



NUTRITION MATTERS

SPRING 2006

PENNINGTON BIOMEDICAL RESEARCH CENTER AND FOUNDATION • LSU SYSTEM

DID YOU Know?

- Dr. Zhong Wang of the Pennington Biomedical Research Center has been awarded the Center's first grant from the American Sugar Cane League. Dr. Wang is researching the effect of diets containing sugar cane bagasse on weight gain and metabolic profile in mice. Bagasse, a by-product of sugar cane production, is composed mostly of soluble fiber, as opposed to insoluble fiber such as cellulose. Early studies suggested that a diet containing bagasse, when compared to diets containing equal amounts of insoluble fiber, appear to reduce postmeal glucose peaks and reduce insulin levels thus reducing the progression of complications in diabetics.
- The Center's Executive Director, Dr. Claude Bouchard, has been awarded five years of research funding from the National Institutes of Health for his Heritage Family Study, Phase 4 grant.
- The Pennington Biomedical Research Foundation has recently established a planned giving program called The Legacy Society to foster long-term gifts to benefit the Center in the future. This program is a resource for individuals and families searching for opportunities to leave a lasting legacy in their name.
- The Pennington Center's diverse faculty and staff represent 75 individuals from 28 countries. 📍

CAN A VIRUS CAUSE OBESITY?

"YES, SOMETIMES," SAYS CENTER RESEARCHER

Pennington Biomedical Research Center scientist Dr. Nikhil Dhurandhar is the first in the world to suggest a virus may cause obesity in humans, and his phone is now continually ringing with calls from reporters.

It started with a routine conversation some time ago. Dr. S.M. Ajinkya, a renowned veterinary pathologist from Bombay Veterinary College in Bombay, India, had discovered a chicken virus that was sweeping across poultry farms in India, killing thousands of chickens. At one point, he related his findings to Dr. Dhurandhar. The chickens showed, "Pale and enlarged liver and kidneys, excess fat in the

abdomen and a shrunken thymus." Dhurandhar stopped him there. Something didn't sound right.

Excess fat in the abdomen? A bird that withers away from a viral infection should be skinny. Could the virus be causing the excess fat?

To find out, Dhurandhar and Ajinkya subjected a group of chickens to the virus, called SMAM-1, and then compared them with a group of healthy chickens. All the chickens ate



▲ Dr. Nikhil Dhurandhar examines viral samples in the lab at the Center.

similar amounts of food, and still, only the infected ones became obese. Curiously, cholesterol - usually in higher amounts in obesity - was at a lower level in the infected, obese chickens.

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CAPITALIZING ON SUCCESS INVESTORS OFFER \$11 MILLION TO FUEL PBRC DISCOVERIES

A group of local and national investors want to help finance, develop and bring to market biotech discoveries born in the laboratories of the Pennington Biomedical Research Center, and has rounded up millions of dollars to do just that.

VCE Capital Partners, LLC, has secured \$11 million and used it to create a new fund, called Themelios Venture Partners, LP, specifically to fuel Center discoveries. Themelios is an ancient Greek word for foundation, and according to the managing partner,



the fund will eventually grow to \$30 million.

"The fund will primarily concentrate on research originating from the Pennington Biomedical Research Center," said Ross Barret

▶ Basic Science Laboratory Building Pennington Biomedical Research Center

of Themelios, "however, a key strategy is to seek investment opportunities with companies outside of Louisiana that desire to partner with the Center's scientists or utilize its world class facilities."

Scientists within the Center now have a source for critical start-up funds, should they want to capitalize on their new technologies, discoveries and methods.

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DO HEALTHY HABITS IN SCHOOL MEAN HEALTHIER LIVES?

PENNINGTON RESEARCHERS PARTNERING WITH LOUISIANA SCHOOLS TO FIND OUT

Field scientists, psychologists and behavior specialists from the Pennington Biomedical Research Center have recruited elementary school teachers and students throughout the state to find out if a school environment designed to encourage positive lifestyle changes can improve health among youngsters.

Center researchers want to introduce lessons, healthy lifestyle changes and behaviors at schools to improve health and to provide in-home learning via the internet to reinforce the theme. Then, they plan to measure any improvements that may occur in students' lifestyles. "The research targets students in the 4th through 6th grades in rural parishes," says Don Williamson, Ph.D., Pennington Center lead researcher.

The Center is testing a simple premise: Can solid early training, coupled with important changes in the school or home environment, be a useful tool in the quest for healthier children nationwide?

"We call the study LA Health, because we're aiming to do just that, build a healthier Louisiana," said Tiffany Stewart, Ph.D., one of the lead researchers on the project. "The idea we are testing is that developing a total conscientiousness about health during these critical developmental years will be an important means of turning our children toward a permanent, healthy lifestyle."

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Message from the Executive Director of the Pennington Biomedical Research Center



The last few months have been extremely active at the Pennington Biomedical Research Center. Our researchers have published significant findings, we have unveiled new research space and new technical facilities, and have tried to the best of abilities to protect our state appropriations under challenging circumstances. I encourage you to read in this issue about our studies on human aging, our research in the new field of obesity-causing viruses, and the completion of our magnetic resonance spectroscopy laboratory.

