# Psych-e News

# DEPARTMENT OF PSYCHIATRY AND BEHAVIORAL NEUROSCIENCES



Julie Giroux, Editor • jgiroux@med.wayne.edu • 313-993-6732



# **Upcoming** Events

DPBN Chairman's Grand <u>Rounds</u>

#### April 2015

1:00 – 2:00pm John D. Dingell VAMC Auditorium

4/1 – Janice Niver, MD "Conversion Disorder: A Poorly Understood Diagnosis"

4/8 - Patricia Milner, D.O. ""Bulimia Nervosa""

4/15 - Eva Waineo, M.D. "To Be or Not to Be a Shrink: How Medical Students Choose Their Specialty"

4/22 – Steven Ondersma, Ph.D. "Rogerian Technology: Leveraging Social Responses to Computers to Promote Behavioral Health in Primary Care"

4/29 - Maureen Walton, MPH, Ph.D. "Clinician and Computer Delivered Brief Interventions for Substance Use and Violence Among Adolescents"

#### I. Greetings from the Chair

The New Investigator Grant Program is being offered again and the application can be found at the end of this newsletter. This is for assistant professors, postdoctoral fellows, residents, and graduate students in the Translational Neuroscience Program. To clarify for our students, the faculty sponsor must have primary appointment in the Department of Psychiatry and Behavioral Neuroscience as this is a department-centered program. Please make sure that all applications are submitted to Michelle Caton by 4:00pm on Friday, May 1<sup>st</sup> (Detailed directions in application).

#### II. News from the Faculty

- Mary Morreale, M.D., received the "Leonard Tow Humanism in Medicine Award." Dr. Morreale will be giving the keynote speech at the White Coat Ceremony. This great honor was announced during the Match ceremony (opening the envelopes). The Leonard Tow Humanism in Medicine Awards are presented to a graduating student and faculty member (M.D. or D.O.) at over 100 of the nation's medical schools. This award is given to those who best demonstrate the Foundation's ideals of outstanding compassion in the delivery of care; respect for patients, their families, and healthcare colleagues; and clinical excellence.
- <u>Vaibhav Diwadkar, PhD</u>, and his team, had their theoretical work relating to epigenetics, brain network function and risk for schizophrenia has woven into a substantial story (link below) by Carla Clark, Psychiatry Editor for BrainBlogger. Brainblogger is a highly regarded and awarded site, and notably is partnered by Scientific American. <u>http://brainblogger.com/2015/03/04/less-stress-less-psychosis/</u>
- Drs. Joseph and Sandra Jacobson, had their recent findings of adverse effects of prenatal methylmercury exposure on IQ in Inuit children that were published in Environmental Health Perspectives, was reported in National Geographic last week (please see link below).
   <u>http://news.nationalgeographic.com/2015/03/150327-inuit-mercury-beluga-iq-canada-nunavikarctic-faroe-islands/</u>
- Vaibhav Diwadkar,PhD, and team, had their paper, "Dysfunctional activation and brain network profiles in youth with obsessive-compulsive disorder: a focus on the dorsal anterior cingulate during working memory," appear in a special issue of the journal Frontiers in Human Neuroscience, and is available to the public on line at the journal's website. The special issue is devoted to the use of complex techniques to map psychopathology in the brain, a question of increased interest in the field, and a focus of research in the WSU Department of Psychiatry and Behavioral Neurosciences. The full article can be found below.

http://journal.frontiersin.org/article/10.3389/fnhum.2015.00149/abstract

• **Donald Kuhn, PhD ,** who received an NIH R21 Award, "Beta-ketoamphetamines: Window to the Neurotoxic Mechanisms of Methamphetamineln", in collaboration with several faculty in the Department of Chemistry at WSU, are testing new chemical variants of mephedrone and methamphetamine to determine how subtle alterations in drug structure can result in a compound that is highly toxic to the brain or not toxic at all.



