

# Medical Robotics Week 2023 – Workshop Days

Tuesday, 22. Aug. 2023 - Workshop Day 1		
<b>Workshop 1 (Day1)</b> Practical industry workshop for TwinCat3 (Beckhoff AG) and Matlab/Simulink (Mathworks) <i>Seminar room 01.006</i>		
8:30	9:00	<b>Registration</b> and coffee
9:00	9:10	<b>Welcome</b> Georg Rauter
<i>Seminar room 01.006</i>		
9:10	9:30	<b>Introduction to real-time systems</b> Tobias Bachmann
<i>Seminar room 01.006</i>		
9:30	9:50	<b>Reading schematics of control cabinets</b> Georg Rauter
<i>Seminar room 01.006</i>		
9:50	10:10	<b>Software installation and programming platform</b> Georg Rauter
<i>Seminar room 01.006</i>		
10:10	10:40	<b>First steps in Matlab/Simulink</b> Vasco Lenzi
<i>Seminar room 01.006</i>		
10:40	11:00	<b>Coffee break</b>
11:00	12:40	<b>My first Matlab/Simulink program in TwinCat3</b> Georg Rauter
<i>Seminar room 01.006</i>		
12:40	14:00	<b>Lunch break</b>
14:00	15:40	<b>Safety in TwinCAT 3</b> Georg Rauter
<i>Seminar room 01.006</i>		
15:40	16:00	<b>Coffee break</b>
16:00	17:40	<b>Implementing a servo motor in Matlab/Simulink for TwinCat3</b> Georg Rauter
17:40		<b>Voluntary GetTogether</b> ( <a href="#">Restaurant zum Tell, Spalenvorstadt 38, 4051 Basel</a> )



**Wednesday, 23. Aug. 2023 - Workshop Day 2**

<b>Workshop 1 (Day 2)</b> Practical industry workshop for TwinCat3 (Beckhoff AG) and Matlab/Simulink (Mathworks) <i>Seminar room 01.006</i>		<b>Workshop 3 (Morning)</b> Fiber-based systems for robotics and medical applications <i>Seminar room 02.073</i>	
		<b>Workshop 2 (Afternoon)</b> Young Surgineers <i>Seminar room U1.197</i>	
9:00	10:40	<b>Matlab/Simulink state flow programming</b> Vasco Lenzi	
<i>Seminar room 01.006</i>		9:00	10:40
		<i>Seminar room 02.073</i>	
		Introduction to optics, fibers, lasers, and applications (background of potential applications in robotics and medicine)	
10:40	11:00	<b>Coffee break</b>	
11:00	12:40	11:00	11:40
<b>Implementation of basic controllers in Matlab/Simulink for control of a servo motor in TwinCAT3 &amp; Intro to User Interface (PLC &amp; HMI)</b> Georg Rauter		<i>Seminar room 02.073</i>	
<i>Seminar room 01.006</i>		11:40	12:40
		<i>Seminar room 02.073</i>	
		Optical coherence tomography, available and potential applications	
12:40	14:00	<b>Lunch break</b>	
14:00	15:40	13:00	14:30
<b>TwinCat3 Vision</b> Tobias Bachmann		<i>Seminar room U1.197</i>	
<i>Seminar room 01.006</i>		<b>Young Surgineers Session</b>	
15:40	16:10	14:30	15:00
<b>Coffee break</b>		<b>Coffee break</b>	
16:10	17:35	15:00	16:45
<b>Demonstration of visual servoing using Matlab/Simulink in TwinCAT3 Vision</b> Nicolas Gerig		<i>Seminar room U1.197</i>	
<i>Seminar room 01.006</i>		15:45	17:00
		<b>Coffee break</b>	
17:35	17:40	17:00	18:00
<b>Wrap up and Conclusions</b> Georg Rauter		<i>Seminar room U1.197</i>	
<i>Seminar room 01.006</i>		<b>Young Surgineers Session</b>	
		18:30	20:00
		<i>Seminar room U1.197</i>	
		<b>Vorstandssitzung</b> Only CURAC board	
20:30		<b>Voluntary GetTogether</b> ( <a href="#">Restaurant Zum Isaak, Münsterplatz 16, Basel</a> )	

