

Outline

Literaturseminar / Journal Club
für Studierende der Molekularen Medizin in Göttingen
im WS 2019/2020

Highlights in Medical Research
- Milestones in Immunology, Virology and Oncology -

This journal club intends to discuss groundbreaking publications in medical research particularly in the fields of immunology, virology and oncology. Every two weeks we will read one original research article as on the hybridome technique for the production of monoclonal antibodies by George Köhler and Caesar Milstein (1975), T-cell restriction to the major histocompatibility complex (MHC) by Rolf Zinkernagel and Peter Doherty (1974), the discovery of HIV in 1983 and of HCV in 1989, the demonstration that RNA interference applies in mammalian cells by Tom Tuschl and his group members in Göttingen (2001) and more recent ones as new concepts in anticancer drug delivery or mode of action of chemotherapeutics. Besides deepening specific knowledge, we will try to figure out the rationales behind each of the respective experiments and the precise meaning of the results. By doing this, we will get trained in and enhance scientific reading and debating abilities.

Vorbesprechung + Einführung: Donnerstag 10.10.19, 14.00-15.00 (HS 01/02)

KÖHLER G, MILSTEIN C (1975): Continuous cultures of fused cells secreting antibody of predefined specificity. *Nature* 256, 495-7 (Do, 17.10.2019 14.00-15.30 in HS 01/02)

ZINKERNAGEL RM, DOHERTY PC (1974): Restriction of in vitro T cell-mediated cytotoxicity in lymphocytic choriomeningitis within a syngeneic or semiallogeneic system. *Nature* 248(5450), 701-2 (Mi, 30.10.2019 12.30-14.00 in HS 69/71)

BARRÉ-SINOUSSE F ET AL. (1983): Isolation of a T-lymphotropic retrovirus from a patient at risk for acquired immune deficiency syndrome (AIDS). *Science* 220(4599), 868-71 (Do, 14.11.2019 14.00-15.30 in HS 69/71)

CHOO QL, KUO G, WEINER AJ, OVERBY LR, BRADLEY DW, HOUGHTON M (1989): Isolation of a cDNA clone derived from a blood-borne non-A, non-B viral hepatitis genome. *Science* 244(4902), 359-62 (Mi, 27.11.2019 12.30-14.00 in HS91/92)

ELBASHIR SM, HARBORTH J, LENDECKEL W, YALCIN A, WEBER K, TUSCHL T (2001): Duplexes of 21-nucleotide RNAs mediate RNA interference in cultured mammalian cells. *Nature* 411(6836), 494-8 (Mi, 11.12.2019 12.30-14.00 in HS61)

MACDIARMID JA ET AL (2007): Bacterially derived 400 nm particles for encapsulation and cancer cell targeting of chemotherapeutics. *Cancer Cell* 11(5):431-45 (Mi, 15.1.2020 12.30-14.00 in HS61)

SISTIGU A ET AL (2014): Cancer cell-autonomous contribution of type I interferon signaling to the efficacy of chemotherapy. *Nat Med* 20(11):1301-9 (Do, 30.1.2020 14.00-15.30 in HS61)