

CONTENT UHK ANNUALLY 2020

- 3 The University of Hradec Králové lends a helping hand. The Rector commended volunteers
- 9 "It was an exceptional opportunity and I learned much from it," Anna Macáková recalls here compulsory service at a nursing home
- 10 Klára Rybenská received an award from the Minister of Education for coordinating the manufacture of face shields

Science

- **12** Stanford University Survey: Top 2 % ranking for UHK researchers
- **14** UHK Scientists shoot lasers at apple trees to help orchard keepers
- 15 The Faculty of Informatics and Management can identify potentially malicious websites
- **16** The legacy of J. A. Comenius with respect and admiration
- **18** Naturalised inferentialism: standards, meanings and reasons in the natural world the project continues
- 19 EEA and Norway grants go towards UHK. The University will open a new study course on the transfer of technologies and students can look forward to a unique summer school
- **21** Research by Associate Professor Šilhán reveals that tree rings predict rockslides years in advance
- 22 Nominations and evaluations of selected results according to the M1 Module on behalf of the Faculty of Informatics and Management, UHK
- 24 The uncertain realities of Jaroslava Severová
- **26** A Czech historical atlas won three prestigious awards
- **28** The Department of Chemistry published in prestigious journals
- **30** A team from FIM is the only Czech participant in an international competition. It is designing a robot called FIM Bot
- 32 "The goal of the project '1620 Road to Defeat' was to commemorate the key events of the quadricentennial anniversary of the end of the Bohemian Revolt," explains archaeologist Ladislav Rytíř

- **34** Faculty of Education students majoring in Czech Studies moved three tonnes of stone
- 35 Unique research on reed galls and solitary bees has provided many answers, but even more questions
- **37** The immortal Remoska has dazzled people for over 60 years
- **38** Hradec Days of Social Work organised online for the first time in history
- **39** University galleries stand for tradition, exhibition practice and educational potential
- **40** Vivat academia, Vivant professores! Welcome, new professors and associate professors

Foreign affairs

- 46 Twenty-one million Czech crowns go toward international student and employee mobility. The University of Hradec Králové yet again receives a bumper crop of funds
- **48** The first UHK double degree programme agreement has been signed
- **49** Two new lichen species have been discovered in South Korea
- **51** Student exchange during Corona times. Is there a silver lining?
- 52 "Friendships from Taiwan have opened the door to the entire world for me," says student Markéta Jindráková
- 55 "There were a lot of guests at Harvard, but we all felt very welcome," says Fulbright Scholar Program scholarship holder Lukáš Vízek
- **57** The Faculty welcomed 20 international students, notwithstanding the COVID-19 pandemic
- **58** A semester in Canada during the COVID-19 pandemic
- **60** The FF UHK eLearning programme
- **61** We have established a new partnership with Uzhhorod National University
- **62** FF UHK will participate in SensiClass, an international strategic partnership

Life at UHK

- 63 Rector Kamil Kuča honoured 8 outstanding individuals from the University of Hradec Králové on the occasion of the Velvet Revolution of 1989. Great thanks will also be bestowed on everyone who fought the COVID-19 pandemic
- **67** Alžběta Dvořáková was awarded the 2019 Mayor's Student Award for Creative Achievement
- **68** The Elixir for Schools DIGI Centre educates teachers and students alike in digital technologies at the Faculty of Science
- **69** We only had 24 hours to create a winning project. The first signs of fatigue didn't appear until around six in the morning
- **71** Philosophical faculties decided to fight against traditional myths
- 72 The University strives to be quality certified. The prestigious HR Excellence in Research Award is granted by the European Commission
- **75** Swimming across the Chanel is like climbing Mount Everest. Along with all the magic and misery you can imagine
- 77 "My university teachers' supporting my writing was of vital importance to me," says writer and UHK graduate, Jakuba Katalpa
- **79** UNIVERSITY a new application for university students is here
- **80** Lenka Novotná won the main prize at the 2019 Graphics National Competition for her book Kroj
- **81** The University of Hradec Králové organised a one-week IT Day Camp
- 83 The Philosophical Faculty of the University of Hradec Králové got the green light, and it can start renovating its building on Svoboda Square. The estimated cost is about CZK 200 million
- **84** Researchers' Night in Hradec Králové: Robots in research and in practice
- **86** Let's be objective about Europe. The EUforka project busts myths about the EU
- **87** The University of Hradec Králové is proud to join a project that supports top notch athletes
- **88** Once again, students and companies met at the JobStart trade fair. UHK graduates are an inspiration
- 90 UHK Annually in a nutshell

The University of Hradec Králové lends a helping hand. The Rector commended volunteers

JAKUB NOVÁK UHK SPOKESMAN

KRISTÝNA VÁVROVÁ DEAN'S OFFICE, FACULTY OF SCIENCE, UHK

The new coronavirus pandemic brought the entire world to a standstill at the start of the year. After it had claimed its first dozens, hundreds and then even thousands of victims, it became painfully obvious that governments were not prepared to face the challenge. The mantle was taken up by volunteers. In the Czech Republic, universities stood at the forefront of the effort to stop the disease from spreading. The University of Hradec Králové (UHK) was no exception.

Taking care of medical workers' children and sewing face masks.

Rector Kamil Kuča describes the first wave of UHK students volunteering in the spring: "When we realised how critical the situation was, we immediately responded to the desperate calls

of hospitals and other medical facilities, which were looking for volunteers who would help take care of the children of doctors and other medical workers. We spread the news across all our communication channels, and I am proud to say that our students stood up to the challenge. More than sixty volunteers offered to help without



UHK ANNUALLY 2020 UHK ANNUALLY 2020

a moment of hesitation." But this was not all that the University did. Don't forget that medicine related courses are also taught at UHK and so, in addition to helping medical staff at the University Hospital in Hradec Králové, UHK students also started to assist medical workers directly in their homes – they took care of their children in their home environment, especially when the kids had special needs. Students did their best to help out not only in Hradec Králové. They also helped out in other towns

Institute of Social Work at the Philosophical Faculty, the compulsory labour order also applies to special education students at the Faculty of Education majoring in social policy and social work. The compulsory labour order that was enacted in the spring of 2020 also applies to Veronika Obrovská, a sophomore in the masters' Social Work programme at the Institute of Social Work of the Philosophical Faculty UHK. "I have not been designated to any particular job so far, but I am ready. I think that







and cities such as Pardubice, Náchod, Jaroměř, Humpolec, Třebíč, and even Pilsen, depending on the students' own home address. Students also joined local community projects under which they made and distributed hundreds of handmade face masks. "Our teachers also did their best to help, like former Vice-Rector Zdeněk Beran and his family personally made hundreds of face masks for the Rector's Office and other University departments."

Compulsory labour and the UHK

On Friday, 13 March 2020, the Czech Government enacted Decree No. 207 on the provision of care in social service facilities for the duration of the state of emergency, which allowed the Government to order students from several study programmes to take up designated jobs. In addition to UHK's students from the the students' involvement is a good step, which could help social services in our region during this state of emergency. As social work students, we are being led to show solidarity and empathy, and to help others. Now we have a chance to put those values into practice and lend a much-needed helping hand," Veronika comments. In addition to being enrolled in a full-time study program, she also works in the Civic Advisory Centre in Hradec Králové.

The autumn wave of the pandemic was witness to several dozens of compulsory labour orders for students in both the Hradec Kralové region, and in other regions of the Czech Republic. UHK students most frequently help in social facilities such as nursing homes for the elderly but also in other facilities, including hospitals. Martin Řehák joined the efforts as a volunteer. "I enjoy working with children and I planned to

start a new teaching job, but classes were cancelled, and I was rather unhappy that I wouldn't get the opportunity to teach. When a notice was put up on the University website that volunteers were needed and after we learned more about the volunteer work from our tutor Irena Kapustová, I didn't think twice and signed up right away. I started to help the very next day," says the leader of a local Boy Scout's organisation and a student of the Faculty of Education, UHK. Lenka Haklová, a student at the Institute of Social Work (Philosophical Faculty), worked at a nursing home for the elderly. Cheerful and a dog lover, she joined the nursing home in Lampertice in the Trutnov district. "In the end, I am glad that I got the opportunity and the experience, even if it would have been much better to try out this job as part of our normal training in our second year of study," Lenka explains with a smile.

Tens of Thousands of UHK Shields at the Frontline and the Minister's Award for Exceptional Contribution

The shortage of protection gear for medical practitioners during the coronavirus pandemics raised a wave of solidarity, as many people started to sew facemasks at home. In Hradec Králové, five different organisations decided to cooperate in the manufacture of face shields for doctors, medical staff and social workers. At first, the components were manufactured by

3D printing. "The University of Hradec Králové adopted a very proactive approach from the very onset, especially by engaging our student volunteers. The manufacture of face shields was one of those efforts through which we could help in our region and of which I can be proud," Rector Kamil Kuča describes the University's involvement. UHK was one of the initiators of the FB group 3D Print Against Covid-19. In cooperation with other volunteers, the University immediately started coordinating the manufacture of face



protection shields. "Even though the 3D printed shields are just a quick fix, we still believe that they will be useful in the current situation. They are certainly in high demand by the University Hospital in Hradec Králové and many other institutions," the Vice-Rector for Strategy and Development, Pavlína Springerová, commented at the end of







4

UHK ANNUALLY 2020

UHK ANNUALLY 2020

UHK ANNUALLY 2020 UHK ANNUALLY 2020

March of 2020. The manufacture was co-organised by the University, the Technology Centre in Hradec Králové and the companies Trilab, Deeplab and Industra. "We used twenty-five 3D printers to produce brackets for the shields, which were manufactured from PETG (polyethylene terephthalate glycol), material known for its resistance and durability. Volunteers from UHK took care of both the printing process and the assembly. The print alone takes about two hours, so there was time enough to prepare other parts in the meantime, such as the harnesses, and to complete the final assembly. In the end, we worked 24/7 in three shifts with the help of additional volunteers and printers from UHK," recalls Dr. Richard Cimler, the founder of Deeplab and a lecturer at the Faculty of Science (UHK). The regional government of the Hradec Králové Region also got involved, and once the manufacturing process had been certified, production was handed over to Gifty, which managed to make the entire process more effective. "The volunteers managed to manufacture and distribute over 30,000 protective face shields during the first wave of the pandemics, mostly to nursing homes for the elderly, to schools, to emergency and rescue workers, to local authorities and to medical offices," the Vice-Rector Springerová sums up the effort.

Klára Rybenská, a then postgraduate student at the Faculty of Education (UHK), was one of the most active members of the production team and chief coordinator of shield distribution. She was nominated for the Minister of Education, Youth and Sports Award. It is given to students and graduates who excel in their field of study and for extraordinary student contribution. Dr. Rybenská received the award from the then Minister Plaga after graduating.

Respirator testing and medical worker training

"To help test filters and materials, we lent our electron microscope to the volunteer initiative COVID19CZ, which developed a new type of respirator together with the Czech Technical University in Prague. The Department of Chemistry offered their stock of chemical substances, which were in shortage on the market at that time, for the

manufacture of a disinfectant. We also lent our RT-PCR machine to the District Hospital in Trutnov, when it became a testing centre for Covid-19 patients," explains Jan Kříž, the Dean of the Faculty of Science. Cooperation with the Trutnov Hospital did not end there. The Faculty also organised a training course for the hospital's medical staff on how to use personal protective gear. The course was overseen by Dr. Alena Myslivcová Fučíková. "It soon became apparent that the medical workers were well trained for the situation. We only taught them a few tricks how to stay comfortable while working. We also lent them our filtration and ventilation unit, which we use in our course on the use of hazardous agents that we teach together with Dr. Klára Kubelková from the Faculty of Military Health Sciences (University of Defence, Brno), here at our Faculty of Science (UHK)," Dr. Myslivcová Fučíková described the training workshop.

Donated computers helped with distance learning

The autumn wave of the Covid-19 pandemics reminded everyone that distance learning is a major challenge for many families. "Many families, and single parent families in particular, found it very difficult to finance the equipment needed to arrange distance learning for their children. We took it upon ourselves to help them as much as we could," Pavlina Springerová, Vice-Rector for Strategy and Development (UHK), described another aspect of the University's involvement in the combat against the pandemics, and she adds "In November, we decided"





to donate some of our spare computers to families in need. The donation was arranged by a local association called Let's Talk to Each Other to whom we initially and formally donated the computers to it. The association then assembled the computers and distributed them to where they were most

needed." In the first stage, the University gave away 40 computers that were no longer used by the Faculty of Informatics and Management and the Faculty of Science. "The Philosophical Faculty also decided to donate some of its notebooks, but in the end it opted to give them to children's homes rather than families," the Dean of the Philosophical Faculty Jan Prouza joins the debate. "We wanted to help overcome the increasingly broader gap in access to education created by the social and economic inequality in our society, especially now – during the coronavirus pandemics. In addition to donating the computers, we also asked our students to help to the best of their abilities," Rector Kuča acknowledges the effort.

Algorithms to predict how the disease will progress in COVID-19 stricken patients

The most recent contribution UHK researchers have made in the area of pandemics management is the development of a contactless monitoring system to aid the understanding of how COVID-19 progresses in patients afflicted by the disease. "First of all, we have to design a system based on sensors that will monitor the patients," Richard Cimler, Head of the Centre for Advanced Technologies of the Faculty of Science, outlines the project that received a CZK 2.5 million grant from the Technology



UHK ANNUALLY 2020 UHK ANNUALLY 2020





Agency of the Czech Republic. "Nonetheless, the most important part of the project is to develop advance algorithms that will allow us to monitor the progression of the disease and to conduct an ongoing evaluation of the patients' condition," explains Dr. Filip Studnička from the Department of Physics of the Faculty of Science. "This will allow doctors to intervene before the patient's condition starts to visibly deteriorate, or to relocate patients, whose condition is improving, to a different ward and in so doing distribute available resources, such as ventilators, more efficiently." UHK researchers are currently installing the sensors in hospitals in Trutnov and Chrudim and plan to extend the research programme to other hospitals as well.

