



Charles University
ANNUAL REPORT
2020





The photograph on the cover was taken on **8 April 2020** and shows Štěpán Jaroš, a student who was then in his third year of study in General Medicine at the Charles University Faculty of Medicine in Hradec Králové. On that day, Štěpán started working as a volunteer at the **Pulmonary Clinic of the University Hospital in Hradec Králové**, which had been reserved for the hospitalization of patients with coronavirus infection.

“At the time we didn’t know much about the new virus that was gradually spreading around the world. Like the virus, the protective measures taken were also new to us. The photo published here was taken while I was practising the safe removal of protective clothing during my first day in service,” he says. He participated in the operation of the clinic, training employees of other departments in the use of protective equipment and triage.

Štěpán also returned to the hospital in autumn 2020.

“I was assigned to the intensive care unit of the Department of Anaesthesiology, Resuscitation and Intensive Care. The shift in the approach to Covid-19 between spring and autumn was huge, not only in the hospital, but also in society, and this was unfortunately reflected in the number of patients. Now, we have been working with patients on every shift. We were with them from admission to the clinic, when their condition was deteriorating, to when they were getting through the most difficult period of illness and were transferred to a standard ward. Unfortunately, not everyone recovered from their illness. I think that, for many of us students, this was the first time we witnessed a patient dying, and maybe there were too many moments like that at once.”

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RECTOR'S INTRODUCTION



RECTOR'S INTRODUCTION

Dear colleagues and friends of Charles University,

2020 was an extremely difficult and challenging year for the whole of society. The coronavirus pandemic, which has, right from the start, gripped not just our country, but the whole world, has affected the lives of every one of us. It has also left its mark on life at Charles University.

We have faced unusually difficult times, when our previous certainties, perceptions of freedom of movement, organization of work, modes of education and leisure time have changed overnight. At the beginning of the year, no one could have imagined how many changes lay ahead for society.

Critical moments brought with them many stories of courage, determination, solidarity and sadness, but also great hope. People all over the world reached out to help one another, and workers in healthcare and the emergency services worked heroically to save human lives.

Within only a few weeks, teaching switched from face-to-face to distance mode and did their utmost to maintain the continuity of education of school pupils and university students. In less than 12 months scientists across countries and continents joined forces to develop vaccines to give the world hope of overcoming the virus.

These are, admirable and extremely important stories of hope that we can overcome even at such a difficult, complex time as the Covid-19 pandemic.

The story of hope is also connected with the story of Charles University and its unique role in society.

I am proud that our university has been involved in helping to deal with the pandemic from the very beginning.

Thousands of volunteers – students, staff and teachers – did not hesitate to stand in the front line and provide assistance in hospitals, schools, call centres, laboratories, and wherever help was needed.

Our research teams immediately began building a testing system, investigating new treatments, and helping with vaccine development. Charles University set up a Covid-19 test centre. Thanks to this, we have tested thousands of our colleagues and fellow citizens at the Albertov site in Prague.

Thanks to our subsidiary, Charles University Innovations Prague s.r.o., we developed and launched a completely new type of Covid-19 test, which detects not only the coronavirus, but also the influenza A and B viruses, nationwide.

Charles University has showed its enormous inner strength during the pandemic. We faced an unprecedented situation in which, overnight, we had to transfer more than 49,000 students to distance learning, thousands of employees to home office, and manage the University through a crisis team.

We successively had to deal with not only with the chaotic introduction of regulations and measures by the state, but also with the introduction of all-encompassing hygiene rules across faculties and units, the restriction of the operation and gradual closure of dormitories

and refectories, and the cancellation of dozens of traditional university events, as well as the large economic loss, amounting to more than one billion crowns, suffered by the University over the course of several months as a result of government restrictions.

This was a challenging test of the internal integrity and strength of the University, as well as its readiness to rapidly implement completely new rules and procedures.

I am delighted that we were able to address the crisis and, thanks to the excellent cooperation of our students and the huge commitment of our administrative, teaching and research staff, we were able to overcome even the most difficult moments.

I would like to express my deep and heartfelt gratitude to everyone.

The pandemic did not stop life at the University, which we continued to develop and strengthen throughout 2020.

During this difficult year, the many restrictions in place significantly reduced opportunity to hold of on-site information events for prospective students, as a result of which CU came up with a new concept for recruitment campaigns, which we called Na Karlovku. As part of this initiative, a special website was launched and an information day for all applicants was held online. It included discussions between applicants on the one hand, and students and teachers on the other, multimedia videos, and virtual tours of individual faculties.

In 2020, the sixth edition of Junior Charles University, which attracts dozens of secondary school students from all over the country every year, took place online. This time, the events and individual lectures focused on four areas: medicine, the natural sciences, the social sciences and the humanities.

I am delighted that, despite the difficult times we were experiencing, the number of both Czech and international students at Charles University has increased.

At Charles University, we are strongly committed to supporting scientific and research activities in the form of various grants, grant projects and competitions. Financial support for the development of research fields at the University increased by more than 100 million crowns compared to the previous year, and totalled about 1.4 billion crowns in 2020. At the same time, funding was increased for excellent research groups, promising junior researchers and postdoctoral positions.

In 2020, as in previous years, students on doctoral study programmes and staff in postdoctoral positions at Charles University had the opportunity to participate in the University's research support programmes, i.e. Progress, UNCE and Primus. In 2020, a total of 71 Primus projects were supported at Charles University through a total amount in excess of 168 million crowns.

In addition to continuing the established support for the research activities of these groups, in 2020 Charles University began preparing a comprehensive support system for postdoctoral students and launched a new START programme, which supports doctoral students while emphasizing on internationalisation, mobility, the interdisciplinarity of research, skills development and professional language competences in areas for the practical application of soft skills.

The University achieved a major success in the field of ERC CZ grants. Three of our researchers were awarded grants in the ERC CZ competition organized by the Ministry of Education, Youth and Sports (MEYS), in which only the very best research projects succeed. Our university received the most grants out of all universities in the Czech Republic. The largest grant was received by Mgr. Marek Stibal, Ph.D., from the Faculty of Science, for a project to study the melting of the

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Greenland glacier, Associate Professor Mgr. Zdeněk Dvořák, Ph.D., from the Faculty of Mathematics and Physics, was recognised for the project Algorithms and Complexity Within and Beyond the Scope of Limited Expansion, and Dr. Alessandro Testa from the Faculty of Social Sciences received financial support for a research project rooted in the tradition of the critical and historical anthropology of religions and practices in Central and Eastern Europe after 1989. I congratulate all of them.

Also, thanks to its excellent research results, CU has long been ranked amongst the 1 % best universities in the world. In 2020 we were placed 260th in the prestigious international QS World University Rankings. CU was ranked among the 100 best workplaces in the world in the fields of Anatomy & Physiology and Geography. Charles University is ranked amongst the top 200 universities in nine other disciplines: English Language and Literature, Philosophy, History, Linguistics, Modern Languages, Mathematics, Media and Communication Studies, Sociology, and Political Science and International Studies.

In 2019 and 2020, a unique, independent international evaluation of research, based on benchmarking with prominent European universities, took place at Charles University for the first time.

It focused on individual disciplines, faculties and higher education institutes. The whole process was managed by a Research Evaluation Board composed of independent international academics from partner universities. The results of this process will be presented in the spring of 2021. The evaluation will include a report on the publication performance and quality within individual research fields, a peer review of more than 2,300 non-bibliometrizable results, self-evaluation reports and other data (e.g. on the number of employees, doctoral students, research funding and the number of grants). The evaluation will provide us with an international comparison and a number of recommendations for the future.

At the same time, the M17+ national evaluation took place in all modules and focused on the evaluation of the research areas at individual universities. The final report and results of the evaluation will also be published in spring 2021.

We continued to strengthen and develop international cooperation. In 2020 the number of our inter-university agreements increased from 205 to 212. We further developed our strategic partnerships and cooperation. In the autumn we assumed presidency of the 4EU+ Alliance of leading European universities. I am delighted that all six universities in 4EU+ were able to win the prestigious TRAIN4EU+ research cooperation project, which is funded from Horizon 2020.

Last year's international cooperation was dominated by the pandemic and the exchange of experience and knowledge. Strong ties within the 4EU+ Alliance and the Coimbra Group, UNICA, Europaeum or EUA university associations have deepened even further as a result of the joint effort to overcome this critical situation.

The University's subsidiary, CUIP s. r. o., which was founded with the goal of transferring knowledge and technology into practice, celebrated three years of its existence. In 2020 several projects that significantly helped in dealing with the coronavirus pandemic were successfully completed.

A team headed by Prof. Stanislav Kmoch from the 1st Faculty of Medicine developed a transparent chemical solution for the analysis of Covid-19 samples that facilitates extra protection for medical staff and was cheaper than the existing one solution. In view of the great potential of this product, the University founded a company, GeneSpector s. r. o.,

which later launched a complete solution for Covid-19 testing. In the space of only a month this increased the capacity of laboratories by up to 500 %.

A further important product we launched was the multiplex test for Covid-19. In addition with the novel coronavirus, it was also able to detect strains of flu.

The transfer of research results into practice continued in other areas, unrelated to coronavirus, too. For example, we established Charles Games s.r.o., a game incubator for students, and LAM-X a.s., which focuses on the launching state-of-the-art nanomaterials on the market.

In June, CU launched a new think-tank called Vzdělávání21

(Education21). Vzdělávání21 is a professional platform of the University, established with the aim of systematically improving education in the Czech Republic, strengthening modern pedagogical approaches, and initiating public debates on current topics in the field of education. The team comprises representatives of our university and leading experts in the field of education from a number of institutions and professional associations.

