

# Longer Life Foundation

An RGA/Washington University Collaboration

## LONGER LIFE FOUNDATION'S 2020-2021 RESEARCH GRANT RECIPIENTS

*The Longer Life Foundation (LLF) is proud to announce its newest research grant recipients. These individuals are investigating some of the most important health issues of the day, including COVID-19.*

*To find out more about LLF and the research funded to date, please visit [www.longerlife.org](http://www.longerlife.org) or reach out to Dr. Dan Zimmerman at [dzimmerman@rgare.com](mailto:dzimmerman@rgare.com) or Dr. Dave Rengachary at [drengachary@rgare.com](mailto:drengachary@rgare.com).*

Investigator/Title of Research Project	Description
<p><b>Jeffrey Henderson, M.D., Ph.D.*</b> Prognostic Biomarkers of Severe Disease in COVID-19 Patients</p>	<p>The aim of this novel study is to discover biomarkers that identify COVID-19 patients at high risk for progressing to severe disease. This will improve mortality and morbidity by directing high-risk patients to closer medical monitoring, identifying patients who will benefit from early treatment, and optimizing use of limited treatment doses.</p>
<p>*Award effective June 1, 2020 through May 31, 2021. All other awards effective October 1, 2020 through September 30, 2021.</p>	
<p><b>Cynthia Herrick, M.D., MPHS</b> Clinic to Community Connections: Type 2 Diabetes Prevention Among Low-Income Women with Gestational Diabetes</p>	<p>The central objective of this project is to test a program that teaches practical skills to prevent diabetes. The program focuses on women who have high blood sugar first detected during pregnancy (gestational diabetes).</p>
<p><b>Alex Holehouse, M.Sc., Ph.D.</b> Predicting the Functional Impact of Genetic Variation with Intrinsically Disordered Protein Regions</p>	<p>A major roadblock toward personalized medicine is the inability to predict the clinical significance of arbitrary mutations detected in a person's genome. This proposal is centered on a novel approach for predicting the functional impact of mutations by studying intrinsically disordered proteins (IDRs) and protein regions.</p>
<p><b>Devesha Kulkarni, M.Sc., Ph.D.</b> Defining the Role of Intestinal Immune Cell Balance and its Association with Obesity</p>	<p>In the last 10 years, researchers have identified the role of dysbiosis (imbalance in gut microbiota) in the development of obesity and its related comorbidities. The results of this study will form the scientific basis for therapeutic approaches to prevent or reverse obesity and associated diseases.</p>

<p><b>Kathryn Lindley, M.D.</b>          Angiogenic Imbalance and Diastolic Dysfunction in Pre-Eclampsia</p>	<p>Pre-eclampsia (PE) during pregnancy is associated with the development of future cardiovascular disease (CVD). Recent epidemiologic studies suggest that rather than being a marker of CVD, PE is mechanistically linked to the development of CVD. The goal of this study is to identify PE-related biomarkers associated with left ventricular diastolic dysfunction, which may help identify women at high risk for future CVD.</p>
<p><b>Bettina Mittendorfer, Ph.D.</b>          Director, Longevity Research Program (LRP)          Dietary Protein and Cardiovascular Health (Year 2)</p>	<p>The goal of this three-year LRP project is to evaluate the effect of dietary protein (plant vs. animal origin) on cardiovascular health and to determine the physiological and cellular mechanisms involved. This topic is particularly important because consumption of protein-fortified plant-based foods is now a popular trend.</p>
<p><b>Carolina Soriano-Tarraga, M.Sc., Ph.D.</b>          DNA methylation in Alzheimer's disease (AD)</p>	<p>This study will examine changes in blood DNA methylation, a modification of the DNA, in AD patients and controls at two time points (at early and late stages of the disease), and compare these results to brain DNA methylation from the same individuals. This information could be used as a biomarker of AD diagnosis, progression, and prognosis, or to improve the understanding of what causes AD. It may also serve as a new way to identify drug targets.</p>

The Longer Life Foundation invites you to click below to view a short (4:04) interview with Dr. Bettina Mittendorfer to learn more about her research and work as Director of the Longevity Research Program.