Rector's Award goes to UHK volunteers

The list of activities pursued by UHK teachers and students to help combat the pandemics would be rather extensive. At the date of this

publication, help still continues. "I therefore decided to acknowledge every student who selflessly and unpretentiously participated in the effort during the first wave, whether by taking care of the children of frontline medical workers, or by helping the elderly in nursing homes, or by manufacturing face shields. I would like to extend my thanks and gratitude to all of them. I will present the Rector's Medal as a special reward to our students' representatives. I am sure we should be able to find a convenient and dignified space at the University where we will be able to exhibit the medal to remind future generations of the responsible and beneficial role our University played in these difficult times," Rector Kamil Kuča concludes gratefully. •

"It was an exceptional opportunity and I learned much from it," Anna Macáková recalls her compulsory service at a nursing home

TOMÁŠ VODIČKA DEAN'S OFFICE, PHILOSOPHICAL FACULTY, UHK

Anna Macáková, a second-year student majoring in social work, was one of the students conscripted by the Hradec Králové region to assist social services during the first wave of the Covid-19 pandemics. She helped in the Private Nursing Home in Nechanice.

How did you get the job?

It all started when I got a call from the regional authorities. A rather pleasant-sounding lady offered me a job at a nursing home. I was then interviewed by the nursing home director, also by telephone. We agreed on the starting date and she gave me some details on my new job.



So, what was your first day like?

My first day at work was very hard, especially mentally. I did not really know what to expect. So, I was mostly just trying to get a grip, observe, and ask questions, because it certainly was not easy.

What was your service like? What did you do?

We started the day off by helping our clients with their morning routine. My colleague and I were assigned to the first floor. It took about an hour to change their clothes and nappies and to change their bed linen. I accompanied the clients who were able to walk to their breakfast room and helped the rest to eat in their rooms. After that, we changed their nappies and gave them their drinks. This was followed by lunch and a nap, during which we repositioned bedridden clients and washed them. We took them out for a walk whenever the weather was okay. When the weather was bad, I helped them out during their indoor exercises. I helped distribute their medication and measured and recorded their body temperature. After afternoon snacks, we again changed their nappies. Dinner was served at 5 pm and we then helped them to their beds and with their evening routine. Before the end of the day, we prepared the laundry and other things needed for the next day. My shift ended at 7 pm.

Did you know that students may be "conscripted" under Czech laws in a state of emergency?

No, not at all. I didn't have the slightest idea until they called me. It was quite a surprise.

UHK ANNUALLY 2020 UHK ANNUALLY 2020 UHK ANNUALLY 2020

UHK ANNUALLY 2020

And to tell you the truth, I really didn't feel up to it at the time. But looking back, it has been a great experience, not only in terms of my studies, as I am studying towards becoming a social worker, but also in terms of my private life. I dote on all the good memories. And I have become rather attached to many of our clients.

The Hradec Králové Regional Authority commended you on your efforts. Tell us about it.

The Regional Authority paid my wages into my bank account rather promptly; within two or three months. And I was pleasantly surprised by the amount, it was more than I had expected. •

Klára Rybenská received an award from the Minister of Education for coordinating the manufacture of face shields

PETRA KUBAŘOVÁ DEAN'S OFFICE, FACULTY OF EDUCATION, UHK

Klára Rybenská received an award from the Minister of Education, Youth and Sports for exceptional student contribution in the year 2020. Robert Plaga, Minister of Education, bestowed the award in recognition of students who volunteered to help manage the first wave of the Covid-19 pandemics, who cared for others without any regard for their own comfort, and whose stories were inspirational.

Lára Rybenská, a student at the Faculty of Education (UHK), coordinated the activities of the university community related to the manufacture of 3D printed headbands and the assembly of face shields for the Hradec Králové Region with extraordinary resolve and diligence.

Ms Rybenská got a PhD in Information and Communication Technologies in Education at the Faculty of Education in September. By that time she had already been working as a secretary at the Department of Auxiliary Sciences of History and Archival Studies (Philosophical Faculty). UHK's Vice-Rector Pavlína Springerová contacted her as to whether the Faculty could lend the University any 3D printers. Klára is in charge of the 3D printers and she immediately organised the 3D printing of headbands. "I just decided to go for it, there was no time to waste. I felt that it was the best I could do at that time," Ms Rybenská recalls.

The printing process started in mid-March. A total of thirty 3D printers were operated by twenty-five university students; coordinated, organised in shifts and trained by Klára Rybenská herself. She also coordinated the procurement of materials, the distribution of finished face shields and communication with DIY printers. During the first couple of weeks, this little workshop managed to distribute over 4,500 face shields free of charge.

At the start of April, production was handed over to the University of Hradec Králové, which replaced the 3D printing process with a much more efficient injection moulding process. Throughout this period, Klára Rybenská continued to manage the entire manufacture, and managed to raise the daily production capacity to match the promptly increasing demand. Ms Rybenská tirelessly coordinated all the orders, invoices, material supply and distribution. By 17 May, Klára Rybenská and her team had managed to manufacture, assemble and

distribute almost 30,000 face shields all across the Czech Republic. In the end, some forty students participated in the endeavour over a period of two months.

It was Klára Rybenská who organised and coordinated the entire face shield project on behalf of UHK. Without her every day relentless efforts, weekends included, the University of Hradec Králové would never have been able to produce and distribute 30,000 shields during the first wave of the pandemics to protect doctors, dentists, social workers and other frontline workers at a time when protective gear was most needed.

Klára Rybenská modestly adds that "it would not have been possible to coordinate the large number of orders, invoices and material supplies and keep the distribution network going without the help of our students. They came to work and helped every day in spite of all their other study duties. I would therefore like to thank everyone who supported us in any way they could, specifically the UHK management board, all my colleagues, the officials from the regional authorities, as well as everyone who brought us food and drink and face masks. It was a collective effort."

She definitely appreciates her experience with the production of UHK face shields.



"It was a fairly intense period, but I am very grateful for the opportunity, because it taught me a lot. The experience certainly made me richer in many ways. I volunteered, it was my decision to spend all that time and energy, and I would certainly do it again, if I could," Ms Rybenská sums up with a smile.

Stanford University Survey: Top 2 % ranking for UHK researchers

JAKUB NOVÁK UHK SPOKESMAN

Stanford University, one of the most prestigious universities in the world, employs some of the best researchers. In their most recent research conducted in cooperation with Elsevier's SCOPE, they published the article titled Updated science-wide author databases of standardized citation indicators, which contains an appendix listing the most successful scientists in the world. The top 2% ranking featured no less than 6 researchers from UHK.

t is a very extensive list, or rather a database based on a very lucid and transparent methodology. The scientists are classified in two categories – Career and Single 2019. The Career category covers their citation contribution throughout their career until the end of the year 2019, while the Single category reflects their citation index over the past year," explains Ondřej Krejcar, the Vice-Rector for Science and Creative Activities. He happens to be one of the three UHK scientists

who ranked in the top of their field in the Career category, in addition to Kamil Kuča, the university Rector and a renowned toxicologist, and associate professor Jiří Bajgar from the Faculty of Science.

The top two percent of the most frequently cited scientists in the year 2019 in the Single category also include Dr. Eugenie Nepovimová, Professor Kamil Musílek and Professor Kamil

University of Hradec Králové THE STANFORD LIST OF THE STANFORD LIST OF WORLD TOP 2% RESEARCHER. WORLD TOP 2% RESEARCHER (career-long citation impact up (citation impact during the until the end of 2019) single calendar year 2019) Toxicology Assoc, prof. MUDr. Jiří Baigar, DrSc. Assoc. prof. Blanka Klímová, Ph.D. Toxicology Toxicology + Medicinal & Biomolecular Chemistry Prof. Ing. Kamil Kuča, Ph.D. Prof. Ing. Kamil Kuča, Ph.D. Artificial Intelligence & Image Processing Medicinal & Biomolecular Chemistry Prof. Ing. Ondřej Krejcar, Ph.D. Prof. PharmDr. Kamil Musílek, Ph.D. Medicinal & Biomolecular Chemistry Mgr. Eugenie Nepovimová, Ph.D.

Kuča, who has been featured in both categories, and Associate Professor Blanka Klímová. Their research and articles are widely cited worldwide. Vice-Rector Krejcar does not spare praise for his colleague: "Unlike my other esteemed co-workers who managed to get to the top of the rankings, Associate Professor Klímová is

we are so delighted about the success," the Vice-Rector for International Affairs Leona Stašová enthuses, and adds: "The THE Young University Rankings 2020 use 13 different selection criteria, such as teaching and learning environment, knowledge transfer, research influence and international outlook."



neither a medicinal nor a bio-molecular chemist, she is a social scientist. In her field, she managed to rank among the top one hundred scientists in the Czech Republic."

UHK ranked among the Top Five "Young" Universities

The increasing quality and international recognition of the University of Hradec Králové has been confirmed by the University's premium position in one of the rankings published by the Times Higher Education (THE) magazine in 2020, which focused on so-called young universities. "Although the roots of our University date back to the year 1959, as do the beginnings of the tertiary education of teachers at the then Institute of Education in Hradec Králové, the University of Hradec Králové as an official institution classifies as a young university. The international competition among new research and educational institutions is enormous, which is why

The Times Higher Education Emerging Economies University Rankings and the Nature Index

UHK's placement in The Times Higher **Education Emerging Economies University** Rankings 2020 and its placement in the internationally recognized World University Rankings is great news and notably a mark of appreciation for UHK's efforts. UHK's placing in the THE Young University Ranking is not the only first in the year 2020 nor is it its first taste of international success. For the first time in history, the University of Hradec Králové managed to place in the Nature Index thanks to researchers from the Faculty of Sciences. The Nature Index is a database that monitors premium publication outputs in natural sciences. "We attribute our success to our physicists Janusz Gluza and Jiří Lipovský and the work they did from June 2019 to May 2020," comments Jan Kříž, the Dean of the Faculty of Sciences. •

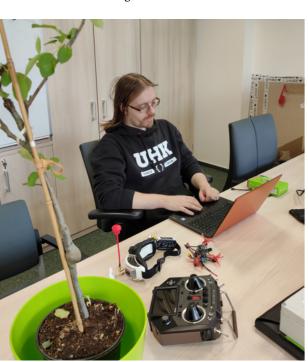
UHK Scientists shoot lasers at apple trees to help orchard keepers

KRISTÝNA VÁVROVÁ DEAN'S OFFICE, FACULTY OF SCIENCE, UHK

UHK scientists use flying drones, multispectral cameras and lasers to develop a method that will aid horticulturists and viticulturalists in their plant care and cultivation. The Zeta Programme project for young researchers under 35 succeeded in the call for innovations published by the Technology Agency of the Czech Republic (TA CR) and placed 13th and 14th out of 400 applications.

ur aim is to be able to promptly and efficiently identify trees that are exposed to nitrogen stress, i.e. nitrogen shortage or excess, which hinders their growth and the maturing of fruit, over large surface areas," the lead researcher, Associate Professor Jan Šlégr, outlines the project.

To this end, they will analyse pictures taken by a broad variety of cameras, both multi-spectral and mono-spectral, or photodiodes attached to flying drones. "We will shoot laser beams at tree leaves, record the wave lengths reflected back at drone sensors and then analyse the images," Professor Šlégr continues.



Researchers will then review the recorded images separately and develop algorithms to assess the condition of the trees from the recordings made by the various cameras. The data may also be used to monitor the yield and the development of fruit and plant hydration.

Researchers must also come up with novel ideas on how to mount lasers and cameras on the drones. "We are currently at the prototyping stage. So far, we keep rather close to the ground, forgive the pun – before drone-testing apple trees, we will take them down to the strawberry fields, where there is nothing to get hung about," Jan Šlégr concludes.

The TA CZ Zeta project called Design of Non-Destructive Methods for Analysing Nitrogen Stress in Fruit Farming stands for a collaboration of experts from the Faculty of Science (UHK) and the Pomology Research Institute in Holovousy, and a follow-up of their joint success in previous projects. Under- and post-graduate students from the FS UHK will also partake in the project.

The Faculty of Informatics and Management can identify potentially malicious websites

ZUZANA DOSTÁLOVÁ DEAN'S OFFICE, FACULTY OF INFORMATICS AND MANAGEMENT, UHK

Detection software has been developed to home in on malicious software. A web browser plug-in is the key. The software monitors any potentially malicious websites that an internet user might be visiting at any time.

Dr. Daniela Ponce from the Department of Information Technologies initiated the project and student developers Ondřej Caha and Patrik Štípek co-authored it. They started working on the project during the winter term of the year 2019. The application has passed initial functionality testing and appears to be running just fine.

"The app is based around the current list of malicious websites published online by the Czech Trade Inspection Authority. It downloads and stores the database. If the user attempts to visit any of the malicious sites listed, the app redirects them to a warning page, which displays the cause for redirecting the user and explains why the site has been listed as potentially malicious," Ondřej Caha explains.

The application is installed by way of a browser plug-in. After user testing, the app will be uploaded to Google Chrome, Firefox and Microsoft Edge app stores. A single button click is all it takes to install the application.

"The software is intended for older and less experienced users who frequently become victim to malicious websites. Regrettably, current circumstances



pertaining to the COVID-19 pandemic have resulted in development being halted just before the user testing stage, which is the last milestone we need to pass before we launch the application," Dr. Ponce comments on the current state of development.



Various unique events have been organised for the period from 2020 to 2022 to commemorate the 430th anniversary of the birth and the 350th anniversary of the demise of the father of education science John Amos Comenius. The UHK's Faculty of Education, whose own logo has been inspired by Comenius, has joined the celebrations.

In an inaugural event, organised slightly in advance of the anniversary, we commemorated Comenius, the Teacher of Nations, by a public reading from his most extensive but sadly never completed work De Rerum Humanarum Emendatione, considered by Comenius himself to be his most important philosophical contribution. The artistic interpretation of the selected segments of the 1600-page treatise was rendered by František Staněk, an actor from The Klicpera Theatre.

