

CONFIDENTIAL

CHARGE NUMBER: 1600  
PROJECT TITLE: Smoker Psychology  
PERIOD COVERED: June 1-30, 1980  
PROJECT LEADER: W. L. Dunn  
DATE OF REPORT: July 10, 1980

Project Title: The Discriminative Stimulus Properties of  $\ell$ -nicotine and Nicotine Analogues

Written by: V. J. DeNoble

PRODUCED IN TEXAS  
2-Isonicotine and 4-isonicotine have been shown not to be effective in producing nicotine-like interoceptive responses. However, 2'-methylnicotine and dl-3-dimethylaminomethylpyridine were active in producing the cue. dl-diethylaminomethylpyridine has not been tested yet. The data to form a dose response curve for  $\ell$ -nicotine should be completed within two weeks.

Project Title: The Effects of Intraventricular Injections of  $\ell$ -nicotine and Nicotine Analogues on Activity and Schedule-Controlled Behavior

Written by: V. J. DeNoble

The effects of intraventricular injections of 2'-methylnicotine was compared to that of  $\ell$ -nicotine in the same rats. The data shows that 2'-methylnicotine is equally as active. 4-3'Isonicotine was inactive at doses 8 times that of  $\ell$ -nicotine.

At present six of the twelve rats being used in the schedule controlled behavior study have received saline control injections and will be tested with nicotine within two weeks.

Project Title: Auditory Evoked Potentials

Written by: F. P. Gullotta

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This study has been completed. Data analyses revealed that cigarette smoking under conditions of short-term deprivation ( $\bar{X}$ =28 min.) prevented the AEP from habituating. Habituation did occur following overnight smoke deprivation.

Project Title: Equipment

Written by: F. P. Gullotta

A Nicolet Med-80 computer system has been delivered and installed in the laboratory. It is functioning perfectly.

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Project Title: Spectral Analysis of EEG Data  
Written by: F. P. Gullotta

Pilot studies have begun. We are currently examining smokers under different deprivation conditions and recording from four brain loci simultaneously.

Project Title: Inhalation Studies  
Written by: J. A. Jones

The new mobile apparatus for monitoring inhalation has arrived, and tests of system accuracy are being initiated. The apparatus now consists of four major units: the respitrace transducer, the Medilog-respitrace interface, the Medilog tape recorder, and the playback system. A more detailed description of the system will appear in the annual report, being prepared this month. **DO NOT REAS**

Project Title: Study of Smokers of Ultra-Low-Delivery Brands  
Written by: **S. R. DUNN CALLON WITH**

The design of the study and detailing of the procedures have been completed. A research proposal has been submitted. Data collection is being deferred until the study is approved. **2/87**

Project Title: Study of Cambridge Smokers  
Written by: S. R. Dunn

A study is being developed to examine the motivations of people who smoke the Cambridge brands. Details of this study are currently being worked on.

Project Title: Firmness Evaluations  
Written by: F. J. Ryan

Cigarettes of five different firmness values have been provided by Chris Irving. These will be used to find the discrimination threshold for firmness.

Project Title: Nicotine Preference Study  
Written by: F. J. Ryan

Analytical data are now available on the most recent make of 6 mg cigarettes with different nicotine deliveries, as shown in the following table:

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<u>Model</u>	<u>Nicotine</u>	<u>Tar</u>	<u>Puffs</u>	<u>Nicotine/Tar</u>	<u>Nicotine/Puff</u>
*2239	.12	6.18	7.1	.019	.0169
*2237	.23	6.57	7.3	.035	.0315
2241	.29	6.01	7.6	.048	.0381
2240	.30	6.30	7.6	.048	.0395
*2238	.35	6.15	7.2	.057	.0486
2236	.43	5.73	7.8	.075	.0551
2242	.63	6.57	7.5	.096	.0840
*2243	.72	6.88	8.0	.105	.0900
*2244	.81	6.69	8.0	.121	.1013

PRODUCED IN TEXAS

From these models we will choose five to be evaluated by a POL panel, probably #2239, #2237, #2238, #2242, and #2244. The last of these is not as different from the next to last as we would like.

Project Title: Nicotine-Discrimination Study  
 Written by: F. J. Ryan

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We have now run 13 subjects and anticipate that data gathering will end in late August. (Each subject is run daily for 4 weeks.)

An Annual Report was written this month.

*W. R. D.*

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