Research on schizophrenia and addictive drug cravings illustrate the breadth and reach of our alumni community.

One neuroscientist is part of a research team in North Chicago that is working to unlock ways to suppress drug-seeking behaviors triggered by cocaine and other drugs, and the other runs a genetics research company in Reykjavik, Iceland. Both scientists participated in noteworthy brain discoveries announced late last year. And, both share a common lineage as they are former recipients of the Brain Research Foundation Fay/Frank Seed Grant Program.

Kuei Tseng, M.D., Ph.D., recipient of a 2012 Seed Grant, co-leads a team that has done work on cocaine addiction described by other scientists as “groundbreaking.” According to a paper published in Nature Neuroscience, Tseng’s team is able to positively modulate the function of a type of glutamate receptor in the brain to decrease cocaine cravings.

Kári Stefánsson, M.D., Dr. Med., CEO of deCODE genetics, recipient of nine separate BRF Seed Grants, reported in the journal Nature his company’s discovery that mutations associated with an increased risk of schizophrenia and autism also affect cognition in a subset of individuals who don’t meet the criteria for those illnesses. This discovery potentially opens new scientific avenues to understanding what leads to these life changing illnesses.

“The Brain Research Foundation community congratulates Drs. Tseng and Stefánsson for their impressive scientific accomplishments and these latest contributions to the field of neuroscience,” stated Terre A. Constantine, Ph.D., Executive Director of the Brain Research Foundation. “Their most recent work represents the tremendous diversity of our field, and the vast community of researchers whose work and careers have been helped along by our Seed Grants. The pool of funding for neuroscience has contracted and so it’s critically important that institutions like ours continue to support the most deserving projects.”
Dear Friends,

This past year was an outstanding year for many reasons. Not only did we celebrate our 60th anniversary, but our annual Discovery Dinner was the most successful to date, raising over $1 million. We could not have reached this milestone without the continued support of our donors. Special thanks to our co-chairs Suzanne M. Kopp-Moskow & Michael Moskow and Alicia & Peter Pond, and our honorees Jeffrey S. Aronin and Discover Financial accepted by David Nelms.

I want to thank you for your generous response to our annual appeal letter. We have many loyal supporters who decided to increase their giving amount significantly because they believe in what we do. We also received a number of generous contributions from new donors who recently found out about the BRF’s mission and want to endorse it. And at our annual meeting we welcomed three new trustees to the Foundation, each of them passionate about the BRF and our mission. We look forward to having their council and support as the Foundation grows.

We would simply not be here without the support of our friends, supporters and donors, so I send this to you with my sincerest thanks for allowing us to pursue our mission and fund the most groundbreaking and innovative neuroscience.

One miraculous day, scientists will find the cure for Alzheimer’s disease, autism or schizophrenia; but that discovery is built upon many experiments and years of support through organizations like the Brain Research Foundation. The Foundation and our supporters will be able to say that we played a role in making these breakthroughs happen. We are a small Foundation that has huge impact on the landscape of neuroscience, and together we will continue to fund research that opens new avenues to the treatment and prevention of brain disorders. We believe that there are answers, treatments and eventual cures on the horizon.

We promise to never stop looking for the most innovative neuroscience, and to steward your philanthropy with great responsibility and perseverance. The future seems limitless with your help and encouragement.

Sincerely,

Terre A. Constantine, Ph.D.
Executive Director
A good part of our success is the result of the hard work and dedication of our Trustees and Associate Board. At the end of 2013, two of our valued supporters stepped down from their critical leadership roles. We are pleased to take this opportunity to thank them for their tireless commitment to the BRF.

**Nathan Hansen**

With his term as the President of the Board of Trustees of the Brain Research Foundation has recently come to a close, so we would like to take this opportunity to thank him for his hard work and commitment to our Foundation.

For the past seven years Nathan has been one of the Foundation’s biggest advocates. He led us through many years of unheralded financial growth and program expansion. He supported and promoted the expansion of our Seed Grant Program and the development of the Scientific Innovations Award. His leadership brought us to our 60th Anniversary Discovery Dinner where we raised an unprecedented $1 million.

William E. Fay, Jr., BRF Founding Member and Chairman Emeritus aptly summed up Nathan’s contribution: “We were so fortunate to have Nathan’s passion and insight over these many years. It was a great comfort to know that he was so committed to our legacy and mission and we are going to benefit from his guidance for many years to come.”

