



MEDICAL UNIVERSITY  
OF VIENNA

## Clinical & Research Fellowships

MedUni Vienna offers a wide range of fellowships for medical doctors and scientists from all over the world to gain subject-specific experiences and skills while being trained under supervision.

[www.meduniwien.ac.at/en/fellowships](http://www.meduniwien.ac.at/en/fellowships)

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Michaela Fritz  
Vice-Rector for Research and Innovation  
MedUni Vienna

## Learning from each other

Welcome to the Medical University of Vienna and thank you for your interest in a Fellowship at our university.

A Fellowship can enable interested medical doctors and scientists from all over the world to gain subject-specific experiences and skills at the Medical University of Vienna while being trained under supervision at a (clinical) unit of your interest.

During your time at our university, you have the opportunity to increase your professional expertise in a learning-based environment, experience international exchange and dialogue with experts on site, and establish networking contacts for potential future endeavours.

From our experience of more than 250 completed fellowships both sides profit: the fellows as well as the supervisors.

We are looking forward to a fruitful co-operation.

A handwritten signature in black ink that reads "Michaela Fritz". The signature is written in a cursive, flowing style.



Tashi Tenzin from Thimphu, Bhutan, is the first neurosurgical specialist who has been trained as a Clinical Fellow at MedUni Vienna.

“In Bhutan, patients have to be taken abroad for complex procedures. With the new skills, I can do so much more for my patients.”

Tashi Tenzin, Neurosurgeon from Bhutan

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# MedUni Vienna in brief\*



6  
LUDWIG  
BOLTZMANN  
INSTITUTES  
Partners for research funded  
by third parties



10  
CHRISTIAN DOPPLER (CD)  
LABORATORIES  
enhance applied research

15  
ERC GRANT HOLDERS  
promote excellence

31  
PATENT  
APPLICATIONS

23  
PATENTS  
GRANTED

UNIVERSITY CLINIC OF  
DENTISTRY VIENNA  
38,250  
patients

864  
GRADUATES  
Medicine and Dentistry degree programmes,  
20 PhD programmes, 10 doctoral programmes,  
Medical Informatics and Molecular Precision  
Medicine Master's programmes

# EUR 124.5m

## REVENUE

from R&D projects and donations

## INTERNATIONAL PARTNERS

Top 10 international research partnerships based on number of publications

791 Université de Paris

705 Harvard University

700 Free University of Berlin

675 Humboldt University of Berlin

664 Charité University Hospital Berlin

612 University of Hamburg

526 University College London

525 Ruprecht Karls University Heidelberg

523 University of Munich

517 Charles University Prague

2019-2021, source: InCites

# 4,930

## ACADEMIC PUBLICATIONS

# 2,971

## LEAD, SENIOR AND CORRESPONDING AUTHORSHIPS

## PATIENT CARE AT UNIVERSITY HOSPITAL VIENNA

# 61,016

inpatient cases

# 515,687

outpatient cases

# 1,738,848

clinic appointments

# 44,755

operations

# 6,190

employees,  
incl. 4,122  
researchers

# 7,825

students

# Clinical & Research Fellow

As a University dedicated to research, education and patient care, the Medical University of Vienna offers a wide range of training opportunities like our distinguished Fellowships, designed to meet the desire of physicians and researchers to be trained under supervision individually at the (clinical) unit of their interest for up to 12 months. Each Fellowship is based on a personal Training Plan, clearly defining stated goals of the involvement and co-created by Fellow and department to ensure the best outcome. We invite physicians and researchers interested in becoming a Fellow at our University to apply at the (clinical) unit directly – representing their individual motivation and specific interest – to find their perfect match.

After being accepted by an University Department, the International Office will start the approval process and guide the future Fellow through necessary steps and administrative matters (e.g. visa, cooperation agreement, insurance, immunization, authentication of documents, payments...). The final approval of the Fellowship will be issued by the International Office upon clearance of all mandatory documents. Since application timelines are highly variable and dependent on current regulations and the country of origin of the Fellow and his/her documents, Fellowships need to be planned in advance.

Fellowships at the Medical University of Vienna are based on Cooperation Agreements between our University and the Home Institutions of the Fellows, guaranteeing that they remain employed with their respective Home Entity (monthly salary included) for the whole duration of the Fellowship.

The education of future generations of healthcare professionals is a vital part of our approach. Although Fellowships are non-curricular, Fellows are invited to participate in (academic) lectures offered as add-on programmes by HR, free of charge. Moreover, Fellows are further welcome to attending a complete postgraduate course (please see page 11) – please note that in this case additional costs occur.



# Key Data for Fellowships

- Clinical Fellowship, clinical focus (for physicians only)
- Research Fellowship, scientific focus

**Duration:** 3 to 12 months, with opportunity to extend

## Minimum academic requirements:

Master's degree respectively Medical Degree & Physicians License (Clinical Fellows)

## Based on:

- **Individual Training Plan** by the (clinical) department
- **Cooperation Agreement** between the Medical University of Vienna and Fellow's Home Institution, based on Austrian Law. The Fellowship does not constitute an employment with the Medical University of Vienna.

