



# NUTRITION MATTERS

WINTER 2006

PENNINGTON BIOMEDICAL RESEARCH CENTER AND FOUNDATION • LSU SYSTEM

## DID YOU Know?

- The Pennington Biomedical Research Foundation recently launched a new online newsletter called, "Pennington E-News." Our E-News emphasizes breaking news stories, research highlights, and other information on activities and events. If you'd like to stay connected through our online communications, please visit: [www.pbrf.org/explore.cfm/subscribe](http://www.pbrf.org/explore.cfm/subscribe) to sign up.
- Identical twins may be different! Our genetic make-up tells only part of the story. This conclusion is part of the reason for our Center's new focus on prenatal causes of obesity. (Read news to the right).
- It is difficult to lose weight but even more difficult to keep it off. The human body, when forced to diet, goes into a "starvation mode" to protect its weight. Your body does not want to lose weight! So how to get thinner and stay that way? A group of international scientists gathered at the Center in December to discuss just that point and offer the latest in their findings. The idea was to spark more research and learning so we can all benefit.

## DOES OBESITY BEGIN BEFORE WE ARE BORN?

PENNINGTON CAPTURES PRESTIGIOUS COMPETITIVE NATIONAL AWARD

The Pennington Biomedical Research Center will be the new home of a national Clinical Nutrition Research Unit (CNRU) specializing in prenatal and early postnatal causes of obesity and other chronic diseases. The CNRU is funded by the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) of the National Institutes of Health (NIH).

Led by Eric Ravussin, Ph.D., a team of nearly 30 researchers was awarded this competitive grant of more than \$5.5 million over five years.

"This grant will allow us to bring together several scientists to work on a common theme," Ravussin said. "Moreover, we want to reach out to other institutions in Louisiana with faculty who can contribute to this new research effort."

The newly funded research unit at the Center becomes one of only ten in the country, each of which has a dedicated research theme. The new CNRU's theme is "Nutritional Programming: Environmental and Molecular Interactions."

Nutritional programming is a line of research that focuses on the role of nutrition on the



Photo left to right: PBRC researchers Anthony Civitarese, Ph.D., Madlyn Frisard, Ph.D. and principal investigator Eric Ravussin, Ph.D., discuss the molecular interaction between two proteins potentially involved in the development of obesity and Type 2 diabetes.

developing fetus and in early postnatal life. It investigates how variations in nutrition or stress may impact or alter the inherited characteristics of individuals.

"Ten years ago, if I had seen identical twins with an exact, hundred-percent match in DNA, I would have told you they are exactly the same. Not any more," said Ravussin, "We see differences that go beyond DNA, and those differences seem to be partly due to influences of nutrients during fetal and early life development."

Ravussin said previous research suggests that early nutrient interactions may be involved in

## CLINICAL RESEARCHERS BECOME HURRICANE EMERGENCY DISPATCHERS



Researchers and staff of the clinic at the Pennington Biomedical Research Center have made great strides in understanding the causes of diabetes and therapies to treat

this serious disease. Center clinicians see many volunteers with diabetes, offer much in the way of education and understanding, and are in touch with manufacturers of diabetic medications and supplies. So, the physicians, technicians and even corporate sponsors of the Center's clinical trials and research were well positioned to render assistance to those with diabetes displaced by Hurricane Katrina.

continued on page 4

continued on page 5



# Message from the Executive Director of the Pennington Biomedical Research Center



**T**he past several months have been more eventful than we could have imagined, filled with both very unexpected and much anticipated milestones. For the first time in our history, students are on campus taking classes. Hurricane Katrina's destruction of the LSU Health Sciences Center in New Orleans and its medical, dental, nursing and allied health schools forced the LSU System to find other means of teaching and housing these fine faculty members and students so education and research could continue.

We were fortunate to be able to offer classroom, office and research space on our campus, and now more than 600 students are here studying medicine, dentistry, allied health professions and nursing. Many thanks go to our executive staff and

technical staff who so ably transformed our former conference center into a "school" complete with wireless computer access, study space, a small bookstore, large lecture halls and small classrooms. In addition, we are providing office and laboratory space for almost 200 faculty and staff from the LSU Health Sciences Center and other New Orleans institutions.