We are not letting Nathan get very far, as he has accepted the Acting Secretary role and is continuing his work on various committees. Thank you Nathan, for all of your friendship and support over these many years.

**Jennifer Falconer**

All of us at the BRF want to express our thanks to Jennifer Falconer who stepped down from her role as Chair of the Associate Board at the December 2013 meeting. For two years Jennifer was a great asset to the Associate Board and the Foundation due to her tireless efforts to increase the reputation and visibility of the BRF.

“Jennifer did an amazing job of keeping all the Associate Board projects moving in the right direction while recruiting new members and raising awareness about the Foundation. She was and continues to be a pleasure to work with” says Kathy Thompson, BRF Trustee.

Her energy, enthusiasm and wonderful nature were infectious and we all look forward to her ongoing involvement and support of the BRF.
The Brain Research Foundation is pleased to announce the appointment of Richard M. Kohn as President of the Board of Trustees. Richard is a founder of Goldberg Kohn and a principal in the firm’s Commercial Finance Group. He has been a valued Trustee for many years and we are pleased to formally introduce him to our friends and supporters. The Q & A that follows is edited from an interview during which we had a chance to find out more about our new leader.

Q. For those of us who don’t know you, can you tell us a little about yourself?

A. I came to BRF through the merger with Children’s Brain Research Foundation, where I had been active on the Board. I’m a partner at a law firm I co-founded in 1976, where I specialize in international finance, and I also teach that subject as an adjunct at The University of Chicago Law School. I’ve worked for 15 years with the United Nations, on projects to help developing countries modernize their laws to enable small businesses to grow, create jobs and raise standards of living. My wife, Joan (an actress) and I have two daughters (a musician and a learning disabilities therapist) and three wonderful grandchildren.

Q. What is it about BRF that made you want to become the President of the Foundation?

A. When you become involved with an organization with our extraordinary vision of advancing neuroscience by funding breakthrough research, witness first-hand the way in which our exceptional Board, Associate Board, staff and donors all pull together to fulfill that vision, and have the chance to build on the momentum generated by my predecessor, Nathan Hansen, it’s impossible to resist doing everything you can to help out.

Q. Can you talk about how the organization has changed since you first became involved?

A. Because I came to BRF via the Children’s Brain Research Foundation, the biggest change for me was the shift in our focus from research focused exclusively on children to research helping people of all ages. Since the merger, the most dramatic change has been the expansion of our quest for the very best neuroscience beyond Chicago, and our decision to expand our reputation internationally, both of which I find to be quite exciting.
Q. Many people have a personal interest in the work of the Foundation. Do you have a personal interest that you can share?

A. Many years ago, Dr. Bennett Leventhal, who was then at The University of Chicago, helped my wife and me with an incident concerning our daughter, Elizabeth, who was then in fifth grade and struggling with learning disabilities. The caring way in which Bennett helped us left an indelible impression on Joan and me, so that years later, when I was presented with the opportunity to support Bennett (whose neuroscience research was at the core of the Children’s Brain Research Foundation), I jumped at the chance.

Q. Is there one BRF success story in recent years that stands out to you?

A. I’m particularly proud of our educational outreach work with concussions and our current project on the impact of physical exercise on reducing cognitive decline. These programs have had a tremendous effect on the non-scientific community, helping people in direct ways while at the same time raising the awareness of our Foundation.

Q. How do you explain what the BRF is and its mission and vision to people you’ve just met, and why they should think about becoming involved?

A. That’s easy. I just tell them that we’re on the cutting edge of science—that we parachute in where other organizations are unwilling to go—in our quest to improve the lives of people who have nowhere else to turn. It’s the kind of opportunity that you just can’t pass up.

Q. Where do you see the Foundation in 10 years? What excites you the most about that journey?

A. The Foundation functions along two principal tracks: Our pure research track, where we fund innovative neuroscience research through our Seed Grant Program and Scientific Innovations Awards, and our Educational Outreach Programs, where we fund research and other initiatives to make neuroscience accessible to the non-scientific community. I believe that our work along both tracks will continue to expand at a steady pace, and that the combined effect of all that work will be extraordinary. When you add to that our new strategic focus on expanding our search for the best neuroscience geographically, and expanding our reputation internationally, it’s perfectly reasonable to predict that 10 years from now BRF will be widely known throughout the world as the seat of cutting-edge neuroscience research. What excites me most about that journey is the cumulative impact we will have had on the lives of people along the way!

