

# Discover!

news from the Brain Research Foundation

## BRF Funding Advances Science and Research Careers

As National Institutes of Health (NIH) funding has dropped by one-third over the past ten years, research support from non-profit organizations like the Brain Research Foundation has become more critical than ever. Tomorrow's major breakthroughs in the prevention and treatment of neurological diseases depend on our scientists having dedicated funding of their research. Every dollar invested in their work moves our understanding of the brain and nervous system forward.

### Tracking Seed Grant Successes

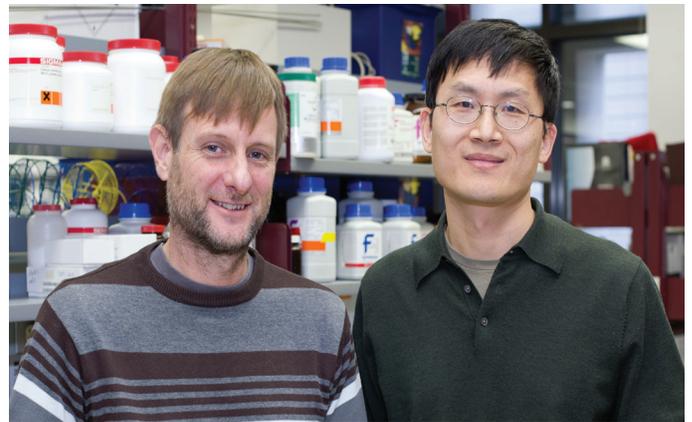
In Illinois, BRF seed grants ensure that the best and brightest in neuroscience across the state are able to advance in their careers. The success of the Brain Research Foundation Seed Grant Program is measured in various ways. Initially, we track success by determining the number of publications that have resulted from a seed grant project and the amount of additional outside funding that results from a project help a researcher obtain.

Another perhaps less measurable success factor is how a seed grant may help advance the career of a researcher. Results generated from

seed grants may enable a researcher to get larger project grants which in turn helps them perhaps get promoted to a tenured position or become established as an independent researcher. All three of these successes happened from a 2007 Seed Grant.

### Continued Advancements

Since the completion of the project, both researchers have published articles and obtained funding from the results. In addition, both scientists have advanced in their careers. Dr. Zhuang is now an associate professor at the University of



From left, Jeff Beeler, Ph.D., Xiaoxi Zhuang, Ph.D.

Xiaoxi Zhuang, Ph.D., neurobiologist at the University of Chicago, was a recipient of a 2007 BRF Seed Grant for his work on understanding the neurobiological and behavioral basis of drug abuse and addiction. At the time of the grant, Dr. Zhuang was an assistant professor with several people in his lab. One postdoctoral fellow in his lab, Jeff Beeler, Ph.D., focused on this seed grant project.

Chicago and Dr. Beeler is now a research associate (assistant professor) there as well. The Brain Research Foundation is proud that our seed grants have such an impact on science and scientists. Dr. Zhuang received a grant from the National Institute of Neurological Disorders and Stroke in the amount of \$400,000. *(continued on page 7)*

# Dear Friends,

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Thank you to all our donors who continue to help the Brain Research Foundation grow in the amount of grants we fund and the number of people we touch.

You will read in this issue about the amazing success stories from our seed grants. How in the past three years, an investment of \$1.4 M has generated at least \$12 M in additional funding for groundbreaking research. How this year, we had a 32% increase in the BRF Seed Grant letters of intent. There obviously continues to be a funding need in the neuroscience community. We are pleased to be able to support such talented

researchers and only wish that we were capable of funding even more.

In November, we held our 2010 Discovery Dinner. It was an extremely successful benefit which raised over \$600,000 that will go to fulfilling the BRF's mission. Along with a reception and dinner, guests heard from a panel focused on sports-related brain injuries among youth. The panel served as a "kick-off" for our educational program on this topic. In April, we will be working with the Chicago Public Schools to educate coaches and administrators about concussions. This will be very helpful as coaches try to assess head injuries. In addition, we are exploring the best way to develop a larger, more comprehensive program that would provide training to coaches in Chicago and perhaps state-wide.

