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*Advancing the
treatment of all aspects
of bipolar disorders to
improve outcomes and
quality of life for those
with bipolar disorder
and their families.*

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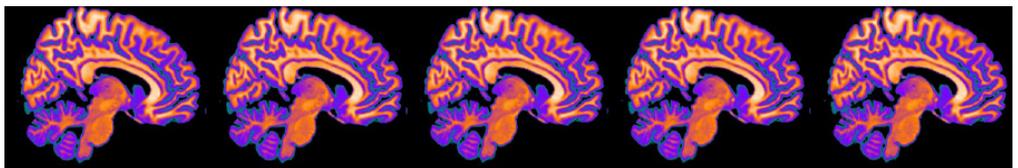
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Diagnostic Imaging for Bipolar Disorder: has its time come?

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Bipolar Disorder (BD) is a complex psychiatric disorder characterized by episodes of depression interspersed with periods of mania (BDI) or hypomania (BDII). BD is associated with significant psychosocial morbidity and mortality and is amongst the world's top ten disabling conditions (1). One reason it maintains its ranking is the failure in its timely diagnosis.

Despite the severity of BD the delay between onset and diagnosis is typically between 5-10 years (2-4). Surveys of BD patients, conducted in the last twenty years, report remarkably consistent delays without any evidence of improvement in illness recognition (2,4). Delayed diagnosis in BD has adverse clinical consequences in terms of increased periods in episode and greater psychosocial morbidity as well as emerging treatment resistance (5). The importance of diagnostic delay is further underscored by emerging yet compelling evidence that the initial phases of the illness are associated with neurobiological changes that may drive subsequent clinical deterioration (6). Therefore the timely diagnosis of BD is currently the single most important unmet need in enhancing clinical and functional outcomes.

Neuroimaging has arguably been the most significant technological development in delineating the neural underpinnings of neuropsychiatric disorders. Neuroimaging studies to date have been successful in identifying brain structural and functional changes differentiating individuals with BD from healthy comparison cases. Regions that have been consistently implicated include the ventral prefrontal cortex, the anterior cingulate gyrus, amygdala/parahippocampal complex and the basal ganglia (7,8). Despite the contribution of these findings to our

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LETTER FROM THE PRESIDENT

Miami 2013: What a Great Meeting!

The 10th International Conference on Bipolar Disorders was the first ICBD to be held under the auspices of the ISBD and the first to be held outside of Pittsburgh. In addition to a new location and a new organizer, the meeting also featured a new format for the scientific program. Given all these changes, it would be reasonable to ask if the 10th ICBD could maintain the excellent track record of the meetings in Pittsburgh. As it turns out, the answer is a resounding "Yes".



Some of the highlights of the meeting that we would like to share appear below:

- With 6 plenary key note lectures, 28 parallel symposia, 7 breakfast brainstorming sessions and 252 accepted posters, it was truly an outstanding scientific program.
- With 950 registered participants, it was the most attended ISBD meeting ever and surpassed the attendance of the 9th ICBD held in Pittsburgh in 2011.
- With two plenary sessions, Patrick Kennedy as keynote speaker, and 4 parallel sessions attended by up to 400 participants, including around 200 patients and relatives, the joint day with the Depression and Bipolar Support Alliance (DBSA) was a great success.
- With 3 pre-conference courses and an Editors' workshop by the Editors of our journal, *Bipolar Disorders*, we added additional educational value, and all courses were full, with a long waitlist of attendees expressing interest.
- The pre-conference Latin American Satellite featured highlights from our Latin American colleagues and was attended by more than 200 participants.

Anecdotally, we received only two critiques of the meeting: 1) that there was no bookstore at the conference, as in year's past, and 2) that the pre-conference courses were held outside the full days of the meeting, leaving participants who could not attend without additional options for other sessions to attend. We will definitely take these concerns into consideration in the planning of our next meeting.

Thus, I conclude that the merger with the ICBD, after nine conferences in Pittsburgh, proved to be a great success. I want to thank all members of the program and organizing committees, all speakers and poster presenters, and especially Dr. David Kupfer and Dr. Ellen Frank, who were presented with the first "ISBD Kupfer-Frank Distinctive Contribution Award." This Award was given in recognition for their having started the ICBD conferences and having founded the ISBD.

After 10 ICBDs and 5 Biennial Conferences of the ISBD, we are now moving forward to the '16th Annual Conference of the International Society for Bipolar Disorders' in Seoul from March 18-21, 2014. For this conference we will use the same format as the Miami meeting. Therefore, you are invited to submit proposals for Parallel Symposia, Breakfast Brainstorming Sessions, and Posters or Oral Communications via the conference website. And as an ISBD member, you are also entitled to submit proposals for courses on the ISBD website.

We are looking forward to your submissions. And last but not least: save the date to join us in Seoul!

Best Wishes,



Willem Nolen, MD, PhD
President, ISBD

SOCIETY UPDATES

As mentioned in the Letter from the President, the 10th International Conference on Bipolar Disorders in Miami was an unprecedented success; moreover, the meeting also provided the Society's committees an opportunity to get together to chart the course for the years to come, and we have had some excellent discussion during the meeting about ways to improve the membership experience that we are delighted to share with you in this edition of the ISBD Global.

Many of you will be pleased to know that the ISBD will now be in a position to fulfill two long standing requests from our membership beginning in 2014: 1) we will now be able to offer an online only membership for Category 3 countries (e.g. The US, UK, etc.), and 2) we will be able to move from a calendar year membership to a rolling membership, whereby members can join in any given month of the year and membership renewal notices will be sent out just prior to the anniversary date of the individual joining the Society. What this means for you, our members, is an end to the scenario of signing up for ISBD membership in July only to receive a renewal notice 4 months later. This is a win-win for the membership and for the Society as a whole, as we expect to be able to grow the organization significantly with these important changes.

The meeting also provided a great opportunity for our task forces to meet face to face and discuss the developments of the group over the past year, as well as plan for the meeting in Seoul. The groups that plan to be ready to present in Seoul include the Staging Task Force, which has now a paper ready for submission for publication, and the Suicide Task Force, which is completing a set of meta-analyses examining the correlates of suicide and suicide attempts in bipolar disorder ahead of planned submission of their manuscript to the *Bipolar Disorders* journal. Other groups that plan to contribute to a joint ISBD Research symposium in Seoul include the Pediatric Bipolar Disorder Task Force and the Prodromes Task Force, possibly in combination with the aforementioned staging group. A new task force has been accepted on the role of lithium in bipolar disorders, with new proposals for patient-family involvement and Research Diagnostic Criteria expected in the coming months. We are proud to announce that all task forces will now be overseen by our new Interim Vice President for Research, Dr. Andrew Nierenberg. As part of his role as VP for Research, Dr. Nierenberg will also chair the ISBD Research Committee and serve as a liaison between the ISBD task force chairs and the *Bipolar Disorders* journal for those groups that plan a publication as a key deliverable.

In order to address the significant increase in demand on the Society's resources related to the growth of the organization, including the significant change to an annual meeting format, the Society plans to hire additional home office support and increase its infrastructure. As a parallel initiative in support of these changes, ISBD held the first face to face meeting of our recently formed Fundraising Committee, which is working on a plan for stable growth and sustainability of the organization in the years to come.

The ISBD remains a dynamic organization that is committed to evolving to meet the challenges of growth and change in the context of an increasingly diverse and participatory membership. We will continue to make investments on behalf of our members and the Society and appreciate your continued support.

Best Wishes,



Chad Daversa, MA
Executive Director, ISBD

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Authors: Please refer to the back cover for instructions on submitting material to the newsletter.

Special Issues for Women with Bipolar Disorder

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Introduction

Bipolar disorder (BD) is a debilitating psychiatric illness that can have major psychological, cognitive, social, and health consequences for the individual (1, 2). The prevalence of BD is similar in men and women but there are considerable gender differences in the trajectory of the disorder (3). Bipolar subtypes (e.g. BD II) and rapid cycling are more common in women than men; women are more likely to experience depressive and mixed episodes, and there is accumulating evidence for the significant role of female reproductive hormones in BD symptomatology (3).

There is considerable data supporting the role of reproductive hormones in the production and exacerbation of BD symptoms in women across their monthly and life cycle (1, 4, 5). Premenstrual, post-partum, perimenopausal and postmenopausal phases are all associated with more frequent occurrences of manic and depressive episodes (2). Hormone-related disorders such as polycystic ovary syndrome, and exogenous hormone use (the contraceptive pill, assisted reproductive technologies, hormone replacement therapy), play a role in the course and possible management of BD in women (6, 7).

The purpose of this article is to identify the unique issues for women experiencing BD at different stages of life, the relationship between hormonal events and BD symptoms, and to outline the key considerations for treatment.

Menstrual cycle exacerbation, PMDD and oral contraceptives

It is well established that hormonal fluctuations across the menstrual cycle can affect the severity of psychiatric disorders. Over 65% of women with BD experience worsening of mood, premenstrually (4, 8). There have been observed increases in hospitalisation rates (9, 10), greater need for acute treatment (11) and more suicide attempts (12, 13) in the premenstrual and menstrual phase in many women with BD (14). However, not all women with BD experience these changes (15). The presence of premenstrual exacerbation has been described as an independent exacerbating factor in women with BD (16). The relationship between premenstrual exacerbation and deterioration during other hormonal life events such as postnatally and during the perimenopause,

is controversial, with some authors suggesting there is an increased risk (17) but others reporting no correlation (8).

