University: University of Pécs
Country: Hungary

SDG3: GOOD HEALTH AND WELLBEING

3,3 Collaborations and health services

3.3.1 Current collaborations with health institutions

Have current collaborations with local, national, or global health institutions to improve health and well-being outcomes.

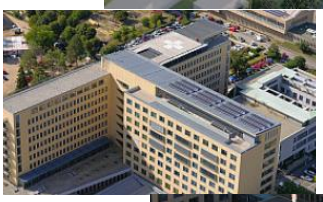
- **Local collaboration**

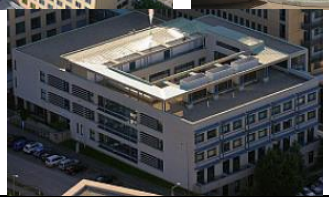
Health infrastructure (first aid, emergency room, clinic, hospital and certified personnel) are available and accessible for public.

	
Akác campus site, Pécs	Bajnok Street campus site, Pécs
	
Dischka campus site, Pécs	Édesanyák campus site, Pécs
	
József Attila Street campus site, Pécs	Munkácsy Mihály Street campus site, Pécs
	
Nyár Street campus site, Pécs	Pacsirta Street campus site, Pécs


Rákóczi Road campus site, Pécs (CC)


Rét Street campus site, Pécs



Szigeti Road campus site, Pécs


Tüzér Street campus site, Pécs


Harkány campus site


Komló campus site


Mohács campus site

Siklós campus site

Szigetvár campus site


UP UNIV Pharmacy

 	
Bus for perform health screenings	The National Virology Laboratory on the University of Pécs

Description:

The Clinical Center of the University of Pécs

The Clinical Center is one of Hungary's largest healthcare providers and, with its regional service obligation, is the most significant and only clinical-level healthcare institution in the South Transdanubia region. In addition to its primary task of providing medical care, it also plays an educational role and constitutes the university's most significant research and development capacity.

Following the integration of city hospitals in 2024, it will be a major player in the region's labor market with nearly 6,000 direct employees. Nearly 1,100 doctors, 4,000 specialist staff, and 580 pharmacists, biologists, psychologists, non-patient-bed physical employees, and employees with health, economic, and technical qualifications perform the tasks.

Continuous patient care is provided at 16 locations with 2,700 beds; in 30 clinical units in Pécs and 5 hospitals in Baranya County. In 2024, more than 118,000 inpatients and 13,500 outpatient care hours per week were provided at the Clinical Center, with more than 1.5 million cases in all reimbursement categories. We provide healthcare services in 107 specialties in outpatient care and 65 specialties in inpatient care. In the vast majority of professions, patient care is provided at the highest level of progressivity, with a significant regional care obligation, and we are the only institution in the country to provide certain interventions. Health visitor care is provided at a further 99 locations in 162 health visitor districts.

In addition to patient care, the Clinical Center participates in the education and practical training of Hungarian and foreign students from the Medical School, the Faculty of Health Sciences, and the Faculty of Pharmacy by providing training facilities and personnel. It also conducts extensive research and innovation activities, ranging from basic research to applied clinical research, the results of which are published in leading international scientific journals.

The primary goal of the management of the Clinical Center of the University of Pécs is to provide patient-centered, continuously improving, high-quality healthcare.

The UP Clinical Center provides health services with comprehensive service support for the entire academic community too. The staff of the CC is committed to effective care and is dedicated to supporting patients in difficult situations who have fallen ill. This is based on expertise, humanity and empathy, and a dedicated and prepared team.

The management of the Clinical Center of the University of Pécs is committed to continuous improvement. In this spirit, during the project "Practical implementation of infection control activities at the Clinical Center of the University of Pécs", which was implemented with the support of the European Union with nearly HUF 60 million, measures were taken that significantly contribute to the prevention of healthcare-associated infections, the quality of patient care, patient satisfaction and patient-, and staff safety.

The Clinical Center of the UP has been awarded the Family Friendly Hospital Innovation Award. The UP won the award primarily because of its efforts to improve the mental, physical and social well-being of its staff during the coronavirus epidemic.

The Richter Health City program ended with a great result. In addition to screenings and counseling sessions, specialists from the Cardiology Clinic of the Clinical Center of the University of Pécs also offered a wide range of presentations. Topics were discussed that provide useful information for health-conscious everyday life and for developing a preventive approach. Topics included the prevention and treatment of osteoporosis, the functioning of memory, and the importance of mental health. There were also a number of other lifestyle presentations.

The University of Pécs is committed to the health and safety of the university citizens and the population (SDG3 Health and Well-being). Accordingly, UP continuously monitors and follows the international and domestic professional recommendations issued on the topic of coronavirus and consults with the competent authorities. In addition, it has set up an operational professional staff involving the professions concerned, so that it can act quickly and efficiently in line with the current situation.

The University of Pécs is one of the most significant research centres of Hungary, with a huge professional research base. The János Szentágothai Research Centre is home to numerous research areas of natural and medical sciences. The Research Centre was given the title ‘Excellence Research Center’ by the Hungarian Academy of Sciences (MTA) acknowledging its exceptionally high-quality scientific work.

The health filter bus of University of Pécs went to households in Baranya:
The University of Pécs is committed to the success of public health screening in Baranya. A nationwide campaign entitled “We are taking screening in place” has been launched to improve the health status of people living in multiple disadvantaged settlements. The main goal of the program is to minimize territorial inequalities in access to health care and to strengthen the health awareness of the population living in disadvantaged settlements.

The University of Pécs and the Baranya County Local Government are working together for the development of the region (Cooperation agreement):
The University of Pécs helps the lives of the inhabitants of the area by, among other things, developing training that has a direct stimulating effect on the economy, increasing the number of teacher training places, organizing joint art and cultural programs with the Baranya County Municipality, and providing extended health care and screening.

Campus Legal Aid Clinic
The Campus Legal Aid Clinic has set a goal to solve problems with providing a wide range of free legal help to the students of the University of Pécs, thanks to the successful cooperation of law students and experienced lawyers.

The General Practitioner (GP) Service
The General Practitioner (GP) Service provided by the Centre for Occupational Health and Hygiene of the University of Pécs Clinical Centre offers primary care for the workers and students of the university.

- The place of consultation: 7623 Pécs, Rákóczi road 2. C building 1. floor
- Opening hours/Service hours:
    - Monday-Thursday: 8:00-15:00; Friday: 8:00-14:00

Adult General Practitioner Services
The adult general practitioner service is located in the building of the Janus Pannonius Clinical Block in Pécs and its surrounding area.

- Weekday afternoon: from 15:00 to 07:00
- Saturday, Sunday and public holidays from 0 to 24 hours

UP UNIV Pharmacy
The UP UNIV Pharmacy, the public unit of the Clinical Central Pharmacy, offers a pleasant, modern and child-friendly environment, high professional standards, patient-centred care, fast service and a wide range of products.

- Opening hours: Monday - Friday 8:00 - 16:00

Mental Health Institute
Baranya county residents outside Pécs (according to the regional duty of care), as well as university students and UP health care staff not having a permanent address in Pécs, are provided with long-term.

Student Counselling Center
The Student Counselling Center of the UP aims to help and support students in university-related and private matters. Our psychologists help students with their questions, problems and stagnations by establishing a relationship based on mutual trust within the framework of counselling.

INDIT Public Foundation's **Alcohol and Drug Outpatient Clinic** offers help for people with substance abuse problems and behavioural addictions. Our services include: assessment, counselling, individual therapy, couple and family counselling.

S.O.S. E.L.E.T. Pécs telephone service
The S.O.S. É.L.E.T. telephone service of Pécs started its operation on 1st January 1975 with the primary aim of suicide prevention and crisis intervention. The service is anonymous, both the caller and the person on duty are guaranteed anonymity. The S.O.S. É.L.E.T. telephone service in Pécs is available every day for 12 hours, from 7 p.m. to 7 a.m., every day of the year, including public holidays, and is free of charge from all mobile networks throughout the country. Since 15th June 2020, we are also available via online chat from 7pm to midnight. Our aim is to help people find creative solutions to crisis, so that they can come to us with new problem-solving strategies, mobilise their resources, become more mature, more fulfilled and avoid the dangers of negative outcomes such as suicide, alcohol, drugs and other psychiatric problems.

Psychological Consultation
Psychological Counselling is a counselling service provided by the Medical School of the University of Pécs. It aims to provide psychological support for medical students studying on the Hungarian, English and German programs. The years spent at university and young adulthood are a crucial and sensitive period of personal development. The process of becoming a doctor is in many ways different from that of other professions: the challenges are more demanding and the students are more deeply affected in their personalities. Consultation is available in individual and group sessions, free of charge and with full confidentiality. Our service does not require doctor-patient contact or therapy. We do not diagnose or prescribe medication. However, we can help you with major psychological problems. We provide information on how to access therapeutic care.

Support service
Mental health counselling for students registered with us. Prevention of crisis situations, management of current crisis situations, appropriate care for psychological trauma (helping to find a specialist if necessary). Regular consultations for students with autism spectrum disorder. The service is available at the Support Service and online by appointment.

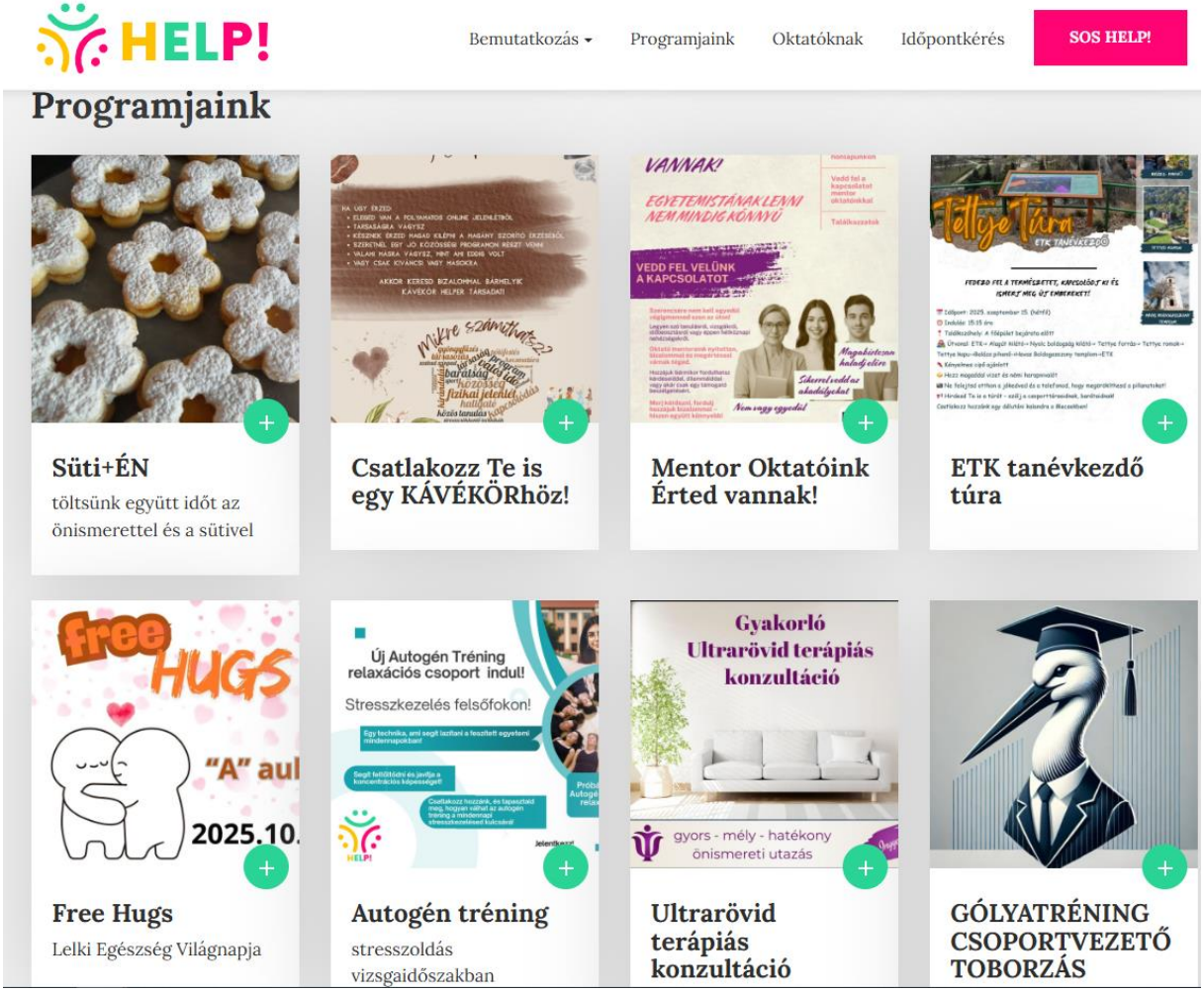
There are **legal and advocacy organizations** at the University of Pécs.