In an effort to outline the most significant concepts from the treatise, Jan Hábl from the Department of Pedagogy and Psychology (Faculty of Education, UHK) cooperated with David Loula to prepare a selection of citations for publication – The Best of De Rerum Humanarum Emendatione by J. A. Comenius. The selection is based on a three-volume critical edition of the work published by the Svoboda Publishing House in 1992. The selection was published with the consent of the translators and copyright holders of the critical edition.

Comenius scholar Jan Hábl also strives to present the work of the Teacher of Nations to the

broader public. Together with his colleagues, he has devised for the Comenius 2020 project an interactive presentation about the life and the ideas of the prodigious Czech philosopher, pedagogue and theologian. Although aimed principally at the younger generation, the project also strives to stimulate a more general public discussion about the spiritual inheritance of our nation. Comenius' timeless ideas continue to appeal to students of all ages, as it expands their horizons and helps them to learn to cooperate in the improvement of all things human, not just in theory but also in practice.

More than half a dozen events devoted to the inheritance and work of J. A. Comenius were planned to take place as part of the Educational Days event, which should have taken place in March. Although the event had to be cancelled due to the COVID-19 pandemic, we hope that it will be possible to host it next year, together with the Comenius Association conference, which is also planned for next year. The Comenius Association is a network of 31 university institutions from 18 European countries specialised in teacher training and social education.

The analysis of the possibilities and limits of the Comenius project for the improvement of all things human has been subject to a detailed review by thirteen contemporary thinkers, published by Jan Hábl under the title Utopianism or Realism of Comenius' General Consultation on an Improvement of All Things Human? The Czech and foreign contributors to the collection investigate Comenius' treatise from four principal perspectives: historical, pedagogical and psychological, philosophical, and theological. Historians explored

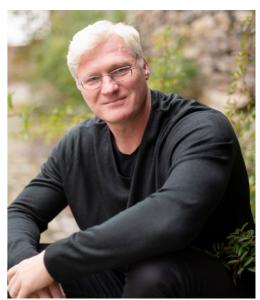
the historical circumstances that formed the creation of the General Consultations, its sources and inspirations, and the Comenius' concept of humanity and its improvement. Education scholars and psychologists analysed the educational aspects of the work – are the educational plans proposed by Comenius realistic or utopian? Philosophers and theologians delved into the conceptual framework and backdrop of De Rerum Humanarum Emendatione, that is the philosophical, anthropological and theological sources of the Comenius' emendation vision. Together,



the co-authors created a text that reviews the span of Comenius' combat for humanity in an unprecedented depth and breadth.

In the upcoming years, not only the Faculty of Education will strive to do more than just commemorate what Comenius left us. We feel that we should all endeavour to mend the human condition, today and in the future, and that we should stop and think about what can be done to make things better. How different our prospects would be, if the improvement of all things human were to continue. •





Naturalised inferentialism: standards, meanings and reasons in the natural world – the project continues

TOMÁŠ VODIČKA DEAN'S OFFICE, PHILOSOPHICAL FACULTY, UHK

In October 2019, Professor Jaroslav Peregrin and his fellow scholars from the Department of Philosophy and Social Sciences of the Philosophical Faculty of the University of Hradec Králové accomplished a major breakthrough when the project Naturalised Inferentialism: standards, meanings and reasons in the natural world was selected to be one of the top 20 elite grant projects of excellence in basic research (EXPRO) by the Czech Science Foundation.

The project Naturalised inferentialism: standards, meanings and reasons in the natural world has been in progress for about a year. How is it going?

As you would expect, the project has been affected by the current pandemic. Fortunately,

pure scholarship makes up the core of the project and we may still engage in it even in these troubled times. The project has already produced its first fruit. Two of our papers have been accepted in leading journals (Philosophy and Phenomenological Research and Mind and Language – out of 651 journals recorded in the Scimago database, they rank 10^{th} and 20^{th} respectively in the

subject matter of philosophy), and two of our articles were included in a collection published by Routledge, a major publishing house.

What do you plan to accomplish in the upcoming stage of the project?

Next year we plan to organise a large conference devoted to the phenomenon of argumentation. Leading philosophers such as Bob Brandom, Bahak Köymen, Josef Perner and Hilary Kornblit have already responded to our call for papers. This should be a rather extraordinary event. Naturally, we may be compelled by circumstances to conduct it over the internet, which would a pity – a face-to-face debate is still indispensable, irrespective of the

marvels of contemporary technologies. And we wish to continue in our scholarship, and in presenting our ideas and thought processes to the international scientific and philosophical community.

What is the overall objective of the project?

Put simply, we would like to contribute to the current knowledge and understanding of the functioning of the human language, and in more general terms, human social practices. In philosophy, a rather distinctive approach to these problems has evolved in recent times, which has become to be known

as inferentialism. It is currently represented by Professor Brandom as its principal proponent. Bob Brandom himself has so far worked at a purely philosophical, speculative level. We argue that science has inundated us with a cornucopia of tangible results that may be brought in evidence for the concepts introduced by inferentialism, and which, as we hope to establish, appear to support its conclusions. We therefore seek to find a path that would connect philosophical speculation with the relevant outcomes of empirical science. We are convinced that this confrontation should produce a truly fresh and fecund perspective of the human language and cast new light on us humans in general.



JAKUB NOVÁK UHK SPOKESMAN

The University of Hradec Králové has managed to establish a promising cooperation with one of the largest universities in Norway – the Oslo Metropolitan University (OsloMet). The two universities will focus on the transfer of technologies, the protection of intellectual property rights and the creation of spin-offs. UHK can draw up to EUR 132,000 from the EEA and Norway grants to subsidise the project, which is to start in August this year.

This a great step forward in the area of technology transfer, a field of study on which the University of Hradec Králové wants to focus in the upcoming years. I am quite positive that the sharing of best practices and a cooperation with the Oslo Metropolitan University will push us forwards," Leona Stašová, Vice-Rector for Creative Activities, praises the new development. In practical terms, the sharing of best practices will be implemented via a new course to be taught by lecturers from OsloMet at UHK. They are experts in the field of technology transfer. A course syllabus is currently being drafted, while the course itself is scheduled for the academic year 2021/2022.

The partnership, which has recently been forged based on the call for the Institutional Cooperation Project, is very ambitious. Thanks to the project, a unique summer school is soon to be set up as the first of its kind in the Czech Republic. "The transfer of technologies is closely linked to the protection of intellectual property rights. No summer school has been organised on this topic in the Czech Republic, especially not one that would be taught by such an experienced international partner, and we expect that the methodology of the contemplated summer school will be shared with other universities in both partner countries," Vice-Rector Stašová explains the international reach of the project.

10

SCIENCE

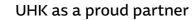
The project should facilitate and develop entrepreneurship and it should support the creation of spin-offs. This will in turn create a more stable economic environment that will be able to show for a more flexible approach to employment needs on both a local and a global scale.

"We support all projects that aim to form a business environment that is based on the outcomes of research and development, and science in general. This particular cooperation will help reinforce the students' economic and business skills and build and support community engagement," UHK Rector Kamil Kuča comments, adding that the growing community of start-up businesses has a direct positive impact on the development of the entire region.

EEA and Norway Grants generally aim to contribute to a more equal Europe, both socially and economically, and to develop the bilateral relations between the Czech Republic, Norway, Iceland and Liechtenstein. For the upcoming project, the University of Hradec Králové may draw a grant of up to EUR 132,000.



The Oslo Metropolitan University has four faculties, just like the University of Hradec Králové, and it is attended by about 20,000 students. Despite being one of the youngest universities in Norway (it was established as late as in 2018), it is a new institutional partner that has been attested by an extensive network of international contacts and the establishment of two prestigious scientific centres. •



Universitas

magazine for universities

Universitas is an independent online magazine about science, education, research and higher education. Twenty-two Czech universities, including the UHK, are involved in the project. More information at www.universitas.cz.



Associate Professor Karel Šilhán from the Department of Biology of the Faculty of Science, University of Hradec Králové, analysed the growth rings of over 150 conifers in the Outer Western Carpathians, a region that has witnessed extensive rockslides over the past 20 years. His research managed to identify a method to predict the movement of rock formations years before they break lose.

In our initial investigation, we tried to establish whether we could identify any signs in the surviving trees that would indicate how rockslides behave before they slide," Associate Professor Šilhán explains. "We know from previous research that rocks move or rather "creep" at a very slow, virtually imperceptible pace for up to several decades before disaster strikes. The surface detritus creeps by millimetres over time, unbeknownst to anyone, but then comes a single bout of heavy rain and the entire area ruptures and slides down."

Tree rings reveal even subtle shifts

Research shows that rock movements are recorded in the rings of the surrounding pinophyta. Trees respond to changes in weather and local climate, and therefore trees from one area should exhibit similar annual growth depending on warmth or precipitation. The slow creeping of the underlying rock may damage tree roots or even bend trunks. Trees correspond by growing asymmetrically, which shows up in the tree ring structure in the form

of so-called reaction wood. "We observe this as an abrupt attenuation on one side of the rings and as complementary thickening of the rings on the other. This allows us to reconstruct the frequency of the creeping movement of the underlying rock structure," Karel Šilhán says. All of the samples had to be compared with trees situated outside the area affected by the rockslide, because the change in the tree rings may also be attributed to other causes, such as snow pressure. Associate Professor Šilhán's team therefore had to compare samples growing even a mere ten meters apart.

"Using these observations, we managed to identify 3 basic creeping mechanisms. The first type is characterised by an increasing frequency, when the rocks move just a little bit but at regular intervals. The second type involves an increasing size of the movements, without a change in frequency. The third type sees rock movements clumped into a single focal point, from which the rockslide is ultimately triggered," Associate Professor Šilhán outlines the research.

Can we predict catastrophic rockslides?

This begs the question whether we could actually "predict" future rockslides and thus avoid their disastrous consequences. "We may certainly develop this line of research much further. The mechanisms that we have managed to describe will allow us to reconstruct other rockslides, even going up to millennia in the past and in areas that are today covered by trees or buildings. Samples from local trees should also be able to tell us whether the location is under the threat of catastrophic reactivation. But rather than giving a simple prediction, we will only be able to express the degree of instability and potential for the reactivation of the rockslides. We still do not have enough data for a more accurate prediction," Associate Professor Karel Šilhán concludes.

The research was conducted as part of a project run by the Czech Science Foundation and titled



Old rockslides: truly inactive. The outcomes were published in the Landslides journal (impact factor 4.7), which is ranked number one in the Engineering-Geological category on the Web of Science.

Nominations and evaluations of selected results according to the M1 Module on behalf of the Faculty of Informatics and Management, UHK

ZUZANA DOSTÁLOVÁ DEAN'S OFFICE, FACULTY OF INFORMATICS AND MANAGEMENT, UHK

The Research, Development and Innovation Council conducts assessments at a nation-wide level in accordance with Government-approved Methodology for Evaluating Research Organisations and R&D Purpose-tied Aid Programmes.

A t its 107th meeting of 8 February 2017, the Czech Government approved new rules for evaluating research organisations, which substantially modified the existing system. The new evaluation scheme has been implemented step by step. Ever since 2017, research organisations have been monitored and evaluated every year based on a comprehensive evaluation scheme. Starting from the year 2020, evaluation is now conducted in five-year cycles.

The basic principles of the new system, which follows prevailing international standards, involve conducting the evaluation at three different levels – at the national (central) level, at the provider level and at the level of individual research organisations. Research organisations themselves are classified into three segments, that is into universities, institutes of the Czech Academy of Sciences and departmental and industry research organisations. Quality is now evaluated based on five basic modules – quality of selected results, research

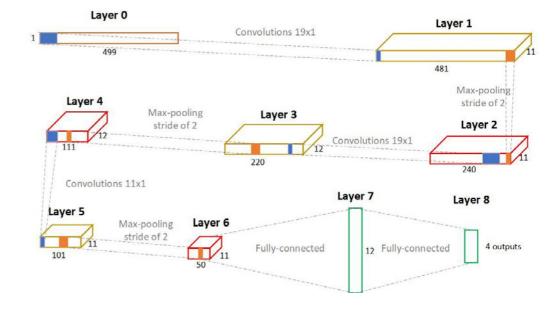
performance, social relevance, viability, and strategy and policies. The relative significance of the different modules depends on the status and the position of the research organisation in the overarching R&D system. Another important change is the evaluation of the quality of international cooperation of individual research organisations. Based on the experience gained in the first years of implementation, Module 1 now also includes evaluation in the area of applied social sciences and humanities. Consequently, remote reviews were added to evaluate those disciplines in which bibliometrics do not provide relevant evaluation data in the year 2020 within Module 1.

Evaluation will be based only on results published in RIV (Information Register of R&D Results), where each outcome is further evaluated based on additional criteria.

The faculties of the University of Hradec Králové nominated their outcomes based on quotas set by the Rector's Office. The results were then evaluated by a committee chaired by Ondřej Krejcar, the Vice-Rector for Science and Creative Activities.

"We were excited to learn that the Faculty of *Informatics and Management had so many* excellent research results. At the same time, it made it particularly difficult to choose and nominate just some of the best," Hana Mohelská, FIM's Vice-Dean for Science and Research explained. In the end, the Faculty selected and nominated the following authors and their work: Dalibor Cimr - Computer Aided Detection for Fibrillations and Flutters Using Deep Convolutional Neural Network, Pavel Čech - Matching UML Class Models Using Graph Edit Distance, Marek Franěk; Jan Petružálek; Denis Šefara – Eye Movements in Viewing Urban Images and Natural Images in Diverse Vegetation Periods, Martin Gavalec – Strong Tolerance of Interval Eigenvectors in Fuzzy Algebra and José Luis Salmerón Silvera – Uncertainty Propagation in Fuzzy Grey Cognitive Maps With Hebbian-Like Learning Algorithms.

Chaired by Professor Krejcar, the committee ultimately selected just two authors and their work, specifically Dalibor Cimr and José Luis Salmerón Silvera. Their work will be submitted to Module I and will be evaluated by the RDIC committee.



