students and a former faculty member of the Department of Physiology and Biophysics. "It was a privilege to be trained here. I have many fond memories of the days I spent here as a grad student."

Granger's latest research focuses on the brain's smaller blood vessels' response to focal ischemia, a restriction of blood supply to tissue that deprives it of oxygen. He noted the specific field is one research publications have increasingly taken notice of during the last several decades.

One area of his research, he said, is looking at various risk factors - including high cholesterol, hypertension, obesity and smoking - to see how different combinations can have an impact on a patient.

"I think this is a very fruitful area for further research because again, most patients who are subjected to an ischemic episode do not have a single risk factor," he said. "They have multiple risk factors."

Currently serving as the Boyd Professor and Head of the Department of Molecular and Cellular Physiology at the Louisiana State University Health Sciences Center in Shreveport, Granger became the seventh Guyton Distinguished Lecturer in the history of the series.

— Dustin Barnes

NIH renews longest continuous PPG

In August 2014, the Department of Physiology and Biophysics received the competitive renewal of the Program Project Grant (PPG), "Cardiovascular Dynamics and Their Control."

The award provides $10.2 million in funding for a five-year period through May 31, 2019, which provides 50 years of funding for this project. This is one of the longest running Program Project Grants in the history of the National Institutes of Health.

This grant began in 1968 with Dr. Arthur Guyton as principal investigator. The primary goal of this PPG was to bring together, in a thematic program, investigators with interdisciplinary skills whose research interests were in an integrative, systems analysis of cardiovascular physiology.

This project has involved the analysis of cardiovascular (CV) dynamics and related control systems, including the kidneys, the sympathetic nervous system (SNS), endothelial factors, and the endocrine system.

Dr. John Hall, chair of the Department of Physiology and Biophysics, has been an investigator on the PPG for more than 40 years and has served as the principal investigator for the last 25 years. The PPG has evolved over the years to include new developments in almost all aspects of cardiovascular dynamics.

The total program, including core support services, provides a unique interdisciplinary approach toward developing an integrative analysis of long-term regulation of blood pressure and circulatory dynamics in forms of experimental hypertension that are highly relevant to human hypertension.

NIGMS continues research center funding

The Center of Biomedical Research Excellence (COBRE) grant, "Cardiorenal and Metabolic Diseases Research Center," is now in its third year of funding, sponsored by the National Institute of General Medical Sciences.

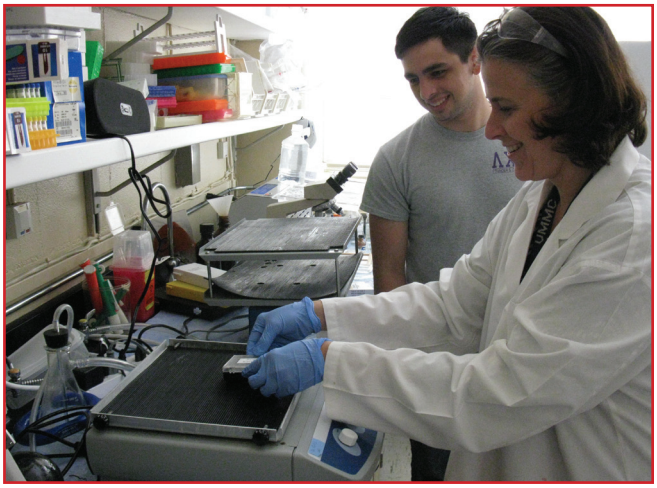
The CMDRC was established in October 2013 to provide infrastructure for a multidisciplinary, diverse group of basic, clinical and population scientists working on the common synergistic theme of cardiorenal and metabolic diseases and to facilitate their collaborations. The COBRE is currently funding three major projects, seven pilot grants and core services to early stage investigators.

An important and unique future of the COBRE is that UMMC has been able to assemble a multidisciplinary group of basic, clinical and population scientists working on the common synergistic theme of obesity, cardiorenal and metabolic diseases. The CMRDC has been able to facilitate their collaborations and interactions and has already made several important advances in understanding the factors that lead to obesity, cardiovascular, renal and metabolic diseases.

