Thanks to a dramatic increase in life expectancy, the number of individuals aged 65 and older is rapidly increasing. This presents considerable challenges to our health care system since increasing age is associated with a higher susceptibility to infectious diseases due to the decline in immune fitness, dubbed “immunosenescence”. The mechanisms underlying age-associated dysregulated immunity are still incompletely understood. Advancement in our comprehension of mechanisms of immune senescence and development of interventions to improve health span requires animal models that closely recapitulate the physiological changes that occur with aging in humans. Nonhuman primates (NHPs) are invaluable preclinical models to study the pathophysiology of aging due to their outbred nature, high degree of genetic and physiological similarity to humans, and their susceptibility to human pathogens. In this presentation, I will review the utility of NHPs in characterizing immune senescence, evaluating interventions to reverse aging of the immune system and development of vaccine strategies that are better suited for this vulnerable population.

"Aging and Immune Function: from molecular mechanisms to intervention"

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*The ASM-HI 2017 Fall Meeting is co-sponsored by ASCLS-Hawaii (American Society for Clinical Laboratory Science–Hawaii) is an approved provider of continuing education programs in clinical laboratory science through the ASCLS P.A.C.E. program. The listed course(s) is(are) approved for CA licensed clinical laboratory scientists and personnel. Program objectives: 1. Describe the hallmarks of immune senescence; 2. Explain why older individuals are more susceptible to infection; 3. Describe the impact of caloric restriction on immune senescence; 4. Explain the impact of menopause and andropause on immunity. ASCLS P.A.C.E. credit is pending.

American Society for Microbiology
Hawaii Branch
2017 Annual Fall Meeting Lecture

Treetops Manoa (Wailele Manoa)
3737 Manoa Rd at the Manoa Waterfall,
Honolulu, HI 96822
Saturday, December 2, 2017 12-3pm

Early Online Registration currently available at:
https://HawaiiASM.eventbee.com/event?eid=198757074
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