

CPB 69700 RESEARCH SEMINAR

DEPARTMENT OF COMPARATIVE PATHOBIOLOGY

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Thurs., November 12, 2009
VPTH 112
3:30 pm

“Immunostimulatory Approach For Enhancing
Vaccine Efficacy In The Aging Population”

Abstract:

The ability to resist infection and respond to vaccination is greatly reduced in the elderly owing to the general decline in innate and adaptive immune functions with aging. Over the years several strategies such as increasing vaccine dose, immunostimulatory patches and novel adjuvants have been used to address the issue of low vaccine efficacy in the elderly. We have evaluated the role of β -defensin 2 (MBD2) in enhancing the efficacy of an adenoviral vector-based H5N1 influenza vaccine in an aged mouse model. MBD2 activated dendritic cells in vivo and also lead to improved humoral and cellular immune responses to influenza vaccine in aged mice. This strategy has potential to design effective vaccines and immunotherapeutics for the elderly.