



# NUTRITION MATTERS

FALL 2006

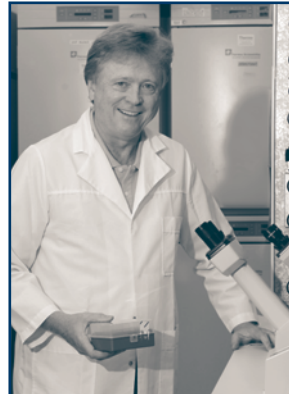
PENNINGTON BIOMEDICAL RESEARCH CENTER AND FOUNDATION • LSU SYSTEM

## DID YOU Know?

- PBRC Executive Director Claude Bouchard, Ph.D. and holder of the George A. Bray, Jr. Endowed Super Chair in Nutrition is ending his term as president of the International Association for the Study of Obesity. The IASO is comprised of nearly 2500 leading researchers and health workers from some 50 countries. The IASO recently met in Sydney, Australia where leaders announced the number of overweight people in the world now exceeds the number of malnourished.
- PBRC was featured in a two-part story on obesity and viruses in *New York Times Magazine*, highlighting the groundbreaking work of PBRC scientist, Dr. Nikhil Dhurandhar.
- People who reach 90 years of age or older, apparently, have built-in cell protection. Their cells can rejuvenate themselves or their parts better than most. Centenarians have an even greater level of protection. Researchers at the Center are trying to determine what, exactly, the cell protection consists of and are trying to learn what role activity and nutrition play in reaching advanced ages.
- Every one of the buildings comprising the Pennington Biomedical Research Center was a gift to the LSU System, built with private donations. Given in 1980 by "Doc" and Irene Pennington, offered to construct the buildings, and also asked the community to join them in funding its work in the future. For every dollar donated to the Center, an additional \$4 is generated from other funding sources.

## MIMICKING A GOOD THING

DON INGRAM RETURNS AND PURSUES A CALORIE RESTRICTION ACT-ALIKE



Dr. Don Ingram returns to Louisiana.

**Eating less - a lot less - may mean living longer:** That's a bit of news researchers at Pennington Biomedical Research Center (PBRC) and others around the world are coming to grips with as they study extreme calorie restriction. Eating up to 30% less than normal consumption,

while maintaining good nutrition, may lead to better health and a longer life span. *Nutrition Matters* has recently covered news of the calorie restriction trials at the Center. This is also available on the website at [www.pbrc.edu](http://www.pbrc.edu).

Now, however, a returning Louisiana native and senior researcher in calorie restriction and aging is trying to find a way to "mimic" calorie restriction. Primarily

because, as we all seem to find out at one time or another, a lifetime of dieting is a long and arduous journey, one that most dieters find hard to stay on track. And when you're trying to reduce calorie intake by a third below normal levels, well, "It's going to be very, very difficult to follow that for a lifetime," says Don Ingram, Ph.D.

Ingram, a native of Bogalusa and graduate of LSU, is one of the newest faculty members at the PBRC arriving in July. He is a psychologist and gerontologist who spent the last 26 years at the National Institute on Aging (NIA) at the National Institutes of Health (NIH). He was most recently the Chief of the Laboratory of Experimental Gerontology at the NIA's Gerontology Research Center in Baltimore, Maryland.

"The NIH has a very good set-up, great resources for research, but coming here was astounding. PBRC is a remarkable place; wonderful work atmosphere, incredible and innovative research, and a fantastic physical facility," Ingram said. His research has focused on

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## Meet Sidney Arbour & Marie Constantin

### TWO FOUNDATION SUPPORTERS AIM FOR BETTER HEALTH

The motto and resolve "Take care of one's health" appears to have paid off for retired businessman and community leader Sidney Arbour, Jr. Now in his 90s, Arbour walks a mile three times a week in his Hundred Oaks neighborhood of Goodwood Park.

He is quick to credit exceptional medical care and a "second chance" after suffering a mild heart attack in his 60s. But, in fact, Sidney had those medical and spiritual gifts, but also got serious about his continued recovery. Today, his ardent discipline is an inspiration to all.

Arbour, a supporter of the Pennington Biomedical Research Center since 1994, attributes a local registered nurse at a local rehab program with saving his life.

"If it wasn't for Colletta Barrett, I wouldn't be here today."

Barrett, who is now Director of Mission at OLOL, is past president of the American Heart Association and proponent of preventive education to retain a healthy heart.

Since recovering from the heart attack in 1970, Arbour says he became much more diligent about his health, maintaining an exercise program and watching his weight. Some years later, Arbour was encouraged to take a giant step as he participated in *The Advocate's* River Road Run. "I called all my children and told them what I was doing. I participated in the half-mile the first year and the next year went the whole way."

Those who know Arbour know he is an avid friend to Catholic High School, where he participates in all alumnus activities,

especially the Brother Eldon Run/Walk each year. So, when the Pennington Biomedical Research Center announced it was searching for 90-year-olds for a special health education and longevity clinical study, it wasn't much of a surprise that Arbour was one of the first to sign up.

Arbour joined the program in the Spring and encourages others in his age bracket to do the same.

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Sidney Arbour, Jr.

## BRIEFS

### *Worldwide Experts on Diabetes to Gather Here*

In October, Pennington Biomedical Research Center will host a group of scientists arriving from around the world to share the latest findings and current research in botanicals (plant derived compounds) and their role in curbing the onset of cardiovascular disease, metabolic syndrome and diabetes.

William Cefalu, M.D., Douglas L. Manship Professor in Diabetes and head of the John S. McIlhenny Laboratory of Botanical Research at the Center, will co-chair the symposium along with Michael LeFevre, Ph.D., Chief of PBRC's Division of Functional Foods, on **Oct. 29-31**.

### *Successful Research Program Extended*

George Bray, M.D., Division Chief, Clinical Obesity and Metabolic Syndrome, and former Executive Director of PBRC, has received a 7 year competitive renewal award from the National Institutes of Health to continue a valuable, ongoing study called *Look AHEAD*. The award totals approximately \$8.79 million. The *Look AHEAD* clinical trial is documenting the long-term health effects of an intensive weight loss intervention in approximately 5100 overweight volunteers with Type 2 diabetes. Participants achieve and maintain weight loss by decreasing caloric intake and increasing physical activity.