Although, for our entire history we have described ourselves to our academic peers as a "research only" institution, it is a pleasure to see dedicated, energetic students working and relaxing on our campus. Likewise, many of the students and faculty have told our staff how much they enjoy the beauty and quiet of the Center.

An anticipated and very significant event for our future was recently announced. The

Center was awarded a National Institutes of Health grant to create a center for the study of prenatal causes of obesity and its complications. This is a large undertaking, and one that we hope will be productive for many years. This endeavor places the Center on the very edge of learning about the biology that may lead to obesity.

Research suggests that the biological and chemical environment within the mother's womb, including nutrition, may have a profound affect on our health and life-long development. It appears that in addition to our genetic make-up, the risks of becoming obese may be increased by events that occur in utero and have lasting consequences. We will be closely examining these as well as events that occur immediately after birth to learn much more.

I congratulate our researchers and support staff who developed the proposal for this new endeavor. It was a highly competitive process, pitting the Center against other leading research institutions across the country. Please read more about that effort in this issue.

2005 has been a banner year for the Pennington Biomedical Research Center. The partnership with the USDA is growing and is beginning to impact significantly our research efforts. This is also the year in which we were able to secure two center grants from the National Institutes of Health: the Botanical Research Center grant announced earlier in 2005 and now a Clinical Nutrition Research Unit. I hope the new year will be full and rewarding for each and every one of you. I look forward to sharing more news from the Center with you in the future.

  
Claude Bouchard, Ph.D.  
Executive Director

## JOHN W. BARTON, SR. CHAIR ESTABLISHED



*The Louisiana Board of Regents and the LSU Foundation recently held a presentation and reception at the LSU Lod Cook Alumni Center to recognize endowed chairs and professorships established through matching funds. Recognized at the reception was the John W. Barton, Sr. Endowed Chair in Genetics and Nutrition at the Pennington Biomedical Research Center. The support fund provided a matching grant of \$400,000 to the \$625,000 in private funding from over 60 individuals and organizations to endow the chair in Barton's name. Barton was recognized for his tireless efforts to provide guidance and leadership to the Pennington Biomedical Research Center. Attending the event were (left to right) Board of Regents Chairman Roland Toups; PBRF Barton Chair Development Committee Chairman Lee Griffin; PBRF Vice Chair Paula Pennington de la Bretonne; honoree John W. Barton, Sr.; Pennington Center Executive Director Claude Bouchard; PBRF Supporter Imo Brown; Board of Regents Vice Chairman Frances Henry; and LSU System President William L. Jenkins.*

## William Hansel Laboratory of Cancer Prevention Established With Major Gift to the Pennington Biomedical Research Center

The Pennington Biomedical Research Center has dedicated a new laboratory for cancer prevention research to honor the scope and promise of cancer research work led by William Hansel, Ph.D.

Through a major gift to the Pennington Biomedical Research Foundation from Edward and Loretta Downey of Maryland, and a matching gift from Dr. Hansel, the laboratory was dedicated recently at a reception held to recognize the donors and the newly named laboratory.

“We cannot begin to express our deep gratitude to the Downey family, and the support of their uncle, with this major gift that establishes a laboratory devoted completely to the development and delivery of drugs for the treatment of cancer,” said Claude Bouchard, executive director of the Center. He praised Dr. Hansel for his work to develop cancer-treating drugs that have recently been issued patents. One of these drugs is now being studied in a fast track process by the National Cancer Institute.

John Noland, chairman of the Pennington Biomedical Research Foundation, presented etched bronze medallions to the Downeys and Dr. Hansel during the reception. An etched wall plaque identifying the new lab was also unveiled. “Gifts such as these create viable opportunities for achieving healthier lives today and for the next generation,” said Noland.