A confounding factor when evaluating premenstrual exacerbation in BD is the frequent comorbidity with Premenstrual Dysphoric Disorder (PMDD). PMDD is characterised by the onset of affective symptoms during the week before menses, and resolving within one week post-menses. PMDD is associated with clinically significant distress or interference with normal occupation (18). PMDD affects 3-8% of the general population (18-20), but is more common in women with BD, with studies reporting an incidence of 22-27% (14, 21, 22). Women with PMDD, have been reported as having approximately 8 times higher risk of developing BD (20). Given the rates of comorbidity, it has been proposed that a link exists between the aetiology of BD and PMDD, though at present this is poorly understood (23).



Premenstrual exacerbation of BD, regardless of whether it meets the criteria for PMDD, is much less common in women taking oral contraceptives (OCs) (4). It has been suggested that OCs have a mood stabilising effect and may be a useful treatment for women with BD who are sensitive to hormonal fluctuation (14). Evidence for the impact of OCs on mood in healthy populations is controversial, with a number of systematic reviews failing to reach consensus (24, 25). However it is accepted that OCs can cause depression in some women though the significance of this effect in bipolar disorder is unknown (26).

Sexual health is important in women with BD. Increased libido and impulsivity, plus decreased inhibitions during

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manic episodes often leads to increased sexual activity, and increased risky sexual behaviour with associated risk of unplanned pregnancy and sexually transmitted infections, including HIV (27-29). Unplanned pregnancy can be associated with risks to the foetus from illness exacerbation and potential teratogenicity of some mood stabilising medications. Whilst oral contraceptives may help stabilise mood in some women the importance of barrier methods of contraception to prevent sexually transmitted infections should not be forgotten.

Hormone treatments for BD

The influence of hormones and women's specific life events including pregnancy and menopause is an understudied area of research in BD. Nevertheless, there are some reports that rapid cycling and mixed mania are more prevalent in women with BD, and a higher risk of episodic recurrence and rate of depressive episodes in women with the disorder has also been noted (30-34). Since this evidence suggests that fluctuations in sex steroids may exacerbate or precipitate BD, there is reason to believe that there may be some efficacy in the use of selective estrogen receptor modulators (SERMs) as an intervention for the disorder (35-37). In particular, recent findings in mania suggest alterations in brain related protein kinase C (PKC), an enzyme inhibited by most mood stabilising treatments for BD. Tamoxifen, a SERM, also alters PKC activity and it is possible that it may be a useful adjunct to current mood stabilising intervention in the disorder (38-40). Our group found significant reductions in mania scores over a 28 day period in 13 DSM-IV diagnosed women with BD, mania phase, receiving tamoxifen compared to medroxyprogesterone acetate and placebo in a small pilot study (41). Two other placebo controlled trials have also demonstrated efficacy for the SERM in reducing BD symptomatology (42, 43). More recently, Amrollah and colleagues (44) reported the effectiveness of tamoxifen plus lithium compared to lithium alone for the rapid reduction of manic symptoms in 40 in patients with BD. These results certainly show promise and tamoxifen has now been recommended as a treatment option for the disorder (45).

Cognition issues in women with BD

Cognitive impairments in BD have long been recognised as a characteristic of the disease during periods of relapse (46). Recent studies have demonstrated that these deficits continue during periods of remission (47). Additionally women have been shown to experience changes in cognitive function during periods of hormonal change (48). This places women at risk of significant cognitive decline with each episode, and subsequently dementia (49). Estrogen's effect on cognition is a relatively new area of study, however there is evidence to suggest that it has a significant role in modulating key

neurotransmitters (50). The presence of estrogen receptors in the hippocampus and frontal lobes - the verbal memory, working memory and retrieval portions of the brain - indicate a link between cognitive functioning and estrogen (51). Recently studies have shown that SERMs, specifically raloxifene, improves verbal memory (52) and psychomotor speed (53) as well as preventing cognitive decline (54). Studies into raloxifene and cognition have shown promise but further research is warranted to ascertain the effectiveness of raloxifene as an adjunct treatment in BD.

Epilim/ BD and PCOS issues

Polycystic ovary syndrome (PCOS) is a disorder of hyperandrogenism and ovarian dysfunction, most often accompanied by insulin resistance and obesity (55). PCOS may be more commonly seen in women with psychiatric disorders. Obesity is a risk factor for the development of PCOS, adding another potential sequelae to antipsychotic induced weight gain in women. Sodium valproate has been demonstrated to induce PCOS like features in 10% of women who use it (56). In most women, symptoms will resolve with the cessation of valproate (57). Symptoms of PCOS may include acne, hirsutism, irregular or absent menses, infertility and weight gain. Longer term concerns in women with PCOS include the development of type 2 diabetes in 40% of women, a higher risk of cardiovascular risk factors and cardiovascular disease with age, and triple the risk of endometrial cancer (58-60). Treatment should include the cessation of sodium valproate where possible, following a healthy diet with the aim of normalising weight, at least 150 minutes of exercise per week and where necessary, medications such as metformin and the oral contraceptive pill (61).

Special Issues with the Management of Medication during Pregnancy

Women with BD are often treated with atypical or second generation antipsychotics (SGAs) during pregnancy, with a documented increase of maternal and neonatal complications (62). Due to the lack of antipsychotic medication information in pregnancy, we established the "National Register of Antipsychotic Medication in Pregnancy (NRAMP)" in Australia. NRAMP tracks maternal and neonatal progress during pregnancy and the first 12 months postnatally, to provide evidence-based guidelines for safe perinatal care.

To date, we have 238 consented participants; 104/238 (44%) have BD, and there have been 84/104 (81%) live births to mothers taking second generation antipsychotics (SGAs) during pregnancy. Complications for women taking SGAs during pregnancy include gestational diabetes (11% of the NRAMP group) and excessive weight gain (37%). Our

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NRAMP data shows healthy outcomes for infants at 12 months, ie: 59/84 (70%) progressing well (achieving all developmental requirements in cognition, motor and language skills). We are still following up the remaining babies. To date there is no major signal for congenital abnormalities related to a specific SGA. Neonatal problems include 16/84 (19%) large for gestational age babies, respiratory distress in 19/84 (23%) and neonatal abstinence syndrome in 16/84 (19%).



From our current sample of 104 women with BD who take antipsychotic medication during pregnancy, we have observed mostly healthy babies and mothers. NRAMP is continuing to recruit more women to develop a solid evidence base to inform clinicians about the best management of medications in pregnancy for women with BD.

Safety for women with BD in acute wards

All women should experience the acute inpatient ward as a safe and supportive environment. Throughout most of the Western world, psychiatry wards house men and women patients together. As the severity of illness and use of illicit drugs increases on the acute inpatient units, the risk of sexual and physical assault particularly against women, rises. A recent report released by the Victorian Mental Illness Alliance Council, Australia found that women admitted to psychiatry wards experience high levels of violence and sexual assaults (63). Across the nine different psychiatry hospital wards surveyed in Victoria, 85% of female inpatients felt unsafe during hospitalisation, 67% reported experiencing sexual or other forms of harassment and 45% of respondents had experienced sexual assault during an in-patient admission. Women with BD who experience increased libido may be vulnerable to sexual assault, as a result of sexual disinhibi-

tion. Indeed, patients with BD are more likely to engage in “relationships” on inpatient wards (64). Our recent research has found that the presence of a “women only area” on an acute psychiatric inpatient unit resulted in significantly more positive experiences for female patients when compared to the experience of women on a traditional mixed-gender unit (65). In a 6 month follow-up, the documented number of sexual risk, threat or harm incidents was 6 times higher on the mixed-gender ward compared with the single-gender ward. Building gender-specific areas on acute inpatient units is a simple and effective means to improve the safety and therapeutic outcomes for vulnerable female psychiatric patients.

Conclusion

Understanding the particular issues that women with BD experience with respect to the hormone fluctuations that may underpin the onset or exacerbation of BD, enable clinicians to provide new and specifically tailored treatment options for their women patients. Managing contraception, pregnancy and menopause in women with BD in a safe environment involves a holistic approach. Personalised, new approaches to the understanding and treatment of BD are urgently required and considering women’s special needs allows patients to obtain the best outcomes.

References

1. Dennerstein L, Soares CN. The unique challenges of managing depression in mid-life women. *World Psychiatry*. 2008;7:137-42.
2. Nguyen T-V, Low NC. Hormonal Treatments for Bipolar Disorder: A Review of the Literature. *Journal of Behavioral and Brain Science*. 2012;2:48-59.
3. Meinhard N, Kessing LV, Vinberg M. The role of estrogen in bipolar disorder, a review. *Nordic journal of psychiatry*.0:1-7.
4. Rasgon N, Bauer M, Glenn T, Elman S, Whybrow PC. Menstrual cycle related mood changes in women with bipolar disorder. *Bipolar Disorders*. 2003;5:48-52.
5. Studd J, Panay N. Hormones and depression in women. *Climacteric*. 2004;7:338-46.
6. Abel KM, Kulkarni J. Depression in women: Hormonal influences. *Mood and anxiety disorders in women*. 2006:163-84.
7. Burt VK, Rasgon N. Special considerations in treating bipolar disorder in women. *Bipolar disorders*. 2004;6:2-13.
8. Payne JL, Roy PS, Murphy-Eberenz K, Weismann MM, Swartz KL, McInnis MG, et al. Reproductive cycle-associated mood symptoms in women with major depression and bipolar disorder. *J Affect Disord*. 2007;99:221-9.

