
SLTBR NEWSLETTER

Society for Light Treatment and Biological Rhythms

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MAY 1989

Officers, Directors (*), Committee Chairs: **Alfred J. Lewy***, M.D., Ph.D., *President*, Oregon Health Sciences University; **Norman E. Rosenthal***, M.D., *President-Elect*, National Institute of Mental Health; **Anna Wirz-Justice***, Ph.D., *Vice President*, Psychiatrische Universitaetsklinik Basel; **Michael Terman***, Ph.D., *Secretary, Newsletter Editor*, New York State Psychiatric Institute; **Carla J. Hellekson***, M.D., Fairbanks Psychiatric and Neurologic Clinic; **Robert L. Sack**, M.D., *Treasurer*, Oregon Health Sciences University; **David Avery**, M.D., *DSM-IV Liaison Committee*, Harborview Medical Center, Seattle; **George C. Brainard**, Ph.D., *Federal and Industrial Relations Committee*, Jefferson Medical College, Philadelphia; **Charmaine I. Eastman**, Ph.D., *Membership Committee*, Rush-Presbyterian-St. Luke's Medical Center, Chicago; **Daniel F. Kripke**, M.D., *Annual Meeting Committee*, Veterans Administration Medical Center, San Diego; **Leslie M. Powers**, M.D., *Insurance Liaison Committee*, Columbia University, New York.

SCHEDULE SET FOR ANNUAL MEETING

The summer solstice meeting, 21 June 1989, at Building 36 on the NIH campus in Bethesda, MD, includes a rich set of research presentations and two important open committee forums. Please plan to participate. If you are not yet a member, or have not yet preregistered, please submit the enclosed application and preregistration forms *no later than 10 June*. Other than the membership requirement, there will be no registration fee. Corporate Members may send *one* representative per membership; any additional corporate representatives should arrange in advance for individual Associate Membership.

08:00-08:30 Registration
 08:30-10:30 Paper Session I
 10:30-10:45 Coffee/Poster Break
 10:45-12:15 Committee Forum: DSM-IV Liaison
 12:15-13:15 Lunch/Light Break
 13:15-15:15 Paper Session II
 15:15-15:30 Coffee/Poster Break
 15:30-16:30 Paper Session III
 16:30-17:30 Committee Forum: Federal/Industrial Relations
 17:30-18:00 Business Meeting / Posters

Paper Session I

Kern: Rate of change of sunlight parameters: effects on human physiology.

Hellekson and Booker: Epidemiology of SAD in Fairbanks, Alaska.

Partonen et al.: Bright white light treatment in Finland.

Armstrong et al.: Human melatonin suppression by light at night.

Oren et al.: Supersensitivity of SAD patients to dim light.

Gaddy et al.: Light-induced melatonin suppression in winter depression.

Terman et al.: Thirty-minute light therapy at 10,000 lux.

Graw et al.: A classic symptom revisited: diurnal variation of mood.

DSM-IV Liaison

Avery, Dunner, Rosenthal, Spitzer, and floor discussion. Questions include: difficulties with the DSM III-R formulation, validation of SAD, structure and organization of a new cross-center study.

Paper Session II

Lam et al.: UV vs. non-UV light therapy for SAD.

Lebeque et al.: Morning full spectrum vs. cool white light in SAD.

Avery et al.: Phase-typing SAD using a constant routine.

Levendosky et al.: Core body temperature in patients with SAD and controls in summer and winter.

Depue et al.: Effects of light on the biology of SAD.

Lewy et al.: The phase-shift hypothesis for winter depression.

Wirz-Justice et al.: Most SAD patients are phase delayed in winter but respond equally to morning or evening light.

Joseph-Vanderpool et al.: Blunted response to corticotropin-releasing hormone (CRH) in patients with SAD is corrected by light treatment.

Paper Session III

Richter et al.: Light imagination with hypnotized winter-depressed patients

Stewart et al.: Is SAD a variant of atypical depression? Differential response to light therapy.

Yahia et al.: Light therapy for detoxified male alcoholics.

Parry et al.: Melatonin and phototherapy in premenstrual depression.

Federal/Industrial Relations

Brainard, Waxler, and floor discussion. Questions include: safety guidelines for light treatment, criteria for proof of efficacy, and avoiding fraudulent claims.

Posters

Schlager et al.: Dawn twilight therapy for winter depression.

Oren et al.: Effects of different light wavelengths in SAD.

Doghramji et al.: Two- vs. four-hour evening phototherapy of SAD.

Deltito et al.: The effect of bright light treatment on non-SAD unipolar and bipolar spectrum depressed patients.

Brainard et al.: Treatment of SAD with a portable, head-mounted phototherapy device.

Williams: Photostasis: regulation of daily photon-catch.

Teicher: Rapid resolution of SAD by low-dose alprazolam.