# Medical Robotics Week 2023 – CURAC Days

Thursday, 24. Aug. 2023 - CURAC Day 1	
CURAC Day 1 <i>Auditorium U1.131</i>	
Innovation Booster Robotics event (Afternoon) <i>Auditorium U1.101</i>	
<b>7:30</b>   8:30	<b>Präsidiumssitzung</b> Only CURAC steering committee
<i>Seminar room U1.197</i>	
<b>8:30</b>   9:00	<b>Registration and coffee</b>
<i>Hall U1Q1 &amp; U1Q2</i>	
<b>9:00</b>   9:05	<b>Welcome from CURAC President</b> Thomas Klenzner (Universitätsklinikum Düsseldorf, Düsseldorf, Germany)
<i>Auditorium U1.131</i>	
<b>9:05</b>   9:20	<b>Welcome from General Chair MRW2023 &amp; CURAC2023</b> Georg Rauter (University of Basel, Basel, Switzerland)
<i>Auditorium U1.131</i>	
<b>9:20</b>   9:25	<b>Welcome from Medical Chair CURAC 2023</b> Beat Müller (Clarunis - Universitäres Bauchzentrum, Basel, Switzerland)
<i>Auditorium U1.131</i>	
<b>9:25</b>   9:30	<b>Welcome</b> Lukas Engelberger (President of the Gesundheitsdirektorenkonferenz)
<i>Auditorium U1.131</i>	
<b>9:30</b>   10:15	<b>KeyNote 1</b> <i>Chairs: 1, 2</i> Aude Billard (EPFL, Switzerland) «Robotic assistance for 4-handed manipulation with application to Laparoscopic Surgery»
<i>Auditorium U1.131</i>	
<b>10:15</b>   10:30	<b>Industry Pitches</b> Guest
<i>Auditorium U1.131</i>	
<b>10:30</b>   11:00	<b>Coffee break and industry exhibition</b>
<i>Hall U1Q1 &amp; U1Q2</i>	
<b>11:00</b>   12:00	<b>Session 1: Robotics and Navigation</b> <i>Chairs: 1, 2</i> 4 x (12min Talk + 3min Q&A)
<i>Auditorium U1.131</i>	
11:00 – 11:15	“A Novel End Effector for Telemanipulated Suturing in Robot-Assisted Laparoscopy” <u>Kirst, Alexander</u> ; Hellings-Kuß, Anja; Hagmann, Katharina; Dyck, Michael; Schlenk, Christopher; Klodmann, Julian
11:15 – 11:30	“Nullspace Control for Automatic Ultrasound Gel Supply” <u>Osburg, Jonas</u> ; Ernst, Floris
11:30 – 11:45	“Robot-assisted Neuroendoscopy: Surgeon’s Third Hand – a Proof of Concept Study” <u>Karnam, Murali</u> ; Rychen, Jonathan; Guzman, Raphael; Cattin, Philippe; Rauter, Georg; Gerig, Nicolas
11:45 – 12:00	“Feasibility and accuracy of CARLO® guided optic canal unroofing” <u>Schicker, Martina</u> ; Ha, Thanh Tu; Luder, Yann; Morawska, Marta; Röthlisberger, Michel
<b>12:00</b>   12:30	<b>Poster Session 1: Short presentation to posters</b> <i>Chairs: 1, 2</i> 10x 3min Talk
<i>Auditorium U1.131</i>	
12:00 – 12:03	Poster 1: “Spatially-constrained Keypoint Matching for Efficient Statistical Shape Modelling” <u>Harkämper, Lena</u> ; Großbröhmer, Christoph; <u>Himstedt, Marian</u>
12:03 – 12:06	Poster 2: “Innovating Instrument Handover Techniques for Robotic Scrub Nurses” <u>Scheppach, Carl</u> ; Wagner, Lars; Spinner, Caroline; Jell, Alissa; Wilhelm, Dirk

