

# Discover!

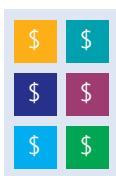
news from the Brain Research Foundation



## Measuring Success

Our 2013 grantees have accomplished a great deal in a short amount of time.

Six grantees have obtained additional funding for their research.



Grantees have published seven articles in peer-reviewed journals.



Our success is measured in advancements in understanding the brain. We would love to have a complete story about a cure to a neurological disorder but the journey to that point is built on decades of scientific exploration. Brain Research Foundation plays a major role in paving the path to that outcome through a road of discoveries.

The Fay/Frank Seed Grant Program is an extremely successful scientific investment as we continue to fund the best neuroscience in the country. We know this because we track our grantees' achievements after their seed grant is completed. At the end of the one-year \$50,000 grant period, we learn not only about the grantee's research results but also how those results will impact the scientific community through published articles and additional outside funding that will continue the momentum ignited by our seed grant.

An important means of advancing science and a researcher's career is by obtaining funding to support the various research projects they have designed. However, larger government grants are hard to get without a track record and some

preliminary results. Our seed grants enable researchers to generate the necessary results to submit proposals that will garner additional funding. Our 2013 winners generated impressive results; six out of the 12 have obtained additional funding and three others have stated that they plan to submit larger grant proposals in the near future. This investment in neuroscience paid off extremely quickly and will continue to grow as more grants are funded with the "seed" that the BRF "planted."

In science, one year is actually a very small amount of time; nevertheless, at the end of the 2013 grant period, six awardees have already published a total of seven articles in peer-reviewed journals. These scientific journals help disseminate the new discoveries that BRF has supported and scientists from across the world can build upon this knowledge to answer more questions.

The 2013 Seed Grantees accomplished a great deal in a small amount of time. As we continue to track our grantees, we anticipate even more impressive results.



**BRAIN RESEARCH  
FOUNDATION**

Innovate. Explore. Discover.

<b>In this issue:</b>		Foundation Future	page 4	BRF Lab Notes	page 9
Dear Friends	page 2	Associate Board News	page 6	Bill Fay: Our Inspiration	page 11
SRC Expands	page 3	Mingling With a Mission	page 7	Save the Dates	page 12

# Dear Friends,

## Board of Trustees of the Brain Research Foundation

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I want to thank you for your generosity throughout fiscal year 2014 which ended on June 30. Many of you graciously donated your time and financial support to make this past fiscal year so successful.

I am so proud of everything the Foundation accomplished because of the support of our wonderful donors. Last fiscal year, we contributed \$1.4 million toward neuroscience through our research grant programs. We continue to fund truly innovative research to expand our knowledge of the brain and neurological disorders.

## Our Scientific Review

Committee (SRC), led by Dr. Sam Sisodia, met in May to review the many applications we receive for our Fay/Frank Seed Grant Program. The SRC takes their job very seriously, identifying the best projects that will generate results to advance the project for further outside funding. Each year, the SRC reports that the proposals are better and better. Our wish would be to support even more innovative projects. We imagine a future where limited resources does not stand in the way of hastening research discoveries. As you read on the cover, the seed grants that we do award are very successful. We have the SRC to thank for all of their hard work.

As I hear about exciting discoveries, I become more energized each day and look forward to future possibilities. The answers are out there. We just need to help uncover them. Let's continue that challenge.

I say "thank you" with my sincerest gratitude for allowing us to pursue our mission and fund the most groundbreaking and innovative neuroscience.

I hope to see you on October 22<sup>nd</sup> for our Annual Discovery Dinner (details on page 5).

Sincerely,



Terre A. Constantine, Ph.D.  
Executive Director and CEO

## Our Scientific Review

Committee reports that each year the Fay/Frank Seed Grant proposals we receive are better and better.



