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INTER-OFFICE CORRESPONDENCE

RICHMOND, VIRGINIA

To: . Dr. J. L. Charles Date: September 6, 1983

From: . V. J. DeNoble

Subject: . Project 1610 (Behavioral Pharmacology) Objectives and Plans, 1984

OBJECTIVES

Acetaldehyde

1. Continue research directed at finding ratio(s) of acetaldehyde and nicotine that will have optimal reinforcing effects under various work requirements. 3 QT

2. Determine if congeners of acetaldehyde have reinforcing effects. 3QT

3. Further the behavioral profile of acetaldehyde using multiple schedule and drug discrimination techniques. 3QT

1

4. Continue research in collaboration with Project 6902 on the neurochemical effects of acetaldehyde. — NO QT

5. Examine the effects of termination of chronic nicotine-acetaldehyde combinations on behavior maintained under a fixed ratio schedule of food presentation. 4QT

6. Determine if acetaldehyde can increase the reinforcing effects of selected nicotine analogues. 2QT

Nicotine-Brain Behavior Interactions

1. Compare the behavioral effects of systemically versus centrally administered nicotine on schedule-controlled performance. 3QT

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2. Examine the possible interaction between systemic and central administration of nicotine on fixed ratio performance. 3QT

3. Continue brain mapping studies to identify sites of action of the behavioral effects of nicotine. 4QT

4. Determine if selected nicotine analogues can be substituted for nicotine in the self-administration tests. 2QT

Nicotine-Receptor Behavior Interactions

3

1. Continue to examine the behavioral effects of the optically pure isomers of nicotine with an emphasis on central versus peripheral sites of action. 1QT

2. Compare nicotinic and muscarinic agonists for cross tolerance effects. 1QT

3. Continue investigations on the functional dynamics of the nicotine receptor as measured by behavioral supersensitivity following chronic receptor blockade. 2QT

VJD/mps