## Financing/Tuition/Processing Fee:

Tuition fee applies. Depending on certain specific circumstances this charge can be waived for justified reasons (if applicable, Fellows may add an explanatory statement for waiving the tuition fee to the application).

Please note that the processing fee of EUR 700 still applies.

Financial backing of a Fellowship generally must be guaranteed by the Fellow's Home Entity via Cooperation Agreement. For information on alternative funding by official grants or scholarships please visit our website.

Please be aware that a Fellowship is a non-curricular postgraduate involvement. According to Austrian law, it is not equal to a residency/specialist training.

[www.meduniwien.ac.at/en/fellowships](http://www.meduniwien.ac.at/en/fellowships)



# How to apply

Kindly refer to the respective **Application Form** (Clinical or Research Fellow) below for further information and an overview of required data prior to your application.

## Contact International Office

Please feel free to contact us for any further queries concerning Fellowships

[www.meduniwien.ac.at/en/fellowships](http://www.meduniwien.ac.at/en/fellowships)  
[fellow-postgraduate@meduniwien.ac.at](mailto:fellow-postgraduate@meduniwien.ac.at)



**Application Form  
Clinical Fellow**



**Application Form  
Research Fellow**

For additional detailed information regarding funding opportunities and logistics for candidates from the Middle East please contact:

Basem Saraireh  
[bsaraireh@yahoo.com](mailto:bsaraireh@yahoo.com)

Shahrokh Shariat  
[shahrokh.shariat@meduniwien.ac.at](mailto:shahrokh.shariat@meduniwien.ac.at)

*Thanks to advances in medical science, many things that until recently were little more than visions have become reality. Through our joint efforts, the MedUni Vienna is a key driving force behind the revolution that is benefiting patients.*

**Dana Muin**  
Department of Obstetrics and Gynecology



## Parallel completion of a postgraduate university course

MedUni Vienna offers a wide variety of master's programmes resulting in an MPH, MAS, MCLinDent, MDSc or MBA, as well as certificate courses and continuing education courses providing an academic qualification. All of these part-time postgraduate courses provide excellent training, with expert teaching staff from Austria and abroad, as well as cooperations with other top universities and institutions. In addition to a fellowship, following programs are offered in english language:

- Applied Medical Aesthetics
- Clinical Research
- Health Care Facilities
- Medical Physics
- Toxicology
- Endodontology
- Esthetic Dentistry
- Periodontology and Implantology
- Prosthodontics and interdisciplinary Therapy Concepts

Please note that additional costs will apply if you will be attending a complete postgraduate course.

**For detailed information  
please visit our website**

### **Contact University Courses | Postgraduate Programs**

T: +43 (0)1 40400-40104  
postgraduate@meduniwien.ac.at

[www.meduniwien.ac.at/postgraduate](http://www.meduniwien.ac.at/postgraduate)



# Fellowships at MedUni Vienna

## Department of Biomedical Imaging and Image-Guided Therapy

The Department of Biomedical Imaging and Image-Guided Therapy is one of the largest and most influential imaging department in Europe and worldwide. Having established an outstanding reputation in clinical radiology, radiology research and teaching, the department was ranked on position 24 in the recent US News and World Report international specialty ranking.

The department consist of 4 clinical divisions:

- General and Pediatric Radiology
- Neuroradiology and Musculoskeletal Radiology
- Cardiovascular and Interventional Radiology
- Nuclear Medicine

It hosts 110 physicians in both specialties, Radiology and Nuclear Medicine, as well as a total of 500 employees overall.

The imaging armamentarium contains the full range of MR scanners (1,5 T to 7 T clinical) and 15,4 T (pre-clinical research). In CT, the most modern scanners, including a Photon-counting CT, are available for clinical examination as well as research projects. With a new digital PET-CT, a new whole-body PET-CT and PET-MRI, hybrid imaging offers the most modern equipment for our patients and our research projects. Interventions are performed in a variety of cath labs including a fully equipped OR and an additional hybrid OR for complex procedures.

Our observership and fellowship programs promote active learning in all sub-specialty areas of radiology and nuclear medicine and include hands-on training in specific divisions and labs. In general, 3-month, 6-months and 12-months observerships and fellowships are available under the guidance and mentorship of our internationally recognized specialists. Combined clinical and clinical-research programs are available.

For residents, observers and fellows, we offer a daily morning conference, a weekly lunch-conference (catered), daily read-out sessions in all fields of imaging, plus possibilities to attend any of the 540 interdisciplinary case conferences and tumor boards per month.

For further information, see our website ([www.meduniwien.ac.at/radnuk](http://www.meduniwien.ac.at/radnuk)) as well as postings and characteristic of our Division of Cardiovascular and Interventional Radiology as well as Nuclear Medicine.

We are looking forward to welcoming you in our department!



