CANCER DISCOVERY & TRANSLATIONAL SCIENCE (CDTS) – CERTIFICATE

· Bruce Horazdovsky, Ph.D, Program Director

The Certificate program in Cancer Discovery & Translational Science is available to Mayo Clinic professionals who working in cancer related discuplines. Doctoral candidates may be considered. Potential candidates for the degree must hold Mayo Clinic appointments of sufficient duration to complete the program requirements.

Course Work

The curriculum for the Certificate consists of 12 credits. The student must complete all of the required courses listed below:

Course Requirements

| Code | Title | Hours |
|-------------|--|-------|
| BMB 5000 | Cancer Biology I: Introduction to Cancer Biology: Molecular, Cellular and Genetic Basis of Cancer | 3 |
| BMB 6070 | Cancer Biology II: Molecular Mechanisms of Cancer: Signal Transduction Pathways and Networks | 3 |
| BMB 6510 | Cancer Biology Journal Club | 1 |
| Total Hours | | 7 |

Elective Courses

| Code | Title | Hours |
|---|---|-------|
| Students have the | option to complete these courses within a given | 5 |
| degree plan. A minimum of 5 credits are required. | | |

| BMB 5350 | Hormones and Cancer | 1 |
|-----------|--|---|
| CTSC 5300 | Foundations of Epidemiology | 1 |
| CTSC 5400 | Introduction to Bioinformatics Concepts and Core Technologies for Individualized Medicine Approaches | 1 |
| CTSC 5720 | Clinical Trials Design and Conduct | 1 |
| IMM 6865 | Regenerative T Cell Immunotherapy and Cellular Engineering | 3 |
| IMM 6884 | Tutorial in Generation and Function of T Cells | 2 |
| MPET 6814 | Cellular Pharmacology of Agents that Target Cancer | 2 |

This is a suggested sequence based on a summer term start. Individual course plans may vary depending on true start date, program, employment/personal commitments, and research interests. Be sure to confirm you have met your requirements using your degree planning tool. Course offerings may vary slightly. Current course offerings are posted in the course catalog.

| Code | Title | Hours |
|----------------|------------|-------|
| First Year - S | ummer Term | |
| Electives | | |

| Code | Title | Hours | |
|--------------------------|---|-------|--|
| First Year - Fall Term | | | |
| BMB 5000 | Cancer Biology I: Introduction to Cancer Biology Molecular, Cellular and Genetic Basis of Cancer | : 3 | |
| BMB 6510 | Cancer Biology Journal Club | 1 | |
| Code | Title | Hours | |
| First Year - Winter Term | | | |
| BMB 6070 | Cancer Biology II: Molecular Mechanisms of Cancer. Signal Transduction Pathways and Networks | 3 | |
| Electives | | | |
| Code | Title | Hours | |
| First Year - Spring Term | | | |

Electives