For more information about the COBRE program, visit https://www.umc.edu/Education/Schools/Medicine/Basic_Science/Physiology_and_Biophysics/COBRE/COBRE_Home.aspx

COBRE funds new pilot project grants

Dr. Bernadette Grayson, assistant professor of neuroanatomy and behavioral sciences, and her team are studying the use of bariatric surgery to reduce the comorbidities of Metabolic Syndrome (MetS), on the rise because of its durable effectiveness to decrease body weight, adiposity, diabetes, cardiovascular disease and dyslipidemia.



Grayson gives a demonstration for one of her team members.

In many metabolic-related realms, the beneficial effects of bariatric surgery impact males and females equally in both humans and rodents. The previous work, however, suggests that rodent dams which, before pregnancy, receive vertical sleeve gastrectomy (VSG), a bariatric surgery that is on the rise, give rise to offspring which are intrauterine growth-restricted (IUGR).

Several clinical studies have documented this phenomenon in humans. The goal of the team's research is to understand the *in utero* mechanism by which this reduced growth is occurring.

Using its rodent model of VSG, the team is targeting the gestational day 19 dam and hypothesizing that the hormonal milieu and placental structure during gestation are altered such that the growing fetus is at risk for reduced growth.

Dr. J. Paula Warrington, instructor in physiology and biophysics, is studying if preeclampsia is a pregnancy-specific disorder characterized by hypertension with or without proteinuria after 20 weeks of pregnancy.

Warrington

The underlying mechanisms are poorly understood; however, it is appreciated that reduced blood flow to the placenta (placental ischemia) is a major initiating event.

Cerebrovascular complications contribute to 40 percent of all preeclampsia/eclampsia-related deaths and some patients develop eclampsia, characterized by seizures before or after delivery. One potential mechanism linking placental ischemia and cerebrovascular dysfunction is reduced cerebrovascular expression of Degenerin proteins, Epithelial Na^+ Channels (ENaC) and Acid Sensing Ion Channels (ASIC).

Degenerins play an important role in maintaining vascular myogenic tone, which regulates cerebral blood flow (CBF). The placental ischemic rat model has reduced cerebrovascular ENaC expression, impaired myogenic tone and impaired regulation of CBF. Additionally, non-pregnant mice with reduced ENaC (ENaCm/m) and loss of ASIC2 (ASIC2-/-) have impaired vascular myogenic tone, which can lead to increased blood-brain barrier (BBB) permeability and edema, both characteristic of preeclampsia patients and placental ischemic rats.

Whether reduced ASIC2 and ENaC during pregnancy impair CBF autoregulation, increase BBB permeability and cerebral edema is not known. Placental ischemia is associated with increased drug-induced seizure susceptibility; however, it is not known whether reduced ENaC and ASIC2 increases susceptibility to seizures during pregnancy.

Therefore, this project will test the hypothesis that reductions in ENaC and ASIC2 during pregnancy impair cerebrovascular myogenic reactivity and CBF autoregulation, causing cerebral edema, increased BBB permeability, and increased seizure susceptibility.

Faculty News


Harmancey

Dr. Romain Harmancey joined the Medical Center faculty as an assistant professor of physiology and biophysics on Jan. 5. He was a postdoctoral fellow at the University of Texas Medical School at Houston.

After receiving the B.S. in biology and physiology from the Universite Paris XI, Orsay, France, in 2001, Harmancey earned the M.S. in biology and genetics in 2002 and the Ph.D. in pharmacology in 2006 at Universite Paul Sabatier, Toulouse, France. Harmancey came to the United States in 2007 for a postdoctoral fellowship in the Department of Internal Medicine, Division of Cardiology, at the University of Texas Medical School.