12:06 – 12:09	Poster 3: “Feasibility and accuracy of CARLO© guided extradural anterior clinoidectomy” <u>Ha, Thanh Tu</u> ; Schicker, Martina; Cordier, Dominik; Luder, Yann; Morawska, Marta; Röthlisberger, Michel
12:09 – 12:12	Poster 4: “Optical coherence tomography-guided laser osteotomy: toward improvement of ablation efficiency” <u>Hamidi, Arsham</u> ; Cattin, Philippe C.; Canbaz, Ferda
12:12 – 12:15	Poster 5: “Feet-Driven 4-Arm Manipulation: A Novel Approach for Solo Laparoscopic Anastomosis” <u>Gholami, Soheil</u> ; <u>Munier, Louis</u> ; <u>Cabasse, Cecile</u> ; Bouri, Mohamed; Billard, Aude
12:15 – 12:18	Poster 6: “Deep Learning-based Artificial Intelligence in Audio based Analysis of Swallowing using Cervical Auscultation” Salloum, Hazem; <u>Graf, Simone</u> ; Schilling, Berit; Richter, Lena; Jeleff-Wölfler, Olivia; Feussner, Hubertus; Ostler, Daniel; Wilhelm, Dirk; Fuchtmann, Jonas
12:18 – 12:21	Poster 7: “Model to Simulate Brain Biopsies Using a Navigated Robotic Guiding System and a Bone Cutting Laser” <u>Ha, Thanh Tu</u> ; <u>Luder, Yann</u> ; Röthlisberger, Michel; Schicker, Martina; Morawska, Marta; Cordier, Dominik
12:21 – 12:24	Poster 8: “Feature Description using Autoencoders for Fast 3D Ultrasound Tracking” <u>Wulff, Daniel</u> ; Ernst, Floris
12:24 – 12:27	Poster 9: “Gamified Virtual Reality Training for Visuospatial Ability in Neuroradiology” <u>Allgaier, Maren</u> ; Härtel, Tim Jered; Zubel, Seraphine; Thormann, Maximilian; Behme, Daniel; Preim, Bernhard; Saalfeld, Sylvia
12:27 – 12:30	Poster 10: “Target Tracking in 4D Ultrasound using Localization Networks” <u>Krause, Cassandra</u> ; <u>Wulff, Daniel</u> ; Ernst, Floris
<b>12:30</b>	<b>Lunch break</b> and industry exhibition
<b>14:00</b>	
<i>Hall UTQ1 &amp; UTQ2</i>	

<b>14:00</b>	<b>14:45</b>	<b>KeyNote 2</b>	<b>Chairs: 1, 2</b>	<b>14:00</b>	<b>15:45</b>	<b>Innovation Booster Robotics event</b>
<i>Auditorium U1.131</i>		Franziska Mathis-Ullrich (FAU, Erlangen, Germany) «Towards Natural Co-Operation with Surgical Robotics»		<i>Auditorium U1.101</i>		
<b>14:45</b>	<b>15:45</b>	<b>Session 2: Surgical Assistance Systems &amp; Image Processing, Quantification and Visualization</b> (12min Talk + 3min Q&A)				
<i>Auditorium U1.131</i>		<b>Chairs: 1, 2</b>				
<b>14:45 – 15:00</b>	“Corrective Cold Ablation Robot-Guided Laser Osteotomies in Wrist Surgery” <u>Hofer, Maximilian</u> ; Coppo, Enrico; Morawska, Marta; Müller-Gerbl, Magdalena; Thieringer, Florian M.; Honigmann, Philipp					
<b>15:00 – 15:15</b>	“Extended upper GI functional assessment in dysphagia by synchronized intraesophageal ultrasound and fluoroscopy” <u>Jell, Alissa</u> ; Geiger, Alexander; Bernhard, Lukas; Gassert, Florian; Feußner, Hubertus					
<b>15:15</b>	<b>16:15</b>	<b>Coffee break</b> and industry exhibition				
<i>Hall U1Q1 &amp; U1Q2</i>						

<b>16:15</b>	<b>17:00</b>	<b>KeyNote 3</b> <i>Chairs: 1, 2</i>	<b>16:15</b>	<b>18:00</b>	<b>Innovation Booster Robotics event</b>
Auditorium U1.131		Ryo Takeda (Hokkaido University, Sapporo, Japan) «The Importance of Numerical Estimation and Experimental Verification of Clinical Applicable Biomechanical Research: From Blood Vessels to Ligament Tissues»	Auditorium U1.101		
<b>17:00</b>	<b>18:00</b>	<b>CTAC Session</b> <i>Chairs: 1, 2</i>			
Auditorium U1.131		4 x (12min Talk + 3min Q&A)			
17:00 – 17:15		“From Black-Box to Wisdom-oriented Healthcare: A Glance into Model-Guided Medicine!” <u>Mario Cypko</u>			
17:15 – 17:30		“Implants with actors and sensors to improve the healing of bone fractures - an update from the Smart Implants project” <u>Bergita Ganse</u>			
17:30 – 17:45		“Improving surgical skill assessment using robotics” <u>Joël Lanvanchy</u>			
17:45 – 18:00		“Cognitive Surgical Robots for Laparoscopic Surgery” <u>Martin Wagner</u>			
<b>18:00</b>	<b>21:00</b>	<b>Get together</b>			
Main entrance, Biozentrum, University of Basel		<a href="#">Biozentrum, University of Basel, Spitalstrasse 41, 4056 Basel</a>			

