CHARGE NUMBER: 1600

PROJECT TITLE: Smoker Psychology

PERIOD COVERED: August 1 - 31, 1980

PROJECT LEADER: W. L. Dunn

DATE OF REPORT: September 9, 1980

Project Title: Nicotine Discrimination at 16 mg Tar
Written by: F. J. Ryan

Data collection continues from final 4 smokers, should end in late September.

Project Title: Nicotine in Saliva Analysis
Written by: F. J. Ryan

GC is now installed in lab. Data gathering, training of personnel begins at once.

Project Title: Firmness Evaluation Panel
Written by: F. J. Ryan

Training to assign firmness numbers to different weight cigarettes, interrupted by vacation schedules, has resumed.

Project Title: The Inhalation Monitoring Program
Written by: J. A. Jones

A MINC laboratory computer is being programmed to display and to analyze smoke-laden inhalation patterns from the cassette recorder. Inhalation data collected by using the new mobile system indicates that the apparatus is operational and that the MINC capabilities are optimal for handling the high-speed analysis.

Project Title: Study of Smokers of Ultra-Low Delivery Brands
Written by: S. R. Dunn

Data collection is under way.

Project Title: The Discriminative Stimulus Properties of Nicotine and Nicotine Analogues
Written by: V. J. DeNoble

A series of additional compounds have been tested. Dialkyaminoalkyl-pyridines as well as some isomeric nicotines, a 2' - alkyl of nicotine, and a 6 - alkyl of nicotine. Of the compounds tested, the 2' - methyl

nicotine and the 3 - dimethylaminomethylpyridine produced significant behavioral activity. The 2' - methyl nicotine at the same dose used during the daily nicotine training sessions produced responses on the nicotine correct lever. Presently we are preparing to do a dose-response curve with the 2' - methyl nicotine.

Project Title: The Effects of Intraventricular Injections of Nicotine on Behavior Maintained Under a Fixed Ratio of Reinforcement
Written By: V. J. DeNoble

Using schedule-controlled behavior as a measure, rats given intraventricular injections of nicotine continued to display behavioral disruptions 10 to 12 minutes post infusions. The duration of suppression in response rate was approximately 110% longer than that observed with Dr. Abood's scale.

Project Title: Habituation of the Pattern Reversal Evoked Potential
Written By: F. P. Gullotta

Pilot data have been gathered on three subjects. Data reduction and analyses are currently in progress. There were some problems in the initial data gathering procedure, therefore, we intend to run several more subjects.

Project Title: The Effects of Cigarette Smoking on the Brainstem Auditory Evoked Potential
Written By: F. P. Gullotta

Techniques have been adequately worked out for recording and measuring this response. We intend to initiate a full scale study once we have been moved into our new laboratory.

Project Title: Pattern Reversal Evoked Potentials Under Differing Smoking and Deprivation Conditions
Written By: F. P. Gullotta

We have completed pilot studies with different combinations of smoking and smoke deprivation. The study will be begun when the new laboratory is ready.