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9. Diamond SB, Rubinstein AA, Dunner DL, Fieve RR. Menstrual problems in women with primary affective illness. *Comprehensive Psychiatry*. 1976;17:541-8.
10. Weston J, Speroni KG, Ellis T, Daniel MG. The effect of menstruation of psychiatric hospitalization. *Journal of psychosocial nursing and mental health services*. 2012;50:39-43.
11. Luggin R, Bernsted L, Petersson B, Jacobsen AT. Acute psychiatric admission related to the menstrual cycle. *Acta Psychiatr Scand*. 1984;69:461-5.
12. Baca-Garcia E, Diaz-Sastre C, De Leon J, Saiz-Ruiz J. The relationship between menstrual cycle phases and suicide attempts. *Psychosomatic Medicine*. 2000;62:50-60.
13. Baca-Garcia E, Sanchez Gonzalez A, Gonzalez Diaz-Corrallero P, CGonzalez Garcia I, De Leon J. Menstrual cycle and profiles of suicidal behaviour. *Acta Psychiatr Scand*. 1998;97:32-5.
14. Cirillo PC, Passos RBF, Bevilacqua MCdN, López JRRA, Nardi AE. Bipolar Disorder and Premenstrual Syndrome or Premenstrual Dysphoric Disorder Comorbidity: A Systematic Review. *Revista Brasileira de Psiquiatria*. 2012;34:467-79.
15. Leibenluft E, Ashman SB, Feldman-Naim S, Yonkers KA. Lack of relationship between menstrual cycle phase and mood in a sample of women with rapid cycling bipolar disorder. *Biological Psychiatry*. 1999;46:577-80.
16. Dias RS, Lafer B, Russo C, Del Debbio A, Sachs GS, Joffe H. Longitudinal follow-up of Bipolar disorder in women with premenstrual exacerbation: Findings from STEP-BD. *American Journal of Psychiatry*. 2011;168:386-94.
17. Marsh WK, Templeton A, Ketter TA, Rasgon NL. Increased frequency of depressive episodes during the menopausal transition in women with bipolar disorder: preliminary report. *J Psychiatr Res*. 2008;42:247-51.
18. Epperson CN, Steiner M, Hartlage SA, Eriksson E, Schmidt PJ, Jones I, et al. Premenstrual dysphoric disorder: Evidence for a new category for DSM-5. *American Journal of Psychiatry*. 2012;169:465-75.
19. Endicott J. History, evolution, and diagnosis of Premenstrual Dysphoric Disorder. *Journal of Clinical Psychiatry*. 2000;61:5-8.
20. Wittchen HU, Becker E, Lieb R, Krause P. Prevalence, incidence and stability of premenstrual dysphoric disorder in the community. *Psychological Medicine*. 2002;32.
21. Choi J, Baek JH, Noh J, Kim JS, Choi JS, Ha K, et al. Association of seasonality and premenstrual symptoms in bipolar I and bipolar II disorders. *J Affect Disord*. 2011;129:313-6.
22. Fornaro M, Perugi G. The impact of premenstrual dysphoric disorder among 92 bipolar patients. *Eur Psychiatry*. 2010;25:450-4.
23. Frey BN, Minuzzi L. Comorbid bipolar disorder and premenstrual dysphoric disorder: real patients, unanswered questions. *Arch Womens Ment Health*. 2013;16:79-81.
24. Kurshan N, Neill Epperson C. Oral contraceptives and mood in women with and without premenstrual dysphoria: a theoretical model. *Arch Womens Ment Health*. 2006;9:1-14.
25. Oinonen KA, Mazmanian D. To what extent do oral contraceptives influence mood and affect? *J Affect Disord*. 2002;70:229-40.
26. Kulkarni J. Depression as a side effect of the contraceptive pill. *Expert Opin Drug Saf*. 2007;6:371-4.
27. Beyer JL, Taylor L, Gersing KR, Krishnan KR. Prevalence of HIV infection in a general psychiatric outpatient population. *Psychosomatics*. 2007;48:31-7.
28. Meade CS, Bevilacqua LA, Key MD. Bipolar disorder is associated with HIV transmission risk behavior among patients in treatment for HIV. *AIDS and behavior*. 2012;16:2267-71.
29. Vieira P, Kapczinski F, Kauer-Sant'Anna M. Use of contraceptive methods among women treated for bipolar disorder. *Archives of Women's Mental Health*. 2009;12:183-5.
30. Robb JC, Young LT, Cooke RG, Joffe RT. Gender differences in patients with bipolar disorder influence outcome in the medical outcomes survey (SF-20) subscale scores. *J Affect Disord*. 1998;49:189-93.
31. Kilzieh N, Akiskal HS. Rapid-cycling bipolar disorder. An overview of research and clinical experience. *The Psychiatric clinics of North America*. 1999;22:585-607.
32. Ishimaru-Tseng TV. Evaluation of late onset bipolar illness during menopause. *Hawaii medical journal*. 2000;59:51-3.
33. Suominen K, Mantere O, Valtonen H, Arvilommi P, Leppamaki S, Isometsa E. Gender differences in bipolar disorder type I and II. *Acta Psychiatr Scand*. 2009;120:464-73.
34. Leibenluft E. Women with bipolar illness: clinical and research issues. *American Journal of Psychiatry*. 1996;153:163-73.
35. Freeman MP, Smith KW, Freeman SA, McElroy SL, Kmetz GE, Wright R, et al. The impact of reproductive events on the course of bipolar disorder in women. *J Clin Psychiatry*. 2002;63:284-7.
36. Blehar MC, DePaulo JR, Jr., Gershon ES, Reich T, Simpson SG, Nurnberger JI, Jr. Women with bipolar disorder: findings from the NIMH Genetics Initiative sample. *Psychopharmacol Bull*. 1998;34:239-43.
37. Sajatovic M, Friedman SH, Schuermeyer IN, Safavi R, Ignacio RV, Hays RW, et al. Menopause knowledge and subjective experience among peri- and postmenopausal women with bipolar disorder, schizophrenia and major depression. *J Nerv Ment Dis*. 2006;194:173-8.
38. Wang HY, Friedman E. Lithium inhibition of protein kinase C activation-induced serotonin release. *Psychopharmacology (Berl)*. 1989;99:213-8.
39. Friedman E, Hoau Yan W, Levinson D, Connell TA, Singh H. Altered platelet protein kinase C activity in bipolar affective disorder, manic episode. *Biol Psychiatry*. 1993;33:520-5.
40. O'Brian CA, Liskamp RM, Solomon DH, Weinstein IB. Inhibition of protein kinase C by tamoxifen. *Cancer Res*. 1985;45:2462-5.

