MEDICAL UNIVERSITY OF VIENNA

WELCOME TO THE FUTURE OF MEDICINE

Annual Report
2024

EDITORIAL

WE SHAPE THE FUTURE

20 years of MedUni Vienna: blending tradition and innovation.

It is with great pride that we reflect on two decades of the Medical University of Vienna as an independent institution. Since its separation from the University of Vienna in 2004, MedUni Vienna has combined the dynamism of a young university with the research and education expertise of the "Vienna Medical School" and the 650-year tradition established under it. This unique blend defines us and continues to fuel our ambition.

What began as a bold step towards autonomy has grown into an international success story: over 73,000 scientific publications, around 16,000 graduates in medicine and dentistry since 2004, top global rankings, and more than one million patient interactions each year. Our university has become an indispensable driver of medical advances in Europe.

Looking forward is our guiding principle. This is shown in numerous ways, including our ambitious construction initiatives: the Eric Kandel Institute – Center for Precision Medicine, the Center for Translational Medicine and MedUni Campus Mariannengasse are creating over 90,000 square metres of cutting-edge research and teaching infrastructure. These projects have since come to represent our commitment to shaping tomorrow's medicine – personalised, digital and interdisciplinary.

My heartfelt thanks go to everyone who has contributed to MedUni Vienna's success over the past two decades. Let's continue to work together to generate knowledge, share it and shape the future of Austria and Europe!

Professor Markus Müller
Rector, Medical University of Vienna

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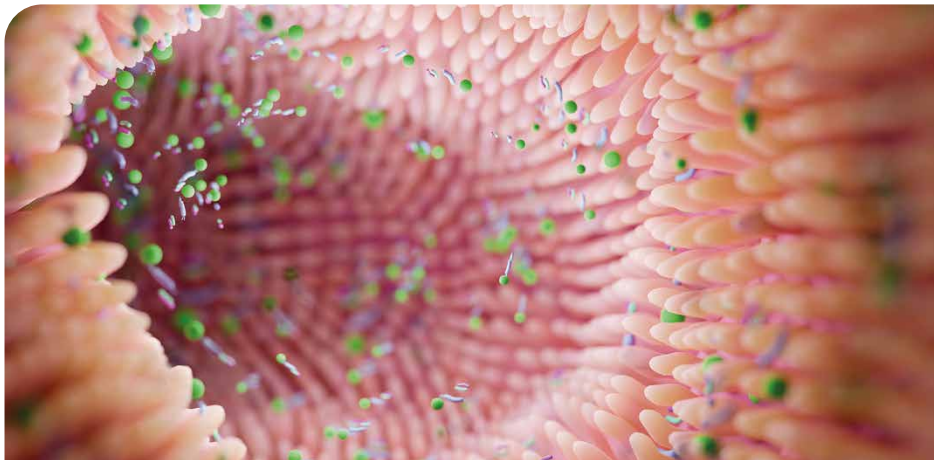

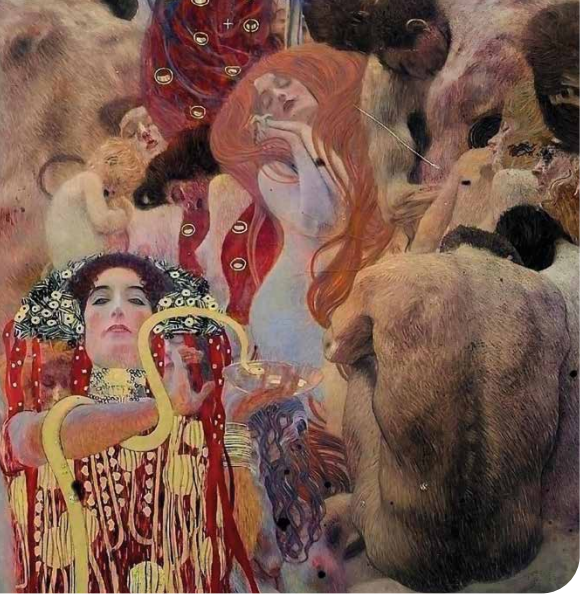

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20 YEARS OF MEDUNI VIENNA

Special milestone. In 2024, MedUni Vienna celebrated 20 years as an independent university. A series of events turned the spotlight on the university's rich history, as well as providing a source of impetus for the future.

MedUni Vienna combines a young organisation's thirst for knowledge with over 650 years of experience. Established in Vienna in 1365, Alma Mater Rudolphina had a medical faculty from its earliest days – making it a respected centre of health-related expertise as long ago as the Middle Ages. It became an autonomous organisation in 2004, when it was separated from the University of Vienna. Since then, around 16,000 medicine and dentistry graduates, as well as over 73,000 academic publications written by the university's researchers have added new chapters to MedUni Vienna's success story.

During these first 20 years, MedUni Vienna – already one of Europe's largest medical education centres – has also grown to become one of the world's most highly regarded institutions for cutting-edge research. The expertise of its employees is bundled in a range of different centres, while the appointment of highly qualified staff helps to bolster the organisation's potential. In the course of 2024, the university celebrated this special landmark with numerous events and initiatives – from the anniversary of its establishment on 12 March, through to the Long Night of Research on 24 May – for its employees, students and all those who have ties with the institution.

Independence delivers advantages

Standing on our own two feet was a challenge to begin with, mainly because of the need to build up many administrative processes and services. But at the same time, this autonomy gave us immense leeway. The fledgling MedUni Vienna redesigned the Medicine degree programme with a new, contemporary curriculum, concluded numerous partnerships, and gradually stabilised its financial position. Major agreements with University Hospital Vienna have paved the way for joint decision-making. The university also

3 QUESTIONS FOR...

Wolfgang Schütz, Rector Emeritus

As Dean and Rector, Wolfgang Schütz was closely involved in the separation of MedUni Vienna and its early years of independence.

Looking back, how would you assess the separation?

In retrospect, I can't see it as anything but positive – our concerns at the time proved to be unfounded. Besides a lot of emotion, there was also the fear that we would lose touch with the other disciplines. But the opposite was the case: we built up more partnerships than the medical faculty had had beforehand. If there is one minor downside, it's that our strong positions in the international rankings were even better when we were still part of the University of Vienna.

Why was medicine separated from the University of Vienna?

One of the reasons was the size of the medical faculty, which accounted for more than 50% of the University of Vienna's budget. Other universities in Europe link their clinical disciplines with patient care through a subsidiary, but that wasn't possible in Vienna. This is why a separate university was established, with the Rector responsible for the budget.

In your view, what have been the most important milestones over the past 20 years?

Definitely the development of a strong corporate identity, and the Medicine degree programme, too: in 2003, when the separation had been agreed, we redesigned the curriculum from top to bottom. The previous one was 100 years old and it paid too little attention to the clinical side. We also quickly defined our research focuses, which meant we could raise the profile of our research achievements. And after only a few years, we had the highest third-party funding of any of the country's 21 universities.

»Our university is one of the leading medical teaching centres worldwide, as the international rankings also go to show. Continuous development enables us to maintain our quality standards. And a groundbreaking centre for medical education is emerging in the shape of the new campus.«

Anita Rieder
Vice Rector for Education

launched an extensive construction and modernisation programme. Designed to create ideal conditions, the new facilities will allow the enormous impact of digital medicine on teaching, research and patient care to unfold – turn to page 16 to find out more.

Successful branding

In 2013, MedUni Vienna took an important step that shaped its future. Shortly before its 10th anniversary, MedUni Vienna launched a strategic brand development process – becoming one of the first universities in Austria to do so – with a view to clearly positioning the university and distinguishing it from the University of Vienna. Based on a participative process involving more than 600 employees and numerous experts, the process gave rise to a clear brand strategy that places an emphasis on knowledge and innovation.

This positioning provided the foundations for the university's corporate design. Besides giving the MedUni Vienna logo a much fresher and more contemporary look, the logos of the various departments and organisational units were harmonised. Replacing this varied mix with a coherent brand architecture has resulted in a distinctive external identity that has enhanced brand recognition.

The current Leadership & Reputation project is aimed at strengthening communication and leadership skills. Significant progress was made on this front in 2024. What impact does MedUni Vienna have internally? What does being a good leader actually mean here? And how attractive is the corporate culture for

»Research is the engine that drives advances in medicine: our aim is to integrate knowledge into innovations for patients and enable people to experience this progress for themselves. We achieved this in impressive fashion once again in 2024.«

Michaela Fritz
Vice Rector for Research and Innovation

MedUni Vienna's logo now has a much fresher, more contemporary look.

prospective new employees? These were some of the questions discussed at a series of workshops, where specific opportunities were also defined and prioritised. The outcome was a leadership framework that will influence all related processes, including staff recruitment, training and target agreements. In addition, a project focusing on scientific communication using the university's social media channels was implemented – training courses and guidelines will enable students, researchers and other MedUni Vienna employees to use social media effectively and draw attention to their own projects.

Key figures underline success

MedUni Vienna is better placed today than it was 20 years ago in many ways – and this is also backed up by the numbers. A rarity two decades ago, papers from MedUni Vienna researchers are now published in respected journals such as Nature and Science once or even on multiple occasions in any given month. The proportion of female professors has also increased, reaching 30% in 2024, compared with well below 10% when the university became autonomous.

MedUni Vienna's workforce includes many scientists and researchers who are also outstanding physicians. Every year, they treat more than 60,000 inpatients and perform around 45,000 operations. Additionally, the outpatient clinics and special outpatient clinics at MedUni Vienna and University Hospital Vienna handle about 1.1 million appointments each year. Various rankings reaffirmed MedUni Vienna's excellent standing in 2024 – see page 13 for more information.

» The significant progress made on our construction projects underlines MedUni Vienna's success in developing its infrastructure. We have also seen the same degree of improvement in our financial indicators, IT infrastructure and strategic data management. «

Volkan Talazoglu
Vice Rector for Finance

The logo was given a makeover for the 2024 anniversary.

A packed lecture theatre for the Day of the Medical University of Vienna on 12 March 2024. Rector Markus Müller welcomed visitors to the event.

The special jubilee campaign featured eye-catching branding on university buildings.

MedUni Vienna celebrated 20 years as an independent university with a diverse programme of events to mark the Day of the Medical University of Vienna on 12 March 2024. One of the highlights was a live feed of an operation – a team of experts from the Neurosurgery, Neuropathology and Biomedical Engineering units demonstrated various surgical techniques for the treatment of aneurysms.

> *I would like to congratulate MedUni Vienna on its special jubilee. It is one of Europe's most important medical institutes and makes a major contribution to research and patient care.*
>
> **Heyo K. Kroemer**
> Chief Executive Officer, Charité University Hospital Berlin

Heyo K. Kroemer (pictured below), Chief Executive Officer of the Charité University Hospital Berlin, held the university lecture, while BioNTech vaccine pioneer and MedUni Vienna University Council member Christoph Huber (left) gave the anniversary lecture.

A thoroughly entertaining lecture took place on 9 April 2024. To mark the university's anniversary, Omar Sarsam gave a special performance of his cabaret Sonderklasse. A MedUni Vienna graduate and paediatric surgeon, Sarsam is one of Austria's most successful cabaret artists.

"This confirmation of our strong international reputation is testimony to the outstanding performance of our people over the past two decades," said Markus Müller, who has been MedUni Vienna's Rector since 2015. "The three pillars of our mission – research, teaching and patient care – contribute to the quality of our university in equal measure. This ensures that MedUni Vienna will continue to fulfil its social role of generating knowledge, conveying knowledge and putting knowledge to use in the future."

MedUni Vienna is well placed moving forward. The Target Control Agreement for University Hospital Vienna for 2025-2033 was concluded by the federal government and the City of Vienna on 4 July 2024, while on 9 December 2024 MedUni Vienna signed the new performance agreement with the Federal Ministry of Education, Science and Research, which will ensure a solid financial framework through to 2027. Meanwhile, more than 90,000m² of new infrastructure for the medicine of the future is taking shape on several major construction sites. This will create state-of-the-art conditions for the practice and teaching, as well as research into and the active development of digital and personalised medicine.

» MedUni Vienna is shaping the medicine of the future through its pioneering research, modern teaching and comprehensive patient care. Its innovative educational programmes are playing a significant role in the evolution of healthcare. «

Maria Sibilia
Chair of the Senate

» University Hospital Vienna's excellent reputation is closely tied in with the outstanding work performed by physicians posted there from MedUni Vienna. This is why being seen as an attractive employer, and attracting and retaining the most talented people are core priorities for the university. «

Eva Dichand
Chair of the University Council

The guests at the MedUni Vienna party at the University Clinic of Dentistry Vienna celebrated the 2000s.

MedUni Vienna commemorated the darkest chapter in Austria's history – its annexation by Germany in 1938 – with a ceremony at the Memorial Against Forgetting.

»With departments run in conjunction with MedUni Vienna, University Hospital Vienna ranks among the world's top 25 hospitals. MedUni Vienna's translational research approach, which quickly integrates new scientific findings into clinical practice, is one of the key factors in this success.«

Oswald Wagner
Vice Rector for Clinical Affairs

»The extension of the Finance and Target Control Agreement between the federal government and the City of Vienna ensures that University Hospital Vienna and MedUni Vienna will be able to continue along their successful path together – for the good of patients.«

Herwig Wetzlinger
Director, University Hospital Vienna (a business unit of the Vienna Hospitals Association)

Rector Emeritus Wolfgang Schütz spoke with Ursula Wiedermann-Schmidt about milestones and memories as part of the Alumni Club's Lebenswege series.

NEW TARGET AGREEMENT

Setting a course for the future. Signed on 4 July 2024, the new Target Control Agreement for 2025-2033 concluded by the Austrian federal government and the City of Vienna is a vital foundation stone for the continuing development of University Hospital Vienna and MedUni Vienna.

Besides setting the budget, the agreement includes a commitment by University Hospital Vienna – as Austria's most important general hospital – to provide cross-regional patient care, meet staffing targets for nursing care, reduce the burden on medical personnel and cut the number of cases handled under quota systems. "The agreement underscores our position as a leading research and teaching institution in Austria and internationally, and safeguards the provision of world-class patient care all the way through to 2033," commented Rector Markus Müller. Agreed with the Federal Ministry of Education, Science and Research in 2021, the addition of 66 new study places by 2029 remains unchanged, bringing the total to 2,000 per year nationwide.

The signing of the agreement was attended by (from left) Rector Markus Müller, Finance Minister Magnus Brunner, Vienna Healthcare Group (WIGEV) Director Evelyn Kölldorfer-Leitgeb, Science and Research Minister Martin Polaschek and City of Vienna Provincial Councillors Peter Hacker and Peter Hanke.

FOUR TOP SPOTS

Strong results. In 2024, four rankings underlined MedUni Vienna's outstanding performance and reputation.

Top 25 hospitals worldwide: US news magazine Newsweek and data provider Statista evaluated 2,400 hospitals in 30 countries. University Hospital Vienna, which runs departments in cooperation with MedUni Vienna, was ranked 25th, an improvement of five places.

One of the world's best medical universities: in 2024, MedUni Vienna jumped eight places to 60th in the Medicine category of the highly respected QS World University Ranking by Subject. In the Dentistry category, the university was ranked in the joint 51 to 100 band out of a total of 491 institutions. Ranked 98th, MedUni Vienna finished inside the top 100 once again in the Life Sciences and Medicine category.

Austria's top 3 universities: MedUni Vienna was again rated as one of Austria's best universities in the Shanghai Academic Ranking of World Universities. Placed in the 201-300 band, it was named as one of the country's top three institutions. This ranking attaches particular significance to research performance.

Second-best medical university in the German-speaking countries: in the respected Shanghai Global Ranking of Academic Subjects, MedUni Vienna gained a number of places in the Clinical Medicine category (ranked 76-100) compared with the previous year, and finished in the 51-75 band for the world's leading medical universities. It took second place in the ranking of medical universities in the German-speaking countries (after the University of Heidelberg) and came first in Austria.

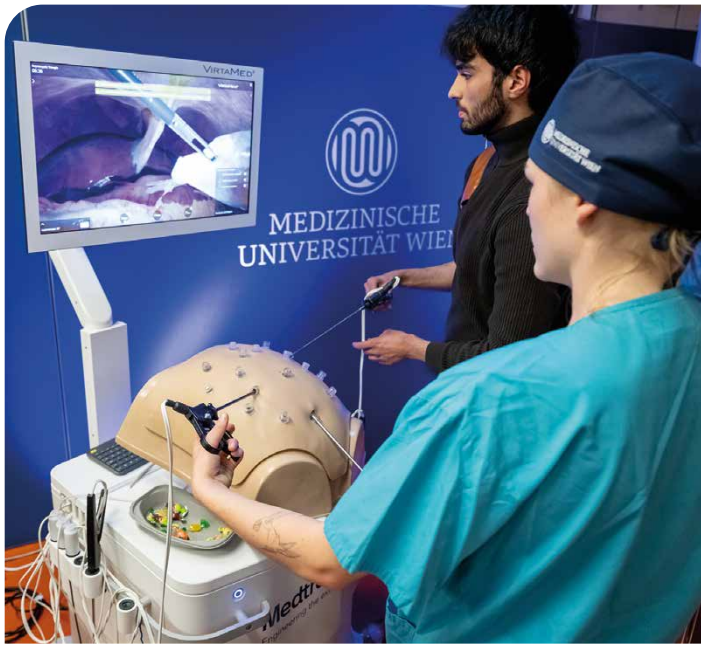
A workshop gave members of the public the opportunity to dissect brain specimens and find out more about the functions of this vital organ.

A real crowd-puller: neurosurgery performed on vegetables!

LONG NIGHT OF RESEARCH DRAWS 10,000 VISITORS

Hands-on. On 24 May 2024, visitors to the roughly 150 stations lining MedUni Vienna's Medical Research trail had the chance to experience the fascinating world of science at first hand.

Nowadays, microsurgical procedures are used in many operations. Visitors were able to control the instruments on a plastic model.



The University Clinic of Dentistry Vienna also set up a number of different stations.

Here, visitors were able to implant a prosthetic heart valve in a pig heart – under the watchful eye of an expert.

ARCHITECTURE FOR MEDICINE

Written by Stefan Oláh and Ulrike Matzer to mark the university's anniversary, a special illustrated book captures the current architectural designs at MedUni Vienna and outlines their place in cultural and scientific history. Photographer Stefan Oláh turned the spotlight on the aesthetics of various facilities, including operating theatres, robotic drug dispensing equipment and walk-through disinfectant systems. Presented in the Jugendstilhörsaal lecture theatre on 20 March 2024, the new book takes a look behind the scenes at MedUni Vienna and University Hospital Vienna. The visual tour opens up fascinating perspectives on the places where medicine is practised, as well as providing interesting details on the latest developments.