"This grant will take advantage of unique structural features found in certain synthetic psychoactive drugs to gain insight into the mechanisms by which methamphetamine can damage the central nervous system. Drugs like mephedrone, methylone and MDPV, which are psychoactive substances found in so called "bath salts", are almost identical in chemical structure to the neurotoxic amphetamines. These drugs also have high abuse potential and they share most of the pharmacological properties of the amphetamines. However, unlike the amphetamines, they do not cause damage to the brain." – Dr. Kuhn

#### III. Research Activities

• Brianne Mohl, TNP student under the direction and supervision of Jeffrey Stanley, PhD, successfully defended her dissertation March 1<sup>st</sup>. As part of her dissertation research, Dr. Mohl developed a novel approach of characterizing one's ability to sound out words vs sight words or to be proficient at both. With this novel index, she demonstrated greater ability to predict phonological deficits using fMRI in those ADHD children with poor sighting ability independent whether or not the ADHD child had a comorbid reading disability. This is an important finding which contradicts previous neuropsychological studies showing phonological deficits only in those ADHD children with a comorbid reading disability. This area of



"I am extremely proud of Brianne's accomplishments. She has a bright and prosperous future as a young research scientist." — Jeff Stanley, PhD

research is also critically important in providing better guidance on remediation strategies in ADHD children. Reading disability is highly prevalent in children with ADHD; however, little is known why some ADHD children but not all also develop a reading disability... this includes a lack of understanding of how ADHD symptoms impact the development of reading fluency from the perspective of neuroimaging. Dr. Mohl has two manuscripts under review with at least two other papers to be submitted. She was awarded a Young Investigator Award from the DPBN and will be traveling to Toronto, ON in May as she has been chosen to receive one of the Society of Biological Psychiatry's 2014 Chairman's Choice Awards. She also received a highly competitive impact score (13 percentile) on her NIH National Research Service Award (NRSA) F31 predoctoral training application, which fell short of funding. Dr. Mohl will pursue her postdoctoral position Michigan State University with Drs. Joe Krajcik and Bob Geier at the CREATE for STEM Institute. CREATE for STEM is a Michigan State University sponsored research Institute with a broad mandate for Collaborative Research in Education, Assessment, and

Teaching Environments for the fields of Science, Technology, Engineering, and Mathematics. The Institute is a joint endeavor of the College of Natural Science and the College of Education at the University, in coordination with the Office of the Provost.

- <u>Michael Lisieski</u>, graduate student of Translational Neuroscience Program working with Shane Perrine, PhD, was awarded in the First Place Posters category for his poster presentation at the recent campus-wide WSU Graduate Exhibition. He is currently studying a model of comorbid posttraumatic stress and substance use disorders in animals.
- Congratulations to those who participated in Brain Day, an annual nationwide science event aimed at educating kids on the workings of gray
  matter as well as showing off recent technology and recruiting potential subjects for research. The event was held on Saturday, March 20<sup>th</sup> at the
  Detroit Science Center. Assisting hands-on with the community were <u>Usha Rajan, Brianne Mohl, Muzamil Arshad, & Karthik Ramaseshan</u> helped
  out on the day and as did many volunteer pre-med undergraduate students from Dr. Diwadkar's lab; <u>Danyoul Yamin, Navneesh Pandher and
  Prabhleen Pandher.</u>
- Congratulations to <u>Mariam Diskina</u>, a second year medical student, and <u>Victor Ajluni, MD</u> for their abstract, "Impact of Volunteering with Street Medicine Detroit on Medical Students' Attitudes Toward Homeless Individuals" that was accepted in Wayne State University School of Medicine -Medical Student Research Symposium in January. Ms. Diskina has been under the mentorship of Dr. Ajluni for the past couple years.
- <u>Teri Cichon</u>, research assistant in the Child Anxiety Research Division (CARD) lab, who has been accepted to the accelerated nursing program at Wayne State University this fall.

 <u>Hilary Marusak</u>, Graduate student in the Translational Neuroscience Program (TNP) working under the mentorship of Dr. Moriah Thomason, whose paper, "Altered Amygdala Connectivity in Urban Youth Exposed to Trauma", was accepted in the journal Social Cognitive and Affective Neuroscience.

