



**Elena Choleris**, Editor-in-Chief **Andrew Murtishaw**, Guest Editor

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# 2015 IBNS Conference... Just Around the Corner!

by Andrew Murtishaw

The 2015 IBNS Annual Meeting will be held July 2-7 and before we know it, we will all be enjoying the lush gardens of Victoria, British Columbia, Canada! Thanks to our amazing IBNS Council Members and the incomparable Front Office staff — you will get to know Marianne and Alison a bit better in this newsletter — this upcoming conference is set to be yet another meeting that you don't want to miss. Here are some highlights that you can look forward to:

Keynote Speaker: **Jaak Panksepp, Ph.D.**, Bowling Green State University, Bowling Green, OH, USA

Keynote Speaker: **George F. Koob , Ph.D.,** The Scripps Research Institute, La Jolla, CA, USA

Presidential Lecture: **Stephen Kent, Ph.D.**, La Trobe University, Melbourne, Australia

Bench-to-Bedside Lecture: **Bill Deakin, Ph.D.**, Univeristy of Manchester, United Kingdom

The Symposia schedule is available <u>HERE</u> and includes the following topics, which is a small sampling of the many amazing symposia that you can attend:

Decision-making in animal models for neuropsychiatric disorders. Chairs: **Kiyofumi Yamada, Wen-Sung Lai.** 

Molecular mechanisms of cocaine-induced cellular and behavioral plasticity. Chairs: **David Dietz, Mary Kay Lobo** 

From the lab bench to the field: Translational research approaches for investigating mild Traumatic Brain Injury (mTBI). Chair: **Chand Taneja.** 

The mechanisms of stress resilience and safety: Implications for stress-related neuropsychiatric disease. Chair: **Matthew W. Hale**.

Neurogenesis: Sex, drugs and memory – what's neurogenesis have to do with it? Chairs: **Brian Christie, Liisa Galea.** 

IN THIS ISSUE

## **Save the Dates!**

2015 IBNS Meeting

## **Fairmont Empress**

June 2 – 7, 2015 Victoria, BC Canada

2015 IBNS Conference

Page 1

2015 Travel Awardees

Page 2

Safe Routes to School

Page 3

Safe Routes to School 'Thank You'

Page 4

Protecting Young Brains With Yoga

Page 5

Brain Awareness Outreach

Page 6

Do You Know Who We Are?

Page 7

<u>Father of Cognitive Behavior</u> Therapy

Page 8

Member News

Page 9

**Sustaining Corporate Sponsor** 





# Congratulations to our 2015 travel award recipients!

<u>First</u>	<u>Last</u>	<u>Organization</u>	Country
Steven	Tran	University of Toronto	Canada
Patrick	Piantadosi	University of British Columbia	Canada
Jacqueline- Marie	Ferland	University of British Columbia	Canada
Eric	Parise	Florida State University	USA
Mouna	Haidar	The Florey Inst. of Neuroscience and Mental Health	Australia
Richard	Matta	University of Guelph	Canada
Andrew	Murtishaw	University of Nevada, Las Vegas	USA
Franklin	Back	Universidade Federal de Santa Catarina	Brazil
Joshua	Haight	University of Michigan	USA
Esther	Remmelink	VU University Amsterdam	Netherland
Daniel	Hoops	The Australian National University	Australia
Leah	Mayo	University of Chicago	USA
Jules	Panskepp	Oregon Health and Science University	USA
Joseph	McQuail	University of Florida	USA
Michael	Loureiro	University of Western Ontario	Canada
Jason	Alipio	California State University, San Bernardino	USA
Sarah	Jablonski	Cincinnati Children's Hospital Medical Center	USA
Christopher	Fitzpatrick	University of Michigan	USA
Kanza	Khan	University of Southern Mississippi	USA
Morgane	Milienne-Petiot	University of California San Diego	USA

### **IBNS OFFICERS**

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USA **Cliff Summers USA-Elect** Kim Gerecke

### IBNS CALL FOR NEWS

Would you like to submit an article or member news for our next IBNS News edition? We would love to hear from you!