Architecture for Medicine

Editors:	Markus Müller, Stefan Oláh, Ulrike Matzer
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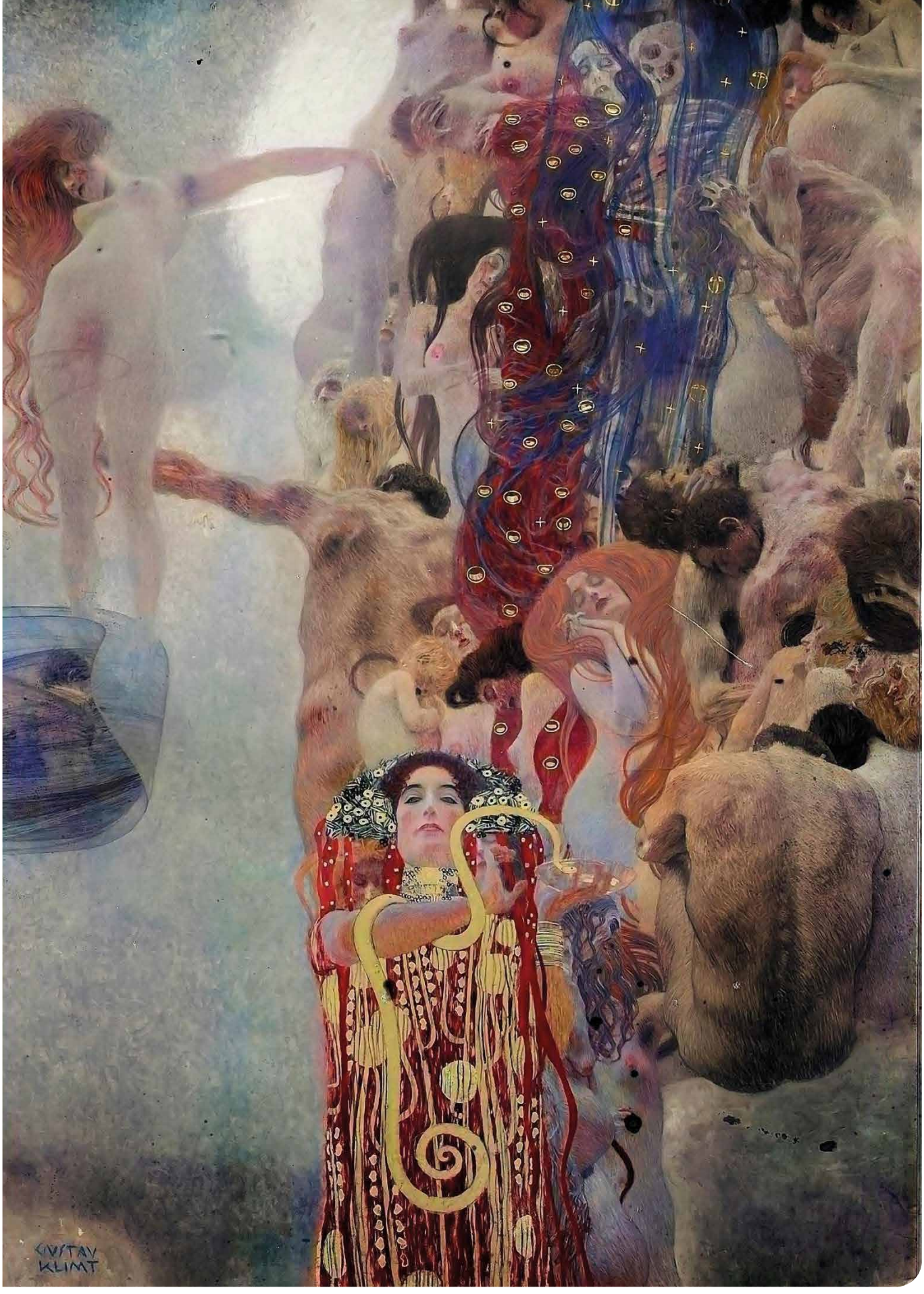

GUSTAV
KLIMT

Gustav Klimt's faculty painting "Medicine" has adorned the facade of the new extension at the Anna Spiegel research building since 13 November 2024. The colouring for the painting, which symbolises the cycle of life, was produced by Google and the Belvedere under a joint AI project. The lower middle section of the work shows Hygieia, the Greek goddess of health and hygiene, with the Aesculapian snake and a cup of water from the River Lethe. In ancient Greece, legend had it that anyone who drank the water would lose their memories of life before entering the underworld.

ARTWORKS AND CONSTRUCTION PROJECTS

Infrastructure development drive. Significant progress was made on the extensive MedUni Campus AKH construction project during 2024 – and even included finding a place for art on site.

A stroll around MedUni Campus AKH in early 2024 would have revealed nine cranes – a sign that the large-scale construction projects at MedUni Vienna have long since advanced beyond the detailed planning phase, and implementation is now proceeding rapidly. In the process, MedUni Vienna is not only modernising its research and teaching infrastructure, but also creating space for art – in line with its social responsibilities, which include promoting art and culture. A number of artworks have been selected for the new facilities, and several are already on show on, in or in front of the existing buildings and open spaces.

A new attraction took centre stage at the end of 2024: Medicine by Gustav Klimt was unveiled on the Anna Spiegel Building extension at a special ceremony held on 13 November. Painted by the famous Vienna Secession artist more than 120 years ago, Medicine is one of three faculty paintings commissioned by the University of Vienna – and it caused a huge scandal at the time. Far too progressive for their time, Klimt's depictions for jurisprudence, medicine and philosophy were ultimately rejected. The original paintings were destroyed in a fire in 1945. All that had remained of them were black-and-white photographs and sketches – until the original colours were recreated using artificial intelligence, under a project implemented by the Belvedere in partnership with the Google Arts & Culture lab.

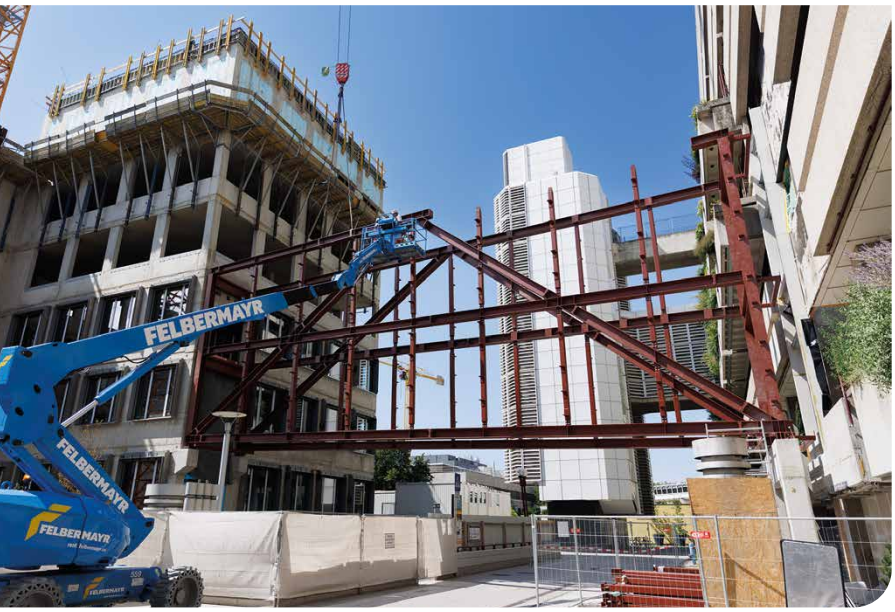
After finding out about the initiative, MedUni Vienna requested use of the rights from the Belvedere. Featuring the Greek goddess of health Hygieia, Klimt's faculty painting – in the form of a weatherproof mural – now has pride of place at its intended destination. A logical decision, given that the design was recreated using such a cutting-edge approach, and that MedUni Vienna deploys and also develops AI technologies.

Center for Translational Medicine

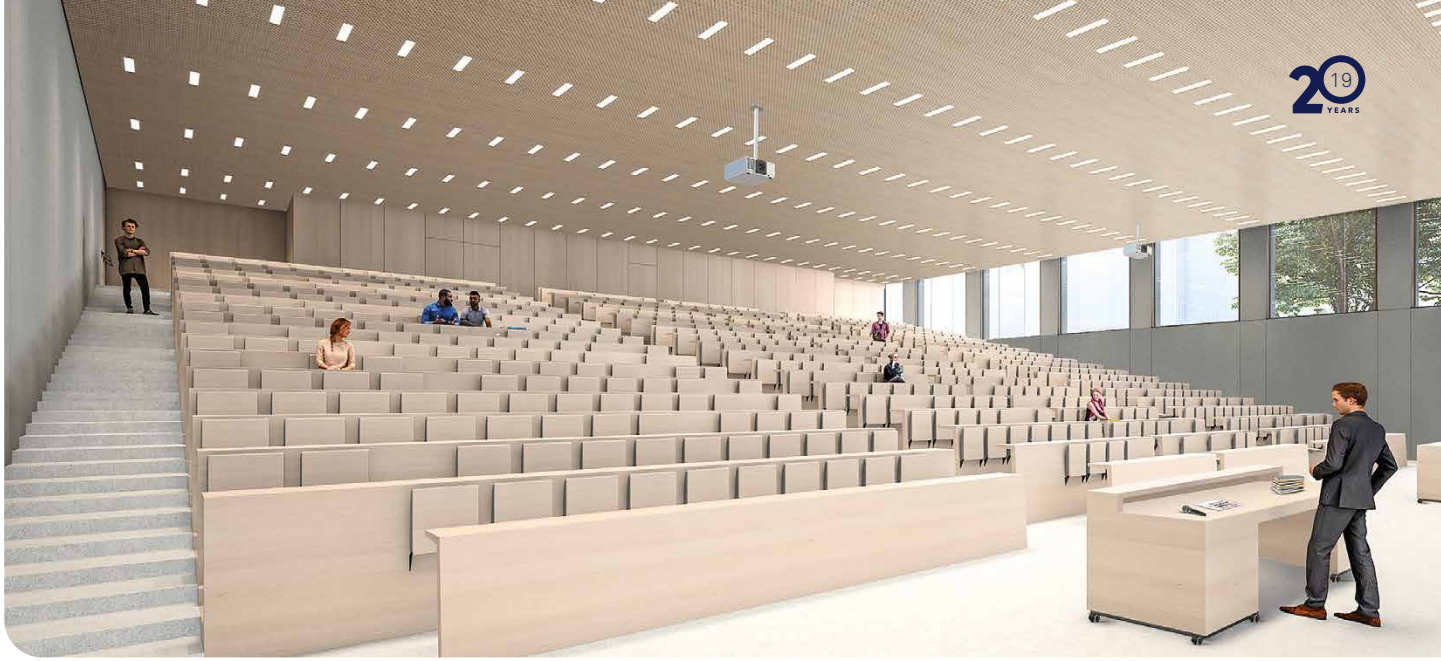
Directly opposite, work on the shell of the Center for Translational Medicine is well underway – the topping-out ceremony took place on 17 October 2024. Since then, visitors have been able to see the new building for themselves on various tours of the site. Due for completion in 2025, the centre represents a major step that will shape Austria's future as a medical hub. It will open up new possibilities for clinical research, teaching and translational patient care, while at the same time boosting the international competitiveness of Austrian medicine. Specialists from various disciplines will be able to collaborate under one roof. The centre will also serve as a unique setting – and the only one of its kind in Europe – for clinical trials, in which subjects will often be the first people in the world to receive the latest therapies.

The core objective of the new facility – ensuring that basic research, applied research and healthcare go hand in hand – is also symbolised by the bridge that connects the Center for Translational Medicine with the main University Hospital Vienna building. The complex task of building the bridge began in August, and the beams and girders have already been moved into place and assembled. The two-storey structure comprises 400 elements, which in turn are made from a total of 800 individual parts. Two thousand bolted joints were needed to join the individual elements together. The bridge was completed together with the facade in late December.

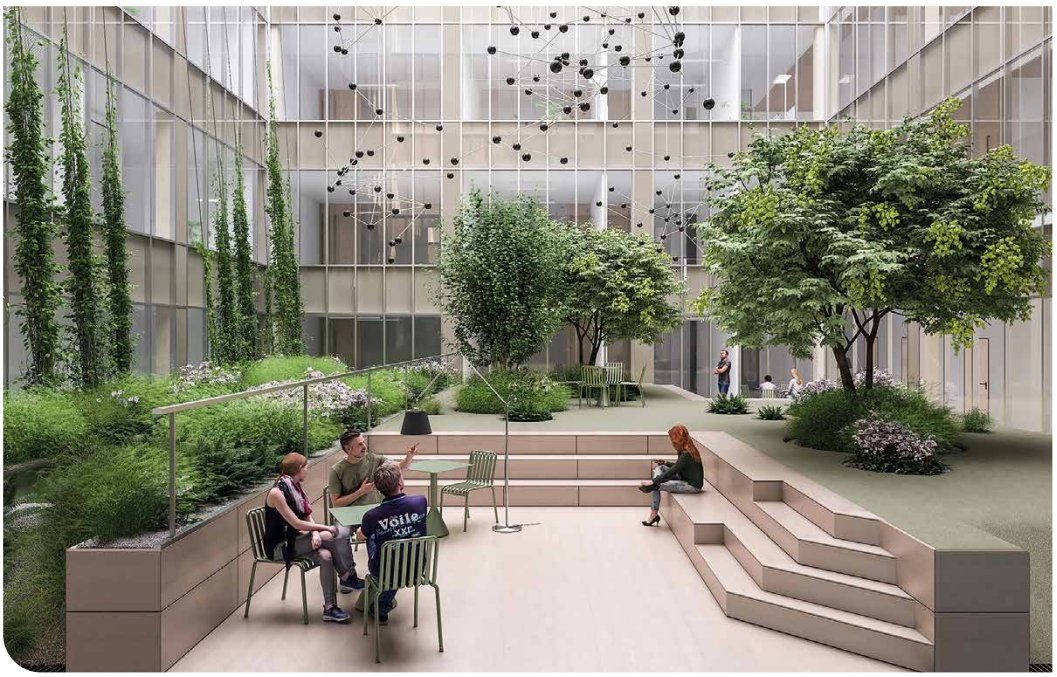
The topping-out ceremony on 17 October 2024 paid tribute to the significant progress made on construction of the Center for Translational Medicine.



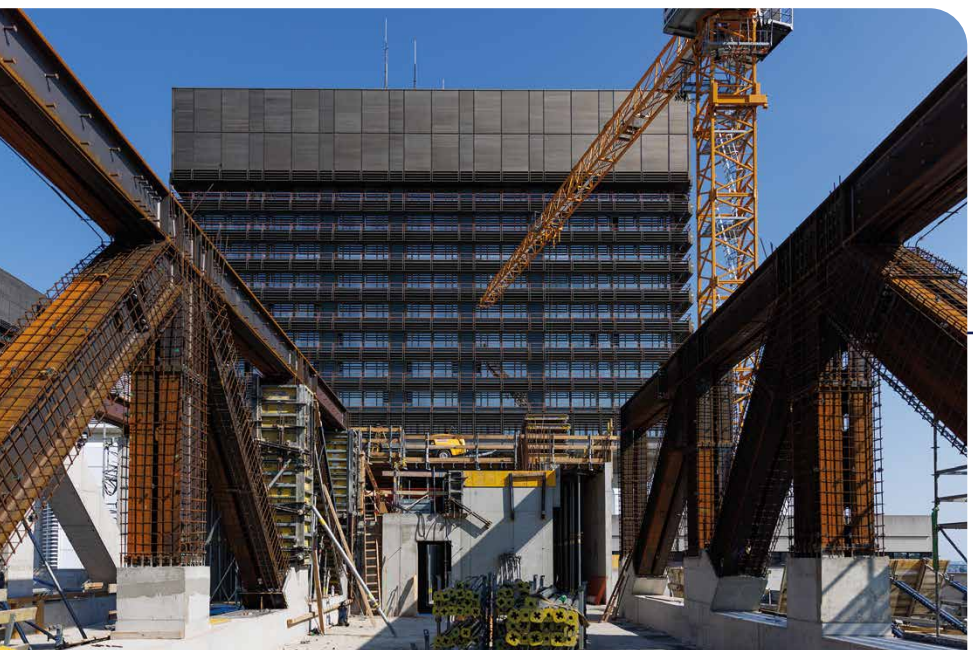
The Center for Translational Medicine will be linked directly to University Hospital Vienna via a bridge, bringing basic research and patient care at the hospital closer together.



With a capacity of 760, the pillar-free lecture theatre on the ground floor can also be used in conjunction with the generously proportioned foyer for conferences.



The plans include a greened zone where people can meet and relax in the courtyard. Extensive glazing will let in natural light, creating a pleasant atmosphere in the adjacent offices.



Three large beams on the roof will provide the necessary stability. Including the steel casing, they weigh in at 950 tonnes.

The construction site for the new Eric Kandel Institute – Center for Precision Medicine: in future, researchers at the site will develop diagnostic approaches, treatments and preventive measures tailored specifically to individual factors.

Visitors to the cafeteria at MedUni Campus Mariannengasse will be able to see Thomas Feuerstein's work "Metabolic Landscape", which combines a map with human metabolic processes, while monitors display dialogues based on recent publications.

Selfie with a Nobel laureate

Important preparations were also made in 2024 for the artworks that will be on show here. Accurate down to the last detail, scans of Nobel laureate Eric Kandel and cardiologist Eugene Braunwald, which will form the basis for life-sized bronze statues, were taken in 3D studios. The statues will be installed at the facilities which bear their names: the Braunwald Auditorium in the Center for Translational Medicine, and the Eric Kandel Institute – Center for Precision Medicine. The perfect selfie spot!

Researchers at the Eric Kandel Institute will develop diagnostic approaches, treatments and preventive measures tailored specifically to individual factors. With around 200 researchers set to move into the facility in late 2026, the institute is designed to strengthen MedUni Vienna's pioneering position in this field – a vital step towards the provision of personalised medicine.

Next door, the Center for Technology Transfer is at the planning stage. The centre will provide ideal conditions for MedUni Vienna research groups to collaborate effectively with life science companies.

Grand Decoration of Honour in Gold for Eric Kandel

In a ceremony held at the Hofburg in Vienna at the end of February 2024, Austrian President Alexander Van der Bellen presented Erich Kandel with the Grand Decoration of Honour in Gold with Sash in honour of his services to the Republic of Austria. Kandel holds an honorary doctorate from MedUni Vienna, and the Center for Precision Medicine currently under construction will be named after him. His research paved the way for detailed insights into the working of the human memory – Kandel's findings earned him the 2000 Nobel Prize in Physiology or Medicine.

Researchers and students at MedUni Campus Mariannengasse can look forward to an ideal learning and working environment.

MedUni Campus Mariannengasse

Construction work also progressed at MedUni Campus Mariannengasse in 2024. Implemented in cooperation with the owner, government real estate company Bundesimmobiliengesellschaft (BIG), this development is currently the largest construction project at any of Austria's universities. From late 2027, the state-of-the-art campus will offer 60,000 m² of space – more than the total currently at MedUni Vienna's disposal – for researchers and students.

The university began plotting a course for development of the new campus a decade ago: in 2012, then Rector Wolfgang Schütz and his team capitalised on the opportunity to purchase the land for the new Campus Mariannengasse from Wien Energie. The acquisition was financed through MedUni Vienna's third-party funding of EUR 46 million. The plot was then sold to BIG, which is now building the facility.

Following a competition, BIG ART selected two large-format installations for the MedUni Campus Mariannengasse site. The foyer will feature a concrete work by Toni Schmale entitled "Manual Manoeuvres", which will create a connection between art and day-to-day medical practice. The work takes its cue from fragments of classical sculptures. The cafeteria will include an installation by Thomas Feuerstein: titled "Metabolic Landscape", the 30-metre long panoramic artwork combines a contour map of a real-life landscape with the metabolic processes in the human body. Four monitors display a changing series of associated dialogues – these are generated by software which reads the latest publications by the centres based at the campus.

The new buildings – and the artworks which form a dialogue with the architecture – will further enhance MedUni Vienna's attractiveness and performance by significantly improving the quality of infrastructure, as well as by bringing the various parts of the university closer together, which will promote information sharing and knowledge transfer. Additionally, the paintings, sculptures and installations will generate new impulses, and open up the campus to people who do not study or work there – in turn, this will help to raise MedUni Vienna's profile.

"Manual Manoeuvres" by Toni Schmale was chosen as the artwork for the foyer. Set inside a large concrete frame, it depicts the Heimlich manoeuvre, the recovery position, heart massage and a comforting hand.

FOCUS

Studying at MedUni Vienna

Leading-edge, research-driven teaching: *MedUni Vienna focuses on high-quality curriculums, practice-led training and continuing education, as well as infrastructure upgrades, aimed at opening up ideal career opportunities for graduates.*

ADMISSION AND STARTING A DEGREE

MedAT. Almost 12,000 people took part in the admissions procedure for Austria's medical universities on 5 July, including 5,920 in Vienna.

Large numbers of applicants took part in the MedAT admissions process once again in 2024: 15,158 applicants registered, with 11,904 ultimately taking part in the process, in the hope of securing one of the 1,900 medical degree programme places available. 50 additional places were offered compared with the previous year, with a total of 772 (2023: 760) at MedUni Vienna. As usual, admission exams were held at several locations across Austria. The exams for MedUni Vienna took place at the Messe Wien congress centre.