“When you become involved with an organization with our extraordinary vision of advancing neuroscience by funding breakthrough research... it’s impossible to resist doing everything you can to help out.”
Celebrating Success:

We surpassed our goal of raising $1 million for research and education at the 2013 Discovery Dinner

We owe a huge debt of gratitude to our Board of Trustees, Anniversary Committee, Associate Board, donors and friends who helped us surpass our $1 million fundraising goal. The 60th anniversary Discovery Dinner was co-chaired by Suzanne M. Kopp-Moskow and Michael H. Moskow and Alicia and Peter Pond. Together they hosted the BRF’s most successful fundraiser in our 60-year history!

At the 2013 Discovery Dinner, Jeffrey S. Aronin, Founder, CEO and Chairman of Paragon Pharmaceuticals, LLC, in addition to Chairman and CEO of Marathon Pharmaceuticals, received the Frederic A. Gibbs Philanthropic Leadership Award. The award recognizes his deep commitment to civic and philanthropic efforts.

“Jeff Aronin has made substantial contributions to the life sciences industry where his success has allowed him to positively impact the philanthropic community,” stated Terre A. Constantine, Ph.D., Executive Director of the Brain Research Foundation. “As a Foundation that has created a unique model for igniting new research paths, we respect Jeff’s achievement which has been to reinvent the traditional pharmaceutical model and make it easier for innovative life sciences companies to bring much needed products to market and to compete with larger players.”

Discover Financial Services received the Discovery Award for Community Service. David Nelms, Chairman and CEO of Discover, accepted on behalf of the company. "Knowledge is power and the $10 million commitment that Discover has made to help educate public high school students in the essential life skill of financial management is laudable,” Dr. Constantine added. “Already Discover’s program has been delivered to more than 400 schools throughout the U.S. and this is just one of several philanthropic efforts by the company.”

Keynote speaker Gary Fencik used his time at the podium to detail how many of his 1985 Super Bowl Bears teammates revealed in the sport but some now struggle with the physical and cognitive consequences. He concluded his remarks by joining a host of other supporters whose contributions pushed total proceeds for the event to just over $1 million.

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Jeffrey S. Aronin, Founder, CEO and Chairman of Paragon Pharmaceuticals and CEO of Marathon Pharmaceuticals, accepting the Frederic A. Gibbs Philanthropic Leadership Award from Michael W. Ferro, Jr. Founder and CEO of Merrick Ventures, LLC.

Greg Case, President and CEO of Aon Corporation, presenting the Frederic A. Gibbs Award for Community Service to David Nelms, Chairman and CEO of Discover.

Michael H. Moskow and Suzanne M. Kopp-Moskow, Discovery Dinner co-chairs.

Dr. Terre A. Constantine, BRF Executive Director and Gary Fencik, former Chicago Bear and BRF Honorary Trustee.
We are deeply grateful for the generosity of our donors. Because of their support, we will continue to fund discoveries that conquer disorders of the brain.

**Exploration $25,000+**
- Anonymous
- Aon
- Jeffrey and Lisa Aronin
- Discover
- Michael and Jacky Ferro, The Sun Times Foundation/The Chicago Community Trust
- Karen and Jim Frank
- Goldberg Kohn LTD and Joan & Richard Kohn Charitable Foundation
- Grosvenor Capital Management, L.P.
- Annie and Gregory K. Jones, The Edgewater Funds
- John and Martha Mabie, 36 Foundation & Mid-Continent Capital, LLC
- Suzanne M. Kopp-Moskow and Michael H. Moskow
- Daryl and David Nelms
- Alicia and Peter Pond
- J.B. and M.K. Pritzker Family Foundation

**Sponsor $5,000+**
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- Howie Berk, Illinois Disability Pooled Trust
- Blue Cross Blue Shield Association
- BMO Harris Bank
- Rita and John Canning
- Cole Taylor Bank
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- Joel Friedman, Alvin H. Baum Family Fund
- Mr. and Mrs. Robert Dunn Glick, Horwood Marcus & Berk
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- Kathryn and Bruce Johnson
- JRG Capital Partners in memory of Jacob Huzenis
- Dan and Gloria Kearney Foundation
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- Susan and Richard Lenny
- Mesirov Financial
- John A. Miller
- Noel and Michele Moore
- Norman Perlmutter, Perlmutter Investment Company

The PrivateBank
Mr. and Mrs. J. Christopher Reyes
James Star

Dr. Bennett Leventhal and Norm Bobins, BRF Trustees, with Heather Higgins Alderman and Chicago Alderman Edward M. Burke.