University Chaplaincy Services
The Ecumenical Chaplaincy of the University of Pécs is a form of cooperation based on the idea of Christian ecumenism. With the help of the staff of the Chaplaincy, you can find guidance for your spiritual problems, pains, fears and uncertainties through the Bible. In the list below, find the campus minister of your denomination, or whichever denomination is close to you, contact a representative, and entrust your care to a spiritual director who will help you find God's healing word.

Careers Office
At the Career Office of the UP, our goal is to help prospective, current and graduating students and staff of the University of Pécs to achieve personal success. WE BELIEVE that by developing their self-awareness and personal competencies, and by consciously planning their career path, they can get closer to achieving their goals. We do this through career guidance and skills development programmes, individual counselling, support networks and labour market services.

HELP! Office
Helps students of the Faculty of Health Sciences overcome their difficulties. In addition to individual conversations, they support their development with courses and trainings so that students can be more confident and successful in their studies and in their private lives!
The services are free of charge and anonymous for students of the Faculty of Health Sciences.
The goal of the HELP! Office staff is to create a safe and supportive environment for all students, where acceptance and development are naturally connected. They believe that an atmosphere of trust is essential for students to share their difficulties and challenges with each other, and to find the paths that are most suitable for their self-development and vision for the future.
Stability and change are not mutually exclusive, but harmoniously complement each other, which is why we support renewal, transformation and transformation, through which every student can experience the joy of growth, development and self-realization.
The Office acts as a safety net that helps students deal with difficulties and overcome challenges. The power of community is of paramount importance to them, as human

relationships and loving support are one of the greatest resources on the path of personal and professional development.
By strengthening motivation and self-confidence, they encourage their students to move boldly towards their goals, while providing them with the protection and stability they may need during their university years.
They believe that every student is unique, which is why they provide personalized support, helping them find their inner resources and successfully shape their future. The Office creates an inspiring environment in which change is not a scary obstacle, but an opportunity for development.
By prioritizing relationships built on trust, they create a support system that helps students not only during their university years but also in the long term. Their mission is to provide each student with a stable and loving environment where they can move forward in their lives with confidence and self-identity.



The YourLife health program
The YourLife health program of the Medical School of Pécs was created to make students and staff feel good about themselves. To this end, they not only organize various programs or provide services, but also strive to make health as a value an integral part of all educational, operational and decision-making processes.

The University Student Union of the University of Pécs, the Doctoral Students' Union and the University Student Union of all ten Faculties of the University deal with sustainability issues affecting the university and the faculties.

Some of the events from the table:

Information
Name of the activity: **XII. Interdisciplinary Doctoral Conference** Description: The 12th Interdisciplinary Doctoral Conference (IDK2024) was held on 5-6th April, 2024 at the University of Pécs, Faculty of Humanities and Social Sciences. The conference invited PhD and undergraduate students from all scientific disciplines, offering them the opportunity to present their research as oral or poster presentations in both English (primarily) and, for a few, Hungarian. Registration and abstract submission preceded the event and it provided an international, multi-disciplinary forum for sharing scientific findings.
Name of the activity: **MEDPécs 2024 – Online Conference** Description: The Doctoral Student Council of the University of Pécs organized **MedPécs2024**, an online conference held on 22nd November 2024, for PhD students in the fields of health, medicine, and pharmaceutical sciences. Participants presented their research through oral and poster sessions, with English as the main language, though some Hungarian presentations were also accepted. The event welcomed not only doctoral students but also graduate students with outstanding scientific achievements.
Project name: **Blood Donation** Description: The Hungarian Red Cross, with the help of the Student Government of the Faculty of Health Sciences organized a volunteer blood donation event on 21st March, 2024, at the "D" building of the Faculty of Health Sciences in Pécs. Donors were reminded to stay well-hydrated and have a hearty breakfast beforehand, and to bring their ID, address card, and social security card. Many participants attended to give the life-saving gift of blood and help those in need.
Project name: **Fundraising for Nevetnikék Foundation** Description: The Nevetnikék Foundation and the Student Government at the Pécs Medical School collaborated again to support sick children. During Freshmen Camp, they raised HUF 80,000 by returning bottles and another HUF 170,000 through first-week freshman program tasks, which meant they were able to donate a total of HUF 250,000 to the foundation.
Project name: **Chill with the Peers** Description: On 15th October the “Chill with the Peers” event was held in the Dr. Romhányi György Hall at the Medical School of the UP. Students were welcomed with hot chocolate, snacks, and informal conversation corners to meet peer helpers and staff from the Student Services Office. The Peer Program, part of the faculty’s well-being concept, aimed to introduce students to peers they could turn to for support with academic, personal life, or mental health issues.
Project name: **Cigarette cleanup campaign** Description: The Student Union of the Faculty of Engineering and Information Technology at the University of Pécs organized a cigarette butt cleanup on 8th Mayunder the stairs of the Boszorkány Street Dormitory.
Project name: **Beginning of the World: The Search for the Good Life in the Age of Ecological Crisis** Description: On 15th November 2024, at 6:00 p.m., the College for Sustainable Development of the UP, the Contemporary Challenges Research Center of the Faculty of Humanities and Social Sciences, and the Pécs Community Foundation organized a public event at Reggeli. The guest was human ecologist András Takács-Sánta, who was interviewed by Judit Farkas from the Department of Ethnology and Cultural Anthropology. The discussion focused on his book *“Beginning of the World: The Search for the Good Life in the Age of Ecological Crisis”* exploring its aims, his related work, and the role of communities in the ecological crisis.

Project Name: **Workshop for the Nevetnikék Foundation**
Description: The Student Union of the Faculty of Engineering and Information Technology at the University of Pécs visited the Nevetnikék Foundation for a cheerful workshop where eco-friendly toys were created. These toys were placed in treasure chests at various children's hospitals, allowing young patients to choose a favorite piece to give them courage and patience during examinations and treatments. The Student Union expressed gratitude for the opportunity and emphasized the foundation's dedicated and invaluable work, which fully deserves support.

- **National collaboration**

The Virology National Laboratory (VNL)
The primary research area of the The Virology National Laboratory (VNL is the study of viruses transmitted from animals to humans. Currently, within the national laboratory, four thematic research groups fulfill the comprehensive investigative needs of the era of epidemics and global pandemic preparedness. In addition to basic research, the research group participates in numerous applied research projects aimed at developing and testing tests applicable in medical and patient care practice, potentially antiviral agents, as well as developing and applying diverse epidemic prevention and investigation technologies.
The laboratory's highlighted goal is also to coordinate virological research related to epidemic protection in Hungary and to organize the domestic research network. This enables a new applied virology that, in the age of epidemics, competes adaptively through continuous application and development of modern technologies in preventing, investigating, and combating epidemics, and in better understanding the mechanisms of already known viral infections.
A key task is serving society, state bodies, and industrial stakeholders with expert activities and making broad professional use of the testing opportunities provided by the BSL-4 research laboratory.
Through its capacities and geographical location, the Virological National Laboratory operates beyond our country's borders as a regional center for research, biosafety, and knowledge transfer across the Balkans and the entire Carpathian Basin.

Collaborative Clinical Trials
08/07/2024
A strategic cooperation agreement focusing on clinical trials was signed last November between MSD Pharma Hungary Ltd. and the University of Pécs. This collaboration aims to provide patients with earlier access to innovative therapies and to accelerate the launch of clinical trials.
According to the agreement, the two organizations will hold biannual meetings to discuss ongoing clinical trials, their results, and any challenges encountered, in order to enhance the success of these goal-oriented research studies.
The first such meeting took place on June 11 2024.
Currently, 41 clinical trials are underway at the University of Pécs, sponsored by MSD Pharma Hungary Ltd., with a total of 64 patients participating to date. Approximately three-quarters of these trials focus on oncological diseases, while the rest target cardiovascular conditions.
As part of the strategic cooperation, MSD Pharma Ltd. will offer internship opportunities to final-year and/or penultimate-year students of the Medical School (ÁOK) and the Faculty of Pharmacy (GYTK) at the University of Pécs. These internships will run for an indefinite period, with a weekly commitment of 20 hours.
To maintain and further enhance its existing competitiveness in the field of clinical trials, the University of Pécs also aims to simplify and accelerate the contracting process among other things, by introducing electronic signatures.

The Regional Mental Health Care has been given a deserved place

15/02/2024, UnivPécs

The Psychiatric and Addiction Care Provider and Clinic of the Department of Psychiatry and Psychotherapy of the Clinical Center of the UP was finished with a slightly more than half a billion HUF, and was officially opened on 14 February, the day of St. Valentine, the patron saint of lovers, the mentally ill and people suffering from epilepsy.

The staff of the Clinical Centre occupied the Rehabilitation Centre in 2015, where a new 300 m2 clinical unit was built on a raised floor to help people with serious chronic psychiatric illnesses such as schizophrenia, depression and dementia, among others, to recover and improve their living conditions.

The project, coordinated by the National Directorate General for Hospitals and implemented in a consortium partnership between the Universities of Pécs, Szeged and Debrecen, has resulted in the renovation of thirty-four psychiatric care units, three new care units and four new day therapy units linked to psychiatric outpatient care nationwide, with a total EU funding of HUF 4.724 billion. As a result of the development, patients requiring psychiatric or addiction care can now receive effective help, the infrastructure improvements will make the work of psychiatric care professionals more comfortable, and the free trainings provided during the project will further improve professional competence.

Thanks to the project, the The Psychiatric and Addiction Care Provider and Clinic of the Department of Psychiatry and Psychotherapy of the Clinical Center of the UP will move from the Nyár Street site to the new building constructed at Rákóczi Street 2. The ceremonial opening was addressed by Dr. Péter Takács, Minister of State for Health, Dr. Péter Hoppál, Government Commissioner, Dr. József Bódis, chairman of the board of the Foundation that maintains the University of Pécs, Dr. Attila Miseta, Rector of the University of Pécs, Dr. Andor Sebestyén, President of the Clinical Centre of the University of Pécs and Dr. Tamás Tényi, Director of the Department of Psychiatry and Psychotherapy of the University of Pécs.

Dr. Péter Takács, State Secretary for Health, highlighted that mental health is so important that it is at the centre of the government's interest, and mental health is one of the priorities of the Hungarian Presidency in the field of health in preparation for the upcoming European Union Presidency.

"We would like to particularly focus on the mental and spiritual health of youth and the impact of environmental changes on mental health"- said State Secretary Péter Takács, who then gave a brief overview of the numerous regional developments and investments of the past 10 years. As he said, these developments are for the benefit of all patients in Baranya County. In his speech, the State Secretary for Health also directly addressed the health employees working in the new department: "I wish for the colleagues to use this beautiful building that provides a proper environment for the healing of the patients, for many years to come. The work you do requires a very strong mental stamina. I hope for you to keep this mental stamina."

Dr. Péter Hoppál, Government Commissioner, said that the new Psychiatric and Addiction Care Provider and Clinic of the Clinical Center is a very important element of healthcare, as thousands of people in Hungary are affected by serious, chronic psychiatric illnesses, such as schizophrenia, depression and dementia.

Statistics show that around a quarter of the population suffers from some form of minor, moderate or severe psychiatric illness, that is why it is important to continuously improve the inequalities in the care network in the country, and this project is a milestone in that.

"No amount of resource and allocations are too much to keep this very serious social task in control, so that we can give professionals all the help they need to provide the maximum safety and quality of care to the people living here" - underlined Dr. Péter Hoppál, Government Commissioner.

He also emphasized that the government has supported and is supporting the development of Debrecen, Szeged and Pécs as priority centres, as it is its primary obligation.