### *Silvia Returns to Pennington*

Bill Silvia, recently retired as Senior Executive Vice-President and Chief Operating Officer of the LSU system, has returned to the Pennington Medical Foundation to support its growth. Silvia will continue to serve as its Chief Financial Officer and serve as the Foundation's advisor to the executive director on planning and special projects. His priority will be to take the lead in putting together the financing for the construction of a new clinical research building. He will also take leadership in the consortium studying the development of a large wellness center as defined in our Strategic Plan 2005-2010.



### *Lecture Series*

Diabetes Lecture Series continues November 7 from 5:30 p.m. - 8:30 p.m. at the C. B. Pennington, Jr. Building. It is free and open to the public.

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



It is my pleasure to announce that we have made substantial progress in the conversion of our former conference center to serve as the new home of our Population Science program. I would like to thank the Trustees of the Pennington Medical Foundation. With their help, an important addition to the building was constructed and is now open, and our researchers have already started to move into their new offices. Population Science is a growing area for the Center, and is the third component in our continuum of research.

The Center has been able to rely on a Basic Research program since its opening. This is the area where our scientists are true explorers of the human body, seeking and learning the basic knowledge that drives our mission to promote healthier lives. It is in the more than 30 basic research laboratories that we are learning the cellular, molecular and genetic underpinnings of obesity, the biology of exercise, the defects predisposing some to diabetes, stem cell uniqueness, botanical and other compounds that affect the course of disease and potential cures for cancer. New knowledge starts here. Our hope is that what we learn in our basic science laboratories might one day be applied to improve health and lives of people.

Clinical Research is the next research component. It is where we build on the knowledge from Basic Research. Clinical research is where we learn the effects of medicine, food, exercise and behavior change on humans. Over the years, more than 20,000 Baton Rouge citizens have volunteered to participate in clinical trials, and of them more than 10,000 have completed

the programs. It is in clinical research that we determine whether inhaled insulin is safe, if there is effective treatment for diabetes, if the "DASH" diet is an effective means of lowering blood pressure, if a specific diet and exercise regimen can ward off diabetes or cardiovascular disease, and if there may be drugs that are safe and effective for combating obesity and weight gain.

However, it is one thing for a drug or a behavior change or a diet to work in a laboratory setting or a clinical setting, and another thing for it to be accepted, properly used and effective in the day-to-day setting. One means of determining if new knowledge from basic or clinical research is actually improving lives is to explore communities and groups of people outside the laboratory. This is the venue of our Population Science program. It aims to explore how new knowledge is accepted by large groups of people or society as a whole. Our researchers here are, among other things, determining if education works in a rural setting to improve health, if improvements to schools will lead to healthier students and healthier adults, and if pregnant mothers can be convinced to adopt a healthier lifestyle to maximize the chance of having healthy babies. Population scientists also take snapshots of the demographic, economic, behavior and health characteristics of groups of people defined in terms of age, sex, and ethnicity.

We look forward to new, exciting research led by epidemiologists, psychologists, behaviorists, nutritionists and other researchers in our growing Population Science program and invite you to visit the Center to see first-hand the new addition to the C.B. Pennington, Jr. Building.

Claude Bouchard, Ph.D.  
PBRC Executive Director,  
George A. Bray, Jr. Endowed  
Super Chair in Nutrition

# MATCHING GIFTS PROGRAM MULTIPLIES SUPPORT

GENE AND SYLVIA DUKE COMMITTED TO PBRC

Two special supporters of the Pennington Biomedical Research Center and Foundation, Gene and Sylvia Duke, are multiplying their annual donation, thanks to the matching gifts program of the ExxonMobil Foundation.

Matching gifts are corporate contribution programs that match the charitable contributions made by employees to qualifying organizations, such as PRBC. Some companies also match charitable contributions made by spouses, retirees, and board members. Specific guidelines regarding the type of organizations included, donor eligibility, and the dollar amount, that will be matched, are established by each corporation.

The ExxonMobil Foundation's Educational Matching Gift Program is intended to encourage giving to higher education by employees, retirees, and surviving spouses. The matching ratio is three-to-one, with their Foundation contributing \$3 for every \$1 contributed by the employee/retiree or surviving spouse.

The Duke's are vitally interested in the work of the Pennington Biomedical Research Center and the company's matching gifts help to make theirs more significant. Gene worked with Exxon for more than 30 years in management labor relations.

"We want to assist the Pennington Biomedical Research Center in its continuing work, and we help in other ways as well. But, the most significant thing we can do is to provide an annual gift that can be matched," says Gene Duke. Through the ExxonMobile Foundation,



*ExxonMobile retiree Gene Duke and his wife Sylvia's donations to the Pennington Biomedical Research Center are matched to significantly increase their gift.*

the Duke's annual gift has been tripled each year of their giving.

"We are thrilled that the Duke's are taking advantage of this corporate benefit, and they often encourage associates and friends to do the same," says PBRF President and CEO Jennifer Winstead. In addition, Sylvia and Gene are always providing volunteer assistance. "You'll see them enjoying themselves at the Soaring to New Heights event, but they have also been behind the scenes providing valuable volunteer leadership," she adds. "They are dedicated to the work of Pennington Biomedical Research Center."

In 2004, ExxonMobil employees and retirees gave more than \$7.7 million to colleges and university systems. In April of 2005, ExxonMobil matched their donations with contributions of \$18.6 million, making it one of the largest matching programs in the United States, accord-

ing to Gerald W. McElvy, president of the ExxonMobil Foundation Matching Gift Programs.

Today, there are more than 10,000 companies that match donations to philanthropic organizations. That means that a gift you or your spouse make to the Pennington Biomedical Research Foundation could be doubled-or even tripled!

The history of matching gifts celebrated its 50th anniversary in 2004, when the General Electric Foundation created the first matching gift program for the General Electric Company. Philip Reed, chair of the General Electric board

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## We Appreciate Matching Gifts...