Please make your submission to Elena Choleris

Marianne Van Wagner **Executive Coordinator** 

Alison Watson **Business & Event Manager** 

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## **Important Dates:**

March 23, 2015 - Abstract Deadline (Posters Only)

- Deadline for Exhibitor Registration & Ads April 3, 2015

April 24, 2015 - Hotel Reservation Deadline

May 1, 2015 - Online Registration Ends (Onsite Registration Available)

May 1, 2015 - Last Day for Registration Refunds

June 2-7, 2015 - Conference Dates

For additional meeting information, please visit the IBNS website or contact Marianne Van Wagner, Executive Coordinator, at <a href="mailto:ibns@IBNSconnect.org">ibns@IBNSconnect.org</a>



# Safe-Routes to School... A Follow-Up of the 2014 IBNS **Fundraiser**

by Andrew Murtishaw

In 2014, IBNS decided to give back to the local Las Vegas community where the annual conference was to be held. Spearheaded by Jonathan Brigman, the Brain Safety Initiative was able to successfully raise just over \$1,000.00 from the generous contributions of the IBNS members. These funds were donated to the Clark County School District Safe Routes to School Program, a program that encourages students to walk and bike to and from school. Sherie Moore, the coordinator for the Safe Routes to School Program, recently reached out to IBNS to give us an update on how the funds were utilized, please see the attached letter.

As members of a scientific community that is so often dependent upon public awareness and their support — we are in a unique position to give back to these very communities. As IBNS moves forward with this idea of giving back to the local communities where the conference is to be held each year, please not only continue to support these endeavors but reach out to the IBNS Council Members if there is a fundraiser or outreach that you think will be particularly helpful for certain community, school, or neighborhood.

The many donations that each of you made towards the 2014 IBNS Brain Safety Initiative made an actual difference in the lives of the students here in Las Vegas. On behalf of the Las Vegas community, thank you IBNS for taking the time to make my city a little bit safer.



CCSD SRTS, School Community Partnership Program 4601 W. Bonanza Road, 2nd floor, Las Vegas, NV 89107. Email: srts@interact.ccsd.net. Phone: 702-799-6560

December 29, 2014

Dear International Behavioral Neuroscience Society,

Thank you for your \$1,075.00 donation to the Clark County School District's Safe Routes to School (SRTS) program for the purchase of bicycle helmets in June 2014. One aspect of the SRTS program is encourage students to wear helmets when riding or rolling. It is always a challenge to get kids to wear helmets on a regular basis and we have found that kids really like helmets with fun graphics. We were able to maximize your donation by working with the bicycle helmet maker, Raskullz. Raskullz makes trendy and colorful bicycle helmets that children love to wear. The Raskullz helmets shown on the students in the photo below retail at \$19 to \$22 per helmet. Raskullz sold us the helmets for \$3 - \$5 each.

Your donation has helped the SRTS staff get helmets to students whose parents have not been able to afford to buy them, let alone purchase the kinds of helmets their kids want to wear. Your generosity has really made a difference in the lives of a number of students.



Students at Lucille Rogers Elementary wearing Raskullz helmets during Bike Safety Week.

# 2015 IBNS Brain Health Fundraiser: Protecting young brains with yoga

by Matthew B. Young

After last year's very successful brain safety initiative IBNS is doing it again! This time we are looking for contributions purchase to yoga/exercise mats! Why, you may wonder? Well, research in humans has suggested that yoga and meditation have positive effects on emotional regulation and stress coping, likely through reductions in cortisol levels and reduced expression of proinflammatory factors. These findings overlap with animal research demonstrating that similar biomarkers are associated with depressed/anxious phenotypes, and well-characterized appreciation of the long-term impact of stress and anxiety in juvenile populations.