Putting knowledge and skills to the test

Split into several parts, the written exam required applicants to demonstrate basic, entry-level knowledge of biology, chemistry, physics and maths, as well as text comprehension, cognitive, social and emotional skills. The exam for prospective Dentistry students was largely identical to that for the Medicine degree programme. However, instead of text comprehension and the ability to recognise implications, Dentistry programme applicants had to demonstrate their manual dexterity, including wire-bending skills and their ability to produce mirror images of certain shapes.

White coat welcome: first-semester students received their new white doctors coats on 2 October. Rector Markus Müller and Vice Rector for Education Anita Rieder welcomed the new students and gave them some important pointers for the new semester.

STRESS MANAGEMENT PAYS DIVIDENDS

The "Coping with Stress" seminar has been compulsory in the first semester at MedUni Vienna since 2018. Now, a study by the Center for Public Health and the Teaching Center has shown that attending the seminar reduces the risk of stress and burnout among students. Social interaction with teaching staff and other students, as well as group activities appeared to play a key role in achieving this beneficial effect. Most of these positive impacts were not observed when students participated in the seminar online.
BMC Medical Education

Social skills course firmly established

Designed to raise trainee physicians' awareness of the importance of a good bedside manner when dealing with patients, MedUni Vienna introduced the compulsory first-semester course "Social Skills" 15 years ago. Since then, around 11,000 students have taken the course, including 760 first-years who completed it at the end of January 2024. The training hospital for the course is Haus der Barmherzigkeit, where students gain initial experience of treating people with chronic conditions and disabilities.

RECOGNISED IN THE USA

Go west. MedUni Vienna students and graduates can study, work and carry out research without restrictions in the USA thanks to an accreditation procedure.

Since 2024, accreditation by an agency recognised by the World Federation for Medical Education (WFME) has been a requirement for anyone who wishes to take the United States Medical Licensing Examination (USMLE) before going on to work as a physician in the USA. As a result of the accreditation, MedUni Vienna's Medicine degree programme is now listed in the Educational Commission for Foreign Medical Graduates (ECFMG) Medical Schools Eligible for 2024 Pathways database.

Vice Rector for Education Anita Rieder was delighted with the outcome: "The fact that MedUni Vienna graduates and students are now allowed to work and perform research at world-class institutions in the USA shows that MedUni Vienna's Medicine degree programme comes up to the highest international standards." The Medicine programme was audited in accordance with international standards and awarded unconditional accreditation in summer 2023. The agency responsible for the audit, AHPGS, also received recognition status from the WFME and is now authorised to carry out WFME accreditations.

Since 2024, MedUni Vienna students and graduates have been able to take the United States Medical Licensing Examination (USMLE) in the USA.

PERSONAL LEARNING STYLES

There is no such thing as a universal teaching method that is equally effective for all students, and teaching methods alone do not have a decisive impact on academic success in medicine or dentistry degrees. These were the key findings of a systematic review carried out by MedUni Vienna's Curriculum Development research unit. Although problem-based learning, practice-driven methods and e-learning have their advantages, successful learning appears to be more closely related to personal habits.
Educational Psychology Review

GRADUATION CEREMONIES

717 future physicians and dentists and 129 PhD students completed their degrees in the 2023/2024 academic year. The graduation ceremonies took place at the end of November in the spectacular surroundings of Vienna's Konzerthaus, with around 8,000 people in attendance.

A few months earlier, on 20 June 2024, staff who had completed their post-doctoral teaching qualifications were presented with their certificates in the Van Swieten Hall. A total of 82 MedUni Vienna employees had received teaching qualifications in 2023 – eight in basic biomedical research, 24 in surgical disciplines and 50 in non-surgical subjects.

STUDYING MEDICINE AND DEEPENING KNOWLEDGE

Diverse curriculum. Prospective MedUni Vienna students can choose from a broad range of courses, including the Medicine and Dentistry undergraduate programmes, as well as a diversified selection of doctoral and PhD programmes and master's degrees. The portfolio also includes continuing education courses that enable professionals to enhance their expertise.

Undergraduate degree programmes
- Medicine
- Dentistry

Master's degree programmes
- Medical Informatics
- Molecular Precision Medicine (in collaboration with the University of Vienna)

PhD programmes with a focus on basic medical research
- Cardiovascular Tissue Regeneration and Repair*
- Cell Communication in Health and Disease*
- Endocrinology and Metabolism
- Immunology
- Infection Biology
- Inflammation and Immunity
- Malignant Diseases
- Medical Imaging
- Medical Informatics, Biostatistics & Complex Systems
- Medical Physics
- Molecular, Cellular and Clinical Allergology
- Molecular Drug Targets*
- Molecular Signal Transduction
- Neuroscience
- RNA Biology
- Signaling Mechanisms in Cellular Homeostasis*
- Vascular Biology

* Programme being phased out, no new admissions

Doctoral programmes in applied medical science with a focus on clinical research
- Biomedical Engineering
- Cardiovascular and Pulmonary Disease
- Clinical Endocrinology, Metabolism and Nutrition
- Clinical Experimental Oncology
- Clinical Neurosciences
- Epidemiology
- Mental Health and Behavioural Medicine
- Programme for Organfailure, -replacement and Transplantation (POeT)
- Preclinical and Clinical Research for Drug Development
- Public Health
- Musculoskeletal and Dental Research

Joint PhD programmes
- Molecular Biosciences (in collaboration with the University of Vienna)
- NTU Singapore at MedUni Vienna (in collaboration with Nanyang Technological University)

Postgraduate programmes
- Advanced Diseases – Master of Science (MSc) (Continuing Education)
- Applied Medical Aesthetics
- Ergonomics and Fitness for Work
- Industrial Medicine
- Occupational Health Assistant
- Clinical Research
- Digital Medicine
- Endodontology
- Esthetic Dentistry
- Special Training in Orthodontics
- Forensic Sciences

- Gender Medicine
- Traditional Chinese Medicine (TCM)
- Health Care Management (HCM-MBA)
- Healthcare Facilities
- Intensive Care
- Interdisciplinary Pain Medicine
- Clinical Academic Psychotherapeutic Propaedeutic and Medical Humanities (KAPP-MH) – MSc (Continuing Education)
- Crisis Intervention and Suicide Prevention
- Master of Advanced Studies (MA) in Insurance Medicine
- Master of Applied Medical Aesthetics (MSc)
- Master of Public Health
- Medical Hypnosis
- Medical Physics
- MSc in Occupational and Organizational Medicine
- Patient Safety in Health Care
- Periodontology and Implantology
- Prosthodontics and Interdisciplinary Therapy Concepts – Academic Expert (AE) or Master of Dental Science (MDSc)
- Psychotherapy: Psychoanalytic/Psychodynamic Methods (ULG-PPPM)
- Psychotherapy: Behavioural Therapy
- Psychotherapy Research
- Sleep Coaching – AE or MSc (Continuing Education)
- Study Management – Academically Certified Study Manager (AE)/MSc in Study Management
- Substance Use Disorders – MSc (Continuing Education)
- Toxicology
- Transcultural Medicine and Diversity Care – AE or MSc (Continuing Education)

20 YEARS OF PUBLIC HEALTH TRAINING

Continuing education course. A new round of the Public Health master's course began in autumn 2024, marking the programme's 20th anniversary.

The influence of lifestyle factors such as exercise and diet on our health, as well as prevention, epidemiology, communication, big data, and principles of psychology, business and management in the health system – for 20 years now, the interdisciplinary Public Health continuing education course has been promoting the development of comprehensive expertise in this socially significant medical discipline. A new intake of 20 students began their training on 10 October 2024.

The backgrounds of the course participants are just as diverse as the range of topics they will be studying, as Co-Course Coordinator Piero Lercher reported: "We have participants from each of Austria's federal provinces, as well as from all five continents – even though the course is taught in German. Many of them have a background in medicine or another scientific field, while others work in areas including the legal profession and public administration." Although the course management has remained unchanged over the past 20 years, the curriculum is constantly being adapted. In addition to their lectures, the students also complete internships and go on field trips – practice-based training that has laid the foundations for many an impressive healthcare career.

Public Health – Master of Science

4 semesters, part-time

For course details and registration, visit *www.mph-vienna.at*

FOCUS

Translational research

More than the sum of its parts

MedUni Vienna champions interdisciplinary, cross-organisational research and actively participates in numerous partnerships. Teamwork is all about pooling expertise, sharing resources, and achieving results faster.

SUCCESS THROUGH COLLABORATION

Partnerships fuel research. In 2024, MedUni Vienna unlocked various synergies as part of its commitment to pursuing shared goals and exploring new frontiers.

Collaboration is a vital element of translational medicine. When clinicians and basic researchers work together closely, it means that new knowledge can be applied to clinical practice more quickly so that patients can start to benefit sooner. The research centres under construction (see page 16) will create an even better set of conditions for interdisciplinary work.

MedUni Vienna's commitment to cross-organisational research clearly shines through in its scientific output: in 2024, 71.63% of its published papers were the product of international collaborations, primarily with institutions located in Germany and the United States.

ACCN inaugurated: pioneering work for "Mission on Cancer"

In early 2024, the comprehensive cancer centres at the Medical Universities of Vienna, Graz and Innsbruck formed the Austrian Comprehensive Cancer Network (ACCN). Their shared aim is to enhance quality of life for cancer patients, as well as care in Austria through knowledge transfer and networked research.

Working alongside its partners in this area, MedUni Vienna is leading efforts for the European Union's Mission on Cancer – a key priority under the Horizon Europe funding programme which will run until 2030. By deepening understanding of cancer, improving diagnostics and therapies, and advancing prevention measures, the Mission seeks to enhance quality of life for patients and ensure equitable access to high-quality care across Europe.

Pictured (standing): Federal Minister for Education, Science and Research Martin Polaschek, Philipp Jost (MedUni Graz), Maria Sibilia (MedUni Vienna), Dominik Wolf (MedUni Innsbruck) and Shahrokh Shariat (MedUni Vienna).

Concentrated expertise in infections
In 2024, preparations began for the Ignaz Semmelweis Institute for Infection Research which is headed by Florian Krammer. Launched in early 2025, its goal is to deliver world-class research that has a global impact. The institute concentrates expertise in infectious diseases, infectiology and epidemiology from the Medical Universities of Vienna, Graz and Innsbruck, the University of Veterinary Medicine Vienna, and Johannes Kepler University Linz.

MedUni Vienna's research groups also partner with industry players ranging from large corporations to small startups. One example is the Christian Doppler Laboratories, where top researchers collaborate with innovative companies to conduct high-level, application-oriented basic research. In 2024, two new Christian Doppler Laboratories were established (see page 52 for details).

An attractive employer
In March 2024, an interim evaluation for the HR Excellence in Research Award reaffirmed MedUni Vienna's status as an appealing employer for researchers. Granted by the European Commission, this award recognises institutions that align with the principles of the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers under a clear, long-term strategy. "This accolade reflects MedUni Vienna's dedication to continually improving working conditions for researchers," said Maria Wolfram-Eder, Department of Human Resources and Human Resources Development. Since 2022, her team – monitored and supported by EU Commission reviewers – has implemented various targeted measures.

SETTING PRIORITIES

Framework for interdisciplinarity. MedUni Vienna consolidates its expertise in five research clusters and one research platform, emphasising translation to ensure that clinical insights inform research and patients benefit swiftly from innovative applications.

Medical Imaging Research Cluster
The Medical Imaging Research Cluster brings together the institutes and research facilities involved in imaging at MedUni Vienna in six fields of specialist research. The focus is on carrying out research into and achieving advances in morphological, functional and molecular imaging, so that diseases can be diagnosed and treated earlier.

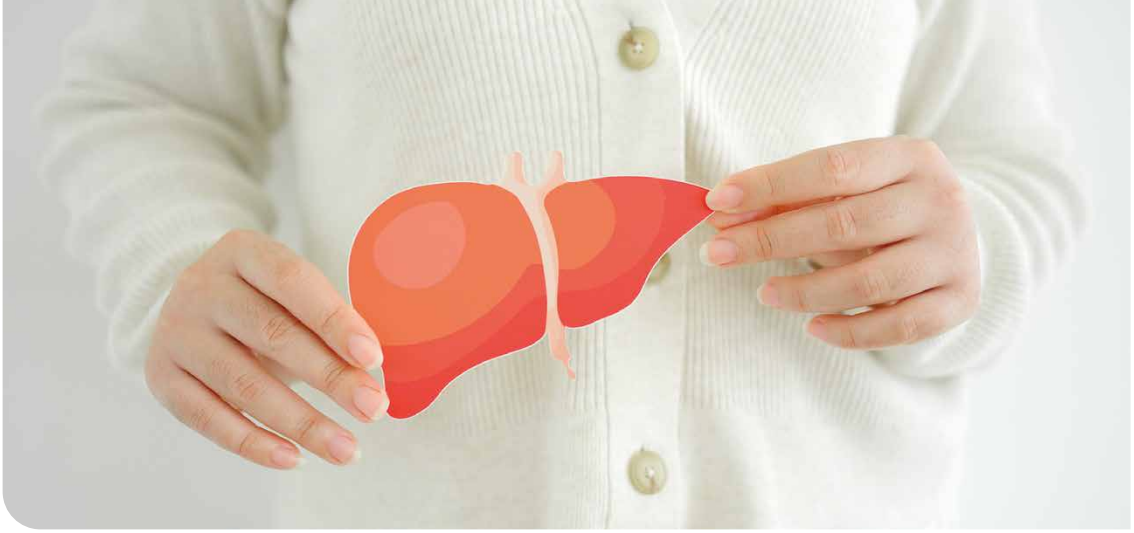
Immunology Research Cluster
This cluster investigates allergies, inflammations and infections through basic, translational and clinical research with the goal of developing new diagnostic and therapeutic approaches.

Cancer Research and Oncology Research Cluster
Cancer patients benefit from innovative procedures and technologies. Experts at the Comprehensive Cancer Center (CCC) connect all oncology stakeholders in order to align treatment with research.

Medical Neuroscience Research Cluster
This cluster seeks to better understand nervous system disorders to improve the diagnosis and treatment of such conditions.

Immunology Research Cluster
Research spans heart and vascular diseases, imaging and non-imaging diagnostics and epidemiological and genetic questions.

Transplantation Research Platform
A global leader in transplantation, University Hospital Vienna is actively advancing research in this field.



Advanced liver disease is the second-most common cause behind loss of work years. Young patients are affected disproportionately.

FOCUS ON METABOLISM

Liver. Various studies at the Division of Gastroenterology and Hepatology (Department of Medicine III) have yielded new insights into physiological mechanisms, diagnostics and treatments for diseases of this key metabolic organ.

Spleen stiffness as a marker
Led by Mattias Mandorfer, the NICER (Non-Invasive Clinically Significant Portal Hypertension Risk Estimate) model was developed as a non-invasive method of measuring liver-related hypertension with unprecedented accuracy. Measured using elastography with spleen stiffness as an indicator, if widely adopted the model could identify at-risk individuals early for beta-blocker treatment. Previously, measurements required a minimally invasive balloon catheter, a procedure performed at only a few centres worldwide.
The Lancet Gastroenterology and Hepatology

Refining blood tests
Existing thresholds for liver health were often too vague or oversensitive, meaning that they missed many patients and misidentified healthy individuals. A team led by Georg Semmler, Lukas Hartl, Mathias Jachs and Mattias Mandorfer established a new threshold: the FIB-4 score. This allows at-risk individuals to be identified via a simple blood test. The group also demonstrated that non-invasive tests are as reliable as minimally invasive methods.
Hepatology and Journal of Hepatology

Cancer risk in hepatitis C
Though hepatitis C is curable, advanced liver damage leaves a residual risk of liver cancer and portal hypertension complications. An international research group coordinated by MedUni Vienna showed that current liver stiffness should guide post-treatment risk assessment and personalised follow-up care.
Hepatology and Journal of Hepatology

New treatments
The adipose triglyceride lipase (ATGL) enzyme is central to fat metabolism. A team led by Emmanuel Dauda Dixon and Michael Trauner demonstrated that inhibiting it improves liver health, reducing fat accumulation, inflammation and fibrotic changes. It was also shown that this effect extends beyond the liver – surprisingly also influencing bile acid composition and intestinal fat absorption, a discovery which opens up new avenues for treating metabolic dysfunction-associated steatotic liver disease and steatohepatitis.
Journal of Hepatology

FOCUS ON AGEING

Decoding the ageing process. Which processes promote healthy ageing and which hinder it? Insights in this field have the potential to enhance the well-being of an ageing population while also easing the burden on healthcare systems.

New biomarker discovered
A team led by Josef Penninger uncovered the role of a previously unknown lipid metabolism pathway in ageing, and its impact on muscle health and glucose regulation in particular. The researchers focused on the lipid glycerophosphocholine (GPC) and the enzyme glycerophosphocholine phosphodiesterase 1 (GPCPD1), which breaks GPC down by hydrolysis. In older age, fewer GPC-degrading enzymes are present, which leads to elevated GPC levels. Given the fact that GPC levels correlate strongly with biological age, they could serve as a reliable biomarker for it.
Nature Aging

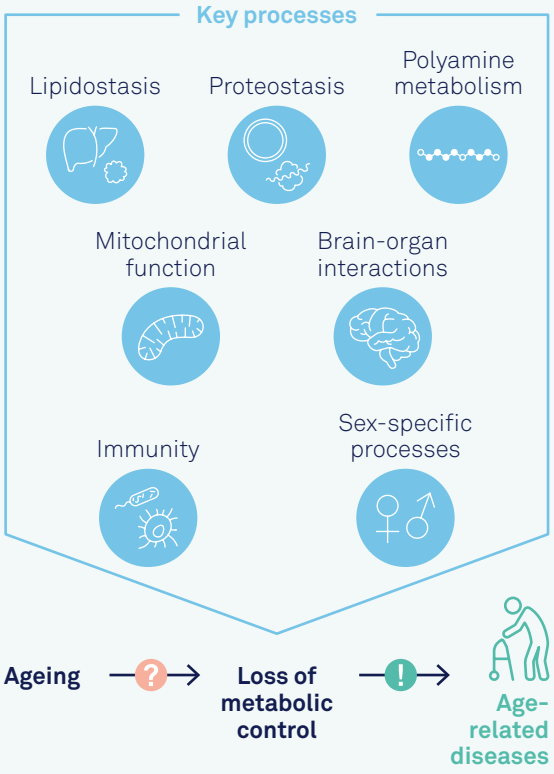
Improving quality of life
A study from the Center for Public Health found that while subjective quality of life in older age has improved slightly over the years, Austria lags behind in comparison to its European peers, particularly in terms of healthy life years. Led by Richard Felsinger, Judit Simon and Gerald Haidinger, the team behind the study tracked quality of life in a large, representative sample of people aged 65 and over in Austria across more than a decade. For the first time, the study not only took gender, health status and region into account, but socio-economic factors, too, which could be key to improving quality of life in later years.
Journal of Aging & Social Policy

UNDERSTANDING AGE-RELATED DISEASES

As people age, their metabolism changes significantly. Insulin resistance rises – and with it their risk of developing diabetes. Meanwhile, metabolic flexibility – i.e. the body's ability to switch between burning carbohydrates and fats – diminishes. What are the mechanisms behind these changes, and how can they be counteracted to prevent age-related diseases? With funding of approximately EUR 30 million over a five-year period, the Metabolic Control of Aging and Diseases (MetAGE) excellence cluster is looking for answers to these questions. The Austrian Science Fund (FWF) is contributing EUR 17.9 million, with the remainder provided by the partner institutions: the Medical University of Vienna, the Medical University of Graz and project lead the University of Graz.

MetAGE research goals

MetAGE takes a holistic approach to studying key ageing processes.



PUBLIC HEALTH AT EVERY LEVEL

Public engagement. Three studies published in 2024 at the Center for Public Health show the full spectrum of this specialist research field.