22

UHK ANNUALLY 2020



The work of Jaroslava Severová (Faculty of Education, UHK) sets itself apart in the context of Czech visual culture, as most recently manifested at her 2020 exhibition in the Central Bohemian Gallery in Kutná Hora, which revealed the diversity and intensity of her art.

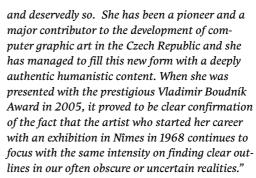
The exhibition showed her striking, characteristically multi-layered prints, objects d'art and installations.

Titled Uncertain Realities, in addition to her "fly-by walk-through" prints and graphic designs from the period 1965 to 1971, and her objects Aeon (2002-2019), Inside (2002-2019) and The Curve (2004), the exhibition displayed a cross-section selection of her computer prints from 2016–2020. Her most recent digital work illustrates Jaroslava's gradual shift from the letteristic rechiselling of meaning (X 30b, 2016; EL 40A and EL 4D, 2017; Three B's, Discovery 10i and Discovery 10f, 2018; Circle 3b, Three A's and Memento mori 2, 2019) through her lexically-conceptual approach (Nothing, 2018) and malleable (if not outright baroguise) dynamics (Space S 10 and Space 133 A, 2016; Space Yi, 2018) to the abstract, velvety-black structures that evoke visions

of the sublimation of human consciousness (*Two 2016*; *Six and Seven*, 2018; *It* 5, 2019; *Movement*, 2020).

Exhibition curator, Richard Drury, explains: "In her work, Jaroslava Severová strives to make sense of the essence of things. To what extent the essence consists in an artifice of immutable rules, to what extent it consists in a liquid, coincidental or unpredictable matter; whether it separates us from some hidden meaning or whether it is a mere veil of nothingness. The artist's reflections and deliberations are principally embedded in her vigilant perception of the most intimate aspects of the human condition. It is that distinct humanistic headspring that feeds and waters the resurrective power which makes the audience perceive her work as the "image first seen". As an artist, and later as a teacher, Jaroslava Severová has managed to win a rather unique place in the Czech visual culture over the past fifty years,







Associate Profession Jaroslava Severová is an academic painter, and she teaches at the Department of Art, Visual Culture and Textile Studies of the Faculty of Education, University of Hradec Králové. She studied with Professor Jiří Horník and Professor Vojtěch Tittelbach at the Academy of Fine Arts in Prague. She is a creator of prints, drawings and paintings. She creates original spatial installations and illumination art. Since the 1990s, she has been a major contributor to computer graphic art. Her art and installations have been exhibited in many galleries both in the Czech Republic and abroad. •





Dr. Tomáš Burda from the Department of Recreaology and Tourism of the Faculty of Informatics and Management has co-authored an award-winning publication.

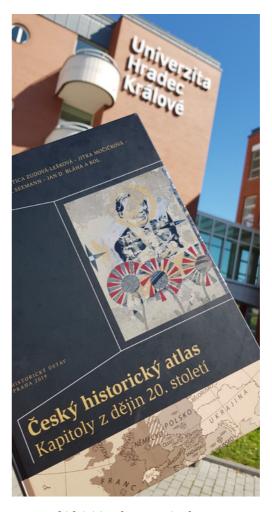
n Friday, 4 September 2020, an award-winning ceremony was held at the Czech Academy of Sciences for the best books published by the publishing house Academia. A total of 59 books were long listed in the 12th year of the prestigious awards in six categories. A committee consisting of ten experts and chaired by Professor Ivo Kraus selected The Czech Historical Atlas – Chapters from the History of the 20th Century as the winner of the Original Science or Popular Science Publications category.

The atlas depicts the flow of history in space and time through printed maps processed by state-of-the art digital cartography. Unlike similar maps available online, the atlas offers a more user-friendly approach and many printouts.



The publication was created by 29 authors from 4 universities and the Institute of History of the Czech Academy of Science. It is one of the first atlases that has been designed and processed exclusively by digital cartography through a cooperation of experts from many fields.

"I am glad to have been able to employ my experience from similar previous projects, such as the project for the Historical Geography Research



Centre, which initiated cooperation between geographers and historians, the work on the Historical Towns Atlas or my experience as geographer of tourism and social-economic geographer. What I found particularly enriching was the cooperation between experts from various, ostensibly rather distant fields," Tomáš Burda explains his involvement in the award-winning atlas project. His main contribution to the atlas included maps of churches and religious denominations, settlements and inhabitants, industry, transport and agriculture, as well as a map of Czech cultural and scientific achievements that have left their mark in the world. He has created a total of 30 maps and written the accompanying texts to them. His work represents almost

11% of the entire publication. "The atlas is the outcome of a longstanding cooperation under the NAKI II project of the Ministry of Culture called The Czech Historical Atlas, which is the spiritual successor of the Academic Atlas of Czech History. The new project focused on the history of the 20th century," Dr. Burda adds.

Nonetheless, the Academia Publishing Award was not the only award bestowed on the authors of the atlas. Earlier this year, the Czech Cartographic Society organised the 22nd Map of the Year annual contest. At its meeting in June, the expert committee reviewed the registered cartographic works published in the Czech Republic in 2019. A total of 92 products competed for the title Map of the Year, as well as 18 authors from all over the Czech Republic and 18 student cartographers from five universities. There were five categories. The Czech Historical Atlas won first prize in the main category Atlases, Map Collections and Editions.

The Czech Historical Atlas also won the award given by the Czech Academy of Sciences for extraordinary research, experimental development and innovation.

Due to the current pandemics, the authors could not accept the award in person, but if the situation permits, they should be able to do so in Spring 2021. •

26

UHK ANNUALLY 2020
UHK ANNUALLY 2020



Last year, researchers from the Department of Chemistry of the Faculty of Science (UHK) focused on topics related to the preparation, analysis and biochemical evaluation of biomolecules. Their research has been supported by a number of projects supported by the Czech Science Foundation, Technology Agency of the Czech Republic and the Grant Agency for Health Research of the Czech Republic and follows from international cooperation with institutions such as KRICT (South Korea), the University of St Andrews (United Kingdom), Nanjing Agricultural University (China) and University Bourgogne Franche-Comté (France).

Inis year, we generated many interesting and promising results," Professor Kamil Musílek, the Head of the Department, explains. "Over the past few years, we have made large investments into our state-of-the-art labs and we have been fortunate enough to attract excellent researchers for our team. Our research follows several basic directions, such as the research of senescence (neurodegeneration, cancerous growth), toxicology (search for new antidotes) and metabolomics."

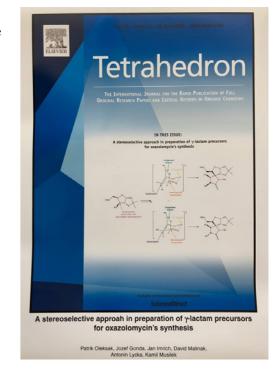
RNDr. Patrik Olekšák, PhD and his colleagues published a paper titled A stereoselective approach in preparation of γ -lactam precursors for oxazolomycine's synthesis in the Tetrahedron (impact factor 2.2). The

paper was featured on the journal's front cover. It deals with the effective synthesis of y-lactam compounds, including compounds from the oxazolomycine family. Oxazolomycines are compounds produced by the Streptomyces genus of bacteria, which exhibit some interesting biological properties, and as other compounds from the γ-lactam family, they can potentially become a cure for many diseases. A disadvantage of the compound is its rather complicated isolation from natural sources, which is why several research teams across the globe strive to synthesize it in a laboratory. Dr. Olekšák's team has managed to synthesize y-lactam precursors for oxazolomycine by a novel approach using commonly available carbohydrates. The paper also describes the spatial models of the

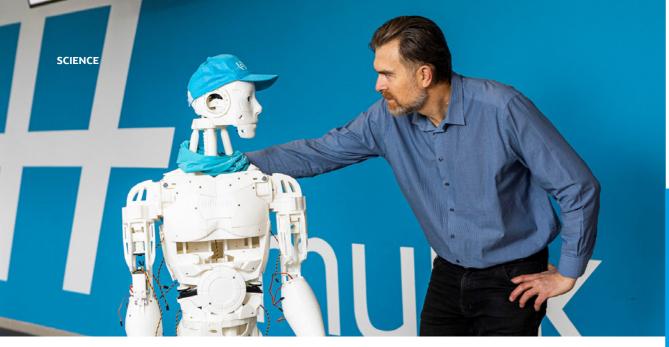
compounds in the key reaction steps of the process. The new findings will help improve the efficiency of the synthesis of these extraordinary chemical structures.

Radomír Jůza, a postgraduate student of Applied Biology and Ecology, published a paper in Medicinal Research Reviews (impact factor 9.7). Together with his colleagues from the Third Faculty of Medicine of Charles University and the Biomedical Research Centre of the University Hospital in Hradec Králové, they wrote about Recent advances with 5 HT3 modulators for neuropsychiatric and gastrointestinal disorders. The paper was featured on the front cover.

PharmDr. Ondřej Benek, PhD and his colleagues from the Biomedical Research Centre of the University Hospital in **Hradec Králové** published a review paper titled A Perspective on Multi-target Drugs for Alzheimer's Disease in the prestigious journal Trends in Pharmacological Sciences (impact factor 13.5): "Our review discusses socalled multi-target drugs (MTD's) and the current state of research on the potential they hold in the treatment of the Alzheimer's disease. The principal advantage of MTD's is that they have multiple effects against the target disease and therefore should be more effective than single-target drugs, at least in theory. This topic has become rather popular over the past few years and has been explored in hundreds of scientific papers and other publications. However, some of the proponents neglect to mention that MTD's also have their disadvantages and limitations. We draw attention to their possible shortcomings and propose some of the possible solutions. As far as I know, a critical view of MTD's has been missing in scientific literature, which is why I believe that the review could be interesting and beneficial for other researchers in our field, "Dr. Benek sums up. •



UHK ANNUALLY 2020
UHK ANNUALLY 2020



A team from FIM is the only Czech participant in an international competition. It is designing a robot called FIM Bot

ZUZANA DOSTÁLOVÁ, KAREL MLS FACULTY OF INFORMATICS AND MANAGEMENT, UHK

A team from the Faculty of Informatics and Management of the University of Hradec Králové (FIM UHK) is one of the 77 teams that qualified to enter the competition. The teams hail from 19 countries. A total of 10 million US dollars in prize winnings is at stake.

Everything started in 2018 when a certain student of the name of Jiří Šurýn came up with a topic for his master thesis based on an assignment derived from the ANA Avatar XPRIZE competition. We agreed on that very same day to sign up for the project, even though at first it seemed more like a student prank and a totally crazy idea. However, like Peter Diamandis, the founder of the XPrice Foundation says in his Laws: "The day before something is truly a breakthrough, it's a crazy idea," recollects Karel Mls, the team leader and a lecturer at the FIM's Department of Information Technologies.

The aim of the competition is to develop a physical, non-autonomous robotic avatar system that enables the operator to see, hear



and interact with a remote environment. In future, avatars will be expected to remotely

provide healthcare services or deploy immediate response in natural disaster scenarios.

The ANA Avatar competition kicked off in March 2018 and should go on for 4 years.

Currently a prototype humanoid robot with the working name FIM Bot is being manufactured at the Faculty of Informatics and Management using a 3D printing process.

"We will also have to develop a working feedback system for the human operator and then connect both parts – the robot and

the human operator – in real time via a fast Wi-Fi connection, and then test and synchronize them perfectly... At the Researchers' Night, which was held in November this year, we showed the first version of our functional model to the visitors. We could not have wished for a better slogan for the science festival – Humans and Robots – is just perfect," Karel Mls adds with a smile.

The future avatar will be manufactured from a polylactic acid (PLA), a biodegradable material similar to polystyrene, which is made from plant starches, and one of the most popular materials for 3D printers, which will form the mechanical structure of FIM Bot's body.

The components will be put together with screws, bolts and glue. Almost 2 kg of printing filament, that is about 500 metres of material, will be used to produce one arm, which will consist in almost 80 separate components. The 3D printing alone will require at least 200 hours.

Together with the production of the physical parts, the team must also develop the software. "The actuators used for the movement of the fingers, hands or head will be controlled by Arduino scripts. At a higher tier, the system control will run on a Linux-based system (Raspberry Pi 4). The more complex algorithms and the machine learning and artificial intelligence aspects of the system will require the use of Python and will require

the use of the university's own cloud infrastructure," Pavel Blažek, the project's technical supervisor, explains.

The project does not just have the support of FIM UHK. It has also been included in SKODA Auto's University Cooperation Program. "This year, we have been testing new waters in the area of

financing, such as through the Gama 2 internal contest for applied research projects organised by UHK. But in general, we strive to maximise our fiscal efficiency, and look for other solutions that will get us to the competition finals with the existing level of support. Everyone involved in the project does so in their free time and for the thrill and excitement of working at the cutting-edge; students may also use the outcomes in their class projects and graduation thesis," the main project coordinator concludes. •



"The goal of the project '1620 - Road to Defeat' was to commemorate the key events of the quadricentennial anniversary of the end of the Bohemian Revolt," explains archaeologist Ladislav Rytíř

TOMÁŠ VODIČKA DEAN'S OFFICE, PHILOSOPHICAL FACULTY, UHK

In 2020, the Department of Archaeology co-organised commemorative events for the 400th anniversary of the Battle of Rakovník. Regrettably, all scheduled events were affected by the Coronavirus outbreak.

What was the original plan for the project "1620 - Road to Defeat"? And what were the main features of the project?

The project, whose main events were scheduled to take place from 30 September 2020 to 2 December 2020, aimed to commemorate the significant historical events of the year 1620. A combination of various project elements was intended to help us recollect in a dignified and comprehensive manner the events that preceded the fateful Battle of White Mountain. The programme consisted of a variety of scientific, historical and cultural elements, which were the products of a cooperation between both formal institutions and individual experts and enthusiasts. We created a website and Facebook page for the project, where we presented news about the project and ongoing events as well as details about the Battle of Rakovník.

1620 Cesta k porážce

DOMONIA STRÁMA VISA PLANSTY KANÍOV DISSISTE BRODRACE Q.