Christian J. Herold  
Head of Department

## Division of Cardiovascular and Interventional Radiology

(Department of Biomedical Imaging and Image-Guided Therapy)

The Division of Cardiovascular and Interventional Radiology is one of four clinical divisions within the Department of Bioimaging and Image-Guided Therapy. This rather unique division is combining image-guided therapies (“minimal-invasive” treatments) as well as high-end non-invasive cardiac and vascular diagnostics. The staff consists of 10 board-certified interventional radiologists and 5 residents, as well as 29 technicians.

This division covers a huge range of different diagnostic and therapeutic procedures: we provide all endovascular vascular treatments including thrombectomy in acute ischemic stroke as well as in acute pulmonary embolism and acute ischemia, including treatment of aortic diseases from aortic arch down to the pelvic arteries, revascularization of renal, visceral, and peripheral arteries as well as all endovascular treatment options for benign and malignant tumors. Furthermore, we perform biliary interventions and image-guided tumor ablation procedures, and we embolize acute arterial bleeding. Additionally, we are using high-end Computed Tomography and Magnetic Resonance machines for non-invasive imaging of the heart, the coronary arteries and all other parts of the arterial systems.

Spending a fellowship at our specialized division will give the fellow the opportunity to:

- See and attend an unique broad spectrum of endovascular procedures – literally from head to toe
- Be involved in the acute interventional service for ischemic stroke, acute aortic syndromes, pulmonary embolism, acute arterial bleeding and more
- Get involved in all fields and possibilities of interventional oncology starting from image guided biopsy and PICC line implantation, and going up to treatment procedures including direct ablation procedures (CT navigated microwave-, cryo-, and radiofrequencyablation), embolization treatments (TACE, TAE, SIRT) as well as pulmonary vein / portal vein embolization and hybrid procedures (intraoperative microwave ablation)
- Be part of one of the biggest aortic centers in Europe which provides all available open surgical, hybrid as well as pure endovascular treatment options
- Become an expert in Cardiac imaging and Vascular Imaging
- Connect with a highly specialized enthusiastic team of dedicated interventional Radiologists
- Train him/herself at our dedicated endovascular simulator



Christian Loewe  
Head of Division

# Division of Nuclear Medicine

(Department of Biomedical Imaging and Image-Guided Therapy)

The Division of Nuclear Medicine at the University Hospital Vienna is one of Europe's largest and most important nuclear medical departments with more than 90 staff, its room and equipment set up, the treatment ward incorporating 8 systemised beds as well as its radiochemistry/pharmacy with cyclotron facility.

In the area of imaging diagnostics all procedures of conventional nuclear medicine such as thyroid, skeleton, lung, brain and heart examinations as well as inflammation diagnostics in SPECT and SPECT/CT-Technology are offered.

In addition, the department has PET/CT and PET/MR scanners, which are used in combination with a wide range of radiopharmaceuticals for individual and customised diagnosis and therapy concepts. This is of crucial importance for the close cooperation with the Comprehensive Cancer Center (CCC) and the numerous university hospitals.

The department further focuses on nuclear medicine treatments of thyroids, liver, prostate or neuroendocrine tumours using beta and alpha radiation emitters.



Marcus Hacker  
Head of Division

# Division of Cardiac Thoracic Vascular Anaesthesia and Intensive Care Medicine

(Department of Anaesthesia, Intensive Care Medicine and Pain Medicine)

The Division of Cardiac Thoracic Vascular Anaesthesia and Intensive Care Medicine was established in 1991. The international development of cardiac anaesthesia and thoracic anaesthesia – together with cardiac surgery and thoracic surgery – had led to a meaningful, organically grown coherence of the two areas "Anaesthesia" and "Intensive Care Medicine". The anaesthesia team of the department consists of 55 medical doctors.

A high volume lung transplant program, heart transplant program, pediatric cardiac anaesthesia program, artificial heart program (LVAD, RVAD, BiVAD) and ECMO program are established at the division. Structured training in Echocardiography is supported by annual courses (50% theory, 50% hands on) and training in the OR aiming for board certification in TEE+TEE. The division is also involved in the research: development of patient data management systems and performance documentation systems, research groups tackling ventilation and antibiotic treatment in the ICU, as well as translational research in animal models. ARDS models and microdialysis technique are established and are associated with publications in top ranked international research journals.



### Clinical

- Echocardiography: TTE and TEE
- Anesthesia for Cardiac Surgery including artificial heart and heart transplantation
- Anesthesia for complicated Thoracic Surgery, Lung Transplantation and Tracheal Resection
- Intensive Care Medicine for Cardiac Surgery
- Anesthesia for all invasive and interventional procedures in Vascular Surgery including EVAR, TEVAR and open thoracic-abdominal aortic repair
- Organ replacement therapy in ICU of heart, lung, and kidney.

