

### DSM-5 Approved; Slated to Publish in Spring

The American Psychiatric Association (APA) Board of Trustees has approved the final diagnostic criteria for the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)*. The trustees' action marks the end of the manual's comprehensive revision process, which has spanned over a decade and included contributions from more than 1,500 experts in psychiatry, psychology, social work, psychiatric nursing, pediatrics, neurology, and other related fields from 39 countries. These final criteria will be available when *DSM-5* is completed and published in spring 2013.

Key decisions made by the Board of Trustees include:

#### Overall Substantive Changes

- Chapter order.
- Removal of multiaxial system.

#### Section 2 Disorders

- Autism spectrum disorder.
- Binge eating disorder.
- Disruptive mood dysregulation disorder.
- Excoriation (skin picking) disorder.

- Hoarding disorder.
- Pedophilic disorder.
- Personality disorders.
- Posttraumatic stress disorder.
- Removal of bereavement exclusion.
- Specific learning disorders.
- Substance use disorder.

#### Section 3 Disorders

- Attenuated psychosis syndrome.
- Internet use gaming disorder.
- Non-suicidal self-injury.
- Suicidal behavioral disorder.

#### Disorders Not Accepted for Sections 2 or 3

- Anxious depression.
- Hypersexual disorder.
- Parental alienation syndrome.
- Sensory processing disorder.

Source. "American Psychiatric Association Board of Trustees Approves DSM-5." (2012, December 1). Retrieved December 3, 2012, from <http://www.psych.org/File%20Library/Advocacy%20and%20Newsroom/Press%20Releases/2012%20Releases/12-43-DSM-5-BOT-Vote-News-Release--FINAL--3-.pdf>.

### Researchers Find Value in "Junk DNA" from Brain

Short snippets of DNA found in human brain tissue provide new insight into human cognitive function and risk



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for developing certain neurological diseases, according to study findings published in *PLoS Biology*.

The researchers found hundreds of regions throughout the human genome that showed a markedly different chromatin structure in neurons in the prefrontal cortex, the brain region that controls complex emotional and cognitive behavior, compared with non-human primates. The findings of the

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## JPN's 2012 Article of the Year



Shirley A. Smoyak, RN, PhD, FAAN, Editor (right), presents the JPN 2012 Article of the Year Award to Carmen M. Stoller, MSN, RN-BC, during the American Psychiatric Nurses Association annual conference in Pittsburgh, Pennsylvania.

Carmen M. Stoller, MSN, RN-BC, has been named recipient of the *Journal of Psychosocial Nursing and Mental Health Services'* (JPN) 2012 Article of the Year Award for her article, "Revising a Medication Education Program on an Inpatient Child and Adolescent Psychiatric Unit" (Vol. 50, No. 1, pp. 41-47). In her article, Stoller described an initiative to improve medication education offered to children and adolescents and their families on an acute child and adolescent inpatient unit in a mental health facility. Strategies included adding a game to medication education groups, creating and distributing medication education handouts, and developing and implementing medication education sessions for parents.

This award, which was accompanied by a cash prize, recognized the best-written article published in JPN between October 2011 and September 2012, and was chosen by a committee on the basis of writing clarity, style, and editorial expertise. Because the award is intended to help mentor new writers, articles in which the lead author is a member of the JPN Editorial Board or Review Panel are ineligible. In addition, Ms. Stoller was invited to join the JPN Review Panel. JPN congratulates the author on her outstanding contribution.

### JPN Board, Panel Members Receive APNA Awards

Brenda Marshall, EdD, NP-BC, a member of the *Journal of Psychosocial Nursing and Mental Health Services* (JPN) Review Panel, and Margaret (Peggy) Halter, PhD, PMHCNS, a JPN Editorial Board member, were honored in November at the American Psychiatric Nurses Association's (APNA) annual conference in Pittsburgh.

Marshall was presented with the APNA Award for Excellence in Education for her significant contributions fostering the professional growth of psychiatric-mental health nurses through imparting knowledge, skill, and critical analysis to the field. Marshall is currently an associate professor at William Paterson University of New Jersey, where she teaches psychiatric-mental health nursing to undergraduate nursing students, research methods and biostatistics to Doctor of Nursing Practice (DNP) candidates, and is the coordinator of the DNP program. In addition to teaching, she has a private practice in Pompton Lakes, New Jersey, which provides psychotherapy for individuals, couples, and families.