## New BRF Staff Member

We formally welcome Terri Reniva to the Brain Research Foundation. In June, Terri joined as our Executive Assistant and provides administrative support to the BRF team. Terri has a deep appreciation for and commitment to empowering small organizations and the communities they serve through inclusive, mindful, and strength-based approaches. In addition, she has a personal passion for working at the BRF. Like many, she has experienced a loss due to a neurological disease.

Prior to her work at BRF, Terri managed projects for a real estate start-up company in Chicago that specialized in community-oriented design and was deeply engaged in youth development work throughout her undergraduate school. A native of Illinois, Terri loves the outdoors, reading, and health and fitness. In her free time, she and her husband are very involved with her two children's school and sports activities, and serve as volunteer caregivers for two dog rescue organizations.

# SRC Expands

The Brain Research Foundation Scientific Review Committee (SRC) is made up of well-regarded researchers in the field of neuroscience. This committee lends their scientific expertise when reviewing the various research proposals submitted to the Foundation, evaluating proposals and making suggestions for funding to the Foundation.

"I welcome Drs. Abel and Isacson to the BRF's SRC. Their scientific expertise continues to strengthen our Committee," stated Dr. Sam Sisodia, SRC Chair. "I look forward to working with them during the grant review process."



Ted Abel, Ph.D.

**Dr. Ted Abel** is the Brush Family Professor of Biology in the School of Arts and Sciences at the University of Pennsylvania where he is Co-Director of the Biological Basis of Behavior Program and directs an NIMH-funded predoctoral

training program in behavioral and cognitive neuroscience. His laboratory's primary focus is on understanding the molecular and cellular basis of learning and memory and well as the role of sleep in memory storage.

A graduate of Swarthmore College, Dr. Abel received his Master of Philosophy in biochemistry from the University of Cambridge, where he was a Marshall Scholar and worked with Nobel Laureate R. Tim Hunt. He received his doctorate from Harvard University, where he worked with Tom Maniatis studying transcriptional regulation. He was a postdoctoral fellow with Nobel Laureate Eric Kandel at Columbia University studying the molecular mechanisms of memory storage. He has published widely in journals that include *Nature*, *Neuron*, *Journal of Clinical Investigation* and *Journal of Neuroscience*. He is currently a member

of the Board of Scientific Counselors of NIMH and the Scientific Advisory Committee of the New Jersey Governor's Council on Autism.



Ole Isacson, Ph.D.

**Dr. Ole Isacson** is Professor of Neurology (Neuroscience) at Harvard Medical School and founding Director of the Neuroregeneration Research Institute and the Neuroregeneration Laboratory at

McLean Hospital, an NIH Udall Parkinson's Disease Research Center of Excellence Awardee and currently leads the extramural NIH iPS cell consortium for Parkinson's disease. His work focuses on the understanding and treatments of neurodegenerative disease, with particular emphasis on distinguishing critical mechanisms and treatments of neuronal vulnerability at the onset of disease, or new restorative treatments using stem cells after symptoms. He received his Medical Bachelor (1984) and Doctor of Medicine (a research doctoral degree in Medical Neurobiology, 1987) from the University of Lund in Sweden. In 1989, after a two-year postdoctoral position at Cambridge University, England, Dr. Isacson was recruited to Harvard as an Assistant Professor of Neuroscience and there established a small independent research laboratory for his work on neuroregeneration.

Since 1990, Prof. Isacson's laboratory at Harvard has grown to an internationally recognized academic research center for Parkinson's disease and related disorders. He is a member of the Executive Scientific Advisory Board of the Michael J. Fox Foundation. Dr. Isacson has received several international prizes, research awards and lectureships. Prof. Isacson was elected fellow to the American Association for the Advancement of Science (AAAS) in 2013.