The expert team set to work immediately and came up with a number of initiatives, expert studies and recommendations, for example on the safe functioning of schools under the conditions of the coronavirus epidemic or on distance learning methods.

The new think-tank contributes to the fulfilment of the third role of the University within society. In 2020, despite many restrictions, we addressed this issue with great intensity. The University's Česko! A jak dál? project, the aim of which is to involve prominent personalities from CU in discussions about current challenges and problems, continued. In Hradec Králové and Prague, we organized three events focusing on health prevention: Health Day, Mobility against Obesity and Stop Alcohol in Pregnancy. At these events, students, medical doctors and other representatives from both CU and other institutions provided advice to the public on how to take better care of their health. After the introduction of government restrictions, the project became an online discussion webinar focusing mainly on the topic of coronavirus from the perspective of economics, education and fake news.

The University prepared several exhibitions and cultural events for the public, such as Nezapomeneme (We Will Not Forget) and the international Sluneční Králové (Sun Kings) project. The latter presented the most important archaeological discoveries by Czech Egyptologists at the National Museum.

In February, a video mapping event took place on the facade of the Carolinum to mark the centenary of the restoration of the name Charles University to our alma mater. We also celebrated 100 years since the founding of the Faculty of Science, the 30th anniversary of the founding of the Faculty of Social Sciences, the 20th anniversary of the founding of the Faculty of Humanities, and also the 75th anniversary of the founding of medical faculties in Pilsen and Hradec Králové.

As part of our efforts to strengthen the communication of educational and research topics to the public, Charles University agreed memoranda of cooperation with three public media outlets – Czech Television, Czech Radio and the Czech News Agency.

Charles University also strengthened its communication tools.

The successful university magazine Forum was given a complete new look; in 2020, a total of 5 issues were published, including a special focusing on women at Charles University. We launched a new online university magazine, ukforum.cz, as well as the CU photo bank, which already contains hundreds of photographs from many areas of university life.

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In 2020 Charles University entered into a partnership with the City of Prague, taking an important step in the Hybernská Campus project, which will help create a closer connection between activities in the academic sphere, the city and the general public. As soon as the situation allows, cultural community activities, student projects and interactive popular science exhibitions will take place in the Hybernská 4 building in Prague. The University has prepared the Hyb4City project, which will synergistically complement these activities and increase the focus on research and innovation.

In 2020 we continued to improve facilities and services for students, teachers and other staff members.

Major renovation work was started in the new part of the Rectorate, where corridors, staircases and electrical installations are undergoing complete reconstruction. The completion and modernization of the campus of the Faculty of Social Sciences in Prague-Jinonice continues. The newly renovated premises should be open to students in two years' time.

We are continuing the construction of the Campus of the Faculty of Medicine and Pharmacy in Hradec Králové, the second stage of construction of the campus for the University Medical Centre in Pilsen, and we are also advancing preparations for the start of construction of the Albertov Campus. In 2020, a zoning decision was issued for the construction of the Biocentre. The construction of a new building for the Institute of the History of Charles University and Archive of Charles University in Prague-Motol is currently being prepared, and construction work is expected to begin in 2022.

Dormitories and refectories are also undergoing changes. During 2020, these facilities started using new logotypes and names: Culina Carolina for catering establishments, and Accomoda Carolina for accommodation facilities. However, the changes include not only the name and visual style, but also go hand-in-hand with qualitative changes in the preparation of meals, accommodation services and the operation of dormitories.

I am delighted that, even in such a difficult year as the previous one, we had the opportunity to bestow the Charles University awards for exceptional accomplishments in the Carolinum and to appreciate the best of the best students, teachers and educational projects. I congratulate each of this year's winners once again for their contribution to education in our country.

Dear Colleagues,

Charles University is a community of people, and it is they who create its success story. I look back on a difficult year with great respect and I am proud that the pandemic did not hold back the development of CU. I am delighted that we have successfully passed this difficult test, continued our work and fostered freedom, inner integrity, and the quality of both research and education.

Many thanks to all of you who help make our university better every day with your unceasing commitment to your work.

I believe that this critical period and the series of difficult trials that we have experienced will make us stronger, and next year we will again do all that we can to maintain our alma mater's position among the most prestigious universities in Europe.

Prof. MUDr. Tomáš Zima, DrSc., MBA

Rector of Charles University

THE UNIVERSITY DURING THE PANDEMIC

The pandemic fundamentally changed ways of teaching and admission procedures

In 2020 educational activities at Charles University underwent many changes as a result of the pandemic. Before the pandemic, several hundred licences were needed, and then very quickly, within only a few days in March, we had to buy additional ones, of which we suddenly needed thousands. As it was necessary to adjust study regulations to the new situation within a matter of weeks, we swiftly prepared university regulations containing the necessary amendments for distance assessment, extension of the maximum study period, etc.

Initially, teachers, and to some extent students, lacked the skills to work online effectively, so, in cooperation with a number of our colleagues from the faculties, units and the Rectorate, we gradually expanded the range of courses and webinars on distance learning, as well as preparing an online manual for distance assessment.

The pandemic also inevitably the admissions procedure. However, thanks to the cooperation of all those involved, the faculties of Charles University coped even with this challenge, and with more than 61,000 applications, we welcomed almost 16,500 first-year students for the 2020/2021 academic year.

Before the start of both semesters of this academic year we issued recommendations to faculties in the Hybrid Autumn 2020 and Hybrid Spring 2021 documents. However, the ever-changing governmental measures against the pandemic once again negatively affected teaching in the autumn semester, although this time there was not such an impact on healthcare, medical, pharmaceutical and teacher training programmes, where exemptions were granted for internships and practical training.

In order to allow distance learning and assessments, we amended the Code of Study and Examination. We continuously took measures to ensure the availability of a wide range of electronic information resources. We provided methodical support to teachers through the new Karlovka-Online.cz website, and also through a number of courses and webinars, about which we provided

information on the Charles University Education Portal. Almost 52,000 students and teachers are active users of the Moodle system, to which more than 11,500 new courses have been added in a year. We held meetings for all vice-deans and heads of study departments on the topic of current measures and other news once every 14 days. In order to prevent a devastating spiral of increasing mental discomfort, and the consequent decline in the effectiveness of our students' learning, in addition to faculty measures we enhanced the services provided at the Carolina Centre within UK Point.

I believe that we will be able to capitalize on our experience with remote operation, for example through the development of so-called "blended" mobility (i.e. online mobility with partial, often only short-term, physical mobility). Even for these types of mobility, we will certainly utilise the opportunity of cooperation in education through the 4EU+ university alliance.

I would like to express my appreciation of the work performed in 2020 by all those who, despite the difficulties and restrictions, became involved and contributed to the quality of teaching, and I thank them from the bottom of my heart for helping us to get through these challenging months together at CU.



Prof. MUDr. Milena Králíčková, Ph.D.

Vice-Rector of Charles University for Education





Empty auditoriums, such as the one at Celetná 13 in Prague, have become a symbol of the pandemic



61,000 applications for study received by Charles University in the 2020/2021 academic year.

16,500 students entered the first year of their studies.

52,000 teachers and students of Charles University actively use the Moodle system.

11,500 new courses were added in Moodle during the year.

All students of Charles University, with the exception of selected study programmes (medical, healthcare, pharmaceutical, etc. study programmes) in which face-to-face teaching was permitted in the 2020/2021 winter semester on the basis of exemptions, studied remotely/online.

28 % of all new secondary-school graduates in the Czech Republic applied to study at Charles University in 2020.

Running a university online? Few could have imagined it

At the beginning of 2020, no one could have imagined the changes that awaited Charles University over the next few months and the challenges that we would all face together. Even at the beginning of the summer semester of the 2019/2020 academic year, one could not imagine the consequences of the incipient Covid-19 pandemic, which had such a fundamental impact on the life of the entire academic community.

Never in history have universities had to immediately terminate face-to-face teaching and implement a complete transition to distance teaching.

We were faced with an unprecedented situation. And the first huge challenge was to carry out such a complex undertaking as teaching exclusively by means of distance learning.

In March 2020, the idea that the entire educational process at universities could be based on other forms of teaching than the in-person presence of students at seminars and lectures was almost unimaginable. Students and staff had practically no, or very little, experience with the use of the electronic tools that enable such complex forms of remote education.

Nevertheless, we were able to successfully overcome this challenge. In a very short period of time, the University switched to distance learning, allowing students to seamlessly continue their studies during the ongoing semester.

This was achieved thanks to the huge effort and commitment of both academic staff, who had to learn to teach and lecture in a virtual environment practically overnight, and non-academic staff, who put in place all the conditions necessary for the teaching process to be fully preserved and to maintain its high quality.

Enormous challenges were faced in particular by IT staff, who ensured the functionality of and support for the entire online system at Rectorate and faculty level, as well as the staff of libraries and of study, human resources or international departments, and other workplaces.

A high degree of flexibility was also shown by students, who overnight experienced a complete change in the methods of teaching and education.

The changes also affected students' private lives, and they were faced with new decisions on whether to stay in dormitories or return home.

We made these dramatic changes in a rather non-transparent environment, with frequent changes in government regulations, fragmentary information on the severity of Covid-19, and the frequently ambiguous interpretation of individual restrictive measures in the first few weeks and months.

We were faced with another major challenge following the decision that the changes and new formats of distance learning that we had in the first few weeks and months must be applied in the new academic year, i.e. during the entire winter semester of the 2020/2021 academic year.

However, this, too, we managed together and, thanks to the extraordinary commitment of our colleagues across the entire university, we were able to continue our teaching and research. I would like to express my immense gratitude to all of them for their efforts.