"And we, as citizens of Pécs and Baranya, can say that we have finally reached the point where the infrastructure we see is of truly European quality" – added the government commissioner.
Dr. József Bódis, chairman of the board of the Foundation that maintains the UP, said that the strategy and certain emphases of health care are different today than they were 10 years ago, when the focus was on diagnostics and treatment.
"What we call care has become more and more strengthened. This is of particular importance in relation to mental illnesses, since it is very likely that surgery is not necessary, that a drug or combination of drugs is not enough, but that a close contact between the caring professionals and the patients must be established. This requires an appropriate infrastructural environment, and I think it is hard to imagine anything better than that" - said Dr József Bódis.
Although there were critics of the project, there were many who trusted and believed in its realisation, said Dr Andor Sebestyén, President of the Clinical Centre of the UP. He said that it was a great improvement for patients, who "will be able to recover in a new environment, where they will have the necessary bed and staff conditions for their recovery, through staff who will now be able to carry out their daily tasks in a dignified place. I wish all of us lots of strength and health to be able to treat our patients in the right way."
The speakers, the department and the press were guided around the new building by Dr. Tamás Tényi, Director of the Psychiatric and Psychotherapeutic Clinic of the Clinical Centre of the UP.
The new care centre provides care for more than 2,500 patients receiving psychiatric care and approximately 5,500 patients receiving specialized psychiatric care annually, where patients can come from anywhere in Baranya County.
In the new department, 3-3 psychiatrists and clinical psychologists, as well as 1-1 psychiatric nurse, registered nurse and social worker help with the treatment and cure of patients.
The project was implemented within the Széchenyi 2020 program, with the support of the European Union, with the application code EFOP-2.2.0-16-2016-00008.

HALF A BILLION HUNGARIAN FORINTS FOR ROBOT-ASSISTED LABORATORIES
07/06/2024, UnivPécs
The University of Pécs will receive 500 million Hungarian forints in funding to develop their rehabilitation equipment infrastructure – announced the State Secretary for Innovation and Higher Education of the Ministry of Culture and Innovation on 6 June 2024 in Budapest.
The establishment of robot-assisted rehabilitation laboratories currently represents the peak of innovation in healthcare and rehabilitation; therefore, the government is allocating 500 million Hungarian forints to develop this field. Balázs Hankó emphasised that the aim is for “the same technology and techniques to be available to patients and the doctors and healthcare professionals treating them” at all four Hungarian medical training centres.
The funding comes from the Self-Financing Fund (Önerő Alap), which provides background support for such research equipment development projects; to date, 56 projects at 14 universities have received funding; now, the University of Pécs will receive 500 million Hungarian forints for the procurement of robot-assisted rehabilitation equipment.
Dr Andor Sebestyén, director-general of the Clinical Centre of the University of Pécs, explained that these new, modern technological devices may shorten what are often lengthy rehabilitation periods and increase the effectiveness of therapies. In addition, they will play an important role in education and further training, as students will become familiar with the most modern technologies.

The title of Excellent Research Infrastructure
10/12/2024, UnivPécs

The National Laboratory of Human Reproduction (NLHR) of the University of Pécs has been awarded the title of Excellent Research Infrastructure, granted by the National Research, Development and Innovation Office (NRDI Office). This title recognises those research infrastructures that are outstanding not only on a national but also on an international level, and whose scientific achievements have a significant impact on the world. Gábor L. Kovács, head of the NLHR research group and director of research at the János Szentágothai Research Centre, spoke about the achievements of the laboratory, the reproductive challenges of the modern world, and future plans of the laboratory.

Reproduction today presents increasing challenges, as many factors influence fertility. Social changes, health issues, lifestyle factors, and the postponement of childbearing all contribute to the declining birth rates in the developed countries of the world, including Hungary.

“The average age for starting a family has now shifted by nearly ten years compared to previous generations. While social norms are changing, biological capacities cannot keep up with this trend. Female fertility declines drastically after the age of 40, and this is also a significant issue for men,” explained Gábor L. Kovács.

The goal of the National Laboratory of Human Reproduction is to find innovative solutions to these problems. Over the past four years, they have established an interdisciplinary research group bringing together gynaecologists, urologists, immunologists, geneticists, and biologists.

“This team is capable of both identifying clinical problems and solving them using the most advanced scientific technologies. By combining medical expertise and scientific innovation, we work to offer new hope to couples struggling with reproductive difficulties,” said the researcher.

The laboratory has achieved several breakthroughs in the field of reproductive research over the past four years, some of which have already led to patents:

Embryo viability assessment: Using an innovative method, the chemical composition of tiny vesicles released by embryos is analysed. This information helps doctors select the most viable embryo, increasing the success rate of artificial fertilisation.

Red light technology: Their research has shown that light exposure significantly influences embryo development. The lab uses red light, which minimises harmful effects and thereby improves implantation chances.

Innovative tissue analysis techniques: New methods of protein and lipid analysis support the diagnosis of reproductive issues and help optimise artificial fertilisation procedures.

The international partners of the university include researchers from Israel, Italy, and Austria, who collaborate on joint projects to advance reproductive research. With the Austrian partners, for example, members of the laboratory are studying the relationship between immune disorders and reproduction, while with Italian researchers they are analysing the long-term outcomes of IVF programmes. Future plans include further integration of artificial intelligence, particularly in the fields of genetic analysis and imaging.

“AI offers the possibility to process vast amounts of data and to make more accurate decisions, for instance in embryo selection. This could open a new era in reproductive research,” emphasised the professor.

The laboratory maintains close collaboration with the Gedeon Richter Pharmaceutical Company, which has developed a comprehensive innovation strategy.

“Richter focuses on three key areas: inflammatory diseases of the nervous system, ageing research in primates, and human reproduction. In the field of human reproduction, the cooperation is particularly close, as gynaecological products play a prominent role in the portfolio of Richter. Our aim is to contribute to market innovation within ten years with our own gynaecological drug developments,” said Gábor L. Kovács.

The collaboration between the University of Pécs and Richter is of utmost importance not only from a research perspective but also in strengthening the relationship between industry and academia. At the same time, the laboratory faces major challenges due to limited international funding opportunities. “Our young researchers feel cut off from international opportunities, yet

these connections are essential for scientific progress. This needs to change," warned Gábor L. Kovács.
The Excellent Research Infrastructure title may open up new opportunities, but long-term sustainability of the lab will require additional resources:
"This recognition is not only a source of pride but also a responsibility. It motivates us to continue our research and remain at the forefront of global science," concluded the director.

The Launch of the Hungarian National Genome Programme has been Initiated at UP
In the past few years, the University of Pécs Szentágothai Research Centre launched the creation of a genomics and bioinformatics centre and research infrastructure that provides most useful services and products for healthcare, agriculture, university education, research and industrial developments at maximum cost effectiveness. Thanks to the funding the project received, they were able to purchase the Illumina NovaSeq sequencing equipment, using it to establish a complex system that was only available in Vienna and Prague in Central Europe so far. The Szentágothai Research Centre has initiated the launch of the all-encompassing, synchronised and multidisciplinary Hungarian National Genome Programme, that would also serve national economic purposes. This programme is unique not only in Hungary, but also in the Eastern-Central European region as well, and has various advantages: both for the health of society, and for scientific development and economic stability. The goal is to determine the genetic characteristics of the Hungarian population, development of disease-specific genetic panels and promoting the identification of new pharmaceutical targets.

New Bat Virology Research Begins at the UP
25/04/2024
The Virology National Laboratory (VNL) of the University of Pécs (UP) has joined a consortium researching viruses found in bats. The internationally recognized project, known as "One-BAT," is supported by a non-refundable grant of HUF 126,574,700 from the National Research, Development and Innovation Fund of the Ministry of Culture and Innovation, under the funding program 2020-2.1.1-ED. The initiative focuses on studying bat viruses through the lens of the "One Health" approach.
The project, registered under the ID 2020-2.1.1-ED-2023-00256, is implemented through the collaboration of 13 international partners. Its aim is to study viruses found in European bats with a cross-disciplinary consortium involving ecologists, virologists, and modelers. OneBAT seeks to explore the complex interactions between natural viral hosts, occasional host organisms, pathogens, and the environment — relationships that are key to understanding how infectious diseases emerge. Beyond the concrete insights from the research, OneBAT also aims to develop innovative methods and procedures that enable rapid identification of new infectious diseases and the formulation of effective responses.
In addition to developing rapid protocols for serological and molecular biological testing of animals involved in the research, harmonized, long-term disease ecology surveys are also being conducted across Europe.
As part of the OneBAT program, receiver antennas are being installed in several European countries, including Hungary, to help study the behavior and migration of flying animals. This research also contributes to the protection of increasingly rare bat species, which are under strict conservation measures.

The Digital Well-being Program and the University of Pécs signed a cooperation agreement
In order to promote the digitization of the industry, the parties cooperate in several areas within the framework of the agreement: such as digital healthcare, data wealth and data analysis, digital sports, artificial intelligence, examination of the health and social effects of 5G, fintech and

blockchain topics, digital awareness, digital consumer protection, data-driven agriculture, or drone projects. Joint projects are initiated in connection with regional economic analyses, impact assessments, corporate competitiveness investigations, and in the field of digitalization related to innovation and research. The projects include joint studies, support for theses and doctoral dissertations, the definition of doctoral research topics, a special college, the organization of a digital theme week, and support for research activities.

Mosquito monitor
A joint project of the Ecological Research Center and the University of Pécs, in which the population is asked for help in mapping invasive hip mosquitoes.
Following the example of the University of Pécs, the hospital in Székesfehérvár will establish a new center

The Second National Laboratory at UP is Open!
The minister said, 18 laboratories are included the current structure, out of these 18, two are in Pécs. These laboratories concentrate on topics of industry and digitalization, social and environmental safety, culture and family and healthcare.

- **Global collaboration**

New dimensions in health sciences
19-20/09/2024, UnivPécs
A two-day scientific conference and symposium was organized by the Institute of Emergency Care, Health Education and Nursing Science at the Faculty of Health Sciences of the University of Pécs on 19–20 September 2024 titled “New dimensions in health sciences, with special regard to the development of healthcare” at the Granary Visitor Information Centre. The project was implemented with the co-funding by the governments of the Czech Republic, Hungary, Poland and Slovakia, and the International Visegrád Fund through the Visegrád Foundations.
The event consolidated three high-quality professional conferences: the 2024 XVI International Nursing Science Symposium, hosted in Pécs for the first time this year, the XVIII Pécs Emergency Days, and the II International Central European Simulation Workshop-Conference. The aim of the program series is to provide an intellectual workshop for healthcare professionals and those interested in science, and to offer a forum for the nursing and other healthcare professional communities from the Czech Republic, Hungary, Slovakia and Poland to share knowledge and experience through plenary and sectional sessions. The main financial supporter of the professional event is the International Visegrád Fund, alongside the Ministry of Interior’s State Secretariat for Health and numerous other sponsors.
In his opening speech, Dr József Betlehem, Vice-Rector for General, Strategic and Relations Affairs at the University of Pécs, drew the participants’ attention to the fact that the conference venue is located directly next to the Hungarian university founded first in 1367. “It is a great honour that this year the University of Pécs could host this event” - said Dr Betlehem, adding that he hopes the time spent here will prove useful to every colleague.
From the Ministry of Interior, Judit Bidló, Deputy State Secretary responsible for professional direction of healthcare, greeted the audience and highlighted that it was a special pleasure to be able to do this during Hungary’s current Presidency of the Council of the European Union.
Attila Péterffy, Mayor of Pécs city with county rights, expressed that it is an honour not only for the University of Pécs but for the entire city to host this international conference. He explained that the university’s relationship with Pécs is very special, as the institution plays a leading role in the region not only in education but in research-development and innovation, the continuous improvement of the city.
“Our close cooperation with the university aims to make Pécs appealing to sustainable and forward-looking investments and developments” - underlined the mayor. He also spoke about

Pécs's Climate-neutral and smart city mission, encouraging participants to use their time here not only for professional development and networking but also to get to know the city's historical and cultural heritage.

