STRENGTHENING ALCOHOL AND HIV/AIDS BIOMEDICAL RESEARCH

CONTENTS

| | Foreword and Acknowledgment | i |
|------|---|-----|
| | Mandate and Meeting Goals | iii |
| | Content of EAB Document | v |
| | Contributors List | vi |
| I. | AIDS Epidemic: Overview and Introduction | 1 |
| | A. Dimensions of the Epidemic | 2 |
| | B. Context for Research: Major Themes of the NIH Plan | 3 |
| | C. Alcohol Consumption | 4 |
| | 1. Table 1: Prevalence of Alcohol Consumption HIV+ | 5 |
| II. | NIAAA Alcohol and HIV/AIDS Biomedical Research | 6 |
| | A. Introduction and Background | 7 |
| | B. Past Biomedical and Research Priorities | 16 |
| | C. Summary Funded Research | 17 |
| | D. Research Opportunities: A New Research Approach: | 18 |
| | From Bedside to Bench (and back again) | |
| III. | Strategic Plan Area: Natural History and Epidemiology | 25 |
| | A. Scientific Issues | 26 |
| | B. Research Priorities of the NIH FY 2007 Plan | 27 |
| | C. Special Emphasis Area: Natural History and HAART | 29 |
| | D. Special Emphasis Area: Biomedical Aspects of Alcohol, | 33 |
| | HIV/AIDS, and Liver Disease | 2.5 |
| | E. Special Emphasis Area: Alcohol and HIV-related Anemia | 35 |
| | F. Special Emphasis Area: Modeling Alcohol-related Outcomes | 37 |
| IV. | Strategic Plan Area: Etiology and Pathogenesis | 41 |
| | A. Scientific Issues | 42 |
| | B. Research Priorities of the NIH FY 2007 Plan | 43 |
| | C. Special Emphasis Area: Alcohol, HIV/AIDS-Induced Immune Modulation | 45 |
| | D. Special Emphasis Area: Mucosal Immunity | 49 |
| | E. Special Emphasis Area: Alcohol and Host Defense: | 51 |
| | A New Role for Mitochondria in Coordinating The | |
| | Anti-Viral Immune Response | |
| | F. Special Emphasis Area: Alcohol, HIV/AIDS and the | 53 |

| | H. Special Emphasis Area: Alcohol Effects on Pulmonary Function in the HIV-Infected Patient | 68 |
|-----|---|--------------|
| V. | Strategic Plan Area: Prevention Science: Vaccines | 70 |
| VI. | Appendix A. References by Special Emphasis Area | 75 76 |
| | B. Additional Papers | 101 |

G. Special Emphasis Area: Alcohol, HIV/AIDS-Induced Effects

Central Nervous System (CNS)

on the Microvasculature Endothelium

- 1. Braithwaite RS, Conigliaro J, Roberts MS, Shechter S, Schaefer A, McGinnis K, Rodriguez MC, Rabeneck L, Bryant K, Justice AC. *Estimating the impact of alcohol consumption on survival for HIV+ individuals.* AIDS Care April, 2007, Vol 4 Page 459-66.
- 2. Bagby G.J., Zhang P., Purcell J.E. Didlier P.J., and Nelson S. Chronic Binge Ethanol Consumption Accelerates Progression of Simian Immunodeficiency Virus Disease. Alcoholism Clinical and Experimental Research, Vol30, No 10, October 2006.
- 3. Pfefferbaum A., Rosenbloom M.J., Adalsteinsson E., and Sullivan E.V., Diffusion tensor imaging with quantitative fibre tracking in HIV infection and alcoholism comorbidity: synergistic white matter damage. Brain (2006) Page 1-17.
- 4. Justice A. (Guest Editor) Alcohol in HIV Infection: *Insights from the Veterans Aging Cohort Study and the Veterans Affairs National Health Information System*, August 2006, Vol 44, No. 8, Supplement 2.