

2023 年度 第 62 回 大学院セミナー

2023 年 11 月 9 日

分野名 (責任者名)(内線)	医歯薬学総合研究科/原爆後障害医療研究放射線リスク制御部門 放射線災害医療学分野(原研医療) 責任者名(光武範吏) 内線(7116)
演題 Title	1. Health and Wellbeing is the priority research area at Nazarbayev University: our focus is to advance healthcare by solving basic questions. 2. Defining the nutrient-dependent nuclear processes mediating cell growth and survival in cancer cells
講師等 Presenter	Director of the National Laboratory Astana, Nazarbayev University, Astana (Kazakhstan) ナザルバエフ大学アスタナ国立研究所・所長 Dos Djurmakhanbet Sarbassov 先生
概要 Abstract	1. Nazarbayev University (NU), a 12-year-old institution in Kazakhstan, aims to transform society through education and research. It has quickly become a top 30% global university by prioritizing high-quality education and competitive research. NU focuses on five key research areas, including Health and Wellbeing. NU Medicine, comprising the School of Medicine, University Medical Center, and Center for Life Sciences, collaborates to advance research and innovation for the improvement of health and wellbeing in the local community and globally. I will briefly introduce current situation of NU. 2. Elevated glycolytic consumption, known as the Warburg effect, characterizes the metabolic surge in rapidly growing cancer cells. Glucose starvation proves highly toxic for KRAS mutant cancer cells, as it induces reactive oxygen species (ROS) generation, leading to pre-apoptotic nuclear condensation. Our research reveals that ROS facilitate apoptosis by promoting histone deacetylation and chromatin condensation through recruitment of the Nucleosome Remodeling Deacetylase (NuRD) complex to chromatin. Oxidizing compounds effectively mimic glucose-dependent nuclear condensation in KRAS mutant cancer cells, priming them for apoptotic cell death. This discovery has led to the development of a potent drug combination targeting KRAS mutant cancer cells.
開催日時	2023 年 11 月 15 日 (水) 17:30 ~ 18:30
場所	原爆後障害医療研究所4階研修室
備考	本セミナーは、原研研究集会の一環として行います。

- 先端医療科学特論(基礎編)
- 先端新興感染症病態制御学特論
- 日本語 (Japanese)
- 対面 (Face to face)

- 先端医療科学特論(臨床編)
- 先端放射線医療科学特論
- 英語 (English)
- オンライン (Online)