

MEETING NEWS

*New Orleans
Nov. 2000*

SSPD will sponsor an evening paper session at the Society for Neuroscience meeting that is to be held in New Orleans, November 4-9. The SSPD session is scheduled for **Wednesday, November 8, from 5:30 to 9:00 p.m.** and will consist of a short business meeting followed by oral presentations.

(PLEASE NOTE: Due to an unavoidable conflict, the night on which the session will be held is different from previous years.)

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 **September 30, 2000**. 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).

This year we will have two **invited speakers**: **Werner J. Schmidt** (Zoologisches Institut, Neuropharmakologie, Universität Tübingen Mohlstr., Tübingen, Germany) and **Paul Vezina** (Department of Psychiatry, Committee on Neurobiology, The University of Chicago, Chicago, IL). Drs. Schmidt and Vezina will begin the scientific session with a discussion of drug sensitization. Abstracts of their presentations are presented on page 4 of the newsletter. Volunteer presentations will follow.

After many years absence, a number of behavioral pharmacologists attended the June meeting of the American Society of Pharmacology and Experimental Therapeutics (ASPET) to promote the recent formation of a Behavioral Pharmacology division. Along with our molecularly-minded colleagues, we braved a deluge of raindrops to arrive at the Hynes Convention Center in Boston and listen to some interesting and informative talks and to view posters. In support of the new section formation, SSPD sponsored a successful and well-attended feast and paper session. The science part of this session focused on methodological issues related to drug discrimination. The following papers were presented:

*Boston
June 2000*

Ellen Walker	Low efficacy agonists as discriminative stimuli: some generalizations
Carol Paronis	Preparing for tolerance studies in midazolam-discriminating monkeys: when a lack of effect is a good thing

ASPET Meeting in Boston (cont.)

- Jonathan Katz Response rate criteria for inclusion of lever selection data - do they matter?
- Nancy Ator Drug stimulus control and low response rates: rule-governed behavior in the rat
- Wouter Koek Flipping coins - towards a formal definition of intermediate responding

Special thanks to the presenters and to all those who participated in the discussion of each paper.

New Members

The Executive Committee would like to welcome our the new members who have joined since the last newsletter was sent:

- Allison Chaumer, Ph.D. National Institute on Drug Abuse, Intramural Research Program, Baltimore, MD
- S. Barak Caine, Ph.D. McLean Hospital, Alcohol and Drug Abuse Research Center, Belmont, MA
- J. David Leander, Ph.D. Eli Lilly and Company, Indianapolis, IN

Nominations for Officers

Do you (or someone you know) want to be President? Since we already have Al Gore and George W. Bush as candidates for the U.S. President, we'll leave the mud-slinging commercials and high cost politics to them. SSPD is in need of nominations for the offices of President and Secretary/Treasurer. We are asking that any SSPD member who would like to be a candidate for either of these offices to please send their name and contact information to Jenny Wiley. The person who is elected president will serve as President-Elect for the year 2001 and will serve as President in the year 2002. The Secretary/Treasurer serves a two-year term, beginning in January 2001. Nominations are needed as soon as possible.

SSPD Website Update

Thanks to our webmaster, Dominic Stoleran, the SSPD Website continues to be up and running. As mentioned in the last newsletter, we now have listed contact information for all SSPD members. There is a simple form of password protection to prevent access by casual visitors to the site. The password may be obtained from the printed version of this newsletter or by contacting Jenny Wiley.

If you find that any of your contact information is incorrect, please e-mail Jenny Wiley with updated information.

Invited Speaker Abstracts: SSPD Evening Paper Session at Society for Neuroscience Meeting

Can drug cues represent a context to which sensitization can be associated?

Werner J. Schmidt, Zoologisches Institut, Neuropharmakologie, Universität Tübingen, Tübingen, Germany