## Friday, 25. Aug. 2023 - CURAC Day 2

CURAC Day 2 and members assembly <i>Auditorium U1.131</i>		Lunch symposium <i>Auditorium U1.131</i>	
8:00	8:30	Registration and coffee <i>Hall U1Q1 &amp; U1Q2</i>	
8:30	9:15	<b>KeyNote 4</b>	<i>Chairs: 1, 2</i>
<i>Auditorium U1.131</i>		Jaydev Prataprai Desai (Georgia Tech, Atlanta, USA) «Robotic Transcatheter Delivery of Mitral Valve Implant»	
9:15	10:15	<b>Session 3: “Best Paper Session”</b>	<i>Chairs: 1, 2</i>
<i>Auditorium U1.131</i>		4 x (12min Talk + 3min Q&A)	
9:15 – 9:30		“Communication System Using Natural Language for Robotic Laparoscope Guidance” <u>Pan, Yan</u> ; Bernhard, Lukas; Fan, Cheng; Beckendorf, Lukas; Wilhelm, Dirk; Feußner, Hubertus; Groh, Georg	
9:30 – 9:45		“A Laryngoscope with Shape Memory Actuation” <u>Fischer, Nikola</u> ; Ho, Patty; Marzi, Christian; Schuler, Patrick; Mathis-Ullrich, Franziska	
9:45 – 10:00		“Characterization of Dynamic Gripping Force Feedback for Robot-Assisted Surgery” <u>Schäfer, Max B.</u> ; Riepe, Sarah; Parenzan, Matthias; Bauer, Christian J. E.; Hotz, Jonas; Meiringer, Johannes G.; Weiland, Sophie; Pott, Peter P.	
10:00 – 10:15		“In situ minimally invasive 3D printing for bone and cartilage regeneration - a scoping review” <u>Maintz, Michaela*</u> ; Tomooka, Yukiko*; Eugster, Manuela; Gerig, Nicolas; Sharma, Neha; Thieringer, Florian M.; Rauter, Georg	
10:15	10:25	<b>Poster Session 2: Short presentation to posters</b>	<i>Chairs: 1, 2</i>
<i>Auditorium U1.131</i>		5 x 3min Talk	
10:15 – 10:18		Poster 11: “Speech Recognition for the Sterile Interaction with Information Systems in the Surgical Area” <u>Schrüfer, Katrin</u> ; Noortwijk, Pascal; <u>Junger, Denise</u> ; Burgert, Oliver	
10:18 – 10:21		Poster 12: “6G in Clinical Applications: Integrating New Network Approaches in Healthcare” <u>Kolb, Sven</u> ; <u>Jurosch, Franziska</u> ; Kröger, Nicolai; Mehmeti, Fidan; Bernhard, Lukas; Fuchtmann, Jonas; Speidel, Stefanie; Kellerer, Wolfgang; Wilhelm, Dirk	
10:21 – 10:24		Poster 13: “Center for Intelligent Optics” <u>Canbaz, Ferda</u>	
10:25	10:45	Coffee break and industry exhibition	
10:45	11:30	<b>KeyNote 5</b>	<i>Chairs: 1, 2</i>
<i>Auditorium U1.131</i>		Nassir Navab (TU Munich, Munich, Germany) «The Path from Intelligence Amplification to Artificial Intelligence in Computer Assisted Interventions»	
11:30	12:15	<b>Guided poster round</b>	
<i>Hall U1Q1 &amp; U1Q2</i>		All poster presenters present at their poster	