Also speaking at the event was Dr. William Richardson, chancellor of the LSU Agriculture Center, who talked about Dr. Hansel’s earlier groundbreaking research and discoveries in disease prevention in cattle.

Hansel, who has been a faculty member at the PBRC since 1990 and also works with the LSU Ag Center, previously served as the Gordon D. Cain Professorship of Animal Physiology. Prior to coming to Baton Rouge, Dr. Hansel served as the Liberty Hyde Bailey Professor of Animal Physiology at Cornell University. He has also received numerous grants from the National Institutes of Health, National Science Foundation and the USDA and various scientific awards.

More than 60 faculty and friends attended the event held in the Atrium of the state-of-the-art Basic Science Laboratory Building.



*The William Hansel Laboratory of Cancer Prevention was dedicated recently at the Pennington Biomedical Research Center with a major gift to the Pennington Biomedical Research Foundation from Edward and Loretta Downey (left) and a matching gift from Dr. Hansel (right). The laboratory is totally dedicated to the development and delivery of new medications for the treatment of cancer. Drs. Hansel and Carola Leuschner and their research team have developed two highly effective drugs that target and selectively destroy cancer cells. The National Cancer Institute has accepted one of these drugs into its Rapid Access to Intervention Development Program.*

## Cutting Edge Cancer Research Underway

William Hansel, Ph.D. is a remarkable man. He arrived at the Center following an already lengthy career at Cornell University, from which he retired.

As a specialist in reproductive biology, he brought a unique perspective to the Center, understanding the function and role of reproductive organs, cells and processes. While attending a scientific conference in Poland, he learned that certain hormones in the human body behaved toward breast cancer cells in a rather normal fashion. They attached themselves to the surface of the breast cancer cells to deliver chemical messages – similar to how these same hormones attach to ovarian cells to cause ovulation.

He had been working with just such hormones back at the lab and decided to create a deadly combination – for cancer. He spliced a membrane destroying compound to the hormone. When the hormone attached itself to cancer cells, the “message” was a deadly blow, destroying the cancer cell membrane and the cancer cell.

“It was the most remarkable result I had ever seen in my lab,” Hansel says.

Within months he and his Center colleague, Dr. Carola Leuschner, and Dr. Fred Enright of the LSU Agricultural Center, were killing not only the main cancer tumors in laboratory animals, but also the cancer cells that had split from the tumor (metastasized) to migrate to other parts of the body. And he made this discovery in his eighties!

The National Cancer Institute has taken notice and included the cancer killing compound in a “fast track” program aimed at accelerating the research process that will eventually lead to trials in humans. Hansel and his research colleagues are hopeful that the first study for human subjects will take place within the next few years. Meanwhile, Hansel is in the lab daily working on the next steps and exploring new compounds.



# Center Testing Means Some Diabetics May Soon Get Insulin Without Needles

Literally generations of people with Type 2 diabetes have had only one means of giving themselves the necessary insulin to trigger their bodies' muscles to consume glucose from their blood - daily needle injections.

Now, Pennington Biomedical Research Center physician William Cefalu, M.D., has put needle-free insulin through a clinical trial to learn if patients can inhale a powdered form of insulin and get the same results as the needle-injected form.

Dr. Cefalu and his team recruited Type 2 diabetics requiring insulin to participate in the clinical trial. They were given a device that looks like a large asthma type inhaler. The clinical participants simply dropped a tablet of insulin in the device, crushed it



*PBRC clinician Anne Chatellier demonstrates the Exubera inhaler. If approved by the FDA, patients will use the device to crush an insulin tablet into powder, then inhale it.*

with a built-in handle, and then squirted the dry powder in their mouths while inhaling.

The results were very good, with the powered insulin offering results similar to injected insulin. That prompted the manufacturers of the drug, called Exubera, to immediately apply to the Food and Drug Administration (FDA) to allow the drug on the market. Dr. Cefalu was the only non-industry physician to go before the FDA initial review board to present his data. The review board recommended approval of the drug by the FDA.

