

Welcome to ESR Kickoff Meeting and First Training Event  
HiPerNav  
“High Performance soft-tissue Navigation”

4<sup>th</sup> – 8<sup>th</sup> of September 2017  
Oslo University Hospital - Rikshospitalet  
Oslo – Norway



Holmenkollen (Foto from Skiforeningen/Visit Oslo)

## Monday, September 4<sup>th</sup> - 2017

Time	Topic	Speaker
08:30 – 09:00	Arrival/coffee	
09:00 – 09:15	Welcome to The Intervention Centre, Oslo University Hospital	Erik Fosse
09:15 – 10:00	HiPerNav Project overview and meeting agenda	Ole Jakob Elle/ Camilla Lien
10:00 – 10:30	Coffe break	
<u>10:30 -1200</u>	<u>Short project partner presentations and their role in the HiperNav project (10 min. each)</u>	-
	WP2 - Multimodal imaging (NTNU)	Dr. Faouzi Alaya Cheikh
	WP3 - Biomechanical Modelling (Inst. Nat. De Recherche en Information at en Automatique)	Dr. Stephane Cotin
	WP4 - Registration and data fusion (Stiftelsen SINTEF)	Dr. Thomas Langø
	WP5 - Integration into Navigation Platform (CAScination AG)	Dr. Matthias Peterhans
	WP6 - High Performance Computing (Universidad de Cordoba)	Dr. Joaquin Olivares
	WP7 - User Interaction (Technisch Universiteit Delfi)	Prof. Jenny Dankelman
	WP8 - Clinical pilots (Universitaet Bern)	Dr. Stefan Weber
	WP9 - Dissemination, Kommunikation and Exploitation (Universite Paris 13)	Dr. Mounir Kaaniche
12:00- 13:00	Lunch break	
13:00 – 14:30	<u>Presentation of the ESRs (10 min. each)</u>	
	ESR 1 OUS	Andrea Teatini (OUS) Navigation and stereo-camera laparoscopic registration to pre-operative CT/MRI and intra-operative US.
	ESR 2 OUS	Pravda Jit Ray Prasad Automatic feature extraction and segmentation of liver using the combination of deeplearning and traditional methods
	ESR 3 OUS	Egidijus Pelanis Clinical assessment and validation of navigation system during laparoscopic liver interventions
	ESR 4 UCO	Nitin Satpute GPU acceleration for enhancement and denoising of pre-operative and intra-operative images
	ESR 5 UCO	Orestis Zachariadis Heterogeneous parallel computing for image registration algorithms
	ESR 6 NTNU	Rabia Naseem Cross-modality guided image enhancement
	ESR 7 NTNU	Shanmugapriya Survarachakan Fast and automatic extraction of liver, vessels and tumor from both pre-operative CT/MR and intra- operative ultrasound in laparoscopic surgery
	ESR 8 UP13	Dibash Basukala Multi modal medical image quality assessment
	ESR 9 UNIBE	Raluca-Maria Sandu Towards modelling patient specific planning tools for automatic assessment in ablation treatments of liver tumors
14:30 – 15:00	Coffee break	

<b>15:00 - 1600</b>	<b>Presentation of the ESRs (10 min. each)</b>		
	<b>ESR 10 CAS</b>	<b>Benjamin peter Eigl</b>	<b>Stereotactic, minimally-invasive ablation treatment of pancreatic cancer</b>
	<b>ESR 11 UNIBE</b>	<b>Ankit Gupta</b>	<b>Framework for the detection and navigation of surgical tool during the laparoscopic surgery</b>
	<b>ESR 12 INRIA</b>	<b>Jean-Nicolas Brunet</b>	<b>Characterization of boundary conditions for biomechanical modeling of liver</b>
	<b>ESR 13 INRIA</b>	<b>Sergei Nikolaev</b>	<b>Identification and characterization of boundary conditions for patient-specific biomechanical simulation.</b>
	<b>ESR 14 SNF</b>	<b>Javier Pérez de Frutos</b>	<b>CT – LUS registration for minimal invasive liver surgery</b>
	<b>ESR 15 TUD</b>	<b>Maryam Gholinejad</b>	<b>User interaction and workflow analysis in minimally invasive liver surgery</b>
<b>16:00 – 16:10</b>	<b>Break</b>		
<b>16:10 – 17:00</b>	<b>ESR group activity (Dividing into groups)</b>		
<b>19:30 – 22:00</b>	<b>Dinner (For both ESR's and WP leaders)</b>		

