

12th Berlin Summer School 2019 "Non-invasive Monitoring of Hormones"

Monday 23.09.2019	Tuesday 24.09.2019	Wednesday 25.09.2019	Thursday 26.09.2019	Friday 27.09.2019
8:15 - 8:45	9:00 - 10:30	9:00 - 10:30	9:00 - 10:30	9:00 - 10:30
Reception	J. Wauters	Female reproductive monitoring I: (Asian elephant)	J. Fickel	Monitoring adrenal activity (stress) II: (Cheetah)
8:45 - 9:30	Non-invasive endocrine assessment: Metabolism of hormones, biological validation and factors determining data interpretation	• Preparation of urine samples: hydrolysis and extraction	Non-invasive DNA analysis using fecal samples for identification of species, sex and individual	Evaluation of the EIA
A. Ganswindt	Field endocrinology: practicalities, concerning collection and preservation of faecal samples	Preparation of calibration curves III:		HPLC-immunogram II: (Cat species)
Non-invasive hormone monitoring: an introduction to the topic		• Evaluation EIA		Evaluation of the EIA
9:30 - 10:30		Monitoring male reproductive activity II:		
J. Wauters		• Evaluation EIA		
Non-invasive endocrine assessment: Principle of enzyme immunoassay and analytical validation				
Coffeebreak	Coffeebreak	Coffeebreak	Coffeebreak	Coffeebreak
11:00 - 13:00	11:00 - 12:00	11:00 - 13:00	11:00 - 13:00	11:00 - 13:00
M. Dehnhard	Calibration curves I:	A. Ganswindt	Female reproductive monitoring III: (Asian elephant)	Participants + lecturers
Basic biology: reproductive biology and stress physiology	• Preparation of calibration curves for Testosterone / 5a-P	Determining adrenocortical activity as a measure of stress	• Evaluation EIA	Data evaluation + presentation Evaluation of the summer school Criticism Concluding remarks
Coffeebreak	Coffeebreak	Coffeebreak	M. Dehnhard	
Lunch	Lunch	Lunch	HPLC immunograms	
14:00 - 15:30	13:00 - 14:30	14:00 - 15:30	Lunch	13:00 - 14:30
Preparation of microplates I:	Ch. Touma	Female reproductive monitoring II: (Asian elephant)	14:00 - 15:30	Pizza Party
• Coating	Non-invasive monitoring of stress hormones in mice and its application in biomedical research	• Assessing the EIA for 5a-P	Performing HPLC-immunograms: (Cat species)	End of 12th Berlin Summer School 2019
Checkerboard titration I:	Coffeebreak	Coffeebreak	• Assessing the EIA for PGFM	
• Testosterone / 5a-P	15:00 - 17:00	15:30 - 18:00	Monitoring adrenal activity (stress) I: (Cheetah)	
Coffeebreak	Checkerboard titration II:	Visit to the Tierpark	• Application of three EIAs to monitor adrenocortical activity in cheetahs	
16:00 - 18:00	• Finalization and evaluation			
Monitoring male reproductive activity:	Preparation of microplates II:			
• Preparation and extraction of fecal samples	• Blocking			
18:00 - 22:00	Coffeebreak			
Barbecue party	17:30 - 19:30			
(Yellow kitchen / garden)	Calibration curves II:			
	• Assessing the enzyme immunoassays (EIA) for calibration curves for Testosterone / 5a-P			
	Monitoring male reproductive activity I: (Asian elephant)			
	• Assessing the EIA for testosterone			

Lecture room
Seminar room

Lab