

Syllabus for Spring 2020, Institute of Biopharmaceutical Sciences			
Course title : Model Organisms in Drug Discovery			
Course objectives: <ol style="list-style-type: none"> 1. To learn the benefits and limitations of various model organisms in biological research. 2. To understand why certain organisms have been applied to biomedical studies and how model organisms are important for drug discovery and development. 			
Date : 15:30 – 17:20 Thursdays March. 5 th 2020 to July 2nd 2020		Location: 1st floor BPS classroom, Biomedical Building	Contact: Dr. Tsui-Ting Ching 2826-7000 ext 7968
Date	Topic	Hour	Instructor
03/05	<i>Saccharomyces cerevisiae</i> in Drug Discovery: Genome and Signaling Pathway	2	Dr. Tsui-Ting Ching
03/12	<i>Saccharomyces cerevisiae</i> in Drug Discovery: Application	2	Dr. Tsui-Ting Ching
03/19	Genetically Engineered Mouse Models in Drug Discovery Research	2	Dr. Irene Cheng
03/26	Mouse Models for Human Diseases	2	Dr. Irene Cheng
04/02	Holiday		
04/09	Mechanism of Action in Model Organisms	2	Dr. Tsui-Ting Ching
04/16	<i>Drosophila</i> as a Model Organism	2	Dr. Jenn-Yah Yu
04/23	<i>Drosophila</i> models in Cancer, CNS diseases and Metabolic Disorders	2	Dr. Jenn-Yah Yu
04/30	Midterm Exam	2	Dr. Tsui-Ting Ching
05/07	<i>Caenorhabditis elegans</i> in Drug Discovery: Introduction	2	Dr. Ao Lin Hsu
05/14	Disease models in <i>C. elegans</i>	2	Dr. Tsui-Ting Ching
05/21	Zebrafish as a System in Drug Development	2	Dr. Guor Mour Her
05/28	Genomic Technologies and Drug Screens in Zebrafish	2	Dr. Guor Mour Her
06/04	Other Model Organisms I	2	Dr. Tsui-Ting Ching
06/11	Other Model Organisms II	2	Dr. Tsui-Ting Ching
06/18	Final Exam	2	Dr. Tsui-Ting Ching
06/25	Dragon Boat Festival		

07/02	Student self-study	2	Dr. Tsui-Ting Ching
<p>Reference:</p> <p>“The Biological Resources of Model Organisms: Collection, Characterization and Applications”</p> <p>By Robert L. Jarret and Kevin McCluskey, CRC Press; 1 edition (July 16, 2019)</p>			