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41. Kulkarni J, Garland KA, Scaffidi A, Headey B, Anderson R, de Castella A, et al. A pilot study of hormone modulation as a new treatment for mania in women with bipolar affective disorder. *Psychoneuroendocrinology*. 2006;31:543-7.
42. Bebchuk JM, Arfken CL, Dolan-Manji S, Murphy J, Hasanat K, Manji HK. A preliminary investigation of a protein kinase C inhibitor in the treatment of acute mania. *Arch Gen Psychiatry*. 2000;57:95-7.
43. Zarate CA, Jr., Singh JB, Carlson PJ, Quiroz J, Jolkovsky L, Luckenbaugh DA, et al. Efficacy of a protein kinase C inhibitor (tamoxifen) in the treatment of acute mania: a pilot study. *Bipolar Disord*. 2007;9:561-70.
44. Amrollahi Z, Rezaei F, Salehi B, Modabbernia AH, Maroufi A, Esfandiari GR, et al. Double-blind, randomized, placebo-controlled 6-week study on the efficacy and safety of the tamoxifen adjunctive to lithium in acute bipolar mania. *J Affect Disord*. 2011;129:327-31.
45. Yatham LN, Kennedy SH, Schaffer A, Parikh SV, Beaulieu S, O'Donovan C, et al. Canadian Network for Mood and Anxiety Treatments (CANMAT) and International Society for Bipolar Disorders (ISBD) collaborative update of CANMAT guidelines for the management of patients with bipolar disorder: update 2009. *Bipolar Disord*. 2009;11:225-55.
46. Quraishi S, Frangou S. Neuropsychology of bipolar disorder: a review. *J Affect Disord*. 2002;72:209-26.
47. Martinez-Aran A, Vieta E, Colom F, Torrent C, Sanchez-Moreno J, Reinares M, et al. Cognitive impairment in euthymic bipolar patients: implications for clinical and functional outcome. *Bipolar Disord*. 2004;6:224-32.
48. Henderson VW. Cognitive changes after menopause: influence of estrogen. *Clin Obstet Gynecol*. 2008;51:618-26.
49. Kessing LV, Andersen PK. Does the risk of developing dementia increase with the number of episodes in patients with depressive disorder and in patients with bipolar disorder? *J Neurol Neurosurg Psychiatry*. 2004;75:1662-6.
50. Sherwin BB. Estrogen and cognitive functioning in women. *Endocr Rev*. 2003;24:133-51.
51. Genazzani AR, Pluchino N, Luisi S, Luisi M. Estrogen, cognition and female ageing. *Hum Reprod Update*. 2007;13:175-87.
52. Jacobsen DE, Samson MM, Emmelot-Vonk MH, Verhaar HJ. Raloxifene improves verbal memory in late postmenopausal women: a randomized, double-blind, placebo-controlled trial. *Menopause*. 2010;17:309-14.
53. Kulkarni J, Gurvich C, Gilbert H, Mehmedbegovic F, Mu L, Marston N, et al. Hormone modulation: a novel therapeutic approach for women with severe mental illness. *Aust N Z J Psychiatry*. 2008;42:83-8.
54. Yaffe K, Krueger K, Cummings SR, Blackwell T, Henderson VW, Sarkar S, et al. Effect of raloxifene on prevention of dementia and cognitive impairment in older women: the Multiple Outcomes of Raloxifene Evaluation (MORE) randomized trial. *Am J Psychiatry*. 2005;162:683-90.
55. Azziz R, Carmina E, Dewailly D, Diamanti-Kandarakis E, Escobar-Morreale HF, Futterweit W, et al. The Androgen Excess and PCOS Society criteria for the polycystic ovary syndrome: the complete task force report. *Fertil Steril*. 2009;91:456-88.
56. Joffe H, Cohen LS, Suppes T, McLaughlin WL, Lavori P, Adams JM, et al. Valproate is associated with new-onset oligoamenorrhea with hyperandrogenism in women with bipolar disorder. *Biol Psychiatry*. 2006;59:1078-86.
57. Joffe H, Cohen LS, Suppes T, Hwang CH, Molay F, Adams JM, et al. Longitudinal follow-up of reproductive and metabolic features of valproate-associated polycystic ovarian syndrome features: A preliminary report. *Biol Psychiatry*. 2006;60:1378-81.
58. Haoula Z, Salman M, Atiomo W. Evaluating the association between endometrial cancer and polycystic ovary syndrome. *Hum Reprod*. 2012;27:1327-31.
59. Mani H, Levy MJ, Davies MJ, Morris DH, Gray LJ, Bankart J, et al. Diabetes and cardiovascular events in women with polycystic ovary syndrome: a 20-year retrospective cohort study. *Clin Endocrinol (Oxf)*. 2013;78:926-34.
60. Morgan CL, Jenkins-Jones S, Currie CJ, Rees DA. Evaluation of adverse outcome in young women with polycystic ovary syndrome versus matched, reference controls: a retrospective, observational study. *J Clin Endocrinol Metab*. 2012;97:3251-60.
61. Teede HJ, Misso ML, Deeks AA, Moran LJ, Stuckey BGA, Wong JLA, Norman RJ, Costello NF and on behalf of the Guideline Development Groups. Assessment and management of polycystic ovary syndrome: summary of an evidence-based guideline. *Med J Aust* 2011;195(6):65.
62. Gentile S. Antipsychotic therapy during early and late pregnancy. A systematic review. *Schizophr Bull*. 2010;36:518-44.
63. Council VMIA. Zero Tolerance For Sexual Assault : A safe admission for women. 2013.
64. Keitner GI, Baldwin LM, McKendall MJ. Copatient relationships on a short-term psychiatric unit. *Hosp Community Psychiatry*. 1986;37:166-70.
65. Kulkarni J, Gavrilidis E, Lee S, Hayes E, Lee A, Ong R, et al. Gender Segregation to Improve Safety for Women in Acute Psychiatry Wards. *Journal of Clinical Psychiatry*. Submitted May 2013.



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(Continued from Page 1)

understanding of the pathophysiology of BD their utility in the clinical practice has been negligible. This is because there is considerable overlap in brain structure and function between patients and healthy comparisons cases. Additionally, brain changes in BD are subtle and distributed across many regions. This is a challenge for conventional voxel-based analyses which are best suited for detecting regional and linear changes between groups. More recently, multivariate pattern recognition methods have become available to address these limitations. Pattern recognition is a particular type of machine learning concerned with the discovery of regularities in data through the use of computer algorithms. These new approaches to neuroimaging data analysis represent a novel opportunity to bridge the gap between neuroscience and clinical practice and provide support for the nosological validity of BD.

In a recent study, our group demonstrated the clinical potential of pattern recognition analyses using structural magnetic resonance imaging data from two independent groups of patients with BD and matched healthy individuals. We used a type of machine learning called Gaussian Process Classifiers (GPCs) which are probabilistic prediction models based on Bayesian probability theory (9). Probabilistic classification is especially useful for clinical applications as it can reflect more accurately variability within clinical populations; for example when quantifying the probability that an individual has BD within a population where illness severity can be expected to vary between individuals. The process involves a training and a test phase (Figure 1). Initially, the GPC is trained to identify the pattern of neuroimaging parameters that best distinguishes patients from comparison individuals. The effect of duration of illness and medication exposure is also modelled. In the test phase, the classifier is shown previously unseen neuroimaging data from a new individual for classification as a patient or healthy comparison. The accuracy of the classification can be quantified as well as its sensitivity and specificity. Sensitivity is the proportion of BD patients (true positives) that were correctly classified and specificity is the proportion of healthy comparison individuals (true negatives) that were correctly classified. Additionally, the algorithm produces discrimination brain maps. Discrimination maps represent the predictive value of voxels in discriminating between patients and healthy comparison individuals. These maps are therefore different from brain maps derived from conventional voxel-based analyses that represent mean group differences.

We focused on structural magnetic resonance imaging (sMRI) data in preference to other neuroimaging techniques because diagnostic aids based on sMRI data could be easily incorporated in routine clinical practice. sMRI is available in most clinical settings, it is safe and has great patient acceptability as a diagnostic method for brain disorders. The study examined patients with BDI and included two independent cohorts of patients and comparison individuals to determine the reliability of the findings. GPCs were applied to gray (GM) and white matter (WM) sMRI data obtained using a 1.5 Tesla, GE NV/i Signa MR System, from two independent samples of patients with BD. Within each cohort patients were matched on age, sex and IQ to an equal number of healthy comparison individuals. Patients in the first cohort (n=26) had a mean age of 41.5 years and mean age at illness onset (defined as first mood episode) of 25.7 years. They were euthymic and received treatment with a variety of psychotropics mostly in combination. Patients in the second cohort (n=14) had a mean age of 37.6 years and mean age at illness onset of 18.8 years. They were also euthymic but in contrast to the first cohort they were on monotherapy with anticonvulsants.

In both cohorts, application of GPC to GM and WM identified clusters localized within cortical and subcortical structures implicated in BD. Specifically discriminating regions were located within the frontopolar and ventral prefrontal cortex, the parietal lobules, the middle/superior temporal gyri, the lingual gyrus and cuneus and within the thalamus and cerebellum. Figure 2 shows an example of a GM discrimination map. The diagnostic accuracy of the GPC classifier for GM was 73% in cohort 1 and 72% in cohort 2; sensitivity and specificity of the GM classification were 69% and 77% in cohort 1 and 64% and 99% in the cohort 2. The diagnostic accuracy of the GPC classifier for WM was 69% in cohort 1 and 78% in cohort 2; sensitivity and specificity of the WM classification

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Figure 1. Machine Learning Classification

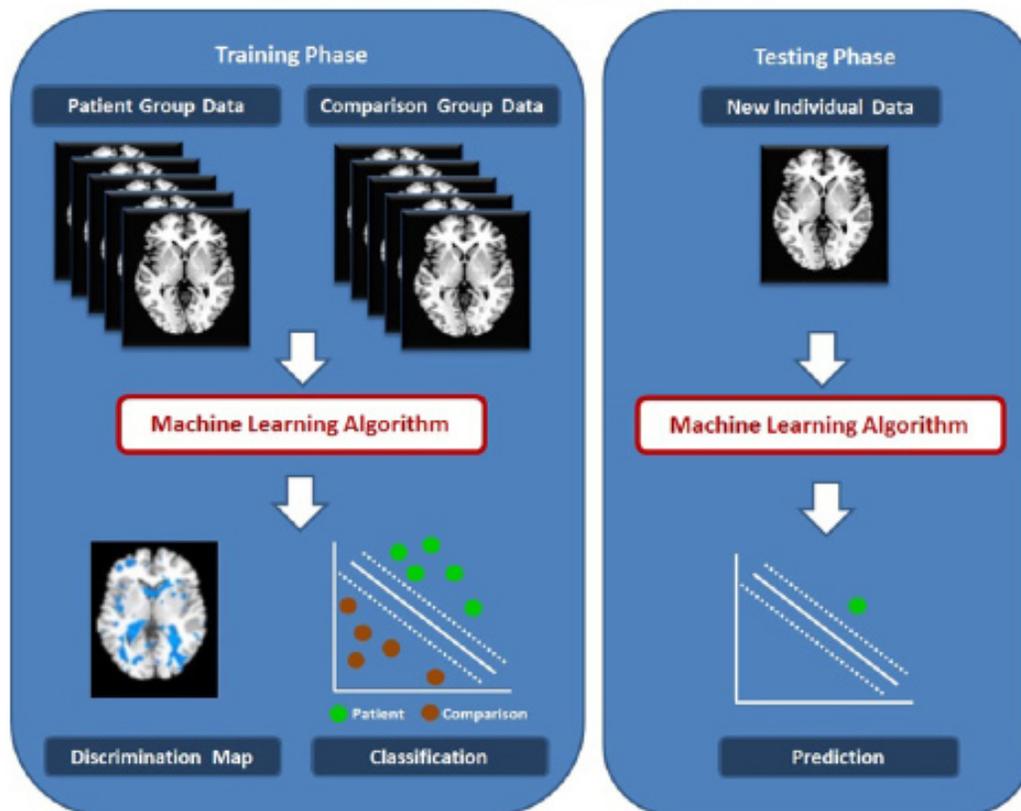
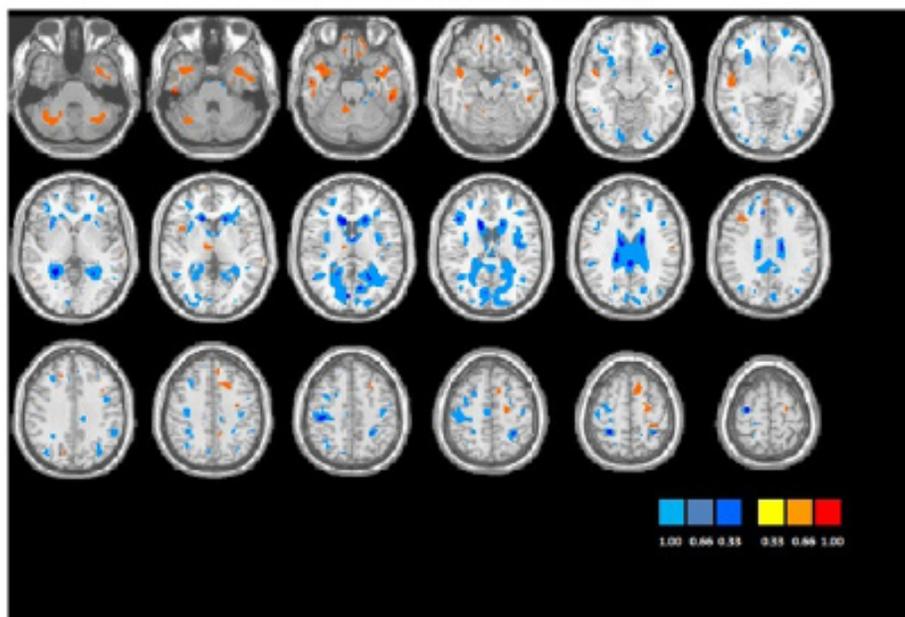