## BRF Scientific Review Committee

**Sangram S. Sisodia, Ph.D.**  
SRC Chair  
Department of Neurobiology  
The University of Chicago

**Ted Abel, Ph.D.**  
Department of Biology  
University of Pennsylvania

**Scott T. Brady, Ph.D.**  
Department of Anatomy and Cell Biology  
University of Illinois at Chicago

**Judy L. Cameron, Ph.D.**  
Department of Psychiatry  
University of Pittsburgh

**John F. Disterhoft, Ph.D.**  
Department of Physiology  
Northwestern University

**Daniel A. Peterson, Ph.D.**  
Department of Neuroscience  
Rosalind Franklin University of Medicine and Science

**John L.R. Rubenstein, M.D., Ph.D.**  
Professor of Psychiatry  
University of California  
San Francisco

**Ole Isacson, Ph.D.**  
Professor of Neurology  
Harvard University

# Foundation Future

Imagine for a moment that you could be a part of finding the prevention or cure of devastating neurological conditions. Imagine that moment could start now. Whether you want to support our mission today or design a plan that benefits BRF after you are gone, you can find a planned giving method that is right for you. Below are some examples to help you get started.

## 100%

As the chart on the opposite page illustrates, any gift that you make to the BRF goes entirely towards our goal to fund the absolute best and most pioneering neuroscience in the country. Our aim is to invest at least 100% of all annual BRF donations in innovative research. We have met this goal for the last several years. Our “endowment” and our investment income cover all of our annual operating expenses. We believe that we are one of the few charitable organizations who consistently meet those objectives.

## Why Wait? Make a Difference in Your Lifetime.

Charitable planning tools help your gifts work harder—for you and BRF. Depending on the vehicle, you can meet current and future financial goals, provide for your loved ones, receive tax savings and earn income streams, starting now.

## The Next Generation

A planned gift to the BRF is a wonderful way to engage your whole family in the conversation and to participate. Do something that can immediately impact neuroscience and encourage the next generation to follow in your footsteps.

## Ways to Make a Planned Gift

There are a variety of ways to make a planned gift to BRF—and many of them offer benefits you can begin earning today. Whether you want to support our mission today or design a plan that benefits BRF after you are gone, you can find a method that is right for you.

## Gifts You Make Today—With Added Benefits

### Retirement Plan Assets and IRAs.

Under the extended charitable IRA legislation for 2013, if you’re 70½ or older, you can make charitable gifts now to BRF using funds from your individual retirement accounts (IRAs) without undesirable tax effects.

### Charitable Lead Trust.

Do you want to benefit from the tax savings that result from supporting BRF, yet you don’t want to give up any assets that you’d like your family to receive someday? You can have it both ways with a charitable lead trust.

### Memorial and Honorary Gifts.

If you have a family member or friend whose life has been touched by a brain disease or disorder, we hope you’ll consider making a gift to us in honor of that person. Providing a gift establishes a living tribute that allows you to:

- Honor a loved one or yourself
- Support our continuing efforts
- Receive personal financial benefits from your contribution.

## Gifts that Pay You Income

### Charitable Gift Annuity.

Through a simple contract, you agree to make a donation of cash, stocks or other assets to BRF. In return, you (and someone else, if you choose) receive a fixed amount each year for the rest of your lifetime.

*The Foundation’s U.S tax. identification number is 36-2477928. The Foundation cannot provide legal or financial advice. We urge you to consult with your legal representative or financial adviser to determine the most appropriate way for you to give.*

### Charitable Remainder Trust.

With a charitable remainder trust, you or other named individuals can receive income each year for life or a period not exceeding 20 years from assets you give to the trust you create. Payments can be either variable or a fixed amount. After the life of the named individuals or the set period of years, the balance in the trust goes to the BRF.

### Gifts that Make an Impact After Your Lifetime

#### Bequest.

Consider including a gift to the BRF in your will or living trust. Called a charitable bequest, this type of gift offers these main benefits:

- Simplicity. Just a few sentences in your will or trust are all that is needed.
- Flexibility. Because you are not actually making a gift until after your lifetime, you can change your mind at any time.
- Versatility. You can structure the bequest to leave a specific item or amount of money, make the gift contingent on certain events, or leave a percentage of your estate to us.
- Tax Relief. If your estate is subject to estate tax, your gift is entitled to an estate tax charitable deduction for the gift's full value.