As I direct the Foundation, I continue to see us building a

stronger organization each year. I am energized by the impact we have on science. The BRF is very fortunate to have donors that understand our mission and the importance of private funding. Thanks to longtime contributors, the Foundation will be distributing two new grants this year focused on ADHD and Parkinson's disease. I am excited to learn how we will have advanced these two areas, and look forward to updating you on the progress in an upcoming newsletter.

These worthy endeavors are only made possible through our donors. We hope you will continue to think of us in your giving plans.

Sincerely,

A handwritten signature in black ink that reads "Terre A. Constantine". The signature is fluid and cursive, written on a white background.

Terre A. Constantine, Ph.D.  
Executive Director

## BRF Welcomes Three New Trustees

**Diane B. Jastromb** A Highland Park resident, Jastromb has been active in Chicago's philanthropic community for more than 25 years with schools and organizations such as Ravinia School, Highland Park High School, SHALVA, and the Jewish Women's Foundation of Metropolitan Chicago. She is a recipient of the Community Service Award from The Chicago Lighthouse for People Who Are Blind or Visually Impaired where she has served on the board. She now serves on the Brain Research Foundation's Development and Fundraising Committee. "I'm very interested in furthering research on how our brains and the environment shape emotional and chemical balances, as well as alternative therapies to treat current illnesses," she stated.

**Susan J. Moran, D.Phil., J.D.** Moran is an attorney and serves as president of Moran Properties, Inc., an oil and gas drilling and extraction business. Her volunteer roles have been with the Latin School of Chicago and Children's Home + Aid. On the BRF Board, she is serving on the Programs Committee. Moran has known the BRF for many years through her husband John McDonough's involvement as a Trustee. They live in Chicago. "My interests in medical research include a broad spectrum of neurological diseases and disorders, affecting both children and adults," said Moran. "In particular, I have a special interest in research on Alzheimer's disease given my family has been touched by it."

# Foundation Forward

## New Chicago Ordinance Aimed at Reducing Sports Brain Injuries

When Chicago Alderman Ed Burke attended the November 1 BRF Discovery Dinner, he learned of the national movement to adopt new laws related to the care of young athletes with head injuries. The dinner included a panel focused on sports-related brain injuries among youth. Alderman Burke went to work right away with his colleague Alderman Latasha Thomas to move the City of Chicago forward in adopting an ordinance to do the same.

Passed by the city council in January, the ordinance requires any Chicago student-athlete who exhibits signs, symptoms, or behaviors associated with a concussion be removed from a game or practice and barred from returning without written medical clearance. Schools not enforcing the ordinance risk losing their water and sewage exemption under the ordinance.

In discussing the ordinance, Alderman Burke said, "The most important part of this is public education... to persuade parents that putting their kids back in the game after a head injury is a recipe for disaster. We understand the competitive nature of sports and how parents want their children to be competitive. But, there has to be some caution."

### BRF Helping Chicago Public Schools Protect Student Athletes

All Chicago schools will need to train coaches and administrators about the new city ordinance aimed at protecting children and adolescents. To assist, the Brain Research Foundation will be making presentations at upcoming Chicago Public School meetings focused on concussion symptoms, the dangers associated with a second impact, and why students need time out of play to recover.

The BRF is also planning to distribute educational materials to coaches and looking at other ways it can help educate parents and children about the long-term risks of head injuries.

**Carol Neal Whiting** Whiting is a lifelong resident of Lake County and now lives in Libertyville with her husband Philip. Her volunteer commitments include the Misericordia Women's Board and Northwestern Lake Forest Hospital Women's Board. Whiting now serves on the BRF's Marketing and Communication Committee. "Since 1992, my husband has had several strokes," said Whiting. "They were not too damaging but none the less life changing. Also, my association with Misericordia since 1982 has provided me with a broad exposure to brain disorders. Given these experiences, I'm honored to be part of the Brain Research Foundation."



