Technology overview

Food insecurity is a global issue that has profound implications for individuals of all ages. Recent figures indicate that in the US alone, 19.2% of households with children experienced some level of food insecurity, accounting for more than 7.9 million children living in food-insecure environments. Not only are there severe implications for otherwise healthy children in food insecure homes, including potential problems in physical and cognitive development, but chronic diseases can be significantly exacerbated as a result of poor nutrition as well.

Dr. Mendoza and his team lead global health research on the influence of household food insecurity on HIV-positive children in the United States and sub-Saharan Africa. One of the most pressing issues related to food insecurity and HIV management is lack of anti-retroviral drug adherence that has been seen in patients who do not have consistent access to adequate nutrition. Dr. Mendoza and his team have drawn direct and measureable links between the systemic decrease in CD4 counts and food insecure patients, allowing a deeper understanding of how this chronic disease can be effectively managed.

Dr. Mendoza also co-leads research examining household food insecurity among U.S. adolescents and young adults with diabetes. It is well understood that both type 1 and type 2-diabetes are best managed through monitored and consistent dietary patterns, and food insecurity can greatly compromise treatment efforts.

For ongoing work in this field, there is interest in partnering with companies to develop guidelines for best nutritional practices aimed at optimizing therapeutic effectiveness, especially in children living with food insecurity.