12:15	14:00	Lunch break and industry exhibition	12:45	14:00	Lunch symposium Main sponsor:  <i>Chairs: 1, 2</i> Jean-Marc Collet (Stäubli AG, Switzerland) «Robots at the heart of clinical interventions»
Hall U1Q1 & U1Q2			Auditorium U1.131.		
14:00	14:45	<b>KeyNote 6</b> <i>Chairs: 1, 2</i>			
Auditorium U1.131		Matthias Harders (Universität Innsbruck, Austria) «Recent Developments in Surgical Simulation»			
14:45	15:45	<b>Session 4: Intelligent OR Technique &amp; Machine Learning</b> <i>Chairs: 1, 2</i>			
Auditorium U1.131		4 x (12min Talk + 3min Q&A)			
14:45 – 15:00		“Towards examiner-independent reproducible abdominal ultrasound examinations” Baader, Tobias; Bach, Thanh Nam; Yavuz, Sümeyra; Brand, Lukas Klaus; Güler, Beyda; Grupp, Peter; Malek, Nisar Peter; Hoffmann, Tatjana; Pauluschke-Fröhlich, Jan; Fröhlich, Eckhart; <u>Burgert Oliver</u>			
15:00 – 15:15		“Dynamic Torque Limitation vs Static Torque Limitation for Bone Screws in Pig Bone” <u>Wilkie, Jack</u> ; Richard, Jordan; Joshi, Aditya; McFarlane, Zoe; Staiger, Mark; Rauter, Georg; Möller, Knut			
15:15 – 15:30		“Contactless Energy Supply for Medical Drill with integrated Temperature Sensor” <u>Knott, Anna-Lena</u> ; Sanders, Mark; Prinzen, Tom; Klenzner, Thomas; Schipper, Jörg; Kristin, Julia; Schmitt, Robert H.			
15:30 – 15:45		“Adaptive Contrast Enhancement for Digital Radiographic Images using Image-to-Image Translation” <u>Popp, Ann-Kathrin</u> ; Schumacher, Mona; Himstedt, Marian			
15:45	16:15	<b>Organizer KeyNote</b> <i>Chairs: 1, 2</i>			
Auditorium U1.131		Beat Müller (Clarunis - Universitäres Bauchzentrum, Basel, Switzerland) «Robotic surgical oncology»			
16:15	16:30	Coffee break and industry exhibition			
16:30	17:15	<b>KeyNote 7</b> <i>Chairs: 1, 2</i>			
Auditorium U1.131		Tobias Keck (Universitätsklinikum Schleswig Holstein, Lübeck, Germany) «Potential von Robotik und AI in der klinischen Chirurgie»			
17:15	18:15	Members Assembly CURAC Only CURAC members	17:15	18:15	Lab Tour: 3D Printlab at the point of care Florian Thieringer (Universtitätsspital Basel - Mund-, Kiefer- und Gesichtschirurgie, Basel, Switzerland)
Auditorium U1.131			3D-Printlab University Hospital Basel		
18:15	18:45	<b>Lab Tour: 3D Printlab at the point of care</b>			
3D-Printlab University Hospital Basel		Florian Thieringer (Universtitätsspital Basel - Mund-, Kiefer- und Gesichtschirurgie, Basel, Switzerland)			
19:00	23:00	<b>Conference Dinner, Best Paper &amp; Best Poster Award Ceremony</b>			
Hotel Krafft, Basel		<a href="https://www.hotelkrafft.com/">Hotel Krafft, Rheingasse 12, 4058 Basel</a>			



