division of medical sciences SEMINAR SERIES



Human skeletal muscle stem cell function: Effect of ageing

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Skeletal muscle stem cells (satellite cells) are indispensable for muscle regeneration and make significant contributions to muscle growth and remodelling in health and disease. Regulation of satellite cells is complex and orchestrated by a network of transcription factors referred to as the myogenic regulatory factors. Relatively little is known about the upstream cues that trigger the myogenic regulator factors, however using exercise-induced damage we have identified several factors that are associated with either proliferation or differentiation of satellite cells. Muscle satellite cells have also been implicated in age-related sarcopenia and it appears that maintenance of muscle mass in advanced age is dependent on the maintenance of satellite cell pool size and function. Data investigating basic muscle satellite cell regulation and dysfunction in ageing will be discussed.



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Lunch will be provided.