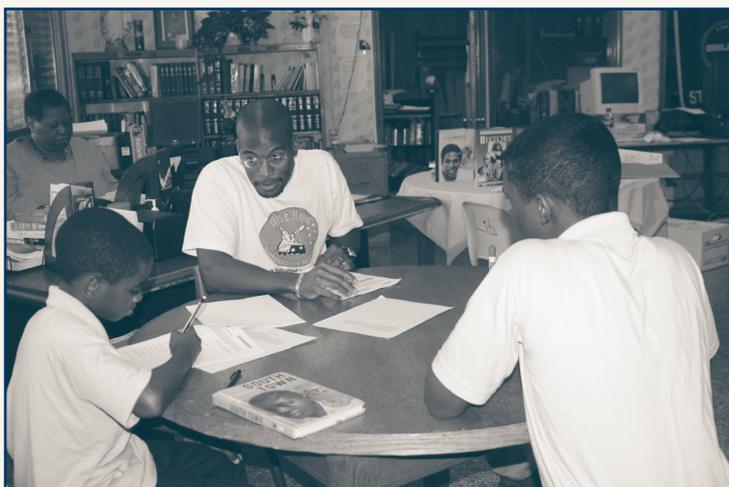
We have noticed a growing interest on the part of the national and international media for the research results reported by the Center's scientists. You can read more about this trend in the section *PBRC in the News*. We are proud of PBRC's team of scientists and staff and count the growing interest of the national and international news media as one indicator of our success to become "the leading nutrition and preventive medicine research center recognized for the outstanding quality of its research, its contribution to scientific discovery,

and its commitment to professional and public education initiatives" (From the Strategic Plan 2005-2010).

Late in April, we convened for the 8th time in Baton Rouge the PBRC External Advisory Board. This panel of experts is composed of accomplished scientists and academic leaders from a dozen institutions in the USA and Canada. This board meets every other year. The board examined our overall performance, gave us feedback on our strengths and weaknesses, and made recommendations that will share with the LSU System President and the Board of Supervisors. The external reviewers have received a copy of our *Scientific Report* for the years 2004 and 2005, an important document that we publish only biannually. This year's publication is more detailed than ever concerning our mission, our long term goals and our research. Thanks to a generous contribution from our supporting Pennington Medical Foundation, we will also issue a comprehensive, interactive CD – our first – as a dynamic means of telling the story of our Center as well as its accomplishments.

Our five-year strategic plan of Vision 2010 is defined in terms of 10 strategic priorities. We have made significant progress during the first year of the 2005-2010 plan on several fronts, including the creation of a new division called Nutrition and the Brain, expansion of our imaging capabilities, modest expansion of our research space, and numerous additions to our faculty. The devastation caused by the hurricanes in 2005 has slowed us down somewhat but has not stopped us. I look forward to reporting even more progress in the future as we step into the second year of our five-year strategic plan.

Claude Bouchard, PhD
Executive Director



▲ Pennington Biomedical Research Center scientist Robert Newton, Ph.D., working in a pilot study with students to create a healthy school environment by introducing health lessons, messages and activities. He and other researchers will conduct a similar, but larger study, called LA Health, in elementary schools across the state this fall.

COME "GLOW" WITH US SOARING TO NEW HEIGHTS '06

EXCLUSIVE FAMILY EVENT TO BENEFIT THE PENNINGTON CENTER AND FOUNDATION

If you haven't come out to the Pennington Balloon Championships held on the grounds of the beautiful Pennington Biomedical Research Center campus in the last two summers, please plan to join us this year! The balloon championship is a five day national competition that brings hot air balloon enthusiasts from around the country to compete for money and prizes. Families from all over the region come to see how spectacular these balloons are close up and to meet the balloon pilots.

The Saturday evening of the balloon championships, August 5, will feature three unique events: the fireworks show, balloon glow where the pilots light up or 'glow' their hot air balloons at dusk, and a special community supported "Soaring to New Heights" philanthropic family event that benefits the Pennington Biomedical Research Center and Foundation.

Under special reserved "Soaring to New Heights" tents earmarked for the Pennington Biomedical Research Foundation (PBRF), located in a premiere place immediately adjacent to the Hot Air Balloon Glow site, Soaring attendees and families can join in the festivities while helping support the PBRF. Proceeds from the PBRF's "Soaring to New Heights" event benefits the Pennington Biomedical Research Center.

Enjoy a cocktail buffet in an A/C tent, and then watch the Balloon Glow at 8:30 p.m., the fireworks around 9 p.m., and the music from 7 to 9:30 p.m.

SOARING TO NEW HEIGHTS '06

Pennington Hot Air Balloon Championships

WHEN

Saturday, August 5,
6 p.m. 'til 10 p.m.

WHERE

Grounds of the Pennington Biomedical
Research Center Campus

WHAT'S UP

Balloon Launch, Balloon Glow &
Fireworks; VIP Tent
(special air conditioned tent with
seating, viewing area, and buffet)

DONATIONS

\$80/person • \$200/family of four
\$750/table of ten • \$30/children
(Tickets for children 6 & under are **free**.)

QUESTIONS

763-2511

Individual tickets, family packets, and VIP tables are now available. Don't wait as last year's event was sold out due to the limited seating for this popular event. Plan now to attend this community event and bring your family to this fun evening activity. "Soaring to New Heights" event tickets are: Adult \$80; child \$30; table of 10 \$750; and a family packet (2 adults; 2 children) \$200. Tickets for children six years and under are free.

Planning the event this year is a volunteer team of community leaders led by Mary Jo Mayfield, event chair. Committee members are Annette Barton, Lori Bertman, Melanie Boyce, Paula de la Bretonne, Sylvia Duke, Susan Freeman, Jan Hill, Margo Kadair, Gretchen Kantrow, Sancy McCool, Page Silvia, Buddy Tucker, and Julie Wright. They have planned many special activities for the kids and a great buffet and beverages for the parents and their friends. ☑

"Soaring to New Heights" event will be held on Saturday, August 5th from 6 p.m. to 10 p.m.

*Limited ticket availability – to order your tickets or tables or to get more details, call **Melissa Bell**, PBRF development director, at 763-2511.*



International Researchers Focus on Obesity Causing Viruses

Researchers from around the world recently converged on the Pennington Biomedical Research Center (PBRC) to learn more and share what they know about the latest discovery: viruses may cause some obesity.

Dr. Nikhil Dhurandhar, the first researcher to suggest a virus can cause obesity in humans, led the way in the field, but even in the last couple of months others have followed to report their own discoveries of other viruses to cause obesity.

Dhurandhar and Co-chairs, Drs. David Allison and Philip Sherer, asked researchers in this new field to come to Baton Rouge to share their new results and latest findings.