From left, Diane B. Jastromb,  
Susan J. Moran,  
Carol Neal Whiting



With your help, the Brain Research Foundation continues to grow, bringing us steps closer to unravelling the mysteries of the brain. We thank you for your support and encourage you to help us spread the word about the important work we're doing.

## Ways of Giving

There are several ways in which donors can participate in the work of the Brain Research Foundation.

**Direct Gifts** Contributions are accepted in the form of cash, check, credit card, and stock.

**Matching Gifts** If you work for one of the growing number of companies that has a Matching Gift Program, the amount of your gift could be multiplied. Please check with your Human Resources Office to see if your company offers this benefit.

**Planned Giving** Long-term estate and financial planning can enable you to make a substantial contribution to the Brain Research Foundation. Examples of planned gifts include: bequests, life insurance policies, charitable remainder trusts, charitable lead trusts, and charitable gift annuities.

### Memorial and Honorary Gifts

You can make a donation in memory of someone or give a gift in honor of a special person.

For more information call the BRF at 312.759.5150 or visit us at [www.thebrf.org](http://www.thebrf.org).

# After Hours:



## \$615,000 Contributed for Research Through Our 2010 Discovery Dinner

More than 200 guests arrived at the Four Seasons Chicago on Monday, November 1, to support neuroscience research. The 2010 Discovery Dinner was chaired by BRF Trustees Suzanne Kopp-Moskow and Norman Bobins. Along with a reception and dinner, guests heard from a panel focused on sports-related brain injuries among youth.

“Norm and Suzanne were outstanding chairs of this event and attracted a great crowd of interested BRF supporters,” said Nathan Hansen, BRF President. “Our Board has decided to make the dinner an annual event and look forward to the next dinner in the Fall.”

Dinner sponsors made contributions of \$5,000 or more to host tables and ensure that the BRF’s Seed Grant Program was well funded for 2011.



Above: Trustees Suzanne Kopp-Moskow and Norman Bobins, 2010 Discovery Dinner Chairs.

Pictured below from left: Marilyn Vitale, Tom Heagy, Susan Gordy, David Epstein and the 2011 Benefit Chair Linda Heagy.



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# 2010 Discovery Dinner

## Abbott Receives First Frederick A. Gibbs Discovery Award



Abbott Chairman and CEO Miles White receives the Frederic A. Gibbs Discovery Award from Dinner Chair Suzanne Kopp-Moskow.

The Brain Research Foundation presented the Frederic A. Gibbs Discovery Award to Abbott, a global, broad-based health care company, for its dedication to advancing neuroscience through education, research and philanthropy. Named for one of the BRF's founders, the award was accepted by the Chairman and CEO of Abbott, Miles D. White, at the November 1 Discovery Dinner.

"Abbott sustains a remarkable commitment to scientific research that benefits millions of people," Terre Constantine, BRF Executive Director said. "Through Miles White's leadership the company supports a massive effort that helps advance the understanding of many health problems, including brain-related health issues. Abbott is especially deserving of this award."

The award is named for Dr. Gibbs, a neurologist who helped found the Brain Research Foundation in 1953. He was a pioneer on the use of electroencephalography (EEG) for the diagnosis and treatment of epilepsy.

"It's an honor to be associated with a pioneer like Dr. Gibbs, and with such an outstanding organization as the BRF," White said in accepting the award. "We intend to return this good faith in our work with continued commitment to the cause."



Panelists Rick Telander of the Chicago Sun-Times, Drs. Carrie Jaworski and Hunt Batjer of Northwestern, and Dan McGrath of the Chicago News Cooperative and St. Leo High School.

### Panel Discussion Broadens Understanding of Concussive Injuries in Youth Sports

A panel of four experts shed light on the symptoms and potential long-term implications of brain injuries in sports among youth. Answering questions posed by moderator Dr. Bennett Leventhal, the symptoms, treatments, and long-term impacts of improper care were discussed.