#### IV. Office of Education and Training

- Congratulations to <u>Drs. Cori Chase and Bella Schanzer, and Ted Hunter</u>, as their poster, "Reduction In Costs Associated with Heavy Utilizers Of Psychiatric Services (HUPS) at a Va Medical Center", was accepted to be presented at the QUESST Research Day. Quality Education and Safe Systems Training (QUESST) is hosted by the DMC Graduate Medical Education and Department of Quality and Safety. The 4th annual GME QUESST Research Day Poster Competition on Wednesday, April 15, 2015 from 7:00 am until 11:00 am at the University Health Center (UHC Lobby and Crockett Room ).
- Congratulations to Dr. Divya Vemuri, M.D., who has been selected as the CAP Chief Resident for the 2015-2016 academic year!
- **Congratulations to** <u>Dr. Arthur Robin</u> as he has received the results of the Pediatric Clinical Psychology Internship Match for the next group of interns, who will start in September 2015. We welcome the following to our department!
  - Kimberly Painte from Pacific University, Oregon
  - Emily Foxen-Croft- University of Maryland Baltimore County
  - Stephanie Loupee Chicago School of Professional Psychology
  - Brittany Peters- Wayne State University
  - Billy Holcombe- Howard University

#### V. Clinical and Administrative

- Please be on the lookout for emails regarding your annual VCE Training. This is required for all UPG employees and those that provide any service or interaction with UPG patients and/or clinics.
- A message from our administrator In recent months, there has been an increased amount of theft in the building and in the parking lot. We have been working with Wayne State police, as well as building management to improve our current safety procedures. As a result, we have implemented tighter security measures, such as parking lot rounding by foot patrol and camera, restricting building access, and a more frequent WSU Police presence. As we strive to provide a safe environment for you, as well as our patients and visitors, we welcome any suggestions or concerns you might have. Thank you – Julie Giroux

"The best way to remember your wife's birthday is to forget it once." - E. Joseph Cossman

## Department of Psychiatry and Behavioral Neurosciences New Investigator Grant Program

The DPBN announces a New Investigator Grant Program that will fund up to 4 grant applications for the period of one year, each up to a maximum amount of \$25,000. The purpose of the program is to provide funding for meritorious projects that will generate preliminary or pilot data to support innovative and significant scholarly contributions and to strongly encourage, whenever possible, a larger application to an extramural funding agency (e.g., NIH, DoD).

# Eligibility

- The grant program is directed at junior investigators in the department and includes assistant professors, postdoctoral fellows, residents, and graduate students in the Translational Neuroscience Program.
- A Principal Investigator may submit only one proposal.
- Racial/ethnic minority individuals, women, and persons with disabilities are encouraged to apply as Principal Investigators.

# **Program Overview**

- This grant program will provide limited and relatively rapid financial support for research within the program interests of the DPBN. While applications may involve a wide variety of biomedical, behavioral, or clinical disciplines, there must be clear relevance to the DPBN mission which is: "to study and find solutions for the etiology and treatment of serious and chronic mental disorders".
- Grant support may not be used to supplement research projects already being supported by the Public Health Service, NIH, Department of Veterans Affairs, NSF, private or public foundations, or from other sources.
- Allowable expenses include direct support for salary (or in the case of graduate student awardees, support for stipend/tuition) and supplies. Travel, equipment and computers are not eligible for support.
- Funding decisions will be based on scientific merit as determined by a peer review committee of senior faculty in the DPBN.
- All research applications involving human subjects or laboratory animals must comply with all rules, regulations and certifications for Wayne State University and other potential oversight agencies (e.g., FDA, DEA).
- Potential applicants with questions concerning acceptability of their proposed work may contact Drs. Mark Greenwald (mgreen@med.wayne.edu) or Donald Kuhn (donald.kuhn@wayne.edu).

# **Application procedures**

- All applications are to be submitted to Michelle Caton as one (1) paper copy and one (1) electronic copy as email attachment according to the instructions below.
- Applications must be submitted by 4:00 pm on Friday, May 1, 2015.

