**Funding Opportunity on**

**Mechanisms of Disparities in Chronic Liver Diseases and Cancer**

**Description**

The purpose of the initiative is to support multidisciplinary research to understand the underlying etiologic factors and the mechanisms that result in disparities in chronic liver diseases and cancer in the US.

Hepatocellular carcinoma (HCC) is one of the fastest rising causes of cancer-related deaths in the United States, with disparities observed in cancer incidence and survival among racial/ethnic minority populations. HCC has been shown to disproportionately affect disadvantaged populations, with higher rates and worse survival among racial/ethnic minorities and individuals of low socioeconomic status (SES) than their counterparts.

The established risk factors for liver diseases and cancer include chronic hepatitis B virus (HBV) and hepatitis C virus (HCV) infection, heavy and chronic alcohol consumption, genetic predisposition, cirrhosis of any cause, and tobacco smoking. Diabetes is also associated with an increased risk of HCC and antecedent obesity likely contributes. Also, co-infection with HIV in individuals with chronic infections with either HBV or HCV lead to worse clinical outcomes. The prevalence of these and other risk factors varies among various racial and ethnic sub-populations. Concerted efforts are needed to promote comprehensive research on understanding the complex causes of chronic liver diseases and HCC disparities and how their clinical care may affect outcomes.

**Research Objectives**

The overarching objectives of this initiative are to understand the etiologic factors and the underlying mechanisms responsible for chronic liver diseases and documented cancer disparities among racial/ethnic minority and socioeconomically disadvantaged populations in the US. For this initiative, the focus is on the causes for increase in both the incidence and mortality rates of chronic liver disease and cancer among the health disparities populations.

NIH-designated health disparity populations in the United States, which include Blacks/African Americans, Hispanics/Latinos, American Indians/Alaska Natives, Asian Americans, Native Hawaiians and other Pacific Islanders, socioeconomically disadvantaged populations, sexual and gender minorities and underserved rural populations.

Areas of research interest include but are not limited to the following:

- Interactions of infectious agents with other risk factors (such as hepatitis B, hepatitis C, HIV, with obesity, diabetes, aflatoxin exposure, alcohol use, smoking) among various racial/ethnic minority populations.
- Examine biological, environmental/occupational exposures and social factors that may explain larger or smaller gender differences in different racial/ethnic minority populations.
- Risk/protective factors for liver cancer health outcomes in various health disparity populations in different regions of US.
• The role of metabolic abnormalities associated with obesity, pre-diabetes and/or diabetes and influence of other risk factors in the progression of fatty liver, NASH, cirrhosis and liver cancer in health disparity populations.
• Integrative studies to examine the interplay of multiple factors including social factors with microbiome, epigenomics, and proteomics to identify risk patterns for liver cancer.
• The role of healthcare access and quality in explaining disparities in liver cancer mortality.
• Patient, clinician, and system/policy-level factors that predict receipt of curative treatments with available outcomes among liver cancer patients from health disparity populations.

Funding Opportunities to Support Liver Disease/Cancer Disparities Research
PAR-17-151- Mechanisms of Disparities in Chronic Liver Diseases and Cancer (R01)
PAR-17-150- Mechanisms of Disparities in Chronic Liver Diseases and Cancer (R21)

View the web link for details at:

Award Budget: R01: up to $500K/yr. for five years; R21: up to $275K for two years

Receipt Dates: April 4th, 2018; April 4th, 2019

Scientific/Research Contact(s)
Rina Das, PhD
National Institute on Minority Health and Health Disparities (NIMHD)
Telephone: 301-496-3996
Email: dasr2@mail.nih.gov

Emmanuel A. Taylor, Dr.PH., M.Sc
National Cancer Institute (NCI)
Telephone: 240-276-6159
Email: taylorem@mail.nih.gov

Jo Ann S. Rinaudo, PhD
Division of Cancer Prevention National Cancer Institute (NCI)
Telephone: 240-276-7133
Email: rinaudoj@mail.nih.gov

Tram Lam, PhD, MPH
The Division of Cancer Control and Population Sciences National Cancer Institute (NCI)
Telephone:240-276-6967
Email: lamt@mail.nih.gov

Betsy Read-Connole, PhD
Division of Cancer Biology National Cancer Institute (NCI)
Telephone: 240-276-6190
Email: bconnole@mail.nih.gov

Gary J. Murray, PhD
National Institute on Alcohol Abuse and Alcoholism (NIAAA)
Telephone: 301-443-9940
Email: murrayg@mail.nih.gov