One of the PBRC education department's ongoing scientific symposia series, the meeting was called "Infection, Inflammation and Obesity." It was designed to pull world leaders together to learn the absolute latest, to debate the findings, and equip participants with new ideas and new knowledge to guide their individual research as they return to their labs.

Special thanks to the underwriters of this seminar:

- Merck & Company, Inc.
- Takeda Pharmaceuticals
- GlaxoSmithKline
- Pennington Medical Foundation 



CAN A VIRUS CAUSE OBESITY?

continued from cover

*A fat causing virus?
Could it do the same to humans?*

One good way to tell if a human has been infected with a virus is to look for specific antibodies in the bloodstream. For example, any human infected by SMAM-1 would likely have antibodies in his or her blood, naturally created by the body to fight off the virus. When Dhurandhar and his colleagues searched for antibodies in blood samples from obese persons, they found that 20% of these people had antibodies to fight off SMAM-1. Those with the antibodies (and presumably the virus) were heavier and had lower cholesterol levels than those without – the same symptoms as the SMAM-1 infected poultry.

"If SMAM-1, an avian virus, could cause obesity in humans, could there be a human virus that does the same?" wondered Dhurandhar.

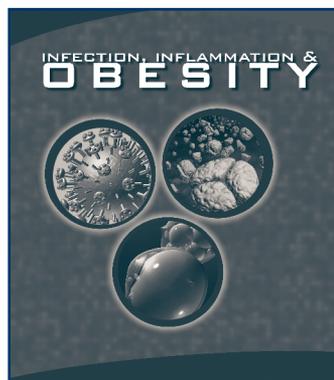
SMAM-1 is an "adenovirus" that infects birds, but other adenoviruses are known to infect humans and other mammals. There are fifty such human adenoviruses, all associated with acute upper respiratory tract infections, diarrhea or conjunctivitis (sore-eyes). Dhurandhar started his studies with adenovirus type 36 (Ad-36).

In several experiments, chicken, mice, and other animals infected with the human virus Ad-36 showed the same strange symptoms seen with the SMAM-1 infection; they became obese but had low cholesterol. Next, Dhurandhar and his colleagues conducted a study to find the relationship between this human adenovirus and obesity in people. They found that only 11% of lean people but a significant 30% of the obese people screened had antibodies to Ad-36. As with the virus SMAM-1, those with antibodies against Ad-36 had lower cholesterol levels and were heavier than those without.

Adding to the mounting evidence were the findings of a study of twins. It is commonly understood that twins usually weigh the same; they are both obese or both lean, due to their similar genetic makeup. Dhurandhar and his colleagues studied twin pairs where one twin was antibody-positive to Ad-36 and the other antibody-negative. The antibody-positive twins were heavier and fatter.

Through these studies they showed for the very first time a human virus is associated with human obesity!

Dhurandhar and his colleagues are trying to determine how this virus works, a first step toward a cure or a vaccine to prevent obesity caused by Ad-36.



Ad-36 seems to act on specialized "pre-fat" cells that have the potential to store fat. When the body's existing fat cells are storing as much fat as possible, the pre-fat cells are recruited to quickly become mature fat cells capable of storing fat. Dhurandhar and

his colleagues have recently discovered that Ad-36 greatly enhances this process, effectively increasing the number of fat cells.

Following Dhurandhar's lead, other researchers have determined at least two other human adenoviruses, types

37 and 5, are also likely to cause obesity in humans and two other adenoviruses do not, leaving about 45 more adenoviruses to study.

Dhurandhar reminds us that like many other diseases, obesity has many causes, and multiple causes may be present in an individual.

"Yes," he says, "It appears certain adenoviruses may cause obesity in some people. But this is only one cause. We still don't know the complete picture of obesity, its causes or its cures." 

Editor's note: This story was written by Rohan Dhurandhar, son of Dr. Nikhil Dhurandhar, an LSU student and a science writer.

"It appears certain adenoviruses may cause obesity in some people. But this is only one cause. We still don't know the complete picture of obesity, its causes or its cures."

NEW BOARD MEMBERS

The Board of Directors of the PBRF welcomes four outstanding individuals as new members, bringing additional expertise to the organization in the areas of business, finance, law, and medicine.

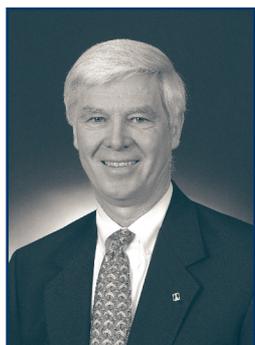
Newly appointed to four year terms are **Brace Godfrey of Godfrey and Schneider, Ltd. and Cyntreniks, LLC.**; **J. Herbert Boydston, president of the banking segment of Capital One**; **Elizabeth Querbes Sammons, senior vice president, Morgan Stanley, Individual Investment Group**; and **Carl Luikart, M.D., cardiologist.**

Godfrey brings a combination of government, business, and legal experience to the board of directors, having worked for 20 years as Counsel and Senior Counsel to the Louisiana State Senate and later



▲ **Brace Godfrey**

for Adams and Reese law firm. In 2005, he formed his own firms in law, strategic business and government consulting and most recently in downtown property development. He is currently chairman of the board of the Baton Rouge Downtown Development District and serves on the boards of the Baton Rouge Area Foundation, Public Affairs Research Council, and Advance Baton Rouge. He is a founding member of 100 Black Men of Baton Rouge, and is now on the National Executive Committee.



▲ **J. Herbert Boydston**

Boydston is president of the banking segment of Capital One (formerly Hibernia National Bank). Hibernia and Capital One merged in November of 2005. During the five

years of Boydston's leadership at Hibernia, the bank grew from \$16.2 billion in assets to \$23.2 billion; and growing in locations from 265 to 328. He earned a Master's degree from LSU and is a

PENNINGTON FOUNDATION RECOGNIZES TWO CORPORATE SPECIAL PARTNERS

The Board of Directors of the Pennington Biomedical Research Foundation gratefully acknowledged at a recent meeting two corporate partners who have provided important underwriting to enhance community outreach, education and communication.