### Research

- Measurement of tissue concentrations of Antibiotics and various drugs in humans and in large and small animals
- Complicated ventilation in ICU including automated ventilation
- Protective ventilation in ARDS in pig and patients
- Research in anticoagulation after Cardiac Surgery-
- Outcome Research after Cardiac and Thoracic Surgery using methods to process large data



Edda Tschernko  
Head of Division

# Comprehensive Center for Pediatrics

The central concern of the Comprehensive Center of Pediatrics (CCP) is to provide patient-centered medical care for acutely and chronically seriously ill children and adolescents, i.e. from the unborn or the smallest premature infant to young adults, according to the principle of "evidence-based medicine". In order to realize this, the aim is to merge the facilities, bundle competencies across departments, and establish and expand cooperation in research and teaching.

The three cornerstones are clinics, research and teaching.

The clinical focus is a commitment to a highly specialized care for children and adolescents with acute life-threatening as well as rare diseases and/or severe chronic courses.

The goal of the research mission is to improve efficiency and increase effectiveness, support collaborative projects with pooling of resources, perform joint clinical trials such as drug trials, registries, and outcome studies, and invest in interdisciplinary basic research.

The teaching focus is dedicated to a restructuring of medical teaching according to disease entities / competence teams with the aim of strengthening interdisciplinary education and training already during medical school and in postdoctoral training (including research fellows and international observerships).

The Comprehensive Center for Pediatrics consists of 4 core institutions:

- Department of Pediatrics and Adolescent Medicine with 4 Divisions:
  - Division of Neonatology, Intensive Care Medicine and Neuropediatrics
  - Division of Pediatric Pulmonology, Allergology and Endocrinology
  - Division of Pediatric Cardiology
  - Division of Pediatric Nephrology and Gastroenterology
- Department of Pediatric and Adolescent Surgery
- Department of Child and Adolescent Psychiatry
- Division of Obstetrics and Feto-Maternal Medicine

As the largest pediatric institution in Austria, the CCP is positioned among the European leaders not only in patient care but also in research.



Angelika Berger  
Head of Center

# Division of Neonatology, Intensive Care Medicine and Neuropediatrics

(Department of Pediatrics and Adolescent Medicine)

The Division of Neonatology, Intensive Care Medicine and Neuropediatrics includes Neonatology, Pediatric Intensive Care Medicine and Neurooncology as well as Pediatric Epileptology.

In the neonatal wards, critically ill term as well as premature infants are cared for after birth and up to 6 years of age in the follow-up outpatient clinic. The Division hosts 2 neonatal intensive care units (24 NICU beds in total), 2 neonatal intermediate care units (24 NIMCU beds in total) as well as a pediatric intensive care unit with 8 dedicated PICU beds. Up to 200 preterm infants with a birth weight <1500g are cared for annually, with a strong focus on extremely premature infants born at the border of viability (22 weeks of gestation onward). This makes our institution the largest perinatal center in Austria, as well as one of the largest perinatal centers in Europe.

In recent years, great progress has been made in the outcome of extremely premature infants, especially at the limit of viability. Nowadays, neonatologists from all over the world visit our institution every year to learn the "Viennese model" of management of extremely premature and high-risk neonates. With a survival rate of 80-90% even for the very smallest, extremely premature infants, unprecedented positive outcomes have been achieved, which is remarkable especially in view of the fact that morbidity has not increased.

The focus of patient care in the Pediatric Intensive Care Unit (PICU) is on the treatment of life-threatening organ failure in infants, children and adolescents, including specialized care after neurosurgery and cardiac surgery. A special clinical is any kind of extracorporeal support, including extracorporeal membrane oxygenation (ECMO), all kinds of dialysis procedures as well as long-term cardiac bridging to transplantation ("Berlin Heart").

Education and training of staff and teams is complemented by skills and sim-trainings in the Pediatric Simulation Center. Highly complex patient simulators are used to train interdisciplinary teams in rare neonatal emergency situations in a realistic environment, leading to improved performance in emotionally stressful situations and, in this context, to a significant increase in patient safety.

The scientific output of the Division has multiplied in recent years, with numerous publications in top-ranked international journals. Research foci are neonatal neurology, neonatal infectiology, neonatal nutrition, and pediatric simulation research. The clinical research groups are complemented by a strong basic research group in the field of neonatological immunology.



Angelika Berger  
Head of Division

## Department of Pediatric and Adolescent Surgery

Our department is optimally prepared for the small patients: We work with pediatric anesthesiologists, pediatricians and pediatric nurses. Our operating rooms and our ward are completely oriented towards children. We have a school run, teachers, nutritionists, child-friendly food, a playroom, clinic clowns – and most importantly – parents can stay overnight with their child at any time, throughout the inpatient stay. This is called "rooming in" and we now know for sure that it helps children get better faster.

Besides fully-equipped clinical facilities oriented towards patient-care, our clinic also engages extensively with clinical and basic research. Areas of clinical expertise include anorectal malformations (1, 2), pediatric urology (3, 4), neonatology (5, 6) and pediatric oncology, specifically focusing on the role the tumor microenvironment in pediatric solid tumors, as well as mechanisms of metastasis (7). Since recently, the clinic has a fully equipped lab with all the necessary means to carry out basic and translational research projects, which have been so far focused on cancer research.