Lahmeyer et al.: Sleep and core body temperature in SAD patients during treatment with morning and evening light.

McGrath et al.: A preliminary report on seasonal alcohol abuse and dependence.

Powers et al.: Bright light treatment of night-shift workers.

SOLSTICE CELEBRATION

All meeting attendees are invited to cocktails, dinner, and evening festivities at a favorite Washington night spot, "Cities." It will, however, be at your own expense. We need your response *without delay* in order to place the reservation (*RSVP form enclosed*). North Americans please respond to Dr. Norman Rosenthal, Europeans and others to Dr. Anna Wirz-Justice.

THE DSM-IV DEBATE, CONT.

In advance of the April 1989 meeting of the DSM-IV Work Group on Mood Disorders, several SLTBR members sent the memorandum below in response to Dr. David Dunner's preliminary report (see Newsletter #3). The debate proceeds with an open committee forum at the SLTBR annual meeting, to be chaired by Dr. David Avery.

As individuals with a special interest in the classification of Seasonal Affective Disorders, we do not think [the preliminary report] was a fair and balanced representation of a clinical entity for which we believe there is increasing evidence of validity; nor do we consider the draft a useful summary for clinicians and researchers working with patients who suffer from this condition. . . . We outline our concerns with his report below:

Data Base for the Category

Dr. Dunner states that "the major data base for inclusion of seasonal pattern in DSM-III-R apparently is the article by Rosenthal et al. (1984, *Arch. Gen. Psychiatry* 41:72-80)." In the first place, at the time that the decision was made to include "seasonal pattern" in DSM-III-R (winter 1986) there was mounting evidence for the validity of the syndrome, at least as judged by several different groups of investigators working in this area. It is not the purpose of this response, however, to dwell on the wisdom of the inclusion of the entity into DSM-III-R, which is not of immediate relevance. Rather, we would like to discuss the current status of the concept.

Dr. Dunner's report, while referring to a few articles, does not give an accurate picture of the activity in the field. In fact, an editorial in *Current Contents* (January 1988) targeted the interacting fields of chronobiology, seasonality, and depression as one of the most active areas of ongoing medical research. In addition to the description of SAD in the study by Rosenthal et al., there are at least 30 studies that describe patients of remarkably similar clinical profile and course and at least 26 studies

report a beneficial effect of bright light in these patients. While few studies have examined the efficacy of bright light in nonseasonal depressives, those that have done so suggest no antidepressant response of comparable magnitude. Thus seasonal pattern has both descriptive validity (its clinical features can be differentiated from other forms of depression) and predictive validity (differential therapeutic response). Given the establishment of both descriptive validity, namely the seasonality of the condition, and predictive validity, namely the response of symptoms to bright light, it is surprising to us that a group devoted to nosology should not seize with greater enthusiasm upon such a diagnostic category that [shows construct validity and implies a theory of etiology].

Critique of the Initial Data Base

Dr. Dunner criticizes the family history data and laboratory procedures employed in defining the category of SAD. While we acknowledge the validity of his criticisms, we wish to emphasize that the validity of a category has not historically depended on family loading or on the demonstration of unique laboratory findings. With respect to the latter, these are now beginning to appear in the literature.

Seasonal Pattern and Depression NOS

Dr. Dunner expresses concern that DSM-III-R allows for allocating "seasonal pattern" to people meeting the diagnosis of depressive disorder not otherwise specified (NOS). He states, "A worrisome thought is that, by including individuals who have seasonal pattern associated with depression NOS, non-ill individuals may be included, thus confounding the data." Certainly researchers need to use caution in applying the diagnosis of depressive disorder, NOS, and should apply it only to individuals whom they believe to have a mental disorder. If researchers include such patients, they should make this clear in reporting their results. However, we see no disadvantage in a classification that at least allows for the possibility that such patterns may exist. Indeed, recent evidence does suggest that many individuals suffer from a mild, yet dysfunctional, winter syndrome that does not reach the severity threshold for Seasonal Affective Disorder as it was originally conceptualized, but that nevertheless does respond to light therapy (Kasper et al., *Arch. Gen. Psychiatry*, in press).

Relationship of Seasonal Pattern to Atypical Depression

Dr. Dunner indicates that the relationship between these two disorders is unclear. While we agree that some clinical features of these two syndromes are superficially similar, not all patients with seasonal pattern have atypical depressive symptoms and not all patients with atypical depression show a seasonal

pattern. Furthermore, a recent study by Stewart et al. (*SLTBR Annual Meeting, 1989*) suggests [that light therapy is ineffective] in patients with non-seasonal atypical depression.