Halter was presented with the APNA Award for Excellence in Leadership—Advanced, which honors an APNA advanced-level member who has distinguished himself or herself as an accomplished nursing leader. She is an Associate Dean at Ashland University's new College of Nursing and Health Sciences in Ohio. In this role, she has recently been working to ease the faculty's transition from a single-purpose hospital-based nursing program into an academic model. Concurrently, she is also developing a Doctor of Nursing Practice program with a Family Nurse Practitioner focus. In addition, Halter is a textbook editor, having written for and edited the sixth and now upcoming seventh (to be published in fall 2013) editions of *Foundations of Psychiatric Mental Health Nursing*.



JPN reviewer Brenda Marshall (left image), and editorial board member Margaret (Peggy) Halter (right image), receive their respective awards at the American Psychiatric Nurses Association's (APNA) annual conference in Pittsburgh. APNA President Marlene Nadler-Moodie (right) and APNA Immediate Past President Carole Farley-Toombs (left) join them. Photos courtesy of APNA.

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study provide important insights for diseases that are unique to human beings such as Alzheimer's disease and autism.

The research team isolated small snippets of chromatin fibers from the prefrontal cortex. Next, they analyzed these snippets to determine what genetic signals they were expressing. Many of the sequences with human-specific epigenetic characteristics were, until recently, considered to be "junk DNA" with no particular function.

Now, they present new leads on how the human brain has evolved, and a starting point for studying neurological diseases. For example, the sequence of DPP10—a gene critically important for normal human brain development—not only showed distinct human-specific chromatin structures different

from other primate brains such as the chimpanzee or the macaque, but the underlying DNA sequence showed some interesting differences from two extinct primates—the Neanderthal and Denisovan, most closely related to our own species and also referred to as "archaic hominins."

The research team also discovered that several of these chromatin regions appear to physically interact with each other inside the cell nucleus, despite being separated by hundreds of thousands of DNA strands on the genome. This phenomenon of "chromatin looping" appears to control the expression of neighboring genes, including several with a critical role for human brain development.

Source. "Short DNA Strands in the Genome May be Key to Understanding Human Cognition and Diseases." (2012, November 21). Retrieved December 3, 2012, from <http://www.newswise.com/articles/short-dna-strands-in-the-genome-may-be-key-to-understanding-human-cognition-and-diseases>.

### Medication-Taking Habits Important to Life Expectancy for Schizophrenia Patients

Results of a Johns Hopkins study suggest that individuals with schizophrenia are significantly more likely to live longer if they take their anti-psychotic drugs on schedule, avoid extremely high doses, and also regularly see a mental health professional.

The research team analyzed data collected between 1994 through 2004 on 2,132 adult Maryland Medicaid beneficiaries with schizophrenia. The researchers reviewed how much medication the patients took, how regularly they took it, and how often they visited a mental health professional. The goal of the study was to review how adherence to the 2009 pharmacological

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Schizophrenia Patient Outcomes Research Team guidelines was associated with mortality in this population.

Comparing data from year to year, the researchers found that among those patients who had 90% or better adherence with their medication schedules, the risk of death was 25% lower compared with those who were less than 10% adherent. Over the decade-long study period, taking medication did not increase the risk of death and there was a trend toward reducing the mortality rate. In addition, the researchers found that each additional visit per year to a mental health professional was linked to a 5% reduction in risk of death overall.

The study did not rule out all links between increased mortality and antipsychotic drugs. For example, the team found that people who took high doses of first-generation antipsychotic medication daily (1,500 mg or greater chlorpromazine equivalents) were 88% more likely to die. The researchers say mortality rates possibly increased in this group because first-generation antipsychotic drugs have been associated with cardiac disease risks, and among those who died while taking the larger doses, 53% died of cardiovascular disease.

Among those whose information was reviewed, the most common cause of death was cardiovascular disease (28%); unintended harm, including suicide, was responsible for 8%.