Recognized at the recent meeting was Blue Cross and Blue Shield of Louisiana for underwriting communication materials, and Capital One, formerly Hibernia National Bank, for its underwriting of the 2006 Scientific Dinner Series.



"This is the third year that Blue Cross and Blue Shield of Louisiana has provided this generous donation to the Center—and it is helping us to tell the public of the Center's ground-breaking work," said PBRF Chairman John Noland at the recent meeting.

According to Renea Austin-Duffin of Blue Cross and Blue Shield, "We are committed to health and wellness education, and our company recognizes the importance of the Center's disease prevention research efforts to Louisiana and throughout the world."

In addition, Blue Cross and Blue Shield of Louisiana has also provided the PBRF with other corporate support, including participation in the Irene W. Pennington Wellness Day for Women.

For many years, the Center has drawn on the talent of renowned scientists who travel here to share their research findings with their

colleagues. But, it is through the generous underwriting by Capital One that the work of these scientists is now shared with donors and supporters of the Center through the Visiting Scientist Dinner series.

Capital One®

Each year, the series is a special and personal way to introduce the community supporters of the PBRF to the direct work of the visiting scientists and often to invited Pennington Center faculty members, whose work compliments the visiting scientist. Three of these dinner events are held each year, featuring a unique scientist on a topic of interest relating to disease prevention, exercise,

or nutrition. "This is our investment in the Pennington Center. We hope that through our donation others will recognize the importance of the scope and work

"This underwriting is vital to our outreach and to inform and thank our supporters".

- *Dr. Claude Bouchard*

underway in their clinic and laboratories, and will seek ways to provide support as well," said Capital One Sr. Vice President Janet Rack.

"We are very grateful to Capital One and Blue Cross and Blue Shield for their important contributions," said Dr. Bouchard, executive director of the Center. "This underwriting is vital to our outreach and to inform and thank our supporters," he added. ☐



◀ A check for \$10,000 was recently donated to the Pennington Biomedical Research Foundation to benefit the work of the Pennington Center from the Louisiana Ballooning Foundation. The donation was made from proceeds raised during the 2005 National Balloon Championships held on the grounds of the Pennington Biomedical Research Center. Louisiana Ballooning Foundation board members Bob McNeese (far left) and George Richard present the donation to Kevin Lyle, PBRF board member, and Dr. Donna Ryan, associate director of the Center.

Scientists Investigate Keys to Living a Long Life



▲ Zylpha "Zipp" Quinn, a 103 year old participant, is doing her part to help our Healthy Aging Study. Seen here are Tiffany Hall, Coordinator; Janet Rhorer, Ms. Quinn's daughter; and Dr. Eric Ravussin, the study's principal Investigator.

If you will be 90 or more at your next birthday, scientists at Pennington Biomedical Research Center want to know how you made it that far. According to Eric Ravussin, Ph.D., 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 to make it that far in life: Do they have better

genes? Better lifestyle? Better nutrition? The study will look at all three.

Center researchers are inviting residents 89 years-of-age or older and living within a 40-mile radius of Baton Rouge to participate in a study that will require two sessions with each participant. The first is a visit by researchers to the participant's home, the next is a trip by the participants to the Center's research clinic on Perkins Road.

During the home visit, a nurse practitioner will fill out a questionnaire concerning participants' medical history, physical activity, and foods they eat. The nurse practitioner will also measure blood pressure and weight and conduct a blood test. The Center will provide transportation for the clinic visit during which more measurements will be taken. Those who participate will earn up to \$350 in compensation for their time and have access to their information that was recorded during the study.

Healthy Aging is a study looking at four areas: genetics, metabolism, physical ability, and cognitive ability. By accurately testing each area, researchers hope to gain insight to the keys to a long and healthy life. [L]

To volunteer for this study contact: **Tiffany Hall at 763-3044**, or e-mail at HallTM@pbrc.edu.

CLINICAL TRIALS SPRING 2006

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

BLOOD PRESSURE

EKODE

Volunteers are needed to participate in a 6-day feeding study examining the effects of a high sodium diet on blood pressure. All foods will be provided by Pennington during the test period.

Volunteers need to be:

- Age 35 to 65
- Normal to overweight
- Non-smoker
- Not taking any medications (except thyroid medications)

Volunteers compensated \$350.

WEIGHT LOSS STUDY

SUGAR

Volunteers are needed to participate in this 16-week weight loss study examining an investigational medication and its effect on weight and body fat levels.

Volunteers need to be:

- Age 18 to 64
- Overweight
- Not taking diuretic medications
- Females cannot be of child-bearing potential

Volunteers compensated \$800.

DIABETIC RESEARCH STUDIES

BREEZE, CHROMIUM II & TAKE II

Volunteers are needed for several studies on the treatment of diabetes.

Volunteers need to be:

- Type 2 Diabetic
- Age 18 or older
- Normal to overweight

Volunteers compensated up to \$800.

ANSIR

Are vitamins the "ANSIR" to preventing Type 2 Diabetes? This 6-week study will test the effects of vitamins on people who are insulin resistant.

Volunteers need to be:

- Age 40 to 70
- Overweight
- Not taking any medications (must also be willing to stop current vitamin or supplement usage for 6 weeks prior to screening)
- Non-smoker
- Non-Diabetic

Volunteers compensated \$200.

If you are interested in participating in a research study, call our recruiting department at 225-763-2596 or visit www.pbrc.edu

FREE NUTRITIONAL INFORMATION FOR CHILDREN & ADULTS

▶ ▶ ▶ go to www.pbrc.edu

The Pennington Biomedical Research Center has three nutritional educational publications available on its web site, produced in coordination with its researchers and the LSU Agricultural Center.

