The role of the immune system in the protection against infections has been recognized for over a hundred years. However, only recently it has become apparent that inflammatory components of the immune system are often elevated in aged individuals and associated with high incidence of non-communicable diseases such as cancer, cardiovascular disease and neurodegenerative disorders, among others.

The Furman lab integrates systems-level immunity in humans to accelerate knowledge of how the immune system affects aging and related chronic disease. Central for this research is the use of state-of-the art technological platforms to measure multiple levels of the immune system in large human cohorts and the application of advanced analytics by artificial intelligence and machine learning to cope with these large volumes of data ('Big Data'). We collaborate closely with multiple Buck faculty to help defining the immune pathways and circuitries affected by aging and linked to chronic disease states.

To learn more about the Furman lab, click HERE.
To apply to the Furman lab, return to the Internships Homepage.