*PBRF is honored and most appreciative for all our friends who show their loyal support through matching gift opportunities.*

*Eleanor Eldredge, a donor and friend to PBRC since 1994, continues to offer her support and dedication to PBRF through ongoing matching gift donations.*

# FREE For Yourself, Daughters, and Friends...

Mark Your Calendar Now!

Events:

FREE Health Screenings, Health Information Expo, Educational Seminars, "Louisiana on the Move" sign up, giveaways, and more.

Keynote Speaker: Cooking Expert & Author Holly Clegg

Register online by October 1 at [www.pbrc.edu](http://www.pbrc.edu) to guarantee your lunch.

Proceeds benefit the Women's Nutrition Research Program - an initiative of the Pennington Biomedical Research Center

**Irene W. Pennington  
Wellness Day for Women  
Saturday, October 7  
8 am - 2 pm  
C. B. Pennington, Jr. Building**  
Free parking, free admission, relax and enjoy yourself

Presenting Sponsor:



Contributing sponsors:



In-Kind Sponsors:



Sponsored by the Pennington Biomedical Research Center and Foundation

## NEW ANNUAL GIVING PROGRAM NOW UNDERWAY TO SUPPORT WORK OF PENNINGTON BIOMEDICAL RESEARCH CENTER

*"Looking back, C.B. 'Doc' Pennington provided for the initial bricks and mortar needed to construct the Pennington Biomedical Research Center more than 18 years ago. His original challenge to grow the Center with support from the community is even more of a necessity today. The 2006 Annual Giving Program does just that... each gift, no matter the size, makes a difference."*

John Noland,  
PBRF Chairman

Since 1988, the Pennington Biomedical Research Center (PBRC) has focused its mission on promoting healthier lives through research and education in nutrition and preventive medicine. With escalating obesity rates, the Center and its renowned scientists and physicians are poised to find solutions, not only for the United States, but also the world.

According to the U.S. Surgeon General Richard Carmona, M.D., "We may see the first generation that will be less healthy and have a shorter life expectancy than their parents." It's alarming: diabetes has doubled with 20 million people now living with diabetes and another 41 million not aware they have pre-diabetic



*"We may see the first generation that will be less healthy and have a shorter life expectancy than their parents."*

Richard Carmona, M.D.  
U.S. Surgeon General

conditions; heart disease is the number one cause of death in men and women; nearly two out of three adults are considered overweight or obese and almost one out of six children and teens are overweight or obese; and nearly half of all cancers are associated with obesity.

Waiting for the next generation to find a solution will be too late for those in our community who need answers and results right now. PBRC is compelled to act.

PBRC doctors and scientists are searching for solutions now in the hope of preventing these diseases before they occur. They have tested and assisted in securing approval from the FDA on countless pharmaceutical medicines like Exubera, a new form of 'inhaled' insulin; partnered with the Army to apply nutrition to improve troop readiness and effectiveness for combat; co-created and tested the DASH Diet, a sensible eating plan proven to reduce high blood pressure - resulting in patients eliminating the need for medications; and are engaging Louisiana school children in a study to improve their lifestyles and future health.

PBRC research and discoveries must move forward because from research comes solutions and cures. However, PBRC needs local support and financial contributions to make this a reality. Please use the enclosed envelope today to send in a contribution or donate online at [www.pbrf.org](http://www.pbrf.org).

For more information, contact Melissa Bell at (225) 763-2511 or [melissa.bell@pbrf.edu](mailto:melissa.bell@pbrf.edu).

## MIMICKING A GOOD THING

### DON INGRAM RETURNS AND PURSUES A CALORIE RESTRICTION ACT-ALIKE

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nutritional and pharmacological interventions designed to slow the rate of aging, thus reducing the risk of age-related and functional decline, including his work that led to new medications for the treatment of Alzheimer's disease.

Now, Ingram and his lab team are working to determine what happens in organisms, especially in humans, when food supplies drop way off or, as he puts it, the organisms get into a "very low-energy" environment. Many organisms have a genetically programmed reaction: they slow down development, halt reproduction, reduce their metabolic rate, and some even go into a suspended animation or hibernation-like state. Yeast, worms, flies and rodents all exhibit this genetically controlled response to low energy availability. In addition, the same response mechanisms also turn on many bio-

chemical defenses to enhance response to stress and ward off disease.

"If you're going to stop growing and reproducing, you better have a way to survive," Ingram said, "and these organisms have a number of genes that, when stimulated by low energy (food) intake, lead to a cascade of responses that eventually result in slowing many aging processes, and thus produce subsequently greater health and longer life."

The question is, do humans have a similar set of genes or genetic responses that also slow down aging processes, ward off illness and contribute to longer life when food intake is severely reduced? Caloric restriction studies say, possibly, "yes," but Ingram would like to know if the same response can be created with a nutrient, a drug or other chemical compound.

Ingram and his colleagues have seen a "fake" glucose (sugar) molecule cause responses similar to calorie restriction but which did not reduce food intake substantially. When the imposter glucose makes its way into cells, it prevents cells from being able to use available, real glucose. By making glucose unavailable to the cells, the imposter creates a situation that "mimics" a low-food or low-energy environment, and seems to set off the events that lead to a biochemical slow-down, and enhanced stress responses similar to actual calorie restriction.

Currently, the search is on for a nutrient or other compound that would create the beneficial effects of caloric restriction without the life-long dedication to severe diet restriction, and without any harmful side-effects. If Dr. Ingram and his colleagues continue the successes they have achieved so far, caloric restriction mimicry could become a reality.

# LEGACY SOCIETY

PENNINGTON BIOMEDICAL RESEARCH CENTER

*Editor's Note: This is the first in a series of features on how you and/or your family can consider and make a planned gift to the Pennington Biomedical Research Center and Foundation.*

## WHAT IS THE LEGACY SOCIETY?

The Legacy Society is the planned giving program of the Pennington Biomedical Research Center and Foundation. As a member of the Legacy Society, your planned gift supports innovative and ground-breaking research that is changing the health of future generations.