Cancer screening for unhoused individuals
Homeless people face higher cancer risk factors but low awareness and insufficient access are major issues when it comes to targeted prevention. Working as part of the EU-funded CANCERLESS project, an international team led by Igor Grabovac and Maren Jeleff reviewed 40 studies in order to systematically address this group's health challenges for the first time. Barriers to cancer prevention include a lack of support from family or friends, limited privacy for preparing for screenings, and negative experiences with healthcare systems. For instance, sexual trauma combined with insensitive treatment during cervical cancer screenings (e.g., Pap tests) can deter individuals from accessing such services. The review lays the foundation for developing better prevention and support programmes.
The Lancet Public Health

Suicides among doctors
A team led by Eva Schernhammer and Claudia Zimmermann conducted a meta-analysis comparing suicide rates among doctors with those of the general population, drawing on observational studies published between 1960 and 2024. Looking at two periods (1935 to 2020 and 1960 to 2020), they recorded at least 3,303 male and 587 female suicides. Collected in 20 countries, the data show that while suicide rates among doctors have in fact declined, female doctors still face a significantly higher risk compared to the general population.
British Medical Journal

Nutrition tips on social media
How do child and youth influencers on YouTube portray food and what impact does this have on young audiences? A team led by Eva Winzer and Brigitte Naderer analysed 162 videos from seven German-language influencers, totalling 33.8 hours and featuring 901 food depictions. Most of the products shown were so high in fat, sugar, or salt that they breached the WHO guidelines on marketing to children. The analysis underscores the urgent need for measures to foster a healthier food environment for young people.
BMC Public Health

ERC GRANTS AWARDED IN 2024

Third-party funding. The European Research Council (ERC) awarded substantial grants to a number of MedUni Vienna projects in 2024.

Conrad Merkle (Center for Medical Physics and Biomedical Engineering) and **Adam Gosztolai** (Institute of Artificial Intelligence) each received a Starting Grant of EUR 1.5 million for a period of five years. Conrad Merkle is developing new imaging technologies for tumour tissue samples (TOCCATA). Adam Gosztolai is working on a mathematical theory that combines recordings of individual neurons throughout the brain into a unified model that can predict global brain states (NEURO-FUSE).

Hrvoje Bogunović (Institute of Artificial Intelligence) secured a five-year, EUR 2 million Consolidator Grant to develop AI-supported imaging for at-home monitoring of retinal diseases (HealthAEye).

Stanisa Raspopovic received a Consolidator Grant (EUR 2 million) and a Proof of Concept Grant (EUR 150,000). He is conducting research into bioelectronic treatment through implantable stimulation of the vagus nerve (DiabetManager) and is working on a device with sensors that converts the wearer's interactions with their surroundings into electrical impulses (NEURO-SOCK).

ONGOING ERC PROJECTS IN 2024:

STARTING GRANTS:

Sarah Melzer, PeptidesAndFear
Division of Neuronal Cell Biology, Center for Brain Research
Period: 2022-2027

Dimitris Tsiantoulas, The B-Miracle
Department of Laboratory Medicine
Period: 2023-2027

Thomas Vogl, EarlyMicroAbs
Center for Cancer Research
Period: 2023-2028

CONSOLIDATOR GRANTS:

Christoph Bock, EPI-CART
Institute of Artificial Intelligence, Center for Medical Data Science
Period: 2021-2026

Wolfgang Bogner, GLUCO-SCAN
Department of Biomedical Imaging and Image-guided Therapy
Period: 2023-2028

Kaan Boztug, iDysChart
Department of Pediatrics and Adolescent Medicine
Period: 2019-2025

Alwin Köhler, NPC-BUILD
Division of Molecular Cell Biology, Max Perutz Labs
Period: 2018-2025

Shotaro Otsuka, conNEctoER
Division of Molecular Cell Biology, Max Perutz Labs
Period: 2024-2028

ADVANCED GRANTS:

Tibor Harkany, FOODFORLIFE
Division of Molecular Neurosciences, Center for Brain Research
Period: 2022-2026

Eva Schernhammer, CLOCKrisk
Division of Epidemiology, Center for Public Health
Period: 2022-2027

Erwin Wagner, CSI-Fun
Department of Dermatology
Period: 2018-2024

SYNERGY GRANTS:

Igor Adameyko (coordinator), KILL-OR-DIFFERENTIATE
Division of Neuroimmunology, Center for Brain Research (in collaboration with Karolinska Institutet and Institut Curie)
Period: 2020-2026

Oskar Aszmann, Natural BionicS
Department of Plastic, Reconstructive and Aesthetic Surgery (in collaboration with Imperial College London and Fondazione Istituto Italiano di Tecnologia)
Period: 2019-2025

PROOF OF CONCEPT GRANTS:

Bernhard Baumann, OPTIMEYEZ
Center for Medical Physics and Biomedical Engineering
Period: 2023-2025

Tibor Harkany, SECRET-DOCK
Division of Molecular Neurosciences, Center for Brain Research
Period: 2022-2024

FOCUS

Digital medicine

Technologies opening up new avenues for precision medicine: *digital tools have been playing a major role in diagnostics, therapies and disease research for some time now. Besides applying them, MedUni Vienna also plays a leading role in their ongoing development.*

ACTIVELY DRIVING AI INNOVATION

Pioneering precision medicine. Embedded in the institution's strategy, artificial intelligence is a cornerstone of digital medicine at MedUni Vienna. The university doesn't just use AI – it actively researches and refines it.

From algorithms identifying moles in images of the skin and AI-assisted robots supporting surgeries to genetic analyses uncovering causes of rare diseases and guiding tailored therapies, digital medicine is reshaping healthcare at a fundamental level. MedUni Vienna is committed to leading this transformation, as shown once again by its increased focus on machine learning, bioinformatics and molecular medicine throughout 2024.

"What sets MedUni Vienna apart is having AI researchers, medical professionals and biologists under one roof," highlighted Georg Langs, who uses machine learning to create predictive models for personalised treatment of diseases such as breast and lung cancer. "We're not just users of technology – we're actually driving new AI methods forward through in-house, interdisciplinary teams." There are currently around 100 researchers across various AI labs working on a range of medicine-related topics. Since early 2024, a dedicated website section has showcased these working groups and their projects (see info box).

Deepening expertise

Degree programs need to keep pace with the demands of digital medicine. Specialist knowledge in this field is shared through the Medical Informatics and Molecular Precision Medicine master's programmes, with the latter offered in partnership with the University of Vienna. In 2024, MedUni Vienna also laid the groundwork for a new part-time Digital Medicine postgraduate course, which was developed under the EU-funded DS4Health project, fostering collaboration with other European universities.

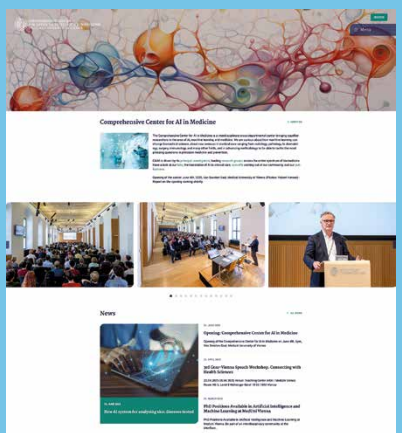
AI and machine learning will also be an integral part of the new centres at MedUni Campus AKH, where major construction milestones were reached in 2024. The Eric Kandel Institute – Center for Precision Medicine will provide state-of-the-art research infrastructure for digital and personalised medicine, with extensive space for computational biomedicine projects and technology platforms, as well as a biobank. Next door, the Center for Translational Medicine will focus on characterising diseases to the latest standards, ensuring patients can benefit quickly from research breakthroughs. The federally funded Digital Skills & Communication project is embedding digital expertise into the medical curriculum.

AI OR THE GERMAN TERM "KI"?

MedUni Vienna prefers to use the term "artificial intelligence" over its German counterpart "künstliche Intelligenz". While the German term implies more of a comparison to human intelligence, also using the English word "intelligence" in German rather than "Intelligenz" carries a sense of data that is to be understood, which better reflects the technology's potential in medicine.

AI labs at the touch of a button

All of the MedUni Vienna groups working on AI and machine learning are listed online. The website details clinical applications, events, funding updates and publications.
caim.meduniwien.ac.at/en/



TOOLS THAT ADD VALUE

Insights. Three examples from MedUni Vienna highlight the scope and potential of advances in AI.

Case 1:
AI detects cardiac amyloidosis
When abnormal proteins known as amyloids build up in the heart muscle, a condition called cardiac amyloidosis can develop, leading to severe complications if left untreated. An international team led by Christian Nitsche (Department of Medicine II) and Marcus Hacker (Department of Biomedical Imaging and Image-guided Therapy) developed and validated an AI system for automated and reliable detection of this condition. It was trained using data from 16,000 patients who underwent scintigraphy between 2010 and 2020 at University Hospital Vienna and eight other centres in Europe and Asia.
The Lancet Digital Health

Case 2:
Tumour cell detection in seconds
The FastGlioma system was developed with significant contributions from MedUni Vienna. Using AI, it allows surgeons to determine whether tissue removed during brain tumour surgery is glioma or healthy tissue in a matter of mere seconds. This improves the precision of tumour removal, enhances safety and shortens operating times. MedUni Vienna's Department of Neurosurgery, and the Division of Neuropathology and Neurochemistry at the Department of Neurology collaborated with researchers from the University of Michigan, University of California San Francisco and New York University.
Nature

Case 3:
Clearly defined AI guidelines
The European Union is the first region in the world to draft specific guidelines for developing and deploying general purpose AI – the versatile models behind systems like ChatGPT. Matthias Samwald, from MedUni Vienna's Institute of Artificial Intelligence, who co-chairs one of four key working groups, is working with his team to develop criteria to identify and assess AI tools with potential systemic risks. The "General-Purpose AI Code of Practice" will translate the principles set out in the EU AI Act into practical measures, reducing development costs for businesses and researchers while improving risk prevention.

DECODING EARLY DETECTION

Data analysis. A team from the Complexity Science Hub and MedUni Vienna analysed all hospital admissions in Austria over more than a decade to identify clues for early, personalised prevention strategies.

What are typical disease progressions in multimorbid patients – i.e. individuals who have two or more long-term health conditions? Which moments in their life go on to have a significant bearing on their outcomes? To find out, a group of researchers from the Complexity Science Hub and MedUni Vienna examined around 44 million hospital stays in Austria between 2003 and 2014. In their model, each decade of age is represented as a layer, with diagnoses shown as points within them. This allowed the team to spot connections between conditions across age groups – for example, how often obesity, hypertension and diabetes co-occur in 20 to 29-year-olds, and their increased risk of diseases later in life.

Pinpointing critical moments

The team identified 1,260 disease trajectories (618 for women, 642 for men) over a period spanning up to 70 years. "On average, a trajectory includes nine different diagnoses, showing just how common multimorbidity is," confirmed Elma Dervic from the Complexity Science Hub. The research focuses on 70 trajectories in younger people that later diverge into distinct disease patterns, revealing key moments for prevention.
npj Digital Medicine

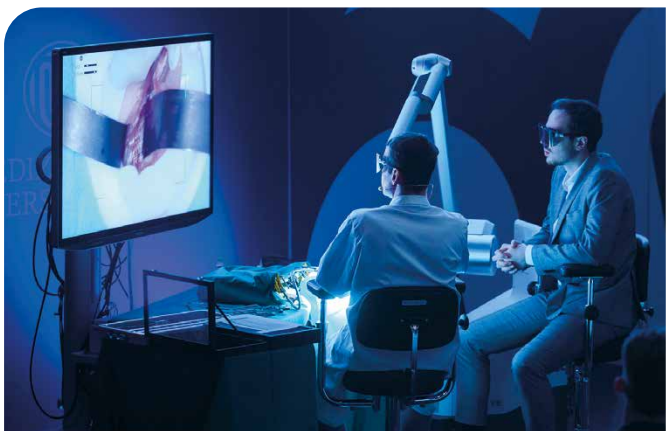
SIMULATOR FOR ANEURYSM SURGERY

Virtual and physical training. A new simulator developed at MedUni Vienna enables better planning and practice for complex aneurysm surgeries.

Clipping an aneurysm – i.e. sealing it with a vascular clip – is a delicate procedure that requires precision and deep anatomical knowledge. Advanced simulators and 3D visualisation tools are vital for giving neurosurgeons the expertise and confidence they need to perform it. Experts from the Center for Medical Physics and Biomedical Engineering, alongside colleagues from MedUni Vienna's Department of Neurosurgery and the Department of Electronics, Information and Bioengineering at Politecnico di Milano, created a simulator combining augmented reality and 3D printing.

Significant benefits

A study led by Francesco Moscato (Center for Medical Physics and Biomedical Engineering) and Philippe Dodier (Department of Neurosurgery) confirmed the tool's value. Fourteen neurosurgeons with varying levels of experience participated in the study, including nine MedUni Vienna residents who tested the simulator over a two-day period. Metrics including video recordings and smartwatch tremor analysis showed significant improvements in active simulation time, clipping attempts and radiological closure rates for aneurysm surgeries.
Neurosurgical Focus



BETTER MAPPING OF BRAIN TUMOURS

Imaging procedures. Digital technologies are improving the visualisation of brain tumours, as shown in two examples.

Assessment of diffuse gliomas, or malignant brain tumours, can be challenging using magnetic resonance imaging (MRI). Amino acid positron emission tomography (PET) – which uses radiolabelled amino acids – offers a more reliable way to map both glioma activity and spread. An international research group (RANO Group), led by Matthias Preusser (MedUni Vienna) and Nathalie Albert (LMU Munich), developed the first global standards for interpreting these PET images, creating a benchmark for the use of the imaging technique in clinical trials and treatments.
The Lancet Oncology

Glioblastoma is a type of glioma and the most common malignant primary brain tumour in adults. Though surgical removal is critical for prognosis, the procedure can be very difficult due to the boundaries of the tumour, which are often poorly visible. With key contributions from MedUni Vienna's Department of Neurosurgery, an international team combined 5-Aminolevulinic acid (5-ALA) with stimulated Raman histology (SRH), a novel laser-based fluorescence tool. Besides highlighting tumour cells, this approach also shows specific immune cells in the tumour microenvironment, which could be significant for future treatments.
Nature Biomedical Engineering

Showing the structure of the nucleus

An international team led by Kareem Elsayad from the Center for Anatomy and Cell Biology developed a technique to measure, visualise and interpret the mechanical properties of the cell nucleus for the first time. Known as Brillouin light scattering, this method captures light scattered by constant thermal vibrations in a sample, calculating stiffness along the light's path. By measuring all angles of the nucleus simultaneously, researchers revealed its highly dynamic structure.
Nature Photonics

FOCUS

Innovative treatment

From bench to bedside – and back again: *working in line with this principle for many years, MedUni Vienna takes steps to ensure that new findings quickly feed into effective diagnostic and treatment methods, while researchers act on and analyse experience gained in hospital care.*

40TH ANNIVERSARY OF FIRST HEART TRANSPLANT

Success story. Today, MedUni Vienna and University Hospital Vienna form one of the world's largest centres for heart transplants – an evolution that reached a special milestone in 2024.

From left to right: Andreas Zuckermann (Heart Transplantation Programme Director), Walter Weiss (patient), Daniel Zimpfer (Head of the Department of Cardiac Surgery) and Edda Tschernko (Head of the Division of Cardiothoracic and Vascular Anesthesia and Intensive Care Medicine)

The first heart transplant in Vienna was performed by a team of surgeons on 5 March 1984. This operation paved the way for one of the largest transplantation programmes in the world – since then, around 1,800 such procedures have been carried out. An area that is the subject of intensive research, numerous innovative concepts and technologies have been introduced over the years with the aim of boosting safety and enhancing patients' quality of life following a transplant.

Austrian premiere

One of the most recent examples was the case of a one-year-old patient who in late 2024 received a donor heart that did not match their blood group. At this age, the body only produces small quantities of antibodies against other blood groups. However, during the operation – and potentially in the course of follow-up treatment – these antibodies need to be removed using the filter on the heart-lung machine. This highly complex procedure was only possible thanks to years of preparation, the expertise of ten multidisciplinary teams from University Hospital Vienna and MedUni Vienna, as well as close consultation with Lori West, who developed the relevant technology.

HEART DISEASE RISK

Early detection. A genetic test in combination with an ultrasound examination of the carotid artery can be used to identify high-risk patients.

Caused by mutations in blood stem cells, clonal haematopoiesis can lead to blood cancer. It is now known that the condition can occur in people with normal blood values, increasing the risk of developing life-threatening atherosclerotic cardiovascular diseases. An interdisciplinary team headed by Christoph Binder, Robert Kralovics and Roland Jäger of the Department of Laboratory Medicine alongside Matthias Hoke of the Department of Medicine II investigated the potential effects of clonal haematopoiesis on individuals with asymptomatic atherosclerotic narrowing of the carotid artery (also known as carotid artery disease). In the process, they discovered a combined biomarker that can be used to produce a personalised cardiovascular risk profile.

Presymptomatic test

To do this, the team developed a method based on high-throughput DNA sequencing and applied it to around 1,000 blood samples as part of the Inflammation and Carotid Artery-Risk for Atherosclerosis Study (ICARAS), which began in 2002. Combining the new test with ultrasound-based duplex sonography enables high-risk patients to be identified long before any symptoms appear. As a result, treatment can be adapted in a way that prevents the progression of atherosclerosis (commonly referred to as hardening of the arteries), as well as strokes and heart attacks, which can be caused by the condition. ***Journal of the American College of Cardiology***

NEW TRICUSPID VALVE PROSTHESIS

Catheter-based. A new, minimally invasive procedure is now available to treat leaky tricuspid valves.

Minimally invasive, catheter-supported heart valve implants and reconstructions have been a focus of the Division of Cardiology, part of the Department of Medicine II, since 2008.

The first operation of its kind in Austria – and only the third worldwide – was performed in December 2023 in the hybrid operating theatre at University Hospital Vienna. An interdisciplinary team of cardiology, cardiac surgery, vascular surgery, radiology, anaesthesia and care experts, as well as technicians, successfully implanted the new prosthetic valve via the patient's groin. Patients with severe tricuspid valve leakage can now be treated using this new, minimally invasive method.

Successful operation

The tricuspid valve is located between the right atrium and the right ventricle. In the past, leaks were mainly treated with medication. Though clip systems have been in use for a few years, the results have been less than satisfactory in patients with severe valve leakage. Now, the new generation of prosthetic heart valves has opened up an additional treatment option. "Serious leaks, which were previously difficult to treat, can now be operated on via the groin using a minimally invasive procedure," explained Philipp Bartko of the Department of Medicine II, who heads the programme for interventional treatment of structural heart diseases. The new implant evolves and adapts to the patient's anatomy, meaning that deficiencies can be fully resolved in almost all cases.