JUDr. Tomáš Horáček, Ph.D.
Bursar of Charles University

Meeting of the Rector's Board on 18 May 2020 in the Patriotic Hall of the Carolinum: mandatory face masks as the new standard





5 November 2020: state of emergency declared at Charles University.

23: number of members of the Charles University crisis team.

10 March 2020: date from which all ceremonial gatherings at Charles University were cancelled.

11 March 2020: date on which the Ministry of Education, Youth and Sports prohibited the in-person participation of students and teachers in tuition.

27: number of information bulletins on coronavirus measures issued by Charles University in 2020.



The pandemic reminded everyone of the important role that science plays in the modern world

As elsewhere, the global coronavirus pandemic has had a dramatic impact on us at CU. In the spring of 2020 our country's response to this threat was truly exemplary, with everyone helping where they could. Scientists did not want to, and could not, stay on the side-lines. From one day to the next there arose a need to test thousands, and soon tens of thousands, of people for the SARS-CoV-2 virus. The only method available at the time, a diagnostic PCR test, is well known and established in most large hospitals, and it seemed as if nothing stood in the way of testing. Wrong. One of the things the pandemic has exposed with brutal immediacy to all those who had not yet realized it has been the fact that the world today is globalized, and the massive extent to which we are dependent on globalization. Virtually overnight, the international shipment of goods was almost stopped; our supply of reagents, which we used to order from Korea or China with next-day delivery, suddenly dried up, and test kits to diagnose the new coronavirus became scarce. There was nothing: no PCR reagents, no buffers, no RNA isolation solutions, insufficient disinfectant. Many of us at Charles University and beyond (especially at the Academy of Sciences of the Czech Republic, Palacký University in Olomouc, CEITEC in Brno and Masaryk University) decided at the same time that we had to get to work. An academic initiative was set up to aid the Covid testing effort. In parallel, several laboratories developed their own testing procedures and methods for the isolation and detection of viral RNA. Our laboratories at BIOCEV selflessly and enthusiastically became involved under the leadership of RNDr. Ruth Tachezy from the CU Faculty of Science, who put together a great team of dozens of assistants and students from the Faculty of Science and the 1st Faculty of Medicine. An in-house test centre was also set up by Prof. Stanislav Kmoch and Associate Prof. Karel Holada at the 1st Faculty of Medicine. The Faculty of Medicine in Plzeň and the University Hospital in Hradec Králové also became involved in testing. Each of these laboratories had to develop its

own certified procedures and assemble a team or several teams of volunteers, who had to leave their own work and work long hours at the coronavirus testing laboratory. Their enthusiastic dedication deserves the highest recognition.

In addition, scientists continued to do what they do best: scientific work to help deal with the crisis. There is not enough space here to describe all of the activities they performed. Researchers from CERGE-EI, the Faculty of Social Sciences and the Faculty of Mathematics and Physics set out to create mathematical models predicting the future course of the pandemic; RNDr. Karel Drbal at the Faculty of Science developed a method for virus detection in wastewater, and Associate Prof. Zdena Palková and her colleagues at the same faculty developed a rapid, sensitive method for virus detection method based on LAMP technology, etc. Research into the detection and isolation of viral RNA carried out by Prof. Stanislav Kmoch and his assistants from the 1st Faculty of Medicine eventually resulted in an original solution that led to the establishment of spin-off company Gene-Spector s. r. o., which is today helping to deal with the pandemic on a national level.

The coronavirus pandemic has shown that science is important and knowledge matters. Let's hope that our society doesn't forget this lesson.

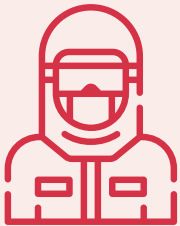


Prof. RNDr. Jan Konvalinka, CSc.
Vice-Rector of Charles University for Research





Medical students from the 1st Medical Faculty of Charles University also took part in helping to tackle the pandemic, for example by performing Covid-19 testing at the sampling point at the General University Hospital



More than **100** people volunteered to help with testing for SARS-CoV-2 infection. The Faculty of Science and the 1st Faculty of Medicine, and others, participated in testing under the auspices of BIOCEV (the Biotechnological and Biomedical Centre of the Czech Academy of Sciences and Charles University in Vestec).

BIOCEV analysed a total of **4,000** samples in two months during the spring wave and **8,000** samples in the autumn.

3 research groups of the Department of Genetics and Microbiology of the CU Faculty of Science were awarded the Gama project of the Technology Agency of the Czech Republic. This project is dedicated to the introduction and optimization of serological tests for the detection of SARS-CoV-2 antibodies, the introduction and optimization of a method for the rapid detection of the SARS-CoV-2 virus using isothermal amplification, and the development of reliable, uniform procedures for testing antiviral protective devices.

The research group led by RNDr. Ruth Tachezy and RNDr. Michal Šmahel received funding from the Ministry of the Interior for the “Development of a methodology for the comprehensive assessment of the immune preparedness of members of the security and emergency services involved in the COVID-19 epidemic” project.

I wouldn't hesitate for a second and help out again

Fear. Uncertainty. Ignorance. In March, we all experienced similar feelings. We sat in a café that was doomed to closure the next day, wondering how we, as students of the Charles University Faculty of Education and future teachers, could help out in these strange times. We created a website to connect students with parents who were looking for help with tutoring their children. Shortly afterwards, we received a request for help with child-minding at the University Hospital in Motol. And things started moving. Overnight, a group dedicated to looking after the children of staff members was set in the premises of the education department. This triggered a huge wave of solidarity and many students wanted to get involved in volunteering.

Deal with administration. Provide sufficient protective equipment. Find some games. Organize individual activities with children. Arrange lunches. There were many things we had to do to create a functional collective, but we didn't give up. The biggest driving force was happy children and the gratitude of their parents. We appeared in the media several times and I felt incredible support from those around me.

When the situation repeated itself in October, we were ready for a lot of things. While in the spring we often took care of only ten children, this number tripled in the autumn. Our biggest success was getting all of the children involved in online lessons.

I do not regret a single exhausting day or the countless phone calls. I know I wouldn't hesitate and help out again, because it makes sense.



Bc. Nela Pastrnková

former vice-chair of the Agora Student Association, current member of the supervisory board, second-year student on the follow-up master's study programme in Teacher Training in Czech and the Social Sciences at the Faculty of Education

The coordination of volunteers mainly required good communication

In 2020, the words "volunteer" and "obligation to work in times of need" were churned out on an almost daily basis. From the very first moments of the spring wave, large numbers of students, on their own initiative, got involved in working at hospitals throughout the Czech Republic. During the first few weeks over 3,000 students were volunteering, which was incredible. And all of this without the statutory obligation to work!

Almost 300 students from the Faculty of Medicine in Hradec Králové alone were involved. The announcement of the obligation to work repeatedly created a chaotic atmosphere, with an unnecessary bureaucratic burden for all involved. I found that one of the biggest problems was the lack of interest of the Ministry of Health in keeping teaching going; on the contrary, they prevented us from teaching due to the obligation to work. For this reason too, my colleagues and I see our obligation to work as unnecessary and counterproductive, as the number of students helping out also changed depending on the situation.

Our main task as student coordinators was to advocate for the rights and needs of students so that they could continue to prepare as best they could for their future careers, and ensure that their dedication and efforts to not be looked down upon. We tried to establish and maintain a dialogue between volunteers, faculty management and representatives of regions and the government.

I would like to thank the Association of Deans of Medical Faculties, which, together with us, waged a relentless struggle to maintain teaching and tried to ensure that the obligation to work was in place for as short a time as possible.



Pavel Petraš

fifth-year student of General Medicine at the Faculty of Medicine in Hradec Králové, member of the board of the Academic Senate of the Faculty of Medicine in Hradec Králové, chief coordinator of volunteers for students of the Faculty of Medicine in Hradec Králové, now former president of the Medical Students Association (in post until October 2020)



Charles University volunteers in action: Patient triage at the Královské Vinohrady University Hospital

From 13 March to 30 March 2020, **3,280** volunteers registered in the volunteering database at all five medical faculties and the Faculty of Pharmacy of Charles University.

At the end of March, **1,511** of them had already provided assistance at healthcare facilities and with helplines, babysitting, research of scientific articles, and many other activities. Others received training.

By the end of March 2020, **183** students, staff and members of the CU Alumni Club had signed up as non-medical volunteers. At the end of June there were a total of **205** volunteers. Many of them helped in tutoring children in foster care or children with special needs, babysitting children of healthcare professionals, or provided assistance at Charles University accommodation facilities. Other active volunteers were recruited by the Faculty of Education.

57 children aged between three and fifteen were looked after by **33** temporary workers recruited from amongst CU students and staff members in the spring of 2020 in a children's group organized by CU Point at the Arnošt z Pardubic Dormitory. **41** Charles University staff members with children were helped out this way.

Volunteer activity continued even after the beginning of the 2020/2021 academic year.



We discussed crisis solutions with our international partners – often several times a week

In Canada I learned that “*Each cloud has a silver lining*”. The silver glow around our Covid cloud are the many challenges and significant bends in the road that Charles University has successfully negotiated since the beginning of the coronavirus crisis. Long-term cooperation with international universities and networks has made a large contribution to this. Our patient labours have borne fruit.

March 2020 brought a fundamental challenge and change to the current education system. Teaching, sharing good practice, joint research, student activities – we moved everything fully into cyberspace in just a few days. What we had long thought to be a difficult goal to achieve, a combination of digital and face-to-face teaching, was achieved within a very short period.

In 2018 and 2019 we focused on deepening cooperation with our five 4EU+ partners (the universities in Heidelberg, Milan, Copenhagen, Warsaw, and the Sorbonne in Paris) in all areas. In addition, Charles University assumed presidency of the project in November 2020. It was therefore natural for us to cooperate and share good practices for managing the pandemic with these universities.