Behavioural sensitization refers to the intensification of a behaviour upon repeated administration of a drug. Sensitization is nearly unextinguishable and therefore is considered to play a major role in the formation of an "addiction memory". The finding that glutamate/NMDA receptor (R)-antagonists block the development of sensitization has led to the hypothesis that repeated exposure to an addictive drug activates glutamatergic transmission and this promotes drug seeking and relapse. Many findings are in accordance with this view but not all: In several experiments the development of sensitization was not inhibited by NMDA-R-antagonists, however the expression of sensitization (which is tested only under the sensitizing drug) was abolished. This has been explained as a state-dependency effect, i. e. what has been learned in the presence of an NMDA-R-antagonist (here sensitization) can not be expressed in the absence of an NMDA-R-antagonist. State-dependent effects may have been overlooked so far since in many studies animals were treated in the home cages with the sensitizing drug plus the NMDA-R-antagonist and the development of sensitization (for example the day to day increase in locomotion) was not measured in the experimental set up. The state-dependency interpretation was criticised since most of the studies have been conducted with MK-801 and this drug produces sensitization to its own locomotor stimulant effects. To clarify this issue, we chose haloperidol-induced catalepsy (akinesia and rigidity) of the rat that shows pronounced sensitization when repeatedly elicited (known as the "repeated measures effect"). Since acutely administered NMDA-R-antagonists show clear cut anticataleptic effects, a possible day to day intensification of catalepsy can not be due to the effects of the NMDA-R-antagonist. We showed that haloperidol-induced catalepsy was counteracted by the NMDA-R-antagonists MK-801, CPPene, eliprodil, Ro 25-6981 as expected, but that the development of sensitization of catalepsy was not inhibited by these drugs. A challenge with haloperidol 14 days after sensitization revealed no sensitized catalepsy, haloperidol plus NMDA-R-antagonist produced the sensitized response and most interestingly, the NMDA-R-antagonist alone also elicited the sensitized response. We concluded from these findings that sensitization of catalepsy developed context dependently i. e. sensitization has been associated to the drug (NMDA-R-antagonist) cue which makes expression of sensitization dependent from the NMDA-R-antagonist state. The paradoxical finding that an anticataleptic drug can induce sensitized catalepsy shows that expression of sensitized catalepsy has been rendered completely state-dependent. In conclusion, two forms of sensitization exist, a context-independent (non-associative) form, which can be inhibited by NMDA-R-antagonists, and a context-dependent (associative) form. It may be speculated that in the latter case NMDA-R-antagonists may disrupt the association to the environmental context but instead represent a contextual stimulus to which sensitization can become associated.

Drug sensitization, state-dependency and the activation of excitatory amino acid receptors:

What are the issues?

Paul Vezina, Department of Psychiatry, Committee on Neurobiology, The University of Chicago, Chicago, IL

Both drug sensitization and state-dependency are well established phenomena that can exert powerful effects on the expression of various behaviors. Recently, a certain degree of controversy has developed over whether the latter phenomenon can provide an alternative account for the apparent ability of glutamate receptor antagonists - dizocilpine, in particular - to prevent the induction of sensitization. In a review of the results from a number of studies, it will first be addressed whether sensitized responding during induction is in fact necessary and sufficient for the subsequent later expression of sensitization. In this context, the actions of the non-competitive NMDA receptor antagonist dizocilpine on behavioral, cellular and biochemical responses during induction and expression of sensitization will be compared to those of competitive antagonists of NMDA as well as non-NMDA receptors and other manipulations impacting excitatory amino acid transmission. While the actions of dizocilpine on acute and sensitized drug-induced responding may be complex, the results of the above experiments taken together strongly support a critical need for excitatory amino acid receptor activation in the induction of drug sensitization. Supported by USPHS grants DA-9397 and DA-9860.

**SSPD TREASURER'S REPORT
10/22/99 - 9/15/00**

Beginning Balance 10/22/99		7886.82
Expenses		
Postage & Fed-Ex	223.83	
Website Registration & Maintenance	760.20	
Bank service charges	60.50	
Neuroscience 1999 meeting	1468.56	
ASPET 1999 meeting	1381.47	
Neuroscience 2000 program listing	150.00	
		4044.56
Income		
Donations	4658.98	
Dues	1580.00	
		6238.98
	Balance as of 9/15/00	10,081.24

SSPD would like to express its appreciation to the following companies for their recent generous donations:

Grünenthal
H. Lundbeck A/S
Institut de Recherche Pierre Fabre
Janssen Research Foundation
P.J. Noyes Company
Pharmacia & Upjohn
Porsolt and Partners Pharmacology
Synthelabo Recherche (L.E.R.S.) Research Division

News about the Drug Discrimination Database

The database was updated recently and now contains 3,128 publications. There were a number of changes to the site as well, to improve ease of use. Suggestions from SSPD members for further developments are always welcomed. You may have noticed that we did respond to earlier requests for provision of abstracts: for some time now, most records have a link near them that provides a direct route to the pertinent abstract in PubMed. This is a great improvement and we hope you like it. We hope to extend this to other abstract sources for articles that are not in PubMed, notably the CPDD abstracts.

The database is now hosted on a different and faster server, so you should find some improvements in speed of access. The change of server should not be apparent in any other way but if anyone does experience problems, please let me or Jonathan Kamien know.

I would like to thank the many SSPD members who responded to my recent call for lists of publications so that we could ensure the website is as comprehensive as possible. This time there was a very good response to this request. I regret being unable to attend SSPD this year but send my regards to all friends and colleagues.

Ian Stolerman

NOTICE: The next newsletter will be published in early Spring 2001. Ads for positions, comments, articles, etc., should be sent to Jenny Wiley no later than February 15 to ensure inclusion in the Spring newsletter.

Society for Stimulus Properties of Drugs

Jenny Wiley, Ph.D.

Secretary/Treasurer

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