The free publications include the nationally recognized Dash Diet, Healthier Diet for Young Children and Physical Activity Guidelines for Children. The Dash Diet is a proven nutritional program, which has been shown to lower

blood pressure. The Dash Diet was developed and studied at the Pennington Center and four other research facilities across the nation and is a recognized and highly acclaimed approach to lowering blood pressure. High blood pressure is a precursor to heart disease.

Parents and teachers are particularly urged to print and utilize the two free publications for children. The publications are brief, concise, and easy to use with any age group. [L]

Visit pbrc.edu/education/resources_pub.htm to print a copy.

IRENE W. PENNINGTON

“WELLNESS DAY FOR WOMEN”

FREE EVENT SCHEDULED OCTOBER 7

The Women’s Nutrition Research Program (WNRP) at the Pennington Biomedical Research Center has scheduled its major annual free health expo, the Irene W. Pennington Wellness Day for Women, on Saturday, October 7. The event is free and open to the public.

“We are thrilled that the event will continue this year in its same location on the Pennington campus, in the C. B. Pennington, Jr. building. Last year’s event had to be cancelled to provide shelter for hurricane Katrina rescue teams, and then the LSU Health Sciences’ Center classes began using the Pennington Center conference meeting facilities. We expect the event this year to be larger than ever,” said Dr. Cathy Champagne, Ph.D., director of the Women’s Nutrition Research Program. The *Irene W. Pennington Wellness Day for Women* is coordinated by WNRP and the Pennington Biomedical Research Foundation. According to Dr. Champagne, “Funds raised from sponsorships and booth underwriters assist the continuing work of the WNRP here at the Center.” Health service companies and organizations wanting to participate can obtain sponsorship information by contacting Anne Schulte at 763-2629.

The event honors the late Irene W. Pennington, wife of Claude B. “Doc” Pennington, Sr., who generously donated \$125 million to establish the Pennington Center in 1980. “Mrs. Irene,” as she was affectionately called, died in 2003 at the age of 104. “Doc” Pennington died in 1997 at the age of 98.

“This year’s event will focus on healthy living for women of all ages. We will offer education about nutrition and disease prevention, hands-on health assessment activities, and cooking and fitness demonstrations,” said Dr. Champagne.

The featured speaker this year is Holly Clegg, nationally recognized Baton Rouge cooking expert and author, who will discuss her



latest healthy cooking advice and provide information on cooking light, but tasty meals. Her slide presentation entitled “The Trim and Terrific Commandments of Healthy Living” and demonstration are scheduled from 11:00 to 12:30.

This year’s Exclusive Presenting Sponsor is Our Lady of the Lake Regional Medical Center (OLOL), who will provide free medical screenings, blood pressure and height/weight assessment. Many of the OLOL staff, including physicians, will be on hand to talk with participants. In addition, heart health computerized assessments will be provided, giving participants a simple to understand risk factor report and recommendations fo improving heart health.

“Funds raised from sponsorships and booth underwriters assist the continuing work of the WNRP here at the Center.”

- Dr. Cathy Champagne

The Pennington Biomedical Research Center staff will provide information about clinical studies currently recruiting volunteer participants. These include a number of ongoing and new clinical research studies – weight management or weight loss, aging, and diabetes – which are open to qualified individuals. Other Center staff will be on site measuring resting metabolic rates, body

composition studies, and providing nutritional information.

Other major sponsors include the Irene W. and C.B. Pennington

Foundation, Blue Cross and Blue Shield of Louisiana, the Reilly Family Foundation, and McDonald’s of Baton Rouge.

So, mark your calendar now for a great day dedicated to women brought to you by the Women’s Nutrition Research Program at the Pennington Biomedical Research Center. The event gets underway at 8 a.m. and concludes around 2 p.m. 

WOMEN’S NUTRITION RESEARCH PROGRAM

The WNRP was established in 1997 at the Pennington Biomedical Research Center in response to the interests of the many researchers at the Center who were studying issues related to women’s health. Primarily an education and outreach program, the WNRP has specifically targeted women’s health issues. The WNRP offers educational programs, including the annual Irene W. Pennington Wellness Day for Women to address women’s unique health concerns.

The WNRP seeks to promote basic and clinical research related to nutrition and disease prevention in women, and to encourage the inclusion of women in clinical trials performed at PBRC.

WNRP

FACULTY APPOINTMENTS

ROGERS NAMED PBRC ASSOCIATE EXECUTIVE DIRECTOR



Richard Rogers, Ph.D.

The LSU System Board of Supervisors has approved the appointment of Dr. Rogers as the new Associate Executive

Director for Basic Science at PBRC. His appointment is effective immediately. Dr. Rogers is currently a faculty member at the Center and most recently served as the Chief of the Division of Nutrition and the Brain. Dr. Rogers earned his Ph.D. of Neuroscience in 1979 at the Brain Research Institute of the University of California, Los Angeles.



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

Dr. Pan has been appointed as Chief of the Division of Nutrition and the Brain. Dr. Pan is currently on faculty in

the Division conducting research on the flow of chemical signals from the bloodstream to the brain via the blood-brain barrier. Dr. Pan was formerly on faculty at Tulane University in New Orleans.

FACULTY RECOGNITIONS



Jianping Ye, M.D.

Dr. Ye has been appointed as a permanent member in the American Diabetes Association (ADA) grant

review panel for a three year term (2006-2009). The ADA is a private, non-profit academic agency with the mission to prevent and treat diabetes. It is the second largest funding agency to support diabetes research behind the National Institutes of Health (NIH). Dr. Ye will review proposals of candidates for research grants. Dr. Ye is also currently an ad hoc reviewer in the Integrative Physiology for Obesity and Diabetes study section at the NIH.

NEW FACULTY



Jessica Thomson, Ph.D.

As part of our on-going relationship with the U.S. Department of Agriculture, Dr. Thomson is the USDA's first Agricultural Research

Service (ARS) scientist to locate at the Pennington Biomedical Research Center. Dr. Thomson is an employee of the USDA-ASR who will be collaborating with PBRC researchers on USDA Center grant projects. Dr. Thomson will also hold the status of PBRC faculty member.

