

第4回 発生・再生医学セミナー

The 4th Seminar of the Seminar Series on
Developmental Biology and Regenerative Medicine

Stemness in normal and malignant tissues

Speaker: **Dr. Atsushi Hirao, Professor**

Division of Molecular Genetics, Center for Cancer and Stem Cell Research,
Cancer Research Institute, Kanazawa University

Date: March 12th (Thu), 2009. 5:00 pm ~

Place: Med. Edu. Lib. Bldg., 4th FL., Lecture Room 3

幹細胞制御とがん

講師：平尾 敦 教授

金沢大学がん研究所・がん幹細胞研究センター

日時：平成21年3月12日(木) 17:00 ~

会場：図書講義棟・4階 講義室3

Stem cells are defined as cells that have the ability to perpetuate through self-renewal, and develop into mature cells of a particular tissue through differentiation. Appropriate controls of stem cell functions are critical for maintaining tissue homeostasis. It has been suggested that dysregulation of stem cell function could lead to cell senescence or cancer. Most cancers comprise heterogeneous populations of cells with marked differences in their proliferative potential as well as the ability to reconstitute the tumor on transplantation. It has been proposed that a rare population of tumor-initiating cells, conceptually termed cancer stem cells, is responsible for initiation and recurrence of tumor, but it is still controversial whether all tumors follow cancer stem cell theory. We have been dedicated mainly to basic researches on the mechanisms of stem cell regulation in both normal and malignant tissues.

1. Ohmura M, *et.al.* Identification of stem cells during prepubertal spermatogenesis via monitoring of nucleostemin promoter activity. *Stem Cells*. 2008, 12:3237-46.
2. Miyamoto K, *et.al.* Foxo3a is essential for maintenance of the hematopoietic stem cell pool. *Cell Stem Cell*, 2007, 1:101-112.
3. Ito K, *et.al.* Reactive oxygen species act through p38 MAPK to limit the lifespan of hematopoietic stem cells. *Nature Med.* 2006, 12:446-451.

This seminar is supposed to be make-up lectures for "B3 Hematopoietic and Immune Systems" and "B7 Developmental and Regenerative Medicine", and to be an extra class of "Developmental Biology and Regenerative Medicine II". Please make sure to sign up the attendee certification

This seminar is also held as a part of "Advanced Education Program for Integrated Clinical, Basic and Social Medicine"

本セミナーを、大学院・博士課程講義科目の造血免疫制御学理論の補講、発生再生医学理論の補講、発生再生医学特論IIの特別講義といたします。受講認定を希望する博士課程学生の皆さま方には会場で受講証明書に必要事項を記入のうえ提出ください。

また、本セミナーを、大学院教育改革支援プログラム「臨床・基礎・社会医学一体型先端教育の実践」の一環として実施致します。

連絡先：免疫識別学分野 西村 泰治 内線：5310 (教授室)、5313 (秘書室)

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