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SSPD WEBSITE:

<http://www.sspd.org.uk/>

DRUG DISCRIMINATION DATABASE:

<http://www.dd-database.org/>

As in the past, SSPD will sponsor an evening paper session at the Society for Neuroscience meeting that is to be held in San Diego, November 10-15. Information on the SfN meeting may be obtained

at their website: <http://www.sfn.org/>. The SSPD session is scheduled for Wednesday, November 14, from 5:30 - 9 p.m. at the San Diego Convention Center, Rm. 26A. The annual business meeting will be held prior to oral presentations of current research.

For SSPD members who are current on their dues (we thank you), there is no fee for attending the session. (Members who are not current on their dues can pay them at the session.) Non-members will be charged a nominal fee. Food and drink will be provided, and there will be a cash bar for extra drinks.

The deadline for receipt of abstracts is **October 31, 2001**. We particularly encourage students and new members to present their research on the stimulus properties of drugs at this informal forum. The time allotted for each presentation will depend on how many presentations are accepted; in any event, no less than 15 min will be allowed for each speaker. Please send abstracts to Jenny Wiley (electronic format is appreciated). Jenny's contact information is on the left side of this page.

SSPD Website Update

Thanks to our webmaster, Dominic Stolerman, the SSPD Website continues to be up and running. For the past several months, we have been choosing a published article to highlight on the website. If you have suggestions for future articles that may be of methodological interest to our members, please contact the webmaster.

Proposed Changes in Bylaws

There has been a motion made to the Executive Committee to modify the organization's by-laws to elect the President of the Society for a two-year term. The tenure of the president would alternate between the tenure of the Secretary/Treasurer, such that the President would take office in the odd-numbered years and Secretary/Treasurer would take office in the even-numbered years. This would allow for a smoother transition between experienced organizers and board members.

As the current bylaws read, every other year both the President and Secretary/Treasurer of the organization are replaced. By alternating the two year tenure for both positions there would be more continuity and experience for a smoother organization of meetings. The vote on these bylaw changes will be conducted at this year's business meeting in San Diego. If passed, changes would be effective with the officers elected in the upcoming election; i.e., the new Secretary/Treasurer would serve 2002-2003 with a new Secretary/Treasurer in 2004; the new president-elect would serve as president-elect during 2002 and would become president in 2003-2004 with election of a new president-elect for 2005. Mike Swedberg, the president for 2002, would serve as past-president for two years in order to maintain the four-member board until the changes are fully in place. The relevant sections of the bylaws would be changed to read as follows:

ARTICLE IV. Officers

IV.1 The SSPD shall have four officers: President, President-elect, Immediate Past-President, and Secretary/Treasurer. These four officers shall comprise the Executive Committee of the SSPD.

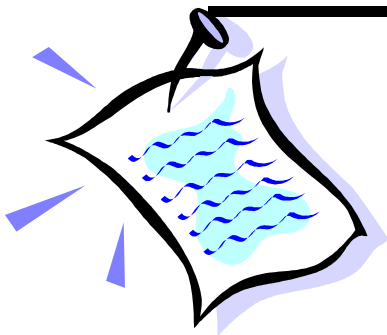
IV.2 The president shall serve for two years, beginning in an odd-numbered year (e.g., 2003-2004). The tenure will overlap the two-year term of the Treasurer/Secretary, which will begin in an even-numbered year (e.g., 2002). During this term, the president will have primary responsibility for the scientific meetings and other activities of the society. Notwithstanding, all substantive actions of the president should be approved by at least three members of the Executive Committee before they are implemented. The president shall schedule, announce, and make arrangements for all SSPD meetings and plan the program of these meetings in cooperation with the President-elect. The president will also represent SSPD to the scientific public and to government agencies.

IV.3 The President-elect shall serve in this office for one year before becoming president. During this year the president-elect shall develop advance plans for SSPD meetings to be held during the following year. The president-elect shall assist the president to develop and implement the current meetings of the society, to as great a degree as requested. Arrangements for meeting rooms shall be the responsibility of the president-elect. The president-elect also will act as editor of any newsletter issues and will be responsible for bulk mailings to the membership.

IV.4 The secretary/treasurer shall serve for two years, beginning in an even numbered year (e.g., 2002-2003). The tenure will overlap the two year term of the President, beginning in an odd numbered year (e.g., 2003-2004). The secretary/treasurer shall keep financial records and minutes of SSPDs actions, shall keep SSPD membership records, shall act as membership chairman, shall supervise the nomination and election of new officers, shall collect membership dues, and shall be responsible for any property of the society.