An active member of the American Heart Association's Council on Basic Cardiovascular Sciences, the Endocrine Society and the American Physiological Society's Cardiovascular Section, Harmancey serves as a reviewer for scientific journals, including Circulation Research, Endocrinology, the Journal of Molecular and Cellular Cardiology and the British Journal of Pharmacology. Harmancey has authored or coauthored 24 research papers and reviews in peer-reviewed professional journals and has presented many abstracts at national and international scientific conferences.

Harmancey is a recipient of a Pathway to Independence Award (K99/R00) from the National Heart, Lung and Blood Institute. His research interest is the molecular mechanisms controlling substrate utilization in the heart and their role in the pathophysiology of obesity and diabetes-associated cardiovascular diseases.


Li

Dr. Ji Li joined the Medical Center faculty as an associate professor of physiology and biophysics on July 1. He was previously an assistant professor at the University of Buffalo – SUNY.

Li has great expertise in age-cardiomyopathy and molecular mechanisms of cardiac metabolism. Li's research is funded by grants from the National Institutes of Health as well as the American Heart Association and the American Diabetes Association.

As president-elect of the Chinese American Diabetes Association (CADA), councilor of the Upstate New York Pharmacology Society (UNYPS, ASPET) and a member of the American Physiology Society and several others, Li is also a member of several editorial boards, including the International Journal of Physiology, Pathophysiology and Pharmacology, and is editor-in-chief of Pharmacology Regulatory Affairs. Li has authored or co-authored many research papers and reviews in peer-reviewed professional journals and book chapters and has presented many abstracts at national and international scientific conferences.

Li was part of a team at Yale University who developed a small molecule that can limit damage to the heart by ischemia when the heart becomes infarct. The molecule, MIF20 was shown to "increase migration inhibitory factor (MIF) action through its receptor."

His research interest focuses on investigating the signaling mechanisms of aging-associated cardiovascular diseases.

Honors and Awards


Dr. MIchael Hall, right, receives the inaugural young Investigators prize from the award's namesake, Dr. Stanley Chapman.

Dr. Michael Hall, assistant professor of medicine, received the inaugural Stanley Chapman Young Investigators Award March 31 during the annual Department of Medicine Research Day.

Hall was honored for demonstrating high potential for a successful career as a physician-scientist.

Hall is also a recipient of the Patrick H. Lehan Cardiology Faculty of the Year Award from the Division of Cardiology.

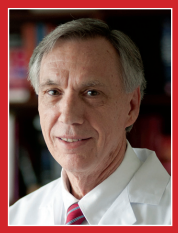

Dasinger

John Henry Dasinger, a graduate student in the Department of Physiology and Biophysics in the laboratory of Dr. Barbara T. Alexander, was a finalist for the Predoctoral Research Recognition Award presented at the 2015 Experimental Biology Meeting in Boston by the Water and Electrolyte Homeostasis Section of the American Physiological Society.

Dasinger presented his work on the role of testosterone in the development of hypertension that occurs in conjunction with early reproductive senescence in low birth weight female rats.


Sasser

Dr. Jennifer Sasser, assistant professor in the Department of Pharmacology and Toxicology, received the 2015 Carl W. Gottschalk Research Scholar Grant from the American Society of Nephrology Career Development Grants Program for her grant, "Mechanisms and Mediators of the Preeclamptic Phenotype in the Dahl S Rat."


Hall

Dr. John Hall, Arthur C. Guyton Professor and Chair of the Department of Physiology and Biophysics and director of the Mississippi Center for Obesity Research, was named the Southeastern Conference's 2014 Professor of the Year in recognition of his excellence both in the classroom and as a topflight obesity and cardiovascular researcher. He was named the top professor of the SEC's 14 member institutions of higher education.

MCOR faculty earn recognition at research award ceremony

The Excellence in Research Awards Program at the University of Mississippi Medical Center recognizes investigators who have been successful in attracting extramural funding for their research programs. Below are faculty from the MCOR who received awards at the annual ceremony on Dec. 9, 2014.

