## 血液内科学(千葉 滋) Hematology (CHIBA Shigeru)



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## 血液がんの克服 ~分子メカニズムからベッドサイドへ

造血器腫瘍(白血病や悪性リンパ腫など)のゲノム異常の解析や、腫瘍の微小環境の解析を通じ、細胞や分子レベルでの病態の解明に基づく治療法開発を目指す。化学療法や造血幹細胞移植でダメージを受ける正常造血とその再生、あるいは骨髄微小環境に関する研究も含まれる。材料としては、患者から得られた血液、骨髄、生検組織などの生体材料の他、培養細胞や遺伝子改変マウスなどを用い、細胞生物学解析、DNA、RNA、タンパク質の解析、免疫染色など様々な技術を駆使して研究を行う。

## Getting over blood cancers ∼ From molecules to bedside ∼

Our research ultimately aims at developing new treatment methods for hematologic malignancies such as leukemias and lymphomas, based on the understanding of cellular and molecular pathophysiology of these diseases through the analyses of genetics and tumor microenvironment. Notably, the blood production system is damaged by chemotherapy and hematopoietic stem cell transplantation for the treatment of hematologic malignancies. Our research scope includes regeneration of hematopoiesis, focusing on the bone marrow microenvironment. To these ends, clinical materials obtained from patients, such as blood, bone marrow, and biopsied tumor, and cultured cells and genetically engineered mice will be used for the cell biological and immunological analyses and analyses of DNA, RNA, and protein.