Figure 2. Discrimination Map



The map represents the pattern of coefficients that quantify the relative contribution of each brain voxel to the classifier decision (patient or healthy comparison); voxels predictive of bipolar disorder are shown in red; voxels predictive of comparison individuals are shown in blue

Diagnostic Imaging for Bipolar Disorder: has its time come?

were both 69% the cohort 1 and 71% and 86% in cohort 2. The performance of the GPCs was better in the second cohort that consisted of younger and less medicated patients confirming that the classification results were not driven by age or medication.

This study demonstrates that specificity and sensitivity of GPC for sMRI scans in BD is comparable to the values obtained by the most commonly used laboratory tests in medicine as seen in Table 1. As with any new test the accuracy of the GPC classification for BD was determined against “gold standard” diagnostic assessments. In this study “true positive cases” (i.e. patients with BD) were identified using the Structured Clinical Interview for DSM-IV for Axis I Disorders conducted by clinicians with expertise in mood disorders. The SCID is designed to elicit the presence or absence of the operational criteria that define the syndrome of BD itself and is therefore expected to have the highest diagnostic accuracy. A more appropriate comparison would be with outcomes of “real world” clinical assessments where BD is either missed or misdiagnosed resulting in nearly a third of patients having to wait for approximately 10 years before they receive an accurate diagnosis (2-4).

This study focuses on differentiating healthy individuals from patients with BD. This represents the necessary first step in developing pattern recognition approaches for use as neurodiagnostic tools. Studies currently under way by our group are evaluating GPCs in larger samples of patients with BD and across different sites. Moreover, we are investigating the performance of pattern recognition classifiers for the identification of biologically meaningful subtypes of BD and for the differential diagnosis of BD from disorders with overlapping clinical phenotypes.

Details of the study “Examination of the predictive value of structural magnetic resonance scans in bipolar disorder: a pattern classification approach” by Rocha-Rego V, Jogia J, Marquand AF, Mourao-Miranda J, Simmons A, Frangou S published by Psychological Medicine are available as open access through this link http://journals.cambridge.org/abstract_S0033291713001013.

Table 1. Sensitivity and Specificity of Diagnostic Aids in Bipolar Disorder and Medical Disorders

Test	Sensitivity	Specificity
Bipolar Disorder (structural)^a	64-77	69-99
HbA1c for diabetes II^b	78-81	79-84
Fasting Blood Sugar for diabetes II^c	48-64	94-98
Blood Pressure for hypertension^c	74-85	62-85
TSH for thyroid disease^d	38-40	94-98
Non-invasive tests for breast cancer^e	70-92	72-77
Pap smear for cervical dysplasia or cervical cancer^f	55-80	75-95
Magnetic Resonance Imaging for gliomas (structural)^g	90-95	50-52

^a Rosa-Rego et al. 2013; ^b Bennett et al. 2007; ^c Hodgkinson et al. 2011; ^d Zarkovic et al. 2011; ^e Bruening et al. 2012; ^f Fahy et al. 1995; ^g Chen and Silverman 2008

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References:

1. Collins PY et al. Grand Challenges in Global Mental Health. *Nature*. 2011;475(7354):27-30.
2. Lish JD et al (1994). The National Depressive and Manic-depressive Association survey of bipolar members. *J Affect Disord*. 1994;31(4):281-94.
3. Hirschfeld RM et al. Perceptions and impact of bipolar disorder: how far have we really come? Results of the national depressive and manic-depressive association 2000 survey of individuals with bipolar disorder. *J Clin Psychiatry*. 2003 64(2):161-174.
4. Berk M et al. History of illness prior to a diagnosis of bipolar disorder or schizoaffective disorder. *J Affect Disord*. 2007;103(1-3):181-6.
5. Perlis RH et al. Long-term implications of early onset in bipolar disorder: data from the first 1000 participants in the systematic treatment enhancement program for bipolar disorder (STEP-BD). *Biol Psychiatry*. 2004; 55(9):875-881.
6. Kapczinski F et al. The potential use of biomarkers as an adjunctive tool for staging bipolar disorder. *Prog Neuropsychopharmacol Biol Psychiatry*. 2009;33(8):1366-71.
7. Bora E et al. Voxelwise meta-analysis of gray matter abnormalities in bipolar disorder. *Biol Psychiatry*. 2010;67(11):1097-105.
8. Delvecchio G et al. Common and distinct neural correlates of emotional processing in Bipolar Disorder and Major Depressive Disorder: a voxel-based meta-analysis of functional magnetic resonance imaging studies. *Eur Neuropsychopharmacol*. 2012; 22(2):100-13.
9. Rasmussen C, Williams CKI *Gaussian Processes for Machine Learning*. Cambridge, Massachusetts: The MIT Press, 2006.



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A Research Coordinator's Perspective on Transitions in Bipolar Disorder Research

Melissa A. Bazan, MA

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Over the past decade, the Bipolar Center at the University of Texas Health Science Center at San Antonio (UTHSCSA) has stayed abreast of new medication treatments and psychosocial interventions for bipolar disorder while investing significant resources and effort in community outreach. From our initial emphasis on pharmaceutical sponsored treatment studies to the integration of a more comprehensive multidisciplinary approach that focuses on both clinical care and research activities we have evolved into a premier bipolar center. Our efforts to engage the community, and the integration of a more comprehensive conduct of research, at both a clinical and research level, have allowed us great success in both the enrollment of patients in clinical research as well as a high rate of retention.

Recruitment and Retention

During the initial 2 years of my involvement at the Center, our research group focused primarily on pharmaceutical sponsored Phase II bipolar medication treatment studies. Essentially, participants were randomized to receive either active medications or placebo, clinician-rated scales were administered to assess efficacy of treatments, and adverse events were recorded. In an academic site such as ours, the extensive, prolonged approval process by the Institutional Review Board (IRB) compounded by the increase in study sites contracted by the pharmaceutical companies negatively impacted our ability to enroll patients into these studies. Our inability to meet recruitment targets in studies that emphasized competitive enrollment became an issue. The inability to absorb research patients into our outpatient clinical program following completion of research may have affected both recruitment and retention. It became apparent that recruitment and retention for bipolar disorder participants required more than a medication management pharmaceutical industry focus. Although these studies provided the benefit of new investigational drugs for bipolar disorder, there was a lack of awareness and empowerment participants gained from their participation in such studies. Additionally, the focus of these studies was confined to assessing progress of bipolar disorder symptoms in patients who had to meet

stringent inclusion and exclusion criteria, limiting our ability to offer care to a large proportion of patients.

The focus of our Center began to transition when our research group became involved in the Systematic Treatment Enhancement Program for Bipolar Disorder (STEP-BD). This longitudinal, multi-site study employed both clinician-rated and patient-rated scales. Although STEP-BD was not a medication study, it was evident that self-reporting was instrumental in creating both an awareness and empowerment for participants in terms of managing their bipolar illness. Participants were followed for several years and assessed at different time points throughout the study. The relationship between participant and our research group transitioned to a collaborative partnership as it became clear to both the researcher and participants that long term-management of this illness, like other chronic diseases, required a comprehensive treatment approach that focused on both medication and participant involvement and empowerment.