CARDIAC HEALTH IN WOMEN

An international study in which MedUni Vienna played a major part has shown that heart bypass graft failure is more frequent in women than men, leading to a higher risk of heart attacks. The study – the most comprehensive scientific evaluation of the topic to date – underlined the need for sex-specific treatment measures. However, the causes of this difference have not been sufficiently clarified, as women are underrepresented in studies on the subject.
Journal of the American College of Cardiology

HEART ATTACK AND ANTIBODIES

In spite of medical advances, acute myocardial infarction remains one of the most common causes of death in the western world. A study headed by MedUni Vienna has now decoded previously unknown cellular processes in constricted coronary arteries, which can cause heart attacks. In the course of their research, the team also identified natural antibodies that can limit the damage caused by an attack. These findings will provide a promising new basis for the development of innovative, targeted therapies.
European Heart Journal

UNDERESTIMATED RISK IN LUNG TRANSPLANTS

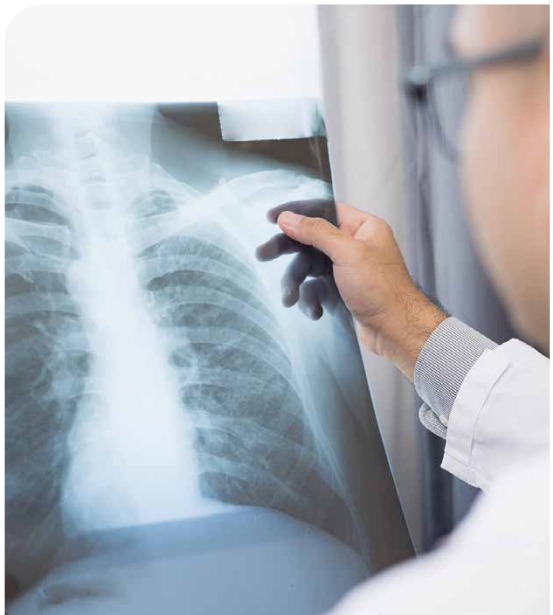
Very little research has been conducted into passenger lymphocyte syndrome (PLS), a potentially life-threatening risk in lung transplants. PLS occurs when particular white blood cells from the donor's blood destroy the recipient's red blood cells after the transplantation, in a process known as haemolysis. A study carried out by the Department of Transfusion Medicine and Cell Therapy in cooperation with the Department of Thoracic Surgery has revealed that this complication occurs more frequently than was previously thought. The most wide-ranging study to date on this subject, the research also identified approaches for early detection and treatment.
American Journal of Respiratory and Critical Care Medicine

STRATEGY AGAINST ORGAN REJECTION

Antibody-mediated rejection (AMR) is one of the most common causes behind the loss of donor kidneys. An international, multidisciplinary clinical trial headed by Georg Böhmig and Katharina Mayer of the Division of Nephrology and Dialysis, part of the Department of Medicine III, has shown that a new treatment principle is not only safe, but also highly effective. The randomised, double-blind, placebo-controlled trial involved testing of the CD38 antibody felzartamab. Rejection was suppressed in nine of the eleven trial participants.
New England Journal of Medicine

PRE-OPERATIVE IMMUNOTHERAPY FOR LUNG CANCER

Inhibiting immune-system "switches" revolutionised the treatment of metastatic cancer – the scientists who discovered this principle were honoured with the 2018 Nobel Prize in Physiology or Medicine. Now, an international team led by Martin Schuler (Oncology) and Clemens Aigner (Thoracic Surgery) has demonstrated that simultaneously inhibiting PD-1 and LAG-3 can kill off lung cancer cells after just a few weeks. In the study on non-small-cell lung cancer, which was carried out for the first time worldwide at centres in Germany, Belgium and the Netherlands, all of the patients presented excellent perioperative results, with an overall one-year survival rate following surgery of 96%.
Nature Medicine



IMPROVING PROSTATE CANCER TREATMENT

Uro-oncology. Prostate cancer is the second-most common form of cancer in men worldwide. Current research projects are pointing the way towards the development of new therapies.

Prostate cancer becomes increasingly aggressive as it progresses. Tumours are difficult to treat when they metastasise, which explains why malignant prostate cancers are the second-most common cause of death in men. This has also made the disease a focal point for research.

Protein slows progression

An international study headed by Lukas Kenner (MedUni Vienna) and Sabine Lagger (Vetmeduni Vienna) identified a protein that could slow tumour growth. "Numerous studies have shown that excessive amounts of JUN are produced in cases of cancer. This is how the link between tumour growth and elevated JUN levels was established," Kenner explained. However, the opposite is true with prostate cancer: the research showed that the progression of prostate cancer is slowed when large quantities of JUN are present. Conversely, tumours grew more quickly when the protein was not present.
Molecular Cancer

Activating signal pathway

Led by MedUni Vienna, an international team of scientists carried out research into a new strategy that not only inhibits tumour growth, but also stimulates the immune system to ward off cancer cells. Investigations centred on the signal pathway GP130, which plays a key role in cell communication. It influences the activity of the STAT3 transcription factor, which is believed to be connected with the development and spread of tumours. As a result, blocking GP130 is seen as a potential game-changer in cancer treatment. But the current study showed the opposite: tumour growth is actually slowed by activating – not inhibiting – the GP130 signal pathway in prostate cells.
Molecular Cancer

Focus on metastasis

Aimed at investigating the effectiveness and safety of metastasis-focused treatment of patients with metastatic prostate cancer, a meta-analysis has provided a comprehensive overview of the current state of research. A research group headed by Marcin Miszczyk and Shahrokh Shariat from the Department of Urology concluded that integrating the therapy – which demonstrates good progression-free survival rates, excellent prospects of recovery and low toxicity – into treatment strategies would be highly promising. Targeted treatment of metastasis can defer the need for hormone therapy. However, due to a lack of randomised studies, this approach is still at the experimental stage.
European Urology

MAJOR BREAKTHROUGHS IN PROSTHETICS

Bionics. MedUni Vienna is a world leader in bionic reconstruction – a highly research-intensive field that generated a number of innovative approaches once more in 2024.

Mechatronic replacements for extremities can restore mobility and enhance quality of life for patients who have been involved in accidents. However, transmitting information from the brain to the machine in high definition remains a challenge.

A question of interfaces
An interdisciplinary research team led by Vlad Tereshenko and Oskar Aszmann from the Department of Plastic, Reconstructive and Aesthetic Surgery has achieved further significant advances. In the course of their study, the researchers showed that skeletal muscles can fulfil an important function as high-definition interfaces for neural information from the spinal cord. The findings are helping to substantially improve control of bionic prostheses. They are also hugely significant for patients who suffer severe nerve damage – in such cases, biological hand replantation or transplantation are not an option.
Science Advances

Creating a sense of feeling
Recipients of bionic prosthetic extremities report feeling that a replacement limb is not part of their body. This is due to shortcomings in the interface between person and prosthesis. Now, though, a team from MedUni Vienna has made significant advances on this front: the researchers developed a new type of interface that restored the feeling of a lost limb for the first time. A nerve containing both sensory and motor fibres was connected to a non-associated muscle, while skin was also grafted onto the muscle. "The nerve then grew into the muscle and the skin, forming new, functional connections with the muscle fibres as well as receptors that sense movement and touch – a procedure that we call 'reinnervation'," said principal investigator Oskar Aszmann. The findings have opened up the prospect of patients being able to sense and move prosthetic limbs as if they were part of their own body.
Nature Communications

New type of disorder discovered

An international team headed by Kaan Boztug (MedUni Vienna, St. Anna Children's Cancer Research Institute and CeMM) has discovered a completely new form of a rare genetic disorder, in which the secondary lymphatic organs either fail to develop at all or their functioning is severely impaired. Patients with the disorder do not have any lymph nodes, and their spleen cannot function, meaning that they are unable to produce sufficient quantities of protective antibodies. Moving forward, the goal is to find out more about the LTβR defect and develop treatment options.
Science Immunology

NEWS FROM THE WORLD OF BASIC RESEARCH

In-depth. Basic researchers identify mechanisms, laying the groundwork for the development of new treatments, as illustrated by the following examples.

A research project is investigating the causes of postoperative pain.

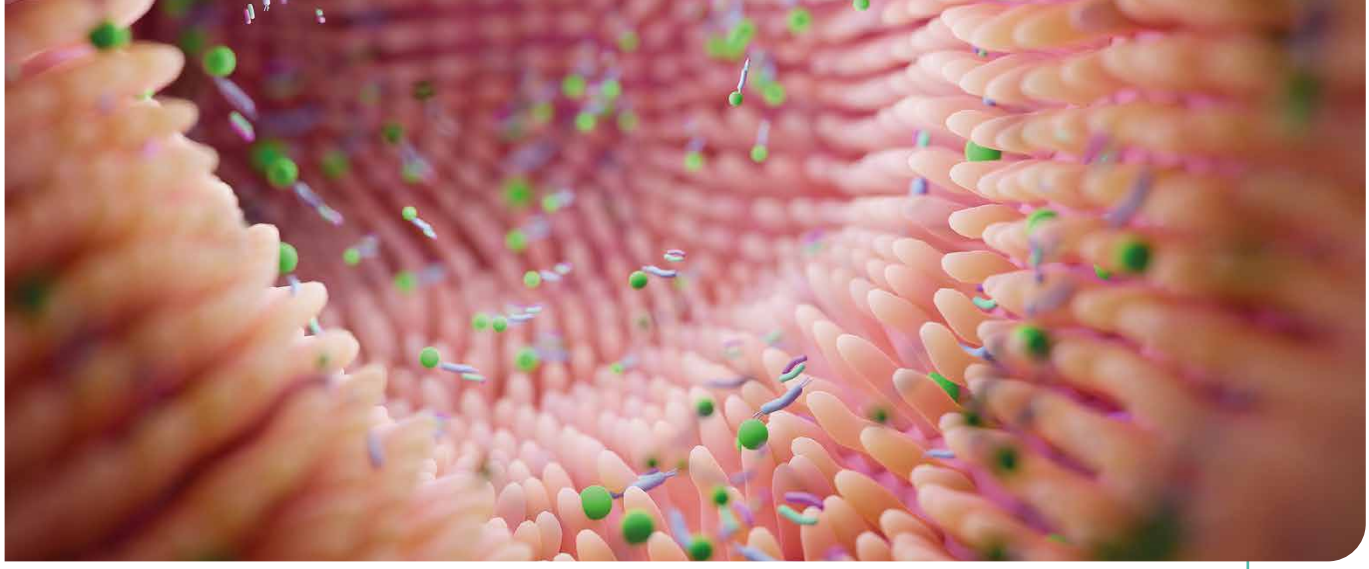
Investigating the Crimean-Congo haemorrhagic fever virus
Crimean-Congo haemorrhagic fever is now also spreading rapidly in Europe due to global warming. Carried mainly by Hyalomma ticks, the disease is fatal in 40% of cases, and no treatments or preventive measures are currently available. A study conducted by Josef Penninger (MedUni Vienna) and Ali Mirazimi (Karolinska Institutet, Stockholm) decoded the receptor that plays a key role in infection, paving the way for the development of a treatment.
Nature Microbiology

Pair of studies on sarcoidosis
In cases of chronic sarcoidosis – a progressive disease with only limited treatment options – clusters of white blood cells called granulomas are formed in various organs. A study led by Thomas Weichhart and Georg Stary found that macrophages in patients who have the condition are predisposed to form granulomas, and also display a divergent lipid metabolism profile. Statins and other drugs designed to lower cholesterol were successful in reducing in vitro and in vivo granuloma formation.
American Journal of Respiratory and Critical Care Medicine

Georg Stary and his team identified another new approach to sarcoidosis treatment – inhibiting the mTOR signal pathway was shown to be a highly effective treatment for granulomas in the skin. This has opened up new possibilities for treatment of this condition as well as other inflammatory diseases.
Lancet Rheumatology

Understanding postoperative pain
What are the mechanisms behind postoperative pain? An international team led by MedUni Vienna and the Institute of Molecular Biology (IMBA) has taken significant steps towards finding an answer to this question. Experiments on mice uncovered the central role of the substance BH4 and the mechanisms underlying it. The cascade of signals begins in specific immune cells (called mast cells) that are positioned close to pain-sensitive nerve cells in the skin and produce BH4 following an operation.
Science Immunology

Unlocking nuclear pores
Edvinas Stankunas and Alwin Köhler from the Max Perutz Labs achieved major advances in our understanding of nuclear pores. A key structure in cell nuclei, the pore enables the selective transportation of molecules between the nucleus and the cytoplasm, and is also vital for gene expression. A basket-like structure in the pore plays an important part in numerous transportation processes, but it can also easily disassemble when isolated. The study authors have developed a new method to overcome this challenge. Using artificial intelligence, they were able to predict the connection between important proteins in the basket structure. These findings will help to provide new insights into genetic diseases and their treatment, as many of these conditions are associated with mutations in proteins in the nuclear pore.
Nature Cell Biology



FOCUS ON THE GUT

Gastroenterology. What mechanisms and changes take place in the gut? Three studies have provided new insights.

Finding causes
Previously, the mechanisms behind the development of chronic inflammatory bowel diseases such as Crohn's disease and ulcerative colitis were unclear. As a result, treatment is aimed solely at easing the often agonising discomfort they cause. Now, though, Bernadette Mödl and Robert Eferl of the Center for Cancer Research and the Comprehensive Cancer Center have identified a potential trigger on the surface of epithelial cells in the gut called enterocytes. This could act as a starting point for the development of new therapies. Tests carried out by the researchers showed for the first time that particular changes in the brush border of enterocytes may be related to the development of these conditions. These dense, finger-shaped protrusions are connected with one another by a protein complex that is responsible for maintaining the organised structure of the brush border.
EMBO Reports

Massive changes in expectant mothers
The female body changes in many different ways during pregnancy and breastfeeding. Various organs as well as the immune system adapt in order to safeguard the health of the mother and her child. An international research team headed by Josef Penninger and Masahiro Onji made a surprising discovery – the intestine also undergoes major changes during this period: projections called intestinal villi expand significantly, almost doubling their surface area. The research team also uncovered initial genetic and mechanistic evidence for the processes that bring about these changes, with the RANK/RANKL system, which is also responsible for key functions in bone turnover, the biology of the mammary gland, breast cancer, and immune tolerance during pregnancy, playing a key role.
Nature

On the trail of microplastics
The gastrointestinal tract is known to be an important site for the accumulation of microplastic and nanoplastic particles in the human body. A group of researchers from the University of Vienna, MedUni Vienna and partner institutions investigated the effects of these tiny plastic particles on cancer cells in the gastrointestinal tract. They discovered that these particles remain in the cells for significantly longer than was previously assumed, as they are passed on to new cells in the process of cell division. They also found indications that the plastic particles could promote tumour metastasis.
Chemospheres

IMMUNE SYSTEM UNDER THE MICROSCOPE

Defensive processes. How does our immune system actually work? Two research papers have shone a light on vital processes, bridging the gap to the development of innovative treatments.

In autoimmune diseases, the immune system also attacks the body's own cells. Marta Rizzi and her team looked into the causes. The FAS signal path influences programmed cell death – also known as apoptosis – as well as B-cell maturation in the human immune system. When this path is disrupted, it can lead to problems in the development and functioning of B-cells. "Our next step will be to identify ways in which the findings can support the treatment of patients suffering from these conditions," Rizzi explained.
Science Immunology

Used to inoculate against tuberculosis since the early 20th century, Bacillus Calmette-Guérin (BCG) is one of the oldest and most commonly used vaccines worldwide. Interestingly, the vaccine also reduces the risk of infection with a range of other pathogens – thanks to an effect known as trained immunity. Christoph Bock (CeMM and MedUni Vienna) and his research team used epigenetic cell identities to predict which individuals benefit from the BCG vaccine's "wake-up call" to the innate immune system. This discovery will contribute to the development of new drugs.
Immunity

NEURAL CIRCUIT DECODED

Heat and food. People lose their appetite in hot weather. A MedUni Vienna study explains why.

Heat reduces the feeling of hunger – this effect can be seen following a visit to a sauna in winter, or after spending time outside in the height of summer. Until now, though, the reasons have been unclear. Tibor Harkany of the Center for Brain Research and his international research team have now found an explanation – and, in the process, potential points of departure for the development of new treatments for obesity and anorexia.

Thermostat in the brain

The research showed that the related signalling cascade begins in the brain's "thermostat", the parabrachial nucleus. As Harkany reported: "We observed the activation of specific cells in the brains of mice that were exposed to a temperature of 40°C for one hour." The extensions of these cells stretch to the hypothalamus, where the neurons that coordinate food intake are located.

However, these neurons do not transmit signals directly, but rather via specialised cells called tanycytes, which send signals to the neurons that stimulate appetite. "The signal pathway we discovered shows that heat does not influence the feeling of being full, as was previously thought. Instead, the release of a particular growth factor inhibits the activity of the brain cells that stimulate the search for and intake of food," Harkany explained.
Nature

TWO NEW CD LABORATORIES

Application-driven basic research. In addition to the 12 existing Christian Doppler Laboratories, two new CD labs opened in 2024.

Christian Doppler Laboratory for Image and Knowledge Driven Precision Radiation Oncology
Opened in May 2024, this CD Laboratory specialises in the development of innovative approaches that allow for personalised radiotherapy. The researchers' focus is on linking key aspects of image-guided radio-oncology. The goal is to integrate findings directly into clinical decision-making processes, laying the foundations for continuous therapy optimisation.

Project managers:
Barbara Knäusl and Maximilian Schmid,
Department of Radiation Oncology
Partner companies:
Brainlab AG, Philips AG and Elekta Ltd

Christian Doppler Laboratory for Patient-Centered Breast Imaging
By far the most common form of cancer in women, breast cancer can be treated more effectively the sooner it is detected. Opened in October 2024, this CD Laboratory will focus on the development and application of diagnostic tools that are more precise and also less invasive than commonly used methods. This is designed to promote acceptance of potentially life-saving screening.

Project manager:
Pascal Baltzer,
Department of Biomedical Imaging and Image-guided Therapy
Partner companies:
Siemens Healthcare Diagnostics GmbH, Bracco Imaging S.p.A., ALSIX GmbH, b-rayZ AG

The following Christian Doppler Laboratories were also operational in 2024:

- Applied Metabolomics
- Arginine Metabolism in Rheumatoid Arthritis and Multiple Sclerosis
- Artificial Intelligence in Retina
- Immunometabolism and Systems Biology of Obesity-Related Diseases
- Inner Ear Research: Protection and Regeneration
- Machine Learning Driven Precision Imaging
- Mechanical Circulatory Support
- Microinvasive Heart Surgery
- MR Imaging Biomarkers (BIOMAK)
- Multimodal Analytical Imaging of Aging and Senescence of the Skin
- Personalised Immunotherapy
- Portal Hypertension and Fibrosis in Liver Disease

NEW COMPREHENSIVE CENTERS

All-round care. Aimed at providing patients with interdisciplinary treatment, MedUni Vienna's Comprehensive Centers are specifically designed to promote networking between specialist and professional groups in the various divisions and departments. Three new centres were opened in 2024.

The new **Comprehensive Center for Clinical Neurosciences and Mental Health** was launched on 16 January 2024 at the Josephinum. It brings together all of the MedUni Vienna facilities and professional groups which support patients with neurological or psychological disorders, enabling the joint development of the university's research and teaching in this field as well as patient treatment.

From diagnostics, management and therapy to knowledge sharing and research – these are the focuses of the **Comprehensive Center for Rare and Undiagnosed Diseases**. Its goal is to achieve continuous improvements in treatment for those affected by such conditions.

The **Comprehensive Center for Integrated Diagnostics** promotes close cooperation between MedUni Vienna and University Hospital Vienna facilities, with a view to providing and enhancing integrated diagnostics across a range of disciplines. In the process, the centre will apply the principles of precision medicine for the benefit of patients.

Our other Comprehensive Centers in 2024:
- Comprehensive Cancer Center
- Comprehensive Center for Cardiovascular Medicine
- Comprehensive Center for Infection Medicine
- Comprehensive Center for Pediatrics
- Comprehensive Center for Perioperative Medicine
- Comprehensive Center for Inflammation and Immunity
- Comprehensive Center for Musculoskeletal Disorders
- Comprehensive Center for Chest Diseases

KICK-OFF FOR NEW REFERENCE CENTRE

As many as 80,000 people in Austria are thought to be affected by ME/CFS alone.

Post-viral syndromes and ME/CFS. A new centre at MedUni Vienna will drive forward research into post-viral syndromes, as well as providing training for healthcare professionals.

The Austrian health ministry commissioned the university to set up a national reference centre specialising in these conditions. Besides performing research into health services and offering training for health service personnel involved in treating these syndromes, the centre will also serve as a hub for translational and multiprofessional patient care. Funding of around EUR 1 million has been provided for the new facility.

EU-wide procedure
The contract was awarded in 2024 following an EU-wide tender process.

In late 2023, then Health Minister Johannes Rauch announced plans to implement the recommendations of the Oberster Sanitätsrat (Supreme Health Council) on medical care for people affected by post-viral diseases. A core element of the recommendations was the establishment of a national reference centre for post-viral syndromes, with research focused in particular on long Covid/post-Covid syndrome and ME/CFS.