Adolescence is a critical developmental period, during which stress can induce life-long behavioral effects. We are partnering with the



Vancouver-based organization "Boys & Girls Club of Victoria," which combines a variety of approaches including play, exercise, and counseling to provide a safe, supportive place for children and youth. In addition, we are partnering with Vinyasa Yoga for Youth, an organization in Vancouver an Greater Canada that teaches yoga, meditation, and stress reduction skills to youth in urban and rural schools, empowering local kids to be centered, healthy and compassionate. Vinyasa Yoga for Youth also provides after-school programming and summer workshops for kids. These programs, like similar programs around the globe, have had and will have profound effects on young people in the juvenile justice system and low-income areas, where yoga and meditation would otherwise be absent. Through donations of money and materials, IBNS will help these organizations expand the reach of their programming to empower young people and offer potentially life-changing skills.

We've set an ambitious goal to raise \$1,000 again this year, so please, keep an eye out for the email that will give you the opportunity to contribute to this year's IBNS Brain Health Fundraiser!

## **DONATE TODAY**

at the

IBNS 2015 Annual Meeting Donation Form

# **Brain Awareness Outreach**

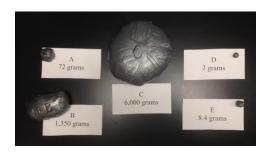
by Andrew Murtishaw

Brain Awareness Week, sponsored by the Dana Foundation, is a weeklong global campaign to increase public awareness of the progress and importance of brain research. In 2015, Brain Awareness Week will be held March 16-22. During this week, scientists and researchers are encouraged to visit local elementary schools and hold public outreach events to celebrate the brain!

As IBNS members, we have an appreciation for the brain and helping others understand how the brain works doesn't need to be limited to just one week a year. We can organize Brain Awareness type events all year long. For instance, as part of the 2014 IBNS Brain Safety Initiative, Monica Bolton, Chelcie Heaney and Andrew Murtishaw, PhD students at the University of Nevada, Las Vegas, put together a Brain Awareness Outreach to teach the local elementary students the importance of the brain and stress proper brain safety and protection by wearing helmets. While there are a number of websites that give great ideas for brain outreach activities, here are a few activities that IBNS members have shared that work for them.

Monica Bolton, Ph.D. student at the University of Nevada, Las Vegas utilizes a game called Whose Brain Is It? In this activity, bags are filled with sand to the exact brain weight of several animals an elephant, human, dog, rat, and alligator — and then wrapped thoroughly in duct tape. Students can then pick up the various "brains" to compare the weight differences between the various animals and write down their answers on a small form sheet. Because an alligator is bigger in body size than a dog (example used is a German shepherd) but their brain is actually smaller, this generally elicits some pretty interesting conversation amongst the students about the

difference in brain size between reptiles and mammals. This activity allows the children to participate in a really hands on way while still generating conversation — the amount of knowledge that elementary kids have about animals is simply astounding. Pictured are the various "brains" along with a form that students can use to match the brain weights with the animals.



Whose Brain Is It?		
Animal	Letter & Brain Weight	
ALA.		
A		
4th Grader		

Chantelle Terrillion, Ph.D. Student at the University of Maryland School of Medicine, has found that students enjoy taking part in an experiment highlighting the sensory receptors in the skin and the homunculus by performing a two-point discrimination task. Using the points of two paper clips, students have to describe when they feel one or two pressure points on various parts of their bodies. On more sensory receptor dense areas of the skin, two pressure points can be determined as the points

begin to move relatively close to one another; whereas, the ability to detect the two pressure points becomes much more difficult on areas of the skin with less sensory receptors. Subsequently, difference in discrimination the threshold is correlated with the size of the corresponding area of the homunculus. This activity can easily become much more "scientific" by creating various pressure probes using paperclips (or toothpicks) at varying distances apart — 26 cm, 13 cm, 6.7 cm, 3.3 cm, and 1.7 cm. Students can then record other students reactions as each probe is applied, in decreasing distance, to various body parts until the subject can no longer feel two separate points. This data can be tracked and compared among students.