As a result of the critical situation the number of joint meetings multiplied during the year; for example, the vice-rectors responsible for 4EU+ met online every other Monday. Students who were involved in various projects were also more active. While we missed face-to-face meetings, our colleagues created a virtual 4EU+ café for the sharing of personal contributions and non-work experiences.

A specific example of this is the 4EU+ Urban Health Case Challenge – Community Resilience in Times of COVID-19 project, which aimed to propose urban change in relation to health and demographic transformation, and which took place on 23–27 November 2020. All six member universities took part in the project. The University of Copenhagen led a multidisciplinary project involving 68 students from a variety of fields for the testing and development of innovative ways of learning and teaching – Medicine, Public Health, the Humanities and Social Sciences, the Natural Sciences, Engi-

neering, Architecture and Economics. Students from Charles University also took an active part in the project.

The pandemic has also accelerated the emergence of various online tools and platforms for the automation of various internal processes. The great news is that, in 2020, all six universities won a TRAIN4EU+ scientific collaboration project that is part of Horizon 2020.

Strong ties within the 4EU+ and the Coimbra Group, UNICA, Europaeum or EUA groupings have deepened as a result of the joint effort to overcome this critical pandemic situation. From the very beginning, we have shared experiences, and the Coimbra Group organized a questionnaire among its members on the impact of and solutions to the pandemic, and its working groups intensified cooperation. We also made extensive use of the webinars of the UNICA group or the European University Foundation.

While 2020 was not an easy year for any of the universities, it did teach us a lot about each other.



Prof. PhDr. Lenka Rovná, CSc.

Vice-Rector of Charles University for European Affairs

THE UNIVERSITY DURING THE PANDEMIC

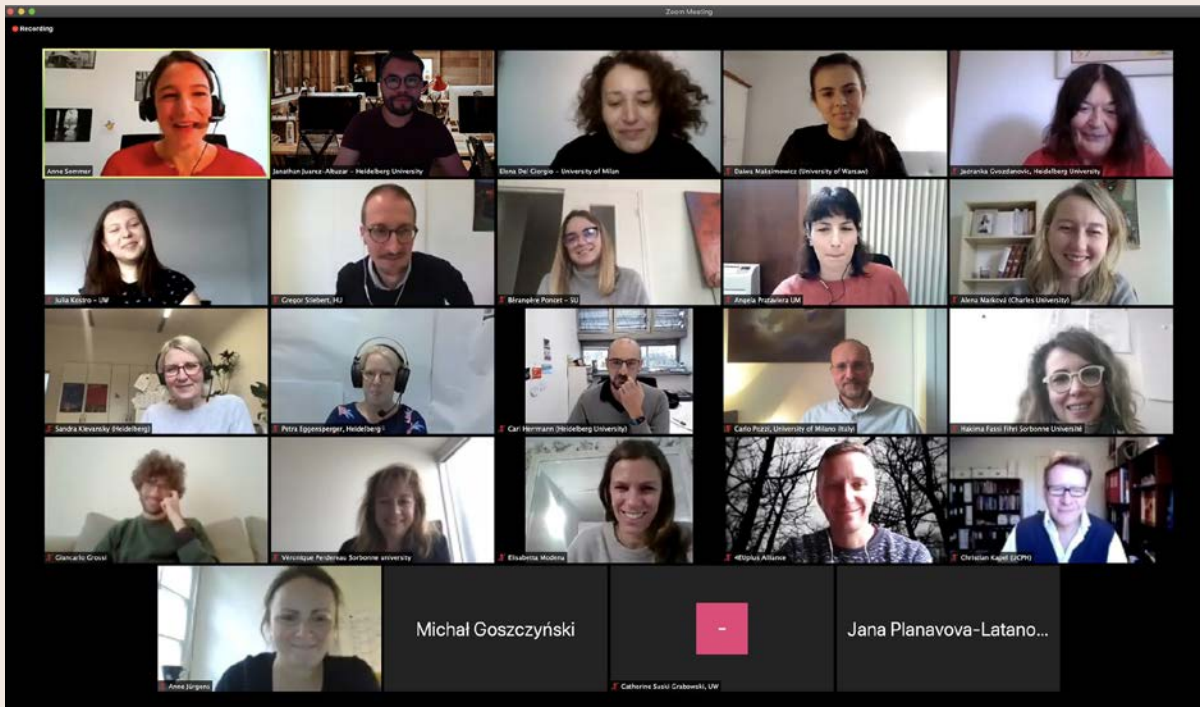
6 universities in the 4EU+ Alliance: Univerzita Karlova, Heidelberg Universität, Sorbonne Université, Uniwersytet Warszawski, Università degli Studi di Milano and Københavns Universitet.

16 November 2020: At its annual meeting, Charles University assumed presidency of the alliance, which has existed for **3** years.

2x more: The number of meetings doubled during the pandemic. The Management Committee (vice-rectors with responsibility for 4EU+) met online every other week, Project Officers and working groups for the joint project in education met every week.

CU also has ties within other groups, including:

- Coimbra Group (41 members – the oldest universities in Europe),
- UNICA (54 universities from European capital cities),
- Europaeum (association of 18 leading European universities),
- EUA (European University Association with more than 850 members) and
- EUF (European University Foundation, with 22 member universities).



On 16 November 2020, Charles University organized a meeting of staff and students at the annual 4EU+ conference

Working from home has become the new standard for thousands of employees

From the very beginning, the Covid pandemic has significantly affected the work of human resources departments. First in the form of reporting quarantines after the return of employees from – at the time – high-risk countries. We had to deal with people returning from abroad and, conversely, our international colleagues returning to their own countries. We kept those who remained in the Czech Republic up-to-date about what was happening, what was allowed and what was prohibited.

After having to deal with a huge amount of agreements on home office following the declaration of the state of emergency, 16 March is a date etched in our memories. When sending employees to home office, we also had to keep track of who was where and what they were doing, and to ensure the basic operation of individual departments. We compiled a list of contact persons for the entire faculty, and IT staff equipped them with mobile phones. Despite the lack of devices at the faculty for working from home, members of staff showed great flexibility – while they worked on their computers and laptops, the IT department quickly set up remote access and provided laptops for administration and teaching. Flexibility during the transition to working from home mean that, in the end, only a minimum number of staff members had to take annual leave to care for a family member following the closure of schools.

A significant impression from the beginning of the anti-epidemic measures was the time pressure and the constant distribution of information on whether the transfer of information and documents (training reports and other documents) was working as it should. While an electronic attendance system was in place, in other places paper documents were still being used. The advent of coronavirus accelerated the complete abolition of the paper-based system, and we completed a successful transition to a fully electronic attendance system. We have set up a repository on Sharepoint to share a variety of documents and gather information. This was a novelty for many, and one that was not always welcome, but now everyone is used to doing things this way.

Likewise, employee training courses, as was the case with teaching in general, had to go online.

Last but not least, in the human resources department we had a new colleague, who needed to be trained. She received the necessary minimum of information and we explained other things “on the job”. We managed it, and our colleague became a fully-fledged member of our team.

At the beginning of the pandemic, we also experienced panic, as some people were scared by 100 new cases in Prague and did not want to go to work here in Pilsen because of

it... That settled down over time. And, given the number of infected people from the end of 2020, it's almost hard to believe.

It was difficult to combine the demands of working with looking after one's family – cooking, tutoring children... However, the new situation at work was stimulating and we were happy to come up with gusto. The main feeling of the whole year is one of solidarity and the good will of all people to help out in any way. Many staff members were involved in sewing face masks, and the IT department in the production of protective shields. The management of the faculty was as accommodating as possible to individual needs and we are convinced that we got through this period mainly thanks to the trust that the management placed in staff and with which, on the other hand, staff members followed the instructions of management.



