

Aging Science Seminar

“Senescent cell involvement in aging and age-related disease”

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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.

Date: Monday, June 12th, 2017: Time: 16:00~17:00

Location: Biken Hall, 1st floor, main building, Research Institute for Microbial Diseases (微生物病研究所 本館1階 微研ホール)

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