Abstract: Year 01-05 (1994 - 1999)

This application requests a NIDA Research Scientist Development Award (RSDA) to support Dr. Rumi Kato Price's research career in epidemiology of drug abuse. She will pursue two studies during the five years of RSDA funding. Each study is aimed at advancing the understanding of the complex relationships among psychopathology, environment, and drug abuse. However, each study uniquely relates to a different aspect of environmental variation: the first, to changes and stability over-time; and the second, to the cross-cultural variation.

**Study 1: Vietnam Drug Users Two Decades Later.** This is a long-term follow-up of the landmark epidemiologic study conducted in 1972 and 1974 by Dr. Lee Robins and associates. The original study found unanticipated changes in drug-use behavior over the periods covering the subjects' pre-, in-, and post-Vietnam experience; and that early psychopathology was a powerful predictor of continued drug use and abuse. Currently, the feasibility study of the follow-up is funded (R01-DA07939). During the next five years, Dr. Price plans to accomplish the following goals: 1) to complete the feasibility study (Phase I), by locating a minimum of 830 respondents from the original study and verifying their identity; 2) to complete the analyses of mortality, geographical mobility, VA medical utilization and tracing efforts; 3) to complete the pretest phase (Phase II), by developing and testing interviews for the main study on a separate convenient sample of 60 subjects; 4) to complete the analyses of validity and acceptability of in-person v.s. telephone interview methods; 5) to initiate and complete the follow-up interviews (Phase III) with the target 830 respondents of the original study; and 6a) to assess the prevalence of substance use and psychiatric problems; 6b) to assess the course of substance abuse over-time; and 6c) to identify the predictors of the long-term outcomes and course of substance abuse.

**Study 2: Protective Factors for Drug Abuse: A Cross-Cultural Perspective.** This study extends Drs. Robins' and Price's U.S. Epidemiologic Catchment Area Project findings on the association between childhood conduct problems and adult substance abuse and psychopathology, to a cross-cultural framework. The overall study will identify socio-cultural factors which inhibit the development of childhood conduct problems into substance abuse and adult psychopathology. The study is currently at a beginning phase. Dr. Price plans to complete the following three phases in five years: 1) to replicate these earlier findings by analyzing highly comparable data already collected in Taiwan, Korea, Canada and New Zealand; 2) to identify different manifestations of childhood conduct problems by reviewing results of existing studies of the native Japanese, Hawaiians and Japanese Americans; and 3) to examine protective factors against substance use in the Japanese society by reviewing archival studies in child-rearing practices, school and neighborhood socialization, and community integration. The results from these phases will provide sufficient information to propose and design a cross-cultural collaborative study between the U.S. research team and the Japan National Institute of Mental Health.

Abstract: Year 06 - 10 (1999-2004)

This application requests continuation of a NIDA Independent Scientist Award (ISA, formally RSDA) for Dr. Rumi Kato Price. The previous application (K02DA00221) proposed to carry out research in three components: longitudinal, cross-cultural/international and methodological enhancement. The progress during the past four years and future plans are: 1) **Longitudinal:** This component has focused on a 25-year follow-up of the then large-scale epidemiologic study (“Vietnam Drug User Returns”) conducted in the early 1970’s. The main follow-up data collection has been completed after two decades of hiatus, with continued fundings starting to complete database archiving, data analyses and dissemination (“Washington University Vietnam Era Study Phase III (VES-III),” R01DA09379, R01DA09281). The future plans are to: 1a) complete data analyses and main publications from VES-III; 1b) conduct a followback investigation on the deceased (13% of the VES-
III eligibles) to develop methods for retrieval of information lost due premature death and to assess the extent of bias inherent in such censored data; 1c) plan and conduct small-scale studies related to intervention for selected high-risk subgroups of the VES-III cohort; and 1d) begin preparation for an offspring study of the VES-III cohort. 2) Cross-Cultural/International: This component centers on the notion of cross-culturally unique protective factors and their moderating effects. The first phase which aims at replicating a developmental psycho pathology model substantiated in the western literature, using an existing large database from five countries (“Cross-Cultural Epidemiology-Phase I (CC-I),” R01DA10021), is currently in the second year of funding. Future plans are to: 2a) complete data analyses and main publications for CC-I; 2b) plan and begin implementing a study to examine adolescent substance use and mental health among the Japanese and Vietnamese, focusing on protective factors and their decay process, using an embedded cohort-sequential, migration design (“Pacific Rim” Project); 2c) implement a feasibility study to conduct substance abuse and psychiatric interviews and collect DNA from Japanese adolescents to study gene-environment interaction effects rising from the presence of ethnic-specific alcohol sensitivity genes and their consequences to other drug use (“Flushing Syndrome,” P50AA11998, Pilot 3); 2d) explore potentials for collecting DNA from the Pacific Rim Study cohorts to incorporate genetic immunity to use of alcohol and potentially other psychoactive substances to the understanding of environmental moderators; 2e) explore potentials for future comparative analyses of the data on the Vietnamese adolescent cohorts from the Pacific Rim Study and those on the VES-III off-springs to examine cross-cultural differences in resiliency against trauma and its relation to substance abuse (“Crossroad” Study). In the next five years, the P.I. plans to: reach closure to VES-III (1a), the followback extension (1b), CC-I (2a), and the Flushing Syndrome feasibility (2c); implement VES-III intervention (1c) and the Pacific Rim Project (2b); begin preparatory work for the remaining (1d, 2d, 2e). 3) Methodological Enhancement component continues previous attempts to integrate novel technologies to more traditional statistical methods to improve epidemiologic prediction and explanatory precision.