Partnership Agreement with the Gedeon Richter PLC. Pharmaceutical Company
07/12/2024, UnivPécs
In a ceremonial event, held at the Richter Centre, the institutions joining the Richter Innovation Ecosystem signed the partnership agreement, which aims to strengthen innovation, explore new ideas, and harness them within three research networks (Neuroinflammation, Neuropsychiatric Translation, and Human Reproduction).
In line with its corporate strategy, Richter began in 2022 to develop a new collaborative innovation structure to address previously unmet medical and societal needs. It organised networks made up of working groups from universities, research institutes, and start-up companies, bringing together top researchers in their fields who align with the Richter's innovation goals to jointly ensure the long-term sustainability of pharmaceutical manufacturing and R&D in Hungary.
"Targeted stimulation of research and development linked to the health economy not only strengthens the national sovereignty and economy of the country but can also result in the creation of internationally marketable products and services. In this spirit, the Government is committed to supporting the mission of Gedeon Richter, which provides space for pioneering pharmaceutical research and innovation processes that may ultimately lead to health industry developments based on domestic high technology, patents, and therapeutically and socially beneficial outcomes," said Balázs Hankó, minister for ctherapeutically and socially beneficial outcomes," said Balázs Hankó, minister for culture and innovation.
Minister Balázs Hankó and Chief Executive Officer Gábor Orbán
In recent years, a new demand has emerged in the field of university and academic cooperation. Recognising this, Richter established the Richter Innovation Ecosystem, currently consisting of three Networks, based on the practice of "open innovation" widely used in the world of RDI, which is rooted in research freedom.
"For the Richter, it is crucial to utilise knowledge and resources beyond its own walls in the course of research and development. The innovation ecosystem just created provides a framework in which the best university and academic researchers can collaborate with the industrial sector to address previously unrecognised medical, societal, and market needs, without compromising their innovative approaches or publication freedom. All this can be done in a top-tier laboratory environment, using the most advanced tools and technologies. We are convinced that the Richter Innovation Ecosystem established today will give rise to innovative solutions that can positively impact people's quality of life and the functioning of society," explained Gábor Orbán, CEO of Gedeon Richter Plc.
The signees, from the left:
Dr Gábor JUHÁSZ, managing director, InnoScience Hungary Ltd.;
Prof. Dr Ferenc BÁNHIDY, vice-rector general, Semmelweis University;
Prof. Dr László BORHY, rector, Eötvös Loránd University;
Dr Péter SÓTONYI, rector, University of Veterinary Medicine;
Prof. Dr László BUDAY, director-general, HUN-REN Research Centre for Natural Sciences;
Gábor ORBÁN, CEO, Gedeon Richter Plc.;
Balázs HANKÓ, minister for culture and innovation;
Prof. Dr Ildikó BÁCSKAY, dean, University of Debrecen;
Prof. Dr Attila MISETA, rector, University of Pécs;
Prof. Dr Márta SZÉLL, vice-rector for strategic planning, University of Szeged;
Dr István Ferenc NAGY, director-general, HUN-REN Biological Research Centre, Szeged;
Prof. Dr Beáta SPERLÁGH, director, HUN-REN Institute of Experimental Medicine;

Szilárd PÉRCSI, head, Innovation and Grant Office, Gedeon Richter Plc.;
Dr Zsolt SZOMBATHELYI, research advisor, Gedeon Richter Plc.
The institutions represented at the ceremonial signing of the partnership agreement were:
University of Veterinary Medicine – Budapest
University of Debrecen – Debrecen
Dunamenti REK Reproductive Centre – Budapest, Győr, Kaposvár, Tapolca
Eötvös Loránd University – Budapest
HUN-REN Institute of Experimental Medicine (KOKI) – Budapest
HUN-REN Biological Research Centre (SZBK) – Szeged
HUN-REN Research Centre for Natural Sciences (TTK) – Budapest
InnoScience Ltd. – Budapest
University of Pécs – Pécs
Gedeon Richter Plc. – Budapest
Semmelweis University – Budapest
University of Szeged – Szeged

International Neuroscience Conference
25-26/01/2024
A prominent scientific event, the International Neuroscience Conference, began on January 25, 2024, in the Endre Grastyán Theoretical Building of the PTE Medical School. At the two-day, English-language, interdisciplinary symposium, several renowned speakers will present the latest international and domestic research results to more than 400 interested parties. At the prestigious event, the participants were able to gain insight into the issues of neuroscience and philosophy through the plenary lectures of Dr. László Lénárd, Rector Emeritus of PTE, neurobiologist, Dr. György Buzsáki, famous brain researcher, honorary doctor of PTE, Dr. Christoph Koch, senior researcher, Dr. Joseph LeDoux, professor at New York University, and János Boros.

Project title
GreenPee – An innovative Physical Education model for sustainable personal and environmental health
Project ID
22320236
Project start date
01.01.2024
Project end date
30.06.2025
Coordinator
University of Pécs (HU)
Partner Organisations
Catholic University in Ruzomberok (SK), Charles University (CZ), University of Physical Education in Krakow (PL)
General description
GreenPE will create, establish, and validate the effects of an innovative physical education (PE) curriculum towards environmental andhealth sustainability. Experts will deliver low-energy-cost outdoor physical activity to the general university student population to targetmental and physical fitness, and health behavior, of which quantitative and qualitative pilot data will be collected.

Green Physical Education for Sustainable Health

Improving the mental and physical fitness of university students through outdoor physical activity is the aim of the project that the Institute of Sport and Physical Education of the Faculty of Science of the University of Pécs participates in alongside a Polish, a Czech, and a Slovakian university.
The GreenPE, meaning green physical education project, aims to implement an innovative model of physical education in higher education, focusing on environmental and health sustainability.
From each partner, 15 university students will receive an outdoor exercise plan, as well as nutritional and mental health counseling over the 20 weeks. Physical education teachers, fitness instructors and sports major student demonstrators, during the autumn semester of the 2024-25 academic year, will provide students with two outdoor P.E. sessions per week and one classroom lecture on the theory of fitness and outdoor physical activity.
At the beginning and end of the programme, participants' mental and physical health will be assessed.

Project title
EU PAL-COPD – A palliatív ellátás integrálására irányuló ICLEAR-EU beavatkozás értékelése az előrehaladott COPD-ben szenvedők és családtagjaikat ápoló személyek kezelésében.
Project ID
2020-2.1.1-ED-2023-00260
Project start date
01.01.2024
Project end date
31.12.2028
Coordinator
Vrije Universiteit Brussel (BE)
Partner Organisations
Stichting Radboud universitair medisch centrum (NL), Universiteit Gent (Be), Kobenhavns Universitet (DK), Universidade Católica Portuguesa (PT), Long Alliantie Nederland (NL), European Association for Palliative Care (BE)
Associated partners: Accelopment Schweiz AG (CH), European Respiratory Society (UK), Lancaster University (UK), King's College London (UK), European Lung Foundation (UK), University of Pecs (HU)
General description
The EU PAL-COPD is the first large-scale international trial, which goal is to systematically integrate palliative care in the treatment routine of people with advanced Chronic Obstructive Pulmonary Disease (COPD) in different healthcare systems in Europe. The ambition of EU PAL-COPD is to improve end-of-life care and well-being of life for millions of COPD patients and their families.
The EU PAL-COPD project, which is coordinated by the Vrije Universiteit Brussel, launched on 1 January 2024, and will be implemented by 13 organisations from seven European countries. On behalf of Hungary the Medical School of University of Pécs, Institution of Primary Health Care, Department of Hospice-Palliative Care is participating in the programme.
Palliative care provides specialised support for people with life-threatening diseases and aims to improve the physical, mental, social, and existential well-being of patients and their families. Traditionally, it has been used in the care of cancer patients in Europe, but its benefits are increasingly being recognised for non-cancer diseases as well. The early use of palliative care for non-cancer diseases, including COPD, is limited in EU countries, despite the fact that COPD is the third leading cause of death worldwide.
Through the implementation of a highly innovative non-pharmacological service model called ICLEAR-EU in different healthcare systems in Europe, the goal is to improve not only medical

care and physical well-being, but also prioritise a patient-centred and family-centred approach with advance care planning and shared decision-making.
The project will implement a clinical trial of the ICLEAR-EU intervention model between 2025 and 2027 in 18 hospitals in seven European countries (Belgium, the Netherlands, Denmark, Hungary, Portugal, the United Kingdom, and Switzerland). Doctors and researchers from University of Pécs are involved developing protocols and coordinating clinical trials in their home countries. Clinical trials will take place at three sites in Hungary: National Korányi Institute of Pulmonology and Palliative Care Expertise, University of Pécs, Dept. of Pulmonology and Palliative Care Expertise, and Komló Hospital, Dept. of Pulmonology and Palliative Care Expertise.
Funded by the Ministry of Culture and Innovation of Hungary from the National Research, Development and Innovation Fund.

Project title
WELLBEING - Promoting the wellbeing concept at medical and public sector of the Visegrad Region
Project ID
22310140
Project start date
01.06.2023
Project end date
30.11.2024
Lead Partner
University of Pécs, HU
Partner Organisations
Charles University, CZ
Comenius University Bratislava, SK - https://www.jfmed.uniba.sk/en/
Medical University of Gdansk, PL - www.gumed.edu.pl
General description
The most important determinants of competitiveness in the life of every organisation are people. Their well-being is a principal aim of the EU and the UN's 2030 Agenda for Sustainable Development. The importance of investing in health & social protection has also been recognised by the World Bank Group, the International Labour Organization, the IMF and the WHO. Well-being policy highlight the importance of ensuring access for social services, occupational health and safety, decent working conditions, equal opportunities, gender equality and social inclusion as measures to enable people to reach their full potential. Well-being plays a particularly important role at medical schools, where students and employees are even more exposed to stress. Medical education can directly contribute to the development of psychological distress in students, and this can lead to catastrophic consequences such as impaired academic performance and competency, burnout, medical errors and attrition from medical school. In addition, several studies have demonstrated that the personal example set by health professionals, has a significant impact on the attitudes and health behaviour of those they come into contact with. The project will therefore focus on ensuring the well-being of medical students (future doctors) and workers by developing a transnational mentoring programme and sharing experiences with the medical and public sectors. In the long term, the project will go beyond its target groups and will also contribute to improving the health awareness of the general population.
The well-being programme gives everyone the opportunity to maintain physical and mental health. As the results of a Faculty are largely influenced by the staff and students of the organisation, we want to give more opportunities to the citizens of the Visegrad region to shape this community together, giving space to community needs and ideas. The concept of well-being provides a vision for human resources development. The main goal is to ensure that people

working and studying in medical schools, health care institutions and social services administration feel proud and happy to work and learn, feel physically and mentally well as part of a community, and positively influence other people in their attitudes towards health. This good practice will be passed on to many other organisations and businesses of the VR.
Project partners:
Charles University
Comenius University Bratislava
Medical University of Gdansk
Project goals:
- supporting the well-being of the students, staff and citizens;
- facilitating the quality improvement of the environment of these communities;
- encouraging citizens to be proactive, work in synergy, innovate and experience creative joy.
Activities:
1, Sharing experiences of past programs at the kick-off event
2, Need assessment (physical infrastructure, community, environment)
3, Joint development of a transnational mentoring program
4, Joint online training, to appoint and train the mentors on the basis of the mentoring program
5, Disseminating results for wide range of stakeholders at closing event and via social media

Project title
IronSleep – Neuroimaging és viselkedési biomarkerek a korai stádiumban lévő Parkinson-kór progressziójának és a mögöttes mechanizmusok a vizsgálatában (IronSleep)
Project ID
2019-2.1.7-ERA-NET-2022-00046
Project start date
01.02.2023
Project end date
31.01.2026
Coordinator
University of Pécs
General description
Parkinson's disease (PD) is the second most common neurodegenerative disease with a steadily increasing incidence. PD is caused by abnormal protein and iron deposition, which starts years or decades before the first motor symptoms of the disease appear. Available drug treatments are only symptomatic, i.e. they cannot slow or stop the destruction of nerve cells. Although promising neuroprotective drugs are being developed, their disease-modifying effects are not proven. Indeed, the development of neuroprotective therapies for PD is largely hampered by the fact that by the time the first motor symptoms appear, nerve cell death is already extensive. Reliable identification of PD that has not yet produced clinical symptoms (preclinical and prodromal) is therefore a priority area of research for the development of neuroprotective therapies and for delaying or preventing the development of PD. The present international research aims to develop a procedure based on MRI imaging and electrophysiological methods and clinical features to reliably identify early and preclinical stages and to gain a better understanding of the pathophysiology of the disease.

Project title
CUPID - Cancer- Understanding Prevention in Intellectual Disabilities
Project ID
CA21123
Project start date
01.01.2023

Project end date
31.12.2026
Coordinator
Waterford Institute of Technology (IE)
General description
Cancer prevention is poorly understood among people with intellectual disabilities. CUPID is setting up a research agenda and knowledge base to improve this in the European Union and beyond.

Project title
3D-BioDegBone
Project ID
2022-1.2.7-EUROSTARS-2022-00003
Project start date
01.01.2023
Project end date
31.12.2025
Coordinator
BTECH Ltd. (TR)
Partner Organisations
Premet Kft. (HU), University of Pécs (HU)
General description
The aim of the collaboration is to develop and produce a new polymer-based bioactive additive manufacturing material for implantable cranio-maxillofacial (skull, face, and jaw) implants, mainly for children in need of such surgeries.