Platinum Medallion - $5 million received in extramural funding

Dr. Richard Roman, professor and chair of pharmacology and toxicology, adjunct professor of medicine

Gold Medallion - $1 million received in extramural funding

Dr. Michael Lehman, professor and chair of neurobiology and anatomical sciences

Dr. Merry Lindsey, professor of physiology and biophysics and professor of medicine

Dr. Larry McDaniel, professor of microbiology

Silver Medallion - $500,000 received in extramural funding

Dr. Jussara M. do Carmo, assistant professor of physiology and biophysics

Dr. Jan Michael William, assistant professor of pharmacology and toxicology

Bronze Medallion - $250,000 received in extramural funding

Dr. Albert W. Dreisbach, associate professor of medicine

Dr. Eric M. George, assistant professor of physiology and biophysics

Dr. Jennifer M. Sasser, assistant professor of pharmacology and toxicology

Dr. Angela Subauste, assistant professor of medicine, adjunct assistant professor of physiology and biophysics

Recent publications by MCOR investigators

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Additional list of publications can be found on our website at *https://www.umc.edu/mcor/currentresearch/*

Recent extramural grants by MCOR investigators

Dr. Eric George, assistant professor of physiology and biophysics, received a R00 award from the National Institutes of Health/National Heart, Lung and Blood Institute, entitled, "Hypertensive Mechanisms in Preeclampsia".

Dr. Michael Hall, assistant professor of medicine and physiology and biophysics, received a Scientist Development Grant from the American Heart Association.

Dr. Nitin Gupta, assistant professor of digestive diseases, received a $12,066 pharmaceutical company award for an industry clinical trial.

Dr. Robert Cox, professor of emergency medicine, received a $27,123 grant from the Denver Health and Hospital Authority for the Researched Abuse, Diversion and Addiction-Related Surveillance System.

Dr. Michael Griswold, professor of biostatistics, received a $62,776 sub-grant from the National Institute on Minority Health and Health Disparities in conjunction with the University of Michigan for the Michigan Center for Integrative Approaches to Health Disparities.

Dr. Luis A. Juncos, professor of nephrology, received a $13,125 pharmaceutical company award for an industry clinical trial.

Dr. Merry L. Lindsey, professor of physiology and biophysics, received a $195,787 sub-grant from the National Institutes of Health (NIH) in conjunction with the University of California, Los Angeles, for the project, "A Community Effort to Translate Protein Data to Knowledge: An Integrated Platform."

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IN THIS ISSUE:

UMMC partners with Power Wellness

The Medical Center's acquisition of the Courthouse wellness locations represent a new way for patients, employees and the community to improve their health.

UMMC has partnered with Power Wellness, a national leader in wellness and fitness centers, to bring best practices from around the country to create medically integrated wellness centers that are more than traditional fitness centers.

According to Jonathan Wilson, UMMC chief administrative officer, "We have had a great deal of behind-the-scenes work since the first of the year when UMMC took on operations of the Courthouse locations."

The Courthouse location assessments are complete, and the initial operational changes are underway. UMMC is in the process of performing an in-depth business plan to guide its strategic direction of meeting its wellness mission.

The next steps will be to determine the facility maintenance/upgrades needed for the locations, purchase of modern cardio-fitness equipment and integration of clinical services lines with the overall wellness model.

This close integration of clinical, educational and research areas will allow the Courthouse locations to serve the larger mission of improving the health of Mississippians.

How to help the MCOR achieve its mission

Although UMMC has made a strong commitment to developing and sustaining the MCOR research and prevention effort, external funding is required to fully realize the potential of the Mississippi Center for Obesity Research.

The MCOR program is currently funded mainly from extramural sources, including gifts from generous donors and grants from the National Institutes of Health (NIH). All funds donated to MCOR will help advance obesity research, prevention and treatment.

Donations can be made online at https://www.umc.edu/mcor/donate/.

To make a gift by check, make it payable to the Mississippi Center for Obesity Research and mail to:

University of Mississippi Medical Center
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