The study also lays out the value of mental health providers to individuals with schizophrenia. Those who saw therapists or psychiatrists were more likely to survive, regardless of whether the individual also took his or her antipsychotic medication on a regular basis.

Source. "Study: Use of Antipsychotic Drugs Improves Life Expectancy for Individuals with Schizophrenia." (2012, November 1). Retrieved November 30, 2012, from [http://www.hopkinsmedicine.org/news/media/releases/study\\_use\\_of\\_antipsychotic\\_drugs\\_improves\\_life\\_expectancy\\_for\\_individuals\\_with\\_schizophrenia](http://www.hopkinsmedicine.org/news/media/releases/study_use_of_antipsychotic_drugs_improves_life_expectancy_for_individuals_with_schizophrenia).

## Nursing Organizations Consolidate

The American Academy of Nurse Practitioners and the American College of Nurse Practitioners have announced they are moving forward with plans to consolidate, effective January 1, 2013. The combined organization will now be known as the American Association of Nurse Practitioners (AANP). With approximately 40,000 members, AANP will serve as the largest professional membership organization in the country for nurse practitioners of all specialties.

The consolidation comes at a time when fewer physicians are pursuing primary care medicine and nurse practitioners are playing an increasingly critical role in providing access to high-quality primary, acute, and specialty care. This is even more urgent with the Patient Protection and Affordable Care Act moving forward, adding 30 million Americans to the rolls of the insured. By consolidating, the new AANP will add a strong, unified voice to the growing movement working to ensure nurse practitioners can practice to their fullest potential, thus best serving patients and their families.

For a full list of AANP board members, visit [http://media.aanponline.com/psa/BOD\\_List.pdf](http://media.aanponline.com/psa/BOD_List.pdf).

Source. "Nurse Practitioners Vote for Form New National Membership Organization." (2012, November 20). Retrieved November 28, 2012, from the PR Newswire website: <http://s.tt/1udGf>.

## Musical Tones May Coax Brain Into Sleep

Researchers at Wake Forest Baptist Medical Center have conducted a pilot clinical study to determine whether a noninvasive approach that uses musical tones to balance brain activity can "reset" the brain and effectively reduce insomnia. The study, published online in the journal *Brain and Behavior*, looked at a new technology that is intended to facilitate greater balance and harmony in brain frequencies, which may result in improved insomnia symptoms.

The technology is called HIRREM—high-resolution, relational, resonance-based, electroencephalic mirroring—commercially known as Brainwave Optimization™. The non-invasive procedure uses a system that is designed to reflect the brain's frequencies back to itself using musical tones. Resonance between the musical tones and the electrical energy in a person's brain can bring balance to the two hemispheres of the brain.



Study results were based on a change in the Insomnia Severity Index (ISI), which measures the severity of sleep disruption using a 0-to-28-point scale; the median ISI for study participants was between 18.7 and 18.9, which is considered moderate-to-severe insomnia. Researchers found that the HIRREM group had a 10.3-point drop in ISI, improved insomnia symptoms, and clinically moved into a category of "no insomnia" or "sub-threshold insomnia." The control participants, who continued their existing insomnia treatment without HIRREM, showed no change in ISI. However, when the crossover control group received HIRREM therapy, the results were indistinguishable from those of the original HIRREM group.

This unblinded, wait-list control, crossover study enrolled 20 participants (14 women and 6 men). Ten people were randomized to receive HIRREM sessions, plus usual care; the remaining 10 were assigned to the wait-list control group. An initial assessment determined the symmetry in amplitude and frequencies between

the brain hemispheres, and data collection included a participant's ISI and other measures, including blood pressure and neurocognitive function tests.

Study participants randomized to HIRREM underwent 8 to 12 sessions that each lasted between 60 and 90 minutes. The sessions involved reclining in a zero gravity chair and placing sensors over numerous locations on both sides of the scalp. A musical tone, determined by a mathematical algorithm and based on the dominant frequency in a floating middle range of the participant's electroencephalogram frequencies, was played back to the participant through ear buds. Resonance between musical tones and oscillating brain circuits is designed to allow the brain to auto-calibrate, moving toward better balance, with associated improvement in symptoms.