Nominations for SSPD Officers

We are searching for persons who are interested in serving as officers in the Society for the Stimulus Properties of Drugs (SSPD). Election for officers will take place next month and new officers will begin serving in January 2002. We will be electing a new secretary/treasurer and a new president-elect. The next president is Mike Swedberg. David Gauvin will be the past-president. Secretary/treasurer will serve for a two-year term. Mike will serve a one-year term as president, but if approved at the annual meeting, the next president (i.e., president-elect) will serve a two-year term (see proposed changes in bylaws on previous page). Hence, whoever is elected president-elect will be an officer of SSPD for 4 years (one year as president-elect, two years as president, and one year as past-president). The year as president-elect will serve as a "training time" for the future president. Then, s/he will have 2 years in which to develop his/her vision for SSPD's future. If you or someone you know is interested in being nominated for one of these positions in the coming election, please contact Jenny Wiley as soon as possible so that we can put your name on the ballot.



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TREASURER'S REPORT

9/13/00 - 10/18/01

submitted by Jenny Wiley, Sec/Treas, SSPD

Beginning Balance 9/13/00		10,081.24
Expenses		
Newsletter xerox	112.08	
Postage & Fed-Ex	245.45	
Website Registration & Maintenance	830.17	
Bank service charges	12.00	
Neuroscience 2000 meeting	1974.52	
EBPS 2001 meeting in Marseille	3517.81	
Neuroscience 2001 program listing	250.00	
Income		
Dues	1440.00	
		1440.00
Balance as of 10/18/01		4579.21



Update on Drug Discrimination Database

The database will contain 3,372 citations when the October 2001 update is in place. I am most grateful to those members of SSPD who have sent lists of their publications to ensure that the database is as comprehensive as possible, and I also thank the many members who returned the questionnaire that we sent out earlier this year.

In the 12 months from June 1997 to May 1998, there were over 8,000 requests for the database home page. During the single month of May 1998, the home page of the Database was requested no less than 2,981 times, perhaps reflecting updating of the database during the previous month. The preceding figures may be compared with those for the period from September 2000 to March 2001, during which the home page was served over 19,000 times (i.e. about 100 times per day). These figures indicate that the site is accessed four to five times more frequently now than three years ago.

During a recent six-month period, an average of 254 pages per day were requested, or about 7,725 per month. These requests originated from 14,174 different visitors. The site transferred a total of 1,381 GB of data to users over this period, an average of just over 7.6 GB of data per day. The busiest weeks for the search engine during the six month period were the weeks beginning 22nd and 29th October and 21st January, a usage pattern that may reflect grant NIH renewals due on 1st November and 1st February, respectively. Regarding file downloads, 385 PC files and 195 Macintosh files were downloaded. The distribution of file downloads probably reflects the relative popularity of PC, Macintosh and other platforms. Sixty-four files were sent using the "email search results to yourself" facility. Due to limitations in the software systems available for quantifying usage of web sites, the real number of requests for the site may be different from those indicated by the preceding data.

Users of the web site are advised that the list of methodological terms is expanded from time to time, and that careful use of this feature enables rather precise searches to be carried out. A browse through this list of search terms that may be seen on the website will give an idea of what is possible.

The future of the database depends largely on the success of the current application for renewal of the NIDA grant that supports it. If the application is successful, the database should be secure for five more years. The intention is to redesign the website to provide enhanced searching facilities and increased convenience for users. The appearance of the site would be changed to give it a more up-to-date look and to reduce any boredom you may have experienced by viewing it so many times, and of course I shall have the resources to update the files regularly as in the past. I would like to end by acknowledging the assistance of Lisa de Smet in identifying and coding the citations, and Jonathan Kamien for maintaining the website and for making many constructive suggestions for developing it.

Ian Stolerman
Institute of Psychiatry, King's College London

Highlights of EBBS/EBPS Satellite Meeting

The Saturday SSPD paper session in Marseille, which immediately preceded the start of the joint meeting of EBBS/EBPS, had a small, but devoted, audience. Each of the five presentations generated plenty of lively discussion. Titles and abstracts for each presentation are provided below for those who were unable to attend the meeting.

Abstracts from Marseille Meeting

Flipping biased coins: statistical analyses of quantal drug discrimination data

Wouter Koek, Centre de Recherche Pierre Fabre, Castres, France

Results of drug discrimination tests are often classified as “full substitution”, “no substitution”, or “intermediate responding”, but different criteria are used, and formal rules are lacking. To classify test results objectively, it may help to examine whether they are significantly different from the results obtained under training conditions. For quantal test data, this means comparing the proportion of subjects selecting the drug-appropriate response (DR) during a test with those during training, and assessing the statistical significance of differences among these proportions. Conventional statistical tests of such differences, however, make restrictive assumptions, and lack sensitivity. Sensitive statistical tests can, nevertheless, be developed by taking the performance of the discrimination, once acquired, into account. From this performance, the probabilities of DR selection after saline and after the training dose are estimated for each subject. Based on these probabilities, the statistical significance of differences between test results and training performance can be assessed analytically by applying binominal distributions, but can be examined also by means of Monte Carlo simulations consisting of Bernoulli trials. Unlike classical statistical approaches, Monte Carlo simulations and resampling methods do not restrict the design of drug discrimination tests. Moreover, they allow one to examine statistically not only the effects of individual doses, but also other aspects of drug discrimination test data. For example, they can be used to examine the shape of the dose-response curve (e.g., monotonic, biphasic), without requiring equally spaced doses and equal sample sizes. And they can be used to estimate 95% confidence limits of ED50 values, without the assumptions of the Litchfield and Wilcoxon method. It is hoped that these procedures, which can be carried out with Microsoft Excel, will be helpful to analyze and classify drug discrimination test results.