A partnership between pharmaceutical companies Pfizer and the sanofi-aventis Group developed the drug, and Nektar Therapeutics created the inhaler. The FDA is currently reviewing the application and the review board's recommendation.

## Hurricane Emergency Dispatchers

*continued from page 1*

Led by Drs. Steven Smith and Eric Ravussin, a team of physicians and clinicians quickly formed to go into nearby shelters to help those who were facing the problem of managing their diabetes after a disaster. The team rounded up their mobile research vehicle, sought assistance from the Pennington Biomedical Research Foundation, and reached out to insulin and diabetes supply manufacturers. They also worked the phones of the Louisiana Emergency Management Center and met face-to-face with Red Cross staff. The team quickly learned how to effectively meet the needs of diabetics in the shelters; coordinating with the shelter staff.

The first idea was to equip the vehicle to be a rolling clinic, driving from shelter to shelter with insulin, oral medications, swabs, insulin pumps and parts, nutrition, blood testing kits and the like. The team soon learned, though, that most shelters had basic medical care and teams of medical personnel who could render

care...if they had supplies. Turning on a dime, the team put the RV back in the garage, pushed aside equipment in the Center's exercise facility to create a mini-warehouse and, overnight, became a dispatch team for much-needed supplies. They soon became the chief emergency supplier of diabetic care supplies in the region, eventually serving more than 7,000 patients.

But success brings its own problems. Smith netted 18-wheelers of supplies that started rolling into the Center. That, plus a check for \$50,000 from Amylin Pharmaceuticals, Inc. to the PBRE, to buy what they could not get donated, created a huge demand for unloading, sorting, re-packaging and shipping. Even the Baton Rouge Rugby team got involved – recruited by a Center researcher/rugby player – to help unload the trucks and deliver supplies.

Smith's group created more than 5,000 30-day "care packs" and shipped them to centers across the south from Mississippi to

Texas, which the team monitored almost daily for diabetic needs. The effort made national and international news.

Since the first hectic days following the creation of the team, most supplies are now gone, shelters have closed and the team believes it filled a critical need that others overlooked. The effort was so successful, a U.S. Senate staff member came to learn first-hand and to take recommendations back to Washington.

Asked how he got so many people involved so quickly with such success, Dr. Smith said his lab staff lives by a motto that makes them think and plan big-despite plenty of obstacles and naysaying: "You can't succeed if you are not willing to fail."

*Editor's note: As a footnote to this story, Pfizer Inc. recently made a \$25,000 donation to the Pennington Foundation for on-going diabetes education related to the effects of Katrina.*

## HIBERNIA NATIONAL BANK VISITING SCIENTIST DINNER

FEATURED SPEAKERS: CLAUDE BOUCHARD, PH.D., EXECUTIVE DIRECTOR, AND JOHN NOLAND, PBRF CHAIRMAN OF THE BOARD

More than 90 guests attended the recent 2005 Hibernia National Bank Visiting Scientist Dinner Series hosted by the Pennington Biomedical Research Foundation (PBRF). Cocktails were served in the atrium tower of the new Basic Science Laboratory Building and dinner was served in the south atrium, overlooking the lake on the campus of the Pennington Biomedical Research Center (PBRF). Featured speaker was Dr. Claude Bouchard, executive director of the Center. *His topic was entitled "Unparalleled Growth-Unlimited Potential: Unleashing the Economic and Scientific Power of PBRC."*



Attending the scientific dinner were Sr. Kathleen Cain, OSF; Jane Boyce; and Polly and John Hernandez.

Dr. Bouchard presented the guiding principles of the Center: building a world-class research institution in preventive medicine, producing cutting-edge and influential research, protecting discoveries and promoting technology transfer, and fostering economic development which generates further research opportunities. He also discussed the breadth and depth of the Center's work in disease prevention, its

economic development potential, and the factors for sustained and enhanced growth. Dr. Bouchard, who was recently honored with the 2005 Earle W. Crampton Award in Nutrition from McGill University, demonstrated in his presentation the expansion potential on research discoveries, including those in the areas of brain development, maximizing disability free aging, stem cell and tissue engineering applications, and in the prevention of Alzheimer's and other dementia, heart disease and diabetes.