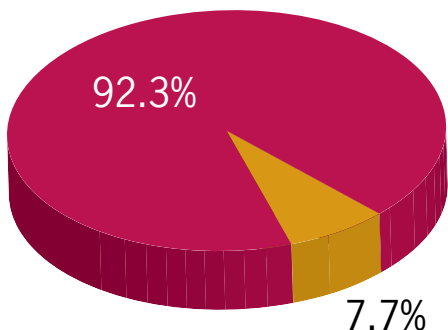
### Residential Real Estate.

With a retained life estate, you deed a personal residence to BRF now. You retain the right to occupy the home for life and continue to pay real estate taxes, maintenance fees and insurance on the property. In addition, you can later decide to rent your home or make improvements to it. After your lifetime—and the lifetime of your spouse or another person you choose to retain rights to live in the home—we take possession of the property.

### Life Insurance.

Naming the individuals and charities that will receive your assets once you are gone can be a simple process. Most assets can pass to your intended beneficiaries by the terms of your will. Other assets, such as retirement plans, life insurance and insurance annuities, however, are not controlled by the terms of your will. The beneficiaries of these assets can be easily modified at any time to meet your changing needs.

To learn more about making a planned gift to the Foundation, please call Sandra DiPasquale, Development Director at 312-759-5157 or email her at [sdipasquale@theBRF.org](mailto:sdipasquale@theBRF.org).



### How is Your Donation to the BRF Used? 100% of all donations fund research and education.

Research funding: **92.3%**

Education, programs, initiatives: **7.7%**

(General operating expenses are covered by our “endowment” and investment income.)

## save the date

Please save the date of Wednesday, October 22<sup>nd</sup> so that you can join us at the Ritz-Carlton Chicago for our annual Discovery Dinner. Co-chaired by Alicia and Peter Pond and Joan and Richard Kohn, the evening promises to be and meaningful and educational.

We are thrilled to be honoring founding board member, William E. Fay, Jr., Chairman Emeritus, with the Founder's Award and Dr. Richard Chaifetz, Chairman and CEO of ComPsych, with the Frederic A. Gibbs Award for Philanthropic Leadership.

Our panel will consist of Dr. Carl W. Cotman of UC Irvine and Adolph Kiefer, a gold medalist in swimming in the 1936 Summer Olympics in Berlin, Germany.

There will be a lively and informative discussion about how physical exercise can help prevent cognitive decline. Reservations start at \$500 and tables start at \$5,000. We hope to see you there. If you are interested in reserving a seat or sponsorship opportunities, please contact Sandra DiPasquale at 312-759-5157.

## 10.22.2014



# Associate Board News

## BRF Associate Board Executive Committee

Michael C. Kasdin, *Chair*  
Julie A. Schultz, *Vice Chair*  
Graham V. Bayly, *Treasurer*  
Eric S. Newmark, *Secretary*

Julie Babyar  
Vanessa A. Bachtell  
Jennifer M. Carr  
Ryan A. Cordier  
Liza P. Dorsey  
Jennifer E. Falconer  
Stacy J. Flanigan  
Adam C. Gilgis  
Michele M. Haynes  
Jennifer E. Hobbs, Ph.D.  
David Jacob  
Nekesa J. Josey  
Amy Kaskie  
Kelli M. Kluga  
Colby T. McVey  
John S. Nicholson  
Yezi Peng  
William B. Rao  
Paul S. Rashid  
Andrew Swigart  
Elizabeth A. Wolcott

## Associate Board at Large

Katherine Booth  
Sarah M. Burke  
Lua M. Clark  
Peter G. Glick  
Matthew H. Johnson  
Patrick M. Peterman  
Arielle Saporta  
Brian Vereb

The BRF Associate Board develops new programs and initiatives to educate the public and get more people involved. It does so by focusing specifically on children's brain disease and disorders.