Cheryl Conrad, Ph.D., Arizona State University, regularly participates in Brain Awareness events throughout the year. One of their most successful activities includes setting up a table with real brains from a human, dog, cow, sheep and a rat. Visitors can don a pair of gloves and gently handle the various animal brains. Her group also sets up a station for kids to "Meet the Neuroscientists." The kids can talk about their interests and then the neuroscientist can tell them how it can fit into the field of neuroscience. This ideally helps the children realize the many different opportunities available to them in college — even if neuroscience is not one of them. The idea is to show them that they can aspire to many different types of majors at college.

Brain Awareness outreach does not have to be activities solely geared at elementary age children. Numerous members have indicated that they put on Brain Bee events for high school age kids. The International Brain Bee is an organization that sponsors a National Brain Bee and an International Brain Bee. Local chapters can send their winner to compete in the National Brain Bee. The various National Brain Bee winners compete in the International

# Brain Awareness Outreach continued...

Brain Bee, with countries represented from all over the world.

Jonathan Brigman, Ph.D., University of New Mexico, has been involved in planning the First Annual New Mexico Brain Bee. Graduate students at the University of Nevada, Las Vegas (Monica Bolton, Chelcie Heaney, and Andrew Murtishaw) founded the Nevada Brain Bee Association and were able to sponsor the First Annual Las Vegas Brain Bee in 2014, sending their local winner on to ultimately take 3rd place at the USA National Brain Bee. The Brain Bee tests knowledge on the brain and the including nervous system, neuroanatomy and disease states.

Julianne Jett, current IBNS Student Councilor and Ph.D. student at University of Texas Health Science Center at San Antonio, puts on a Brain Bowl every year with her department. During the Brain Bowl, 3 undergraduate universities from across Texas come together for a jeopardy style game of all neuroscience-related questions.

Many of the activities that are performed with the younger kids can simply be adapted into activities that can easily work with high school and undergraduate students. For instance, the two-point discrimination task that highlights sensory receptor density in the skin and the homunculus can be expanded upon for high school students. Taking the data collected, students can then make their own homunculus either by hand or by using a virtual Homunculus Mapper created by the Fitzpatrick lab at the Max Planck Florida Institute for Neuroscience (available HERE).



Pictured is an example of a virtual homunculus that students can make with the data that they collect.

Regardless of the age group that you are conducting Brain Awareness outreach with, the vast number of brain related activities at your disposal is overwhelming. Find activities that interest you because if you are bored with the outreach you are will the children conducting, so participating! The bottom line is — get out and give back to the community! Let us do our part to help the general public gain a better appreciation neuroscience research and a better understanding of just how awesome the brain really is!

# Do You Know Who We Are?

by Alison Watson

When you call the IBNS Central Office, who answers the phone? Who replies to your emails? Who updates the website and handles the business end of running a scientific society? Who coordinates the annual meeting? We do!



We are Society Offices, an association management company owned by Marianne Van Wagner. Marianne has been running Society Offices for over 25 years, exclusively for IBNS during the first few years, but adding other scientific societies over time. She currently manages four societies, all based in neuroscience. Marianne attended Baylor University, Waco, Texas, and the University of Texas at San Antonio; and has a background in business administration, computer programming and office management. In addition, Marianne was Assistant Managing Editor for four scientific journals from 1989-1995.

On a personal note, Marianne lives in the Texas Hill Country, just outside San Antonio (a lovely area) and truly enjoys the traveling that is required for her work. She must take several trips per year to manage annual meetings, scout locations for the next annual meeting and to attend continuing education opportunities for those in the association management industry. On these trips, she takes wonderful photographs (she is an accomplished photographer) and uses them to review the sites prior to proposing the next annual meeting location. The photos are also used to promote the meeting on our website and in the newsletter, etc. Though she travels, through the power of the internet, Marianne is always available to assist you, so contact the IBNS Central office anytime!

In 2013, Marianne added Alison Watson to her staff as a Business & Event Manager. Alison assists Marianne in all Society Offices duties. Alison lives in Kentucky, where she attended Murray State University for her undergraduate and graduate degrees in Business Administration. With experience in finance, marketing, office management and meeting planning, Alison was a well-rounded addition to the Society Offices team.