Bupropion: Is it a nicotine “replacement” therapy?

Jenny L. Wiley, Kari L. LaVecchia, Billy R. Martin, and M. Imad Damaj

Virginia Commonwealth University, Department of Pharmacology & Toxicology, Richmond, VA, U.S.A.

The antidepressant bupropion is commonly prescribed for tobacco cessation therapy. Investigation of the overlap in discriminative stimulus effects of bupropion and nicotine was initiated in the present study. In rats trained to discriminate 0.4 mg/kg (-)-nicotine from saline in a two lever drug discrimination procedure, both nicotine and bupropion dose-dependently substituted for the training dose. Whereas nicotine’s discriminative stimulus effects were blocked by the noncompetitive nicotinic acetylcholine antagonist mecamylamine, those of bupropion were not. Previous work had shown that bupropion shares discriminative stimulus effects with other dopamine transport inhibitors, including cocaine and methamphetamine. The fact that nicotine’s discriminative stimulus effects also partially overlap with those of cocaine and amphetamine suggests that bupropion may be producing its nicotine-like discriminative stimulus effects in part through its actions on dopaminergic neurotransmission. Further, these results suggest a dopaminergic component to the discriminative stimulus effects of nicotine. (Research supported by NIDA grant DA-05274.

Abstracts (continued)

Drug trace discrimination with nicotine, morphine and their antagonists

I.P. Stolerman, E. Childs, B. Hahn, E.A. Mariathasan and A. Morley

Section of Behavioural Pharmacology, Institute of Psychiatry, King's College London, London, UK

In typical drug discrimination experiments, subjects are exposed to psychoactive substances both prior to and during training sessions. To determine whether pre-session effects of drugs can serve as discriminative stimuli, rats were trained in a modified two-lever discrimination procedure with food reinforcers presented on a tandem VI-FR schedule. Five minutes after injection of nicotine (20 min pre-session) or saline, the nicotine antagonist mecamylamine was administered to block effects of nicotine during training sessions. Similarly, the action of morphine (30 min pre-session) was terminated by administering naloxone 10 min before training sessions. Stimulus control by drug states was acquired slowly and, typically, the accuracy of lever selection was no more than about 75% after 120 or more training sessions. Extinction tests confirmed stimulus control by nicotine in the presence of mecamylamine and by morphine in the presence of naloxone. However, mecamylamine and naloxone attenuated the response-rate reducing effects of nicotine and morphine respectively. The discriminative effect of nicotine, although weak, was related to the dose administered. A large dose of naloxone administered prior to the morphine blocked stimulus control. Drug effects present prior to training sessions may acquire stimulus control over behaviour, although other explanations of the data are possible. Stimulus control by drug states was less pronounced than in typical drug discriminations due to the time between termination of drug effects and training; the procedure may be analogous to classical conditioning with a CS-US interval that is excessively long (research supported by NIDA DA--5543).

Discriminative stimulus effects of ethanol in C57BL/6J and DBA/2J mice

Keith L. Shelton

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No abstract available at press time.

Discrimination studies on BZ1 selective agonists and antagonists in rhesus monkeys

Charles P. France and L. R. McMahon

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Gamma-hydroxybutyric acid (GHB), a naturally occurring metabolite of gamma-aminobutyric acid (GABA), has been used therapeutically and is also an emerging drug of abuse. The mechanisms that account for the therapeutic as well as the abuse-related effects of GHB are not fully understood. Discriminative stimulus effects of GHB have been assessed in several studies and are reported to comprise ethanol-like as well as GABAA and GABAB related components. The goal of the current study was to see whether stimulus control could be established and maintained with GHB in pigeons. Five pigeons received i.m. injections of vehicle or 100 mg/kg GHB 15 min prior to 15-min response periods during which food was available under a FR 20 schedule. Stimulus control was established after an average of 35 training sessions. Discriminative stimulus effects of the training dose of GHB were no longer evident 60 min after i.m. injection. Responding on the GHB-associated response key was dose-related with doses of 100 mg/kg and larger occasioning >80% drug-key responding. Up to a dose of 178.0 mg/kg, GHB did not systematically alter rates of key pecking. The GHB discriminative stimulus was not mimicked by the positive GABA-A modulator diazepam, up to doses of diazepam that eliminated responding. Small to moderate doses of 1,4-butanediol, purportedly a precursor of GHB, also failed to substitute fully for GHB. These results provide clear evidence for stimulus control with GHB in pigeons and further suggest that the mechanism of action of GHB under these conditions might be independent of GABA-A receptors. Supported, in part, by a NIH Research Career Development Award (DA00211) to CPF.

Society for Stimulus Properties of Drugs

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