Project title
EuPRAXIA Doctoral Network
Project ID
101073480
Project start date
01.01.2023
Project end date
31.12.2026
Coordinator
Istituto Nazionale di Fisica Nucleare (IT)
Partner Organisations
Consiglio Nazionale delle Ricerche (IT), Instituto Superior Técnico (PT), Instrumentation Technologies, elektronska instrumentacija in produkti za procesiranje signalov, d.o.o (SI), (UP),Fyzikalni Ustav Av Cr V.V.I (CZ), Lunds universitet (SE), CIVIDEC Instrumentation GmbH (AT), Pécsi Tudományegyetem (HU)
General description
EuPRAXIA is the first European project that develops a dedicated particle accelerator research infrastructure based on novel plasma acceleration concepts and laser technology. It focuses on the development of electron accelerators and underlying technologies, their user communities, and the exploitation of existing accelerator infrastructures in Europe. It was accepted onto the ESFRI roadmap for strategically important research infrastructures in June 2021 as a European priority. To fully exploit the potential of this breakthrough facility, advances are urgently required in plasma and laser R&D, studies into facility design and optimization, along a coordinated push for novel applications. EuPRAXIA-DN is a new MSCA Doctoral Network for a cohort of 10 Fellows between universities, research centers and industry that will carry out an

interdisciplinary and cross-sector plasma accelerator research and training program for this new research infrastructure. The network focuses on scientific and technical innovations and on boosting the career prospects of its Fellows.

Project title
EIT Healthcare
Project ID
2021-1.2.1-EIT-KIC-2021-00005
Project start date
01.01.2023
Project end date
30.06.2024
Coordinator
Semmelweis Egyetem (HU)
Partner Organisations
Debreceni Egyetem (HU), E-GROUP ICT SOFTWARE Informatikai Zártkörűen Működő Részvénytársaság (HU), EIT Health Innostars Korlátolt Felelősségű Társaság (HU), GE Healthcare Magyarország Korlátolt Felelősségű Társaság (HU), Health Venture Lab Nonprofit Korlátolt Felelősségű Társaság (HU), Pécsi Tudományegyetem (HU)
General description
The aim of the project is for domestic KIC partners at different levels to build on the individual strengths of each partner and work together to maximise the potential of the EIT Health KIC by 2030, strengthening the domestic economy, competitiveness and the health ecosystem.

Project title
EuPRAXIA Preparatory Phase Project
Project ID
101079773
Project start date
01.11.2022
Project end date
31.10.2026
Coordinator
Istituto Nazionale di Fisica Nucleare (IT)
Partner Organisations
Consiglio Nazionale delle Ricerche (IT), Elettra Sincrotrone Trieste (IT), Agenzia nazionale per le nuove tecnologie, l'energia e lo sviluppo economico sostenibile (IT), Università degli Studi di Roma "La Sapienza" (IT), Università degli Studi di Roma "Tor Vergata" (IT), Commissariat à l'énergie atomique et aux énergies alternatives (FR), Centre national de la recherche scientifique (FR), Thales Las France SAS (FR), Deutsche Elektronen-Synchrotron DESY (DE), Ferdinand-Braun-Institut, Leibniz-Institut für Höchstfrequenztechnik (DE), Forschungszentrum Jülich GmbH (DE), Helmholtz-Zentrum Dresden-Rossendorf HZDR (DE), Ludwig-Maximilians-Universität München (DE), Wigner Fizikai Kutatóközpont (HU), Szegedi Tudományegyetem (HU), Associação do Instituto Superior Técnico para a Investigação e Desenvolvimento (PT), Fyzikalni Ustav Av Cr V.V.I (CZ), Organisation européenne pour la recherche nucléaire (CH), Institute of Accelerating Systems and Applications (GR), Consorcio para el diseño, construcción, equipamiento y explotación del Centro de Láseres Pulsados Ultracortos Ultraintensos (ES), The Hebrew University of Jerusalem (IL), Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e. V. (DE), Consorcio para la Construcción, Equipamiento y Explotación del Laboratorio de Luz Sincrotrón (ES), Pécsi Tudományegyetem (HU)

General description
EuPRAXIA is a distributed, compact and innovative accelerator facility based on plasma technology. It has been selected for the 2021 Update of the ESFRI Roadmap. In its first phase, its consortium of 51 institutes and industry partners will construct an electron-beamdriven plasma accelerator in the metropolitan area of Rome, thus bringing innovation, potential for spin-off companies, state-of-the art scientific applications and a vibrant international user community to the middle of Italy. In its second phase, EuPRAXIA will build one laser-driven plasma accelerator at a site to be chosen between several options in Europe. EuPRAXIA will serve users in ultra-fast science, e.g. on high-resolution medical imaging, deeply penetrating positron annihilation spectroscopy for materials and with Europe's most southern free-electron laser (FEL). It will offer fascinating capabilities for research on biomolecules, viruses and microscopic processes. EuPRAXIA will thus be a transformative step in the development of ultra-compact accelerators and applications. The Preparatory Phase project EuPRAXIA-PP will prepare its full implementation.

Project title
PRAGMATICK (CA21170) - Prevention, anticipation and mitigation of tick-borne disease risk applying the DAMA protocol
Project ID
2020-2.1.1-ED-2024-300
Project start date
18.10.2022
Project end date
17.10.2026
General description
Emerging infectious diseases (EIDs) represent a national security threat for every country, exacerbated by climate change, human population expansion, urbanization, and globalization. Based on theoretical expectations previously EIDs were thought to be rare and impossible to anticipate because they require novel genetic mutations to infect novel hosts. A new conceptual framework has been developing for nearly 40 years and has recently been articulated in a manner that leads directly to a protocol for taking proactive or anticipatory steps in coping with EIDs, especially those numerous high probability/low impact pathogens. The framework is called the Stockholm paradigm, which shows that a major trigger of emerging disease, now and in the past, has been climate change. The PRAGMATICK COST action aims to disseminate knowledge and promote the application of the Stockholm paradigm in order to anticipate and mitigate disease risk associated with the presence and spread of ticks and tick-borne pathogens (TBPs) under anthropogenic pressure and changing climate. This research network will apply the comprehensive and highly focused DAMA (Document, Assess, Monitor, Act) protocol that allows to "anticipate to mitigate" emerging diseases. The main focus is on urban tick and TBP hotspots and the spread and establishment of ticks and TBPs. PRAGMATICK will find new ticks and tick-borne pathogens before they find us. By applying citizen science and supporting capacity building in the domain of tick and tick-borne disease prevention, the Action will eventually lead to new and improved insights in the potential threats related to this important group of vectors across Europe.

Project title
DATA-EDIH – Hungarian DATA-EDIH
Project ID
101083971
Project start date
01.10.2022

Project end date
30.09.2025
Coordinator
Neumann János Nonprofit Kft.
Partner Organisations
Budapesti Műszaki és Gazdaságtudományi Egyetem, Debreceni Egyetem, ELTE-Soft Kutatásfejlesztő Nonprofit Kft., HTENET Innovációs Nonprofit Kft., Központi Statisztikai Hivatal, Semmelweis Egyetem, Nemzeti Adatvagyon Ügynökség Kft.
General description
The Hungarian DATA EDIH actively facilitates the digital transformation of SMEs, small mid-caps and public sector organisations in Hungary, with a general focus on data related services and industrial focus on the health industry. The consortium represents high academic and practical technical/business development competence, wide domestic and international network and mature EU grant and PM experience. The most challenging DESI dimensions for Hungary remain the Integration of digital technology and digital public services, where attitude, mindset and competence obstacles occur besides financial ones. DATA EDIH will provide trainings, technical and financial services on both catching up and advanced levels. The activity of DATA EDIH will be built on existing elements of the domestic innovation ecosystem.

Project title
PAL-CYCLES - PALliative Care Yields Cancer welLbEing Support
Project ID
101057243 (HORIZON-HLTH-2021-DISEASE-04-01)
Project start date
01.09.2022
Project end date
31.08.2027
Coordinator
Stichting Radboud universitair medisch centrum (NL)
Partner Organisations
Universitätsklinikum Bonn (DE), Uniwersytet Zielonogórski (PL), Fundatia Hospice „Casa Sperantei" (RO), European Association for Palliative Care (BE), Universidade Católica Portuguesa (PT), Universidad de Navarra (ES), European Cancer Patient Coalition (BE, University of Pécs (HU)
General description
The key objective of the project is to develop, implement and evaluate a novel transitional palliative cancer care programme for patients with cancer, with an intervention that aims for a smooth transition from the hospital to community-based care in the final months of life.
Many patients with advanced cancer in the final phase of life leave the hospital without continuity of information, and certainty about further treatment and care provision. Often, communication between healthcare providers in different settings is suboptimal and this leads to poor continuity and coordination of care, negatively impacting the quality of life of the patient and increasing preventable hospital admissions in the final phase of life.
The Solution is the PAL-CYCLES programme: a transitional palliative care programme for patients with advanced cancer, adaptable to local cultures and healthcare systems.
The project intends to develop, adapt, implement, and evaluate the PAL-CYCLES programme in seven European countries using a stepped wedge randomized controlled trial design. Patient, relatives, and health care provider experiences, as well as ethical and equity issues will be addressed with qualitative methods.

Project title
V4 -Supporting mental health in organisations: developing future business leaders
Project ID
22210016
Project start date
01.06.2022
Project end date
31.05.2024
Coordinator
University of Warsaw (PL)
Partner Organisations
Prague University (CZ), Comenius University Bratislava (SK), University of Pécs (HU)
General description
To develop innovative and cost-efficient solutions for mental health care in the post-covid times, we need to get the businesses involved. We address this issue by developing a series of workshops, focusing on mental health in organizations. To scale our initiative, we offer a 'trainthe- trainer' program, preparing future trainers to conduct workshops in other business schools in V4 countries, and we onboard stakeholders (academics, managers, entrepreneurs). As a result, we equip future leaders with the necessary skills and attitudes to respond to mental health.

Project title
IDEaL - Digital Language Learning for the Healthcare Sector
Project ID
2021-2-AT01-KA220-VET-000049281
Project start date
01.05.2022
Project end date
30.04.2024
Coordinator
DATEY Eyrich GmbH (DE)
Partner Organisations
uugot.it GmbH (AT), Topcoach s.r.o. (SK), University of Pecs (HU)
General description
Background
A survey conducted with the main Educational Health Organization in Austria showed that roughly 50% of initial applicants for classes leading to a qualification in the healthcare sector do not succeed in their training due to a lack of adequate language skills (German). An additional problem is that 2nd and 3rd generation immigrants - as well as other non-native speakers - have neither the appropriate level of language nor the vocabulary to pursue their (further) education in the healthcare sector and obtain the necessary qualifications for entering the workforce. In Germany, the situation is comparable; 56% of unqualified healthcare workers have a migration background and 27,3% of these come from Eastern-European countries (Federal Statistical Office, Institute for Adult Education, Federal Employment Agency). Health tourism, with people seeking affordable healthcare e.g. in Eastern European Countries, and German-speaking students wishing to study or train in non-German-speaking countries are further considerations that underline the urgent need for improved, vocation-specific language skills for the healthcare sector.
Objectives
This project develops top-notch instruments and methodologies in coordination with the partner institutions to forward the innovation-led transformation process of the learning culture of VET

institutions. As an output of the project VET trainers will be equipped with a digital learning platform which not only comprises up to date training methodologies but is interlinked/connected to a language learning tool that has been awarded multiple times and complies with the zeitgeist. The platform can be used in blended learning settings and all developed tools will be accessible anytime and anywhere due to their complete digital finish. The IDEAL project will bridge the gap between recognized language skill deficits (in German) and current VET training/teaching/counselling methods in the healthcare sector. It will do this by developing an innovative online language learning approach, consisting of learning videos (using interactive subtitles) and an interactive glossary, which will be a part of a digital learning platform, and secondly, a teacher's handbook with practical and methodological guidelines for the best usage of the videos, glossary and other materials collected. Additionally, it aims to offer digital learning tools to students and trainees in neighbouring countries (Hungary, Slovakia, Germany) so that they can improve their German language skills and enter the healthcare sector. Accordingly, the project aims to contribute to 1) raising the practical skill level of VET trainers/teachers/counsellors, and 2) improve German language skills and labour market integration of trainees in the healthcare sector. Furthermore, it seeks to promote the use of innovative digital learning tools for language proficiency and skills training, and transfer knowledge in this area among countries. Finally, the project aims to contribute to better employability for people from partner countries wishing to train/work in the healthcare sector in German-speaking countries.