Despite Dr. Dunner's perception of sluggishness in the field, we believe that there is extensive interest in defining a "seasonal pattern" category that is useful for clinicians, researchers and, most important, for the patients themselves. We are in the process of actively debating what the best criteria for this category [are. If these turn out to be the current criteria,] then there will be no substantive disagreement between the outcome suggested . . . by Dr. Dunner and the opinions of those who care most strongly about this category. Nonetheless, we hope that the tone of the final committee report on this condition is more enthusiastic and encouraging than the negative tone of the draft report, which we believe is unwarranted on the basis of the existing evidence.

Norman E. Rosenthal, M.D., Robert L. Spitzer, M.D., Richard Depue, Ph.D., Carla Hellekson, M.D., Alfred J. Lewy, M.D., Ph.D., Jonathan W. Stewart, M.D., Michael Terman, Ph.D., Thomas A. Wehr, M.D., Janet B.W. Williams, D.S.W.

MAKING CLAIMS:

WHO'S ON THE SAME WAVELENGTH?

At a time when the scientific knowledge of the general U.S. public is in marked decline, it is important that scientists take greater responsibility for teaching about their work. In an area such as light therapy, when our voices are weak or absent, the vacuum will often be filled by those with a product to sell. We cannot claim to have all the answers--or to be unbiased -- but we can do more to involve ourselves in public dialogue and we must be vigilant about the ways our work is used by various commercial interests (including our own).

The phenomenon of SAD and the treatment of fall/winter SAD with bright light are receiving considerable coverage by the popular press. There is often a divergence, however, between the interests of authors writing for the lay public and the interests of the research community. One important issue relates to the effects of different wavelengths of light. [Ed.'s note: several relevant papers will be presented at the *SLTBR Annual Meeting*.] "Full-spectrum" lighting seems to have captured the attention of the purchasing public, and a variety of products are marketed around this notion. It is common for SAD research to be mentioned in this context, which may appear to add credence to

various claims, despite the fact that data have not yet strongly supported a specific therapeutic role for any discrete spectral band in the treatment of SAD.

One example comes from a recent article in a new-age publication out of Boston, *EastWest: The Journal of Natural Health & Living*. The March 1989 issue contains a lengthy and well-researched article, *Bringing the Sun Indoors*, focussing on the putative virtues of "full-spectrum" lighting. It includes a section on SAD in which the importance of intensity and duration are mentioned in passing, and the Medic-Light 10,000 lux unit is promoted. However, this section is a brief aside in a lengthy treatment of claims by John Ott and others regarding the health effects of various components of the spectrum.

Many entrepreneurs are excited by the commercial potential of lighting devices aimed at the depressed or dysphoric customer. Furthermore, some procedures are being promoted as "light therapy" which bear little relation to those developed and studied by the scientific community. One case along these lines is material produced by the Downing Institute of San Francisco in support of an expensive program of intervention known as the Downing Technique. To quote their material, "The DOWNING TECHNIQUE (SM) is a method of Neurosensory Development whereby vital life energy, specifically, the energy flow within the brain and nervous system, is increased and optimized through non-invasive, non-medical, direct sensory stimulation. The primary stimulation is visual in nature and is produced by special bioresonant light* rays emitted by an instrument expressly developed for this process called a Lumatron (TM) L.E.S. Both the DOWNING TECHNIQUE and the Lumatron were developed by John Downing O.D., Ph.D. during 20 years of clinical observation in the study of Neurosensory Stimulation. . . . *Bioresonant light is a superior, more biologically active light generated by the Lumatron L.E.S. The proprietary process which produces this type of light is protected with patent pending status."

The promotional packet we received is a marvel of scientific-sounding prose which, however, goes far beyond the bounds of widely-accepted neurobiological concepts into claims that they assess "imbalances in the life energy rhythm" and "decreases in life energy" by means of "specially adapted, non-invasive non-medical measurements, including measurements of visual fields, visual phorias, and critical flicker fusion, accompanied by an extensive constitutional profile questionnaire."

The heart of Downing's intervention is, apparently, "stimulating the retina with specific wavebands of bioresonant light" in order to generate "a color-coded photoelectric nerve impulse which travels through the optic nerve to the hypothalamus. (Out of eleven effective wavebands of color, the specific color stimulus chosen for each individual depends upon the particular imbalance of life energy rhythm.)"

Depression is one of 56 broad areas in which the Downing Institute states that its clients report improvements, and the Institute's references to prominent SLTBR scientists are cause for concern. For example, they quote Dr. Norman Rosenthal out of context ("The change in visual fields is of special interest to me because it represents an objective physiological [*sic*] change. . . ."), in a highly-questionable attempt at bolstering credibility.