As some of you might remember from the 2014 IBNS Annual Meeting in Las Vegas, Alison is also an accomplished singer. She entertained us in a lounge singer act at our opening reception and has performed publicly since 1992, including a stint as an independent demo artist in Nashville, TN, from 2000-2005. Currently, Alison enjoys performing with a classic rock cover band in and around her hometown.

When you see us in Victoria, BC, Canada, for the 2015 IBNS Annual Meeting, be sure to say, "Hello!" We are happy to assist you with any questions or concerns, so feel free to reach out to the IBNS Central Office.



La Trobe Honours Father of Cognitive Behavior Therapy

Nov 2014 Media Release

One of the most influential psychotherapists of all time – a person whose name is up there with people like Sigmund Freud – was today awarded an Honorary Doctorate of Science (Honoris Causa) by Australia's La Trobe University.

He is Dr Aaron T. Beck, aged 93, who is still researching at the University of Pennsylvania Psychopathology Research Centre that bears his name.



La Trobe University
Professor of
Psychology, Stephen
Kent, presented the
degree to Dr Beck in
Pennsylvania. He said
'the University is
delighted to be able to
recognise the truly

revolutionary work of Dr Beck.'

He said La Trobe is among the leading universities in Australia and has been teaching and carrying out research in psychological sciences since its inception almost 50 years ago.

'Many of our students have gone on to forge successful careers in this field based on work pioneered by Dr Beck, changing for the better the lives of countless patients.'

Professor Kent said Dr Beck has been a researcher, teacher and practicing clinical psychologist since the early 1960s.

'During his impressive career of more than 50 years, he has undertaken ground-breaking research that fundamentally changed the way psychiatry and psychology viewed depression.'

In 1967 Dr Beck published a landmark book, 'Depression: Clinical, Experimental and Theoretical Aspects', which outlined a new cognitive theory of depression.

When Dr Beck developed his theory and system of therapy in 1979 – now known as Cognitive Behaviour Therapy (CBT) – psychotherapy did not embrace models of psychopathology that departed from the basic tenets of psychoanalysis.

'Dr Beck was quite courageous and took a tremendous risk at being ostracized by his colleagues when he introduced the notion that conscious thought and beliefs had a central role in understanding and successfully treating depression. CBT has now been evaluated in over 1000 clinical trials for a myriad of psychological disorders,' Professor Kent said.

'Eastern and Western philosophies have long attended to the idea that we can change how we feel by changing the way we think. This idea had been a foundation of stoic philosophy and the first "manual for living" introduced by Epictetus long before Dr Beck — or psychoanalysts — roamed the earth.

'It is also no surprise that his Holiness the Dali Lama has visited Dr Beck's home, as in 1997 they had presented on the commonalities between Buddhist philosophy and CBT.

'Today Dr Beck's "Cognitive Behaviour Therapy" is the primary model of psychological therapy in Australia, Canada, the United Kingdom, the United States of America, and is popular on other continents that still have a psychoanalytic tradition — e.g., Europe and South America.

'In Australia, all university-based clinical psychology training programs teach CBT, most clinical psychologist identify a practice influenced by CBT, and CBT is one of the few psychologically focused strategies funded by Australia's national health care scheme, Medicare,' Professor Kent said.

Dr Beck is President Emeritus of the Beck Institute for Cognitive Therapy and Research, which he founded in 1994 with his daughter, Dr Judith Beck. He is also the Director of the Aaron T. Beck Psychopathology Research Centre at the University of Pennsylvania and the Honorary President of the Academy of Cognitive Therapy.

Dr Beck has published more than 600 scholarly articles and 25 books and has won more than 25 prestigious special recognition awards, including four lifetime achievement awards.

Commenting on the award, Dr Beck said: "I feel greatly honoured to receive this award. It is not only recognition of my work but that of students and colleagues who have worked with me over the past several decades."

