

## Basic Course Abdominal Ultrasound 30<sup>th</sup> March – 2<sup>nd</sup> April 2017

### Day 1: Thursday

Time	Content	Faculty
13:45	Reception / allocation to small-groups of 5 participants / handouts	
14:00	Introduction; Refresher on probe-handling and physical basics: Why appear which structures hypo- versus hyperechogenic? <b>live-demo:</b> sagittal views, systematic identification of 3D anatomy	Hofer
14:30	<b>hands-on ultrasound exercises</b> sagittal views in groups of 5: Retroperitoneal predilection sites of lymph nodes (LN), retroperitoneal blood vessels (AO, IVC, CT, SMA..), dynamic steering of transducer and patient's breathing  (5 course participants examine each other under supervision)	<b>Faculty - Trainer:</b> Bergfelder, Hofer, Majewski, Schmidt, Weigel
15:45	<b>drawing exercises</b> in small groups on sagittal-views → Memoryeffect ↑ and 3D-pattern recognition ↑	Trainer
16:00	<b>coffee break</b>	
16:20	Topographic anatomical orientation in parailiac views <b>live-demonstration</b>	Hofer
16:30	<b>hands-on ultrasound exercises</b> sagittal views in groups of 5: systematic scanning of parailiac views: ruling out ascending DVT (deep venous thrombosis) or enlarged LN	Trainer
17:00	<b>case examples</b> clinical relevance/ common findings in sagittal views	Hofer
17:15	Physical Basics: frequent artifacts and pitfalls	Hofer
17:30	<b>coffee break</b>	
17:45	<b>Live-Demonstration:</b> anatomical orientation in transverse views, advices and tricks to visualize the pancreas, application of pressure	Hofer
18:00	<b>Hands-on ultrasound exercises</b> transverse views in groups of 5: Systematic scanning of all parts of the pancreas Identification of aortic origin of celiac trunc and SMA (superior mesenteric artery), left renal vein crossing, DD of LN ↔ blood vessels	Trainer
19:30	<b>case examples</b> common pathological findings in transverse views	Hofer
19:45	<b>drawing exercises</b> in small groups on transverse-views: Who is who ? → Memoryeffect ↑ and 3D-pattern recognition ↑	Trainer
approx. 20:00	end of 1 <sup>st</sup> day of the course; recommended preparation for friday: Sono-Grundkurs, (Thieme Publisher) 8 <sup>th</sup> German edition 2015, chapters on liver, gall bladder and spleen, pp. 39-78	

(You do **not** have to show up next morning sober / fasting state – to have breakfast is ok)

### Course Site:

Iberostar Royal Golfclub, Novo Sancti Petri (Chiclana), Andalusia

[http://www.clubgolfrealnovosantipetri.com/pg\\_10.php?lng=de](http://www.clubgolfrealnovosantipetri.com/pg_10.php?lng=de)

## Basic Course Abdominal Ultrasound Day 2: Friday 31<sup>st</sup> March 2017

Time	Content	Faculty
10:00	<b>live-demonstration:</b> anatomical orientation in oblique views of the upper abdomen (hepatic hilum) and in right MCL (gall bladder, GB)	Hofer
10:15	<b>hands-on ultrasound exercises</b> in groups of 5: hepatic hilum <b>and gall bladder</b>  portal hypertension, LN-↑, cholecystitis or gall stones?	Trainer
11:15	<b>case examples</b> DD of LN-↑ (size, hilar fat sign) and gall bladder	Hofer
11:30	<b>drawing exercises</b> in small groups: oblique-views of upper abdomen	
11:40	<b>coffee break:</b> fruits & cookies / sweets...	
11:55	<b>live-demonstration</b> systematic scanning of the entire (!) liver incl. star of hepatic veins and DD portal ↔ hepatic veins ↔ bile ducts	Hofer
12:15	<b>hands-on ultrasound exercises</b> liver (part 1) in groups of 5: systematic scanning of the entire liver in 2 perpendicular views, Examination of the hepatic veins in subcostal oblique view  normal variants, fatty liver, focal liver lesions, right heart insufficiency?	Trainer
	<b>Siesta 13:15 – 16:30</b> <i>(opportunity for hands-on exercises from 4:00 PM to 4:30 PM)</i>	
16:30	<b>case examples</b> of frequent focal liver lesions, common pathologies	Hofer
17:00	<b>hands-on ultrasound exercises</b> liver (part 2) in groups of 5: systematic scanning of the entire liver in 2 perpendicular views, (we will try harder together...)	Trainer
17:45	<b>coffee break:</b> fruits & cookies / sweets...	
18:00	<b>live-demonstration</b> systematic scanning of both kidneys / adrenal gl.	Hofer
18:15	<b>hands-on ultrasound exercises</b> both kidneys in groups of 5:  systematic scanning of both entire kidneys in 2 perpendicular views, measurement of organ size, ratio of parenchyma-to-pelvis-ratio	Trainer
approx. 19:30	end of 2 <sup>nd</sup> day of the course; recommended preparation for saturday: Sono-Grundkurs, (Thieme Publisher) 8 <sup>th</sup> edition 2015, chapters on pelvis and genitals: pp. 88-95	