## WHAT ARE PLANNED GIFTS?

Generally, any gift made with consideration about its financial implications to the donor and the donor's family and how it will benefit a charitable organization, such as the Pennington Biomedical Research Foundation, is a "planned" gift. Planned gifts are often established through a legal document such as a will, trust, life insurance policy, or retirement plan. All of these methods can be used to "plan" current and future gifts to the Pennington Biomedical Research Center and Foundation.


## HOW CAN I MAXIMIZE THE BENEFITS TO MY FAMILY, PENNINGTON AND MYSELF?

We recognize that your situation is unique and includes your personal needs and goals, family, assets and charitable interests. Planning your gift can help you maximize the impact of your giving objectives. An initial review of your charitable interests, needs, and assets is a good start. Based on this initial review, your financial advisor and members of the Foundation's planned giving staff work together in implementing various charitable methods for achieving your unique and specific goals. One method of planned giving may allow you to save on income taxes. Another method may combine a gift while providing income for you and a loved one. Some gifts can be given immediately, while others can be deferred, such as bequests through a will. By joining the Legacy Society, the Foundation can customize your planned gift to meet the needs of you and your family, while creating a lasting legacy to the PBRC.

## HOW WILL MY PLANNED GIFT BE USED?

Your planned gift to the Pennington Biomedical Research Foundation will be used to provide perpetual support to the world-renowned research being conducted at the Pennington Center. Your gift will support vital research in disease prevention and create a cutting-edge environment to advance scientific discovery. Your gift will be used to provide our scientists with the resources and tools necessary to achieve Pennington's mission of promoting healthier lives through research and education in nutrition and preventive medicine.

## HOW CAN I RECEIVE MORE INFORMATION ON THE LEGACY SOCIETY?

For more information on joining the Legacy Society or exploring the many ways that planned giving can benefit you, your family, and Pennington, contact our Chief Financial Officer, **Brad Jewell, CPA** at **225-763-2684**. 

## TWO PBRF SUPPORTERS AIM FOR BETTER HEALTH

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According to Eric Ravussin, Ph.D., holder of the Douglas Gordon Chair in Diabetes and Metabolism, and one of the designers of the study called *Healthy Aging*, only three out of 100 people born in 1916 are still living today. Researchers are trying to determine what it takes for near centenarians, like Arbour, to make it that far in life: Do they have better genes? Better lifestyle? Better nutrition? The study looks at all three. For more details, go to [www.pbrc.edu/news](http://www.pbrc.edu/news).




Marie Constantine (forefront) inputs her daily nutritional information as PBRF Registered Dietician/interventionist, Gina Frazier, assists.

long-term clinical study called *Pounds Lost*, led by PBRF scientist and former PBRF Executive Director, Dr. George Bray.

"I love getting the results from these medical tests, so when I have this piece of paper in my hand, it says to me 'I am responsible for changing these numbers'." After nine months in the program, Marie is seeing the difference. Her blood pressure has dropped

significantly and her pulse rate is now at a remarkable low 51. She has lost 27 pounds and is at a maintenance level.

This past summer she traveled with the CAP Elite team to participate in the Master's athletic competition at Stanford University, where she competed in the 50 meter breast stroke. "I broke my personal best record."

"The hardest part of the Pennington study," says Marie, "is recording my food consumption in the computer, so researchers can analyze what I am eating." But, Marie is not giving up and tells those who are interested in her effort that her PBRF "partner" in the *Pounds Lost* clinical study is an important and life changing event. 

Marie Constantin is a successful professional photographer, but she knew she was on a collision course if she didn't get a health program in place. "I was swimming – doing two hours a week, but I wasn't losing weight.

"I decided I needed a 'partner'. I wanted a professional, a program with substance and thought behind it, to guide me through."

Constantin came to the Pennington Biomedical Research Center last December, and after a number of preliminary tests, qualified for the

## what is POUNDS LOST?

*POUNDS LOST* is a study comparison of four diets varying in carbohydrate, fat, and protein. The goal is to determine which type of eating pattern results in the most weight loss at 6 months and which is the most effective in maintaining weight loss over a 2-year period. The trial includes 800 men and women ages 30 to 70 years. This research study may serve to develop healthy eating menus for the public and serve as a model for future weight loss diets. Participating institutions include the Harvard School of Public Health and Women's Hospital in Boston.

Information on *Pounds Lost* and other clinical studies are available at [www.pbrc.edu](http://www.pbrc.edu).

# SPINAL CORD INJURIES

## IMPROVING QUALITY OF LIFE

### EATING, NUTRITION & DIGESTION

*At first, research in spinal cord injury seems an unlikely subject for the mission of the Pennington Biomedical Research Center (PBRC) – promoting healthier lives through research and education in nutrition and preventive medicine.* Yet, vital work in this area is underway at the Center; work that links the PBRC's mission to living with a spinal cord injury.

From the moment of injury, people who suffer spinal cord damage can face an extreme change in their ability to feed themselves, swallow effectively, and process nutrients through the stomach, intestines and colon. The movement of food through our digestive system and of nutrients into our bodies is primarily controlled by nerve signals to and from gut muscles, glands and organs. When these signals are disrupted by injury, individuals face daunting challenges.

Feeding tubes, physical therapy for bowel management, complications from gastrointestinal distress that can trigger life threatening bouts of high blood pressure, are among the list of life-defeating realities PBRC researcher Greg Holmes, Ph.D. is trying to overcome through research.

"This is not just a nutrition and health issue. It is also a dignity issue," said Holmes, a member




*Greg Holmes, Ph.D. and his "polygraph," a device used to measure signals within nerve pathways.*

*"The million dollar question is what digestion-controlling pathways are damaged or destroyed by spinal cord injury?"*

of the Center's newest group, the Division of Nutrition and the Brain. "Quadriplegics must rely upon a parent, a spouse or a healthcare professional for daily nutrition, toileting and personal hygiene. Even persons who retain upper limb function must follow a strict nutritional regimen and still devote hours to daily personal bladder and bowel care."