Dr. Thomson earned her Ph.D. in statistics from the University of Louisiana in Lafayette. Prior to joining the USDA/PBRC team, she worked as an Assistant Professor and Biostatistician at the LSU HSC School of Public Health in New Orleans.



Yourka Tchoukalova, M.D., Ph.D.

Dr. Tchoukalova joins the PBRC faculty as an Instructor. She will be working with Drs. Eric

Ravussin and Steve Smith on a number of ongoing studies, as well as developing an independent and externally funded research program in adipose tissue biology.

Dr. Tchoukalova received her M.D. from the Medical Academy in Sofia, Bulgaria in 1978 and her Ph.D. in Nutrition from the University of Georgia in 2000. Since that time, she has been working at the Mayo Clinic, most recently as an Assistant Professor of Medicine.



Anthony Civitarese, Ph.D.

Dr. Civitarese has been appointed as an Instructor, sponsored by Drs. Ravussin and Smith, and will continue his research on

mitochondria and skeletal muscle biology.

Dr. Civitarese joined PBRC in 2002 as a post-doctoral fellow in Dr. Ravussin's laboratory. Prior to joining PBRC, he earned his Ph.D. in Molecular Biology/Physiology at Deakin University in Australia.



Indu Kheterpal, Ph.D.

Dr. Kheterpal joins the Center as an Assistant Professor. She will be a member of the spectrometry and

proteomics core facility and will be responsible for the proteomics component of the core.

Dr. Kheterpal received her Ph.D. from the University of California/Berkeley in 1998 in Biophysical Chemistry. She did her postdoctoral training at the University of Tennessee Medical Center and also worked as a Research Assistant Professor there before moving to the LSU Center for BioModular Multi-Scale Systems in 2005.

DO HEALTHY HABITS IN SCHOOL MEAN HEALTHIER LIVES?

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Center researchers have already recruited schools and teachers in Avoyelles, East Feliciana, East Carroll, Madison, Pointe Coupee, and St. John parishes and hope to recruit in Franklin parish as well.

LA Health researchers are working to influence the students on lifestyle changes and nutritional health as well as provide them, their schools and parents with educational materials, an interactive Web site and a newsletter.

Teachers at participating schools have already been trained to be health researchers and to turn their classrooms into living laboratories. Through planned lessons, activities, and on-site measures, teachers will be able to provide helpful insight to researchers and build healthy lifestyles in their students. Researchers will also visit the schools twice a year, carrying portable measurement and assessment equipment, surveys and cameras. 

The Business of Research

CENTER START-UP COMPANY NETS MULTI-MILLION DOLLAR CONTRACT

Pennington Biomedical Research Center management is excited about the early success of a venture into the arena of for-profit business. A start-up company, Pennington Management of Clinical Trials, LLC (PMCT), has netted its first major contract worth several million dollars. PMCT is a specialty company designed to handle the details and management of very large clinical trials spread across several sites.

Two organizations created PMCT as a joint venture in 2002. The parent company, and larger investor, is Swedish-based Nordic Management of Clinical Trials, AB (NMCT). It joined with Pennington Discoveries, Inc., a for-profit subsidiary of the Pennington Biomedical Research Foundation, to create PMCT to handle U.S.-based clinical trials. An internationally recognized pharmaceutical company has contracted directly with NMCT to conduct a new drug trial.

Baton Rouge-based PMCT will manage this study, which tests the preventive effect of a new drug on the development of Type 2 Diabetes. In this massive trial, PMCT will contract with approximately 50 clinics in several states across the country and will screen approximately 80,000 patients for potential inclusion in the study.

PMCT identifies suitable research clinics across the country and contracts with them to recruit and enroll thousands of participants, then tracks the participants and their data. When pharmaceutical companies need to test new drugs on large populations for FDA approval, PMCT acts as a one-stop-shop, simultaneously creating the participant base required in multiple cities.

An internationally recognized pharmaceutical company has contracted directly with NMCT to conduct a new drug trial.

The NMCT and PMCT competitive position is developing methods for performing clinical studies more effectively and efficiently. In particular, accelerating the patient recruitment phase. NMCT, along with its new subsidiary, PMCT, is a global company with operations in the United States, Sweden, and Poland.

This study represents the first major project for NMCT and PMCT in the U.S. More importantly, it further expands its international

recognition for innovative methods in clinical trial development and management. Over the past five years, the companies' methods have become a central and integral tool in global modern drug development.

Donna Ryan, M.D., associate executive director for the Center, is also the principal investigator for the study itself, with the Center acting as one of the clinical trial sites. According to Dr. Ryan, PMCT operations will provide several benefits to the Center. Specifically, as a clinical site for the first drug trial, the Center will be compensated for its participation in the study. The Center will also gain recognition for its role in this very large and important project. Finally, current and future revenues from PMCT will also flow through Pennington Discoveries, Inc. and the Pennington Biomedical Research Foundation as owners, thus providing additional annual support to the Center.

PMCT is the first "spin-off" corporation to generate significant returns from expertise and knowledge at the Center.

"In its quest for disease prevention, the Center is wholeheartedly committed to tech transfer opportunities and to developing additional start-up companies in the future," said Dr. Claude Bouchard, PBRC executive director. 

PBRF TRIBUTES *January 1, 2006 through March 31, 2006*

What better way to honor or memorialize someone special than with a gift that holds the promise of a healthier tomorrow. Your confidential gift will be acknowledged with a handsome card sent to the honoree or a family member. You will receive a confirmation card noting your gift. This is a tremendous way to remember someone, say thank you, or acknowledge a celebration such as a birthday or holiday. To make a Tribute gift, contact our office at 225-763-2511. We appreciate your support.