## Interested in being a guest editor for the IBNS News?

We are looking for several editors to help with the next four quarterly editions. If you are interested, please email <a href="mailto:ibns@ibnsconnect.org">ibns@ibnsconnect.org</a> for more info!

# **Member News**



F. Scott Hall, Ph.D., after working at NIDA for 14 years, has recently accepted a position as an Assistant Professor of Pharmacology at the

University of Toledo. Scott will continue his research on drug addiction and his laboratory will primarily investigate the genetic and neurodevelopmental basis of addiction and ADHD.



Wim E. Crusio, Ph.D., at the Université de Bordeaux and Centre National de la Recherche Scientifique, has been editing a series of handbooks in

Behavioral Genetics. The first book, Behavioral Genetics of the Mouse Volume 1, was made available in 2013. More recently, Behavioral Genetics of the Mouse Volume 2 and Behavioral Genetics of the Fly (Drosophila Melanogaster) were made available in 2014.



Stephen Kent, Ph.D., current IBNS President and Associate Professor at La Trobe University, was recently appointed as Head of School of the

newly formed School of Physiology and Public Health. Additionally, Dr. Kent is now in charge of three research centers: Olga Tennison Autism Research Centre, the Bouverie Centre, and the Australian Research Centre for Sex, Health and Society.



Christopher Lowry,
Ph.D., Associate
Professor in the
Department of
Integrative Physiology
at the University of
Colorado Boulder was

recently featured in several Kavli Foundation Science Spotlights, an interactive question and answer session with leaders in various research fields. On January 15, 2015, Dr. Lowry was featured in *Spotlight Live: The Microbiome & the Brain - A New State of Mind*, discussing the effect that gut microbes have on our brain — including our emotions, thoughts, and memory. On December 1, 2014, Dr. Lowry also participated in the Kavli Foundation sponsored roundtable discussion *Microbiome and Neuroscience: The Mindbending Power of Bacteria* with several other researchers.



**Daniel Gómez Visedo** will publish his first Business & Science book titled *Buscando señales de vida inteligente en el* 

comité de dirección (Searching for Signs of Intelligent Life in the Steering Committee), scheduled for release February 5, 2015. The book deals with the dramatic scientific advancements that we are living nowadays in areas like Evolution, Neuroscience and Psychoendocrinology, teaches us that, as living beings, our behaviour in business is ruled by ancient evolutionary mechanisms responsible for our survival and reproduction. They are everywhere, in meetings, business teams, personal relationships, commercial activity, management and planning. Nothing and no one escapes the irresistible influence of instincts and emotions.



Tatiana Lipini, Ph.D., recently accepted a position a position as a Principle Investigator at the Institute of Physiology and

Fundamental Medicine in Novosibirsk Russia. Her newly formed lab will focus on the experimental modeling of pathological cognitive activity.

Additionally, Dr. Lipini published a book Drug Discovery for Schizophrenia in the Royal Society of Chemistry, which will be available March 2015.

J. Bryce Ortiz, Ph.D. student at Arizona State University, recently published the work that he presented at the 2013 IBNS Conference, which he received second place for presenting. The article titled, "Hippocampal brain-derived neurotrophic factor mediates recovery from chronic stress-induced spatial reference memory deficits" in the European Journal of Neuroscience. Much research in the chronic stress field has centered upon the mechanisms leading to detrimental outcomes, especially as it pertains to the hippocampus, a brain region highly sensitive to stress steroids. Interestingly, chronic stress-induced spatial memory deficits recover over the weeks following the termination of chronic stress. This publication is the first to demonstrate that one critical mechanism for the spatial memory recovery process that involves brain derived neurotrophic factor (BDNF). When BDNF was constitutively downregulated within the hippocampus, they found that recovery from spatial memory deficits was hindered and spatial memory deficits that occurred soon after chronic stress ended were maintained even after several weeks of a no-stress recovery period. These results demonstrate that the spatial memory recovery process following chronic stress is an active process and involves hippocampal BDNF. Bryce is featured here in this picture with his mentor, Cheryl Conrad, Ph.D.