Merrilee Redmond with Peter and Alicia Pond, Discovery Dinner co-chairs.

Rob Johnson, Master of Ceremonies and BRF Trustee with John Mabie, Honorary Trustee and Dr. Sam Sisodia, Chair of the BRF Scientific Review Committee.

Father Tom Hurley, BRF Trustee Katherine Thompson and The Honorable Anne M. Burke.
Christopher I. Moore, Ph.D., Department of Neuroscience at Brown University, tries to determine if neurons can provide their own “deep brain stimulation” to change irregular neuronal activity, eliminating the need for chronic electrode implants. A “burst” is a brief period of high-frequency activity within neurons that can have a powerful impact on brain circuits. Symptoms in human diseases like Parkinson’s and epilepsy are thought to be influenced by “overly-exuberant” bursting. With his 2014 SIA, Dr. Moore will conduct research to determine if biological strategies can be effective at modulating thalamic bursts. Data gathered may indicate potential for entirely new treatment strategies thereby reducing or eliminating the need for intrusive and painful electrode implants.

W. Mark Saltzman, Ph.D., Department of Biomedical Engineering at Yale University, is focusing on one such disorder in the hopes of correcting it. Hurler syndrome is a genetic disease that manifests itself after birth through developmental delay, dwarfism, intellectual disability and frequently death prior to ten years of age. With a 2014 SIA, Dr. Saltzman will attempt to correct the gene disorder in Hurler syndrome in mice by “editing” genes in utero using nanotechnology. The potentially transformative approach, if successful, can be applied to any single gene defect – such as Huntington’s disease and Fragile X syndrome.

Anthony Zador, M.D., Ph.D., Department of Neuroscience at Cold Spring Harbor Laboratory, will test an innovative alternative to mapping neural connectivity. Rather than “take” a picture of brain wiring and connectivity through microscopy, Dr. Zador will “build” a picture or model through a unique DNA sequencing technique. The approach will be used to assess the brain wiring in a mouse model of autism. If successful, this technique can potentially be used to analyze neural circuitry disruptions in a great number of neuropsychiatric disorders.

These SIA projects have a high likelihood of producing important findings in a relatively short timeframe. It is expected that these investigations supported by the BRF will yield high impact data and result in additional major grant funding and significant publications in key journals. We look forward to learning about their progress over the next two years.
The BRF sponsored our 14th Neuroscience Day for scientists and students involved in the study of the brain to discuss their work and interests.

Neuroscience Day has grown into a great success with a competitive poster session that draws scores of graduate students and postdoctoral fellows, and a lecture series that focuses on topical and seminal areas of brain research.

This unique forum provides members of the neuroscience community the opportunity to share research interests and to stimulate scientific interactions between laboratories.

The event filled day began with poster presentations by graduate students and postdoctoral fellows. The posters gave a brief summary of recent research that graduate students and postdoctoral fellows conducted in a variety of areas of study, including Alzheimer’s disease, depression, epilepsy and schizophrenia. Each participant is on hand to explain their work. Judges from various Chicago institutions grade the posters and the top presenters were awarded $500 for their outstanding work.

Congratulations to the winners of the 14th Annual Neuroscience Day Poster Presentations:

**Graduate Students**
- Celia Fernandez, The University of Chicago
- Iboro Umana, The University of Chicago

**Postdoctoral Fellows**
- Pedro Brugarolas, Ph.D., The University of Chicago
- Tristan Hendrick, Ph.D., Northwestern University

Following the poster presentations, leading scientists from throughout the United States provided presentations of their research. We were thrilled that for the first time all speakers were BRF grant recipients. Two of them were Fay/Frank Seed Grant winners and two were Scientific Innovations Award winners.