John Noland, chairman of the Pennington Biomedical Research Foundation, spoke of his dedication to the institution and in calling forth others to realize its enormous potential on quality of life issues and economic development potential to the state. He challenged individuals in the group to become advocates of the Center as well. Also attending the dinner was his wife, Virginia. Welcoming guests and introducing Noland was PBRF President and Chief Executive Officer Jennifer Winstead.

The 2005 Scientific Dinner Series was underwritten by Hibernia National Bank, whose stockholders on the very same day approved the merger with Capital One. Janet Rack, Hibernia senior vice president, spoke briefly at the dinner, expressing the bank's dedication to supporting the PBRF and pledging continued support in 2006.

## Does Obesity Begin Before We Are Born?

*continued from page 1*

causing a predisposition for common conditions, including obesity.

For example, he said, other researchers have already found that low birth weight may impact lifelong metabolic functions and represents a significant risk factor for the development of metabolic diseases in adulthood.

According to Ravussin, the nutritional and hormone mix that fetuses are subject to in the womb seem to have a profound effect on adulthood. The new CNRU will be dedicated to thoroughly examining these complex issues and will provide an opportunity for "bridging" clinical and basic science.

## Coypu Foundation Grant Establishes New Laboratory

The Pennington Biomedical Research Foundation proudly acknowledges an important new \$200,000 grant from the Coypu Foundation to establish a new laboratory, designated specially to support the newly awarded Clinical Nutrition Research Unit at the Center.

The new laboratory, to be called the John S. McIlhenny Laboratory of Skeletal Muscle Physiology, will focus on the vital role of muscle mass and muscle composition, and the cellular mechanisms playing a role in response to environmental factors that trigger weight gains. The Coypu grant will also provide for much needed skeletal muscle studies in humans. "It is believed that metabolic impairments preceding the development of metabolic syndrome, a precursor to Type 2 diabetes, reside in the molecular pathways of muscle metabolism," said lead researcher Dr. Eric Ravussin.

"Through this new laboratory, the Coypu Foundation continues to keep its founder, John S. McIlhenny, at the forefront by supporting grants in his lifelong areas of interest and study," said John Hernandez, Coypu Foundation board member.

Visit [www.pbrc.edu](http://www.pbrc.edu) and [www.pbrf.org](http://www.pbrf.org)  
Sign up for our E-News at  
[www.pbrf.org/explore.cfm/subscribe](http://www.pbrf.org/explore.cfm/subscribe)



## LEGACY SOCIETY HONORS PLANNED GIFTS TO PBRC

The Pennington Biomedical Research Foundation's (PBRF) mission is to provide the Pennington Biomedical Research Center (PBRC) with vital funding for vital research that aims to prevent premature death from chronic diseases. Since the Center first opened, it has relied on gifts from business and industry, individuals and foundations to supplement its grant awards and state funding. These private gifts are crucial to the Center as they often provide "bridge" or interim funding not available from other sources. These private donations have recruited top scientists, created numerous laboratories, endowed chairs and professorships, and matched grants for promising new scientific discoveries.

Increasing interest in long-range giving has prompted the Center to create a Legacy Society for individuals and families seeking planned giving opportunities. Membership in the Legacy Society is open to anyone who includes the PBRC and PBRF in their estate plans. According to PBRF Chairman John Noland, "Charitable gifts provide an individual with great personal satisfaction, and the institution with an important opportunity to enhance the scope and breadth of its work. A planned gift creates a long-range and enduring investment which moves the institution forward."

Providing leadership and direction to this development activity is a newly formed

council of financial professionals, chaired by PBRF board member Jerry Jolly, CPA, and managing partner of KPMG, LLP. Serving as co-chairman is Kevin F. Knobloch, CLU, CFP, client advisor at JP Morgan. Serving on the council are other financial advisors: G. Rolfe Miller, branch manager, Morgan Keegan; Elizabeth Querbes, senior vice president, Morgan Stanley; Jason T. Green, managing director, Stanford Group Company; Kevin C. Curry, partner, Miller, Hawthorne, D'Armond, McCowan & Jarman, LLP; Blanchard Sanchez, partner, McArthur Sanchez Associates; and William C. Potter, CPA, JD, managing director, Postlethwaite and Netterville, APAC.