Project title
TWAC - THz Wave Accelerating Cavity for ultrafast science
Project ID
101046504
Project start date
01.04.2022
Project end date
31.03.2026
Coordinator
Centre national de la recherche scientifique (FR)
Partner Organisations
ITEOX (FR), Deutsche Elektronen-Synchrotron DESY (DE), University of Pécs (HU)
General description
Particle accelerators are devices of primary importance in a large range of applications such as fundamental particle physics, nuclear physics, light sources, imaging, neutron sources, transmutation of nuclear waste. They are also used every day for cargo inspection, medical diagnostics and radiotherapy worldwide. Electron is the easiest particle to produce and manipulate, resulting in an unequaled energy over cost ratio. However, there is an urgent and growing need to reduce the footprint of accelerators in order to lower their cost and environmental impact. We propose developing a new structure sustaining the accelerating wave pushing up the particle energy, which will enable democratizing the access to femtosecond-scale electron bunch for ultrafast phenomena studies. This light and compact accelerator based on its size and weight will for example enable it to be mounted on a robotic arm, to move around a patient for medical applications or material inspection for industrial applications.

Good practices for Students with Disabilities
04/2024
The first Youth Integration Lab program of the EDUC alliance was held in Paris in April, 2024, hosted by Paris Nanterre University. The event aimed to improve the lives of students with disabilities. One of the precursors to the event was a conference held in Pécs.

Bendegúz Pisch, a visually impaired student from the Faculty of Humanities of the University of Pécs, represented the university at the event. For international travel, it is recommended that visually impaired participants be accompanied by at least two companions. This made it possible for Bendegúz Pisch to be accompanied by Csaba Magdali, head of the Support Service, and Márk Macanko, co-chair of the Collegium for Social Inclusion.
The event focused mainly on solving problems faced by people with disabilities and looking into the institutions and systems that serve them. It also paid special attention to the university and academic environment where some unique issues come up that are less common elsewhere. There were two programs running at the same time. One was for experts such as PhD students, university teachers, disability coordinators and others who already knew a lot about the topic. The other was for students who care about these issues and tried to find solutions through interactive workshops.
EDUC provides an opportunity for students with disabilities to participate in partial study programs within Erasmus.
What was discussed during the three-day event?
On the first day, experts presented various situations and case studies related to the main topic of the conference. They talked about invisible disabilities such as dyslexia, the creation of accessible spaces, and care systems for people with mental illnesses.
On the second day, they participated in workshops. Márk and Csaba attended different workshops separately. Csaba's workshop was based on a role-playing game where he had to solve various accessibility problems from different perspectives. Through these role-playing exercises, they were able to model the difficulties that may arise when trying to make a project accessible and see how the different stakeholders try to promote their various interests. The event concluded with a joint summary afternoon. First, the students presented their findings, and then the experts responded to the solutions presented in the presentations.
The program included a lot of information and conclusions that can greatly help in organizing a project related to the topic.
Some aspects came up that affect not only people with disabilities. For example, when making education and teaching materials accessible, how research results can be shared with people in simpler forms. At the event, they also met an organization that works with university students with disabilities.

A new AI-based drug recognition system can help hospitals
13/08/2024
The Faculty of Pharmacy of the University of Pécs has developed an artificial intelligence (AI)-based drug recognition system that can greatly improve the safety and efficiency of hospital medicine administration.
The project, led by Dr. Ashraf Amir Reza, assistant lecturer at the Faculty of Pharmacy of the UP, which won the UP Research Innovation Award for "Artificial Intelligence-based Drug Recognition Model and Mobile Application for Safe Dispensing of Medicines", aims to support hospital staff in their work by minimizing potential errors in distributing medicines. The system is currently capable of recognizing 30 oral medications, but the developers aim to increase this number to 80 so that it can be used in smaller hospitals as well.
The AI-based application has already been proven in a clinical setting and has attracted international interest, including, among others, a nomination for an award from the European Association of Hospital Pharmacists. The project has won a HUF 10 million grant from the Dr. Ferenc Jakab Proof of Concept (PoC) programme, which will be used to develop the hardware prototype and to further train the algorithm.
The researchers will also develop a 3D-printed prototype with an integrated camera system to enable more accurate drug identification. The next step in the project is to engage industrial and

professional partners, and the developers hope that the system will soon be widely available and provide a valuable tool for hospital staff in their daily work.

Collaboration for Chronic Kidney, Heart, and Metabolic Patients - Strategic Partnership Signed Between Boehringer Ingelheim and the University of Pécs

15/11/2024, UnivPécs

On 15th November, 2024 the University of Pécs (PTE) and Boehringer Ingelheim, a leading biopharmaceutical company, signed a cooperation agreement to conduct joint research focusing on chronic kidney, heart, and metabolic diseases. The contract was signed by Yael Dassa Levinsky (CEO of Boehringer Ingelheim), Dr. Attila Miseta (Rector of PTE), and Dr. András Fittler (Dean of the Faculty of Pharmacy) in the University Senate Council Chamber.

About Boehringer Ingelheim

Boehringer Ingelheim is a market leader developing breakthrough therapies that aim to transform lives for current and future generations. Their research priorities include cardiovascular, renal, metabolic diseases (CRM), oncology, respiratory diseases, immunology, mental health, and retinal health—areas with significant unmet medical needs.

Goals of the Cooperation

Mutual support in innovation and education activities

Joint participation in clinical trial programs, especially targeting chronic kidney, heart, and metabolic conditions

Development of more effective treatments and therapies

Dr. Attila Miseta highlighted the growing challenge of chronic illnesses in aging societies:

“Many live with chronic diseases requiring continuous care, such as chronic kidney, heart, and liver diseases.”

He emphasized the importance of adapting to rapid technological advances, including digitalization and artificial intelligence, in both medical research and education of students and staff.

Scope of the Collaboration

Cooperation in education and training

Advancement of diagnostic methods

Support for practical training of university students in pharmaceutical manufacturing and safe drug use

Joint research and development of data-driven healthcare and AI solutions

Collaboration in clinical trials

Company Profile and Significance

Yael Dassa Levinsky introduced Boehringer Ingelheim’s global presence: Operating in over 130 countries with 146 subsidiaries

Employing over 53,500 people worldwide

Privately owned since its founding in 1885 by the Boehringer, Liebrecht, and von Baumbach families

The Hungarian branch has been active for 34 years. PTE is the first university in Hungary to establish a formal partnership with the company.

Levinsky stated:

“Through this cooperation, we aim to assemble a research team and expert group from the university’s brightest minds to better serve patients and meet unmet needs through our research.”

Forward-looking relationship building in China

06/12/2024, UnivPécs

The leadership of the University of Pécs (UP) recently visited several universities in China in order to nurture its active relationships with Chinese university partners.

The first stop was the North China University of Science and Technology in the city of Tangshan (Hebei Province), with which contact was first established 20 years ago in the field of medical and health sciences. The visit was given particular significance by the fact that it was 10 years ago that Hanban, the designated organisation of the Ministry of Education of the People's Republic of China, issued the document founding the Confucius Institute for Traditional Chinese Medicine of the UP. During the negotiations, the parties agreed to broaden cooperation beyond Hungarian and Chinese language education to include the humanities as well as law, and they also explored the possibility of involving the field of information technology.
As part of the event, Prof. Dr Attila Miseta, rector of the University of Pécs, delivered a welcome speech at the 14th Chinese–Hungarian Medical Forum in Tangshan.
Following this, the delegation was received by the leadership of the Centre for Language Education and Cooperation in Beijing. Representatives of the Chinese Foundation for Language Education, the University of Pécs, and the North China University of Science and Technology signed a cooperation agreement.
The delegation held talks on various forms of cooperation, including summer schools, student exchange programmes, joint scientific symposia, teaching staff visits, and collaborative research with the renowned China University of Mining and Technology in Xuzhou, the East China University of Political Science and Law in Shanghai, and the Nanjing Audit University. All of these institutions are contractual partners of the UP, and agreements were reached regarding the implementation of further concrete projects.
The programme in Shanghai also included a visit to a new partner, the Shanghai Jiao Tong University, which ranked 45th on the 2024 QS ranking list. The delegation of the UP visited the institute jointly operated with the University of Michigan and agreed to continue the cooperation initiated last year, focusing primarily on a winter school programme.
With each Chinese partner, specific projects, such as joint professional conferences, teaching and research staff exchanges, and short-term student programmes, have been included in the 2025 cooperation plans.

Project title

CLIMATEMED - Developing new curriculum outlines and learning materials on climate change's health impacts for medical schools

Project ID

2021-2-HU01-KA220-HED-000050972

Project start date

01.03.2022

Project end date

28.02.2025

Coordinator

University of Pecs (HU)

Partner Organisations

University College Cork (IE); Nemzeti Népegészségügyi Központ (HU); Centar za zdravlje, vezbanje i sportske nauke (CS); Universitatea de Medicina, Farmacie, Stiinte si Tehnologie George Emil Palade din Targu Mures (RO)

General description

Background:

Several studies suggest the next decade will be critical for immediate action to avoid "long-lasting and irreversible" risks to humans and ecosystems. According to WHO predictions, due to climate change's multifactorial health impacts, 250,000 additional deaths are estimated per year between 2030 – 2050. Moreover, the increased incidence of the recent infectious and chronic diseases and new ones' emergence is also expected. Consequently, climate change pre-

sents unprecedented health risks and requires urgent attention to address them. In addition, reducing climate change-related health risks contributes to achieving Goal 3 of the UN Sustainable Development Goals, namely to ensure healthy lives and promote well-being for all ages.
There is a general agreement that improving climate awareness and the knowledge related to climate change's health impacts are essential among medical students. In 2015, in the Health Educators Climate Commitment declaration, representatives of 118 universities from 15 countries expressed their commitment to ensuring the conditions that help future health professionals acquire the knowledge needed to control the health risks of climate change. In 2018, the Standing Committee of European Doctors, an organisation of European national health organisations, made a professional case to EU decision-makers to add "knowledge on the impacts of climate change" in the training of health professionals. Currently, in the curricula of most medical schools, the health-related impacts of climate change represent a peripheral part: according to a 2019 survey, only 15% of the 2,817 medical schools globally have a course that teaches climate change and health topics. In contrast, there is a growing demand from medical students that medical schools integrate climate change and health issues into curricula. Considering climate-change medicine is expected to emerge as a specialised medical activity shortly, it is necessary to begin preparing current medical students as soon as possible.
Climate change and all its impacts, including health impacts, are felt around the world. Consequently, it is a pressing challenge for all medical schools to tackle teaching on the health impacts of climate change. Clinicians accept that climate change increases health risks by placing extraordinary stresses on human health. People remain vulnerable to massive natural disasters that weaken individuals' and communities' resilience and adaptive capacity. Consequently, it is expected that the number of patients in national health systems will increase significantly due to the adverse effects of climate change.
The CLIMATEMED project, with its learning material development and training design activities, can strengthen the medical universities' capacities to ensure up-to-date knowledge of how climate change can endanger human health and how physicians can deal with these novel health challenges.

Objectives:

The purpose of the CLIMATEMED project is to: (1) create a new curriculum on climate change's health impacts for medical schools, with particular attention to the preventative measures of these impacts; (2) promote climate change and health as a horizontal priority in the curriculum of medical schools across Europe, ensuring academic staff are aware and trained in the concept, and thus securing its place at the forefront of medical school teaching; (3) support practising medical doctors to increase their knowledge of the health effects of climate change, with particular attention to the possible preventative measures against these impacts.
By achieving all these objectives, we want to emphasise the relevance of climate change-related health challenges and promote the introduction of education on the health effects of climate change in as many medical schools in the European Union as possible. The English, Hungarian and Romanian language versions will contribute to achieving this goal. Due to the language similarities, the Serbian version will contribute to supporting this aim in the Balkan region of Europe.
In addition, the CLIMATEMED project also aims to contribute to the attitude formation of current and future doctors. Doctors and other health professionals have a crucial role in shaping the public's attitudes to various health risks. We, therefore, aim to help professionals understand the importance of ever-changing environmental risk factors and communicate this to the public.
All these tasks require medical students, as future doctors, to acquire adequate knowledge of the health impacts of climate change as part of their undergraduate training. To this end, medical school curricula should be developed to include climate change and its impact on health. It is also essential for practising doctors to be equipped with knowledge about climate change and

health to improve the knowledge they have already acquired. The CLIMATEMED project intends to contribute to achieving these objectives.
Current academic staff also play a significant role in ensuring climate change-related health problems are integrated into medical schools' curricula. Therefore, we also want to achieve an attitude change among professors and lecturers. To this end, we are developing a training programme that will help put climate change and health into the focus of academic staff's attention and thus into the medical curricula as a horizontal priority.
All in all, our overall aim is to help fill the gap between the predicted demand for healthcare due to climate change and the current knowledge taught at medical school. In addition, developing our outputs will directly assist the universities participating in the CLIMATEMED project (UP, UCC, UMFST) to address this challenge and provide the material for all universities in the European Union and beyond to continue to deliver this much needed education in their medical curricula upon completion of CLIMATEMED.