## New Board Members

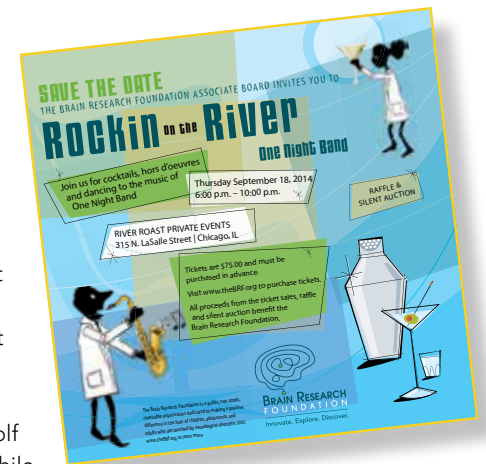
We would like to extend a warm welcome to two new members to the Associate Board, Julie Babyar and David Jacob.

**Julie Babyar** is a registered nurse and public health professional. Her interest in advancing medical research as well as supporting those affected by autism, traumatic brain injury and neuropsychiatric disorders led her to the Brain Research Foundation. She is very enthusiastic and excited about the opportunities the BRF provides for enhancing research as well as awareness for brain disorders.

**David Jacob** is an Associate with Sheridan Legacy Group, a healthcare focused private equity investment fund. He is particularly interested in neurological degeneration related diseases, such as Alzheimer's, Amyotrophic Lateral Sclerosis (ALS) or Lou Gehrig's disease, dementia, and Parkinson's disease. David first found the Brain Research Foundation after researching ways to get involved with an organization that is on the forefront of medical research and passionate about making a positive difference in the lives of others.

## Haymarket Pub & Brewery Golf Tournament

The 2nd Annual Haymarket Pub & Brewery's Annual Charity Golf Tournament benefiting the BRF took place on Sunday, August 17th. Over 75 golfers played 18 holes at the beautiful White Pines Golf Club in Bensenville, IL while drinking Haymarket Brews (7 kegs placed throughout the course!). Included in the ticket price--\$125/golfer--were greens fees, golf cart, hot dog lunch, dinner buffet post golf round, individual gift bag filled with goodies from local sponsors, free transportation (Thanks Chicago Brew Bus!) and much more! The proceeds from the ticket sales plus the raffle and silent auction will go towards funding a seed grant focused on children's neurological issues. Special thanks to Paul Rashid for developing and spearheading this annual fundraiser.



## Tickets Now on Sale!

The Brain Research Foundation's dynamic Associate Board is hosting their annual fundraiser, **Rockin' on the River**, at a great new venue this year. **River Roast** is Chicago's celebrity Chef Tony Mantuano's latest restaurant situated along the iconic Chicago River, featuring contemporary American tavern fare. Dancing to the tunes of One Night Band, wonderful food, raffle prizes and a wine pull make this event a do-not-miss on Chicago's social calendar.

**Thursday, September 18**  
**River Roast**  
**315 North LaSalle**

Call 312.759.5150 for your \$75 tickets or buy online today!

# Mingling with a Mission

The Brain Research Foundation was honored to be the beneficiary of funds raised at “Real Estate Mingle” held on Wednesday, April 30<sup>th</sup> at the Ravenswood Event Center.

Over four hundred of Chicago’s Real Estate Professionals attended the Real Estate Mingle, which featured rare cars, rare liquors and cigars. The event was thoughtfully conceived of and was hosted by Jameson Sotheby’s International Realty, and celebrated the life of Jake Huzenis. We are thrilled to say that enough money was raised that evening to name a seed grant, and the Jacob Jameson Huzenis Memorial Grant was awarded to Dr. Clarissa L. Waites at Columbia University. Special thanks to all of the generous sponsors of the evening, Chris Feuer, Mike Sato and their team at Jameson Sotheby’s International Realty and the Huzenis family.