Optional Dinner (~ 20:30):

At Milan`s Restaurant: "Mar Y Monte" (between Roche and N 340)

Feel free to bring your partner or family (at your own expense)

<http://www.restaurantemarymontecondelafrontera.es/en/>

## Basic Course Abdominal Ultrasound Day 3: Saturday, 1<sup>st</sup> April 2017

Zeit	Inhalt	Referenten
10:00	<b>case examples</b> of common pathologies of the kidneys	Hofer
10:15	<b>drawing exercises</b> in small groups on kidneys → memory-effect↑	
10:30	<b>live-demonstration</b> systematic scanning of the spleen: organ size, „curtain trick“ to visualize the subdiaphragmal parts of the spleen	Hofer
10:45	<b>hands-on ultrasound exercises</b> in groups of 5:  systematic scanning of the spleen and tail of the pancreas, measurement of splenic organ size	Trainer
11:45	<b>coffee break:</b> fruits & cookies / sweets...	
12:00	<b>case examples</b> of common splenic pathologies	Hofer
12:15	<b>drawing exercises</b> of splenic views for your memory-effect↑	
12:30	<b>free hands-on ultrasound exercises</b> in groups of 5: where do you see areas of potential further improvements, which scanning procedures / algorithms would you like to practice? (with support of our trainers until 13:15)	Trainer
<p style="text-align: center;"><b>Siesta 13:15 – 16:30</b> (opportunity for hands-on exercises from 4:00 PM to 4:30 PM)</p> <p style="text-align: center;">Please do <u>not</u> urinate later than 3:30 PM – we will need to have filled urinary bladders!</p>		
16:30	<b>live-demonstration</b> scanning of the minor pelvis: urinary bladder (UB) and male / female genital organs (please drink a lot!)	Hofer
16:50	<b>hands-on ultrasound exercises</b> in groups of 5:  systematic scanning of urinary bladder, Jet-phenomenon uterus, ovaries, prostate gland, vesicular glands	Trainer
18:00	<b>case examples</b> of common pathologies of the UB and genitals	Hofer
18:15	<b>drawing exercises</b> of minor pelvis for your memory-effect↑	Trainer
18:30	<b>coffee break:</b> fruits & cookies / sweets...	
18:45	<b>live-demonstration</b> “FAST” and “eFAST” - algorithm extended focused abdominal sonography for trauma to rule out internal bleedings bleedings and pneumothorax	Hofer
19:15	<b>OSCE-simulation to prepare for final examination tomorrow</b>	Trainer
approx. 19:30	end of 3 <sup>rd</sup> day of the course; recommended preparation for sunday: Sono-Grundkurs, (Thieme Publisher) 8 <sup>th</sup> edition 2015, FAST & eFAST: pp. 111-122	

## Basic Course Abdominal Ultrasound Day 4: Sunday, April 2<sup>nd</sup> 2017

<b>10:00</b>	<b>hands-on ultrasound exercises</b> in groups of 5:  FAST - Algorithmus und eFAST - Algorithmus	Trainer
<b>11:30</b>	<b>Wrap-up final hands-on repetition</b> one entire abdominal ultrasound examination as kind of summary	Trainer
<b>12:00</b>	<b>course evaluation</b> , feedback to course instructor and trainer please rate the course design, schedule and individual teaching competencies of involved faculty and trainers. Overview OSCE examination: small groups and schedule	course participants  Hofer
<b>12:15</b>	a) confirmations of course participation (for course participants who choose not to perform in final OSCE-examination (end) b) time for own preparation for the final OSCE-exam.	without OSCE  with OSCE.
<b>12:30</b>	<b>Final hands-on examination: OSCE with specific feedback</b> = objective structured clinical examination in rotational parcours (only mandatory for future ultrasound tutors and trainers) group 1	Trainer
<b>13:15</b>	<b>Final hands-on examination: OSCE with specific feedback</b> = objective structured clinical examination in rotational parcours (only mandatory for future ultrasound tutors and trainers) group 2	Trainer
<b>14:00</b>	End of course and summative certificates	

**Organizer:** Marburger Bund Stiftung - in cooperation with MEDIDAK Publishing and Medical Education Dept. of Heinrich-Heine-University Düsseldorf

**Course Instructor:** Priv.-Doz. Matthias Hofer, M.D., MPH, MME, Diagnostic Radiologist

**Course Venue:** Iberostar Golfclub Royal, Novo Sancti Petri / Chiclana (Cádiz),  
[http://www.clubgolfrealnovosanctipetri.com/pg\\_10.php?lng=de](http://www.clubgolfrealnovosanctipetri.com/pg_10.php?lng=de)  
Andalusia (Atlantic coast: "Costa de la Luz"), Spain

**Accommodation:** In course participants' own responsibility -  
please find our suggestion attached in separate pdf-file or on the website  
<http://www.medidak.de/intensiv/sono/?page=ort>

**Preparation:** In order to maximize your course benefit and the achievement of your ultrasound competencies, you will receive the corresponding ultrasound Teaching Manual with specific suggestions for your previous background acquisition, also based upon 55 short teaching video clips.  
(will be sent to you by regular mail after arrival of your payment).

**PLEASE** practice the drawing exercises several times prior to the course!