According to Jennifer Winstead, PBRF president and CEO, "This group of estate planning advisors is lending its collective expertise and vast years of financial planning knowledge to provide the PBRF with viable instruments and methods of planned giving that are advantageous to both the individual and the institution."

The Legacy Society membership is acknowledged in various PBRF publications, recognized at scientific educational events, and included on the new donor wall in the C. B. Pennington, Jr. Building.

*For more information on the Legacy Society, contact PBRF Chief Financial Officer, Brad Jewell, at 225-763-2684 or brad.jewell@pbrc.edu.*

## PBRF DEVELOPMENT DIRECTOR NAMED



The Pennington Biomedical Research Foundation welcomes Melissa A. Bell as its new Director of Development. Bell joins the

Pennington team to drive development initiatives related to donor giving programs, donor cultivation and retention, planned giving and special event oversight to achieve the Foundation's goals for the Center. Prior to joining the Pennington Foundation, Bell served as the Director of Donor Cultivation Marketing for St. Jude Children's Research Hospital, working for their headquarters in Memphis, Tenn. Bell began her fundraising career back in 1997 where she managed the monthly sustainer program for St. Jude, and then was promoted to launch St. Jude's first catalog merchandising program to raise

additional revenue and branding opportunities. More recently, Bell led multiple cross functional teams to implement new and emerging fundraising initiatives. Over the past three years, she directly raised more than \$15 million dollars and acquired more than 180,000 new donors through donor cultivation and retention efforts for St. Jude.

Originally from St. Tammany Parish, Melissa and her husband, Jeff, who is a landscape architect and land planner employed with SJB Group, Inc. in Baton Rouge, returned to Louisiana recently with their two children to be closer to their family and to invest their talents in the Louisiana communities that they call home.

## Pennington Foundation Early Fall Scientific Dinner Series

Dr. Arya Sharma, a physician and faculty member of McMaster University of Canada, was a special guest speaker at the Pennington Biomedical Research Center. He spoke to



*PBRC faculty member Dr. Steven Smith; PBRC Executive Director Dr. Claude Bouchard; Scientific Dinner lecturer Dr. Arya Sharma; Hibernia National Bank/Capital One Senior Vice President Janet Rack; and Pennington Biomedical Research Foundation Chairman John Noland*

supporters of the Pennington Biomedical Research Foundation at the Hibernia National Bank Visiting Scientist Dinner Series held recently at the Basic Science Laboratory Building on the Center's campus. He discussed the escalating rate of obesity in the population, particularly in children, and the urgent need for research and study on all aspects of its causes: the environment, genes, and food choices and portions. He demonstrated the extensive societal changes during the last 50 years, which directly reduce one's physical exertion in both the home and work environment. He noted the escalating production of processed and fast foods, and the popularity of larger portions. It is now widely understood that obesity contributes to the development of diabetes, heart disease, hypertension, metabolic syndrome, and some cancers, he said.

In his visual presentation, Dr. Sharma acknowledged the importance of obesity research now underway at the Pennington Center. He emphasized the importance of the work at institutions and called for more research to identify medical, behavioral and pharmaceutical methodologies to help individuals retain their weight loss once it has been achieved. He said additional study into the role of long-term medications for weight management and the impact of various types of surgery now used for morbid obesity is vital to finding optimal solutions.

Dr. Sharma made his presentation to more than 75 guests of the Pennington Biomedical Research Foundation. He also spoke to the faculty and staff during his two day visit. The PBRF event was held in the south atrium of the new Basic Science Laboratory Building, overlooking the lake on the grounds of the Pennington Biomedical Research Center.



