Major Cancer Biology

within the Master Program 'Molecular Biosciences'
University of Heidelberg, Faculty of Biosciences

Focus in Biosciences – Module 1 – Lecture period: 11.04.-22.05.2023 – Exam: 02.06.2023

Lecture Series on „Molecular Principles of Cancer Development“

time: 8:15–9:45 a.m. location: TP3 (INF 580) Buchleither Seminar room

Unit I (11.04.-18.04.2023)		**Date**
L1	The nature of cancer (Ilse Hofmann)	11.04.2023 (Tue)
L2	Cellular oncogenes (Wilhelm Palm)	12.04.2023 (Wed)
L3	Tumor suppressor genes (Stefan Wiemann)	13.04.2023 (Thur)
L4	Dialogue replaces monologue: Heterotypic interactions and the biology of angiogenesis (Hellmut Augustin)	14.04.2023 (Fri)
T	Tutorial ⇨lecture 2 (Jochen Heß)	17.04.2023 (Mon)
T	Tutorial ⇨lecture 3 (Ashok Kumar Jayavelu)	18.04.2023 (Tue)
Unit II (19.04.-25.04.2023)		
L5	Cytoplasmic signaling circuitry programs many of the traits of cancer (Tobias Dick)	19.04.2024 (Wed)
L6	Stem cells and cancer (Andreas Trumpp)	20.04.2023 (Thur)
L7	Epigenetics and cancer (Daniel Lipka)	21.04.2023 (Fri)
T	Tutorial ⇨lecture 5 (Claudia Scholl)	24.04.2023 (Mon)
T	Tutorial ⇨lecture 7 (Mark Hartmann)	25.04.2023 (Tue)
Unit III (26.04.-02.05.2023)		
L8	Multistep tumorigenesis (Karin Müller-Decker)	26.04.2023 (Wed)
L9	pRb and control of the cell cycle clock (Frank Westermann)	27.04.2023 (Thur)
L10	Maintenance of genomic integrity and the development of cancer (Aurelie Ernst)	28.04.2023 (Fri)
T	Tutorial ⇨lecture 10 (Violaine Goidts)	02.05.2023 (Tue)
Unit IV (03.05.-09.05.2023)		
L11	Epidemiology (Rudolf Kaaks)	03.05.2023 (Wed)
L12	Eternal life: Cell immortalization and tumorigenesis (Ana Banito)	04.05.2023 (Thur)
L13	Personalized medicine (Stefan Pfister)	05.05.2023 (Fri)
T	Tutorial ⇨lecture 12 (Priya Chudasama)	08.05.2023 (Mon)
T	Tutorial ⇨lecture 11 (Justo Lorenzo-Bermejo)	09.05.2023 (Tue)
Unit V (10.05.-22.05.2023)		
L14	Tumor immune microenvironment (TIME) (Amir Abdollahi)	10.05.2023 (Wed)
L15	Treatment of cancer (Susanne Weg-Remers)	11.05.2023 (Thur)
L16	Moving out: Invasion and metastasis (Heiko Weyd)	12.05.2023 (Fri)
T	Tutorial ⇨lecture 14 (Christiane Opitz)	15.05.2023 (Mon)
T	Tutorial ⇨lecture 13 (Johanna Wagner)	16.05.2023 (Tue)
L17	Metabolism and cancer (Aurelio Teleman)	17.05.2023 (Wed)
L18	Molecular pathological epidemiology (Michael Hoffmeister)	22.05.2023 (Mon)

The lecture series follows in most parts the book by Robert Weinberg „The Biology of Cancer“.
The topics 'Tumor Immunology' and 'Tumor Virology' will be covered by the lecture series in Module 2.
The content of the lecture series will be examined by a written examination.

Examination date:

Friday 2. June 2023*;* 10:00–12:00, Grand Lecture Hall of DKFZ Communication Center

Responsible for the organization of the lecture series is Ilse Hofmann.

The lecture series is also open to registered DKFZ PhD students (lectures only) and other selected external guests.