1500 Cesta k porážce

1500 Cest

Starting from 30 September 2020, we organised a series of lectures devoted to the Battle of Rakovník, the findings of archaeological surveys, and in more general terms, to the sources of military history pertaining to the Early Modern Period.

We planned to conduct an archaeological experiment consisting in the construction of an artillery redoubt. Regrettably, due to the pandemics, we had to postpone the building works until 2021. But we managed to draw up a detailed project and construction plans based on the structures preserved at the Rakovník battlefield, the primary sources and our consultations with military experts. In our experiment, we would like to measure and analyse the time and workforce needed to complete this type of fortification.

The commemoration of the quadricentennial anniversary of the Bohemian stage of the Thirty Years' War was to be accompanied by a historical recreation of a part of the Battle of Rakovník. The re-enactment was scheduled for 31 October 2020 and was to be attended by 36 military history associations from Bohemia, Hungary, Spain, Malta, the Netherlands, Finland, the United Kingdom, Poland, Sweden and Russia. To our regret, government emergency measures put a stop to our effort. But the plans still stand; we have postponed the re-enactment to the year 2022.

This was to be followed by the redeployment of the historical military units from the battlefield at Rakovník to the battlefield at White Mountain from the 5th to the 7th November 2020 along the actual route taken by the army of the Bohemian Estates. Once again, due to government restrictions, we were unable to stick to the plan. Symbolically, the 80-kilometer march was carried out over a period of two days (6 to 7 November 2020) by 3 members of the organising committee (Ladislav Rytíř (Philosophical Faculty UHK), Mgr. Marian Krucký (Director of the Melichar Museum of National History), and Milan Kukla (military history association Butlers Dragonerregiment), complemented at the end of the march by Luboš Roušal on behalf of Ferdinandus Orden 1561). We are very grateful to Mgr. Kateřina Blažková from the Museum of Thomas Garrigue Masaryk for her invaluable moral and caloric support.

The entire project was to culminate with a ceremonial service at the cairn commemorating the Battle of White Mountain and the nearby Shrine of Our Lady Victorious. The service was organised by Benedict nuns from the convent, while the ecclesiastical part of the ceremony was to be attended by military troops in period-accurate uniforms. Regrettably, the original plans for this part of the programme did not pan out either. In the end, the representatives of all the institutions and associations participating in the project "1620 - Road to Defeat" were beat by the pandemics and had to resort to laying down wreaths at the cairn that commemorates the battle and at the tomb of the White Mountain soldiers in the cloister.

You still managed to present a part of the events online: how difficult was it?

Although we had to make a lot of changes at the very last minute, thanks to the efforts of our colleagues from the Museum of Thomas Garrigue Masaryk in Rakovník, to whom I am ever so grateful, we managed to record and upload the entire lecture serious to our YouTube channel, where it remains available to the public. We also planned to present the lectures at the Municipal Library in Prague, but those were also replaced by their digital recording.

In what regards the accompanying programme of the contemplated re-enactment of the Battle of Rakovník, we put together various exhibits, demonstrations and information on what military life was like at that time – the setup and operation of a military camp, field medicine, and artillery know-how, to name just a few issues of interest. We managed to make short videos on the demonstrations in record time and posted them to our YouTube channel.

Thanks to our sponsors, including the Philosophical Faculty UHK, we also published the second amended edition of The Battle of Rakovník 1620. It outlines what we currently know about the battlefield and the battle itself. You can order the book from the museum website for 250 Czech crowns, or you can buy it at the ticket office in the Museum's main building, or at any of its branches.

Which organisations participated in the event?

My thanks go to everyone who participated in the project. After more than nine months of preparations, we have managed to organise an exceptional event that attracted the attention of experts and the general public alike, and overall, exceeded all our expectations. The principal organiser of the event was the Museum of Thomas Garrigue Masaryk in Rakovník. The expert segments of the project were organised by the Department of Archaeology of the Philosophical Faculty (UHK), the Faculty of Art (UK) and the Institute of History of the Czech Academy of Sciences. I am also very grateful to the military history associations Polský svaz, z.s. and Butlers Dragonerregiment, z.s. The ceremonial service at White Mountain and the ecclesiastical program was arranged and organised by Benedict nuns from Venio Abbey - Benedict Nun Convent at the White Mountain.

The project was organised under the auspices of the Czech Ministry of Culture, and the individual segments were to be attended by the ambassadors of the Netherlands, Liechtenstein, Hungary, Germany, Poland, Slovakia and the United Kingdom. •

Faculty of Education students majoring in Czech Studies moved three tonnes of stone

PETRA KUBAŘOVÁ DEAN'S OFFICE, FACULTY OF EDUCATION, UHK

On 18 September 2020, an event was held in Velké Meziříčí to celebrate the life and work of the writer Ladislav Dvořák (1920–1983) on the occasion of the centennial anniversary of his birth. It was organised under the auspices of the Czech Centre of PEN International and sponsored by the town of Velké Meziříčí and his native hamlet of Krásněves. Also involved in the event were the Grammar School in Velké Meziříčí, the Moravian Provincial Archive in Brno, the State Regional Archive in Žďár nad Sázavou and the Faculty of Education of the University of Hradec Králové.

The one-hundred-year anniversary of the birth of Ladislav Dvořák, a poet, writer, author of literature for children, translator and journalist, has become an excellent opportunity for a much-deserved reflection on his live and moral legacy. The literary history



workshop organised in his memory was held at the premises of the Grammar School in Velké Meziříčí, where Dvořák studied. Lectures were presented by Dr. Jan Bílek and Professor Vladimír Křivánek from the Department of Czech Language and Literature of the Faculty of Education of the University of Hradec Králové, and Dr. Vlastimil Čech from the Department of Czech Literature of the Faculty of Art of Masaryk University in Brno. The lecturers interpreted the writer's life and work in the critical years of the Nazi regime and in the initial years of the Communist regime, in the "golden" sixties and after his signature of Charter 77, as well as in a broader literary context. The lectures and other texts on and about Ladislav

Dvořák will be published in the 24th volume of the national history journal Western Moravia. Visitors could also visit the exhibition of documents and books curated by the archivist, Dr. Martin Štindl.

The workshop was accompanied by a cultural programme. The Director, Jaroslava Šiktancová from the Academy of Performing Arts in Prague, prepared a performative recital called Ladislav Dvořák which sought to answer the question of who he was based on the author's literary work and the testimony about his life in the form of biographical sketches. This was followed by the unveiling of a memorial plaque created by the sculptor Jiří Mark Jr. from Dvořak's native hamlet of Krásněves. The mayor Karel Uhlíř explained the genesis of the plaque, the writer's son held a short speech, as did Dr. Bílek. The day was concluded by a musical performance. The event was attended by several hundreds of people. At the event which combined science and culture, made possible by a cooperation of universities, local government and state administration, the Faculty of Education of the University of Hradec Králové was represented not just by its lecturers, but also by the Vice-Dean, Dr. Nella Mlsová, and the Head of Department, Dr. Petra Bubeníčková. The memorial plaque was installed on a three-ton block of stones hauled from a nearby ravine, where the writer used to play as a little boy.



"A good piece of research does not just produce answers, but also many questions," explains Associate Professor Petr Bogusch from the Department of Biology of the Faculty of Science. His research group specialises in solitary wasps and bees that live in so-called galls and it has been looking for answers and asking questions for over a decade. As the only team specialising in this line of research in the entire world, they have managed to discover several new species, identify new research methods, and propose a new ecosystem of bees.

The research project started in a plastic bottle

Galls are created by chloropid gout-flies, a species of pest fly from the Chloropidae family, which nests in reed stems. Once they hatch, they leave behind an empty cavity called "a gall". The entrance is masked by leaves but some species can still penetrate inside and use it as their nest. Those species include solitary bees and wasps.

"I enjoy studying topics that are constantly on everyone's mind but which still remain chronically under-researched. This is how I encountered reed galls ten years ago. At the time, the Hradec Králové Museum conducted a research project using Malaise traps. They installed one of the traps in a bed of reeds next to a local pond. When I was asked to identify the insects, the task proved surprisingly difficult, because I had never seen some of species before, and in some cases only a few

specimens were caught in the trap. As I studied the species in more detail, I discovered that they lived in reed galls. All of them were considered rather rare, and some of them weren't even available in any museum depository. So we tried to collect the galls and hatch the insects to discover what was inside," Associate Processor Bogusch recollects the beginnings of his research.

At first, the researchers did not know how to hatch the larvae. They sought inspiration from their German colleagues and installed each reed gall in a plastic bottle. The problem was that they had collected over five hundred of them from one location, and there over thirty locations in total. Petr Bogusch therefore designed a hatchery of his own devising, which later got patented as an industrial design.

As a consequence, they discovered that many rare species really do live in reed galls and they even managed to identify some that are

34

UHK ANNUALLY 2020

new to the Czech Republic. Reed gall research also managed to explain the nesting biology of those species – for example their habitat, the design and location of their nests and their sources of food.

Do you dig digger wasps?

The team made a true scientific breakthrough when they studied Pemphredon fabricii, a species of crabronid wasps. "Reed galls are collected in winter when they contain maturing larvae. We wanted to see with our own eyes what they look like during the nesting season and we made a fascinating discovery: the females of P. fabricii feed larvae just before pupation. The interesting thing is that they bring fresh aphids to feed just the smallest larvae at the apex of the nest. This is truly remarkable, we have never seen this type of behaviour in any animal species before," comments wide-eyed Petr Bogusch.

Endangered wetlands and their inhabitants

The beds of reed that form the habitat of gall-loving solitary bees and wasps frequently grow in the open spaces between meadows and ponds or in wetlands and marshes. Regrettably, those are the very areas that have been increasingly endangered by human activity. Many of the species living in galls are recorded in the Czech Red List of Threatened Species. "We often call them 'indicator species' since their presence reveals the qualitative status of the wetlands. They keep to marshes that have existed for a long time and that formed naturally. Gall-nesting wasps and bees do not settle for any food, such as the pollen of invasive plants. This may help us designate certain marshes as a nature reserve, "Mr Bogusch explains the importance of reed gall research for environmental protection, and adds that size does not matter, it's what you do with it: "A wet patch of a field might be large enough for bees and wasps from the entire vicinity. Sometimes you can find more protected and rare species there than in a conservation area. There are very few suitable locations available for those species in the cultivated landscape, which is why they concentrate there. In certain locations, the wetlands form an

interconnected network of many small marshes, where bees can fly and intermingle freely, and which act as an important source of biodiversity. Regrettably, some local and Government authorities do not quite comprehend the importance of those locations and strive to convert them into agricultural land."

The reed gall research project has come to a close, but there are still many unanswered questions

"Our reed gall research project is most likely drawing to a close. We are currently starting to focus on the feeding behaviour of solitary bees, specifically where they collect pollen. In our previous research, we frequently encountered the problem that while some of the species are more or less known, the information on them included in books and other sources has not been updated for over a hundred years," says Petr Bogusch.

The new research project is expected to reveal that various species of Central European bees prefer certain types of pollen. "This type of research is rather time-consuming, we need to travel to museums and collect pollen directly from specimen bees. Our initial paper published on this topic analyses the relationship between pollen and biotope specialisation and the level of endangerment of the species – that is as to whether more specialised species are more threatened than the less specialised ones. The problem we faced was that, so far, bees had not been classified according to their ecological groups. After much pondering and deliberation, we took the liberty of classifying bees into 6 groups that best reflect their environmental needs and which may be used in the protection of landscape, species and nature in general," the Mr Bogusch continues relentlessly. There is a class available to each species, since bees always tend to incline to one or the other. "One of the benefits of this classification is that it may help in environment protection planning, and therefore act as a practical instrument. We hope that it will help in the protection of the environment in general, and in the protection of endangered bee and wasp species in particular," Petr Bogusch describes the broader significance of his team's research.

The immortal Remoska has dazzled people for over 60 years

ZUZANA DOSTÁLOVÁ DEAN'S OFFICE, FACULTY OF INFORMATICS AND MANAGEMENT, UHK

Do you remember the good old remoska pan, which was just as fun and convenient to use at home, as it was at your summer cottage? Easy to pack, easy to transport, easy to cook with. Thanks to a recent cooperation between two institutions, cooking will soon be even easier and more fun.

Through its Faculty of Informatics and Management (FIM UHK), the University of Hradec Králové is partaking in a project aimed at innovating the venerable Remoska pan. The project, which is scheduled for completion in November 2022, will utilise artificial intelligence to accomplish the goal of improving the already unrivalled product. A few years ago, Remoska changed its design and improved its energy efficiency. In addition to a traditional pan, the brand now also offers other kitchen utilities that have gained many awards at both national and international trade fairs.

"We are pleased to have managed to reach the current stage of progress in our joint project with Remoska, a traditional Czech company. Our Faculty can utilise its know-how in the combined fields of IT, economics and management. We believe that a bright future awaits Remoska's products," commented Ondřej Krejcar, the former Vice-Dean emeritus for Science and Research of FIM UHK and a member of the research team for the project, who currently acts as the Vice-Rector of the University of Hradec Králové for Science and Creative Activities.