The lecture session was moderated by Sangram S. Sisodia Ph.D., Chair of the Brain Research Foundation’s Scientific Review Committee and researcher at The University of Chicago. We are very grateful for Dr. Sisodia’s continued commitment to Neuroscience Day. Special thanks to the Department of Neurology at Northwestern University for hosting the event at the Lurie Medical Research Center in downtown Chicago.

January 17, 2014 was proclaimed “Neuroscience Day” by Illinois’ Governor Quinn in recognition of the Brain Research Foundation’s work in bringing together the nation’s leading neuroscientists.
Board News

The BRF is thrilled to welcome three new members to our Board of Trustees.

**Brant Ahrens** is Executive Managing Director and President of Personal Client Services for The PrivateBank. He manages the delivery of all personal, private, mortgage and small business banking, as well as trust and investment management services. He also leads the human resources and marketing and communications groups. Mr. Ahrens serves on the Operating Committee, which drives key strategic decisions for the Company under the direction of the Chief Executive Officer.

Mr. Ahrens was a former Chair of the Associate Board of the BRF and is on the Board of Directors of the Illinois Bankers Association. He is a member the Rehabilitation Institute of Chicago Foundation Board. Mr. Ahrens’ particular interests lie in the fields of autism and peripheral neuropathy.

**Dan Shapiro** has successfully represented clients across the country in complex business litigation at Katten Muchin Rosenman LLP. He focuses his practice on commercial disputes, litigating and trying significant cases including disputes arising out of the purchase and sale of businesses and securities, business valuations, contracts, products liability claims and complex class actions.

Mr. Shapiro is an adjunct faculty member of the Round Table Group, a consortium of university and industry experts who provide consulting, expert witness and legal support services for a variety of businesses. Mr. Shapiro has a particular interest in research relating to the impact of brain hemorrhage on behavior and personality. His family, like many others, has been touched by brain injury. Because of this, he is committed to supporting the scientific community as they advance understanding of how the injured brain functions.

**Kevin Lavender** is Senior Vice President and Managing Director of National Commercial Banking for Fifth Third Bank. He is responsible for overseeing the National Commercial sales teams which include: National Healthcare, Large Corporate, Mid-Corporate, Energy, Government and Financial Institutions.

In addition to the BRF, Mr. Lavender is also on the board of Fifth Third Bank (Tennessee), AmSurg Corporation, National Museum of African American Music, Nashville Convention & Visitors Bureau and University School of Nashville.

Mr. Lavender joined the BRF after learning of our mission, research and commitment to find answers to brain related illnesses. Like so many other families, whether it is autism, depression, Alzheimer’s, etc., Mr. Lavender’s family is also affected. From a personal, professional and social perspective, he is encouraged by BRF’s commitments and proud to be associated with the Foundation.
The Brain Research Foundation is very fortunate to have an Associate Board comprised of highly motivated and passionate supporters of children's neurological issues. Dedicated to funding breakthrough research and educating parents and the public, the Associate Board annually hosts Rockin’ on the River. A great band, wonderful food, raffle prizes and a wine pull make this event a do-not-miss on Chicago’s social calendar. Last year Rockin’ on the River raised almost $60,000 to support the mission of the Brain Research Foundation.

New Leadership

We would like to extend a warm welcome to Michael Kasdin who will serve as the new Chair of the Associate Board. Michael is a Partner at Dentons and he has represented juveniles in the criminal court system on a pro bono basis. He has noticed that many of the juveniles have serious brain disorders ranging from ADD and ODD to intellectual disability and autism. He feels that understanding these disorders may go a long way toward keeping children out of the courts. He has a special interest in childhood development and the science behind ADD and ADHD. Michael also serves as the chairman of the pro bono committee for the Legal Aid Society.

Associate Board Funds Seed Grant

One of the Associate Board's goals is to raise enough money to fund its own Seed Grant to fund research on children's brain diseases and disorders. In 2013 it funded Debra L. Silver, Ph.D., Department of Molecular Genetics and Microbiology, Duke University. The focus of her study is to research neural stem cells to study autism and intellectual disability.
For more information on the Brain Research Foundation, please call 312.759.5150 or visit our website at www.theBRF.org.

You can also follow us online:

www.facebook.com/brainresearchfoundation
https://twitter.com/TheBRF
www.youtube.com/brainfoundation

With your help, the Brain Research Foundation continues to grow, bringing us 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 Sandra DiPasquale at 312.759.5157 or visit us at www.theBRF.org.