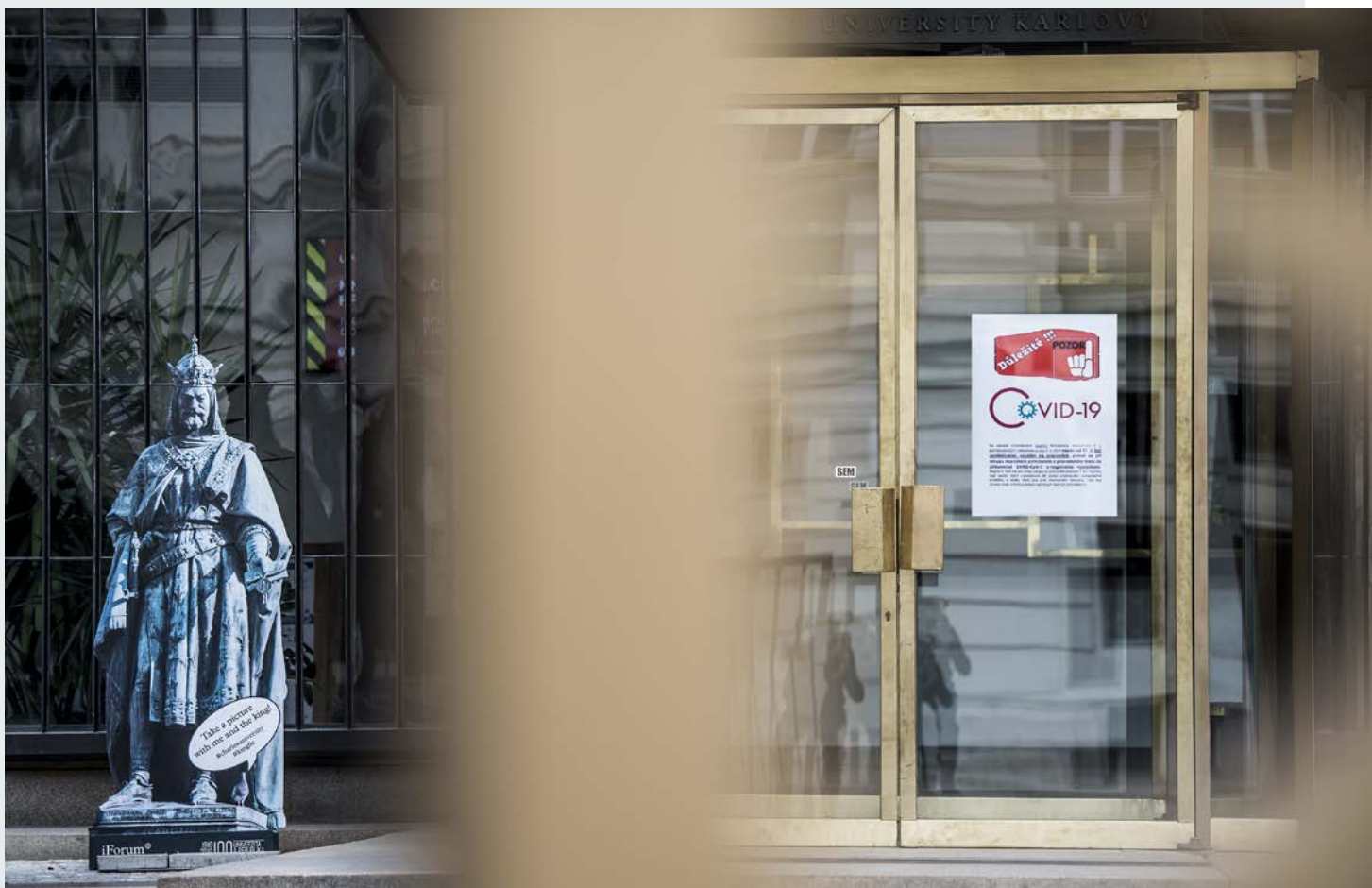
Ing. Alena Polívková

Head of the Human Resources and Payroll Department of the Faculty of Medicine in Plzeň



Mgr. Petra Vakešová

HR specialist at the Faculty of Medicine in Plzeň



During the pandemic, access to the Carolinum building was possible only under strict hygiene conditions

16 March 2020: as of this date, employees of Charles University were instructed to work from home as much as possible.

101 laptops were purchased by the Rectorate of Charles University so as to allow staff members to work from home.

20 training programmes for Charles University staff – both academic and non-academic – have been prepared by the Lifelong Learning Centre since March 2020. More than **850 people** received training. The webinars focused mainly on distance learning, how to maintain interaction with students, the use of synchronous and asynchronous e-learning, pedagogical skills during distance learning, and distance testing. A new website, www.karlovkaonline.cz, was also introduced to support academic staff with testing and teaching.

More than 2,320 members of Charles University staff underwent a total of **58** training sessions organized by the E-learning Support Center. These focused mainly on the use of ZOOM, MS Teams, LMS Moodle, Adobe Connect and other platforms.



Research transferred into practice: nanomasks and Covid-19 tests

It is no secret that universities play an important role in society. In addition to education, it also carries out scientific inquiry, from which the results of science and research emerge. Sometimes these are articles and books, and other times patents and other “improvers”. However, one could say that, as long as ideas lie in the drawers of scientists, they will have no impact on our society. With the help of technology transfer, these ingenious solutions get from the academic environment into practice – into our everyday lives. When a crisis comes, it is in science that people’s hopes and expectations are often placed. It is science that has to come up with information about the spread of the virus, develop more effective respirators and faster testing and, finally, effective vaccinations.

The year 2020 was, of course, significantly marked by the pandemic situation, and researchers at Charles University immediately became involved in helping to resolve it. They came up with a range of solutions, from self-disinfecting nanofibre face masks, to more effective treatments for Covid-19, to test kits, which had the greatest social impact.

The story begins with a phone call from Prof. Stanislav Kmoch from the 1st Faculty of Medicine, who informed me that he had a chemical solution for the transport of Covid-19 samples – one that protected medical staff and was immediately available and even cheaper than the existing solution. We immediately started supplying the product to hospitals and laboratories. However, the potential was much greater, so within a few weeks we had joined forces with the manufacturer, a network of laboratories, and established a company, GeneSpector s.r.o., which launched a complete solution for Covid-19 testing. We delivered both technology and the chemical solution to the first sampling points, and later to the Charles University sampling point. Thanks to the University’s subsidiary, in the space of only a month the capacity of laboratories increased by up to 500%, as well as offering significant protection to medical workers. Another month later, a multiplex test was introduced. We supplied technology not only to dozens of laboratories throughout the Czech Republic, but also to schools and nursery schools. That’s how science works in practice.

The CUIP team has now been working on technology transfer at Charles University for three years. Although the results were most visible during the fight against Covid-19, a

number of projects were also commercialized in other areas, such as the establishment of Charles Games s.r.o., a game incubator for Charles University students. Another company, LAM-X a.s., was also established to focus on the marketing of state-of-the-art nanomaterials. We supply software for banks, have developed a translation programme for the police and a system for processing top film effects, and have successfully put dozens of other projects into practice. A sum of 1,000,000 CZK, taken from GeneSpector profits, was donated to the Endowment Fund of Charles University.

The results of science and research can thus be found everywhere. Behind all technologies are not only the enormous efforts of our scientists, but also the administrative, analytical and commercial structures that enable the transfer of technology into practice. Science helps to improve lives in all areas. Science helps in the fight against Covid-19. That’s why science is here, and that’s a good thing.

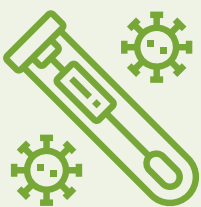


Mgr. Otomar Sláma, MBA, MPA

Director of Charles University Innovations Prague



In October 2020, University subsidiary GeneSpector s.r.o. introduced a common test for Covid-19, influenza A and influenza B



CUIP s.r.o. 2020

- 3** patents sold
- 20** licensing agreements concluded
- 4** newly established spin-off companies
- 373** reports on the results of science and research

GeneSpector s.r.o. 2020

500% increase in laboratory capacity

1/3 of tests in the Czech Republic carried out using GeneSpector technology (every third PCR test using Charles University technology)

44 days to found GeneSpector from the day on which Prof. Stanislav Knoch contacted the CUIP team to tell them that he had potentially usable technology

CU sampling point

4 November 2020: start of operations in Albertov, Prague.

4,094 samples (of which 2,081 PCR tests and 2,013 antigen tests) had been taken by the end of the year.

32 days to build the sampling point following the decision, with the deadlines for deciding on the application taking the longest amount of time. It took less than two weeks to build the facility itself.

74 medical workers took samples.

385 – highest number of tests performed in one day.

THE PANDEMIC
IN THE WORDS
OF CU AND
FACULTIES
MANAGEMENT

The University during the pandemic from the perspective of faculty management

How was your faculty involved in dealing with the crisis?



Prof. PhLic. Vojtěch Novotný, Th.D.
Catholic Theological Faculty

The faculty does not coordinate student volunteering activities centrally, but everyone helps out in their immediate surroundings, as their situation allows. During the first wave of the pandemic, students and teachers sewed face masks, helping their loved ones, neighbours and fellow parishioners. Our theologians helped at nursing homes or, for example, at Hospital of St. Elizabeth on Na Slupi street. Everyone took greater care to ensure that their actions brought a message of hope to society.



Associate Prof. Jiří Mrázek, Th.D.
Protestant Theological Faculty

The faculty devoted the most energy to maintaining teaching and research, but there was also room for activities that room for other activities. A large number of students got involved in volunteer work. The Theology and Contemporary Culture Research Group joined the pomuzeme.si portal, which mediates contact between organizations and volunteers. The “How to respond to coronavirus from the point of view of faith” event, led by Prof. Ivana Noble and organized within UNCE, ran a theological essay competition for CU students and a public art competition on the topic. The art competition ended with an exhibition, and the essays were published in a special issue of the *Studie a texty* journal.



**Associate Prof.
ThDr. Kamila Veverková, Ph.D.**
Hussite Theological Faculty

Since the beginning of the pandemic, we have provided comprehensive support for the academic community. Full use has been made of distance learning and communication and, from a certain point of view, this resulted in closer cooperation between teacher and student. At the beginning of the pandemic, we immediately became involved in sewing face masks for the needy. Many students did volunteer work for non-profit organizations and churches, and doctoral students helped out at the call centre of Na Homolce Hospital. We expanded the range of courses offered by the University of the Third Age and organized deliveries of food and medicine for the needy, help in parishes, charitable care and collections. The pandemic also presented us with practical problems in connection with the activities of clergy, for example online worship, realization of ceremonies, everyday meetings with people, and listening. This was and is probably the biggest challenge. While many things can be replaced, there is no substitute for meeting people in person.



Prof. MUDr. Martin Vokurka, CSc.
1st Faculty of Medicine

In the spring of 2020 the faculty, together with students, participated in a study of collective immunity, made key developments in distance learning, prepared a Help and Study system to allow students to work in hospitals while at the same time meeting their study obligations, and communicated quickly and efficiently with students and teachers, as well as assisting with testing and vaccination. About a thousand students took part in volunteer work organized by the Dobrořlf group, and a benefit event for Medics on the Street was held.