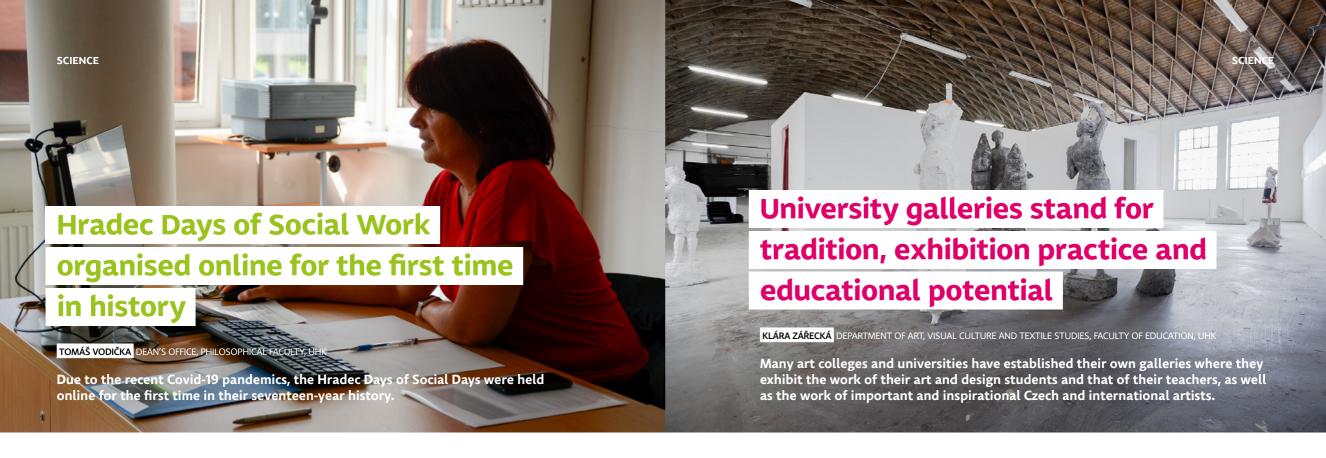
REMOSKA s.r.o. is a Czech limited liability company, which was established in 1957.

Throughout its existence, it has focused on the development and manufacture of kitchen cooking equipment, especially on its renowned, easy-to-transport electric baking pan with



a heating coil installed in the lid. The product has been steadily developed ever since. For the 21st century, the company wants to bring to the market a new improved version that will incorporate some of the elements and features of the internet of things (IoT).

And so, notwithstanding the fact that the manufacture of this product was almost discontinued for some time after the invention of the microwave oven and other similar domestic appliances, the Remoska still has a future. It is currently used on a daily basis in more than 5 million households all over the world. We hope that the upcoming innovations will be welcome by its loyal customers and that a new wave of Remoskamania, such as we witnessed in 2001 in the United Kingdom, is just around the corner.

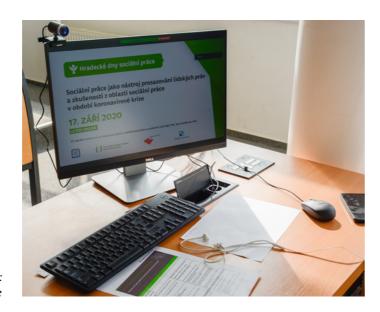


Tam pleased to say that the current restrictions did not have any major impact on the structure of the conference. The call for papers was successful and we were able to present papers across five expert sections, one international. Participants could even attend the accompanying programme, such as movie screening, and they were able to hold informal discussions at an online café," the conference manager, Lucie Smutková, comments.

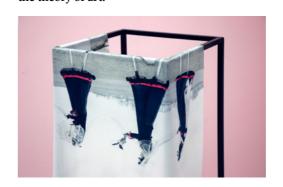
For the keynote address, the participants could watch the pre-recorded lecture by Professor Walter Lorenz titled Affirming social work values and principles in the light of the Corona Crisis. After the lecture, Professor Lorenz responded to live questions from the audience.

"Both the main program and the afternoon seminars were held in a very friendly and cooperative atmosphere that helped counterbalance the absence of personal social contact. We are pleased with how many people attended and we very much appreciate all the encouraging feedback that we got. The participants appreciated that the

conference turned out to be a very welcome and important space for university teachers, social workers and students to share their expertise and experience in," Lucie Smutková concludes.



University galleries play a special role in the system of cultural institutions, since they have the potential to form a new and up-and-coming generation of artists and teach them how to present their work. Each university gallery is unique, with its singular style, rendition of exhibitions, visual and physical space, history and curatorship. Interestingly enough, surprisingly little attention has been devoted to this type of galleries and exhibition spaces in the theory of art.



And so, the Department of Art, Visual Culture and Textile Studies of the Faculty of Education (UHK) stood up to the challenge and organised

an online conference in November in order to draw attention to the importance of university galleries as the first space where art and design students learn to present their work, get a hands-on experience with running a gallery or curating an exhibition. They also learn how to deal with various associated challenges. At the conference, we would like to discuss the concept and strategic planning of the future development of such galleries, how to arrange professional supervision by an experienced curator, and how to improve the reach and prestige of such institutions and expand the scope of their exhibition programme that will account for the contemporary approaches to art and design presentation. So far, we know very little about the criteria for the operation of university galleries, their traditions, and the organisation of their exhibition programme. There is also very little information available about the most vital issue - whether such galleries fulfil their educational potential, especially when it comes to galleries run by faculties of education, or about the involvement of students in their operation or about the role of a curator at such a university gallery.

Vivat academia, Vivant professores! – Welcome, new professors and associate professors

The Department of Information Technologies has a new professor – Vladimír Bureš

ZUZANA DOSTÁLOVÁ DEAN'S OFFICE, FACULTY OF INFORMATICS AND MANAGEMENT, UHK

On Thursday, 2 July 2020, Vladimír Bureš accepted a letter of appointment signed by the President of the Czech Republic on 17 June. He passed his professor appointment procedure at the Czech University of Life Sciences in Prague in the field of systems engineering with flying colours. Together with Mr Bureš, a further 62 men and 18 women were appointed professors.

Professor Bureš has been teaching at the Faculty of Informatics and Management since 2003. As a second-year postgraduate student of systems engineering and informatics, he was accepted at the Department of Economics and Management as assistant lecturer. Just one year later, his supervisor, Professor Mikulecký, offered Vladimír Bureš the opportunity to teach a course on the theory of systems. "I was not exactly sure what the subject entailed. But I took up the challenge and did my best. I teach the subject to this very

day, but the contents of the course have changed radically over time. We have moved from general descriptions and flowcharts to systems dynamics modelling and the basics of system engineering," Vladimír Bureš recollects his early days at the Faculty, where he currently acts as the Head of the Department of Information Technologies. He defended his habilitation thesis titled Multidisciplinarity of Knowledge Management from the Perspective of Systems Engineering in 2009 in the field of systems engineering and informatics at FIM UHK. He subsequently graduated from the MBA distance study programme in the field of global management.

In addition to being a guarantor and a teacher of several undergraduate and postgraduate courses, Vladimír Bureš also currently supervises two research projects. "The first one is endowed with a slightly more prestige, as it involves national support for the COST project (European Cooperation in Science and *Technology*) *implemented within the European* Inter-Excellence scheme. In the project, we research consolidation options for various research methods and directions of research toward a better understanding of the phenomenon of tsunami. The second one is more of a pet project of mine. It is organised under the Ministry of Industry and Trade, within the Operational Programme Enterprise and Innovation for Competitiveness,

titled "Research and Development of a New SW Solution – Intelligent Robotic Management of RPA Documents," which aims to incorporate intelligent functionalities in the existing DMS systems," Professor Bureš explains.

The "fresh" professor also likes to mention tongue-in-cheek that he contributed to projects organised by two Nobel laureates, such as the International Agency for Atomic Energy in Vienna, for which he helped create a methodology for the evaluation of knowledge-based and technical projects. The IAEA is the holder of the 2005 Nobel Prize for Peace.

"Ever since 2003, my accomplishments have been highly driven by the people whom I had the good fortune to work with. I am ever so grateful for being so lucky to have been accompanied on my journey by Peter Mikulecký and Pavel Čech from the very onset. Most recently, I have also received great support from Professor Hynek and Professor Slabý. And the number of my colleagues who have helped me in the time span between those two points is too large to list in the space we have. I hope they will forgive me if I thank them anonymously," Professor Bureš concludes.

When he is not teaching or conducting research, he likes to watch and re-watch various TV series, like The Bing Bang Theory and Futurama. He also likes Hong Kong action movies, as well as WWII and natural science documentaries. He likes jogging, family trips and the occasional dance lesson for adult beginners. •

Associate Professorship for Karel Kouba from the Department of Political Science

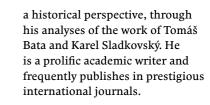
TOMÁŠ VODIČKA DEAN'S OFFICE, PHILOSOPHICAL FACULTY, UHK

The Rector of Palacký University in Olomouc, Professor Jaroslav Miller, appointed Karel Kouba associate professor of political science on 1 July 2020. He was nominated by the Research Board of the Faculty of Arts.

A ssociate Professor Karel Kouba
is a political science graduate
of Palacký University in Olomouc
and Miami University in Florida,
USA. Today, he teaches graduate
and postgraduate courses at the
Department of Political Science
at the Philosophical Faculty of
the University of Hradec Králové,
focusing mainly on Latin American politics.

focusing mainly on Latin American politics. He is currently also Vice-Chair of the Academic Senate of the University of Hradec Králové.

He has lectured at many international universities, especially in Latin America, which is the main focus of his research. Born in Zlín, he also studies Czech society, both in the context of the contemporary election process and from



In his habilitation thesis, he analyses various aspects of electoral

behaviour. For example, he outlined measures that could be introduced by Czech universities to support the voter turnout in elections to their academic senates, which is currently particularly low. He also researches Latin American politics, such as the topical and critical issue of the re-election of presidents and the causes of political instability in the region.

SCIENCE

Pavel Zikl appointed associate professor of special education

PETRA KUBAŘOVÁ DEAN'S OFFICE, FACULTY OF EDUCATION, UHK

On 1 May 2020, the Rector of Charles University in Prague appointed Pavel Zikl associate professor of special education. He was nominated by the Research Board of the Faculty of Education of Charles University after he defended his habilitation thesis titled Motor Activity of Children with Mild Mental Retardation.

Associate Professor Zikl has long been researching various topics in the area of the mentally handicapped and the education of children with special needs, especially children with physical, mental and combined disabilities.



Before joining the Faculty of Education of the University of Hradec Králové, Associate Professor PhDr. Pavel Zikl, PhD, worked as a teacher at a special school for children with multiple disabilities for over ten years. He joined the Faculty in 2003 and currently works as the Head of the Institute for Primary and Pre-Primary Education, where he educates future elementary and pre-elementary schoolteachers. His principal areas of interest as an educator include working with children with special needs, as well as courses devoted to individual types of disabilities (psychopaedics, somatopaedics) and the practical application of therapeutic interventions. As a former Academic Senator and a former Vice-Dean, he is a well-established member of the Faculty. •

Pavel Čech joins the ranks of associate professors of the Department of Information Technologies

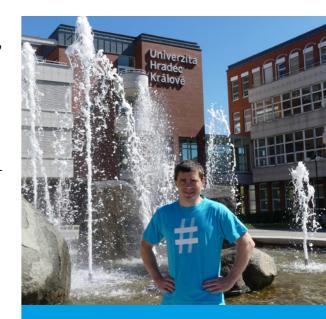
ZUZANA DOSTÁLOVÁ DEAN'S OFFICE, FACULTY OF INFORMATICS AND MANAGEMENT, UHK

At the end of June, Pavel Čech defended his habilitation thesis before the Research Board of the Faculty of Informatics Management. Effective from his appointment by Rector Kamil Kuča on 1 August 2020, Pavel Čech became an associate professor specialising in systems engineering and informatics.

In my thesis I compared various types of UML diagrams used in the development of software systems. I tried to identify similarities between two UML diagrams in spite of the differences between their visual representations," the new associate professor explains the fruits of five years of his research.

Pavel Čech has been with the Department of Information Technologies at FIM UHK since 2003. In 2005, he obtained his PhD in information and knowledge management. He teaches courses on object modelling and business informatics. At FIM, he participated in various research projects organised under the auspices of EU framework programmes and in the projects of the Czech Science Foundation. He also co-organised international workshops and conferences in the area of smart work environment technologies.

His current research interest lies mostly in the area of the application of intelligent technologies that aim to minimize the adverse impact of tsunami, to optimize document workflow management and to implement a paperless laboratory environment.



Associate Professor Ing. Pavel Čech, PhD is from Hradec Kralove. He majored in Information Management at the Faculty of Informatics and Management of the University of Hradec Králové. He is an ardent skier, and a former Alpine skiing competitor. •

UHK ANNUALLY 2020 UHK ANNUALLY 2020

SCIENCE

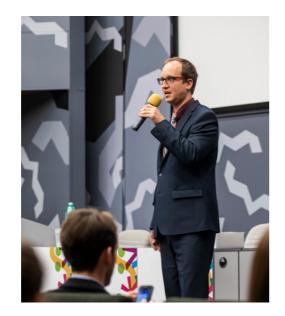
Zdeněk Beran, the Head of the Institute of History, has been appointed associate professor of Czech history

TOMÁŠ VODIČKA DEAN'S OFFICE, PHILOSOPHICAL FACULTY, UHK

On 1 September 2020, the Rector of Jan Evangelista Purkyně University in Ústí nad Labem appointed Zdeněk Beran, the Head of the Institute of History of the Philosophical Faculty of the University of Hradec Králové, associate professor of Czech history. He was nominated by the Scientific Committee of the Faculty of Arts UJEP.

A ssociate Professor Zdeněk Beran is an expert in Czech and Central European history associated with the Late Middle Ages, especially with regards to the Hussite Movement, the history of nobility, and medieval law and administration. Internationally, he is one of the chief proponents of a research project that focuses on peace and the restraint of violence in the Late Middle Ages.

From 2017 to 2018, he was the Vice-Dean for International and Foreign Relations of the Philosophical Faculty of the University of Hradec Králové. From 2018 to 2020 he was the Vice-Rector for International Relations of the University of Hradec Králové. On 1 April 2020 he was appointed the Head of the Institute of History of the Philosophical Faculty of the University of Hradec Králové.



Květuše Kunešová – new associate professor of literary theory

PETRA KUBAŘOVÁ DEAN'S OFFICE, FACULTY OF EDUCATION, UHK

The Rector of Palacký University in Olomouc appointed Květuše Kunešová associate professor of literary theory on 1 December 2020. She was nominated by the Research Committee of the Faculty of Arts of Palacký University in Olomouc after defending her habilitation thesis The Chronotype of Exile (A Study of Temporality and Spatiality in Migrant Literature from Quebec: Émile Ollivier and Dany Laferrière).