From left, Randy Paylock and Charles Huzenis, Principal, JRG Capital Partners



From left, Alexandra Konarski, Audrey Huzenis and Benjamin Brichta



From Left, Kevin Masi and Chris Feuer, CEO, Jameson Sotheby’s International Realty

## The Jacob Jameson Huzenis Memorial Grant

When a neural action called ubiquitination works normally, brain neurons communicate as they are intended and humans are able to go about their daily lives. But when ubiquitination is altered, brain communication processes are disrupted and the brain and human body struggle, or worse. Disrupted ubiquitination is a symptom of Parkinson’s, autism, anxiety and depression, among other disorders.

A new study by Columbia University researcher Dr. Clarissa L. Waites will investigate neural ubiquitination both when it is operational and disrupted and potentially identify therapeutic targets for diseases that arise from the phenomena.

“The Jameson-Huzenis family has stepped forward to endow a grant for research that is of great importance and immediacy to neuroscience and mental health” states Terre A. Constantine, Ph.D., BRF Executive Director and CEO. The grant was funded through “The Real Estate Mingle,” hosted

by Jameson Sotheby’s International Realty that drew contributions from more than 400 real estate professionals. Lead sponsors for the fundraiser included Guaranteed Rate, Westrade and JRG Capital Partners. The grant is named after the late son of Charles Huzenis and Deirdre Jameson and brother of Audrey Huzenis.

*The Jameson Huzenis Family would like to express their gratitude for the support from family, friends and colleagues and appreciate this opportunity to remember Jake in a way that may help others in the future.*

# 2014 Seed Grant Recipients

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**Demet Arac-Ozkan, Ph.D.**

*Department of Biochemistry and  
Molecular Biology,  
The University of Chicago*

Structural and Functional Studies of Adhesion  
GPCRs in the Central Nervous System

**Helen Bateup, Ph.D.**

*Department of Molecular and  
Cell Biology,  
University of California, Berkeley*

Modeling neurodevelopmental disorders with  
genetically defined human neurons

**Stephanie Dulawa, Ph.D.**

*Department of Psychiatry and  
Behavioral Neurosciences,  
The University of Chicago*

Functional characterization of genes associated  
with Obsessive Compulsive Disorder using  
mouse models  
*Women's Council Seed Grant Awardee*

**David Foster, Ph.D.**

*Department of Neuroscience,  
Johns Hopkins*

High-density neural recording of dysfunctional  
memories in animal models of mental disease

**Daniel Leventhal, Ph.D.**

*Department of Neurology,  
University of Michigan*

In vivo optogenetics to distinguish learning from  
performance effects of dopamine on fine motor skills

**Qin Liu, Ph.D.**

*Department of Anesthesiology,  
Washington University in St. Louis*

The Molecular and Neural Basis of Itch Sensation

**Xuelin Lou, Ph.D.**

*Department of Neuroscience,  
University of Wisconsin*

The nanometer-scale organization and function of  
phosphoinositide signaling at central synapses

**Evan Miller, Ph.D.**

*Department of Molecular and Cell Biology  
and Chemistry,  
University of California, Berkeley*

Optical Integrators for Monitoring Activity in Circuits  
and Cells

**Wei Min, Ph.D.**

*Department of Chemistry,  
Columbia University*

Optical imaging of new protein synthesis in live  
neurons and brain tissues

**SungWoo Nam, Ph.D.**

*Department of Mechanical  
Science and Engineering,  
University of Illinois, Urbana-Champaign*

Gel-like Nano-devices for Non-invasive, Electrical and  
Chemical Recording of Neural Activities

**Julie Sigenthaler, Ph.D.**

*Department of Pediatrics,  
University of Colorado, School of Medicine*

Activation of fibrotic scar  
forming cells following  
traumatic brain injury  
*Associate Board Seed Grant Awardee*