## Tuesday, September 5<sup>th</sup> – 2017

<b>Time</b>	<b>Topic</b>	<b>Speaker</b>
<b>09:00 - 10:30</b>	<b>Medical imaging and image enhancement: Ultrasound, CT and MRI</b>	<b>Faouzi Cheikh/Frank Lindseth/Thomas Langø</b>
<b>10:30 -10:45</b>	<b>Coffee break</b>	
<b>10: 45 – 12:00</b>	<b>Cascination demo: Cas-One</b>	<b>Matthias Peterhans/Stefan Weber</b>
<b>12:00 - 13:00</b>	<b>Lunch break</b>	
<b>13:00 – 15:00</b>	<b>Lab tour (for ESR)/ Steering Committee meeting (WP leaders)</b>	<b>Ole Jakob Elle</b>
<b>19:30 – 22:00</b>	<b>Dinner (Social dinner for ESR's)</b>	<b>19:30 – 22:00</b>

## Wednesday, September 6<sup>th</sup> – 2017

<b>Time</b>	<b>Topic</b>	<b>Speaker</b>
<b>09:00 - 10:30</b>	<b>Multimodal imaging, IGS –Part 1</b>	<b>Anne Figel (Siemens)</b>
<b>10:30 -10:45</b>	<b>Coffee break</b>	
<b>10: 45 – 12:00</b>	<b>Multimodal imaging, IGS –Part 2</b>	<b>Anne Figel (Siemens)</b>
<b>12:00- 13:00</b>	<b>Lunch break</b>	
<b>13:00 - 14:30</b>	<b>Lab tour</b>	
<b>14:30 – 16:30</b>	<b>ESR group activity</b>	
<b>19:30 – 22:00</b>	<b>Dinner (Social dinner for ESR's)</b>	<b>19:30 – 22:00</b>

## Thursday, September 7<sup>th</sup> – 2017

<b>Time</b>	<b>Topic</b>	<b>Speaker</b>
<b>09:00 - 10:30</b>	<b>NorMIT_ IGT – planning Part 1</b>	<b>Rafael Palomar, Rahul Kumar, Louise Oram</b>
<b>10:30 -10:45</b>	<b>Coffee break</b>	
<b>10: 45 – 12:00</b>	<b>NorMIT_IGT – navigation Part 2</b>	<b>Thomas Langø/Frank Lindseth</b>
<b>12:00- 13:00</b>	<b>Lunch break</b>	
<b>13:00 - 14:30</b>	<b>ESR's Group sessions</b>	

<b>14:30 – 15:00</b>	<b>Cofee break</b>
<b>15:00 – 16:00</b>	<b>ESR presentations based on the group sessions</b>
<b>19:30 – 22:00</b>	<b>Dinner (For both ESR's and WP leaders)</b>

## **Friday, September 8<sup>th</sup> - 2017**

<b>Time</b>	<b>Topic</b>	<b>Speaker</b>
<b>09:00 - 10:30</b>	<b>Clinical need for Cancer treatment Part 1</b>	<b>Bjørn Edwin</b>
<b>10:30 -10:45</b>	<b>Coffee break</b>	
<b>10: 45 – 12:00</b>	<b>Clinical need for Cancer treatment Part 2</b>	<b>Bjørn Edwin</b>
<b>12:00- 13:00</b>	<b>Lunch break</b>	
<b>13:00 - 14:30</b>	<b>ESR's Group sessions</b>	
<b>14:30 – 15:00</b>	<b>Cofee break</b>	
<b>15:00 – 16:00</b>	<b>ESR presentations</b>	
<b>16:00 – 16:10</b>	<b>Training school conclusion</b>	