The new facility will be headed by Kathryn Hoffmann of the Department of Primary Care Medicine, part of the Center for Public Health, and Eva Untersmayr-Elsenhuber, a clinical immunology specialist who, together with her team, is also building Austria's first ME/CFS biobank. The Center for Public Health, the Department of Primary Care Medicine, the Center for Pathophysiology, Infectiology and Immunology, and the Institute of Pathophysiology and Allergy Research will all play key roles at the reference centre.

PUBLIC ENGAGEMENT

Open exchange. MedUni Vienna bears a social responsibility for people of all ages. In 2024, it once again raised awareness of key issues through a wide range of activities, promoted health literacy among the public and actively shared updates on research and treatment advancements.

Going to Cancer School

How do I read and understand my cancer lab test results? On 1 October 2024, MedUni Vienna and University Hospital Vienna launched a new lecture series sharing valuable information on cancer diagnosis, empowering patients and their families to become experts on the disease – this time with a focus on "Patient Engagement, Involvement, Empowerment". The events in the series take place monthly. Anyone looking to find out more about the condition is free to join at any time.
www.cancerschool.at

Prevention, early detection and treatment: the Kurier Health Talk on 24 October focused on the prostate.

KURIER HEALTH TALKS

Healthy prostate, heart health, multiple sclerosis: in 2024, three health talks were held in partnership with Austrian broadsheet Der Kurier. In the talks, doctors from MedUni Vienna discussed the latest medical developments on stage with other experts and were available to field questions from the audience.

HÖRGANG PODCAST

Produced in collaboration with Springer Medizin, MedUni Vienna's Hörgang podcast is published 20 times a year. In 2024, it covered a broad range of topics including antidepressants, the HPV vaccine, managing migraines and the benefits of a flexitarian diet.
www.springermedizin.at/podcasts-meduniwien/25931952

MedUni Vienna – a popular talking point

In 2024, MedUni Vienna was mentioned in over 3,400 media reports in Austria alone. And beyond the mainstream, its social media channels reached numerous followers:

- 20,109 followers on Instagram
- 34,043 followers on LinkedIn
- 10,064 followers on X
- 20,526 followers on Facebook
- 3,720 subscribers on YouTube

www.meduniwien.ac.at/web/en/socialmedia/

JOIN THE CHILDREN'S MEDICAL UNIVERSITY

Between 15 and 19 July 2024, MedUni Vienna's lecture halls were filled with curious children aged seven to twelve who engaged in a range of activities, including a session on the internal workings of cells, a basic surgery course and learning how to save a life. In all, the Children's Medical University hosted 54 different courses. The programme concluded on 20 July with a graduation ceremony, where the children received a certificate with the title Magister/Magistra universitatis iuvenum (Master of the Children's University) and made a solemn pledge to always remain curious.

Recreating human cells with balloons: Vice Rector Anita Rieder with young students at the Children's Medical University.

SUICIDE PREVENTION WITH HARRY POTTER

A team led by Thomas Niederkrotenthaler from the Center for Public Health developed a classroom programme to enhance mental health literacy and coping skills among children and teenagers. The Reading for Mental Health school project used the novel Harry Potter and the Prisoner of Azkaban for reference. Author J.K. Rowling incorporated her personal experiences with depression into the book, which she overcame through cognitive behavioural therapy.

SCHOOLCHILDREN TRACK VIRUSES

Citizen science projects actively involve the public in research. One such project took place in schools: over a period of several months, a research team led by Andreas Bergthaler from the Institute of Hygiene and Applied Immunology worked with schoolchildren to analyse how viruses spread through the air. The Virus Surveillance in Collaboration with Schoolchildren project received funding from the Austrian Science Fund (FWF) as part of its Top Citizen Science programme.

SPARKLING SCIENCE FOR YOUNG RESEARCHERS

The "Flower Power" project actively involves schoolchildren in research into the role played by Schwann cells in scar formation. As part of their experiments, the participating children and teenagers collect plants and create plant extracts. The Federal Ministry of Education, Science and Research recognised the project with a Sparkling Science grant, which is designed to support young researchers. Michael Mildner and his team will collaborate closely with these citizen scientists over a three-year period, holding workshops and providing insights into research at MedUni Vienna.

AT THE TEDDY BEAR HOSPITAL

In December 2024, hundreds of children brought their cuddly toys with them to the Teddy Bear Hospital, an initiative by MedUni Vienna in collaboration with the Austrian Students' Association (AMSA), the Vienna Medical Chamber, and the Academic Association of Austrian Pharmacists. Medical students treated and operated on the teddies with help from their young charges. This hands-on, play-based approach helps reduce children's fear of medical examinations and hospital visits.

Children act out a doctor's visit with their cuddly toys, helping to overcome any anxiety.

Running together for a good cause: for many, the Cancer Research Run is a highlight of the annual sport calendar.

EUR 270,000 FOR CANCER RESEARCH

18th Cancer Research Run. On 5 October, 3,894 runners joined in the Cancer Research Run, helping to raise a record-breaking total for the cause.

Remarkable stats in perfect running weather: 1,434 solo runners and 2,460 team participants took part in the name of cancer research. In all, 102 companies participated as partners or sponsors, with the total amount raised reaching an all-time high of EUR 270,000. Notable individual efforts included one runner completing 32 laps of the Altes AKH university campus to cover some 51.2 kilometres. The strongest team performance came from Boehringer Ingelheim, with 160 employees notching up a total of 1,438 laps, equivalent to 2,313 kilometres.

Medical advancements

All of the proceeds – as every year – go directly to cancer research projects at MedUni Vienna. Since the event's inception, the donations have supported 60 scientific studies aimed at improving tumour diagnosis and treatment. At present, 14 highly promising projects are being funded, primarily with a focus on advancing personalised therapies. The fact that cancer mortality is declining is largely due to research breakthroughs. Basic research results enable new treatment and prevention approaches.

Anatomical ear model from the 20th century.

Temporary exhibition: De Auribus

The Josephinum hosted a special exhibition on the fascinating history of otology – the study of the anatomy and diseases of the ear. "Through the contributions of notable physicians from Adam Politzer to Nobel laureate Robert Bárany, the Vienna University Clinic played a pioneering role in various major medical achievements," said Christiane Druml, Director of the Josephinum. The world's first specialist university ear clinic opened in Vienna in 1873. New instruments, diagnostic methods and treatments rose to global acclaim, paving the way for modern-day otology.

In 2024, MANZ published the Diabetes and Headache guides.

DIABETES GUIDE

Rising obesity rates are leading to an increase in the prevalence of diabetes – a development which prompted MedUni Vienna to release the second edition of its Diabetes Guide. In it, Alexandra Kautzky-Willer and Yvonne Winhofer share the latest insights into the condition and offer tips on nutrition and exercise as well as explaining how to prevent complications. A fact-based, practical book, the guide supports prevention and better management of diabetes.

PACKED PROGRAMME AT THE ALUMNI CLUB

Membership benefits. In 2024, the MedUni Vienna Alumni Club offered its members a wide range of activities.

Was your career path planned, or did chance play a role? *MedUni Vienna students were given first-hand answers at the Careers After Medical Studies event. Not only permitted, asking questions is actively encouraged in this format. On 8 April, infectious disease specialist Sylvia Knapp and atherosclerosis researcher Christoph Binder from MedUni Vienna, alongside Johann Danzl from the Institute of Science and Technology Austria (ISTA), shared their career journeys, followed by pharmacologist Michael Freissmuth, vaccinologist Ursula Wiedermann-Schmidt and Wolfgang J. Weninger from the Division of Anatomy on 23 October.*

Symphonic start: *On 30 September, the Alumni Club of MedUni Vienna hosted its traditional semester opening concert in the Van Swieten Hall. The Sinfonia Academica orchestra, which has lots of medical professionals among its members, performed works by Johannes Brahms, Wolfgang Amadeus Mozart and Anton Bruckner. The concert was conducted by Michael Rot, whose arrangements regularly feature at the Vienna Philharmonic's New Year's Concerts.*

What can – and should – AI do? *On 25 April, Georg Langs from the Computational Imaging Research Lab at the Department of Biomedical Imaging and Image-guided Therapy, and Georg Dorffner from the Center for Medical Data Science at the Institute of Artificial Intelligence, discussed artificial intelligence in medicine with moderator Britta Blumencron. In a lively exchange with the audience, they explored where AI can be effectively applied while also shining a light on the potential risks.*

A reunion to remember! *On 6 November, the Alumni Club celebrated the graduating classes of 1964 and 1974, while also hosting a reunion for alumni from the classes of 1984, 1994, 2004 and 2014. Approximately 180 people joined the festivities, with 25 attending the class reunions.*

20 years as an autonomous institution: *On 21 October, a special Alumni Club event reflected on MedUni Vienna's transition to an autonomous institution. Former Rector Wolfgang Schütz, moderator Martina Salomon, former Education Minister Elisabeth Gehrer and Vice-Rector Oswald Wagner reviewed causes, developments and impacts on academic governance and research output.*

Welcome to the Alumni Club!

Membership of the Alumni Club is open to past and present students as well as current and former staff of MedUni Vienna:
www.alumni-club.meduniwien.ac.at

Annual membership for full members:	EUR 50
Doctors in specialist training:	EUR 30
Students (from the first semester):	EUR 10

PROFESSIONAL EXCHANGE IN GHANA

Practical knowledge. In autumn 2024, a group of colleagues from MedUni Vienna spent a week in Kumasi, teaching local staff a technique known as a "flexible bronchoscopy".

This procedure involves examining the airways and lungs using a specialised instrument called a bronchoscope. Equipped with a camera and light, this thin, flexible tube is inserted through the mouth or nose into the trachea and bronchi. By allowing the doctor to view the target area on a monitor they are able to gain valuable insights. In Kumasi, Ghana, such examinations were not widely available. Until recently, patients had to travel 250 kilometres to the capital, Accra, for a flexible bronchoscopy.

Know-how shared

In a significant recent development, the hospital in Kumasi recently acquired its own flexible bronchoscope. A bronchoscopy team from MedUni Vienna and the Medical Faculty at Johannes Kepler University Linz provided expertise through lectures and hands-on workshops. "It was a pleasure to introduce our colleagues in Kumasi to bronchoscopy," said Daniela Gompelmann from MedUni Vienna's Department of Medicine II.

The bronchoscopy team in front of the hospital in Kumasi (from left): Daniela Gompelmann (MedUni Vienna), Georg Murauer (Johannes Kepler University Linz Medical Faculty), Christina Bal (MedUni Vienna), Sandra Kwarteng Owusu (Komfo Anokye Teaching Hospital), Akwasi Antwi-Kusi (Kwame Nkrumah University of Science and Technology) and Christian Stanislaw (MedUni Vienna).

UROGYNAECOLOGICAL TRAINING IN KATHMANDU

Live training. In late March 2024, a team from the Urogynaecology Division at MedUni Vienna's Department of Obstetrics and Gynecology demonstrated a uterus-preserving surgical technique in Nepal.

Pictured on the right, the Vienna team in Nepal (from left): Wolfgang Umek, Klaus Bodner, Barbara Bodner-Adler, Greta Carlin and Olivia Bodner in a MedUni Vienna T-shirt. On the left, the Nepalese team with leader Anjana Dongol.

Uterine prolapse is the most common gynaecological condition in Nepal, where the uterus descends into the birth canal and, in severe cases, may protrude from the vagina. Estimates suggest over one million cases, partly because women often perform heavy physical labour during pregnancy and postpartum, with little opportunity for maternity-leave-style rest.

Promoting organ preservation

At the invitation of Dhulikhel Hospital, a team of urogynaecology specialists from MedUni Vienna travelled to Kathmandu for a two-day symposium. Alongside lectures, they introduced a specific uterus-preserving procedure: vaginal sacrospinous fixation. Participants were individually trained in this technique using a specially developed model. "Preserving the uterus is particularly beneficial in countries like Nepal, where many of the women who are affected are still young. Hysterectomy can lead to additional health issues and stigmatisation," said Barbara Bodner-Adler from the urogynaecology clinic. Plans are in place to further expand this nascent collaboration.

FOURTH PLACE AT CYBATHLON 2024

Strong showing. The Vienna FES team from MedUni Vienna secured fourth place in the FES cycling discipline at the Cybathlon in Switzerland.

Functional electrical stimulation (FES) enables people with spinal cord injuries to regain a certain degree of physical activity and mobility. Hosted by ETH Zurich, the Cybathlon – the Paralympics of the technology sector – showcases such assistive technologies and is the world's largest event of its kind. It highlights research advancements across various disciplines and fosters exchange between the scientific community, industry and patients.

Successful debut for Vienna FES

The Vienna FES team from MedUni Vienna was the first Austrian team to compete in the FES cycling discipline – and they excelled. Nikolaus Tellian and Cedrik Kapfenberger took part, with Tellian achieving an impressive fourth place in the final. Though both have paraplegia, they are able to cycle again thanks to FES. The project was led by Martin Schmoll from the Center for Medical Physics and Biomedical Engineering, with support from the Department of Physical Medicine, Rehabilitation and Occupational Medicine, under clinical director Richard Crevenna.

Martin Schmoll with fourth-placed Nikolaus Tellian.

Cedrik Kapfenberger from the Vienna FES team competed at the Cybathlon in Zurich.

Christoph Schriefl (left) and Florian Ettl were ready for action on land and sea.

EMERGENCY MEDICINE AT MIRNO MORE

On duty. Florian Ettl and Christoph Schriefl joined the Mirno More sailing fleet safety team. Held in September, this annual event promotes inclusion and peace.

It takes socially disadvantaged children and teenagers, as well as youngsters with physical and mental disabilities, on a sailing trip in the Croatian Adriatic. On board, they navigate from port to port, fostering teamwork by cooking, playing and dancing together as well as enjoying beach picnics, a grand peace festival and other activities. Once again in 2024, two MedUni Vienna emergency doctors were right in the heart of the action.

Christoph Schriefl, an avid sailor in his free time, has been involved with Mirno More since 2019. For him, it's the social mission that takes centre stage: "It's the encounters that stay with you. Some children and teenagers say that being here is the first time they've made friends or seen the sea." There are children among who require dialysis or use wheelchairs – sailing would otherwise be nearly impossible for them. "This week makes a huge difference for the kids and brings them closer together. For us, it was physically and emotionally demanding – but just as fun and rewarding," said Florian Ettl.

NEW PROFESSORSHIPS AT MEDUNI VIENNA

Expertise. In 2024, MedUni Vienna awarded numerous professorships to specialists in their fields.

Caroline Hutter
Pediatric Hematology and Oncology

Nicole Concin
Gynecology

Ulrike Attenberger
Radiology

Florian Krammer
Infectious Diseases

Christoph Juchem
Magnetic Resonance Physics

Stanisa Raspopovic
Biomedical Engineering

Sabine Steiner
Angiology

Stefan Schaller
Anesthesia and Anesthesiological Intensive Care Medicine

Daniel Zimpfer
Cardiac Surgery

SECTION 99(1) UNIVERSITIES ACT PROFESSORSHIPS

Roland Beisteiner
Endowed Professorship for Experimental Brain Stimulation

Nikolaus Klupp
Forensic Medicine

Sebastian Schoppmann
Surgical Oncology

SECTION 99(4) UNIVERSITIES ACT PROFESSORSHIPS

Bernhard Baumann
Professorship in the subject field Medical Physics

Harald Kittler
Professorship in the subject field Dermatology

Thomas Niederkrotenthaler
Professorship in the subject field Public Health

Alexander Niessner
Professorship in the subject field Cardiovascular Medicine

Johannes Schmid
Professorship in the subject field Cardiovascular Medicine

Georg Stary
Professorship in the subject field Dermatology

SECTION 99(5) UNIVERSITIES ACT PROFESSORSHIPS

Hrvoje Bogunovic
Assistant Professorship in Medical Image Computing (tenure track)

David Fischer
Assistant Professorship in Deep Learning Methods & Applications (tenure track)

Sasha Mendjan
Assistant Professorship in Synthetic Tissue Biology (tenure track)

Saverio Tardito
Assistant Professorship in Cancer Prevention and Metabolism (tenure track)

Eleni Tomazou
Assistant Professorship in Sarcoma Biology (tenure track)

TEACHING AWARDS

Celebrating excellence. One innovative MedUni Vienna project received a commendation at the Ars Docendi State Award, and the university was also recognised for its outstanding contributions to curriculum development and teaching.

In October 2024, the Federal Ministry of Education, Science and Research awarded Philipp Seeböck's project "Research-Centred Competence Acquisition through Journal Clubs" with an Ars-Docendi State Award commendation in the Research-Based or Arts-Informed Teaching category. As Principal Investigator at the Department of Biomedical Imaging and Image-guided Therapy's Computational Imaging Research Lab, Seeböck studies machine learning methods. His "Journal Club Deep Learning" course gives doctoral students the opportunity to discuss scientific publications in small groups, develop and present project ideas and learn to communicate concepts clearly and persuasively.

Teaching Excellence Awards:
- Gürkan Sengölge, Nicolas Kozakowski and Eva Maria Compérat, Block 14 – Kidneys and Homeostasis (Nephrology Seminar)
- Martina Schmid-Schwap and Astrid Skolka, Block Z7 – Foundations of Prosthetics, removable prosthetics
- Florian Ettl and Christoph Schriefl – Line Resuscitation Exercises II

Curriculum Development Awards:
- Dörte Symmank and Jurij Maurer – Medicine in Competition (Paul Ehrlich Contest)
- Maximilian Härtinger, Flavia Millesi and Sarah Stadlmayr – Introduction to Molecular and Cellular Biology

In November 2024, MedUni Vienna presented the awards during the annual graduation ceremony at the Wiener Konzerthaus.

SECOND PLACE IN THE JACOB HENLE CONTEST

A four-strong team of MedUni Vienna students and tutors from the "Symptoms and Differential Diagnoses – Preparation for the Paul Ehrlich Contest" elective put in an outstanding performance at the 3rd Jacob Henle Contest in Göttingen, securing second place. The competition tests skills in a collegial yet competitive setting, including rapid diagnosis, clinical case analysis and practical tasks followed by a complex final case. It fosters medical knowledge, teamwork and practical abilities.

Medical students Christoph Reisenbichler, Alexander Gerhartl, Shehroz Masood and Alexander Hamedinger (left to right) achieved second place at the international contest.

AUSTRIAN ACADEMY OF SCIENCES (ÖAW) MEMBERSHIPS

In late April 2024, the Austrian Academy of Sciences (ÖAW) elected 34 new members, including Eva Schernhammer from the Division of Epidemiology at the Center for Public Health, who was appointed a Corresponding Member of the Mathematical and Natural Sciences Class in Austria. Her team's ERC Advanced Project, CLOCKrisk, aims to "revolutionise the prevention of circadian-related diseases through new approaches in precision prevention." Thomas Vogl from the Center for Cancer Research was another MedUni Vienna employee to be admitted to the ÖAW's Young Academy.

Receiving their certificates: Alfredo Cristiano De Sá Fernandes and Georg Semmler, supervised by Maria Sibilia and Mattias Mandorfer.

AWARD OF EXCELLENCE

Since 2008, the Federal Ministry of Education, Science and Research has presented the Award of Excellence to the top 40 doctoral graduates from Austria's scientific and artistic universities each academic year, based on university nominations.

Two theses from MedUni Vienna received the Award of Excellence:

- Georg Semmler, for his work "Non-invasive risk stratification in chronic liver disease", completed in 2024 as part of the Doctoral Programme in Applied Medical Science (Clinical Endocrinology, Metabolism and Nutrition).
- Alfredo Cristiano De Sá Fernandes, for his thesis "Epigenetic and transcriptional regulation of Dendritic Cells by HDAC1", completed in the Inflammation and Immunity PhD Programme.