Pennington Biomedical Research Foundation graciously acknowledges the following tributes:

Julia A. Bombet was honored through a memorial gift received from:

Polly and John H. Hernandez

Catherine "Cat" Durand Champagne was honored through memorial gifts received from:

Melissa A. Bell
Dr. Phillip J. Brantley
Pam & Charles Fisher
Paula J. Geiselmann
Dr. Betty M. Kennedy
Dr. Marlene Most
PBRC Weight Loss Maintenance Team
Pennington Medical Foundation
Dr. Donna H. Ryan
Page and William L. Silvia, Jr.
Jennifer Winstead

William H. Crawford was honored through a memorial gift received from:

Polly and John H. Hernandez

Steven Blake Hofmann was honored through memorial gifts received from:

Ann S. Keogh
Polly and John H. Hernandez

Nancy Karns was honored through memorial gifts received from:

Mr. and Mrs. Louis J. Mire
Third Tuesday Organ Club

John Paine was honored through a memorial gift received from:

Polly and John H. Hernandez

Van A. Wilson was honored through a memorial gift received from:

Polly and John H. Hernandez

A ROUND-UP OF CENTER NEWS AND NEWS MAKERS

EAT LESS, LIVE LONGER

PBRC researcher Eric Ravussin, Ph.D., and his team have discovered that eating less, a lot less, may tend to slow the aging process, allowing humans to live longer. Volunteers agreed to reduce what they ate by up to 25 percent for 6 months. When Ravussin looked at three “biomarkers” of aging - insulin levels, body temperature, DNA damage – he found all were reduced, suggesting a slow down in metabolism and an increased life span. *ABC-TV, Associated Press, Reuters, Canada TV, and The Advocate* are among the many news outlets to carry this story.

NEW BEVERAGE GUIDELINES

Seeing a need for information about beverages that would be similar to the USDA Food Pyramid, George Bray, M.D., and colleagues across the nation have developed new, daily intake guidelines for beverages such as sodas, water, tea, coffee and alcohol. In general, the recommendations call for fewer servings of high-calorie/low nutrient drinks, such as carbonated beverages, and more servings of nutrient drinks and water. *Media nationwide have covered this story.*

More information about the Healthy Beverage Guidelines, including the report, is available at www.beverageguidancepanel.org.

OBESITY CAUSING VIRUS?

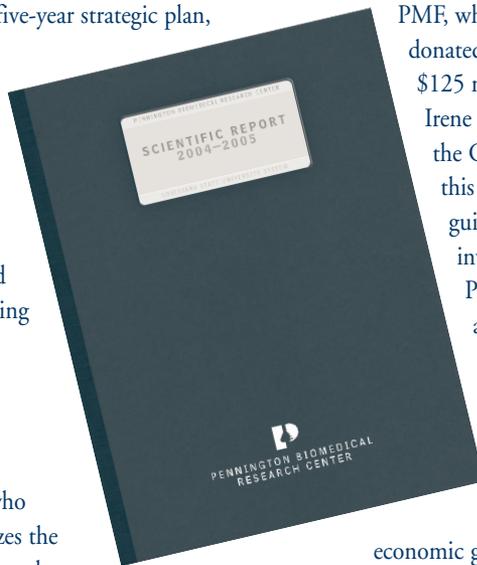
Nikhil Dhurandhar, M.D., is the first researcher in the world to identify a virus that causes obesity in humans. Dhurandhar reports that it was just one of about 50 similar viruses – called adenoviruses – that could do the same. Researchers across the world are now examining them, with recent news that an additional virus also causes obesity in humans. Media worldwide, including *National Geographic*, the *New York Times*, and *Australian radio* have covered this news. (See story page one.)

REPORTING WHAT WE DO

Every two years, the Center issues its premier publication, the *Scientific Report*. This report is a compilation of all that the Center does in research, support, economic development and community involvement. It also provides an update to the Center’s five-year strategic plan, *Vision 2010*.

Members of the Center’s External Advisory board were the first to receive the 2004-2005 edition of the report so they could review it before convening in April.

This edition includes established chairs and professorships with photographs of those who hold them and recognizes the first Professor Emeritus and first recipient of the Honoris Doctorate Causa (honorary doctor’s degree) of the Center. It also includes detailed information on the Center’s accomplishments through its six research divisions, as well as the Division of Education. Academic credentials of all lab and administrative staff are also included.



Special interest in the report is information on two entities that support the Center philanthropically: the Pennington Medical Foundation (PMF) and the Pennington Biomedical Research Foundation (PBRF). The PMF, which oversees the trust donated in 1980 with a remarkable \$125 million gift from “Doc” and Irene Pennington to establish the Center, currently manages this endowment and establishes guidelines for expenditures and investments. PMF Chairman Paula de la Bretonne presents a message of the PMF’s work.

PBRF Chairman John Noland shares with readers the importance of the Center on economic growth, new Foundation initiatives, and enhanced strategic goals. He also introduces the PBRF board of directors. Most importantly, all donations made to the PBRF by businesses, industry, foundations, organizations, and individuals are included.

The *Scientific Report* can be viewed on the PBRC website at www.pbrc.edu.

CAPITALIZING ON SUCCESS INVESTORS OFFER \$11 MILLION TO FUEL PBRC DISCOVERIES

continued from cover

“The creation of this private sector fund occurs at a critical time in the growth of the Center,” said Claude Bouchard, executive director of the Center. “It will make it possible for our basic and clinical research scientists to move their discoveries from the laboratories to the market place. This new fund will also constitute a strong asset in our efforts to recruit new scientists who will bring with them cutting edge technologies in genetics, stem cell biology, developmental biology, imaging, neuroscience, metabolism, functional foods, clinical research, prevention of common diseases, and other areas of interest to the research programs of the center.”

The Baton Rouge business community, long-

time supporters of the Center, have already taken notice.

“The Center is one of the top economic development opportunities in the Baton Rouge area,” said Stephen Moret, head of the Baton Rouge Area Chamber of Commerce. “The untapped commercial possibilities there are huge – now they will have a much greater chance to be realized.”

Themelios managers say they have already identified several potentially marketable technologies developed by Center researchers and are closely examining them for possible financing.

