

Programme

Wednesday 18th September 2024 – DAY 1: The basics – Physiology of homeostasis

11:30-12:30	Registration, Lunch (lobby)	
12:30-12:50	Introduction: Course objectives, logistics, house rules. Introducing the faculty and the candidates	F. Duška + all
12:50-13:30	Brief history of homeostasis, acids, bases and blood gases - introducing basic mathematics and terminology based on historical concepts	D. Lodahl
13:30-14:00	Physiology of extracellular and intracellular buffers	L. Giosa
	Coffee break	
14:20-14:40	Carbon dioxide and respiratory acid-base derangements	T. Langer
14:40-15:00	Renal regulation of acid base	P. Caironi
15:00-15:30	Physiology of osmolarity regulation, body fluids and compartments	N. Van Regenmortel
	Coffee break	
16:00-16:20	Interpreting urinary electrolytes	P. Caironi
16:20-16:50	Integrating sodium homeostasis and Guytonian haemodynamics	M. Bestle
16:50-17:20	Lactate	P. Waldauf
	Coffee break	
17:40-18:10	Blood gas analyser – how it works, useful and useless values	S. Brusatori
18:10-18:30	Most important physiological concepts for acute care clinicians	L. Gattinoni (online)
18:30-18:45	Whiteboard Summary: What did I learn today + Q&A	F. Duška, M. Heldeweg
19:00	Networking Event (Grand Café Orient, Ovocný trh 19)	

Thursday 19th September 2024 – DAY 2: Clinical acid base

09:00-09:30	Boston rules	T. Langer
09:30-10:00	Metabolic disorders: bicarbonate-centred approach	D. Lodahl
10:00-10:40	Stewart electroneutrality-based approach	T. Langer
	Coffee break	
11:00-11:25	Simplified acid-base models	M. Krbec
11:25-11:50	Errors of simplified acid-base models during extreme pH values	L. Giosa
	Lunch (café Didaktikon, ground floor)	
12:50-13:30	Practical physiology-based approach to interpreting acid-base	M. Heldeweg
13:30-14:00	Role of sodium bicarbonate in the management of metabolic acidosis	P. Caironi
14:00-14:30	Whiteboard Summary: What did I learn today + Q&A	S. Rees
	Coffee break	
15:00-18:30	Practical workshops on real clinical cases	
	Lobby: Rest station	–
	Table I: Acid Base Cases 1, 2, 3	S. Brusatori
	Table II: Acid Base Cases 4, 5, 6	D. Lodahl
	Table III: Acid Base Case 7, 8, 9	L. Giosa
	Table IV: Ask me what you did not get! (no case, just experts and a whiteboard)	F. Duška, T. Langer
	Table V: Acid Base Cases 10, 11, 12	F. Zadek
	Table VI: Acid Base Cases 13, 14, 15	M. Heldeweg

Friday 20th September 2024 – DAY 3: Advanced Acid-Base + Water and osmoles

09:00-09:10	Warm-up case (on extreme body temperature)	S. Brusatori
09:10-09:40	Beyond Stewart: Multicompartmental acid base models – the future of acid base analysis?	S. Rees
09:40-10:20	Unifying acid base approaches: just different points of view?	M. Krbec
10:20-10:50	Cerebrospinal fluid, blood-brain barrier and implications on acid-base equilibria	F. Zadek
	Coffee break	
11:10-11:40	Dysnatraemias – practical approach	N. Van Regenmortel
11:40-12:10	Calcium and magnesium in ED and ICU	F. Duška
	Lunch (café Didaktikon, ground floor)	
13:10-13:30	Influence of resuscitative and maintenance fluids on acid-base – the final word	F. Duška
13:30-14:00	Solution of the morning case + what did I learn today?	S. Brusatori
	Coffee break	
14:30-18:00	Practical workshops on real clinical cases	
	Lobby: Rest station	–
	Table I: Acid Base Case 16, 17, 18	P. Waldauf
	Table II: Acid Base Cases 19, 20, 21	F. Zadek
	Table III: Acid Base Case 22, 23	S. Brusatori
	Table IV: Ask me what you did not get! (no case, just experts and a whiteboard)	M. Malbrain, M. Bestle
	Table V: Acid Base Cases 24, 25	T. Langer
	Table VI: Acid Base Cases 26, 27, 28	F. Duška
19:00-21:00	Social Equilibrium Evening	

Saturday 21st September 2023 – DAY 4: Lets focus on real life setting...

09:00-09:35	My practical summary on how to use fluids	M. Malbrain
09:35-10:15	How do I use of diuretics in my ICU?	P. Caironi
10:15-10:45	Advanced acid-base in a patient on renal replacement therapies	F. Zadek
	Coffee break	
10:45-11:00	Big data in acid-base	M. Heldeweg
11:00-11:15	Digging for GOLDMARK: Diagnostic and therapeutic considerations	N. Van Regenmortel
11:15-12:00	Challenge the expert with your Friday night case	F. Zadek, T. Langer, P. Caironi,
12:00-12:30	Kahoot Case-solving contest	N. van Regenmortel F. Zadek
12:30	Wrap up, course evaluation, group photo	

Candidates Rotation through Workshop Stations

Day 2

Group	15:00 to 15:25	15:30 to 15:55	16:00 to 16:25	16:30 to 16:55	17:00 to 17:25	17:30 to 17:55	18:00 to 18:25
Red	Lobby	Table I	Table II	Table III	Table IV	Table V	Table VI
Blue	Table VI	Lobby	Table I	Table II	Table III	Table IV	Table V
Yellow	Table V	Table VI	Lobby	Table I	Table II	Table III	Table IV
Magenta	Table IV	Table V	Table VI	Lobby	Table I	Table II	Table III
Dark green	Table III	Table IV	Table V	Table VI	Lobby	Table I	Table II
Orange	Table II	Table III	Table IV	Table V	Table VI	Lobby	Table I
Neon green	Table I	Table II	Table III	Table IV	Table V	Table VI	Lobby

Day 3

Group	14:30 to 14:55	15:00 to 15:25	15:30 to 15:55	16:00 to 16:25	16:30 to 16:55	17:00 to 17:25	17:30 to 17:55
Red	Table V	Table VI	Lobby	Table I	Table II	Table III	Table IV
Blue	Table IV	Table V	Table VI	Lobby	Table I	Table II	Table III
Yellow	Table III	Table IV	Table V	Table VI	Lobby	Table I	Table II
Magenta	Table II	Table III	Table IV	Table V	Table VI	Lobby	Table I
Dark green	Table I	Table II	Table III	Table IV	Table V	Table VI	Lobby
Orange	Lobby	Table I	Table II	Table III	Table IV	Table V	Table VI
Neon green	Table VI	Lobby	Table I	Table II	Table III	Table IV	Table V