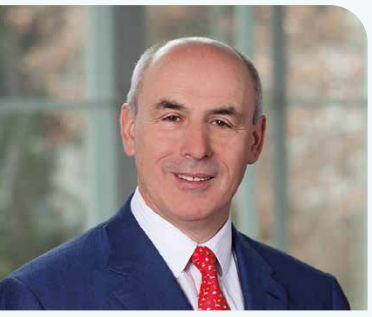
INVENTOR OF THE YEAR

Liesa Weiler-Wichtl, a clinical and health psychologist at the Department of Pediatrics and Adolescent Medicine, was named Inventor of the Year in early 2024 for her work "Mein Logbuch – Ich kenne mich aus!". This therapy tool supports children with cancer and chronic illnesses with practical tips, space for photos, drawing and writing and guidance for emotional experiences. Each year, around 2,200 children in German-speaking countries and 35,000 in Europe are diagnosed with cancer.

Michaela Fritz and Markus Müller presented the Inventor of the Year certificate to Liesa Weiler-Wichtl.

TWO LIFETIME ACHIEVEMENT AWARDS

Recognising excellence. In 2024, the career achievements of two MedUni Vienna faculty members were honoured by professional societies.



Siegfried Kasper

Siegfried Kasper, former long-time head of MedUni Vienna's Department of Psychiatry and Psychotherapy, received the Lifetime Achievement Award from the World Federation of Societies of Biological Psychiatry (WFSBP). During an academic ceremony at the World Congress of Biological Psychiatry in Istanbul, he was celebrated for his contributions to researching the biological causes of psychiatric disorders and their treatments.

Heinrich Schima, an artificial heart expert at MedUni Vienna, was awarded the Emil Bücherl Prize for lifetime achievement at the European Society for Artificial Organs (ESAO) annual meeting in Aachen's Coronation Hall. The citation highlighted his groundbreaking research, his role in advancing new fields such as pump control and usability, and his dedication to patients with cardiac assist devices.

Heinrich Schima (left) with ESAO President Ulrich Steinseifer.

Pictured centre the three winners at the award ceremony on 25 November: Elma Dervic (Complexity Science Hub), Clemens Spielvogel (Division of Nuclear Medicine at the Department of Biomedical Imaging and Image-guided Therapy) and Florentina Porsch (Department of Laboratory Medicine)

DORA BRÜCKE-TELEKY AWARD

Twice a year, the MedUni Vienna Alumni Club, in collaboration with the Vienna Medical Society, honours postdocs for outstanding publications. Dora Brücke-Teleky was one of the first women in Austria to be admitted to study medicine. After graduating in 1904, she became Vienna's first female school doctor and the first female member of the Society of Physicians in Vienna.

On 24 June 2024, certificates were awarded to Lena Nohava (Center for Medical Physics and Biomedical Engineering), Ralph Gradisch (Center for Physiology and Pharmacology), Tim Hendrikx (Department of Laboratory Medicine) – not pictured – and, Alumni Club President Harald Sitte (right).

VERONIKA FIALKA-MOSER DIVERSITY PRIZE

In 2024, MedUni Vienna again recognised outstanding contributions to diversity.

Undergraduate/master's theses:
1st place: Jessica Dyna Stöger explored access to palliative care for marginalised groups.
2nd place: Pia Rottjakob investigated health literacy and reproductive health knowledge among women aged 18-49 in Vienna.
3rd place: Dorota Sluková examined the effects of gender-affirming hormone therapy on the insulin system and lipid levels.

Engagement category:
1st place: Witta Monika Strobl delivered 18 lectures on aspects of transidentity as part of the Gender and Diversity lecture series organised by the Gender Mainstreaming and Diversity Office.
2nd place: Sebastian Schnaubelt and Christoph Veigl used diverse mannequins to create realistic conditions in resuscitation training.
3rd place: Karin Windsperger-Taheri and Daniela Dörfler established a registry for women and girls affected by genital mutilation or circumcision.

Pictured (left to right): Vice-Rector Michaela Fritz, Ulrike Eigenbauer-Stein, Christoph Veigl, Pia Rottjakob, Sebastian Schnaubelt, Jessica Dyna Stöger, Curriculum Director Henriette Löffler-Stastka, Witta Monika Strobl, Margarete Steiner, Dorota Sluková, Günther Hofbauer, Karin Windsperger-Taheri, Franz Kainberger, Vice Rector Anita Rieder.

Researchers of the Month in 2024

Since 2004, an independent MedUni Vienna jury has selected outstanding early-career researchers as Researcher of the Month. In 2024, the following individuals were recognised for their research:

- Georg Pfeiler (January)
- Irfete Fetahu (February)
- Hannes Vietzen (March)
- Petr Bednarik (April)
- Patric Kienast (May)
- Shweta Tikoo (May)
- Robyn Dvorsky (June)
- Victoria Konzett (July)
- Gregor Heitzinger (August)
- Dino Mehic (September)
- Maria Regina Strobl (September)
- Željko Kikić (October)
- Stefan Stojković (November)
- Lisa-Marie Appel (December)
- Johannes Benedum (December)

MAJOR FUNDING FOR BRAIN RESEARCH

Researchers in the Neuronal Circuits in Health and Disease cluster (left to right): Francesco Ferraguti (Medical University of Innsbruck), Thomas Klausberger (MedUni Vienna), Gaia Novarino (ISTA), Tibor Harkany (MedUni Vienna), Noelia Urbán Avellaneda (IMBA), Manuel Zimmer (University of Vienna) and Peter Jonas (ISTA).

Interdisciplinary excellence. The Austrian Science Fund (FWF) is supporting a MedUni Vienna-led excellence cluster set up to investigate neurological questions.

"This is a unique opportunity to bring together Austria's leading minds in neuroscience, from both basic and clinical research, to make tangible progress in understanding brain functions and for developing therapies for brain disorders," said Tibor Harkany from the Center for Brain Research. Headed by Harkany, the Neuronal Circuits in Health and Disease excellence cluster has been allocated funding of EUR 21 million by the FWF, which is supplemented by contributions from participating institutions: MedUni Vienna, IMBA – Institute of Molecular Biotechnology, Austrian Academy of Sciences, Institute of Science and Technology Austria (ISTA), Medical University of Innsbruck and University of Vienna.

In autumn 2024, the FWF's scientific board approved the cluster following a recommendation from an international jury. The cluster also successfully passed an additional fast-track evaluation. This marked the completion of the first funding round of the excellent=austria initiative, under which nine excellence clusters and five emerging fields are supported to drive unprecedented innovation in basic research.

"Austria's excellence clusters are vital for society, laying the foundation for future scientific breakthroughs. These substantial investments enable top researchers to strengthen key areas and foster long-term innovations in sustainable technologies and medicine," said FWF President Christof Gattringer. The FWF has invested EUR 186 million to date, with hundreds of researchers across 24 research institutions in Austria involved.

Emerging field: "Brain Resilience"

Coordinated by MedUni Vienna and allocated funding of EUR 6.8 million by the FWF, the emerging field of "Brain Resilience" takes a novel approach. "We aim to explore the brain's natural resilience mechanisms," said Igor Adameyko from the Center for Brain Research. Many individuals with a genetic predisposition to neurological disorders lead healthy lives. This project seeks to uncover the molecular processes that counteract these predispositions, enabling the development of a healthy brain.

MEDUNI VIENNA'S NATIONAL RESEARCH PARTNERS

Strong together. MedUni Vienna cooperates with numerous partners to unlock synergies and bundle competencies.

SUBSIDIARIES AND INVESTMENTS

ACOmarket GmbH
Established together with five other Austrian universities to bundle digital activities, this company is a central IT service broker and service provider.

Alumni Club
This postgraduate knowledge, dialogue and career platform for MedUni Vienna graduates, students and staff also involves the general public.

CBmed GmbH – Center for Biomarker Research in Medicine
Besides MedUni Vienna and Graz's three universities, CBmed's shareholders include the Austrian Institute of Technology (AIT) and Joanneum Research, as well as numerous partners in science and industry.

Forensisches DNA-Zentrallabor Wien GmbH (DNA Central Laboratory)
The DNA Central Laboratory's principal services are trace analysis and forensic DNA analysis in relation to criminal and parentage investigations.

ITCC P4 gGmbH
ITCC-P4 gGmbH, a non-profit enterprise with private companies and academic centres as shareholders, provides academic institutions and pharmaceutical companies with a comprehensive repertoire of modern laboratory models of paediatric tumours.

Josephinum – Collections of the Medical University of Vienna
The Josephinum keeps the university's medical legacy alive. It houses MedUni Vienna's medical history collections, as well as operating a museum and staging exhibitions to make them accessible to the public.

Karl Landsteiner Privatuniversität für Gesundheitswissenschaften GmbH
MedUni Vienna is one of the four maintaining bodies of the private Karl Landsteiner University of Health Sciences in Krems.

Max Perutz Labs Support GmbH
A joint enterprise with the University of Vienna, Max Perutz Labs Support GmbH promotes scientific research at the inter-university Max F. Perutz Laboratories organisational unit, by managing shared core facilities and infrastructure, and delivering high-quality services.

Medical University of Vienna International GmbH (MUVI)
This international healthcare consultancy is specialised in providing management, knowledge transfer and medical education services.

Universitätszahnklinik Wien GmbH
With around 400 employees, the University Clinic of Dentistry Vienna – a subsidiary of MedUni Vienna – is one of the largest and most advanced university dental hospitals in Europe.

Pan-European cooperation

MedUni Vienna
participated in a total of
109 EU-funded projects in 2024.

- 81 in the core Horizon 2020 and Horizon Europe framework programmes (Health, ERC, MSCA etc.) and an additional five Cancer Mission projects
- 12 projects in the Innovative Medicines Initiative 2 (IMI2) programme/Innovative Health Initiative (IHI)
- 6 projects in the EU4Health Programme
- 5 projects in the DIGITAL Programme

17 MedUni Vienna researchers coordinated EU consortiums with partners from European and other countries.

25 projects commenced in 2024.

LUDWIG BOLTZMANN INSTITUTES (LBIS) AND CLINICAL RESEARCH GROUPS (CRGS)

The Ludwig Boltzmann Gesellschaft (LBG) supports new research approaches in medicine and life sciences. The LBG is an important partner for MedUni Vienna for externally financed research, with the following Ludwig Boltzmann Institutes (LBIs) located at the university:

- **LBI for Digital Health and Patient Safety** (Heads: Harald Willschke and Maria Kletečka-Pulker)
- **LBI for Arthritis and Rehabilitation** (Head: Tanja Stamm)
- **LBI for Hemotology and Oncology** (Head: Peter Valent)
- **LBI for Cardiovascular Research** (Head: Johann Wojta)
- **ATTRACT CRG** (Head: Anna Sophie Berghoff)
- **MOTION CRG** (Head: Thomas Reiberger)

2024 IN BRIEF

31
patent applications
12 patents granted
3 commercialisation spin-offs
53 commercialisation partners

11
Comprehensive Centers

14
Christian Doppler Laboratories

12
centres of medical science

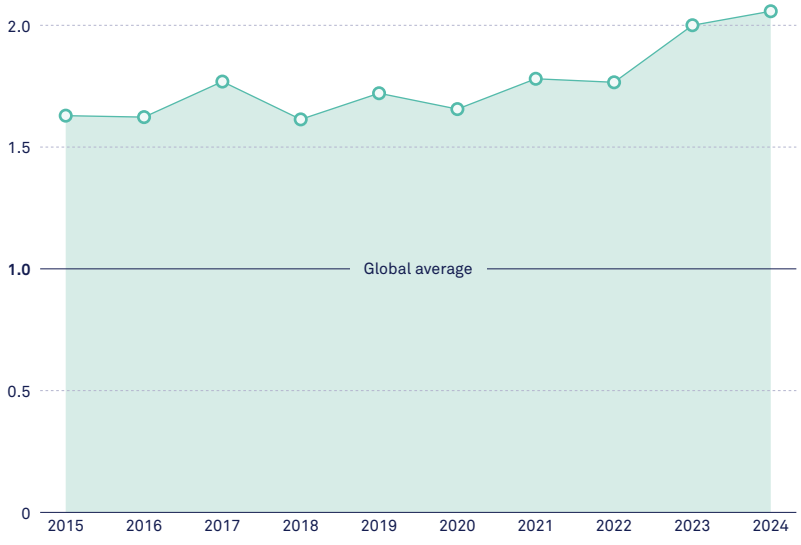
30
departments and clinical institutes

19
ERC grants

4
Ludwig Boltzmann Institutes

Frequency of citations

compared with global average in the discipline concerned



Source: InCites Dataset and ESCI

6,863
employees
incl. 4,704 researchers

8,872
students

55%
First and last authorships of original papers, reviews and letters

4,636
academic publications

202,375
citations of publications, 2015-2024

EUR 164.4m
Revenue
from R&D projects (159.8) and donations (4.6)

Patient care at
University Hospital Vienna

64,449
inpatients (cases)

569,007
outpatients (cases)

1,856,842
clinic appointments incl. inpatients

47,119
operations

International partners

Top 10 international research partnerships by number of publications

1,652	University of London
1,335	Charité University Hospital Berlin, Free University of Berlin, Humboldt University of Berlin
1,237	Harvard University
1,210	University of Texas System
1,205	University of Hamburg, University Medical Center Hamburg-Eppendorf
1,193	Université Paris Cité
1,099	Ludwig-Maximilians-Universität Munich
1,081	Ruprecht Karls University Heidelberg
1,061	Charles University Prague
1,054	University of Zurich

Period: 2020-2024, source: InCites by Clarivate, figures as at 23 April 2024

University Clinic of Dentistry Vienna

41,578
patients (140,765 treatment sessions)

ORGANISATIONAL STRUCTURE

Senate
26 members

Rectorate
Rector and 4 vice rectors

Medical science division

12 centres

- Anatomy and Cell Biology
- Physiology and Pharmacology
- Public Health
- Brain Research
- Pathobiochemistry and Genetics
- Virology
- Forensic Medicine
- Pathophysiology, Infectiology and Immunology
- Medical Physics and Biomedical Engineering
- Medical Data Science
- Biomedical Research and Translational Surgery
- Cancer Research

Clinical division

30 university departments

- Medicine I
- Medicine II
- Medicine III
- General Surgery
- Obstetrics and Gynecology
- Otorhinolaryngology
- Anaesthesia, Intensive Care Medicine and Pain Medicine
- Psychiatry and Psychotherapy
- Pediatrics and Adolescent Medicine
- Biomedical Imaging and Image-guided Therapy
- Orthopedics and Trauma-Surgery
- Dermatology
- Radiation Oncology
- Urology
- Neurosurgery
- Oral and Maxillofacial Surgery
- Department of Cardiac and Thoracic Aortic Surgery
- Thoracic Surgery
- Plastic, Reconstructive and Aesthetic Surgery
- Pediatric and Adolescent Surgery
- Emergency Medicine
- Neurology
- Physical Medicine, Rehabilitation and Occupational Medicine
- Child and Adolescent Psychiatry
- Psychoanalysis and Psychotherapy
- Ophthalmology and Optometrics
- Department of Transfusion Medicine and Cell Therapy
- Hospital Epidemiology and Infection Control
- Clinical Pharmacology
- University Clinic of Dentistry Vienna

2 clinical institutes

- Laboratory Medicine
- Pathology

Organisational units with special service functions

- Comprehensive Cancer Center
- Comprehensive Center for Pediatrics
- Comprehensive Center for Cardiovascular Medicine
- Comprehensive Center for Perioperative Medicine
- Comprehensive Center for Clinical Neurosciences and Mental Health
- Comprehensive Center for Infection Medicine
- Comprehensive Center for Chest Diseases
- Comprehensive Center for Inflammation and Immunity
- Comprehensive Center for Musculoskeletal Disorders
- Comprehensive Center for Rare and Undiagnosed Diseases
- Comprehensive Center for Integrated Diagnostics
- Core Facilities
- Core facility laboratory animal breeding and husbandry
- University Library
- Institute for Ethics, Historical Collections and the History of Medicine
- Teaching Center

AS AT 31 DECEMBER 2024

University Council
5 members

Scientific Advisory Board

Organisational units with university management responsibilities (Infrastructure and services)

12 service departments

- University Management Office
- Human Resources
- Legal Affairs and Compliance
- Corporate Communications
- Studies and Examinations Department
- Research Service
- Technology Transfer Office
- International Office
- Clinical Trials Coordination Centre
- Finance Department
- Facility, Security and Infrastructure Management
- IT Services and Strategic Information Management

4 staff units

- Internal Audit
- Evaluation and Quality Management
- Gender Mainstreaming and Diversity
- Controlling

Interuniversity Organizational Units

- Max Perutz Labs (A joint venture with the University of Vienna)

Subsidiaries and shareholdings

- Alumni Club
- Medical University of Vienna International GmbH
- Universitätszahnklinik Wien GmbH
- Max Perutz Labs Support GmbH
- FDZ – Forensisches DNA-Zentral-labor GmbH
- CBmed GmbH
- Karl Landsteiner Privatuniversität für Gesundheitswissenschaften GmbH
- Josephinum – Medizinische Sammlungen GmbH
- ACOmarket GmbH
- ITCC-P4 gGmbH

Committees

- Working Group on Equal Opportunities
- Works Council for scientific university staff
- Works Council for General University Staff
- Ethics Committee
- Data Protection Commission
- Arbitration Committee
- Students' Union (ÖH Med Vienna)
- Data Clearing House
- Ombudsman for Good Scientific Practice
- Intramural Committee for Animal Experimentation
- Advisory Board for People with Disabilities

Curriculum Directors

- Medicine
- Dentistry
- PhD Programme and Doctoral Programme in Applied Medical Science
- Medical Informatics master's programme
- Molecular Precision Medicine master's programme
- Continuing education courses

UNIVERSITY MANAGEMENT

• Rectorate

The Rectorate is the university's executive management body.
Prof. Markus Müller, Rector
Dr. Michaela Fritz, Vice Rector for Research and Innovation
Prof. Anita Rieder, Vice Rector for Education
Dr. Volkan Talazoglu, Vice Rector for Finance
Prof. Oswald Wagner, Vice Rector for Clinical Affairs
www.meduniwien.ac.at/rectorate

• University Council

The University Council is one of the University's three most senior management bodies, alongside the Rectorate and the Senate. Two of the Council's members are appointed by the Senate of the Medical University of Vienna, and two by the federal government. A fifth member is elected by these four members.
Dr. Eva Dichand (Chair)
Prof. Christoph Huber
Prof. Peter Husslein
Dr. Sigrid Pilz
Prof. Thomas Zeltner (Deputy Chair)
www.meduniwien.ac.at/university-council

• Senate

The Senate is made up of 13 representatives from among the University's professors including heads of organisational units, six representatives of the university's lecturers and academic teaching and research staff including doctors in specialist training, six student representatives and one representative of the general university staff.