Project title
ELUCID - Elucidating the immune response of Schreiber's bats to Lloviu virus infection in vitro and in vivo
Project ID
4500004237
Project start date
01.02.2022
Project end date
31.01.2024
Coordinator
Trustees of Boston University (US)
Partner Organisations
University of Pécs (HU)
General description
The objective of this project is to provide and test samples of Schreiber's bats from multiple countries in Southern-Eastern Europe. We plan to continue and maintain a Lloviu virus surveillance programme in relation to these animals, which will provide samples for Lloviu virus RNA sequence diversity studies and also for in vivo ADAR/APOBEC gene activity studies. The animal-derived data will inform the in vitro study design.

Project title
ISIDORe - Integrated Services for Infectious Disease Outbreak Research
Project ID
101046113 (HORIZON-INFRA-2021-EMERGENCY-02)
Project start date
01.02.2022
Project end date
31.01.2025
Coordinator
European Research Infrastructure on Highly Pathogenic Agents (BE)
Partner Organisations
University of Pecs (HU) +154 partners
General description
ISIDORe is funded by the European Union under Horizon Europe (Grant #101046133). With 154 partners from 32 countries worldwide, the ISIDORe consortium proposes to assemble the largest and most diverse research and service providing instrument to study infectious diseases in Europe, from structural biology to clinical trials.

ISIDORe's two overarching goals are:
1. contributing to fighting the rise of the SARS-CoV-2 variants through a global, integrated and challenge-driven approach by providing fast access to cutting-edge resources and services to scientific user communities for supporting the evidence-based development or adaptation of countermeasures in times of emergency,
2. contributing to Europe's readiness to any epidemic-prone pathogen through a global, integrated and preparedness-driven approach by providing access to cutting-edge resources and services to scientific user communities for supporting their research projects in the field of infectious diseases in "peaceful times" as well as during epidemics.
These goals will be achieved through specific objectives:
● Assembling a One Health-driven, comprehensive, integrated, customised, flexible and high-quality portfolio of services that supports user projects related to both the challenge-driven and preparedness-driven approaches
● Providing access to the full range of our services in a user-friendly and efficient manner
● Enabling by means of scientific services the development or adaptation of prevention and intervention
● Enabling further research by dissemination of the results of user projects through the use of global standards, relevant data platforms and registries, according to FAIR principles and the GDPR.
● Expanding and constantly improving our portfolio of services
● Aligning the activities of our project with overarching strategies for pandemic management and preparedness to better support research on epidemic-prone pathogens and face epidemics
The expected outcomes of the project include:
1. Comprehensive catalogue of RI services relevant to tackle infectious diseases epidemics is available, including services supporting pertinent social sciences research;
2. Fast assembly and provision of innovative, customised and efficient RI services to support research linked to detecting, assessing and combatting newly emerging SARS-CoV-2 variants;
3. Challenge-driven integration of RI to better support research addressing infectious diseases and face epidemics, including for use by epidemics risk assessment and risk management bodies (such as the ECDC, the WHO, the OIE and national epidemics management bodies);
4. Rapid response to epidemics outbreaks through RI services underpinning and supporting research aiming to understand causes and development of the epidemic;
5. Development of novel/adapted epidemics intervention tools and measures enabled by relevant RI services;
6. Availability of research data emerging from access provision activities for re-use on common data platforms and registries, according to FAIR principles and compliant with legal provisions under the GDPR.

Project title
CONSCIOUS II. - Curriculum Development of Human Clinical Trials for the Next Generation of PhD Students and Early Career Researchers in the Medical, Science, Pharmacy and Health Professions
Project ID
2021-1-CZ01-KA220-HED-000023177
Project start date
01.11.2021
Project end date
31.10.2024
Coordinator
Université de Paris (FR)

Partner Organisations
University College Cork - National University of Ireland (IE), Universidade Nova de Lisboa (PT), University of Szeged (HU), University of Pecs (HU)
General description
To create a curriculum that builds on the professional content of the CONSCIOUS curricula and provides a deeper professional knowledge for PhD students in medical education.

Project title
COHRICE - Challenges of human reproductive medicine in a changing Europe: an innovative professional curriculum for graduate medical education
Project ID
2021-1-HU01-KA220-HED-000027613
Project start date
01.11.2021
Project end date
31.10.2024
Coordinator
University of Pecs
Partner Organisations
Medizinische Universität Wien (AT), Universitatea de Medicina, Farmacie, Stinte si Tehnologie, George Emil Palade din Tirgu Mures (RO)
General description
Background:
Since the population in European countries is either constant or slightly declining, reproduction is in the forefront of social and health policies with the aim to maintain or turn over reproductive rates. Recognising the complexity of this challenge, European countries try to address the problem in different ways ranging from socio-political steps to health-related measures. Concurrently, trends related to (post-)modern lifestyles and recent challenges (obesity, COVID-19) as well as to less “traditional” patient groups (e.g. 40+ pregnancies, pregnancies after egg donation, pregnant patients with autoimmune diseases, etc.) and challenges related to infertility or multiculturalism are increasingly prevalent. As a result, contemporary reproductive medicine needs to deal with complex situations, which often requires an interdisciplinary approach and the active engagement of allied healthcare professionals, such as psychologists and social workers. Also, the circulation of medical staff has become a norm, resulting in the fact that medical staff often works in realities that are culturally and socially completely different compared to the place of their studies or countries of origin.
Still, the graduate and resident medical teaching programme fails to put obstetrics and reproductive medicine in the context of social and cultural challenges, as the teaching material focuses on physiological and pathophysiological processes. This leads to the fact that obstetrics and gynecology specialists often face challenges they are not prepared for. To effectively address such situations, both graduate and resident medical doctor training programmes should become more specialised, broadened and inclusive and help students and medical teaching staff develop respective skills to overcome national peculiarities, and to expand the knowledge beside the standardised EU guidelines on medical training in obstetrics and gynecology.
Therefore, three higher education institutions from Central Europe, the University of Pécs as a lead
partner from Hungary, together with the Medical University of Vienna, Austria and the George Emil Palade University of Medicine, Pharmacy, Science and Technology of Târgu Mureş, Romania as well as the Hungarian Society of Obstetrics and Gynecology as an associated partner joined forced with the aim to address these complex issues in their project titled “Challenges of human reproductive medicine in a changing Europe: an innovative professional curriculum for

graduate medical education" (COHRICE) by developing a set of innovative e-learning materials for the next generation of medical students and medical teaching staff.
In this sense, COHRICE will educate the state-of-the-art medical knowledge on key aspects of obstetrics and gynecology in the context of changing societies in Europe and provide an innovative tool into the medical specialisation programs for resident medical doctors working in the field of human reproduction, while also providing expanded learning opportunity for graduate medical students in obstetrics and gynecology. To achieve this goal, the following project results will be developed:
1. Graduate level learning material about the challenges of human reproductive medicine in a changing Europe
2. Advanced level learning material for resident doctors in the topic of relevant challenges of reproductive medicine in a changing Europe for Obstetrics and Gynecology residents
3. Teachers' Guide for facilitating the application of the graduate and advanced e-learning courses
4. E-learning platform for the graduate and advanced level e-learning courses

Objectives:

The framework of the training requirements in Obstetrics and Gynecology (hereinafter: Ob/Gyn) for resident medical doctors is provided by the so-called PACT document
(Project for Achieving Consensus in Training) developed by the European Board of College Obstetrics and Gynecology (EBCOG) with the aim to promote the standardisation of teaching and learning for OB/GYN residents in Europe. The PACT proposes a standardised core and elective curriculum for residents to harmonise OB/GYN education in Europe, with the aim to increase the standard of teaching and to support mobility. We intend to promote PACT suggestions and implement a course for resident medical doctors with an additional focus on socio-cultural trends influencing reproductive issues in our changing Europe. This part of the project would fill the gap in the education of OB/GYN residents concerning medical knowledge.
COHRICE aims to make a relevant input to the curriculum of medical students to put their knowledge in context and awaken their interest not only for physical processes but to open their eyes to how changes in societies impact health and health care strategies. This kind of knowledge makes students more innovative, curious and motivated. The project team of COHRICE believes that medical students can only become innovative, problem-oriented thinkers, if their education is interdisciplinary and is embedded in the context of culture and society. This aspect challenges the limits of the conventional approaches to medical education that is unfortunately still very much present at many universities.
Through our project results, we wish to contribute to generating an attitude-change towards sensitive issues of human reproduction. We wish to put reproductive problems in a social and cultural context and sensitise the next generation of doctors to engage them in a holistic approach towards reproductive problems. We aim to make aware medical professionals of new perspectives in therapies and diagnostic methods in human reproduction. With our three dimensional approach of education (through disseminating our products among medical students and residents/ teaching staff/ and allied professionals), we wish to improve the preparedness of medical professionals and through that decrease the public resistance toward artificial human reproduction, and motivate meaningful lifestyle changes by addressing public health issues.
In doing so, graduate students and resident medical doctors will receive a structured, practical, and up-to-date knowledge on specific, relevant, however less discussed elements of the challenging field of human reproduction. The problem-oriented e-learning materials will contribute to developing their medical skills and the quality of their training, which will allow them to become better trained Ob/Gyn specialists. Also, the medical teaching staff and senior supervisors of the residents will benefit from the COHRICE outputs, as they will receive a free, easily accessible and applicable online training tool discussing complex issues in a diverse and interactive way that they can use and integrate in their teaching practice and courses. The project

also aims to raise awareness among allied professionals about certain trends in societies which an effect on reproductive health, as these healthcare professionals are in the frontline of medical service and thus have a significant influence on making high-impact changes.

Implementation:

The project results to be developed are the following:

PR 1 Graduate level learning material about the challenges of human reproductive medicine in a changing Europe coordinated by the University of Pécs

PR 2 Advanced level learning material for resident doctors about relevant challenges of reproductive medicine in a changing Europe for Obstetrics and Gynecology residents coordinated by the George Emil Palade University of Medicine, Pharmacy, Science and Technology of Târgu Mureș

PR 3 Teachers' Guide for facilitating the application of the graduate and advanced e-learning courses coordinated by the Medical University of Vienna

PR 4 E-learning platform for the graduate and advanced level e-learning courses coordinated by the University of Pécs

The aim of the curriculum development is to optimise the structure of the e-learning curriculum and its full compliance with academic requirements. Curricula will be developed at two levels, one for graduate students who have already taken the standard curriculum for obstetrics and gynecology (PR 1), and the other to complement the training for resident medical doctors in obstetrics and gynecology (PR 2). Both will consist of interactive e-learning materials and complementary syllabuses.

In the early phase of the project, we will assess the knowledge gaps and needs of medical students and resident doctors by an international survey, which will directly feed into PR 1 and PR 2. Parallel to this activity, a background research will be conducted. These steps will enable us to engage in a transnational discussion about Ob/Gyn training in Central Europe and to produce a targeted first draft of the e-learning materials consisting of 14 modules dedicated to separate topics in Ob/Gyn.

A detailed description of the syllabuses related to graduate and advanced training, the different and modularized topics with single lectures, the learning outcomes will be created. These project results aim at developing detailed syllabuses for establishing the structure of the e-learning materials and embedding them into the programs of human reproductive medicine in graduate and advanced education. Syllabuses will be prepared only in English, while the study materials and documents (e-learning materials) will be prepared all languages of the partnership. The graduate e-learning material will be provided as an optional for-credit course. The courses will be offered by the participating universities in all their teaching languages, thus it will be available not only for domestic students but also for international ones.

The courses will be piloted at each partner university to gather feedback from graduate students as well as Ob/Gyn residents. The developed material will go under a quality control process from the participating universities, the project's Advisory Board as well as the associated partner, the Hungarian Society of Obstetrics and Gynecology. This step will result in quality-controlled teaching materials at graduate and advanced levels as well as syllabuses, which are standardised for the three participating countries. Courses will be custom-tailored for the training rules of the given university. All activities will be conducted in a collaborative way among partners.