Source. "Music to the Ears for a Good Night's Sleep? Wake Forest Baptist Studies New Therapy for Insomnia." (2012, November 20). Retrieved November 30, 2012, from [http://www.wakehealth.edu/News-Releases/2012/Music\\_to\\_the\\_Ears\\_for\\_a\\_Good\\_Night%E2%80%99s\\_Sleep\\_Wake\\_Forest\\_Baptist\\_Studies\\_New\\_Therapy\\_for\\_Insomnia.htm](http://www.wakehealth.edu/News-Releases/2012/Music_to_the_Ears_for_a_Good_Night%E2%80%99s_Sleep_Wake_Forest_Baptist_Studies_New_Therapy_for_Insomnia.htm).

## Mindfulness Research Now Being Considered for International Conference

American Health and Wellness Institute, a multidisciplinary mental health evaluation and treatment provider, has announced that the First International Conference on Mindfulness will be held May 8-12, 2013, at the Sapienza-Università di Roma in Rome, Italy.

Presenters and participants will disseminate the latest research and share insights in the field of mindfulness. Clinicians, researchers, academic leaders, teachers, students, and politicians from around the world are invited to attend.

The call for academic papers is now open. Topics for papers related to



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mindfulness include, but are not limited to, the art and science of mindfulness, clinical applications of mindfulness, mindfulness teaching, mindfulness and psychotherapy, and mindfulness in politics.

Keynote speakers at the conference will include:

- Jon Kabat-Zinn, PhD, University of Massachusetts Medical School.
- J. Mark G. Williams, PhD, University of Oxford, United Kingdom.
- Susan Bogels, PhD, University of Amsterdam, The Netherlands.
- Paul Grossman, PhD, University of Basel Hospital, Switzerland.
- Henk Barendregt, PhD, Radboud University Nijmegen, The Netherlands.
- Giuseppe Pagnoni, PhD, University of Modena and Reggio Emilia, Italy.

Select presentations from the conference will be included in a forthcoming book published by Springer in the *Mindfulness in Behavioral Health* series. All presenters may submit their research papers to the journal, *Mindfulness*, for consideration.

For more information about submitting papers or registering for the conference, visit <http://ahwinstitute.com/first-international-conference-on-mindfulness>.

Source. "First International Conference on Mindfulness Scheduled for May 8-12." (2012, November 15). Retrieved December 3, 2012, from <http://news.yahoo.com/first-international-conference-mindfulness-scheduled-may-8-12-152600619.html>.

## Treatment Improves TBI Symptoms Years After Injury

A groundbreaking study published in *CNS Drugs* provides clinical evidence that, for the first time, chronic neurological dysfunction from stroke or

traumatic brain injury (TBI) can rapidly improve following a single perispinal-administered dose of a drug—etanercept, a selective tumor necrosis factor inhibitor—that targets brain inflammation, even years after the initial event.

The observational study of 629 patients, conducted over the course of nearly 2 years, documents a diverse range of positive effects, including statistically significant rapid clinical improvement in motor impairment, spasticity, and cognition in the stroke group, with a similar pattern of improvement seen in the TBI group. The study involved 617 patients treated an average of 42 months after stroke and 12 patients treated an average of 115 months after TBI, long after further spontaneous meaningful recovery would be expected.

The mean age of the stroke patients was 65.8 (range = 13 to 97). The mean interval between treatment with the study drug and stroke was 42 months; for TBI the mean interval was 115.2 months. Statistically significant improvements in motor impairment, spasticity, sensory impairment, cognition, psychological/behavioral function, aphasia, and pain were noted in the stroke group, with a wide variety of additional clinical improvements noted in individuals, such as reductions in pseudobulbar affect and urinary incontinence. Significant improvement was noted irrespective of the length of time before treatment was initiated; there was evidence of a strong treatment effect even in the subgroup of patients treated more than 10 years after stroke and TBI. In the TBI cohort, motor impairment and spasticity were statistically significantly reduced.

Source. "First Effective Treatment for Traumatic Brain Injury Reported by Institute of Neurological Recovery, Even Years After Injury." (2012, November 14). Retrieved December 3, 2012, from the PR Newswire website: <http://ls.tl1to92>.

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