PROFESSORS
Prof. Maria Sibilia (Chair)
Prof. Angelika Berger
Prof. Christoph Binder
Prof. Barbara Bohle
Prof. Wilfried Ellmeier
Prof. Renate Kain
Prof. Irene Lang
Prof. Shahrokh Shariat
Prof. Tanja Stamm
Prof. Michael Trauner (Third Deputy)
Prof. Edda Tschernko
Prof. Rudolf Valenta
Prof. Markus Zeitlinger

UNIVERSITY LECTURERS/ACADEMIC STAFF INVOLVED IN RESEARCH AND TEACHING, INCL. DOCTORS IN SPECIALIST TRAINING
Dr. Carina Borst
Dr. Miriam Kristin Hufgard-Leitner
Dr. Judith Rittenschober-Böhm
Prof. Ivo Volf *(until 1 March 2024)*
Prof. René Wenzl
Prof. Stefanie Widder *(from 1 March 2024)*
Prof. Birgit Willinger (First Deputy)

STUDENTS
Jakob Hütter *(from 14 June 2024)*
Marius Polay
Yannick T. Suhr *(until 14 June 2024)*
Alexis Treitler
Carolin Vollbrecht
Sophie Weißgärber (Second Deputy *from 14 June 2024)*
David Zach

GENERAL UNIVERSITY STAFF
Gerda Bernhard

REPRESENTATIVE OF THE WORKING GROUP FOR EQUAL OPPORTUNITIES
Prof. Alexandra Kautzky-Willer
www.meduniwien.ac.at/senate

COMMITTEES

• Working Group on Equal Opportunities

Chair: Prof. Alexandra Kautzky-Willer
First Deputy Chair: Prof. Daniela Marhofer
Second Deputy Chair: Irene Bednar
www.meduniwien.ac.at/equalopportunities

• Works Council for Scientific University Staff

Chair: Dr. Johannes Kastner
First Deputy: Dr. Stefan Konrad
Second Deputy: Dr. Sophie Pils
Third Deputy: Prof. Michael Holzer
www.meduniwien.ac.at/wc-sus

• Works Council for General University Staff

Chair: Gabriele Waidringer
First Deputy Chair: Gerda Bernhard
www.meduniwien.ac.at/wc-gus

• Ethics Committee
Prof. Jürgen Zezula and Dr. Martin Brunner
www.meduniwien.ac.at/ethics

• Intra-university Data Protection Commission
Deputy Chair: Gordana Sikanic
www.meduniwien.ac.at/dbc

• Advisory Board for People with Disabilities
Chair: Prof. Richard Crevenna
www.meduniwien.ac.at/disabilities

• Arbitration Committee
Chair: Dr. Anna Sporrer
www.meduniwien.ac.at/arbitrationcommittee

• Students' Union (ÖH Med Vienna)
Chair: Carolin Vollbrecht
First Deputy: Anant Thind
Second Deputy: Sophie Weißgärber
www.oehmedwien.at

• Data Clearing House
Chair: Dr. Michael Prinz
www.meduniwien.ac.at/data-clearing-house

• Ombudsman for Good Scientific Practice
Spokesperson: Prof. Elisabeth Förster-Waldl
www.meduniwien.ac.at/gsp

• Medicine Curriculum Director
Prof. Anahit Anvari-Pirsch
Deputy: Prof. Günther Körmöczi
Deputy: Prof. Harald Leitich
Deputy: Prof. Michaela Riedl

• Dentistry Curriculum Director
Prof. Anita Holzinger
Deputy: Prof. Andreas Schedle
Deputy: Prof. Martina Schmid-Schwap

• PhD Programme and Doctorate Programme in Applied Medical Science Curriculum Director
Prof. Stefan Böhm
Deputy: Prof. Sylvia Knapp

• Medical Informatics Curriculum Director
Prof. Georg Dorffner
Deputy: Prof. Georg Duftschmid

• Molecular Precision Medicine Master's Programme Curriculum Director
Prof. Thomas Ashley Leonard
Deputy: Prof. Ruth Herbst

• Continuing Education Curriculum Director
Prof. Henriette Löffler-Stastka
Deputy: Prof. Karin Hoffmann-Sommergruber

• Intramural Committee for Animal Experimentation
Chair: Prof. Daniela Pollak-Monje Quiroga
www.meduniwien.ac.at/intramural-committee-for-animal-experimentation/

SCIENTIFIC ADVISORY BOARD

This external body advises the MedUni Vienna Rectorate on all matters related to research, with the aim of safeguarding the University's strategic positioning for the long term.

• Joseph Thomas Coyle
Professor of Psychiatry and Neuroscience, Harvard Medical School, Boston
• Hedvig Hricak
Chair, Department of Radiology, Memorial Sloan-Kettering Cancer Center, New York City
• Sarah König
Head of the Institute of Medical Education and Education Research, Julius Maximilian University of Würzburg
• Michael Roden
Professor of Medicine, Scientific Director of the German Diabetes Center and Director, Institute for Clinical Diabetology, Heinrich Heine University Duesseldorf
• Robert Schwarcz
Professor of Psychiatry, Pharmacology and Pediatrics, Department of Psychiatry, University of Maryland School of Medicine

UNIVERSITY DEPARTMENTS

MedUni Vienna's clinical division consists of 30 departments, including two clinical institutes. 11 of these comprise a number of different divisions (in accordance with section 31(4) Universities Act). Departments, institutes and divisions also serve as patient care departments (pursuant to section 7(4) Hospitals Act).

Department of Medicine I
Head: Prof. Heinz Burgmann
- Division of Oncology
- Division of Hematology and Hemostaseology
- Division of Palliative Medicine
- Division of Infectious Diseases and Tropical Medicine

Department of Medicine II
Head: Prof. Christian Hengstenberg
- Division of Cardiology
- Division of Angiology
- Division of Pulmonology

Department of Medicine III
Head: Prof. Daniel Aletaha
- Division of Endocrinology and Metabolism
- Division of Nephrology and Dialysis
- Division of Rheumatology
- Division of Gastroenterology and Hepatology

Department of General Surgery
Head: Prof. Oliver Strobel
- Division of Visceral Surgery
- Division of Vascular Surgery
- Division of Transplantation

Department of Obstetrics and Gynecology
Head: Prof. Herbert Kiss
- Division of Obstetrics and Feto-Maternal Medicine
- Division of General Gynecology and Gynecologic Oncology
- Division of Gynecological Endocrinology and Reproductive Medicine

Department of Otorhinolaryngology
Head: Prof. Wolfgang Gstöttner
- Division of General Ear, Nose and Throat Diseases
- Division of Speech and Language Therapy

Department of Anaesthesia, Intensive Care Medicine and Pain Medicine
Head: Prof. Edda Tschernko
- Division of General Anaesthesia and Intensive Care Medicine
- Division of Special Anaesthesia and Pain Medicine
- Division of Cardiac Thoracic Vascular Anaesthesia and Intensive Care Medicine

Department of Psychiatry and Psychotherapy
Deputy Head: Prof. Dan Rujescu-Balcu
- Division of Biological Psychiatry
- Division of Social Psychiatry

Department of Pediatrics and Adolescent Medicine
Head: Prof. Susanne Greber-Platzer
- Division of Neonatalogy, Intensive Care Medicine and Neuropediatrics
- Division of Pediatric Cardiology
- Division of Pediatric Pulmonology, Allergology and Endocrinology
- Division of Pediatric Nephrology and Gastroenterology
- Clinical Division of Pediatrics with special focus on Pediatric Hemotology-Oncology (St. Anna Children's Hospital)

Department of Biomedical Imaging and Image-guided Therapy
Interim Head: Prof. Marcus Hacker
- Division of General and Paediatric Radiology
- Division of Cardiovascular and Interventional Radiology
- Division of Neuroradiology and Musculoskeletal Radiology
- Division of Nuclear Medicine

Department of Orthopedics and Trauma-Surgery
Head: Prof. Reinhard Windhager
- Division of Orthopedics
- Division of Trauma Surgery

Department of Dermatology
Head: Prof. Wolfgang P. Weninger

Department of Radiation Oncology
Head: Prof. Joachim Widder

Department of Urology
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Head: Prof. Emeka Nkenke

Department of Cardiac Surgery
Head: Prof. Daniel Zimpfer

Department of Thoracic Surgery
Head: Prof. Clemens Aigner

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University Clinic of Dentistry Vienna
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Head: Prof. Oswald Wagner
• Division of Clinical Virology
• Division of Clinical Microbiology

Department of Pathology
Head: Prof. Renate Kain

CENTRES OF MEDICAL SCIENCE

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• Division of Anatomy
• Division of Cell and Developmental Biology

Center for Physiology and Pharmacology
Head: Prof. Michael Freissmuth
• Institute of Vascular Biology and Thrombosis Research
• Institute of Pharmacology
• Institute of Physiology
• Division of Neurophysiology and Neuropharmacology

Center for Public Health
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• Department of Social and Preventive Medicine
• Department of Environmental Health
• Department of Epidemiology
• Department of Medical Psychology
• Department of Health Economics

Center for Brain Research
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• Division of Neurophysiology
• Division of Molecular Neurosciences
• Division of Neuronal Cell Biology
• Division of Cognitive Neurobiology
• Division of Pathobiology of the Nervous System

Center for Pathobiochemistry and Genetics
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• Institute of Medical Genetics
• Institute of Medical Chemistry and Pathobiochemistry

Department of Virology
Head: Prof. Elisabeth Puchhammer
• Division of Applied Medical Virology

Department of Forensic Medicine
Head: Prof. Nikolaus Klupp
• DNA – Zentrallabor

Center for Pathophysiology, Infectiology and Immunology
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• Institute of Pathophysiology and Allergy Research
• Institute of Immunology
• Institute of Specific Prophylaxis and Tropical Medicine
• Institute of Hygiene and Applied Immunology

Center for Medical Physics and Biomedical Engineering
Head: Prof. Wolfgang Drexler

Center for Medical Data Science
Head: Prof. Martin Posch
• General Division of the Center for Medical Data Science
• Institute of Medical Statistics
• Institute of Clinical Biometrics
• Institute of Biosimulation and Bioinformatics
• Institute of Medical Information Management
• Institute of the Science of Complex Systems
• Institute of Artificial Intelligence
• Institute of Outcomes Research

Center for Biomedical Research and Translational Surgery
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Center for Cancer Research
Head: Prof. Maria Sibilia

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Prof. Shahrokh Shariat

Comprehensive Center for Pediatrics
Head: Prof. Angelika Berger

Comprehensive Center for Cardiovascular Medicine
Deputy Head: Prof. Christian Hengstenberg,
Prof. Johannes Schmid,
Prof. Edda Tschernko

Comprehensive Center for Perioperative Medicine
Head: Prof. Oliver Strobel
Prof. Christian Loewe

Comprehensive Center for Clinical Neurosciences and Mental Health
Head: Prof. Thomas Berger *(until 1 June 2024)*
Prof. Stephan Doering *(from 1 June 2024)*

Comprehensive Center for Infection Medicine
Head: Prof. Heinz Burgmann *(until 1 July 2024)*
Prof. Birgit Willinger *(from 1 July 2024)*

Comprehensive Center for Chest Diseases
Head: Prof. Clemens Aigner
Prof. Marco Idzko,
Prof. Helmut Prosch,
Prof. Edda Tschernko,
Prof. Joachim Widder

Comprehensive Center for Inflammation and Immunity
Head: Prof. Elisabeth Förster-Waldl

Comprehensive Center for Musculoskeletal Disorders
Head: Prof. Reinhard Windhager

Comprehensive Center for Rare and Undiagnosed Diseases
(new from 1 January 2024)

Comprehensive Center for Integrated Diagnostics
(new from 1 January 2024)

Core Facilities
Head: Prof. Johann Wojta
• Genomics: DNA analysis
• Genomics: genome analysis
• Imaging
• Proteomics
• Cell Sorting

Core facility laboratory animal breeding and husbandry
Head: Werner Höllriegl *(from 1 August 2024)*
Interim Head: Prof. Wilfried Ellmeier *(until 31 July 2024)*

Library
Head: Karin Cepicka

Ethics, History of Medicine and Historical Collections
Head: Dr. Christiane Druml

Teaching Center
Head: Prof. Anahit Anvari-Pirsch
• Postgraduate Education and Training Unit
• Research Unit for Curriculum Development
• Resources Management
• Curriculum Management
• Assessment and Skills
• Medical Didactics
• Digital Learning

INTERUNIVERSITY ORGANIZATIONAL UNITS

Max Perutz Labs
(A joint venture with the University of Vienna)
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• Division of Molecular Biology
• Division of Molecular Genetics

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Head: Maria Wolfram-Eder

Legal Affairs and Compliance
Head: Prof. Markus Grimm

Corporate Communications
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Studies and Examinations Department
Head: Harald Jäger

Research Service
Head: Susanne Friedl

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Head: Dr. Michael Hoschitz

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Head: Christoph Wild

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Head: Markus Künzel

Evaluation and Quality Management
Head: Dr. Katharina Stowasser-Bloch

Gender Mainstreaming
Head: Sandra Steinböck

Controlling
Head: Karin Fartacek

FINANCIAL STATEMENTS

I. STATEMENT OF FINANCIAL POSITION AS AT 31 DECEMBER 2024

ASSETS	31 December 2024 EUR	31 December 2023 EUR
A. Fixed assets		
I. Intangible assets		
1. Concessions and similar rights, and licences thereto	1,091,974.17	605,066.02
Acquired by purchase	*1,091,974.17*	*605,066.02*
2. Rights of use	20,000,000.00	20,000,000.00
Total intangible assets	**21,091,974.17**	**20,605,066.02**
II. Property, plant and equipment		
1. Land, leasehold rights and buildings including buildings on third-party land	19,504,695.80	20,681,874.22
a) Land value	*907,034.40*	*907,034.40*
b) Building value	*799,060.33*	*865,333.83*
2. Plant and machinery	18,000,329.75	17,014,525.57
3. Scientific literature and other scientific media	9,787,498.40	9,305,866.42
4. Other plants, operating and office equipment	3,281,891.26	3,353,557.74
5. Advance payments and plants under construction	27,502,441.75	16,898,767.81
Total property, plant and equipment	**78,076,856.96**	**67,254,591.76**
III. Financial assets		
1. Investments in subsidiaries and associates	649,739.00	649,739.00
2. Loans to subsidiaries and associates	139,382.92	49,727.35
3. Securities and similar instruments held as fixed assets	266,295,231.63	216,243,358.51
Total financial assets	**267,084,353.55**	**216,942,824.86**
Total fixed assets	**366,253,184.68**	**304,802,482.64**
B. Current assets		
I. Inventories		
1. Operating resources	980,000.00	980,000.00
2. Services rendered to third parties not yet invoiced	61,764,630.97	113,178,330.55
Total inventories	**62,744,630.97**	**114,158,330.55**
II. Receivables and other assets		
1. Trade receivables	20,219,799.12	14,168,760.60
2. Receivables from associates	1,299,969.95	1,182,229.99
3. Other receivables and other assets	30,902,959.71	28,837,155.53
Total receivables and other assets	**52,422,728.78**	**44,188,146.12**
III. Securities and equity interests	**6,859,514.49**	**6,746,690.24**
IV. Cash and cash equivalents	**223,261,320.36**	**228,748,918.96**
Total current assets	**345,288,194.60**	**393,842,085.87**
C. Accruals and deferrals	**5,678,207.94**	**5,766,525.28**
TOTAL ASSETS	**717,219,587.22**	**704,411,093.79**

The 2024 financial statements were given an unqualified audit certificate by auditors Leitgeb Wirtschaftsprüfung und Steuerberatung GmbH.

EQUITY AND LIABILITIES	31 December 2024 EUR	31 December 2023 EUR
A. Equity		
1. University negative equity	–8,334,166.31	–8,334,166.31
2. Net profit	39,375,046.43	33,705,368.30
Profit brought forward	*33,705,368.30*	*25,317,551.84*
Total equity	**31,040,880.12**	**25,371,201.99**
B. Investment grants	**31,443,111.25**	**31,052,850.13**
C. Provisions		
1. Provisions for severance payments	24,550,787.74	29,770,068.67
2. Other provisions	248,847,076.16	193,001,050.92
Total provisions	**273,397,863.90**	**222,771,119.59**
D. Liabilities		
1. Advances received	155,684,512.90	202,678,625.30
Deductible from inventories	*55,267,273.26*	*101,251,373.85*
2. Trade payables	29,691,303.76	14,299,526.39
3. Payables to associates	479,999.39	7,216,151.15
4. Other liabilities	37,800,505.47	39,622,122.90
Total liabilities	**223,656,321.52**	**263,816,425.74**
E. Accruals and deferrals	**157,681,410.43**	**161,399,496.34**
TOTAL EQUITY AND LIABILITIES	**717,219,587.22**	**704,411,093.79**

Note regarding equity:
The university has reported positive equity every year since 2019. In 2024, equity increased to EUR 31.0m. Irrespective of this, the *Universitäten-Rechnungsabschlussverordnung* (University Financial Statements Order) 2010 gives medical universities the option of capitalising investments relating to additional clinical expense, research and teaching as rights of use. As a result of capitalising these investments, taking into account investment grants recognised as at 31 December 2024, positive equity in the meaning of section 16(2) University Financial Statements Order was EUR 62.5m (2023: EUR 56.4m).

II. STATEMENT OF PROFIT OR LOSS FOR 2024

	2024 EUR	2023 EUR
1. Revenue		
a) Revenue from Federal Goverment global budget allocation	670,708,120.53	562,856,349.07
b) Revenue from tuition fees	1,026,519.55	1,022,496.65
c) Revenue from postgraduate training programmes	2,905,753.66	2,309,829.27
d) Revenue pursuant to section 27 Universities Act	199,244,857.47	113,721,588.50
e) Reimbursements of costs pursuant section 26 Universities Act	18,860,155.95	17,810,746.52
f) Other revenue and reimbursements	32,003,970.93	18,269,244.85
Revenue from federal ministries	*14,427,531.96*	*385,427.14*
	924,749,378.09	**715,990,254.86**
2. Change in services rendered to third parties not yet invoiced	**–46,049,180.54**	**16,742,041.24**
3. Other operating income		
a) Income from disposal or write-up of fixed assets (excl. financial assets)	74,274.08	347.31
b) Income from reversal of provisions	27,384,844.85	5,437,815.22
c) Other	16,121,403.15	22,407,470.57
Reversal of investment grants	*10,235,285.69*	*10,137,421.23*
	43,580,522.08	**27,845,633.10**
4. Expenditure for materials, consumables and purchased services		
a) Expenditure for materials and consumabels	–23,800,208.99	–22,053,119.08
b) Expenditure for purchased services	–8,971,115.69	–6,295,724.02
	–32,771,324.68	**–28,348,843.10**
5. Staff costs		
a) Salaries and wages	–535,072,200.68	–438,298,270.68
Refunds to the Federal Government for officials assigned to the university	*65,136,751.11*	*67,164,181.49*
b) Expenditures for teaching according to use category 17 und 18 Hochschulstatistik- und Bildungsdokumentationsverordnung – UHSBV, BGBl. II Nr. 216/2019, current version	–1,947,938.50	–1,666,948.91
c) Cost of severance payments and payments to employee benefits funds	–7,794,510.58	–13,096,047.23
Refunds to the Federal Government for officials assigned to the university	*0.00*	*0.00*
d) Cost of pensions	–17,916,226.85	–15,038,256.75
Refunds to the Federal Government for officials assigned to the university	*383,736.32*	*394,842.51*
e) Social security contributions and other pay-related contributions	–93,801,511.81	–85,395,532.73
Refunds to the Federal Government for officials assigned to the university	*13,544,792.05*	*14,058,694.63*
f) Other employee benefits	–48,103,638.73	–5,436,741.73
	–704,636,027.15	**–558,931,798.03**

		2024 EUR	2023 EUR
6.	Depreciation and amortisation	–25,109,679.96	–24,382,102.05
7.	Other operating expenses		
	a) Taxes other than those under item 13	–1,297,384.27	–1,253,387.89
	b) Reimbursements to hospital operator pursuant section 33 Universities Act	–54,684,759.29	–50,065,850.65
	c) Other	–85,816,972.75	–66,873,824.34
		–141,799,116.31	–118,193,062.88
8.	**Subtotal items 1 to 7**	**17,964,571.53**	**30,722,123.14**
9.	Income from financial resources and investments	10,078,808.75	5,852,148.61
	Write-ups	*132,887.18*	*208,679.23*
10.	Expenditure arising from financial resources and equity holdings	–19,966,827.25	–26,797,016.81
	a) Write-downs	*20,999.53*	*19,337.88*
	b) Expenditure arising from subsidiaries and associates	*19,563,000.00*	*26,027,960.00*
11.	**Subtotal items 9 to 10**	**-9,888,018.50**	**-20,944,868.20**
12.	**Earnings before tax (sum of items 8 and 11)**	**8,076,553.03**	**9,777,254.94**
13.	**Taxes on income and profit**	**2,406,874.90**	**1,389,438.48**
14.	**Profit after tax**	**5,669,678.13**	**8,387,816.46**
15.	**Profit brought forward**	**33,705,368.30**	**25,317,551.84**
16.	**Net profit for the year**	**39,375,046.43**	**33,705,368.30**

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