"The million dollar question," according to Holmes, "is what digestion-controlling pathways are damaged or destroyed by spinal cord injury? This is a puzzle, because the dominant nerve path to the stomach exits the brain too high above the spinal cord to be damaged by spinal injury. My hypothesis is that pathways also exist within the spinal cord that are essential in controlling digestive reflexes."

According to Holmes, most research into spinal injury research focuses only on restoring nerves for moving and walking. "Nerve re-growth is a hot topic, but an effective treatment is, in my opinion, a thing of the future," Holmes said, "There are 15,000 new cases of SCI [spinal cord injury] every year with an estimated 250,000-400,000 people with SCI in the US alone, and these individuals need to get on with their lives in the present."

"Surveys of the injured population indicate that stable gastrointestinal function and the resulting freedom from daily bowel regimens are considerably more important than walking again," Holmes said, "Ours is the only lab in the U.S. looking at the possibility of recouping the natural digestive rhythm and reflexes following trauma." 


## DOES EDUCATION CREATE HEALTHY LIFESTYLES IN CHILDREN?

### RESEARCHERS AT PENNINGTON BIOMEDICAL RESEARCH CENTER SET TO FIND OUT

Researchers at the Pennington Biomedical Research Center are set to test the adage "education is the key." They want to know if education of primary and secondary school students actually does lead to healthier choices and healthier lifestyles.

According to lead researcher, Donald Williamson, Ph.D., the John S. McIlhenny Professor in Nutrition, a team of behavior, nutrition, health and field science specialists will set up programs in 18 clusters of rural schools involving 2500 4th through 6th graders across Louisiana this fall.

The aim is to see if changes to the school environment, lessons and activities will lead to long-term, healthier lifestyles of the students.

The team just won a grant from the National Institutes of Health for approximately \$2.1 million to carry out the extensive study called "LA Health". The LA Health project aims to alter environmental and behavioral factors that appear to favor an unhealthy lifestyle, including easy access to high calorie foods, sedentary behavior and play activities that don't involve physical exertion. For more information go to [www.pbrc.edu](http://www.pbrc.edu). 



# PBRC Hosts KRAFT FOODS WORLDWIDE KRAFT SEEKS INPUT FROM PBRC

Kraft Foods, the world's second largest food company, is calling on a group of experts – including researchers at PBRC – to help the company do its part to address the rise in obesity.

Calling the problem “a complex public health challenge of global proportions,” Kraft management announced in 2003 four areas in which the company would seek global advice: product nutrition, marketing practices, consumer information and advocacy and dialogue.

PBRC researcher Michael Lefevre, Ph.D., Chief of the Center's Division of Functional Foods, was asked to join the Kraft Worldwide Health and Wellness advisory council, and has been providing advice based on his research experience in the areas of both functional foods and cardiovascular disease prevention.

Lefevre said taking part in the advisory council is a natural outgrowth of the Center's mission of education regarding nutrition.

“Kraft is the number one food manufacturer in the U.S. If you want to have a direct impact on the population, then this is what you do,” Lefevre said.

The most recent Kraft innovation to utilize the Advisory Council's advice is portion control packaging, where Kraft pioneered the “100-Calorie Pack” category. Consumers can now select from a variety of 100-Calorie Pack options in the Kraft portfolio including *Oreo Thin Crisps*, *Chips Ahoy! Thin Crisps*, *Wheat Thins*, *Balance Bars* and *Jell-O Pudding Snacks*. “It's clear that [after buying an individual package of crackers, for example] people eat the entire contents,” Lefevre said. “Creating a re-closable bag for multiple portions didn't appear to be immediately feasible, so portion control made sense.”

So Kraft created a snack with a smaller portion size – 100 calories – and put the calorie count in bold type on the front label.

Lefevre said Kraft has also made a commitment to responsible marketing practices, particularly when speaking to children. Critics

of children's advertising have long asserted they influence children to buy products without regard for nutritional value. The company voluntarily announced it would be limiting its advertising to only its better-for-you products in outlets that primarily reach children age 6-11. The company recently extended that policy to include Kraft websites, an effort that will be completed by the end of 2006.

For their 100-calorie pack product, Kraft recently won the *Foodprocessing.com* 2005 Innovation Award.

*“Taking part in the Advisory Council is a natural outgrowth of the Center's mission of education regarding nutrition.”*

*Michael Lefevre, Ph.D.*

The worldwide council usually meets two to three times a year in Chicago. However the entire council recently assembled in Baton Rouge at the Center to discuss the latest issues – and see first-hand


the world's largest academically based nutrition research center.



*Kraft Foods Worldwide Health and Wellness advisory council visits the Pennington Biomedical Research Center.*

two days on site and capped their stay with a Louisiana-style crawfish boil with a Cajun dance band at Mount Hope plantation.

“Pennington, and Mike personally, have played an important role in helping Kraft progress its Health and Wellness agenda,” added Ruff.

When the council first met, Kraft was quite interested in the current state of affairs in its four interest areas of product nutrition, marketing practices, consumer communication and advocacy. Now, Lefevre said, after meeting for three years, Kraft is looking to the future, trying to stay ahead of trends. Although the council was formed with an initial time frame of two to three years, members of the council continue to provide their expertise and advice on a wide range of fields including obesity, heart disease, physical activity, advertising, and nutrition. The group believes it can continue to play a valuable role in Kraft's strategic planning. 

John Ruff, who chairs the Council as Senior Vice President Global Quality, Scientific Affairs and Nutrition for Kraft, said the group came away with a very favorable impression of the Center and the facilities. The group spent


## Workplace Giving Can Make a Difference

We are pleased to announce that the Pennington Biomedical Research Center and Foundation will be participating in the Louisiana Combined Federal Campaign (CFC), a federal work place giving campaign that presents non-profit organizations to federal employees for charitable gift consideration. PBRC is honored to be participating in the CFC's 2006 campaign.

