

Animal Welfare Course C updated

Training course for registered persons performing animal experiments and for study directors

Endocrine Disruptors: Basic Principles, Sexual Development of Fish and Testing of Endocrine Active Substances

Monday, October 4, 2021

Course Focus:

Endocrine Active Substances: Endocrine disruptors, hormonal regulation of reproduction and metabolism, endocrine potency of substances

Sexual Development of Fish: Anatomy, gonads, sexual differentiation and development, secondary sex characteristics, sex and sex reversal

Testing of endocrine disruptors: Test methods with suitable endpoints and their sensitivity, what is an endocrine effect, test strategies

Removal of Blood and Gonads in order to assess endocrine effects on vitellogenin and histological effects on gonads.

Video on fatal health consequences due to exposure to endocrine disruptors

Duration, Purpose and Language of Course:

The course will take place from 0915 to 1800h. It will be regarded as a one day further education course by the Swiss authorities or as part of the education of persons responsible for directing animal experiments in the context of MODUL ECOTOX corresponding to FELASA-C (MODUL ECOTOX consists of a total of six courses A, B1, B2, B3, D2 and P: theoretical and practical education of at least 40 hours for persons responsible for directing animal experiments). The course is adapted to registered persons performing animal experiments as well as for study directors. The course language is English or German depending on the audience.

Organisational Information:

Lead & Instructors: Dr. Hans Rufli, **ecotoxsolutions**, Basel
Dr. Susanne Knörr, Heidelberg

Registration: rufli@ecotoxsolutions.com

Costs: Fr.700.- including pdf-files of the presentations sent ca. 1 week prior to the course.

Your Video Equipment: "Zoom" should be installed on your Laptop/PC (<https://zoom.us/download> = English). Microphone and camera should be available as well. At 7h on the day of the course, an invitation link will be sent to your desired email-address previously announced to me. By clicking this link, you will be in the meeting.

Certificate: A written certificate will be handed out as soon as you returned your feedback on the course. This certificate will have to be shown to the Swiss authorities on request.

Programme of Course C

Time	Topics	Speaker
0800-0815	Welcome, Information about Course	H. Rufli
0815-1000	1) Endocrine Active Substances: a) Endocrine disruptors, hormonal regulation of reproduction and metabolism, endocrine potency of substances	S. Knörr
1000-1100	2) Sexual Development of Fish: a) Gonad development and maturation stages	S. Knörr
1100-1200	1) Endocrine Active Substances: b) What is an endocrine effect?	H. Rufli
	<i>Lunchtime</i>	
1300-1420	2) Sexual Development of Fish: b) Sexual differentiation of gonads & Sensitive Windows c) Endpoints and endocrine effects d) Sex determination and sex reversal	H. Rufli
1420-1540	OECD-Test methods and Testing Strategies for endocrine substances	H. Rufli
1540-1630	Removal of Blood and of Gonads to assess endocrine effects on vitellogenin and histological effects on gonads Dissection Manual & Video	S. Knörr
1630-1700	Course Evaluation and Final Review	H. Rufli

0815-0910	1	Endocrine Disruptors	SK
0915-0945	2	Gonad Staging	SK
1000-1025	3	What is an ED	Ru
1030-1100	4	Differentiation of Gonads	Ru
1105-1135	5	Endpoints for Endocrine Effects in Fish	Ru
1140-1210	6	Sex Reversal	Ru
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1300-1320	7	OECD-Methods + Questions	Ru
1325-1340	8	Testing Strategies	Ru
1345-1355	9	Collection of Blood	SK
1400-1415	10	Dissection Manual & Video	SK