**Saturday, 26. Aug. 2023 - CURAC Day 3**

<b>8:00</b>	<b>8:30</b>	<b>Registration and coffee</b>	
<b>8:30</b>	<b>9:15</b>	<b>KeyNote 8</b>	<i>Chairs: 1, 2</i>
Auditorium U1.131		Daniel Murariu (Univ. of Pittsburgh Med. School., PA, USA) «Robotics in Plastic Surgery»	
<b>9:15</b>	<b>10:45</b>	<b>Session 5: Modeling and Simulation</b>	<i>Chairs: 1, 2</i>
Auditorium U1.131		6 x (12min Talk + 3min Q&A)	
9:15 – 9:30		“Morphologic and hemodynamic analysis of intracranial mirror aneurysms” <u>Spitz, Lena</u> ; Schmidt, Jessica; Korte, Jana; Berg, Philipp; Behme, Daniel; Neyazi, Belal; Preim, Bernard; Saalfeld, Sylvia	
9:30 – 9:45		“Testing of Bone-Implant Systems equipped with a Fracture Monitor regarding Interfragmentary Movement – A Simulation-Based Workflow” <u>Wickert, Kerstin</u> ; Roland, Michael; Andres, Annchristin; Orth, Marcel; Müller, Max; Ganse, Bergita; Pohlemann, Tim; Diebels, Stefan	
9:45 – 10:00		“Hyper-redundant endoscopic manipulator position compensation under external load” <u>Giacoppo, Giuliano A.</u> ; Schulze, Eric; Pott, Peter P.	
10:00 – 10:15		“Interactive Surgical Liver Phantom for Cholecystectomy Training” <u>Schüßler, Alexander</u> ; Younis, Rayan; Paik, Jamie; Wagner, Martin; Mathis-Ullrich, Franziska; Kunz, Christian	
10:15 – 10:30		“A Calibration Approach for Elasticity Estimation with Medical Tools” <u>Grube, Sarah</u> ; Neidhardt, Maximilian; Hermann, Anna-Katarina; Sprenger, Johanna; Abdolazizi, Kian; Latus, Sarah; Cyron, Christian J.; Schläfer, Alexander	
10:30 – 10:45		“Symmetric single-input eccentric tube robot (ETR) for manual use” <u>Mayer, Juliane</u> ; Dumancic, Marcel; Pott, Peter P.	
<b>10:45</b>	<b>11:15</b>	<b>Coffee break and industry exhibition</b>	
<b>11:15</b>	<b>12:00</b>	<b>KeyNote 9</b>	<i>Chairs: 1, 2</i>
Auditorium U1.131		Qiu Shao (Maastricht University Medical Center) «The Journey of creating the first microsurgical dedicated robot. When engineers meet plastic surgeons»	
<b>12:00</b>	<b>13:00</b>	<b>Session 6: Image Processing, Quantification and Visualizatio</b>	<i>Chairs: 1, 2</i>
Auditorium U1.131		4 x (12min Talk + 3min Q&A)	
12:00 – 12:15		“Pose Measurement of the EndoWrist Round Tip Scissor Instrument with Optical Coherence Tomography” <u>Schöne, Sandra</u> ; Pol, Nirmal; Kahrs, Lueder A.	
12:15 – 12:30		“Correlating Cerebral Aneurysm Size Measurements Based On Virtual Reality Versus Standard 2D DSA Measurements; A Randomized Comparative Study” <u>Saemann, Attil</u> ; de Wilde, Daniel; Rychen, Jonathan; Röthlisberger, Michel; Zelechowski, Marek; Faludi, Balazs; Cattin, Philippe C.	
12:30 – 12:45		“VR-based body tracking to stimulate musculoskeletal training” Neidhardt, Maximilian; Gerlach, Stefan; Schmidt, Felix N.; Fiedler, Imke A. K.; <u>Grube, Sarah</u> ; Busse, Björn; Schlaefer, Alexander	
12:45 – 13:00		“Intraoperative navigated ultrasound in posterior fossa surgery” <u>Bopp, Miriam</u> ; Saß, Benjamin; Pojskic, Mirza; Grote, Alexander; Nimsky, Christopher	
<b>13:00</b>	<b>13:30</b>	<b>Lunch break</b>	

<b>13:30</b>	<b>14:15</b>	<b>KeyNote 10</b>	<i>Chairs: 1, 2</i>
<i>Auditorium U1.131</i>		Med Amine Laribi (CNRS-Université de Poitiers-ISAE ENSMA, France) «Robot Design: Application to Medical Robotics»	
<b>14:15</b>	<b>14:30</b>	<b>Farewell &amp; Perspectives CURAC 2024</b>	
<i>Auditorium U1.131</i>		Georg Rauter	
<b>14:30</b>	<b>16:15</b>	<b>Lab Visit: Department of Biomedical Engineering, University of Basel</b>	
<i>BIROMED-Lab, DBE</i>		Georg Rauter (University of Basel, Basel, Switzerland) <a href="#">Hegenheimermattweg 167C, 2nd Floor, 4123 Allschwil</a> Lab: <a href="https://biomed.dbe.unibas.ch">https://biomed.dbe.unibas.ch</a> , <a href="https://findus.dbe.unibas.ch/">https://findus.dbe.unibas.ch/</a>	
<b>16:15</b>		<b>End</b>	