ARMIEXTERNAL 2023 MONASH University CARMINAR SERIES 2023

Kidney growth; the good, the bad and the ugly

Professor Jonathan Gleadle -

Professor of Medicine, Clinical Disciplines Group Lead, College of Medicine and Public Health – Flinders University

Abstract

Up to a tenth of the world's population is affected by chronic kidney disease and over 2 million people are receiving dialysis or kidney transplantation. Even modest improvements in kidney size and function could generate substantial reductions in the development of end stage kidney disease. After donation of a kidney by a healthy individual or following nephrectomy for kidney cancer, the remaining kidney grows over the next few days and weeks and increases its function. This compensatory hypertrophy is dominated by an increase in size of individual kidney cells. The mechanism initiating the remaining kidney to naturally enlarge and increase its function in a healthy and enduring way has been elusive. We have utilised genomic and single cell techniques to identify pathways activated in the first few days after kidney removal.

Bio

Jonathan Gleadle is a nephrologist who cares for patients with acute and chronic kidney disease and who receive transplants. His research interests are in the cellular and molecular responses to hypoxia and in the mechanisms that control kidney growth. He leads the Clinical Disciplines and the Discipline of Medicine at the College of Medicine and Public Health at Flinders University.



EVENT DETAILS

DATE:

Tuesday 2 May 2023

TIME:

11:00am

VENUE:

Room G19 – Ground Floor 15 Innovation Walk Monash University Clayton Campus

HOST:

Alberto Rosello-Diez



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