Through several investigator initiated studies conducted by our research group over the years, the integration of medication and self-reporting has been crucial for participant retention and symptom management. Turnover for our Bipolar Center research group has been minimal, allowing the establishment of a strong relationship between research participants and research staff which has contributed to our high rates of retention in several long term studies. Our focus on a comprehensive and multidisciplinary approach to treatment has facilitated research that enhances awareness of participants on the multi-dimensional nature of this severe illness. I believe the key elements that have driven high rates of participant enrollment and long-term retention at our Center are related to the trust and confidence participants have in the research staff as well as the psychoeducation they receive throughout the study. Our research team is familiarized in both psychiatric and psychological research in the area of bipolar disorder. Having this knowledge is an asset when discussing with participants mood dysregulation and patterns in behaviors that are triggers for their episodes. Moreover, our Center

developed the clinician-rated Bipolar Inventory of Symptoms Scale (BISS) that includes not only assessment of mood symptoms but also other symptom domains of this illness- anxiety, irritability and impulsivity. Through our use of a comparable self-report BISS, participants gain awareness as they assess and monitor their bipolar symptoms at each visit.

An added strength of our Center is the integration of research and clinical services, which I believe to have been a strong driving force for recruitment and retention in various pharmacological and non-pharmacological studies. Advertisement through flyers, television, newspaper, and Internet has yielded low rates of success in recruitment for our site. The majority of participants recruited at our site have come through our Mood and Anxiety Disorders Clinic. Our patients have developed trust and confidence in the clinic staff and psychiatrists prior to being approached and then recruited for research. Most of the research patients, irrespective of how they are recruited, get offered to have their clinical care continued following their participation in these studies. I do believe that this has led to high rates of retention of patients in our research studies.

Our research and recruitment efforts over the past decade have evolved with a focus on community outreach. South Texas has a predominant Hispanic/Latino population and as a result our focus of bipolar research highlights the increasing needs of this population. We have created a partnership over the years with a Bexar county community clinic, The Center for Health Care Services (CHCS). Through this partnership, we have been able to develop research goals that are specific to the Hispanic/Latino community. As a result of our emphasis on studying the needs of the the Hispanic/Latino population, the National Institute of Mental Health (NIMH) funded the P20, Bipolar Illness Intervention in Hispanic Communities, and the P30 Optimizing Outcomes in Bipolar Illness Interventions in Hispanic Communities grants. We have been a strong partner on the multi-site Bipolar Trials Network (BTN) and have made a significant contribution in enrolling a large number of patients from the Hispanic/Latino community, a hitherto under represented patient population in clinical studies of bipolar disorders to date.

Research Coordination

The role of the Research Coordinator in bipolar disorder has expanded. The core of the research operation is the invaluable knowledge, training, and dedication Research Coordinators have towards meeting the overall goal. It is the Research Coordinator that helps guide the

participant through the research experience, informed consent process, and address any issues that may hinder retention as well as balance the increase in paperwork and reporting to various sponsors and agencies. Within our academic site, the focus of our responsibilities also includes initiating and maintaining IRB regulatory documents. These documents are completed for every update made to study operations, personnel changes, as well as yearly progress reports.

Future Improvements

Although we have a positive response from participants and overall success in terms of recruitment and retention, there is still more that can be done. I believe that taking our multidisciplinary approach one step further to include a synthesis of both a medication treatment study with a psychological intervention would be insightful. Over the years the most common feedback I have received from study participants is that their awareness of mood symptoms would increase if the option to have therapy were integrated. Additionally, the involvement of family members and social support continues to be an asset in bipolar research. Over the years we have had more bipolar participants attend research visits with their family members or supportive friends. Bipolar disorder not only affects the person but the family dynamics. Several years ago our Center participated in a study on caregiver burden and the findings from this study confirmed our observation of how arduous it is for the entire family especially caregivers to have someone they love suffer from bipolar illness.

Though our bipolar clinic continues to adapt to meet the growing and changing needs of our community, there is still much more that can be done. Our bipolar team continues to be involved in specialized training and research to provide cutting edge care to both our clinic patients and research participants.

ISBD Announcements



Webinars

We are pleased to offer a career development webinar in Publishing, recorded live at our 10th International Conference on Bipolar Disorders, for the benefit of young investigators who may find the information useful in preparation of their manuscripts for publication in high impact peer reviewed journals. The “Editor’s Workshop” was developed by the Editors of *Bipolar Disorders* (Dr. Samuel Gershon and Dr. Roy Chengappa) along with Prof. Gin Malhi, Field Editor, *Bipolar Disorders*, and Editor of the *Australia and New Zealand Journal of Psychiatry*. We hope you enjoy this educational video and look forward to developing new educational content for all our members.

To access the webinar, please visit the Webinars section located under the Education tab on the Society’s homepage, www.isbd.org.

16th Annual Conference of the ISBD: Call for Course Proposals

We invite you to submit course proposals for the 16th Annual Conference of the International Society for Bipolar Disorders (ISBD) scheduled to take place from 18-21 March, 2014 at the COEX in Seoul, South Korea. Courses will be conducted from 9 AM to 5 PM on March 18th through 20th. The Program Committee will allocate dates/times for accepted courses, filling all available space on March 18th (Day 1) first and continuing through March 20th, 2014.

Before submitting a course proposal, please keep in mind that all courses should encourage audience participation and should be structured to provide a high level of interactivity. A minimum of 15 registered participants is required for every course. The maximum number of participants may not exceed 50.

With the exception of a reduced speaker fee of \$450, ISBD is unable to provide any financial support to the course organizers or presenters. A maximum of 4 speakers, including a chair or moderator, will be eligible for the reduced speaker fee. However, ISBD will provide drink service for half day courses and a boxed lunch and drink service for full day courses. AV service, including laptop, projector, screen and if necessary, microphone, will be provided for all courses as well.

The completed application should be emailed to Mariya Dobrovinskaya at dobrovinskayam@upmc.edu or faxed to: +1 (412) 624-4484 no later than 5 PM Eastern Time (US) on Monday, September 16, 2013. You may also access this application on the Society’s website by clicking on the following link: <http://www.isbd.org/education/post-a-course>.

All course proposals will be evaluated by the Education Committee, and final decisions will be announced by Monday, October 14, 2013.

Biological Psychiatry/Behavioral Sciences Postdoctoral Fellowship Opportunities for PhD or MD Clinician Scientists Department of Psychiatry and Behavioral Sciences UTHealth Medical School, Houston, TX

The Department of Psychiatry and Behavioral Sciences, UTHealth Medical School in Houston, is recruiting outstanding Ph.D. or MD clinician scientists for Postdoctoral Fellowship opportunities. We seek well-trained, motivated individuals with excellent communication and interpersonal skills, strong command of the English language, demonstrated proficiency in scientific writing, and the desire to learn the necessary skills to transition into independent faculty positions. The training period involves two years starting in September or October 2013. A key focus for the training period will be the development of successful grant planning and writing skills pursuant to applications to NIH, NSF and private foundations.

NIH-funded investigators in the Department will serve as mentors. Current work focuses on treatment outcomes, clinical trials, behavioral interventions (Dr. Joy Schmitz), human behavioral processes, psychopharmacology (Dr. Scott Lane), neuroimaging, cognitive neurosciences, and clinical trials (Dr. Jair Soares). The department has particular strengths, in clinical service and clinical research, in the fields of mood disorders and substance use disorders. Our clinical research programs are housed at the recently completed state-of-the-art Behavioral and Biomedical Sciences Building (BBSB) and the UT Harris County Psychiatric Center, one of the largest inpatient academic psychiatric hospitals in the US with 250 acute care psychiatric beds.

UTHealth is an integral part of the Texas Medical Center (TMC), the largest medical center in the world, with a vibrant academic community and a plethora of outstanding collaborative and translational opportunities in the health sciences. Houston is the 4th largest US city featuring continued growth and economic prosperity, vibrant opportunities, and a highly competitive cost of living relative to other culturally diverse metropolitan areas. **Applicants must have completed a Ph.D., M.D., or equivalent degree. Postdoctoral experience is expected and preference given to those with training or experience with NIH grant application policies and procedures. Competitive salaries and benefits are available. To find out more information about these unique academically-driven positions or to apply, please forward a CV and letter of interest to Jair C. Soares, M.D., Professor and Chair,, 1941 East Road, Houston, Texas 77054, e-mail: Jair.C.Soares@uth.tmc.edu, phone 713-486-2507; fax 713-486-2553, www.utpsychiatry.org . The University of Texas Health Science Center at Houston is an EO/AA employer. M/F/D/V.**

Faculty Positions for PhD or MD Clinician Scientists Department of Psychiatry and Behavioral Sciences UTHealth Medical School, Houston, TX