*Louisiana Combined Federal Campaign (CFC) is a federal workplace giving campaign that presents non-profit organizations to federal employees for charitable gift consideration.*

The 6-week CFC campaign will begin in mid to late fall. During that time all federal employees in Louisiana offices will have the opportunity to make a contribution by selecting organizations from a published list. PBRC will be participating in the federal campaign as a new member on the list of Community Health Charities (CHC), a national federation of leading nonprofit charitable health organizations. As a member of CHC and a participating charity in the Louisiana CFC, the Center has an opportunity to encourage the promotion of healthier lives through research and education in nutrition and preventive medicine. Through increased donor funding, we have the opportunity to expand our health and nutritional research in an effort to reduce premature death from chronic diseases such as diabetes, hypertension, and some forms of cancer.

Interested federal employees wanting to help the Center through charitable gifts, can look-up Pennington Biomedical Research Foundation (PBRC) in their campaign literature. Federal employees *can* make a difference through federal workplace giving program by designating their charitable giving to the Pennington Biomedical Research Center & Foundation.

*Additionally, if you are not a federal employee and are interested in starting a workplace campaign to help the Center at your place of employment or would like to see healthcare charities added to your options in your existing work place campaign, please contact Melissa Bell, PBRC Director of Development, at Melissa.Bell@pbrc.edu or (225) 763-2511. Thank you in advance for your interest and your support. *

# PBRF Foundation *Success*

## FIRMS, FAMILIES, FRIENDS SUPPORT “SOARING TO NEW HEIGHTS”

The Pennington Biomedical Research Foundation (PBRF) hosted its third annual fund raising event, “Soaring to New Heights,” during the 2006 Pennington Hot Air Balloon Championships, held in Baton Rouge in early August. The popular event drew more than 500 individuals to the Pennington campus to help support its continuing work in research and disease prevention.

The philanthropic event benefited the PBRF and the Pennington Biomedical Research Center (PBRC). More than \$150,000 was raised from sponsorships and ticket sales. “We are so grateful to the firms and families for their generous donations and their commitment to the Center and its work,” said John Noland, PBRF board chair. “This is a popular event because it is unique, a family endeavor,

and a very worthwhile cause that helps our researchers and brings heightened awareness to the PBRC,” he added.

*This year’s presenting sponsor* was the **Irene W. and C. B. Pennington Foundation**. The “Soaring for Nutrition” sponsors were **The Shaw Group** and **Latter & Blum, Inc. Realtors/C.J. Brown**.



*Some of our major sponsors (left to right) Stokes McConnell, Long Law Firm; John Noland, Pennington Biomedical Research Foundation Chairman; Paula Pennington de Bretonne, Irene W. and C.B. Pennington Foundation, Amy Abadie, The Shaw Group; Dr. Claude Bouchard, Executive Director of the Pennington Biomedical Research Center.*

*“We are so grateful to the firms and families for their generous donations and their commitment to the Center and its work.”*

*- John Noland, PBRF board chair*

The soaring event is a family affair!



*Special thanks to the Irene W. and C.B. Pennington Foundation as Presenting Sponsor of the Soaring to New Heights fund raising event at the recent Balloon Championships. Having a great time, despite the rain, are (left to right) Paula Pennington de la Bretonne with daughter-in-law Julie Blackstone holding Michael Jr., son Chris Blackstone holding sons, Cole (on left) and Pierce (on right), his wife, Alyce Blackstone holding Hensley, and Paula’s mother, Peggy Pennington Cole.*

# Thanks to our major sponsors...



*Gene & Sylvia Duke*

*Anonymous*





# A BENEFIT FOR PENNINGTON BIOMEDICAL RESEARCH CENTER & FOUNDATION

“Soaring” attendees joined in the festivities under special air-conditioned tents earmarked for the PBRF. The reserved area was next to the Balloon Glow area of the festival and included a complimentary gourmet buffet, beverages and access to all the festivities on the grounds. Though rain hampered the balloon activities, guests enjoyed fireworks and live music.

*Special thanks to “Soaring for Wellness” sponsors Gene and Sylvia Duke, Equitas Capital Advisors, LLC, Long Law Firm, Milton J. Womack, Inc., and one anonymous donor. The “Soaring for Fitness” donors were Adams & Reese, LLP, Amedisys, Inc., Jim and Laura Bailey, Mary Kay and J. Terrell Brown, Bruce Foods, Daniel T. Calongne & Associates, Capital One, Arthur J. Gallagher Risk Management Services, Inc., Morgan Keegan*

*& Company, Inc., KPMG, University Club Plantation, WHL Architecture, and John and Janet Young. Underwriters and In-kind donors were Baton Rouge Coca Cola Bottling Company, Blue Cross and Blue Shield of Louisiana, Community Coffee, Mockler Beverage Budweiser, Morgan Stanley, Rickey Heroman Florist, Matherne’s Supermarket, Weeks Brothers Equipment Rental, Cake Palace, Broadmoor Middle School, Calvin’s Bocage Market, and Beer League of Louisiana.*

PBRF Chief Executive Officer Jennifer Winstead and Director of Development Melissa Bell thankfully acknowledge the *2006 Soaring to New Heights Committee: Mary Jo Mayfield, chair, Annette Barton, Lori Bertman, Melanie Boyce, Maxine Cormier,*

*Paula Pennington de la Bretonne, Sylvia Duke, Susan Freeman, Jan Hill, Margo Kadair, Gretchen Kantrow, Sancy McCool, Page Silvia, Buddy Tucker, and Julie Wright.*

PBRF also thanks Louisiana Ballooning Foundation Chair Bob McNeese; Executive Director, George Richard and the Louisiana Ballooning Foundation for all of their time, assistance and support of this PBRC event. *Soaring to New Heights* is greatly enhanced by its association with the annual balloon championships.