The Pediatric surgery laboratory:

Consisting of 4 permanent members and 4 visiting clinicians, the laboratory group aims to integrate a personalized medicine approach into the clinical management of pediatric patients suffering from rare and high-risk malignancies. Currently, our focus are aggressive types of pediatric renal tumors, such as relapsing Wilms tumor, but also other entities of pediatric solid tumors frequently metastasizing to the lung, such as osteosarcoma. In collaboration with MedUni Vienna's Department of Pathology, St. Anna Children's Hospital and Children Cancer Research Institute, we aim to create a biobank of primary and relapsed tumor material and establish 3D models recapitulating the cellular complexity of pediatric solid tumors. In addition, we aim to investigate key signaling pathways contributing to tumor development and progression, such as in congenital pulmonary airway malformation.

The main research objectives of our network are:

- Identification of central regulators and processes of immune cell infiltration in pediatric tumors, specifically focusing on nephroblastomas and bone sarcomas, with particular attention to the lung as most frequent metastatic site
- Understanding the impact of neoadjuvant chemotherapy on the tumor microenvironment, especially since neoadjuvant chemotherapy increases the tumor mutational burden and may affect the composition of the immune compartment
- Identification of morphological and molecular changes associated with treatment response, specifically focusing on changes evoking resistance and recurrent disease
- Novel predictive and prognostic markers for use in pediatric solid tumor therapy
- Investigating the use of body fluids and extracellular vesicles for disease monitoring



Martin Metzelder  
Head of Department

# Division of Obstetrics and Feto-Maternal Medicine

(Department of Obstetrics and Gynecology)

## Setting:

- University Hospital Vienna: largest tertiary center and university hospital in Austria
- Medical University of Vienna: largest medical organization in Austria, top-level research institution in Europe, listed among the top 15 medical schools in Europe
- Department of Obstetrics and Gynecology, Division of Obstetrics and Feto-Maternal Medicine: specialized in high-risk pregnancy care, serving about 2,800 deliveries per year incl. referrals
- Services includes prenatal diagnosis, invasive procedures, pregnancy care, high-risk obstetrics, antenatal care in a multidisciplinary setting, collaboration with different professions

## Content:

- Specific area requiring expertise, practice and knowledge beyond that of a general ob/gyn
- Multidisciplinary care, in which the clinical fellow should be qualified to lead the team
- Detailed risk assessment before, during and after pregnancy
- Antenatal diagnosis of the wide range of maternal and fetal disorders
- Management of very high-risk pregnancies during the peripartum period
- Training by specific personnel, including particular equipment and technology
- Specific and well-established training curriculum, log-book and international accreditation

## Preexisting knowledge:

- Management of intra- and postpartum emergencies at a level of a ob/gyn specialist
- Practical skills in obstetrics at a level of a ob/gyn specialist
- Management of the most frequent pregnancy complications and diseases
- Basic diagnosis and treatment of fetal diseases

#### Organization:

- Fellowship follows international and europeanatal programs, but duration is shorter and may vary from 12 to 24 months as to personal requirements and funding
- Organizational concerns are negotiated with the Medical University of Vienna
- Number of training positions is strictly regulated in order to provide sufficient expertise
- Evaluation at midterm and at the end by a dedicated supervisor of the Department

#### Objectives:

- Improving knowledge, practice, teaching, research and audit of the fellow
- Coordinating and promoting collaboration in organizing the department
- Providing leadership in the development and in research within the subspecialty

#### Topics:

- Maternal medicine: basics, multidisciplinary care, theoretical and practical skills
- Fetal medicine: basics, invasive procedures, theoretical and practical skills
- Fellows may choose from a list of actively engaging research groups at the Department
- Focus on translational and clinical research
- Active participation in research activities at the department is mandatory
- Authorship of a peer-reviewed publication during the fellowship is highly recommended

#### Accomplishment:

- Fellow will be granted a certificate as issued by the Medical University of Vienna after accomplishing the fellowship with the possibility of a personal recommendation letter



Herbert Kiss  
Head of Division

## Gynecologic Cancer Unit

The Department of General Gynecology and Gynecologic Oncology is a center of excellence for diseases specific to women. We advise, treat and care for women through all stages of life. Through respectful treatment of our patients, close contact with their relatives and cooperation with physicians in private practice, individual needs of patients are perceived and taken into account.

Our recommendations and therapies are based on the latest international scientific standards. By organizing and participating in national and international congresses, we guarantee that these standards are constantly updated.

Our range of services covers all areas of conservative and surgical gynecology, senology and gynecological oncology.

Gynecological oncology encompasses the entire spectrum of conservative and surgical treatment at an international level. Regular interdisciplinary tumor boards also provide the opportunity to obtain a second opinion from us. The department is an accredited teaching center of the European Society of Gynecologic Oncology.

Our working groups with subordinate special outpatient clinics offer the possibility of further clarification of complex clinical pictures.