# Healthier Living and Weight Loss Focus of Studies

Pennington researchers are currently seeking citizen volunteers for the following clinical studies

## Take II — Diabetic Research Study

The Pennington Biomedical Research Center needs volunteers to participate in the Take II diabetes research study. We are testing the effect of FDA approved medications versus diet. You will be required to have 2 fat biopsies, 2 CT scans at the Baton Rouge General, and 2 6-hour clinic visits.

### To qualify:

- Be age: 35-75
- Have Type 2 diabetes
- Control diabetes with diet or one medication
- Have never taken Actos or Avandia
- Weigh less than 300 pounds
- Have not had kidney, liver or lung disease
- Thyroid and some Blood Pressure medications allowed

Participants will be compensated \$200.

## EKODE — 6-Day Blood Pressure Study

The Pennington Biomedical Research Center is conducting a 6-day blood pressure study. This study will examine an oxidized fatty acid called "EKODE," and its influence on blood pressure.

Throughout the 6-day testing period, participants will eat a diet high in sodium. All foods will be provided by PBRC throughout the testing period (no additional foods are allowed). Dinner will be eaten at PBRC while breakfast and lunch will be packed to take out.

### Study Design:

- 1 screening visit
- 6 other clinic visits (participants are admitted for one overnight stay on the in-patient unit on day 4 of the testing period)

### To qualify:

- Age: 35 – 65
- BMI: 20 – 35 (Normal to overweight)
- No chronic disease
- Non-smoker
- Cannot have elevated blood pressure > 160/95

- Not taking medications or nutritional supplements to lower blood pressure
- Not taking any medications regularly (thyroid medications are accepted if stable dose.)
- Females cannot be pregnant, breastfeeding or planning to become pregnant

Participants will be compensated \$350 at the completion of the study.

## Breakfast Study — 8-Week Weight Loss Study

The Pennington Biomedical Research Center is conducting the Breakfast Study to compare the effects of two different breakfasts on weight loss. 160 people will be recruited and randomly assigned to 1 of 4 groups:

1. Egg Breakfast with no diet plan
2. Egg Breakfast with diet plan
3. Bagel Breakfast with no diet plan
4. Bagel Breakfast with diet plan

The "Bagel Breakfast" consists of a bagel, cream cheese and yogurt. The "Egg Breakfast" consists of two eggs and two pieces of toast with jelly. Volunteers will be responsible for buying and preparing the food at home and will eat the prescribed breakfast at least 5 days/week for 8 weeks. Regardless of group assignment, all volunteers will meet with a registered dietitian at each visit to discuss the breakfast requirements and compliance.

### Study Design:

- 1 screening visit
- 4 other clinic visits

### To qualify:

- Age: 20 – 60
- BMI: 25 – 50
- No unstable chronic disease
- Cannot have a weight change of more than 5% in the past 3 months
- Cannot dislike or be allergic to eggs or bagels
- Volunteers with controlled diabetes are also welcome

Participants will be compensated \$200 at the completion of the study.

If you are interested in participating in a research study, call our recruiting department at 225-763-2596 or visit [www.pbrc.edu](http://www.pbrc.edu)

## NEW FACULTY



**Nathan Markward, Ph. D., M.P.H.** joins the faculty as an Assistant Professor-Research.

He is a specialist in human genome epidemiology (HuGE), and his research will be part of the new program we are developing in the area of Population Health and Prevention Studies. Dr. Markward received a Master of Public Health in Epidemiology from Tulane University in 1997, and his Ph.D. in Human Genetics from Louisiana State University in 2001. He comes to the Center from private industry in Vancouver.



**Paula Geiselman, Ph.D.**

has been appointed to the Digestive Diseases and Nutrition Study Section of the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), an institute of the National Institutes of Health (NIH). This panel is concerned with obesity, digestive diseases, liver, nutrition, and eating behavior. Dr. Geiselman's appointment is effective through June 30, 2009. In this position, she will review competitive research grant applications to NIH.



