

Focus in Biosciences – Module 1 – Lecture period: 08.04.-17.05.2024 – Exam: 29.05.2024

## Lecture Series on „Molecular Principles of Cancer Development“

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

### Unit I (08.04.-16.04.2024)

	Date
L1 The nature of cancer (Ilse Hofmann)	08.04.2024 (Mon)
L2 Cellular oncogenes (Wilhelm Palm)	09.04.2024 (Tue)
L3 Tumor suppressor genes (Stefan Wiemann)	10.04.2024 (Wed)
L4 Dialogue replaces monologue: Heterotypic interactions and the biology of angiogenesis (Hellmut Augustin)	11.04.2024 (Thur)
L5 Stem cells and cancer (Andreas Trumpp)	12.04.2024 (Fri)
T Tutorial ⇒lecture 3 (Ashok Kumar Jayavelu)	15.04.2024 (Mon)
T Tutorial ⇒lecture 2 (Jochen Heß)	16.04.2024 (Tue)

### Unit II (17.04.-23.04.2024)

L6 Cytoplasmic signaling circuitry programs many of the traits of cancer (Tobias Dick)	17.04.2024 (Wed)
L7 Moving out: Invasion and metastasis (Heiko Weyd)	18.04.2024 (Thur)
L8 Epigenetics and cancer (Daniel Lipka)	19.04.2024 (Fri)
T Tutorial ⇒lecture 8 (Mark Hartmann)	22.04.2024 (Mon)
T Tutorial ⇒lecture 6 (Claudia Scholl)	23.04.2024 (Tue)

### Unit III (24.04.-30.04.2024)

L9 pRb and control of the cell cycle clock (Frank Westermann)	24.04.2024 (Wed)
L10 Eternal life: Cell immortalization and tumorigenesis (Ana Banito)	25.04.2024 (Thur)
L11 Maintenance of genomic integrity and the development of cancer (Aurelie Ernst)	26.04.2024 (Fri)
T Tutorial ⇒lecture 10 (Priya Chudasama)	29.04.2024 (Mon)
T Tutorial ⇒lecture 11 (Violaine Goidts)	30.04.2024 (Tue)

### Unit IV (02.05.-07.05.2024)

L12 Cancer Epidemiology (Rudolf Kaaks)	02.05.2024 (Thur)
L13 Tumor immune microenvironment (TIME) (Amir Abdollahi)	03.05.2024 (Fri)
L14 Metabolism and cancer (Aurelio Teleman)	06.05.2024 (Mon)
T Tutorial ⇒lecture 13 (Christiane Opitz)	07.05.2024 (Tue)

### Unit V (08.05.-17.05.2024)

L15 Personalized medicine (Stefan Pfister)	08.05.2024 (Wed)
T Tutorial ⇒lecture 15 (Johanna Wagner)	13.05.2024 (Mon)
T Tutorial ⇒lecture 12 (Justo Lorenzo-Bermejo)	14.05.2024 (Tue)
L16 Multistep tumorigenesis (Michael Dill)	15.05.2024 (Wed)
L17 Treatment of cancer (Susanne Weg-Remers)	16.05.2024 (Thur)
L18 Molecular pathological epidemiology (Michael Hoffmeister)	17.05.2024 (Fri)

The lecture series follows in many 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:** Wednesday 29. May 2024, 10:00–12:00, Gr. SR ATV

Responsible for the organization of the lecture series and exam is: Ilse Hofmann.

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