Within the framework of our interdisciplinary centers, the Endometriosis Center, the Breast Health Center, the Comprehensive Cancer Center and the Pelvic Floor Center, we offer interdisciplinary cooperation with specialists from various disciplines at our department. The certifications and regular re-certifications of our centers and outpatient clinics represent a valuable quality assurance tool in this regard.



Stephan Polterauer  
Head of Gynecologic Cancer Unit, Comprehensive Cancer Center



# Department of Emergency Medicine

Since 1991, the Department of Emergency Medicine represents one of the primary contact points for the Viennese Municipal Ambulances and the Viennese population in terms of medical non-trauma emergencies. 24/7 physicians of the department and medical consultants from many academic disciplines take care of self-admitting or ambulance-brought patients, ranging from simple flu to cardiac arrest patients in need of extracorporeal life support. The identification of potentially life-threatening diseases, rapid diagnosis and effective treatment challenge the team of the department on a daily basis.

In the field of research the focus lies in the field of resuscitation research, the treatment and the complications of myocardial infarction, pulmonary embolism, and arrhythmia. Another research focus lies in clinical epidemiology as well as many aspects of the coagulation system. Over 550 publications in peer-reviewed journals have been published by the department since 1991.

In April 2017, the Center for World University Rankings, which was established in Saudi Arabia, surveyed the universities' performance in 227 different disciplines and listed the universities according to the number of top ten places. The data were collected by Clarivate Analytics, which took over the Web of Science database at the end of 2016. The Medical University of Vienna is represented in this rank list with two top ten placements, one of which is emergency medicine at eight place.

Teaching is another key element: every year medical students are taught the basic principles of emergency medicine in a series of lectures and courses. The Department of Emergency Medicine is one of the most popular Departments for students, electives are booked years in advance, lectures and courses are among the highest ranked with the Medical University of Vienna.



Wilhelm Behringer  
Head of Department

# Division of Nephrology and Dialysis

(Department of Medicine III)

The focus of our division is on nephrology, kidney transplantation, peritoneal- und hemodialysis and extracorporeal therapies such as plasmapheresis, immunoadsorption and arterial hypertension. Our specific expertise is on incompatible and complex kidney transplantation through desensitization and paired exchange programs.

Through interdisciplinary cooperation with other specialized internal divisions, we take care of patients with other comorbidities such as oncological or cardiovascular disease. The consultation service of the Division of Nephrology and Dialysis is staffed 24 hours a day.

Besides medical care of patients we have a strong research focus that spans from clinical studies to translational and basic research.

The Division of Nephrology and Dialysis is among the largest University department of kidney medicine in Europe.



Rainer Oberbauer  
Head of Division

# Department of Neurosurgery

The Department of Neurosurgery is one of the best-equipped neurosurgical sites in Europe. Additionally to microsurgery, endovascular treatment of brain vascular malformations, gamma knife surgery, and an intraoperative MR suite is provided to neurosurgical patients.

## Key data

- Around 3,000 surgical procedures/year in 7 operating theaters (rooms): 4 surgery, 1 intraoperative MRI Suite, 1 GKN, 1 endovascular Neurosurgery
- 35 Doctors: 14 senior certified NS, 7 board certified NS, 12 residents, 2 ward physicians
- 2 care wards with 46 designated neurosurgical beds for patients
- Neurosurgical Intensive Care Unit with 10 beds

Clinical Research is performed in the different neurosurgical subfields, like tumor, vascular, skull base, epilepsy surgery, paediatric, spinal, radiosurgery and neurosurgical intensive care. The last 3 years, altogether 262 peer reviewed publications with an IF of 1204 were published at the neurosurgical department.



Karl Rössler  
Head of Department

## Department of Oral and Maxillofacial Surgery

The department has a long-lasting tradition in computer assisted surgery, virtual planning and the use of patient specific implants in the fields of orthognathic surgery, distraction osteogenesis and complex reconstructive surgery. The department was the first one to perform laser-assisted autonomous robotic midfacial osteotmies in clinical routine. There is also a clinical focus on craniofacial surgery and cleft lip and palate surgery.

The research focuses on tissue engineering, biomaterials and tumor biology. The department is awarded research grants on a regular basis.

Professor Nkenke is the Editor-in-Chief of the leading journal in Oral and Maxillofacial Surgery and also is an active advisor to the EU commission.



Emeka Nkenke  
Head of Department

# Division of Palliative Medicine

(Department of Medicine I)

The Division of Palliative Medicine comprising a palliative care unit with 12 beds was opened in June 2010. From its architectural and organizational aspects, the palliative care unit is perfectly suited to serve the needs of severely ill patients and their families and friends.

At present, mainly patients with progressive cancer and a need for palliative care are treated in this unit due to its location within the Department of Medicine I, which has Divisions for Oncology and Hematology. However, also patients with diseases other than cancer who are in need for specialized palliative care due to a high symptom burden can be treated at the Division of Palliative Medicine. Furthermore, an Outpatient Clinic for Supportive Cancer Care and a Palliative Care Consultancy Service are run by the Division of Palliative Medicine.