**Weihong Pan, M.D., Ph.D.,**

has been asked to join the Neuroendocrinology, Neuroimmunology and Behavior [NNB] Study Section of the National Institutes of Health (NIH). This panel is concerned with the neurobiological basis of behavior across the life span, with a focus on neuroendocrine, neuropeptide, and neuroimmune systems. Major areas of interest include ingestive behaviors, drugs of abuse, stress, and interactions of the brain with immune systems. This panel will review competitive grant applications to the NIH.



Pennington Biomedical Research Foundation  
6400 Perkins Road  
Baton Rouge, LA 70808-4124  
www.pbrf.org  
www.pbrc.edu  
225-763-2511

Non-Profit Org.  
U.S. Postage  
PAID  
Permit NO. 664  
Baton Rouge, LA



PENNINGTON BIOMEDICAL RESEARCH CENTER  
LOUISIANA STATE UNIVERSITY SYSTEM

## PBRF BOARD OF DIRECTORS

*Chairman*, John B. Noland

*Immediate Past Chair*, Kevin P. Reilly, Sr.

*Vice Chair*, Paula P. de la Bretonne

*Treasurer*, C. Brent McCoy

*Secretary*, Kevin R. Lyle

### Directors

Tim A. Barfield

Annette D. Barton

Madhu Beriwal

J.S. "Si" Brown, III

J. Terrell Brown

Joseph H. Campbell, Jr.

Maxine Cormier

Dr. Roy G. Kadair

J. Gerald "Jerry" Jolly, CPA

Charles A. Landry

Betsy S. Nalty

James M. Nolan

Nanette Noland

Bert S. Turner

*Ex-Officio*, Claude Bouchard, Ph.D.

Executive Director, PBRC

*Ex-Officio*, William L. Jenkins, Ph.D.

President, LSU System

*CEO*, Jennifer G. Winstead

*CFO*, J. Brad Jewell, CPA

Printing compliments of  
Blue Cross and Blue Shield of Louisiana

# PENNINGTON in the News

## A ROUND-UP OF CENTER NEWS AND NEWS MAKERS

- A PBRC team of physicians and clinicians offering aid to diabetic evacuees of Hurricane Katrina made news locally, nationally and internationally, including the Boston Globe and Swissinfo, and all local media.
- The Associated Press distributed a story carried by the Times Picayune and others on the Center's new, major grant to create a Clinical Nutrition Research Unit to study prenatal causes of obesity.
- Knight Ridder sought Dr. George Bray for a story on the impact of sweetened drinks on children. Bray says the sweetener Fructose adds calories to the diet, but the brain does not sense it in the diet, which leads to over-consumption. The story was carried in newspapers across the nation.
- Public television stations nationwide are airing a special documentary that features the work of current and former Center researchers to overcome childhood obesity. Louisiana Public Broadcasting produced the program called Step by Step, Kids Trimming Down, with a significant gift from long-time Center supporter Kevin Reilly.

## FACTS ABOUT THE PENNINGTON CENTER

**Mission:** To promote healthier lives through research and education in nutrition and preventive medicine.

**Size:** Main research facilities: 575,000 square feet; grounds: 234 acres.

**Staff:** 70 faculty members, 50 post doctorates, and more than 500 technicians and support personnel.

**6 Research Divisions:** Functional Foods, Experimental Obesity, Clinical Obesity and Metabolic Syndrome, Nutrition and Chronic Diseases, Health and Performance Enhancement and Education, and Nutrition and the Brain. The Center also has an Education Division.

**Laboratories:** 13 laboratories and 16 core service laboratories including genomics, proteomics, clinical chemistry, mass spectrometry, cell culture, comparative biology, transgenic, body composition, and food analysis laboratories.

**Clinic:** Outpatient examination and interview rooms, inpatient rooms for 14 research volunteers, metabolic kitchen, metabolic procedure room, two whole-room indirect calorimeters, dual energy X-ray absorptiometry, and ultrasound imaging.

*The Pennington Biomedical Research Foundation provides the Pennington Biomedical Research Center with vital funding for nutrition-based research that aims to prevent premature death from chronic diseases.*