Prof. JUDr. Jan Kuklík, DrSc.
Faculty of Law

During a crisis, we sometimes hear that everything must be put aside when lives and health are at stake. I am grateful to the many colleagues of mine at the faculty who patiently explain what makes such an approach dangerous. While they do not deny that it is possible (and necessary!) to restrict some of people's fundamental rights and freedoms in the fight against the epidemic, at the same time they remind that this must be justified and implemented in accordance with the law. Once the rule of law is "switched off", it may no longer be possible to "switch it on" again.



Prof. MUDr. Vladimír Komárek, CSc.
2nd Faculty of Medicine

Our medics, who volunteered throughout the year in sampling centres and accident and emergency and intensive care units, took the most active part in handling the crisis. In total, more than 500 students from the 2nd Faculty of Medicine got involved, for which they deserve great recognition and gratitude. Contributions to scientific knowledge were made by team led by Prof. Pavel Dřevínek, which analysed new mutations of the virus and clarified the effectiveness of antigen tests, a team led by Prof. Jan Lébl, which analysed data on disease specificity in children, and by Prof. Jakub Hort, who described cognitive disorders in older individuals.



Prof. MUDr. Petr Widimský, DrSc.
3rd Faculty of Medicine

We have been involved in solving problems related to the pandemic from the very beginning. Our usual focus is on prevention and epidemiology. We were amongst the first in the Czech Republic to realize the seriousness of the threat and we were the first institution to cancel a mass event before they were banned by the government. The faculty ball was cancelled the day before it was planned to take place. Subsequently, the Academic Senate decided to organize volunteer work by students at medical facilities. A significant proportion of teachers at the faculty are doctors who treat Covid patients in their hospitals, which placed high demands on them. The faculty organized two Covid conferences with international participation. We coped very well with the transition of seminars and lectures to remote mode.



Prof. MUDr. Jindřich Fínek, Ph.D., MHA
Faculty of Medicine in Plzeň

The virus has changed the social value system all over the world, even at the Faculty of Medicine of Charles University in Plzeň. After a carefree summer rest for students and teachers, instead of an Indian summer we got a Covid one. In the Czech Republic, an obligation to work was placed on senior medical students, but they had already pre-empted this and set up a group of volunteers who met the staffing needs of the Pilsen University Hospital in full. Systems were successfully put in place for both distance and practical tuition. I felt sorry for our students, who in 2020 were unable to enjoy a substantial part of their university studies, as well as contact with classmates and colleagues. Live contact with art as a means of healing the spirit was something that we missed quite a lot. However, art is eternal, and soothing human pain is the highest art. Our students, assistants and teachers succeeded in this. Let's be grateful to them for that.



Prof. MUDr. Jiří Mandáček, Ph.D.
Faculty of Medicine in Hradec Králové

The contribution of the Faculty of Medicine in Hradec Králové and its contribution to the social good in tackling the current crisis lay primarily in its support for our students, future doctors and nurses, who provided assistance at medical facilities and public health offices across the country. Through the modification of teaching, provision of relief and announcement of an extraordinary scholarship. Through the media, our experts helped inform the general public about the latest knowledge of the disease.



Prof. PharmDr. Tomáš Šimůnek, Ph.D.
Faculty of Pharmacy

Our students provided assistance in pharmacies, diagnostic laboratories and anywhere else it was needed. Academic staff prepared a number of projects focused on Covid-19. Important work was performed by our Drug Information Centre, which was involved in issues related to rational pharmacotherapy and prevention of the disease, as, more than ever, the proliferation of unverified information and hoaxes (both in "lay" media and poor-quality data published in "scientific" literature) necessitated rapid expert analysis and confrontation with relevant evidence.



**Associate Prof.
PhDr. Michal Pullmann, Ph.D.**

Faculty of Arts

We have been involved in many different ways; for example, by providing support services and psychological counselling, tutoring for primary and secondary school pupils (including in Czech sign language) and by interpreting important information for the deaf. Our experts also systematically articulated a humanities and social sciences dimension, which is a prerequisite for comprehensive understanding and effective crisis management, to the public debate on the pandemic.



Prof. RNDr. Jiří Zima, CSc.

Faculty of Science

From the very beginning of 2020, staff at the faculty were actively involved in providing the public with relevant and accurate information about Covid, and biologists, chemists and geographers will continue to do so in 2021. They use faculty and public media, but also the platform of the Sníh initiative, where some of them are its founding members. At BIOCEV we opened a site for PCR tests, and we gave lectures remotely. Students from the faculty worked in Covid centres, biochemical laboratories, or assisted in teaching vulnerable children.



**Associate Prof.
RNDr. Mirko Rokyta, CSc.**

Faculty of Mathematics and Physics

I think that one key thing that we did was the introduction of the so-called student buddies, recruited from amongst senior students, together with the reintroduction of the position of group head teachers, especially in the 2020/2021 winter semester, all of which was implemented in the lower years of bachelor's studies. In my opinion, the decision to extend the examination period and postpone the beginning of teaching in the summer semester by two weeks were also important measures. As a result, I believe that almost 70 % of enrolled first-year students received the minimum number of credits required to progress to the summer semester, which is a decent proportion within the bounds of the faculty.



Prof. PaedDr. Michal Nedělka, Dr.

Faculty of Education

The Faculty of Education helped tackle the coronavirus crisis by getting students involved in child-minding and providing tutoring for the children of healthcare workers (Motol University Hospital, Thomayer Hospital) through the I want to tutor / Let's get everyone involved initiative; in schools and education facilities taking care of children of workers in critical state infrastructure, cooperation with ADRA, the Czech Red Cross, People in Need, META o.p.s., and Ulita života, with the Computers for Children project, and the Association for Integration and Migration. The Faculty Online website, which included examples of good practice in distance learning, was launched.



PhDr. Alice Němcová Tejkalová, Ph.D.

Faculty of Social Sciences

Our teachers and students were involved in tackling the crisis on both a professional and a human level. Economists contributed to proposals to mitigate the impacts of the crisis, and marketing communication students made a successful contribution to the campaign to vaccinate healthcare workers, and also offered their assistance to the state. Students of sociological disciplines were ordered to work in social services, and a number of our colleagues also volunteered to work in hospitals and homes for the elderly, or in social care.



Ing. arch. Mgr. Marie Pětová, Ph.D.

Faculty of Humanities

In the beginning, students and teachers helped mainly through the Donate a Face Mask event. One of our doctoral students, Judita Matyášová, focused on retirement homes and founded the Fask Masks for Senior Citizens initiative, as well as organizing an initiative to strengthen the bond between senior citizens and the youngest generation through children's drawings. We launched a project entitled Students Call Senior Citizens, which aimed to keep the needy in regular contact with others, at least by phone. As early as the spring of 2020, Dr. Dana Moree, in cooperation with the Institute of Sociology of the Czech Academy of Sciences, started a study of developments in the field of domestic violence and violence against women during the pandemic in the Czech Republic.



**Associate Prof.
MUDr. Eva Kohlíková, CSc.**

Faculty of Physical Education and Sport

The past year, which was marked by the Covid-19 pandemic, was left its mark on in all areas of the faculty's activities. The dynamics of change and the massive use of the online environment were reflected not only in the organization of teaching in the faculty's main and subsidiary activities, but also in the public arena. Students and teachers of the Faculty of Physical Education and Sport participated in educational programmes, provided inspiration for physical activities, and provided assistance in schools and medical facilities.

I'm more scared in the tram. Medics help out in hospitals and taking samples

Hospodářské noviny, 27 October 2020

Medical students volunteer for helplines and in hospitals:

“The virus is a reminder of why we’re studying”

Mladá fronta Dnes, 19 March 2020

Over 1,000 medics get to work helping out

Právo, 13 March 2020

Hospitals call up students

Mladá fronta Dnes, 17 October 2020

Charles University researchers: We've got a test for Covid-19 and flu

Blesk, 7 October 2020

Young medical students step up to the front line

Právo, 26 March 2020

University students to help tutoring school pupils

University students to start helping children with gaps in their education due to coronavirus

Mladá fronta Dnes, 14 August 2020

The University during the pandemic from the perspective of CU management

What was the greatest challenge the University faced?



Prof. MUDr. Tomáš Zima, DrSc., MBA
Rector

The University faced a completely unprecedented situation. Overnight, we had to stop face-to-face teaching and transfer tens of thousands of students to distance learning. Crisis management of the University had to start immediately. Thousands of employees started working from home, and we cancelled dozens of events, ceremonial events and conferences. We faced a slump in the budget and often had to deal with chaotic state regulations. Despite the difficult situation, the University showed its inner strength and stability, and at the critical moments we got through it together. My thanks go to all students, teachers, staff and volunteers for their work and commitment in the extremely difficult year 2020.



Prof. Mgr. Miroslav Bárta, Dr.
Vice-Rector for Public Affairs

In 2020 Charles University undoubtedly faced one of its most difficult challenges in recent decades, if not ever. Within a few weeks, we were able to transition to online communication, work, teaching and management, ensuring that life at the University didn't stop altogether. The experience showed that the University, despite its size, is made up of real employees, students, teachers and researchers. Their determination and commitment to the principles and ideas that brought us to this institution helped us to overcome all the hardships that the epidemic brought. In addition, they made a fundamental contribution outside the University, and with their skill, work and knowledge they made a significant contribution towards overcoming this difficult situation.



Prof. JUDr. Aleš Gerloch, CSc.
Vice-Rector for Academic Appointments

The Research Board, one of the University's supreme bodies, had to adapt to the new conditions in 2020. It meets every month and discusses conceptual strategic documents, research plans and procedures for the appointment of professors. It is therefore not possible to stop its activities, as this would disrupt the stability of the University's research activities. Meetings were held in June and July to replace those that had been cancelled in the spring, and in the autumn we organized so-called hybrid meetings. This was also possible due to amendments to the rules of procedure, technical preparations and provisions for secret electronic voting by members. Since the October meeting the Board has been functioning in hybrid mode.