The Division of Palliative Medicine is the leading study centre of the Austrian Palliative Care Study Group (AUPACS), a multiprofessional research group conducting clinical studies in palliative care within different palliative care institutions in Austria.

Since 2011, the Division of Palliative Medicine has been the first palliative medicine institution in Vienna that was accredited to a certified "ESMO-Designated Center of Integrated Oncology and Palliative Care".

A fellowship at the Division of Palliative Medicine would give you the chance to learn about the importance of palliative care instead of having "palliative scare". You would get to know multi-professional teamwork, challenging medical and ethical discussions and to focus on the patients and their needs.

The work is varied, challenging and full of surprises.  
We would be delighted to welcome you as a fellow with us!



Eva Katharina Masel  
Head of Division

# Division of Pulmonology

(Department of Medicine II)

The task of the Division of Pulmonology is, on the one hand, patient care at the University Hospital Vienna, and on the other hand, comprehensive teaching and research as an organizational unit of the Medical University of Vienna. The Division of Pulmonology sees itself as a specialized division of internal medicine, where specialists for the additional subject of respiratory medicine are also trained.

In the field of respiratory medicine, the division covers all common and rare diseases and belongs at least in some indication (e.g. severe Asthma; Prof. Marco Idzko, interventional Bronchoscopy, Prof. Daniela Gompelmann) to one of the leading hospitals in Europe.

Due to the numerous concomitant diseases associated with pulmonary diseases, a profound general internal medicine knowledge is the basis of patient care. For the Division of Pulmonology, the necessary networking with almost all other clinical departments of the University Hospital Vienna also applies in particular.

Our goal is to offer respiratory medicine services according to the latest findings, to conduct medical research and to train the next generations of physicians in the best possible way.



Marco Idzko  
Head of Division

# Department of Radiation Oncology

As one of the largest radiation-oncology departments in Austria, we offer tailored treatment for patients with all sorts of cancer. Radiotherapy makes use of highly complex machines applying ionizing radiation, which can completely inactivate malignant tumours or alleviate tumour-related symptoms.

Most patients are treated on an outpatient basis. For about half of them the treatment aim is curing their disease. If healing is not possible, symptom relief and improving quality of life are the most important treatment intentions. At our wards patients receive combination therapies (radiotherapy combined with systemically active substances) or supportive treatment.

The department is active in further developing radiotherapy and doing research in several areas of external beam radiotherapy (EBRT) as well as internal radiation therapy (brachytherapy).

We are one of the leading institutions in the international research project EMBRACE further developing cutting-edge treatment of MR-based EBRT and brachytherapy of locally advanced cervical cancer.

Moreover, we participate in the EORTC-ESTRO project OligoCare and will participate in the OligoRare trial.

MR-only simulation and treatment planning is developed for brain tumours and prostate cancer.

At the Medical University of Vienna and within the European Society for Radiotherapy & Oncology (ESTRO) and the Austrian Society for Radiotherapy (ÖGRO), we are committed to national and international training of radiation-oncologists, medical physicists, and radiation biologists. Medical treatment at the highest technical level combined with optimal patient care are our main concerns.



Joachim Widder  
Head of Department

# Department of Urology

Our mission is:

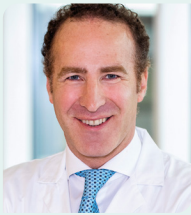
- Excellent treatment results (outcomes), which we achieve through personalized medicine, compassionate care and a safe environment.
- Optimized healthcare by finding ways to be preventive and stop disease progression.
- Better quality of life and health for people by providing appropriate outreach, patient education and patient education.
- Nationwide improvement of the health care system through the sound training of researchers, graduate students, residents, fellows, clinicians and through our commitment to teaching and continuous education.
- Continually pushing the boundaries of science by enabling and supporting groundbreaking basic and translational research.
- Transitioning findings from research to the clinic by bringing knowledge from studies directly from the lab to the bedside: Bench-to-Bedside Philosophy.

The section of Urologic Oncology offers a one to two-year fellowship for urologists who have completed or are in the process of completing a general urology residency program. The fellowship is designed to prepare selected candidates for careers as leaders in academic Urologic Oncology. One year of fellowship is devoted to basic and/or clinical research. It allows the fellows to study under experts in the field and develop expertise in the basic, translational, and outcomes sciences.

The overall goal of this program is to train academic urologic oncologists who are skilled surgeons and knowledgeable clinicians who desire to establish comprehensive academic urologic oncology programs at other teaching institutions. The training program focuses on developing basic academic, technical and judgmental skills, and a framework necessary for conducting effective cancer management, research, and teaching. The goal of the program is to provide comprehensive training in the management of all aspects of urologic oncology, covering fully the diagnosis, evaluation and treatment of all types of genitourinary cancer. We believe graduates of the program will be not only clinical specialists of urologic oncology, but aim to be leaders in the field, striving to improve the outcomes of urologic cancers and to advance the understanding of their biology.