**Susan Voglmaier, Ph.D.**

*Department of Psychiatry,  
University of California, San Francisco*

A Novel Approach to Regulate Glutamate Signaling in  
Neuropsychiatric Disease

**Clarissa Waites, Ph.D.**

*Department of Pathology and  
Cell Biology, Neuroscience,  
Columbia University*

Regulation of neurotransmitter release and synaptic  
vesicle recycling by protein ubiquitination  
*Jacob Jameson Huzenit Memorial Seed  
Grant Awardee*

**Eugene Yeo, Ph.D.**

*Department of Cellular  
and Molecular Medicine,  
University of California, San Diego*

Global analysis of transcriptome diversity at the single-  
cell level in human neurons

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# BRF Lab Notes

Established to help innovative neuroscience researchers gather the data required to validate their hypotheses, the BRF Fay/Frank Seed Grants are a critical first step in understanding neurological disorders. **Since 1981, BRF has awarded more than \$10.8 million to fund early stage research focused on novel ideas.** By enabling scientists to generate the preliminary data required for major grants, the Foundation conservatively estimates that its investments have led to a factor of **twenty times more funding** for grantees and research.

We continue to receive many extraordinary proposals from across the country. This year, we funded fourteen innovative projects. Three are highlighted on these pages.

Model experimental systems, such as mice, are often used to investigate the mechanisms of neurological disease. However, it would be ideal to examine the causes of disease and test potential therapeutics in a human cellular context.



Helen Bateup, Ph.D.

**Helen Bateup, Ph.D., assistant professor in the department of molecular and cellular biology at the University of California, Berkeley is utilizing a “disease-in-a-dish” approach based on state-of-the-art technology to transform skin cells obtained from patients into human brain cells, or neurons.**

These neurons retain the genetic information of the patient from which they were derived allowing her

lab to investigate disease mechanisms in a clinically relevant context. In Dr. Bateup’s seed grant proposal, she intends to use this system to investigate how mutations in genes that cause the autism and epilepsy-related disorder tuberous sclerosis complex (TSC) affect the ability of neurons to communicate with each other, and how altered neuronal communication leads to imbalanced neural network activity. In addition to revealing the causes of brain dysfunction in neurodevelopmental disorders, her future studies will test the ability of potential therapeutics to restore normal patterns of activity directly in patient-derived neurons.

Understanding the neural basis of mental diseases such as schizophrenia and autism is a major challenge in neuroscience.

One major roadblock is the lack of basic understanding of how neural circuits contribute to the cognitive processes that are impaired in these diseases. A recent focus in patient populations has been on the “default mode network” of brain areas such as prefrontal cortex and hippocampus that are particularly active during quiet rest and free thinking. Such areas exhibit marked impairments in patients. Interestingly, activity in the default network is associated with high-level cognitive functions such as episodic memory, imagination, and consideration of the perspectives of others, thus providing a framework for understanding the neural basis of diseases such as schizophrenia and autism.



David J. Foster, Ph.D.

**David J. Foster, Ph.D., assistant professor in the department of neuroscience at Johns Hopkins University, will investigate how this activity is disrupted in models of cognitive disease, and probe possible molecular mechanisms for this disruption.** He will further use powerful genetic techniques to gain experimental control over these activity patterns in the brain. These studies will yield fundamental insights into mechanisms of high-level cognition, with the potential for developing and testing therapeutic interventions for cognitive disease.

Researchers from institutions across the nation have received Seed Grants from the BRF to propel their work. As we continue to fund the best science, wherever it's taking place, we look forward to adding to this list.

