

Wahlpflichtfachbeschreibung Angew. Naturwissenschaften – WPF Drug Targets

Module name	Drug Targets			
In Semester	BTB 6 und 7			
ETCS-Points	2			
Working hours	Sum 60	Contact time 30	Self-study time 20	Exam preparation 10
Duty mark	elective			
Teaching language	German / English			
Offered	Summer term			
Usability for other courses or studies	none			
Conditions for participation	Lectures: Biochemistry, Cell biology			
Targets of the module	<p>- Students will be able to:</p> <ol style="list-style-type: none"> <li>1) give examples of disease-relevant proteins („drug targets“) and to describe their cellular function and physiological role.</li> <li>2) summarize pharmaceutical small chemical compounds and biotechnological drugs.</li> <li>3) present current technologies for the identification of novel „drug targets“.</li> <li>4) analyze and present reports and articles from scientific journals.</li> </ol>			
Content	<p>- The lecture provides an overview of disease-relevant proteins, so-called „drug targets“, used by the pharmaceutical industry to develop chemical and biological agents for the treatment of e.g. cancer, diabetes, inflammation and cardiovascular disorders.</p> <p>- The lecture includes individual classes of „drug targets“, such as kinases, receptor tyrosine kinases (RTKs), G-protein coupled receptors (GPCRs), ion channels, ligands.</p> <p>- The lecture includes biological agents, so-called „biotech drugs“, e.g. monoclonal antibodies and recombinant proteins.</p> <p>- The lecture provides an overview of technologies for the identification of novel „drug targets“.</p>			
Literature	Lecture notes and scientific journals			
Responsible person	Cristina Sirrenberg-Cruciat			

**Efficiency statements**

Form of instruction	SWS	Targets	Examination form	Working hours
Lecture	2	- See above	Oral presentation	60