The clinical component provides fellows with a well-rounded experience in the multi-disciplinary management of urologic cancers, with an emphasis on surgical management of complex cancers, including risk adapted implementation of minimally invasive techniques. This in-depth clinical experience provides extensive operative training in minimally invasive laparoscopic and robotic-assisted surgery, as well as in standard open surgical approaches. Additional rotations in genitourinary medical oncology and genitourinary radiation oncology will give important experience regarding non-surgical interventions.



Shahrokh Shariat  
Head of Department

# Division of Transplantation

(Department of General Surgery)

Transplantation of abdominal organs, liver, kidney, pancreas, small intestine, as well as promotion of regional organ donation are our main tasks. The great experience from liver transplantation also results in high competence for hepatobiliary surgery and complex retroperitoneal operations. Complicated dialysis accesses are also part of our field of activity.

Transplantation is a highly-complex medical procedure requiring the cooperation of experienced teams of numerous medical specialties, making transplantation a prototypical example of academic medicine. Despite these dramatic successes, unmet needs remain. The most pressing, unsolved problem in organ transplantation is the limited long-term graft survival due to the gradual loss of graft function. Vienna is one of the most active transplant centers in Europe with overall more than 7.000 kidney- and more than 3.000 liver transplants. Against the background of this clinical activity, transplantation research has reached the critical mass necessary for performing research at an internationally competitive level, addressing the major unmet needs of the field.

Scientifically, we are at the forefront of the development of immunological tolerance, which should one day enable us to keep a transplanted organ free of rejection without the need for constant medication. Until then, however, we must improve our current drug strategies so that pharmacologically induced tolerance becomes effective, with low risk of rejection, but also as few side effects as possible from the necessary drugs. In clinical and translational research our focus is on donor liver machine perfusion. Both types of perfusion machines are established as well as an organ recovery hub. Hypothermic oxygenated machine perfusion is currently our standard procedure for donor liver preservation. In extended criteria donor organs normothermic machine perfusion is performed for viability assessment prior to transplantation. Research in the field of transplantation is multi-disciplinary, spanning the entire spectrum of experimental, translational and clinical studies. Bench-to-bedside – and back again – is a cardinal feature and a long-standing reality of transplantation research.



Gabriela Berlakovich  
Head of Division

# Division of Vascular Surgery

(Department of General Surgery)

Diseases of the cardiovascular system represent the most common cause of death in the western world, as atherosclerosis and diabetes mellitus show a continuous increase. Furthermore, are younger people increasingly affected by vascular diseases. We consider the respectful and empathic treatment as well as the solution of the individual medical problem of each patient as central.

As surgeons, we treat the patients entrusted to us together with angiologists and interventional radiologists in accordance with the latest vascular medical findings. Our aim is to offer the optimal treatment for each patient. The Clinical Division of Vascular Surgery of the Department of General Surgery plays a central role in this cardiovascular field.

The aims in our scientific research ranges from basic science to translational research and clinical investigations. Our current research includes the molecular processes of atherosclerosis with a special emphasis on aortic aneurysm and carotid stenosis.

Two major pathways are in the special focus of our research:

- The role of Neutrophil gelatinase-associated lipocalin (NGAL) and extracellular matrix metalloproteinase inducer (EMMPRN).
- The role of Neutrophil extracellular traps (NETs) and the role of Neutrophils in general.

In addition, various aspects of aortic growth and rupture should be elucidated with special focus on morphometric and histologic aspects. The clinical research is dominated by endovascular techniques for aortic repair as well as by various clinical aspects of open aortic repair.

Possible candidates for fellowships and scientific collaboration are highly welcome.



Christoph Neumayer  
Head of Division

# Division of Visceral Surgery

(Department of General Surgery)

In our division we stand for first-class medical care at the highest level. In our clinic, we offer a wide range of surgical treatment options for benign and malignant diseases of the organs of the digestive tract and abdominal cavity (esophagus, stomach, intestines, liver, pancreas and other organs), the endocrine organs (thyroid, parathyroid, adrenal glands) and the breast.

With a well-coordinated team of experienced physicians and nurses, we treat the patients entrusted to us with the utmost care and empathy, using an evidence-based approach to patient care and state-of-the-art technical equipment (including minimally invasive techniques and robotic surgery). The state of the art interdisciplinary care is guaranteed by close networking with other specialist departments of the Medical University of Vienna.

In research, we work for continuous development of our biological understanding, diagnostics and therapy of visceral surgical diseases with the aim of further improving patient care for the future. One common focus of our organ-specific laboratory research groups is the development and clinical implication of patient-near models as tools for precision medicine. In our research we build on close interdisciplinary and international networking to answer innovative and clinically relevant scientific questions.

As one of the largest visceral surgery departments in Central Europe, we stand for first-class training and teaching with the aim of recruiting the best future surgeons as staff and training them at the highest level.



Oliver Strobel  
Head of Division and Head of Department of General Surgery









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