2006 EMPLOYEE GIVING CAMPAIGN

Nearly 90 Pennington Biomedical Research Center employees participated in the 2006 Employee Giving Campaign conducted

recently by the Pennington Biomedical Research Foundation to benefit the ongoing work of the Center.

According to Campaign Co-Chairs Dr. William Hansel, researcher, and Anne Jarrett, Director of Intellectual Property, Legal and Regulatory Affairs, employees contributed more than 190 gifts, including pledges, that totaled more than \$23,000.

The Pennington Biomedical Research Foundation initiated the staff campaign for the first time in 2005. With just two years of faculty and staff giving, the employee team has raised more than \$40,000 to support the Center's work.

"The Foundation is most grateful to all of the employees and their families for making a commitment to the Center through the 2006 campaign," said Hansel and Jarrett. 📍



▲ **Campaign Co-Chairs Dr. William Hansel, researcher, and Anne Jarrett, director of Intellectual Property**

THE LEGACY SOCIETY

PLANNED GIVING OPPORTUNITY

In its continuing effort to provide varied opportunities of support for the world-renowned Pennington Biomedical Research Center, the Pennington Biomedical Research Foundation (PBRF) has established a planned giving program called The Legacy Society.

One of the newest members of The Legacy Society is Cathy Champagne, Ph.D., faculty member at the Pennington Biomedical Research Center. Dr. Champagne decided to make the gift because of her dedication and aspirations for the Center in the future. "I decided to make a planned gift because my time here at the PBRC has allowed me to find my niche in life. I have seen first-hand the good things in research that are happening here. I wanted to do my part in helping the research at the Center to live beyond my efforts here," she said recently about her decision to invest in the Pennington Center. Dr. Champagne directs nutritional assessments, assists in clinical studies and encourages clinical volunteers.

It is this increased interest in long-range giving that prompted the PBRF to establish The Legacy Society. Working with the foundation is a group of financial professionals who are providing direction and expertise to the effort.

PBRF board member Jerry Jolly, CPA, and managing partner of KPMG LLP, and co-leader of the newly formed PBRF council, says "A planned gift provides a long-range and enduring investment, which moves the institution forward."

"Membership in The Legacy Society is open to anyone who includes the PBRC and PBRF in their estate plans," says PBRF Chairman John Noland.

Other members of the Planned Giving Council are co-chair Kevin Knobloch, CLU, CFP, client advisor at JP Morgan; Rolfe Miller, branch manager, Morgan Keegan; Elizabeth Querbes Sammons, senior vice president, Morgan Stanley; Jason T. Green, managing director, Stanford Group Company; Kevin C. Curry, partner, Kean, 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. 📍

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

NEW BOARD MEMBERS *continued from page 5*

graduate of the School of Banking of the South. Boydston brings vast expertise to the board in business and banking. He is a member of the Federal Reserve Bank of Atlanta's New Orleans branch, and serves on the boards of the LSU Foundation, Ogden Museum of Southern Art, the University of New Orleans Foundation, and the Louisiana Association of Business and Industry. Boydston works in the corporate Capital One offices in New Orleans.

Querbes Sammons brings investment and strategic financial management expertise to the board, having worked more than 12 years with Morgan Stanley in Baton Rouge and New York. As senior vice president, she advises high net worth individuals and families on estate planning, financial strategies and asset allocation. Querbes Sammons earned an M.B.A. degree from the Columbia Business School, where she graduated with honors and

a concentration in finance and management of organizations. Querbes Sammons is also a graduate of Southern Methodist University in Dallas. She is a frequent speaker on financial planning and is the founder of the Southern Women Action Network (SWAN). She also serves on PBRF's new Planned Giving Council.

Dr. Carl Luikart serves as a partner with Louisiana Cardiology Associates in Baton Rouge. A graduate of Nichols State University, Dr. Luikart attended medical school at



▲ **Elizabeth Querbes Sammons**

Louisiana State University, and completed his fellowship training at the Bowman Gray School of Medicine at Wake Forest University in Winston Salem, North Carolina. Dr. Luikart is immediate past chair of the Board

of Directors of Blue Cross and Blue Shield of Louisiana, and serves on other boards as well. As a noted cardiologist, Dr. Luikart offers a great perspective on the importance of medical research and education related to obesity and its many associated chronic diseases. 📍



▲ **Carl Luikart, M.D.**



Pennington Biomedical Research Foundation
 6400 Perkins Road
 Baton Rouge, LA 70808-4124
 www.pbrf.org
 www.pbrc.edu
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CALENDAR OF EVENTS

Mark Your Calendar - Upcoming Events

AUGUST

August 5, 6 p.m. 'til 10 p.m.

Soaring to New Heights '06 at the Pennington Hot Air Balloon Championships
 Grounds of the Pennington Biomedical Research Center campus

Highlights: Balloon Launch, Balloon Glow & Fireworks; VIP Tent (special air conditioned tent with seating, viewing area, and buffet)

Tickets: \$80 per person; \$200 per family of four; \$750 for a table of ten; \$30 for children

Tickets and sponsor information: 763-2511

Saturday, August 26, 9 a.m.-noon

Men's Health Day

C.B. Pennington, Jr. Building
 6400 Perkins Road

Free and open to the public

Booth sponsor information: 763-2629

OCTOBER

Saturday, October 7, 8 a.m.-2 p.m.

Irene W. Pennington Wellness Day for Women
 C. B. Pennington, Jr. Building

Free and open to the public

Booth sponsor information: 763-2629

LECTURE SERIES

August 15, November 7, 6-8:30 p.m.

Diabetes Lecture Series
 5:30 p.m. - 8:30 p.m.

C. B. Pennington Jr. Building
 Free and open to the public



Support the

PENNINGTON BIOMEDICAL RESEARCH FOUNDATION

Please consider a contribution to help support our newsletter efforts.

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 five years to maintain the Center's 2010 strategic plan.
- Help to offset state budget cuts to the Center. \$400,000 was recently cut from our state funding. Together, public and private contributions will help us regain this shortfall over time.