

Cycle E: Computational and Systems Biology: 52327 - Making of a Drug

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Fall semester 2019, Wednesdays, 16:15 – 18h, Pharmazentrum, Hörsaal 2

The “Making of a drug” is an endeavor that usually takes 15 years or more, involves hundreds of scientists, and consumes a budget of more than 2 billion Swiss Francs on average. No single individual is an expert on all aspects of such a complex and challenging project. It requires resilience, engagement and team spirit with deep scientific commitment on a global scale. However, a fundamental understanding, by everyone involved, of the problems encountered along the way is considered a key ingredient for success. This lecture series is an attempt to provide a conceptual understanding of drug discovery to advanced students of molecular biology or biochemistry held by speakers from industry based on real-life examples.

18.09.	- 1 - Introductory Lecture: Drug Discovery - Challenges and Opportunities <i>Dominic Hoepfner, Novartis Institutes for BioMedical Research (NIBR)</i> <i>Peter Groenen, Idorsia</i>
25.09.	- 2 - Natural Products in Drug Discovery <i>Kathrin Buntin, Novartis Institutes for BioMedical Research</i>
02.10.	- 3 - Chemical Starting Points <i>Daniel Baeschlin, Novartis Institutes for BioMedical Research</i>
09.10.	- 4 - Ecoded Library Technologies in Drug Discovery <i>Johannes Ottl, Novartis Institutes for BioMedical Research</i>
16.10.	- 5 - Target Discovery <i>Stephen Helliwell, NIBR & Eric Billy, NIBR</i>
23.10.	- 6 - CRISPR technology in Drug Discovery <i>Filip Roudnicky, Hoffmann-La Roche & Dominic Hoepfner, NIBR</i>
30.10.	- 7 - Structural Biology in Drug Discovery <i>Carien Dekker, NIBR & Christian Wiesmann, NIBR</i>
06.11.	- 8 - Complex Models of Disease <i>Heinz Ruffner, NIBR & Matthias Müller, NIBR</i>
13.11.	- 9 - Data Science Driven Target Discovery <i>Sophie Lemire, Novartis Institutes for BioMedical Research</i>
20.11.	- 10 - Medicinal Chemistry <i>Martin Bolli, Idorsia & Klemens Hoegenauer, NIBR</i>
27.11.	- 11 - Regulatory Affairs & - 12 - Economic Perspectives <i>Sylvia Lehner, Novartis Pharma AG & Kelvin Stott, Novartis Pharma AG</i>
04.12.	- 13 - Early Clinical Development I <i>Jasper Dingemanse, Idorsia</i>
11.12.	- 14 - Early Clinical Development II <i>Andreas Krause, Idorsia & Matthias Schieker, NIBR</i>
18.12.	- 15 – From Bench to Bedside <i>Esther Schmitt, Novartis Institutes for BioMedical Research</i> - 16 - Short Exam <i>Dominic Hoepfner, Novartis Institutes for BioMedical Research</i>