- Applications should be completed according to standard instructions for a PHS/NIH R21 grant application (<u>http://grants.nih.gov/grants/guide/pa-files/pa-10-069.html SectionIV</u>). Applications include a cover page (see below) followed by the Research Plan.
- The page limits for the Research Plan are specified below. The Research Strategy component may not exceed 6 pages of text including tables, graphs, figures, diagrams, and charts.
  - Specific Aims- 1 page maximum
  - Research Strategy- 6 pages maximum, including (a) Significance, (b) Innovation, and (c) Approach
  - Bibliography and References cited- 1 page maximum
  - NIH format biographical sketch- 4 pages maximum
- Appendices may not be used to exceed the page limitation.
- Preliminary data are not required but may be included if available and relevant.

### **Review Criteria**

Applications will be scored using the following scale:

1.0 Exceptional
 2.0 Outstanding
 3.0 Excellent
 4.0 Very Good
 5.0 Good
 6.0 Satisfactory
 7.0 Fair
 8.0 Marginal
 9.0 Poor

Scores will be based on criteria that are currently used to review NIH grant applications. This process is intended to help the investigator translate his/her application to the next stage.

**Overall Impact.** Reviewers will provide an overall impact/priority score to reflect their assessment of the likelihood for the project to exert a sustained, powerful influence on the research field(s) involved, in consideration of the following five core review criteria, and additional review criteria (as applicable for the project proposed including human subjects or laboratory animal concerns).

**Scoring Criteria.** Reviewers will consider each of the five review criteria below to determine scientific and technical merit, and will give a separate score for each criterion. An application does not need to be strong in all categories to be judged likely to have major scientific impact. For example, a project that by its nature is not innovative may be essential to advance a field.

*Significance.* Does the project address an important problem or a critical barrier to progress in the field? If the aims of the project are achieved, how will scientific knowledge, technical capability, and/or clinical practice be improved? How will successful completion of the aims change the concepts, methods, technologies, treatments, services, or preventative interventions that drive this field?

*Investigator(s).* Are the PI, collaborators, and other researchers well suited to the project? Do the Early Stage Investigators or New Investigators have appropriate experience and training?

*Innovation.* Does the application challenge and seek to shift current research or clinical practice paradigms by utilizing novel theoretical concepts, approaches or methodologies, instrumentation, or interventions? Are the concepts, approaches or methodologies, instrumentation, or interventions novel in a broad sense? Is a refinement, improvement, or new application of theoretical concepts, approaches or methodologies, instrumentation, or interventions proposed?

*Approach.* Are the overall research strategy, methodology, and analyses well-reasoned and appropriate to accomplish the specific aims of the project? Are potential problems, alternative strategies, and benchmarks for success presented? Will the strategy establish feasibility and will particularly risky aspects be managed? If the project involves clinical research, are the plans for 1) protection of human subjects from research risks, and 2) inclusion of minorities and members of both sexes/genders, as well as the inclusion of children, justified in terms of the scientific goals and research strategy proposed?

*Environment.* Will the scientific environment in which the work will be done contribute to the probability of success? Are the institutional support, equipment and other physical resources available to the investigators adequate for the project proposed? Will the project benefit from unique features of the scientific environment, subject populations, or collaborative arrangements?

**Award Notice.** Awards will be announced by July 1, 2015 and funds will be available for use as of August 1, 2015.

#### Department of Psychiatry & Behavioral Neurosciences New Investigator Grant Program Cover Sheet

- 1. Principal Investigator (PI):
- 2. PI signature:
- 3. PI position/title:
- 4. PI telephone number:
- 5. PI email address:
- 6. Project Title:
- 7. One year budget (\$25,000 maximum, direct costs only):
- 8. Budget justification (must fit on this cover page):

All text below the dashed line can be deleted for completion of the cover sheet

Application components (see below) should be assembled into a single merged pdf behind this cover sheet for printing and submission:

Specific Aim(s)- 1 page max

Research Strategy- 6 pages max including significance, innovation and approach paragraphs Bibliography and references cited- 1 page max, any format allowed (by name or number) Biographical sketch- 4 pages max, copy and paste following url into browser for biographical sketch format and example: <u>http://grants.nih.gov/grants/funding/phs398/biosketchsample.doc</u>.

Submit 1 hard copy to Michelle Caton, Department of Psychiatry & Behavioral Neurosciences, Tolan Park Medical Building, Ste. 5A and 1 electronic copy to Michelle Caton, <u>mcaton@med.wayne.edu</u>