The Department of Psychiatry and Behavioral Sciences, UTHealth Medical School in Houston is expanding current clinical research capabilities and seeking outstanding Ph.D. or M.D. clinician researchers. We are recruiting individuals at the Assistant, Associate or Full Professor levels, with demonstrated ability to develop independent NIH-funded research programs that would complement and extend existing research efforts. The department facilities include the recently completed state-of-the-art Behavioral and Biomedical Sciences Building (BBSB) and the UT Harris County Psychiatric Center, one of the largest inpatient academic psychiatric hospitals in the US with 250 acute care psychiatric beds. Target areas for expansion include clinical neurosciences, clinical psychopharmacology, and interventions and health outcomes research, with a focus on mood and anxiety disorders, substance use disorders, schizophrenia and psychotic disorders, and child and adolescent psychopathology. UTHealth is an integral part of the Texas Medical Center (TMC), the largest medical center in the world, with a vibrant academic community and a plethora of outstanding collaborative and translational opportunities in the health sciences. Houston is the 4th largest US city featuring continued growth and economic prosperity, vibrant opportunities, and a highly competitive cost of living relative to other culturally diverse metropolitan areas. Applicants must have completed a Ph.D., M.D., or equivalent degree. Postdoctoral experience is expected and preference given to those with a track record of NIH funding. **Competitive salary and recruitment packages are available. To find out more information about these unique academically-driven positions or to apply, please forward a CV and letter of interest to Jair C. Soares, M.D., Professor and Chair, 1941 East Road, Houston, Texas 77054, e-mail: Jair.C.Soares@uth.tmc.edu, phone 713-486-2507; fax 713-486-2553. The University of Texas Health Science Center at Houston is an EO/AA employer. M/F/D/V.**



A Look at the Literature

Vivek Singh, MD

Associate Professor, Department of Psychiatry,
University of Texas Health Science Center at San Antonio
ISBD Global Editor-in-Chief
ISBD Board Member

REVIEW I

Neuropsychological Impairments in Schizophrenia and Psychotic Bipolar Disorder: Findings from the Bipolar and Schizophrenia Network on Intermediate Phenotypes (B-SNIP) Study. S. Kristian Hill, Ph.D.; James L. Reilly, Ph.D.; Richard S.E. Keefe, Ph.D.; James M. Gold, Ph.D.; Jeffrey R. Bishop, Pharm.D.; Elliot S. Gershon, M.D.; Carol A. Tamminga, M.D.; Godfrey D. Pearlson, M.D.; Matcheri S. Keshavan, M.D.; John A. Sweeney, Ph.D. *Neuropsychological Impairments in Schizophrenia and Psychotic Bipolar Disorder: Findings from the Bipolar and Schizophrenia Network on Intermediate Phenotypes (B-SNIP) Study.* *Am J Psychiatry* 2013;: 10.1176/appi.ajp.2013.12101298

There is ample evidence that family members of patients with schizophrenia have cognitive deficits. However, neuropsychological disturbances in family members of those with other psychotic illnesses and bipolar disorders (BD) are not as well characterized. This study aims to 1) compare cognitive deficits between patients with schizophrenia and bipolar disorder with psychosis, 2) characterize neuropsychological impairment in patients with schizoaffective disorder and compare to deficits in patients with schizophrenia and bipolar disorder with psychosis, 3) reports cognitive deficits in family members of patients with schizophrenia and bipolar disorder with psychosis, and 4) assess cognitive deficits among nonpsychotic relatives with and without cluster A personality traits.

This study enrolled patients with schizophrenia and their first-degree relatives (N=293, N=316), bipolar disorder with psychosis and their first-degree relatives (N=227, N=259), schizoaffective disorder and their first-degree relatives (N=165, N=197), and healthy comparison subjects (N=295). Neuropsychological assessments were done with the Brief Assessment of Cognition in Schizophrenia

(BACS), a validated instrument to assess global cognitive functioning in schizophrenia.

In comparison to healthy controls, patients with schizophrenia had the largest deficits on cognitive functioning followed by schizoaffective depressed, schizoaffective mania, and bipolar disorder with psychosis patients. Pattern of performance across the different domains of BACS were similar and exclusive of diagnosis. First-degree relatives of patients with schizophrenia and bipolar disorder with psychosis were not different from each other. First-degree relatives with cluster A personality traits had similar levels of neuropsychological deficits, irrespective of diagnosis. First-degree relatives with cluster A personality traits with schizophrenia probands demonstrated significant cognitive impairments but first-degree relatives of bipolar disorder patients did not.

Vivek Singh, MD: Findings from this large-scale study demonstrate cognitive deficits to be present in those with schizophrenia and psychotic bipolar disorder and their first-degree relatives. The study also demonstrates increasing degree of cognitive impairment from bipolar disorder with psychosis to schizophrenia, with intermediate level of impairment seen in those with schizoaffective disorder, indicating a dimensional model rather than a categorical model of psychotic disorders. In patients with bipolar disorder, but not schizophrenia, cognitive deficits in first-degree relatives is associated with psychosis-spectrum personality disorder traits. Findings from this study emphasize the need to assess the relevance and interaction of affective and psychotic symptoms in cognitive dysfunction.

REVIEW II

Akhter A, Fiedorowicz JG, Zhang T, Potash JB, Cavanaugh J, Solomon DA, Coryell WH. Seasonal variation of manic and depressive symptoms in bipolar disorder. *Bipolar Disord* 2013; 15: 377–384.

There is a lack of consensus on the seasonality of mood states associated with bipolar disorder. This may be because studies that aimed to assess the association of manic and depressive symptoms to seasons were retrospective in nature and based on admission data, which have generated conflicting data. In addition, there is a paucity of data on the difference in seasonal pattern of depressive and manic symptoms between patients with bipolar I and II disorder. This study, prospectively examines through long term follow of a cohort, the seasonality of depressive and manic symptoms burdens and timing of relapses to depressive and manic/hypomanic/mixed episodes in patients with bipolar I (N=202) and II (N=112) disorder.

This study analyzed data on only those subjects (N=314) who were followed up for at least 10 years with annual or semi-annual assessments. In both subtypes of bipolar disorders, summer was associated with the lowest frequency of depressive symptoms, while winter months were associated with the highest frequency of depressive symptoms. Greater prevalence of depressive symptoms during the winter months was statistically significant in those with bipolar I disorder but not in those with bipolar II illness. Patients with both subtypes of bipolar disorder demonstrated greater frequency of manic symptoms during the months of autumn though patients with bipolar II disorder demonstrated a greater seasonal variation in manic manifestation, with highest frequency of hypomanic symptoms attained during the months surrounding autumn.

Vivek Singh, MD: This study demonstrates seasonal patterns of depressive and manic symptoms in patients with bipolar I and II disorders. A greater frequency of manic/hypomanic symptoms was seen during the autumn equinox while the months surrounding the winter solstice was associated with greater frequency of depressive symptoms. These findings provide clinically relevant information to clinicians so that a greater degree of vigilance could be brought into assessment of manic and depressive symptoms, particularly during the seasons associated with greater frequency of these symptoms.

REVIEW III

Pagel T, Baldessarini RJ, Franklin J, Baethge C. Characteristics of patients diagnosed with schizoaffective disorder compared with schizophrenia and bipolar disorder. *Bipolar Disord* 2013; 15: 229–239.

Controversy continues to surround schizoaffective disorder in regards to nosology and where it fits in the schism between psychotic disorders and affective disorders. This is compounded by a dearth of data on the epidemiological, demographic, clinical symptomatology, and illness course of schizoaffective disorder. This may reflect a lack of consensus on the nosology and diagnostic reliability of this illness. This study aims to assess and compare the clinical and demographic characteristics associated with schizoaffective disorder with those with bipolar disorder and schizophrenia. Clinical, psychometric, and demographic characteristics were estimated through review of studies (n=50) that directly compared under similar circumstances, reducing sampling bias and low diagnostic reliability, schizoaffective disorder (n=2,684), bipolar disorder (n=4,814) and schizophrenia patients (n=10,814).

Patients with schizoaffective disorder, in most categories, had pooled measures that were intermediate or not significantly different from those with bipolar disorder and schizophrenia. Patients with schizoaffective disorder, compared to those with bipolar disorder and schizophrenia, had the highest proportion of women, youngest age of onset of illness, and highest ratings for depression and psychosis. Patients with schizoaffective disorder appeared to have greater similarity to those with schizophrenia than bipolar disorder in clinical categories as well as in psychometric measures.

Vivek Singh, MD: This study fills the knowledge gap as regards demographic, epidemiological and clinical information in patients with schizoaffective disorder as well as aims to clarify the nosological position of this illness in relationship to bipolar disorder and schizophrenia. Patients with schizoaffective disorders appeared to have pooled measures between schizophrenia and bipolar disorder. However, they differed from those with schizophrenia and bipolar disorder in regards to proportion of women, age of illness onset and severity of psychotic and depressive symptomatology. Findings from this study do not indicate that schizoaffective disorder is primarily an affective disorder but do not provide definite clarity of its nosological position between schizophrenia and bipolar disorder. Further investigations need to be undertaken to clarify the apparent resemblance between patients with schizophrenia and schizoaffective disorder since this would impact clinical management.

REVIEW IV

Findling RL, Correll CU, Nyilas M, Forbes RA, McQuade RD, Jin N, Ivanova S, Mankoski R, Carson WH, Carlson GA. Aripiprazole for the treatment of pediatric bipolar I disorder: a 30-week, randomized, placebo-controlled study. *Bipolar Disord* 2013; 15: 138–149.

Bipolar I disorder in pediatric population is a serious and chronic illness associated with functional impairment and increased risk of suicide. There have been controlled studies to assess the efficacy of antipsychotics, including aripiprazole, in the acute treatment of mania. However, despite the understanding that pediatric bipolar patients need long term treatment, there have been no randomized, placebo-controlled studies done to assess the efficacy of these medication in the long term treatment of pediatric bipolar illness. This study is designed to assess the safety, tolerability and efficacy of aripiprazole in pediatric bipolar disorder over 30 weeks.