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. 📍



◀ *Soaring Committee from left to right: Page Silvia, Buddy Tucker, Sylvia Duke, Paula Pennington de la Bretonne, Mary Jo Mayfield, Melanie Boyce, Annette Barton and Sancy McCool. Missing from the photo are Lori Bertman, Maxine Cormier, Susan Freeman, Jan Hill, Margo Kadair, Gretchen Kantrow and Julie Wright*



*Pennington staff members joined in supporting the Foundation at the Soaring event: Frank Greenway, Jennifer Rood, Anne Duke with son Zachary, Robert McNeese, Walter Legett, Pam Fisher, Catherine Champagne, Gena Doucet, and Claude Bouchard.*



*Campus Federal volunteers from left to right: John Milazzo, President and CEO, Ruby Leblanc, Sara McElveen, Cecile Campesi, Kori Melancon, Kathryn Hicks, Sadhana Gera (white shirt), Sheila Thomas, Pamela Love, Blaine Grimes and Brian Ainsworth*



## NEW FACULTY



### **Don Ingram, Ph. D.**

Dr. Ingram joins PBRC as Professor in our *Divisions of Functional Foods and Nutrition and the Brain*. He

has been working over the past 26 years at the National Institute of Aging of the NIH, most recently serving as Chief of the Laboratory of Experimental Gerontology. Dr. Ingram received his B.A. in psychology from LSU and his Ph.D. in psychology and gerontology from the University of Georgia. His research focus at PBRC will relate to nutritional and pharmacological interventions designed to maintain cognitive and motor function in aging, and on mimicking caloric restriction. Dr. Ingram is a native of Bogalusa, Louisiana.

## FACULTY PROMOTIONS



### **Gerlinda Hermann, Ph.D.**

has been promoted to *Associate Professor-Research*. Dr. Hermann is in the Division of Nutrition and the Brain, where she is

investigating the effects of serious chronic diseases on nutrition and digestion. One aim is to learn how to stop disabling affects of disease so that patients who are seriously ill can gain the benefits of nutrition.



### **Corby Martin, Ph.D.**

has been promoted to *Assistant Professor-Research*. Dr. Martin is in the Division of Health and Performance Enhancement

where he is studying the effects of behavior modification like diet, exercise and smoking cessation on disease prevention.



**Jianping Ye, M.D.** has been promoted to *Professor*. Dr Ye is in the Division of Nutrition and Chronic Diseases and does his research in the John S.

McIlhenny Laboratory of Botanical Research where he is investigating the possible link between inflammation and the onset of diabetes.

## LOUISIANA ASSOCIATION OF NONPROFIT ORGANIZATIONS HONORS

# PAULA PENNINGTON DE LA BRETONNE RECEIVES 2006 LOUISIANA HEROINE AWARD

Anyone who wants an example of the power one person has to give back to the community and make a difference can look to Paula Pennington de la Bretonne's work with the Pennington Biomedical Research Foundation (PBRF), said Foundation Chairman John Noland in presenting de la Bretonne with a 2006 Louisiana Heroine Award, a program of the Louisiana Association of Nonprofit Organizations (LANO).

Nonprofit organizations throughout Louisiana were invited to nominate women whose contributions of time, talent and treasure had a significant impact on their organization's work.



(left to right) Donna Saurage, LANO board member, PBRF Chairman John B. Noland, Heroine Award Honoree Mrs. Paula Pennington de la Bretonne, and Melissa S. Flournoy, Ph.D., president and CEO, LANO

"Paula Pennington de la Bretonne has been actively involved in the leadership of the Pennington Biomedical Research Foundation (PBRF) and its

mission to provide funding and support for the Pennington Biomedical Research Center," said John Noland, chair of the PBRF, in presenting the award. She shares the vision of her grandfather, "Doc" Pennington, who presented the LSU System with one hundred twenty five million dollars in 1980 to construction the Center. She understands the needs of the Center for external funding and community support, and she has the dedication and enthusiasm to keep it growing," added Noland.


De la Bretonne is an integral part of the history of the Pennington Biomedical Research Center and Foundation. She has been a member of the PBRF board of directors for six years, leading efforts in development, strategic planning, and as a board officer. She has personally supported the work of the Center through contributions of time, talent, and resources. In 2004, she led a group of PBRF board members to visit and consult with other institutions with the goal to create a stronger development program to benefit the Center, and later led an effort to recruit a new president and chief executive officer for the PBRF. She initiated a new fund raising program in 2004, "Soaring to New Heights,"

*"Paula Pennington de la Bretonne understands the needs of the Center for external funding and community support, and she has the dedication and enthusiasm to keep it growing."*

which has been held annually during the Pennington Ballooning Championships and raises more than \$150,000 from the community. She has also provided leadership to establish the Peggy

Pennington Cole Endowed Chair in Maternal Biology and the Risk of Obesity and the John W. Barton, Sr. Endowed Chair in Genetics and Nutrition. De la Bretonne currently serves as Chair of the Pennington Medical Foundation.

Ten women were selected from various areas of the state to be the 2006 Louisiana Heroines. They are Annelle Tanner, Ed.D., United Way of Central Louisiana; Nancy Barnett Penn, Greater Baton Rouge Food Bank; Cleo Eugene, St. James Council on Aging; Manjula Kothapalli, M.D.; Lafayette Community Health Care Clinic; Bertha Stoner, Calcasieu Women's Shelter; Carol Wise, United Way of Greater New Orleans; Aletha N. Moore, BACH – Pointe Coupee Outreach Service Center; Sylvia Goodman, The Robinson Film Center of Louisiana, and Pam Duvernay, St. Tammany Association of Retarded Citizens, Inc. (STARC).

LANO sponsors the Louisiana Heroine Awards annually to recognize extraordinary women who work selflessly to improve the quality of life in their communities. 

## WAKE FOREST UNIVERSITY SCIENTIST FEATURED AT PBRF DINNER EVENT

Dr. Lawrence Rudel, noted nutritional research scientist from Wake Forest University, was the featured speaker at a dinner hosted by the Pennington Biomedical Research Foundation and Capital One, underwriter of the 2006 dinner series.

Dr. Rudel, a professor of biochemistry and head of Lipid Sciences in the University's School of Medicine, spoke on his five year research study analyzing how diet affects coronary artery atherosclerosis, commonly known as "hardening of the arteries." Atherosclerosis leads to strokes, a leading cause of death in the United States. The study of nutrition and its effects on disease prevention is the primary focus of the work of the Pennington Biomedical Research Center.