A Teachers' Guide (PR 3) will be developed to facilitate the application of the e-learning courses. The methodological teaching materials will be developed including distance learning guidance for educators. Following the structure of PR 1 and PR 2, 14 topics will be created and translated in four languages.

To make project results available, a Moodle-based e-learning platform will be developed (PR 4). The platform will be installed and all produced materials will be added.

To reach the widest audience possible, dissemination activities will be continuous throughout the project. All the participants will organize a multiplier event in their home location with a special focus on their own led PRs.

Results:

In COHRICE, we will create a complex, novel training material consisting of e-learning courses, syllabuses and a teachers' guide in four languages that will be available on a Moodle-based platform.

The e-learning materials and curricula are expected to meet the needs of resident medical doctors practicing in the field of obstetrics and gynecology providing them with unique and socially useful knowledge via an innovative online, work-based, multi-disciplinary learning model. COHRICE will also provide useful insights for graduate medical students and prepare them for the challenges of modern perinatal medicine. The project will contribute to finding solutions to real-world problems (treating high-risk pregnant women, taking care of patients of certain ethnic groups, dealing with post-modern challenges, e.g. diabetes, infertility, etc.) by increasing the efficiency of medical care and the quality of reproductive health-care services.

The presented project will provide open education and innovative practices in a digital area by making the e-learning material available for the next generation resident medical doctors and graduate students. This will contribute to improve the quality of education, in particular support for the use of digital technologies and online education in order to develop pedagogical and evaluation methods.

The project will also support higher education institutions and research institutes to contribute to innovation through developing, implementing and testing the effectiveness of e-learning materials in the field of obstetrics and gynecology; and to ensure the reinforcement of education and research, including through partnerships, inter- and transdisciplinary approaches, and strengthening the role of higher education institutions and research institutes in the local, regional and international environment.

Project title

PHYSAGENET (CA21170) - Network on evidence-based physical activity in old age (PhysAgeNet)

Project ID

2020-2.1.1-ED-2024-300

Project start date

25.10.2021

Project end date

24.10.2025

General description

A sedentary lifestyle in old age is associated with increased risk of chronic and disabling diseases, premature mortality, and substantial economic burden for society. Increase in physical activity (PA), on the other hand, may compensate negative effects of ageing and reduce inactivity costs. However, not all exercise regimens are universally effective, and inter-individual differences in responses to PA exist. Therefore, there is an urgent need for creating "tailored" exercise programmes that will fit the specific needs of the various and diverse ageing populations.

A critical step towards this goal is embracing an evidence-based medicine (EBM) approach where conceptual challenges and pitfalls in basic research and clinical research on ageing and physical activity could be identified and addressed. Unmet needs and gaps in research and practice that currently hinder successful implementation of EBM for training of older adults are:

1. Lack of consolidated research information needed for designing optimal, feasible and effective exercise programs for various target groups

2. Exclusion of disabled, low income and isolated older adults both research trials and exercise interventions
3. Lack of real-world conditions studies over long periods
4. Limited use of technological innovations for assessing, applying and enhancing exercise programs in old populations.

Project title
RETHEALTHSI - Gap junctions serve to distribute health-signals among neurons of the diseased retina
Project ID
2019-2.1.7-ERA-NET-2021-00018
Project start date
01.05.2021
Project end date
30.04.2024
Coordinator
University of Pecs
General description
In retinal neurodegenerative diseases, death of primarily affected cells is often followed by the bystander effect, a mechanism leading to the death of nearby cells, in numbers surpassing insulted cells by several magnitudes1,2,3. The nature of the bystander effect is not known but gap junctions (GJ) that serve intercellular signalling, have been reported to promote the diffusion of death-signals from dying cells to neighbours4,5. This hypothesis puts GJs in the crosshair of recent research and a GJ blockade has been proposed to rescue neurons in progressive diseases, such as diabetic retinopathy, ischemia and glaucoma6,7,8. However, GJs also serve signaling between neurons9 and their chronic blockade would result in a loss of visual function, strongly limiting the possibility to exploit GJ block as therapeutic opportunity to treat chronic retinal disorders. This proposal relies on the hypothesis that GJs can be utilized as tools to promote cell survival by allowing the intercellular passage of rescue molecules counteracting death-signals. In this scheme, the delivery of (what we call) “health-signals” will be followed by their cell-to-cell spreading through GJs. We employ GJ coupled cell cultures and retinal cells to test the feasibility of transjunctional diffusion of intracellular second messengers (IP3, cAMP, cGMP, Ca++), epigenetic factors (miRNA) and pharmacologically active substances (Dexamethasone). We will assess whether these molecules, among other factors, have a size, charge and 3D structure allowing them to travel across GJs. Then, we will progress into intracellular injections of these substances in animal models of retinal degenerative diseases, at the same time testing delivery methods for possible future clinical applications to treat analogous human diseases. We focus on Retinitis Pigmentosa (RP), a family of genetic, so far incurable, disorders leading to blindness. RP causes the primary degeneration of rods and a secondary death of cones, ascribed to bystander effect. Our aim is to characterize GJ crossing molecules that repair retinal cells and rescue vision in RP patients. High sensitivity OCT imaging of the retinal pigment epithelium (RPE) and the outer retina in enrolled RP patients will be carried out throughout the study to detect early alterations in the RPE/outer retina complex, where GJs are abundant. The future goal of the proposal is to exploit the potentials of GJ alterations as tools for personalized RP prognosis and as conduits of molecules for retinal repair.

Project title
AENEID - Academy for European Neurosurgical Excellence through Innovation and Diversity
Project ID
621621-EPP-1-2020-1-IT-EPPKA2-KA

Project start date
01.01.2021
Project end date
31.10.2024
Coordinator
Fondazione Irccs Istituto Neurologico Carlo Besta (IT)
Partner Organisations
Universitetet i Oslo (NO), Universiteit Leiden (NL), European Association of Neurosurgical Societies (BE), Les Hopitaux Universitaires de Geneve (CH), CAE Healthcare Gmbh (DE), Aegis Srl (IT), The University of Birmingham (UK), Medizinische Universitaet Inssbruck (DE), Humboldt Universiteat zu Berlin (DE), Universiteit Maastricht (NL), Universiteatsmedizin Greifswald (DE), Alder Hey Children's NHS Foundation Trust (UK), Univerzitet u Beogradu (RS), Centre Hospitalier Regional de Marseille (FR), Assistance Publique-Hopitaux Marseille (FR), BBZ Srl (IT), University of Pecs (HU)
General description
AENEID is a new educational paradigm that will revolutionize the field of Neurosurgery. It is a pilot project that will improve the way of selecting, training and assessing European Neurosurgery residents, creating a new generation of excellent physicians who can operate as talented and compassionate neurosurgeons, utilizing the most innovative technologies to serve patients better.
AENEID will build a European network among neurosurgery residents and staff from European Centres of Excellence (under EANS guidance), leading simulation companies and university experts in psychology, ethics, clinical empathy, and communication.

Project title: LEAN in Medical Education: Reaching for Quality Management Tools to Teach Human Anatomy Effectively in a Multicultural and Multilingual Learning Space
Project ID: 2021-1-HU01-KA220-HED-000027542
Project start date: 01.11.2021
Project submission date: 31.10.2024
Coordinator: University of Pecs
Lead Partner
University of Pecs, Hungary
Partner Organisations
KAROLINSKA INSTITUTET (Sweden)
THE CHANCELLOR MASTERS AND SCHOLARS OF THE UNIVERSITY OF CAMBRIDGE (United Kingdom)
SVEUCILISTE U ZAGREBU (Croatia)
MASARYKOVA UNIVERZITA (Czech Republic)
General description, Background:
From 2024 the World Federation of Medical Education (WFME) will introduce an obligatory accreditation process for global medical education institutions providing a medical curriculum in English language. At present, Central European Medical Schools in this category are not yet eligible for accreditation by WFME. In particular, Human Anatomy course organizers from these medical schools are in need to develop their abilities to manage their excellent teaching work more effectively in multicultural and multilingual contexts of today, and to align it to global educational sustainability agendas (Sustainable Development Goal 4 on Quality of Higher Education – SDG4, Objective 1.1 of WHO Global Strategy on Human Resources for Health: Workforce 2030). A genuine and adequate needs analysis was prepared for this project and surveyed among all Central European anatomists in Hungary, Czech Republic and Croatia. The survey showed that over 70% of anatomists in this part of Europe know little about international quality standards of medical education, have never heard of the concept of student

centered pedagogy or of assessment methods to measure the professional development of attitudes of their medical students or of themselves, and admit to know little about mental health management principles at the workplace despite many of them are doctors themselves. The reason for such a poor level of knowledge of academics about these topics relevant to their actual teaching context is that quality assurance at the systemic level is underdeveloped in Central European medical education in general. What are those components of teaching traditions in anatomy which can not be eliminated without significant loss in quality or in prestige? Project participants exploring this question are leading anatomists from Central European medical schools (University of Pécs Hungary, Masaryk University Czech Republic, University of Zagreb Croatia) whose research will be augmented by world leading European anatomists (University of Cambridge UK) and educational developers from world leading medical schools (Karolinska Institutet Sweden). As the profile, experience and activities of the participating organisations are highly relevant for the field of the application, the results of this project may significantly help anatomists not only in Central Europe but also globally to deliver a sustainable, high quality, student centered anatomy teaching which is a highly timely expectation of the doctors of the future. Importantly, the project is suitable for creating synergies between different fields of educational experties: between centuries old teaching traditions of anatomists and student centered pedagogies of contemporary professional educational developers. The proposal is innovative, as it will create an online teachers training module accessible for any anatomists worldwide who are willing to adapt their teaching traditions to contemporary global developmental goals and standards (i.e. SDG4). The aims of the proposal are realistic as they are complementary to other initiatives of the participating organisations (CLILMED, EDUC). The proposal brings added value at EU level through results that would not be attained by activities carried out in a single country, as relevant legal frameworks, teaching traditions, perceptions and interpretations of global standards and concepts will be analysed in different cultural contexts of each participating countries.

Project title: Challenges of human reproductive medicine in a changing Europe: an innovative professional curriculum for graduate medical education
Project ID: 2021-1-HU01-KA220-HED-000027613
Project start date: 01.11.2021
Project submission date: 31.10.2024
Coordinator: University of Pecs
Lead Partner: University of Pecs, Hungary
Partner Organisations:
Medizinische Universität Wien, Austria Universitatea de Medicina, Farmacie, Stinte si Tehnologie George Emil Palade din Tirgu Mures, Romania
General description, Background:
Since the population in European countries is either constant or slightly declining, reproduction is in the forefront of social and health policies with the aim to maintain or turn over reproductive rates. Recognising the complexity of this challenge, European countries try to address the problem in different ways ranging from socio-political steps to health-related measures. Concurrently, trends related to (post-)modern lifestyles and recent challenges (obesity, COVID-19) as well as to less “traditional” patient groups (e.g. 40+ pregnancies, pregnancies after egg donation, pregnant patients with autoimmune diseases, etc.) and challenges related to infertility or multiculturalism are increasingly prevalent. As a result, contemporary reproductive medicine needs to deal with complex situations, which often requires an interdisciplinary approach and the active engagement of allied healthcare professionals, such as psychologists and social workers. Also, the circulation of medical staff has become a norm, resulting in the fact that medical staff often works in realities that are culturally and socially completely different compared to the place of their studies or countries of origin.

Still, the graduate and resident medical teaching programme fails to put obstetrics and reproductive medicine in the context of social and cultural challenges, as the teaching material focuses on physiological and pathophysiological processes. This leads to the fact that obstetrics and gynecology specialists often face challenges they are not prepared for. To effectively address such situations, both graduate and resident medical doctor training programmes should become more specialised, broadened and inclusive and help students and medical teaching staff develop respective skills to overcome national peculiarities, and to expand the knowledge beside the standardised EU guidelines on medical training in obstetrics and gynecology.

Therefore, three higher education institutions from Central Europe, the University of Pécs as a lead partner from Hungary, together with the Medical University of Vienna, Austria and the George Emil Palade University of Medicine, Pharmacy, Science and Technology of Târgu Mureș, Romania as well as the Hungarian Society of Obstetrics and Gynecology as an associated partner joined forced with the aim to address these complex issues in their project titled "Challenges of human reproductive medicine in a changing Europe: an innovative professional curriculum for graduate medical education" (COHRICE) by developing a set of innovative e-learning materials for the next generation of medical students and medical teaching staff.