

Centre for Heart Lung Innovation Research in Progress (R.I.P.)



Role of Nuclear Factor of Activated T cells 5 in the Pathogenesis of Coxsackievirus-induced Myocarditis

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Monday, Nov 1st 2021 9:00 - 10:00 a.m.

Zoom Video Conference (Meeting ID: 693 1997 7044; Passcode: 030679)

"Viral myocarditis is an inflammatory heart disease caused by viral infection and coxsackievirus B3 (CVB3) is the predominant pathogen for this disease. Upon infection, CVB3 modulates various cellular signaling pathways, leading to cell cycle arrest and programmed cell death. NFAT5 (Nuclear factor of activated T-cells 5) is a transcription factor that is shown to regulate immune responses, but it was cleaved by CVB3 viral proteases upon infection. To delineate the interplay between NFAT5 and its regulated downstream genes in CVB3 infected condition, we generated a conditional cardiac-specific NFAT5 knockout mouse model and verified that CVB3-induced reduction of NFAT5 leads to the dysregulation of several signaling pathways and inhibition of interferon beta activation, which contributes to viral pathogenesis."

This event is a Self-Approved Group Learning Activity as defined by the Maintenance Certification Program of the Royal College of Physicians and Surgeons of Canada



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