Included among the promotional materials is a manuscript by Jill Ammon-Wexler, Ph.D. (counseling psychology), of the Innerspace Body/Mind Therapy Center in Los Gatos, CA. It is represented as a "preliminary report" of the effects of "Downing-type phototherapy" on subjects demonstrating symptoms of a variety of DSM-III phobic disorders. In her introduction, Ammon-Wexler refers to studies of Drs. Lewy, Hellekson, Rosenthal, and Wehr, stating that "the effectiveness of color therapy in seasonal affective disorder . . . has also been cited by numerous experimenters and clinicians." None of the papers she refers to uses the term "color therapy," and they do not describe interventions that would warrant such a term. Continuing with even broader claims -- unsubstantiated by the scientists she has cited -- Ammon-Wexler concludes that ". . . color therapy has also been found effective as a treatment for manic-depressive patients, and for a wide variety of psychiatric conditions."

With apologies for this extensive rendition, I want to emphasize that SLTBR members must become aware of how their work can be (mis)used in promoting sales of various devices and systems to the public. We need to explore more effective ways to work in partnership with lay persons to clarify the real relevance of our scientific work to the public interest.

Janis Anderson, Ph.D., Massachusetts Mental Health Center, 74 Fenwood Road, Boston, MA 02115; Tel 617-734-1300 ext 412; Fax 617-732-4015.

WELCOME, MEMBERS!

The Board of Directors is delighted to report that response to our initial membership drive has been enthusiastic -- more than 100 colleagues have joined, including leading researchers in light therapy, circadian rhythms, sleep disorders, photobiology, and psychiatry. Several applications have been received subsequent to compilation of this list -- next time! We will publish a complete roster with mailing and electronic addresses, etc., when the application rate wanes.

Regular Members

Torbjorn Akerstedt, Janis Anderson, Aihaly Arato, Josephine Arendt, Stuart Armstrong, David Avery, George Brainard, Joanne Brown, Scott Campbell, Mary Carskadon, Roger Cole, Charles Czeisler, Joseph Deltito, Richard Depue, Derk Jan Dijk, Karl Doghramji, David Dunner, Charmane Eastman, Arlene Frank, James Gaddy, Christian Gillin, Frederick Goodwin, John Hallonquist, Carla Hellekson, Rudi van den Hoofdakker, Frederick Jacobsen, Siegfried Kasper, Herbert Kern, Donald Klein, Wilfried Koehler, Daniel Kripke, Henry Lahmeyer, Raymond Lam, Breck Lebegue, Alfred Lewy, Gila Linsley, Odd Lingjaerde, Harry Lynch, Andrés Magnusson, Robert McGrath, Margaret Moline, Timothy Monk, Martin Moore-Ede, Peter Mueller, Daniel Oren, Barbara Parry, Leslie Powers, Frederic Quitkin, Charlotte Remé, Howard Roffwarg, Norman Rosenthal, David Schlager, Clifford Singer, Robert Skwerer, William Sonis, Karen Stewart, Jonathan Stewart, Martin Teicher, Michael Terman, Juan Terman, Michael Thase, James Walsh, Morris Waxler, Mark Webb, Thomas Wehr, Peter Whybrow, Theodore Williams, Anna Wirz-Justice, Richard Wurtman, Judith Wurtman.

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If you are considering applying for individual membership (*form attached*), please note criteria:

Regular -- for researchers with Ph.D., M.D., or equivalent degree who are actively working in the field of bright light treatment or biological rhythms. Only regular members have voting privileges. The Board of Directors will vote on applications for regular membership.

Associate -- for any interested persons such as scientists in other fields, clinicians, patients.

Student -- for students pursuing an advanced degree and engaged in research related to bright light treatment or biological rhythms. Anyone holding an M.D., Ph.D. or comparable degree is not eligible for student membership, i.e., postdoctoral fellows, residents.

GUILFORD OFFERS SLTBR MEMBERS DISCOUNT ON ROSENTHAL-BLEHAR VOLUME

Seasonal Affective Disorders and Phototherapy, the new research compendium (*for review, see Newsletter #3*), is available to members at 10% discount. Also, *Biological Rhythms and Mental Disorders*, edited by D.J. Kupfer, T.H. Monk, and J.D. Barchas. A general \$10 discount is available by using the coupon enclosed in Guilford's current *Quarterly Update*. List price of both volumes is \$45. Shipping within U.S., \$2.50 (first item), \$1 (additional items). Phone 800-365-7006 (in NY 212-431-9800), or write to Guilford Publications, Inc., Dept. Q12, 72 Spring Street, New York, NY 10012.

BULLETIN BOARD

Members are invited to post brief position announcements in the Newsletter, at no charge.

Postdoctoral position in areas of bright light and human circadian rhythms, SAD, and shift work. Contact Charmane Eastman, Ph.D., Biological Rhythms Research Lab, Rush-Presbyterian-St. Luke's Medical Center, 1653 West Congress Pkwy., Chicago, IL 60612-3864. Tel 312-942-4472; MCI Mail 363-7775; Fax 312-942-2387 attn 2-1232.

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