Associate Professor PhDr. Květuše Kunešová, PhD graduated from the Faculty of Arts of Masaryk University in Brno (Latin, French and English Studies), where she also

got her PhDr. in 1986 and later her PhD in Romance Studies; she specialises in French literature. She joined the Faculty of Education of the University of Hradec Králové in 1994. Mrs Kunešová works at the Department of French Language and Literature, where she lectures and teaches seminars on literary theory, and the literary and cultural history of France

and French-speaking countries. She cooperates with the University of Lille in organising international conferences on young adult literature as the chair of the organisational committee. From 2008 to 2015 she acted as a member of the Advisory Board of the Central European Association for Canadian Studies and as the head of its Czech section.

She frequently attends international conferences in both the Czech Republic and abroad, particularly in France. She has gained international experience from her research stays at universities in France, Belgium and Canada.

In 2007, she was awarded a grant by the Canadian Government for Canadian Studies, specifically Quebec literature, and she was lead researcher in three projects devoted to Czech

expats in Canada.

Květuše Kunešová wrote three monographs (Exile: Reality and Imagination; Transformation of the Novel Genres; French-Canadian Literature for Children and Young Adults). She publishes regularly in Czech and international journals and in collective monographs, especially in cooper-

ation with the University of Lille and ISFEC Aquitaine in Bordeaux.

"Antiquity and French culture gave my life a sense of direction. Canada opened up new horizons for me. Literary theory is just one of the many roads to knowledge. To quote a classic 'Grau ist alle Theorie, und grün des Lebens goldner Baum.'"



JAKUB NOVÁK UHK SPOKESMAN

Finding the necessary financial means for UHK students and academic workers to travel abroad has never been so easy. The year 2020 has been a good year. The University of Hradec Králové (UHK) successfully applied for an Erasmus+ International Credit Mobility grant and received a record amount from the Czech National Agency for International Education and Research (Dům zahraniční spolupráce) – an astounding EUR 781,523.00, which translates into almost CZK 21 million.

C To this context, many thanks go to all our **L** colleagues who have put much effort into putting together all the applications and documents necessary for each mobility. UHK's growth trend in this area is really amazing. It was CZK 10 million in 2018. Last year it was more than CZK 18 million and this year we are the proud recipients of CZK 20 million. This means so much to those of our students and academic workers who wish to travel abroad," notes Leona Stašová, Vice-Rector for International Affairs, explaining how the Centre for International Cooperation has aided the University of Hradec Králové now and in the past. Moreover, the total number of mobility programmes approved, including universities and various institutions, to where people

interested in studying and working can go and from which people interested in studying and working can come, count no less than 204 locations worldwide.

UHK can once again draw on no small amounts in areas such as Asia, Africa and Latin America. These are regions that the University focuses on through a selection of unique fields of study. "The experience gained by our students in these localities lends them not only otherwise unattainable skills and abilities, especially when it comes to language skills, but they also learn how to deal with exceptional situations in cultural and social environments that are just so different to their own. Those of our students who have completed

their studies abroad return to us as more mature personalities. Our academic workers acquire valuable practice and experience," proudly says Vice-Rector for International Affairs, Ms Stašová in her assessment of the benefits of being able to work and study abroad. She in fact has herself been a participant to more than a dozen placements abroad.

A huge challenge for the upcoming academic year is of course the persistent COVID-19 pandemic. "The health and safety of our students and employees has and always will come first. As things currently stand, we are making preparations for alternative options when it comes to studying abroad. I am referring to virtual mobility, which allows students to take selected courses at partner universities outside their own country online, without them physically leaving their home. This is especially necessary due to the bad epidemic situation in various countries," Leona Stašová, Vice-Rector for International Affairs, highlights the various scenarios possible. Moreover, the Faculty of Informatics and Management of the University of Hradec Králové (FIM UHK) has already



entered into negotiations with international partners on the options available. "Ironically, the current pandemic has also contributed to us speeding up preparations, as we have been forced to relocate all activities to an on-line environment. It is from that perspective that we wish to integrate courses run by renowned educational institutions, like Stanford, Harvard and MIT, into our programmes," confirms FIM UHK Dean, Josef Hynek.

The internationalisation of studies remains one of UHK's top priorities in Kamil Kuča's second



term of office. Kamil Kuča is the Rector of the University of Hradec Králové. "In 2019 alone, UHK sent out 420 Czech students to study abroad and received over 700 international students in return," says Rector Kuča, and adds that teachers are also interested in gaining international experience. "Last year, we sent out over a hundred of our colleagues and welcomed almost 400 international teachers in return," concludes Mr Kuča.

The University of Hradec Králové has been working on the UHK Guide series in English since 2018. The UHK Guide is very popular and has been viewed by tens of thousands of students worldwide. Each part acquaints viewers not only with all UHK has to offer, it also provides information and advice regarding accommodation and lots of useful and interesting facts about Hradec Králové itself. •



46

UHK ANNUALLY 2020 UHK ANNUALLY 2020

FOREIGN AFFAIRS FOREIGN AFFAIRS

The first UHK double degree programme agreement has been signed

JOSEF LEŽÁK INTERNATIONAL OFFICE, PHILOSOPHICAL FACULTY, UHK

Kamil Kuča, Rector of the University of Hradec Králové, signed an agreement at the end of October and in so doing he committed the Philosophical Faculty to cooperate with Columbia-based Pontificia Universidad Javeriana Cali. The objective of this cooperation is to create a joint bachelor's degree programme in political science. It is actually the first programme of its kind; the agreement enables students to get a so-called double degree at UHK.

↑ nd the choice of partner university was **A**definitely not random. The decision was made subject to careful selection, considering the friendly relations maintained by both institutions since they signed the bilateral agreement in 2016. And this is not the first time they have agreed to widen the scope of their

the only university in Columbia that UHK has bonded with, the numbers are incredible.

It should be noted that the two institutions signing the agreement does not put an end to work on the programme. Nonetheless, UHK is now one step closer to obtaining accreditation for this unique field of study.

The specificity of any double degree programme lies in identifying the overlapping elements of a field of study at two partner universities so that students can concurrently study at both universities.

Compulsory international mobility forms an essential part of the programme. Students must complete part of their studies at the partner university. If and when they successfully complete their studies, they get not one, but two diplomas! Double degree programmes substantially contribute to the institutions involved taking internationalisation further.

The Philosophical Faculty is currently planning to institute another such field of study, specifically, a master's degree programme in

cooperation. Both universities draw on the experience they gained in participating in the Erasmus+ International Credit Mobility; they partnered in 2018 – 2020. This contributed to 14 students and even 1 international expert, all from PUJ Cali, already having visited UHK. And 5 UHK students have in turn set out to study at PUJ Cali. Given the fact that PUJ Cali is not

> **EUROPEAN UNION** European Structural and Investing Funds Operational Programme Research, **Development and Education**



history. It should be run in partnership with the Constantine the Philosopher University in Nitra, Slovakia. And another bachelor's degree programme in political science is also on the drawing board. The Philosophical Faculty has undertaken to install 3 double degree programmes by the end of 2022. Ms Michaela Čapková is the head of administration in charge of assisting the Project Office and the International Office in getting the programmes up and running. Many thanks for participating in the project also goes to the current Dean, Jan Prouza. He used to be Vice-Dean for

International Affairs and his position has now been taken up by Petra Tlčimuková. And last but not least, we also extend our sincere gratitude to the Head of the Department of Political Science, Milan Hrubeš, and the Head of the Institute of History, Zdeněk Beran.

Preparations on the double degree programmes are part of the implementation of the OP RDE Internationalisation of Education overseen by the UHK (registration number: CZ.02.2.690.00.018_0560013280).

Two new lichen species have been discovered in South Korea

KRISTÝNA VÁVROVÁ DEAN'S OFFICE, FACULTY OF SCIENCE, UHK

Together with his Korean colleagues, Josef Halda (Department of Biology, Faculty of Science, UHK) has discovered and described two micro-lichen species that are new to science.

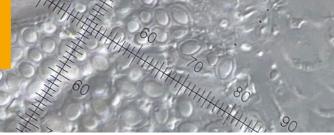
The fabulous discovery was made thanks L to a project aimed at mapping the lichen flora on islands off the south and east coasts of South Korea that not much is known about. "For scientists, it's something like the Promised Land because it is a region that from a lichen point of view is unmapped, unlike Europe," says Dr. Josef Halda.

"I was very glad that I could be a part of the team and so visit localities that are difficult to access. There are thousands of basalt islands of volcanic origin near the coast of Korea zones displaying a wide range of vegetation," explains Dr. Halda and adds that the actual collection of rock samples was no easy task either.

State-of-the-art tools had to be used to remove them from the durable substrates.

The new lichen does not grow leaves. It is unique.

The first new species discovered belongs to the genus Thelopsis (Thelopsis ullungdoensis). It's easy to recognise if you look closely at a cutting of the fruiting bodies, which are made up of large polysporic bags full of multi-cellular spores. Unlike Central European epiphytic representatives known to grow on old beech



and Japan are patriots and their relationships are projected into scientific competitiveness. These characteristics were reflected in the research itself: "For example, the islands of Dokdo, Ulleungdo and Jeju lie near Japan. South Korea very much supports research in this area and appreciates the findings surrounding new species that are not yet known to Japan. And that is why it is a big responsibility to be a member of the team and one is constantly under pressure to have results."





important? The lichen flora of Eurasia is cur-

rently relatively well known as much research

has gone into it. Nonetheless, the new species

discovered in East Asia constitute rare endemic

species within a very small area.

There are many ways how to determine whether a new species has been discovered: "And sometimes the simplest methods are the best. I used a magnifying glass and a microscope, because I study microscopic lichens. Their fruiting bodies are usually not bigger than 1 mm," says Dr. Halda. Then you compare additional microscopic features with other related species to make sure that the species you are handling really is a new one. "Professor Hur from the Sunchon National University accompanied us to many sites. He is an expert in East Asian lichen flora. Professor Hur is the author of many descriptions of new species of lichens and together we discussed the new descriptions. We have to a certain extent been lucky, because the lichens we described belong to genera that do not count all that many species."

South Korea is home to more mysteries. Research could take years.

Political aspects also played a role. Tradition has it that scientists hailing from South Korea

Generally speaking, these new species can be looked upon as bio-indicators in a specific area and they occur in a particular habitat, which needs to be protected because it may represent a refugium for other rare species.

A high species diversity demonstrates the

A high species diversity demonstrates the quality and the degree of conservation of the biotope and that is why the entire area needs to be protected. That goes for all of the areas visited in South Korea, as both the public and the authorities prioritise environmental protection. The scientific potential of East Asia is enormous and be it even a little possible, we would like to further our research with our team," concludes Dr. Halda. •



The COVID-19 pandemic made things difficult for over a hundred exchange students at the Faculty of Informatics and Management (FIM UHK). Some students stayed put in their current destination, while others thought it wise to go home immediately.

ut of 45 exchange students, two-thirds of them returned to their home country and most of them continued in their mobility studies on-line. Fifteen of them did not come back to the Czech Republic. In fact, three exchange students remained based outside of Europe. Ludmila Rejšková and Pavlína Formanová are amongst those exchange students who decided not to return home. Both of them study Information Management and they decided to stay in Kuopio, Finland, and to continue their studies on-line and to further discover the beauty and wonders of the local landscape. "The situation in all of Finland has, generally, not escalated as badly as in other European countries. That's not to say that there aren't certain measures in place. Schools are closed and all learning is done online. All catering outlets are closed. All big events, like ice hockey matches and sports events, have been cancelled. But everything else is allowed here," explains Ludmila Rejšková and adds:

"Our Erasmus programme is absolutely carefree. Before the epidemic hit Europe in full force, we managed to visit Lapland for a week and then travelled to Tallinn, Estonia, just in the nick of time. We spent our free time ice-skating on frozen giant lakes. To add to that, we rented a car twice since April and made several day trips with friends to the breath-taking Finnish countryside."

Contrary thereto, 60 international students took up their studies at FIM UHK at the beginning of the summer semester. Half of them went home when the pandemic struck. And only a third of those who returned home continued in their studies online. The others dropped out. Most of them were male students from Asia and five female students from Portugal. The other half that stayed in the Czech Republic and continued their studies at FIM UHK are mostly Europeans, but also students from Columbia, Mexico and Thailand.

"I went home for two weeks at the end of January. When I was supposed to go back to the Czech Republic, my family and I already knew that the COVID-19 virus was spreading through Italy, but at the time it was not as obvious and there was no quarantine, so I decided to risk the trip. I did it for the same reasons that led me to extend my *Erasmus+ programme by one more semester.* Apart from finding a girlfriend as soon as I arrived here, I like FIM's teaching approach, I enjoy living at the student residence and I like Hradec Králové and the Czech Republic in general," explains Diego Contaldi, a computer science student from Salerno, Italy.

On 26 February 2020, former Vice-Rector Zdeněk Beran cancelled all study and work trips to risk areas and, by analogy, all arrivals from such countries were either postponed or cancelled all together. Envisaged summer schools were also cancelled. So FIM UHK could unfortunately not welcome over a hundred international students in July and August last year.



But the new Rector's Decree passed on 16 June 2020 has gotten our hopes up. Provided the Faculty takes into consideration the up-to-date information and recommendations published by the Ministry of Foreign Affairs of the Czech Republic, study and work trips abroad and international internships for students and academic staff will get the green light. •

"Friendships from Taiwan have opened the door to the entire world for me," says student Markéta Jindráková

PETRA KUBAŘOVÁ, MARKÉTA JINDRÁKOVÁ FACULTY OF EDUCATION, UHK

Her one year stay at National Pingtung University, Taiwan, enchanted her to such an extent that even possible restrictions during the COVID-19 pandemic did not put her off.

When I attended the National Pingtung University, I studied at the Department of English and Music. National Pingtung University is located in Pingtung County, in the southernmost part of Taiwan. Originally, I was supposed to spend only one semester at NPTU, but I liked Taiwan so much that I decided to extend my stay. The local system is very much like the American one in that emphasis is placed on work in class and ongoing projects.

