Basic Principles and Clinical Applications of Cancer Genomic Medicine

(Code: 4726, 1st – 2nd year, 1 unit)

Attendance hours	11
No attendance hours	4
Total hours	15

1. Instructors

Name	Position	Department	Contact Information
MORI Takehiko	Chief Instructor / Professor	Department of Hematology	mori.hema@tmd.ac.jp
IKEDA Sadakatsu	Associate Professor	University Medical Hospital	ikeda.canc@tmd.ac.jp
TANIMOTO Kosuke	Assistant Professor	Genome Laboratory, Medical Research Institute	ktani.nri@mri.tmd.ac.jp

2. Classroom/Lab Lecture Location

Lectures are given online (zoom).

3. Course Purpose and Outline

[Course Purpose]

Organize systematic knowledge on the foundation and medical practice surrounding cancer genomes, the foundation and medical practice surrounding cancer precision medicine, and the field's current status.

[Outline]

Classes will include an overview of cancer genomes and cancer precision medicine from various angles. Lectures will be interactive, including active discussions during the course.

4. Course Objectives

- To understand and be able to explain knowledge of cancer genomes and precision medicine.
- To understand and be able to explain the role of cancer genomes and precision medicine in comprehensive cancer medical care.

5. Format

A bidirectional class will be conducted including presentations, lectures and video content for the purpose of active participation by students taking this course. All programs are conducted in an omnibus format.

6. Course Details

Lectures will be given focused on the following subjects:

- The foundation of genetics and genetic mutation.
- The foundation of next generation sequencing

- Annotation and curation for next-generation sequencing (NGS) analysis data
- Current status and challenges for implementation of genomic treatment

7. Assessment

The assessment will be by the report assignments.

8. Prerequisite Reading

None.

9. Reference Materials

None.

10. Language Used

All classes are conducted in Japanese.