

<p><b>(遺伝子・細胞療法部)</b> 赤司 浩一 教授</p> <p><b>連絡先:</b> ikyoku1intmed1@gmail.com</p>	<p><b>研究内容</b> 幹細胞学を基盤とした研究活動を展開している。主要テーマは、腫瘍性幹細胞を標的とする細胞・免疫治療の臨床応用を目指した基礎的研究である。(1) 効率的な細胞治療を実現するための造血幹細胞分化制御機構の解明、(2) 腫瘍性幹細胞の同定とその分子細胞生物学的特性の解析、(3) 移植片対宿主病の予後予測法や新規遺伝子治療である CART 療法の効果判定検査法の確立、を主な課題として研究を進めている。</p> <p><b>指導内容</b> (1) フローサイトメトリーによる造血幹細胞・前駆細胞の純化。 (2) 次世代免疫不全マウス異種移植システムによる腫瘍性幹細胞の同定。 (3) 腫瘍特異的治療標的分子の探索と分子特異的治療の確立。 (4) 超多重免疫染色技術を用いた移植片対宿主病の病態解明。 (5) CART 細胞を高感度で検出する検査法の確立。</p>
<p><b>Center for Cellular and Molecular Medicine</b></p> <p>Professor Koichi Akashi</p> <p><b>E-mail:</b> ikyoku1intmed1@gmail.com</p>	<p><b>Research Interests</b> This center was established in 2004 to facilitate translational research for the development of novel treatment strategies targeting cancer stem cell. We have three main aims challenging (1) to clarify mechanisms that regulating multi-lineage differentiation from hematopoietic stem cells, (2) to identify cancer stem cells and their molecular characteristics in various tumors, and (3) to establish methods to predict the prognosis of graft-versus-host disease and CART therapy. Our goal is development of seeds for novel anti-cancer therapies and to further evaluate them as clinical applications.</p> <p><b>Contents of Teaching/ Research Themes</b> (1) Purification of hematopoietic stem and progenitor cells by an 8-color fluorescence-activated cell sorting system. (2) Identification of cancer stem cells in the next-generation immunodeficient mouse xenotransplant models. (3) To search for therapeutic target molecules in various tumors and to establish a novel anti-cancer therapy with high tumor specificity. (4) Development of methods to predict the prognosis of GVHD using a multiplex immunofluorescence imaging technology. (5) Establishment of testing enable to track CART cells in vivo to facilitate anti-tumor immunity.</p>