

## REGISTRATION FORM

Dr./Prof. Family name: \_\_\_\_\_

First name: \_\_\_\_\_

Professional or private address: \_\_\_\_\_

Zip code: \_\_\_\_\_

City: \_\_\_\_\_

Country: \_\_\_\_\_

Phone: \_\_\_\_\_

Fax: \_\_\_\_\_

E-mail: \_\_\_\_\_

**The tuition fee and registration amounts to Euro 950,00. You will receive an invoice after registration. Tuition fee includes the following:**

1. Course materials including Anastomosis Training Kit®
2. Microscope, suture, micro-instruments
3. Hands-on workshop with live animals
4. Gloves, syringes and needles, sterile fluids
5. Surgical gowns
6. IT-Equipment and auditorium facilities
7. Refreshment breaks and lunch
8. Dinner on Friday
9. Certificate

### Location:

Christian Doppler Medical Center  
Research Laboratory for Microsurgical Neuroanatomy (Haus 15)  
Ignaz-Harrer-Straße 79  
5020 Salzburg



Für das Diplom-Fortbildungs-Programm der Österreichischen Ärztekammer wurden 36 DFP-Punkte beantragt.



Please send the registration form to:

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**University Hospital - Paracelsus Medical University**  
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UNIVERSITY HOSPITAL  
**UNIKLINIKUM SALZBURG**  
CHRISTIAN-DOPPLER-KLINIK  
DEPARTMENT OF NEUROSURGERY  
**12<sup>TH</sup> SALZBURG HANDS-ON WORKSHOP**  
ON MICROSURGICAL AND ENDOVASCULAR TECHNIQUES, WITH LIVE ANIMALS

**Christian Doppler Medical Center,  
Research Laboratory for Microsurgical Neuroanatomy**  
**Course Director:** Rahman A. Al-Schameri, MD, FEBNI  
**Course Secretary:** S. Thakur, MD  
**Chairman:** Christoph J. Griessenauer, MD, FAANS, FACS, FEBNI

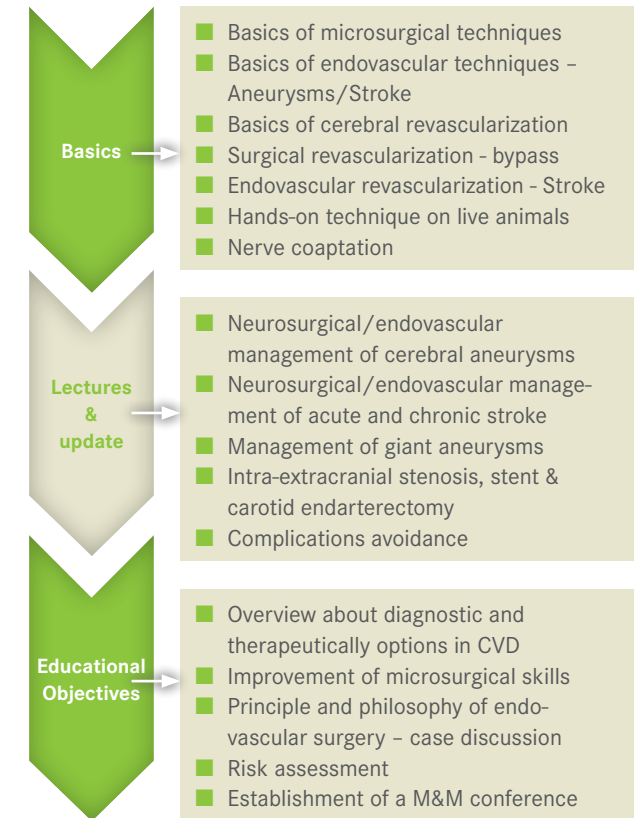


## GOALS & CONCEPT

**12<sup>TH</sup> SALZBURG HANDS-ON WORKSHOP**  
ON MICROSURGICAL AND ENDOVASCULAR TECHNIQUES WITH LIVE ANIMALS  
**MARCH 20<sup>TH</sup> TO MARCH 23<sup>RD</sup> 2024**



## TOPICS



## WELCOME

Modern microneurosurgery should enable the neurosurgeon to work seamlessly and effortlessly through the operating microscope. To accomplish this, it is essential to participate in adequate laboratory animal training. The first step in microsurgery is to acquire skill and proficiency in the handling of the operating microscope. This includes the understanding of basic optical and mechanical construction of the microscope as well as its principles as applied to neurosurgical procedures. Preparation, practice, and proficiency with microsurgical instruments are also indispensable for developing the skills for precise manipulation of magnified tissue structures. Additionally, the increasing demand for endovascular technique for the treatment of cerebrovascular diseases necessitate the neurosurgeons to not only be educated in the open surgical arena, but also in endovascular surgery. This also assures procedural safety and allows the practitioner to choose the ideal technique and treatment for the patient without any bias. The ultimate success in clinical microsurgery depends on the acquisition and application of these special skills. For that very reason the Research Laboratory for Microsurgical Neuroanatomy at the Department of Neurosurgery has been established at the Christian Doppler Medical Center, Paracelsus Medical University Salzburg. We invite you to join our 12<sup>th</sup> Salzburg Hands-on Workshop on Microsurgical and Endovascular Techniques for Cerebral Revascularization and we are looking forward to spending very interesting and stimulating days in Salzburg with you.