All four panelists agreed that more attention needs to be paid to these injuries early in life to prevent devastating results as seen among some professional athletes in recent years.

# Foundation Friends

## BRF Associate Board

The Associate Board consists of young professionals dedicated to supporting the mission of the Brain Research Foundation through awareness and educational activities. In the past year, the Associate Board raised more than \$57,000 through its fundraising events and introduced the Foundation to their guests at these events.

## Upcoming Associate Board Events

### Bank of America Shamrock Shuffle

April 10, 2011 9 a.m.  
BRF is part of the Charity Program

### Chicago White Sox Outing

Sox vs Texas Rangers  
May 17, 2011 7:10 p.m.

### Rockin' on the River

August 19, 2011 6:00 p.m.  
Riverwalk Terrace & Cafe  
401 N. Michigan Avenue,  
Chicago.

An evening reception featuring live music, drinks, food and friends of BRF

### Bank of America Chicago Marathon

October 9, 2011 7:30 a.m.  
BRF is part of the Charity Program

## New Associate Board Member Personally Drawn to BRF Mission



Graham Bayly

When you approach Graham Bayly's desk, you know this is a man who likes things organized. In talking with him, you come to understand that keeping a daily schedule and his environment organized is key to his success.

Bayly was diagnosed with attention deficit hyperactivity disorder (ADHD) when he was eight years old. According to the American Academy of Pediatrics, ADHD is a condition of the brain that makes it difficult for children to control their behavior. It is one of the most common chronic conditions of childhood. ADHD includes three groups of behavior symptoms: inattention, hyperactivity, and impulsivity. Not all children with ADHD have all the symptoms. For Bayly, inattention was his only symptom.

While Bayly respects those who choose to take medications to help deal with their ADHD symptoms, he and his brother both made the decision to stop taking medication beyond college. They found other tools to be more effective in handling the loss of focus and organization that often complicate the lives of those living with ADHD.

According to the American Academy of Pediatrics, ADHD is a condition of the brain that makes it difficult for children to control their behavior. It is one of the most common chronic conditions of childhood.

If Bayly isn't looking at you when you're speaking at a meeting, don't be fooled. He might just have the next brilliant idea to move your thought forward. "People sometimes think I've checked out, but I'm completely tuned in," said Bayly. "People think it must be hard, but ADHD is a huge asset for me. My mind never stops churning, so it helps me stay ahead in a very competitive business."

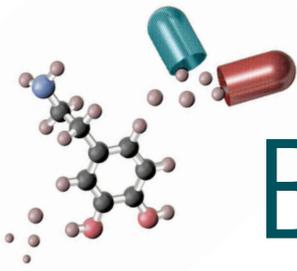
Bayly is now a senior vice president with Willis North America. He works with private

equity firms throughout the United States on the risk management, insurance and employee benefit programs for their acquisitions. He and his wife, Brook, have two children and live in Chicago.

Bayly joined the BRF Associate Board last year at the suggestion of fellow Board member,

childhood friend, and brother-in-law Matthew Claeys.

"I was drawn to the BRF's mission as it is focused on helping people with neurological problems," said Bayly. "I am particularly interested in advances being made in the care of autistic children, sports-related brain injuries, and, of course, ADHD."



# BRF Lab Notes

## New Distinguished Researcher Grants in ADHD and Parkinson's Disease

The Brain Research Foundation is pleased to announce two new grants being awarded for research in attention deficit hyperactivity disorder (ADHD) and Parkinson's disease (PD). The grants will be \$150,000 each and will fund groundbreaking research that will greatly advance the understanding of these disorders. These grants are being funded by generous, longtime contributors of the Foundation.