Prof. RNDr. Jan Hála, DrSc.
Vice-Rector for Development

The implementation of several development projects at Charles University was partially delayed due to Covid-19 (e.g. extended delivery times for construction materials from international suppliers, and deadlines for negotiations with government agencies to obtain statements or participate in inspections of buildings were significantly longer). Nevertheless, all steps were implemented in accordance with the documentation of individual programmes and the conditions of grant providers. Therefore, it cannot be said that the plan was not fulfilled in 2020.



Prof. RNDr. Jan Konvalinka, CSc.
Vice-Rector for Research

There really were a lot of challenges. Every dean or vice-rector will give a different answer to this question, and all of them are right. As for me, the main challenge we faced in the spring was in providing assistance for Covid-19 testing: we needed to develop reagents and procedures quickly, put together teams of volunteers, organize the transport of samples (that was the most difficult thing!), and start testing. We describe this in a little more detail in the "CU during the pandemic" section. I think that the University passed the test thanks to the qualifications of its academic staff and the enthusiasm of its students.



Prof. MUDr. Milena Králíčková, Ph.D.
Vice-Rector for Education

The pandemic was and is a completely new, complex challenge for educational activities at Charles University. I appreciate the work of all those who, despite various obstacles, contributed to ensuring the quality of teaching and fair examination process in 2020. I will remember the year 2020 as a time when we helped each other at the University, when we were able to function as a team if necessary, and, thanks to the commitment and will of many, we managed the transition to the online environment together.



Prof. PhDr. Lenka Rovná, CSc.
Vice-Rector for European Affairs

My students and I learned about the closure of the universities during a seminar on Tuesday, 10 March 2020. We immediately agreed, there and then, to quickly transfer teaching to the online environment. We did not miss a single lecture and, thanks to synchronous teaching, the students also maintained their study habits. All activities in the field of international cooperation with the 4EU+ Alliance, the Coimbra Group, UNICA, Europaeum and EUA had to be transferred online. We already had some experience in this area. The biggest challenge, in my opinion, was establishing internal discipline and a new structure for demanding work that stretched into the night and weekend hours. However, we learned a lot despite the too high cost of this experience.



Prof. MUDr. Jan Škrha, DrSc., MBA
Vice-Rector for International Affairs

The SARS-CoV-2 coronavirus pandemic has had an impact on the normal life of society worldwide, with a significant impact on the teaching of students at all levels. The University was faced with the challenge of providing education for students, which had to be transformed from the classic face-to-face format to distance learning. Even during the first months in the spring of 2020, we were very flexible and able to convert lectures and seminars into the online format, ensuring the continuation of teaching, including the adequate realization of exams.



Prof. PhDr. Ing. Jan Royt, Ph.D.
Vice-Rector for Projects
and Publishing

Historia magistra vitae. The university was founded at a time when Europe was gripped by an epidemic of the plague, yet the charter states that all are invited to the table of knowledge. People set to work with faith, taking the plague as a warning that humanity was on the path of sin. We, too, must begin to take the global problems affecting this world seriously. We have an amazing tool for this – human knowledge. Each of us has a certain gift, which we are obliged to augment and share. The university is a community of teachers and students, and we sit together at a table to converse. I thank all those who contribute to the safety, richness and palatability of food on the University's table of knowledge, as well as to those who please our souls with the beauty of art. We can get through everything together – viribus unitis.



Prof. PaedDr. Radka Wildová, CSc.

Vice-Rector for the Conception
and Quality of Education

The greatest challenge for the University in 2020 was to maintain the continuity and high quality of pedagogical and research work, and also to resist alienation, and not to succumb to fear and confusion. However, as we saw, the determination of the members of our academic community soon gave us the feeling that we could get through everything together. I am pleased to say that, thanks to our effective cooperation, we succeeded not only in continuing our high-quality work, but in raising the bar; in learning from a crisis situation. My admiration and sincere gratitude go to all those who were able to find their place in these complicated times, and actively participated in teaching and other necessary work.



JUDr. Tomáš Horáček, Ph.D.

Bursar

2020 could be described as a year full of changes and unexpected situations. It is very difficult to choose one specific challenge that Charles University faced. However, if we look at the whole of 2020 from a global perspective, the greatest success can be described as the way and the relative calm with which the University got through it. Despite the ever-changing conditions that required continuous adaptation, academic and scientific life at the University did not stop – on the contrary. Despite initial uncertainty and the search for new ways and methods in teaching and research work, the outcome of the whole year ultimately exceeded expectations. This was due to the understanding and diligence of students, the professionalism of academic staff, and the high degree of expertise of our researchers.



MUDr. Milan Prášil, MBA

Registrar

Covid challenge – the biggest challenge each of us has had to face as a result of the pandemic has been to get out of our comfort zones, that is, out of our daily pre-pandemic routine. We have been required to improvise and find new ways of working within the new frames of reference set by the pandemic.



Prof. Ing. František Zahálka, Ph.D.

Chairperson of the Academic
Senate

From the point of view of academic self-government, and in particular of internal regulations, Charles University did extremely well to continue functioning. Excellent communication between the management of CU and the Academic Senate allowed the preparation and implementation of changes in internal legislation so that the effects of national restrictions caused by the pandemic did not fundamentally affect the functioning of CU, both in terms of teaching and research activities. The entire academic community showed a constructive attitude and sense of togetherness in overcoming the situation.



MUDr. Josef Fontana

Member of the Rector's Board

At the University we had to step out of our comfort zone and face new, unexpected, and often unprecedented, challenges. I consider the main challenge to be the need to immediately convert to full-scale distance learning, to live up to our reputation as an important and respected scientific institution in the fight against the pandemic and, despite all the uncertainty, restrictions and need for improvisation, to maintain our values and our stability. Thanks to the considerable effort, ingenuity and ability of a large number of people to work together across our university, we managed to emerge from the pandemic stronger and with honour. A crisis must lead us not to passivity and loss of hope, but to creative activity and solidarity.



Associate Prof. RNDr. Markéta Lopatková, Ph.D.

Member of the Rector's Board

The pandemic also had a strong impact on doctoral studies, chiefly in the form of obstacles to working on dissertation projects, travel restrictions and the difficulty of maintaining contact between doctoral students and their supervisors. An important step forward was the facilitation of a hybrid and remote format for state doctoral examinations and defences, and doctoral studies benefited from the previously implemented electronization of this area. In 2021, it is necessary to emphasize, in cooperation with the Ministry of Education, Youth and Sport the further development of study programmes, focus on average length of study, and on providing doctoral students with a greater degree of support.



Prof. ThDr. Jan Blahoslav Lášek

Member of the Rector's Board

The biggest disaster was the threat to something that is the essence of the University – the possibility of discussion and meeting one another. Only a few decades ago, that would have been an insoluble problem. However, thanks to the Internet, the University was, for the most part, able to successfully cope with the pandemic, and it did not have to cease operation. Lectures and seminars continued online, and that's a big victory! I see a further success in the fact that we all (with some exceptions) tried to maintain our common sense. And critical, common sense also belongs to the essence of the University. There is another "advantage". When teachers were not online, they did not have to constantly move from place to place and were able work in peace. This will certainly be reflected soon in publications.



Mgr. Anna Shavit, Ph.D.

Member of the Rector's Board

The whole university, an organism made up of students, academics, administrators and many other extremely self-sacrificing people, got through it. While we succeeded in many things, I think that much bigger challenges await us. Economic challenges and the fight against misinformation, confusion and chaos. The biggest challenge is to continue to defend and demonstrate the importance of education and research in society and to bring and explain a critical rational view of the things and events around us.



Prof. RNDr. Petr Volf, CSc.

Member of the Rector's Board

Meetings of the Charles University Grant Agency and project evaluations took place online. Students were unable to travel abroad or work in a laboratory or in the field; it's absurd when archaeologists aren't allowed to visit museum depositories and biologists are not allowed to go to the forest. The Charles University Grant Agency sought to help them by allowing planned subsistence costs to be allocated for other purposes and postponing the final evaluation of projects for another year. Let us hope that the terrible effects of the government's actions and the Chinese Wuhan coronavirus will soon end.



Mgr. Michal Zima

Member of the Rector's Board

Universities around the world faced major and unprecedented challenges in 2020. From my point of view, the biggest challenge for Charles University was to put in place the conditions for the necessary and comprehensive move into the online environment. This does not "only" apply to teaching, but also to the actions of self-governing bodies, technical aspects of the process as a whole and, in particular, ensuring the health of students and staff. In my opinion, the University did cope with it very well, and succeeded beyond expectations, from the implementation of distance formats to the establishment of its own test centre.

THE UNIVERSITY IN 2020

Evaluation of research at Charles University



In 2019 and 2020, a unique, independent international evaluation of research, based on an exacting comparison with prominent European universities and focusing on individual fields, faculties and higher education institutes, took place at Charles University for the first time. The results will be presented to CU bodies and the academic community in April 2021. The evaluation will include a report on the publication performance and quality within individual research fields, a peer review of more than 2,300 non-bibliometrizable results, self-evaluation reports and other data (e.g. on the number of employees, doctoral students, research funding and the number of grants). The process as a whole was managed by a Research Evaluation Board composed of independent international academics, mostly from partner universities. The national M17+ evaluation, focusing on the evaluation of universities and their scientific activities, which this year took place for the first time according to all five planned modules, ran concurrently to this.



