

生命科学セミナー

Delineating the contribution of senescent cells to aging

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Jun 13 (Tue), 13:30-14:30

South Campus Research Building for Integrated Life Sciences
(Building G), Seminar Room CD

医学・生命科学総合研究棟（医学部構内 G 棟）2 階セミナー室 CD

The fundamental mechanisms that drive aging remain largely unknown, impeding the development of interventions that delay or prevent age-related disorders and maximize the number of years without serious or chronic illnesses. Senescent cells, which exhibit an irreversible cell cycle, are known to accumulate in various tissues and organs with age. These cells are thought to disrupt tissue structure and function through the components they secrete. To address the role of senescence in aging and age-related diseases, we have made a transgenic mouse model to selectively eliminate these cells. Studies related to the role of senescent cells in progeria (premature aging), natural aging and age-related diseases, including osteoarthritis, atherosclerosis and neurodegenerative diseases, will be discussed. In general, we find that elimination of senescent cells leads to largely beneficial impacts in these processes, without any apparent negative consequences, which suggests this strategy may be useful for the treatment for a variety of age-related conditions.

京都大学大学院生命科学研究科

Host: Lab of Cell Cycle Regulation

Fuyuki Ishikawa (4195)