In his presentation, Dr. Rudel noted his research studies which have shown that oils with high monounsaturated content (olive oil and canola oil, for example) are associated with higher rates of atherosclerosis than polyunsaturated oils (peanut and corn oil). These findings contradict the conventional wisdom that the Mediterranean diet can lower rates of heart attacks. Dr. Rudel pointed out that the Mediterranean diet has many differences from the average American diet, not just in source of oil.

Earlier in the day, Dr. Rudel also presented to the PBRC faculty an in-depth presentation on his discovery of an enzyme target, ICAT, which is a promising target for new cholesterol drug development.



*Attending the Pennington Biomedical Research Foundation event were (l to r) Capital One Vice President Janet Rack; Associate Executive Director of Clinical Research of the PBRC Dr. Donna Ryan; Wake Forest University School of Medicine professor Dr. Lawrence Rudel; PBRF Chairman John Noland and his wife, Virginia. The 2006 Scientific Dinner Series is underwritten by Capital One and invited guests include donors to the PBRC that support its continued growth and excellence.*

The PBRF dinner series is designed to introduce internationally recognized scientists in nutrition and preventive medicine as they share their research findings, expertise, and knowledge with supporters of the Foundation. The evening lecture gives community members a first-hand experience to meet and talk to noted scientists and to discuss timely health issues of importance to the nation and the world.

Over 60 PBRF supporters attended the May 11 event which began with cocktails in the north atrium of the Basic Sciences Building and dinner served in the south atrium, overlooking the lake at the Pennington Biomedical Research Center. 

## MATCHING GIFTS PROGRAM MULTIPLIES SUPPORT

*continued from page 3*


of directors wanted to encourage GE employees to contribute to their alma maters. The 10,000 matching gift companies generate more than one billion dollars annually in matching gifts to college, universities, and other non-profit institutions.

The matching gifts procedure is very simple, although it varies from company to company. The employee calls their human resources department to determine if his or her employer provides matching gifts to the LSU System. If so, the employee completes a matching gift form, usually available on the website,

completes it and sends it to the company for verification.

The company informs the donor and the institution that it will match the donation to the LSU System and designates the funds for the Pennington Biomedical Research Foundation.

The Pennington Biomedical Research Foundation recently added a feature which allows individuals to complete company matching forms right on its website at [www.pbrf.org](http://www.pbrf.org).

If you need assistance in identifying your company's eligibility for the matching gifts program, please call 763-2511. 

## FACULTY RECOGNITIONS



**George Bray, M.D.** will be presented as an *Honorary Member of the American Dietetic Association*. Bray will receive this honor during the

Member Showcase of the Food & Nutrition Conference and Expo (FNCE) in Honolulu, Hawaii September 18, 2006. Dr. Bray was nominated by colleague and Center researcher Dr. Cathy Champagne.



**William Hansel, Ph.D.** has been named a *Fellow of the American Society of Animal Science*. Dr. Hansel was honored in Minneapolis at the Society's annual meeting. Hansel developed the William Hansel Laboratory of Cancer Prevention.



**Carola Leuschner, Ph.D.** and a researcher in the William Hansel Laboratory of Cancer Prevention has been recognized by Nanotech Briefs®. She and her research partner, **Challa Kumar, Ph.D.** of the Centers for Advanced Microstructures and Devices, (CAMD) have been *named a winner in the annual Nanotech Briefs® Nano 50™ Awards in the Technology category*. Their research is on Magnetic-Based Nanoparticles for Cancer Treatment. The winners of the Nano 50 awards are the "best of the best" – the innovative people and designs that will move nanotechnology to key mainstream markets. Leuschner and Kumar will attend a special awards dinner to be held during the NASA Tech Briefs National Nano Engineering Conference in Boston, November 9 and 10, 2006.



**Dr. Irina G. Obrosova, Ph.D.** has been appointed as a regular member to the *Complication Study Section of the Juvenile Diabetes Research Foundation*

*International*, the first Louisiana researcher to gain such an appointment. Dr. Obrosova will review proposals on chronic diabetic complications, a leading cause of morbidity and mortality in patients with diabetes, submitted by researchers from all over the world seeking funding from the Foundation.



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

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PENNINGTON BIOMEDICAL RESEARCH CENTER  
 LOUISIANA STATE UNIVERSITY SYSTEM

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## CLINICAL TRIALS - FALL 2006

CENTER RESEARCHERS ARE CURRENTLY SEEKING CITIZEN  
 VOLUNTEERS FOR THE FOLLOWING CLINICAL STUDIES

### DIABETES

#### RAPSODI

If your blood sugars are slightly higher than normal, you could be among the 40 million Americans with "pre-diabetes", a condition that often turns into diabetes. This study requires people who have a high glucose level and may be "pre-disposed" to developing Type 2 diabetes.

#### To Qualify:

- Ages 35-75
- Not previously diagnosed with diabetes
- 20 pounds or more overweight.

### WEIGHT LOSS STUDY

#### ENTEROSTATIN III

Volunteers are needed for an 18-week study examining the hormone enterostatin which has been linked to weight loss.

#### Study Qualifications :

- Age: 18 – 50
- Overweight (BMI: 30 – 40)
- No chronic disease
- Cannot take regular medications (birth control pills and hormones are allowed)
- Non-smoker

Participants will be compensated \$1,000 at the end of the study.

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

## Support the PENNINGTON BIOMEDICAL RESEARCH FOUNDATION

*Please consider a contribution to help support the Center's work.*

*A convenient postage paid envelope is enclosed in this newsletter. Thank you!*

### YOUR DONATIONS...

- Impact millions of lives daily through investments in the Center's programs aimed at helping rural communities, obese children, aging adults, the military and disease prevention.
- Buy much needed supplies, equipment and fund operating overhead vital to keep our research teams active in their labs and making discoveries.
- Make it possible for the Center to recruit the 'best and brightest' scientists and researchers.
- Are a part of the Foundation's commitment to raise \$10 million dollars over the next four years to achieve the Center's *Vision 2010* strategic plan.
- Help the Foundation to obtain complimentary funding for not one but three newly named research labs and additional resources that might have otherwise remained unfunded.
- Are making a difference as part of an effort to raise an endowment of 10 Chairs and 3 Professorships that provides \$500,000 in annual support.