The 4EU+ Alliance in 2020



1



In November 2020 CU hosted the annual meeting of the 4EU+ Alliance [1]. In addition to CU, the Alliance consists of the Sorbonne University, the University of Heidelberg, together with the Universities of Copenhagen, Warsaw and Milan, with the aim of collaborating on science, research and education, and facilitating the mobility of students and teachers. The meeting discussed the possibilities of interconnection in all these areas. CU also assumed the presidency of the Alliance for the following year.

During the year, the results of the first call for joint educational projects were also announced. Over thirty applications were approved. The implementation of the call forms an important basis for cooperation between members of the Alliance in education.





1

100 years since CU returns to its original name

On 29 February 2020, a videomapping event took place on the facade of the Carolinum to mark the centenary of Charles University being given back its original name [1] thanks to Act no. 135/1920, which stipulated that the Czech university was the “successor to the ancient seat of learning of King Charles”.

In 2020 the University celebrated a number of other important anniversaries. Among the most important are the celebrations of the centenary of the founding of the Faculty of Science [2], the 30th anniversary of the founding of the Faculty of Social Sciences, the 20th anniversary of the founding of the Faculty of Humanities, and also the 75th anniversary of the founding of the medical faculties in Plzeň and Hradec Králové.



2

CU receives three ERC CZ grants

Three CU scientists were awarded grants in the ERC CZ competition organized by the Ministry of Education, Youth and Sports, which rewards outstanding research projects. This was the largest number of grants obtained from all universities in the Czech Republic. The largest grant was awarded to Mgr. Marek Stibal, Ph.D. [1], from the Faculty of Science, for his study of the melting of the Greenland glacier. Associate Prof. Mgr. Zdeněk Dvořák, Ph.D. [2], from the Faculty of Mathematics and Physics, was awarded a grant for the Algorithms and Complexity Within and Beyond the Scope of Limited Expansion project. Dr. Alessandro Testa [3] from the Faculty of Social Sciences received financial support for a research project rooted in the tradition of the critical and historical anthropology of religions and practices in Central and Eastern Europe after 1989.



1



2



3

The third role of the university: exhibitions, discussions, memoranda



1

As part of the “Česko! A jak dál?” project, the University organized another public debate on key topics, with the participation of outstanding CU scientists. In January, a debate on the topic of health was held in Hradec Králové [1]. The discussion was followed by CU information days on the topics of obesity [2] and the effects of alcohol consumption during pregnancy. In the following months, the project moved to the format of online debates, with topics focusing on economics, education and vaccination during the coronavirus pandemic.



2

The University has also prepared exhibitions for the public, including the international Sluneční Králové (Sun Kings) project [3], which presented the most significant archaeological discoveries of Czech Egyptologists at the National Museum. Other exhibitions included Nezapomeneme (We Will Not Forget).

As part of its efforts to strengthen communication with the general public, Charles University concluded memoranda of cooperation with three public service media outlets: Czech Television, Czech Radio and the Czech News Agency.



3



2

University awards in 2020

CU regularly recognises the best students, teachers and educational achievements. Every year, the Rector Prize [1] is given to students who have achieved extraordinary results in scientific, research, sports or cultural activities. The Rector's Extraordinary Prize is intended for students who have demonstrated extraordinary civic bravery. The Bolzano Prize is awarded to students for outstanding innovative work. Other awards include the Miloslav Petrussek Prize for presentation of the university, the Arnošt z Pardubic Prize for the best teachers and best educational work, the Bedřich Hrozný Prize for Creative Initiative, and support provided to the best scientists through the Donatio Universitatis Carolinæ [2].



1

Fight against plagiarism

Charles University has been tackling the issue of prevention of plagiarism for many years. It set itself a new goal for 2020. Together with eight other universities, it implemented a project entitled Strengthening the Prevention of Plagiarism in Student Papers and Theses, in which it created a comprehensive set of outputs – from analyses of tuition in academic writing and regulations, to handbooks for students and academics and recommendations for institutions, to a series of workshops. The project culminated in a conference entitled Academic Ethics and Prevention of Plagiarism, which took place at Charles University. It will continue to tackle ethical issues with other universities, because twenty other universities have already joined the follow-up project for 2021.



New Charles University think-tank: Vzdělávání21 (Education21)



In June 2020 Charles University established the Vzdělávání21 (Education21) think-tank. Thanks to it, the University intends to support systemic changes in the education system, promote innovative pedagogical approaches and methods, connect the main stakeholders in education and contribute to the cultivation of the public discourse on education. In 2020, members of the think-tank prepared several expert analyses of the safe functioning of schools under the conditions of the coronavirus epidemic, which were provided to the Ministry of Education, Youth and Sports, organized discussions concerning of distance elements in teaching, and started data-driven debates on selected current issues, such as the funding of education and the reform of the secondary school final examination (*maturita*).

Education 21

Hybernská campus gets a new look

During 2020, the partnership between the Charles University and the City of Prague for the Hybernská Campus project gained a new impetus. At the end of the year, Charles University Rector, Prof. Tomáš Zima and the Mayor of the City of Prague, Zdeněk Hřib, signed new agreements establishing a registered institute, the Hybernská Campus [1], which will help create a closer connection between the academic sphere, the city and the general public. The year 2020 was dedicated to fostering this strategic partnership and the planning of activities. As soon as the situation allows, cultural community activities, student projects and interactive popular science exhibitions will take place in the Hybernská 4 building in Prague. The University has prepared the Hyb4City project, which will synergically complement these activities and bring more focus on science and innovation.





Try out Culina Carolina

During 2020, Dormitories and Refectories of Charles University began to use two new logotypes, Culina Carolina for gastronomic establishments and Accomoda Carolina for accommodation establishments. This change is not limited to marketing, as the new labels are intended to present a change in CU Dormitories and Refectories' approach to their activities and to the services they provide. Culina Carolina embodies the new quality of food and catering in canteens and other gastronomic establishments at CU; brand-new products that follow modern trends in healthy eating will also be marketed under the brand. Accomoda Carolina is intended to represent the gradual improvement in the quality of accommodation services and a change in the approach to the operation of CU dormitories.



Management



Rector

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RNDr. Markéta Lopatková, Ph.D.



Member of the Rector's Board
Mgr. Michal Zima

CHARLES
UNIVERSITY IN
NUMBERS

9,099 employees

academic staff	3,887.4
research staff	1,232.4
other staff	3,979.1
international academic and research staff	632.7

49,508 students

bachelor's	18,531
master's	14,965
follow-up master's	9,336
doctoral	6,676
international students	10,241
students with specific needs	696
students involved in student research projects	6,113
outgoing students	1,587

1,077 Study programmes

Education	108
Arts and Humanities	215
Social Sciences, Journalism and Information	156
Law and Administration	36
Natural Sciences, Mathematics and Statistics	268
Information and Communication Technologies	32
Engineering	2
Health and Welfare	243
Physical Education and Sport	17
foreign-language degree programmes	208

7,724 graduates

unemployment rate of graduates half a year to a year after graduation	0.6 %
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Research Funding from university programmes

base funding for scientific disciplines	52.6 million EUR
excellent research groups	5.1 million EUR
outstanding junior researchers	6.1 million EUR
postdoctoral fellowships	0.2 million EUR
student grants	10.8 million EUR

260th position in QS ranking

Anatomy and Physiology	ranked 51–100
English Language and Literature	ranked 151–200
Biological Sciences	ranked 251–300
Economics and Econometrics	ranked 201–250
Pharmacy and Pharmacology	ranked 201–250
Philosophy	ranked 101–150
Physics and Astronomy	ranked 251–300
Geography	ranked 51–100
History	ranked 151–200
Chemistry	ranked 251–300
Computer Science and Information Systems	ranked 251–300
Medicine	ranked 201–250
Linguistics	ranked 101–150
Mathematics	ranked 151–200
Materials Science	ranked 251–300
Communication and Media Studies	ranked 151–200
Modern Languages	ranked 101–150
Education	ranked 251–300
Politics and International Studies	ranked 101–150
Law	ranked 251–300
Sociology	ranked 151–200
Environmental Sciences	ranked 301–350

Current international research projects

projects supported by EU Framework Programmes	67
ERC grants	7

International cooperation

interuniversity agreements	212
THE 4EU+ ALLIANCE	6
Charles University	
University of Heidelberg	
Sorbonne University	
Copenhagen University	
University of Milan	
University of Warsaw	
STRATEGIC PARTNERS	3
University of Zurich	
Macquarie University	
University of St Andrews	
KEY PARTNERS	9
Leiden University	
University of Oxford	
University of Cambridge	
University of Edinburgh	
McGill University	
Hebrew University of Jerusalem	
University of Melbourne	
Jagiellonian University	
University of Cologne	

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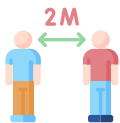
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Facts about Covid-19



The name Covid-19 is an abbreviation for “coronavirus disease 2019”.



The most effective protection against infection is compliance with the “3R” rule – wear a face mask/respirator, keep a distance of at least 2 metres from others, and wash your hands regularly.

Covid-19 remains in the air in aerosol form for at least three hours. It lingers in small quantities on plastics for three days, on stainless steel for two days, on cardboard for a maximum of one day, and on copper for four hours.



The most common symptoms of Covid-19 include a temperature above 37.3°C, a dry cough, impaired breathing, loss of smell or taste, and indigestion.

The most at-risk sections of the population are those over the age of 60, those with chronic diseases such as hypertension, diabetes, cardiovascular disease or chronic respiratory disease, and those with obesity or high blood pressure.



A cloth face mask can be worn for about 1–2 hours before it gets moist, after which its effectiveness decreases.



Widespread vaccination is an effective means of preventing the spread of the virus and the continuation of the pandemic. Vaccines are up to 90% effective.