Columbia University

Duke University

Harvard University

Johns Hopkins

Massachusetts Institute of Technology

Northwestern University

Rosalind Franklin University

Rush University

The Salk Institute for Biological Studies

The University of Chicago

University of California, Berkeley

University of California, San Diego

University of California, San Francisco

University of Colorado

University of Illinois, Urbana-Champaign

University of Illinois, Chicago

University of Pennsylvania

University of Michigan

University of Wisconsin

Washington University in Saint Louis

Yale University

# BRF Lab Notes

Traumatic brain injury is a growing cause of acquired cognitive disability in the US. Considerable progress has been made to understand how the brain responds to traumatic brain injury yet one aspect has not yet received much attention.

Following a blow to the head, the area of brain that is directly injured begins to die and, as a result, is filled by different types of cells. In other types of brain injury like stroke, some of these cells make a "scar" within the dying brain tissue much like the scar that forms after you cut your hand. At this point, it is not known if the scar helps or hinders brain recovery.



Julie Siegenthaler, Ph.D.

**Julie Siegenthaler, Ph.D., assistant professor in the department of pediatrics at the University of Colorado, is trying to uncover what exactly a brain "scar" achieves.** In her proposal, Dr. Siegenthaler plans to look carefully to see if these cells are actively making this scar in laboratory animals after a head injury. By understanding more about these cells we can determine if the scar-forming cells should be helped or stopped to better support brain healing after traumatic brain injury.

Our Associate Board chose Julie Siegenthaler's seed grant to fund, due her connection to the department of pediatrics at the University of Colorado. The mission of the Associate Board of the BRF is to fund grants and that focus on the diseases and disorders of children and adolescents. This is the third year that the Associate Board has raised the \$50,000 to fund a seed grant in its entirety.

**“If we want neuroscience research to progress—if we want new findings in epilepsy or Alzheimer’s disease, stroke, multiple sclerosis—then it requires an investment. The BRF’s investment is small. But I’ve been able to turn that small investment into a ten-fold increase in the amount of money that’s available to do our research. When you’re successful in translating this into further funding and expanding our investigation, it’s really a ten-to-one matching system.\*”**

Dane Chetkovich, MD., Ph.D.

Associate Professor of Neurology

Northwestern University

2009, 2010, 2012 Seed Grant Recipient

*\*Note: As the BRF continues to track our grantees we have found that overall our return on investment is **20 to 1**.*

*It is always such a pleasure to talk to Bill Fay, BRF Chairman Emeritus. He calls into every board meeting to hear what the Foundation is doing. His passion for the BRF has not wavered over the past six decades. As a Founding Trustee of the BRF, Bill has seen many people come and go but one thing has remained constant: the Foundation's mission to support the best research they had the ability to fund.*



*At this year's upcoming benefit, Discovery Dinner which will be held on October 22 at the Ritz-Carlton Chicago, we will honor a man who has been a leader, a donor and a friend of the BRF. In July, I had the privilege to go to Florida to film Bill for a video we plan to play at the benefit. It was such a treat to see him again. It had been about two years since I saw him last.*

*We had a wonderful talk about the BRF. Where it was and where it is now. I was so thrilled to hear that he is extremely pleased and overwhelmed by how much we have accomplished. Moving from selling trick or treat candy on the street corner in the 1950s to organizing a \$1 million benefit 60 years later. And with these funds, we are now supporting brilliant scientists throughout the nation. Bill has always put his trust in us to continue our mission and find the best science to fund.*

*Bill is truly an amazing man. He is an inspiration in how he lives his life.*

A handwritten signature in black ink, appearing to read 'June', written in a cursive style.



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## Save these dates!

### Discovery Dinner 2014 Wednesday, October 22

Ritz Carlton Chicago  
160 East Pearson Street  
Reservations start at \$500 and tables start at \$5,000.

Please call Sandra DiPasquale at 312.759.5157 for more information or for sponsorship opportunities.

### Neuroscience Day Friday, January 23

Northwestern University Chicago Campus  
Free Admission

Call 312.759.5150 to buy tickets or for more information on all our upcoming events.