This study involved a 4 week randomization to acute treatment with aripiprazole 10 mg/day, aripiprazole 30 mg/day, or placebo in children aged 10-17 years (n=296) with bipolar I disorder with index episode of mania or mixed mania. Patients who completed the acute phase in its entirety (n=210), were eligible to continue treatment in a double blind extension phase for 26 week. Efficacy was measured by the total score change on the Young Mania Rating Scale (YMRS).

Less than one third of patients completed the 26-week extension phase of the study, with the highest rates of completers being in the aripiprazole 10 mg/day group. Patients assigned to both aripiprazole doses had greater reduction on the YMRS total score change compared to placebo at the end of 30 weeks. Patients in the aripiprazole groups had longer overall time to discontinuation compared to placebo as well as higher rates of response compared to placebo. In addition, patients assigned to the active treatment groups demonstrated superiority to placebo on Children's Global Assessment of Functioning and Clinical Global Impressions-Bipolar severity of overall and mania scores at endpoint in all analyses. Both the doses of aripiprazole were well tolerated.

Vivek Singh, MD: Pediatric bipolar I disorder is a chronic illness that requires long term management but there is a paucity of data as regards the long term efficacy of various agents used in this illness, including aripiprazole. In this study aripiprazole demonstrated superiority

to placebo on the primary efficacy measure, total score change on the YMRS, as well on several secondary efficacy measures. Findings from this study are limited by the enriched design while generalizability of findings for long term efficacy of aripiprazole is limited by the low rates of completion in all the treatment groups.

SAVE THE DATE

ADVOCACY RESOURCES AROUND THE WORLD

2013 World Mental Health Congress of the World Federation for Mental Health

26 - 28 August 2013

Buenos Aires, Argentina

Website: www.wmhc2013.aasm.org.ar/en/home

2013 ASBDD Conference

3 - 5 October 2013

Melbourne, Australia

Website: www.bipolar-disorders.com.au

26th ECNP Congress

5 - 9 October 2013

Barcelona, Spain

Website: www.ecnp-congress.eu

21st World Congress of Psychiatric Genetics

17 - 21 October 2013

Boston, MA, USA

Website: www.WCPG2013.org

World Psychiatric Association International Congress

27 - 30 October 2013

Barcelona, Spain

Website: www.wpaic2013.org

16th Annual Conference of the International Society for Bipolar Disorders

18 - 21 March 2014

Seoul, South Korea

Website: www.isbd2014.com

4th Schizophrenia International Research Society Conference

5 - 9 April 2014

Florence, Italy

Website: www.schizophreniaconference.org

The International Society for Affective Disorders Congress

28 - 30 April 2014

Berlin, Germany

Website: www.isadconference.com

American Psychiatric Association 167th Annual Meeting

3-7 May 2014

New York, NY, USA

Website: <http://annualmeeting.psychiatry.org/>

ABRATA: The Brazilian Association of Families, Friends, and Sufferers from Affective Disorders. www.abrata.com.br

BIPOLAR Education Foundation (BEF): Takes a community based approach towards Bipolar disorder and Depression education, through programs which engage our key stakeholders and partners including: high schools, sporting clubs, local communities, workplaces, healthcare professionals and governments. www.bipolar-edu.org/

Bipolar Network News (BNN): Provides updates in the latest clinical and research information on bipolar disorder. www.bipolarnews.org.

Child & Adolescent Bipolar Foundation (CABF): Educates families, professionals, and the public. www.bpkids.org

Depression Alliance: UK charity offering help to people with depression, run by sufferers themselves. www.depressionalliance.org

Depression and Bipolar Support Alliance (DBSA): Educates patients, families, professionals, and the public. www.dbsalliance.org

Dutch Association for Manic Depressives: Sponsors psycho-educational courses to provide information and coping skills. www.nsm.nl

Fubipa: In Argentina, is a grass roots organization offering self-help groups, workshops run by psychiatrists, and lectures. www.fubipa.org.ar

GAMIAN Europe: Global Alliance of Mental Illness Advocacy Networks is a non-political, non-sectarian organization dedicated to publishing and promoting information and awareness concerning the incidence and treatment of mental illness. www.gamian.eu

Iberoamerican Network for Bipolar Disorder (IAN-BD): Provides collaboration and exchange between groups and independent investigators from the Iberoamerican area, under the institutional support of ISBD.

www.ian-bd.com

IDEA: In Italy, IDEA works to overcome the stigma and prejudice surrounding depression and bipolar disorders. www.tin.virgilio.it (in Italian)

International Bipolar Foundation: Educates caregivers, consumers and the public, supports research, and advocates for the elimination of stigma. www.InternationalBipolarFoundation.org

Leading Education and Awareness for Depression Pittsburgh (LEAD): A community advocacy nonprofit that promote collaboration throughout the community to address the standard of depression care as a common concern. www.leadpittsburgh.org

Mood Disorders Society of Canada (MDSC): A national non-profit, volunteer-driven organization committed to improving quality of life for people affected by bipolar disorder and related disorders. www.mooddisorderscanada.ca

Public Initiative in Psychiatry: Founded in Russia in 1996 by the doctors and nurses of the Mental Health Research Center of the Russian Academy of Medical Sciences. Member of GAMIAN Europe. Website is also in English. www.pubinitpsy.da.ru

Stanley Medical Research Institute: A nonprofit organization dedicated to eliminating barriers to the timely and effective treatment of severe mental illnesses. www.stanleyresearch.org



THE INTERNATIONAL SOCIETY FOR BIPOLAR DISORDERS

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2013 MEMBERSHIP APPLICATION & RENEWAL FORM

Please complete this form and mail or fax to the above address.

Title: Dr Prof Assoc Prof Mr Mrs Miss Ms Other _____

Name: _____ New Member Renewing Member
(Please print legibly or type) (Please check one)

Preferred mailing address: _____

Office Phone: _____

Home Phone: _____

Fax: _____

Country: _____ E-mail: _____

Professional Information: MD PhD Master's Level Bachelor's Level
 Resident/Trainee Consumer level Student

Area of Specialty: _____ (psychiatry, psychology, pharmacology, etc.)

Would you be interested in writing an article for *ISBD Global*, the Society Newsletter? Yes No
If so, how may we best contact you? Office Phone Home Phone E-mail Fax

MEMBERSHIP TYPES

(Please see breakdown of dues by country on the following page to determine your dues rates.)

- Professional 1 Year Professional 2 Year
 Professional Online (Area 1 & 2 only) Lifetime \$3,000.00 (one time fee)
 Patient or Family Member \$35.00/year

PAYMENT INFORMATION

Check (in US dollars made payable to International Society for Bipolar Disorders or ISBD)

Credit Card: American Express Mastercard Visa Discover

Card Number: _____ Expiration Date (00/00): _____

Card Security Code: _____

Name as it appears on Card: _____

Billing Address: _____

Signature: _____

THANK YOU FOR YOUR SUPPORT!

**INTERNATIONAL SOCIETY FOR BIPOLAR DISORDERS
2013 MEMBERSHIP DUES BY COUNTRY**

Area 1 – Professional Membership: \$150/year or \$285/2 years

Professional Online Membership: \$75/year

Bangladesh	Kenya	Yemen
Egypt	Nigeria	Zimbabwe
Ethiopia	Pakistan	
Georgia	Philippines	
Ghana	Tanzania	
India	Uganda	
Indonesia	Ukraine	

Area 2 – Professional Membership: \$200/year or \$380/2 years

Professional Online Membership: \$100/year

Argentina	Colombia	Peru	Venezuela
Azerbaijan	Ecuador	Romania	
Brazil	Iran	Russia	
Bulgaria	Malaysia	South Africa	
Chile	Mexico	Tukey	
China	Panama	Uruguay	

Area 3 – Professional Membership: \$250/year or \$475/2 years

Australia	Hong Kong	Poland
Austria	Hungary	Portugal
Belgium	Ireland	Saudi Arabia
Canada	Israel	Singapore
Croatia (Hrvatska)	Italy	Spain
Denmark	Japan	Sweden
Finland	Korea, South	Switzerland
France	Netherlands	Taiwan
Germany	New Zealand	United Kingdom
Greece	Norway	United States

If you cannot locate your country of residence to the left, please see the complete list of country classifications online at:

http://www.isbd.org/images/PDF/Dues_by_Country_List_2013_Full.pdf

Please feel free to contact the Society offices regarding any membership or dues questions that you may have.

Thank You to All ISBD Members

Thank you ...

With a membership representing approximately 50 countries and a scientific board representing 15 countries, the ISBD reflects the democratic spirit of an international organization.

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Contribute to the ISBD Global Newsletter

The newsletter of the *International Society for Bipolar Disorders* is a member service. As such, it prints information about the operation and activities of the organization, member news, feature articles, advocacy issues, letters to the editor, notices of events of interest to the membership, advertisements and other information relevant to both professional and lay members interested in all aspects of bipolar disorders.

We encourage you to send any materials that support and reinforce this function. The newsletter is published quarterly. Deadlines for submission of materials for 2013 are as follows: March 1, June 1, September 1, and December 1.

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Instructions to Authors

Submissions should be typewritten, double-spaced and may be submitted via e-mail in a format compatible with Microsoft Word to Mariya Dobrovinskaya at mariyad@isbd.org. Please follow APA style for any in-text citations and style questions and arrange the list of references in the order of their occurrence in the text. Please send any photo image files in a high resolution .tiff, Photoshop, or comparable format. The *ISBD Global* reserves the right to edit a manuscript to its style and space requirements and to clarify its presentation.



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