### ADHD Awardee

#### F. Xavier Castellanos, M.D.

*Neidich Professor of Child and Adolescent Psychiatry  
Director of the Phyllis Green and Randolph Cowen Institute for Pediatric Neuroscience  
New York University*

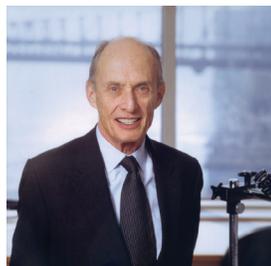


Dr. Castellanos' lab conducts a range of studies all focused on understanding the neuronal substrates of the various conditions which are currently comprised within the syndromal diagnosis of ADHD. Dr. Castellanos has received many awards, including the 2006 Blanche F. Ittleson Award from the American Psychiatric Association for excellence in research in child and adolescent psychiatry, and the 2008 Outstanding Mentor Award from the American Academy of Child and Adolescent Psychiatry.

### Parkinson's Disease Awardee

#### Paul Greengard, Ph.D.

*Vincent Astor Professor  
Laboratory of Molecular and Cellular Neuroscience  
The Rockefeller University*



Dr. Greengard's lab aims to understand the molecular basis of communication between neurons in the mammalian brain, elucidate the molecular defects responsible for various neurological and psychiatric disorders and determine the molecular mechanisms by which neuro- and psychoactive drugs produce their pharmacological actions. Among his many awards and honors are the 2000 Nobel Prize in Physiology or Medicine, the 1997 Charles A. Dana Award for Pioneering Achievements in Health and the 1991 National Academy of Sciences Award in the Neurosciences.

*(BRF Funding Advances Science and Careers, continued from page 1)*

Dr. Beeler continues his focus on addiction. In 2008, he received a grant from the National Institute on Drug Abuse in the amount of \$1.5M. Dr. Zhuang is a co-principal investigator on this grant.

The Brain Research Foundation Seed Grant Program has been funding worthy projects since 1981. Here are some recent BRF Seed Grant highlights:

. Since 2007, seed grant recipients have obtained almost \$12M in additional outside funding with nine proposals still pending that may increase this total.

. 2007 BRF Seed Grant recipient Dr. Kristen Jacobson obtained two NIH grants totaling over \$5.5 M.

. Dr. David Freedman secured nearly \$1 million in a five-year CAREER award for junior faculty from the National Science Foundation. The springboard for this award was his 2008 BRF seed grant.

. The NIH awarded Dr. Dane Chetkovich an exploratory/development research grant in the amount of \$450,000 based on the data generated in the first six months of his 2009 BRF seed grant.

. Since 2007, our grantees have published 28 scientific articles.



*Kristen Jacobson, Ph.D.*



*David Freedman, Ph.D.*



*Dane Chetkovich, M.D., Ph.D.*



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# Brain Matters



BRF funded projects generate over eight times the initial investment in additional funding. These findings are based on a sample of 47 projects over a three-year period that received \$1.4 million in BRF funding and subsequently generated approximately \$12 million in additional funding.

## 32% Increase in Seed Grant Letters of Intent

Demonstrating the ongoing need for private support, 90 neuroscience researchers submitted letters of intent for 2011 BRF seed grants compared to 68 letters in 2010. The number of institutions submitting letters also increased to seven this year compared to five last year, adding the University of Illinois in Urbana and Illinois Institute of Technology. Letters of intent were also received from researchers at the University of Chicago, Rush University, Northwestern University, University of Illinois at Chicago, and Rosalind Franklin University.

The first step in applying for research support, letters of intent are reviewed by BRF Scientific Review Committee members to narrow the number of applicants invited to submit full research proposals. The 90 letters of intent were pared down to 37 invitations for full proposals. Seed grant recipients will be announced in late April and posted on the BRF website at [www.theBRF.org](http://www.theBRF.org).

Since its launch in 1981, the Seed Grant Program has distributed 571 grants totaling more than \$8.5 million. Grants in the amount of \$40,000 each are awarded to researchers after review and approval by the BRF Scientific Review Committee whose members are based at leading neuroscience research institutions across the country.