**Christoph J. Griessenauer, MD, FAANS, FACS, FEBNI**  
Professor and  
Chairman



**Rahman Al-Schameri, MD, PhD, FEBNI**  
Senior Consultant and  
Course Director

## FACULTY

**Rahman Al-Schameri, M.D.**  
Department of Neurosurgery,  
Paracelsus Medical University, Salzburg

**Gerasimos Baltasvias, M.D.**  
Department of Neuroradiology, Zürich

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Department of Neurosurgery,  
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Hospital Clinico Universitario de Valencia

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**Bernd Richling, M.D.**  
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**Jonathan J. Russin, M.D.**  
Department of Neurosurgery,  
Univ. of Southern California, Los Angeles, CA, USA

**Heinrich Schubert, M.D.**  
Department of Plastic Surgery, Barmherzige Brüder, Salzburg

**Camillo Sherif, M.D.**  
Department of Neurosurgery, Universitätsklinikum St. Pölten

**Gottfried Wechselberger, M.D.**  
Chairman of the Department of Plastic Surgery,  
Barmherzige Brüder, Salzburg

## PROGRAM

**Wednesday, 20<sup>th</sup> of March 2024**  
**07:30 Registration**  
**08:00 Start**

**Welcome:**

- Griessenauer & Al-Schameri
- Endovascular Neurosurgery in Europe, obstacles and hope (Richling)
- Goals and strategy of the Microsurgical & Endovascular Course (Al-Schameri)

**Microsurgery Hands-on Part I with Silicone model (Biomet) (Faculty)**

**Hands-on:**

- Running and interrupted sutures

**Hands-on:**

- End-to-end and end-to-side anastomosis

*Lunch*

**Hands-on:**

- End-to-end and end-to-side anastomosis with different size silicone models

**Hands-on:**

- End to side anastomosis 90°

**Surgical anatomy & technique (Al-Schameri)**

- Collateral circulation: Indication for bypass surgery
- Surgical anatomy of the STA/MCA and different skin incisions
- The steps of STA-MCA bypass technique

**Case discussions**

**18:00 End**

**Thursday, 21<sup>st</sup> of March 2024**  
**Microsurgery Hands-on Part II with biological material**  
**07:30 Start**

**Hands-on:**

- Arterial end-to-end and end-to-side anastomosis

**Hands-on:**

- End-to-side with venous interponate anastomosis
- Clinical applications of end-to-side anastomosis with venous graft

**Nerve Coaptation (Schubert)**

- End-to-end nerve anastomosis

**Hands-on:**

- End-to-side anastomosis in the depth
- Clinical applications of end-to-side anastomosis in the depth, STA-SCA

**Stroke:**

- Stroke up-date (Al-Schameri)
- Endovascular therapy of acute and chronic Stroke (Lunzer)

**Webinar (14:00): EC-IC Bypass in Moya Moya:**

**Indications and techniques (Burkhardt)**

**Surgical anatomy & clinical application (Capilla)**

- Anterolateral brainstem and related approaches
- IC-IC Bypass: Petrous Carotid Artery to MCA from Lab to OR

**Refreshment break and the facility of endovascular simulation flow model**

**Webinar (17:00): Complex cerebral Bypass (Russin) Controversial (Al-Schameri)**

- Wide neck cerebral aneurysm, still a surgical indication?
- Management of intraoperative aneurysm rupture

**Case discussions: Participants**

**18:00 End**

**Friday, 22<sup>nd</sup> of March 2024**  
**Microsurgery Hands-on Part III with live animals, Faculty**  
**07:00 Preparation of animals**

**Introduction:** Experimental aneurysm, rabbit model

**Hands-on:**

- Live animals: Three-Four exercises
- Microsurgical exposure of both carotid arteries
- End-to-end anastomosis
- End-to-side anastomosis
- Separation of the abdominal artery from the vein

Lunch in the Lab

**Pathophysiology:** Chronic cerebral ischemia (Sherif)

**Refreshment break and demonstration of stroke flow model**

**Case discussions:**

- Giant aneurysms, acute stent (FD) (Pangratz)
- Aneurysm treatment (Thakur)

**18:00 End**

**19:30 Course Dinner**

**Saturday, 23<sup>rd</sup> of April 2024, Theoretical & Clinical Part**  
**08:00 Start**

**Keynote**

- Aneurysms endovascular treatment: doing what is necessary vs. what is possible (Baltasvias)
- Multimodal aneurysms treatment from the perspective of the hybrid neurosurgeon (Griessenauer)
- Structural injury following clipping (Al-Schameri)
- Un-ruptured aneurysm: Treatment Pros versus Cons (Al-Schameri)

**Carotid artery, technical note**

- Carotid artery stenosis, open surgery, update (Linni)
- Carotid artery stenosis. CAS alternative option (Al-Schameri)
- Complications (aneurysms, bypass) (Al-Schameri)

**Case discussions**

**14:00 End**