I would even go as far as saying that exam periods as we know them are very specific to the Czech Republic. Depending on the subject, lessons were usually not strictly divided into lectures or seminars. Teachers usually included discussions and various activities in their lectures. Improvised piano accompaniment was far more practical than American Literature, for example. In some classes there were up to

50 students, in others only up to 20 (usually music classes).

And the campuses were absolutely fabulous. I think studying takes you to another other realm; it becomes more personal. Students spend more time together and I felt more connected to school. My classmates and teachers also helped me feel at home; everyone was just so accommodating and friendly. When I was in the USA, I was a member of the International Club and a lot of us international students used to get together and meet. But at the National Pingtung University there aren't that many international students; there is no such club. I made lots of friends even so. Many of them came from all over the world, like from Saint Christopher Island (West Indies), Papua New Guinea, Honduras and England. And even though we didn't attend the same school, we saw a lot of each other. When I was in Taiwan, I visited many places and tasted countless dishes that I had never tasted before. During the first semester I rented a car with my friends and we travelled around most of the island. It was a great adventure because we spent the entire day hiking and then slept in hammocks strung up between trees, in our car or on the ground next to our car. We also went to Indonesia, specifically Bali and the Gili Islands.

Taiwan is a beautiful country with diverse fauna and flora and a rich culture. The first time I hit the road was more like a suicide attempt because everywhere you looked there was a honking scooter and you don't exactly expect pedestrians to walk on the roads; you can count the number of pavements on the fingers of one hand. At first the constant noise and chaos makes you tired, but everything about Taiwan is magical and I haven't met one single person who would think otherwise.

Taiwan did not panic because of the COVID-19 pandemic, so neither did I. All we had to do was wear face masks and our temperature was taken every morning. The Consulate in Taipei recommended I return home, because it might not be possible do to so later. When it came to my actually going back home, I took a risk,







FOREIGN AFFAIRS FOREIGN AFFAIRS

but I believed that things would calm down by the end of June and that I would be able to go home like I'd planned, which is also what happened. Personally, I wasn't really afraid of the virus and I didn't feel exposed to it or even endangered by it. Instead, my recommended early return came across to me as an unnecessary risk that I would be exposing not only myself to, but also everyone on arrival as well. To add to that, I didn't understand what the local media were saying and I myself was not keen on finding out more information. I was well aware of the fact that there was nothing I could do to improve the situation but comply with all the regulations and measures in place. Panicking does nothing to help. Quite the opposite. Lessons were also normal. We had one trial week during which we all met online, JUST IN CASE.

Markéta Jindráková studies English and Music at the Faculty of Education of the University of Hradec Králové. She will become a second stage primary school teacher. Both her majors are at the same time also her hobbies and she dedicates her free time to them. But what she loves most is travelling and interconnecting everything that is dear to her - languages, culture and society. She travelled to England and Ireland twice when she was at secondary school and spent a total of two months there gaining work experience. During her studies at the Faculty of Education of the University of Hradec Králové, Markéta travelled to the USA to study music, English and French for a semester.

I came home with a countless number of the most beautiful memories and equipped with new skills and abilities. New friendships have opened the door to the entire world for me! .

The University of Hradec Kralove started cooperation with Nextbike company, which already operates in 14 Czech cities on the principle of bike-sharing.

en.nextbikeczech.com

"There were a lot of guests at Harvard, but we all felt very welcome," says **Fulbright Scholar Program scholarship** holder Lukáš Vízek

KRISTÝNA VÁVROVÁ DEAN'S OFFICE, FACULTY OF SCIENCE, UHK

When Lukáš Vízek was awarded the Fulbright-Masaryk Scholarship in the spring of 2019 allowing him to spend six months at Harvard University, USA, he knew one thing for sure - that he was taking a step into the unknown. A step that could ultimately change his future career as a scientist and researcher. His objective was to explore the process of logical thinking in secondary school students when creating geometric structures. Apart from that he wanted to gain new experiences, get to know another university and learn about new possibilities in the field of scientific communication. How did he manage to do it?



Did you manage to collect enough material to support your research project? What would you want to apply to your work in the future? I mean at secondary schools and universities?

I have collected a lot of materials and am currently just sorting them out so that I can publish them. I have created a lot of source materials for both further research and student work. I looked forward to having normal lessons again, but as things stand, we're going to have to wait it out (Editor's note: The interview was made when the first wave of the COVID-19 pandemic struck).

When at Harvard you worked closely with Professor Jon Star. He supported your scholarship application, and he focuses on more or less the same line of research as you do, although he is a bit more algebra oriented. How did you two working together go? I met with Professor Star practically every week. He is very open to cooperation. He takes an interest in other people's work. He dedicated his time and expertise to my work. We regularly consulted on my work in person.

Who else did you work with?

I met with Professor Star every week through his task groups. He used to call it the Lab, which stands for Laboratory. It was a very diverse group made up of about 10 people. It included Chris, an American and Professor Star's PhD student; Ashkita, an Indian and PhD student of psychology; and Soobin, originally from Korea, Professor Star's colleague, to name just a few. Everyone's work was openly discussed, and I got the opportunity to present my findings. We also analysed Professor Star's work. He told us about his ideas, and everyone could comment on them. He always installed a very stimulating atmosphere, which was enriched by the fact that everyone came from a different academic background.

FOREIGN AFFAIRS

During your stay you also visited a primary school, at which you taught a few lessons. Was there something that caught your attention during the lessons? What are the American students like compared to our Czech students?

I got the opportunity to teach a few maths lessons at a local primary school, at which Professor Star had a small part-time job. We focused the lessons on elementary geometric constructions, and we verified my suggestions on the topic; those that emanated from the work I did as part of my Fulbright scholarship. The students were nice, open and calm. They behaved the same in class and during breaks. It seemed to me that there was no difference between these two periods of time. On the other hand, I got the impression that they were not used to strict rules in class and concentrating on difficult tasks. But I don't want to criticize the American system of education; I didn't spend enough time in the USA to even consider doing anything of the sort.

Your entire family relocated to the USA for a half a year, including your school-going children – how were you cared for? Did the University help you find accommodation, for example?

Harvard University would have provided us with accommodation if we had stayed for a year, so we rented a place of our own because we were only going to stay for half a year. We found it through ads, and everything went smoothly. And our children attended a public primary school. They were put in classes with the children of other guests attending local universities. Their schoolmates were usually not native speakers, because they came from all over the world. The teachers accommodated their lessons based on this fact and incorporated more English lessons in the kids' curriculum.

The Boston region is considerably cosmopolitan, which makes it specific. This helped me get some insight not only into what is going on in our homeland, but also in the world. Time will show how our children remember their stay in the USA.



Do Fulbright scholars keep in contact?

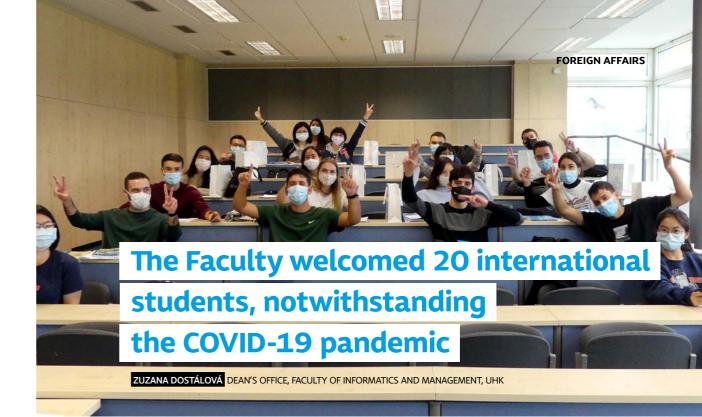
There were 2 Czech scholars in the Boston area this year: one at the Massachusetts Institute of Technology and the other one at Boston University. Fulbright Visiting Scholars from all over the world met at events organised by WorldBoston. We used to go on trips, attend concerts or even go out for dinner every month or so. They were mostly social gatherings. And I was very glad to be a part of them.

Is there anything else that still awaits you under the scholarship programme?

As my stay came to a close, I presented my work as well as that of UHK at the local Czech Center in New York. I prepared the programme for one Science Café. My internship is now closed. But I hope and trust that we will remain in contact and that I can continue working with Professor Star and his colleagues from Harvard University.

Mgr. Lukáš Vízek, PhD

Lukáš Vízek is a didactics specialist at the Department of Mathematics of the Faculty of Science, UHK. He trains prospective maths teachers who would like to teach at second stage primary schools and at secondary schools. He cooperates with grammar schools in Hradec Králové and designs teacher training programmes with colleagues from the Department of Mathematics Education of the Faculty of Mathematics and Physics, Charles University, Prague, like the Geometry Summer School.



The Faculty of Informatics and Management (FIM UHK) welcomed 20 international students under the Erasmus+ exchange student programme.

Notwithstanding the ever-deteriorating situation around the spread of the COVID-19 virus, FIM UHK opened its arms to 20 students hailing from three countries at the end of September. The pandemic, which has recently been gaining momentum in the Czech Republic, did not put off students from Spain, Portugal or even Taiwan. "I'm not really all that scared because the situation in Spain is really bad now and I don't think things can get much worse here," says José from the University of Granada in reply to whether he wasn't afraid of coming to the Czech Republic with Erasmus. He also explains why he specifically chose to study at the Faculty of Informatics and Management. "A friend of mine, who was here last year, recommended it to me. Plus, I think that this is a good opportunity how to make studying more enjoyable and how to improve my English."

The Faculty is awaiting the arrival of a doctoral student from India and a private student from Egypt, who aims to get a bachelor's degree in Information Management.

"I am very glad that I can register over 20 international students this semester. Given the adverse travel conditions, 20 is a very good number and we are pleased that these students have picked up the courage and travelled abroad even under these difficult circumstances," says Kristýna Havlíčková from the International Affairs Department, who looks after incoming students.

When the new students arrived at the Faculty, she gave them basic information about their studies at the Faculty and helped them get to know their way around the University. She told them about the city and its environment. And she gave them some practical presents to get them started. They then ended their first day at the FIM UHK by going on a joint tour of the Faculty. "International students will attend all their lessons in person, without any changes, as long as the situation allows," adds Ms Havlíčková. •

A semester in Canada during the **COVID-19 pandemic**

PETRA KUBAŘOVÁ, DOMINIKA KLŮZOVÁ FACULTY OF EDUCATION, UHK

For Dominika Klůzová, gaining experience abroad is a natural part of her studies. Our English and French student recently came home from having spent a semester in Canada. Read on to find out what she thinks of the University of Quebec in Montreal.

uring my semester at the University of **D** Quebec, I studied Quebec French, which is nothing like continental French, Business English and International Relations. I would describe Montreal as a European city on the American continent. The European, especially French, influence is omnipresent when it comes to the local language and architecture. And so, Quebec is definitely a unique place where both the French-speaking and the English-speaking cultures come together.



Taking into account the number of students, the Université du Québec à Montréal (UQAM), here referred to as UQAM or the University of Quebec, is the second biggest university in Canada with 6 faculties. The campus is very

large, and its various extremities are well interconnected by underground premises, like classrooms, relaxation and rest areas, a cafeteria and a library. You can find accommodation at student residences within the campus, or you can rent student housing anywhere in town.

The subjects I took at UQAM were taught in large auditoriums. Students of various nationalities and specialisations met in groups to learn and study together. If I were to compare our educational system and that of Montreal, I would definitely like to stress the democratic approach in place in Canada. When the semester starts, teachers meet up with their students and they debate over the terms and conditions under which students can and must pass the subject. Then they sign a mutual agreement to seal their pact. In doing so, students gain a much greater sense of responsibility in terms of meeting their duties and obligations and they know beforehand what is expected of them. Unlike in the Czech Republic, exams at UQAM are taken both mid and end semester. Another difference are school fees; they are very high in Canada.

Like Montreal, UOAM also boasts a multicultural environment, and I did not really notice teachers treating Canadian students differently to international students. And what's more, local students don't tend to keep to themselves. On the contrary, they enjoy spending time with their fellow international students.

The COVID-19 pandemic caught me in the second half of my stay, sometime mid-March. All of UQAM was shut down, student residences included, and everything was still closed when I left to go home. We continued our studies long-distance via Moodle and we took to video calls. Apart from me not being able to be literally present in class, the course of studies did not change much. Before the pandemic struck, we had already been working from home. The only difference was students in difficult situations being let of the hook a little or students being allowed to complete their studies in a different way. It was not possible for me to return home early for several reasons. I didn't want to end my stay in a new country prematurely, travelling had already become risky and the situation in Canada was initially much better than in Europe. I then also contracted the Coronavirus and my flying home before the date planned became impossible anyway. In the end, I got better and managed to finish the semester without too many difficulties, and I made the best of the few days I still had before my flight home and even though most places were closed to the public, I travelled Montreal, watching in awe how the harsh winter transformed into a beautiful spring.



Even though the COVID-19 pandemic somewhat impacted the second half of my stay, it helped me learn so much about another country and its culture. Not to mention the knowledge and experience I gained. And last but not least, COVID-19 helped me realise what I wanted to do after I finish my studies. •



Dominika Klůzová

is a final year student at the Faculty of Education of the University of Hradec Králové. She studies French and English and studies Spanish in her free time. During her Master's, she completed a study stay in Norway, an internship in Paris and a volunteer internship at Lombok, Indonesia. Her hobbies go hand-in-hand with her passion for languages – she loves travelling and getting to know new cultures. She is interested in international relations and the history of various countries. She loves reading and cooking and cannot do without fashion and design.

UHK ANNUALLY 2020



Given the situation around the COVID-19 pandemic and the winter semester just around the corner, the Philosophical Faculty of the University of Hradec Králové has decided to launch its very own eLearning programme. And what's more, the faculty shared it with all of its European and non-European partner universities.

The eLearning programme consists of 22 online courses. It covers various fields, including archiving, history, political science, sociology and social work. Almost 90 students have enrolled in the programme. This is UHK's first virtual mobility, and it is run under Erasmus+, Erasmus+ International Credit Mobility and other various non-European mobility programmes.

Most students hail from partner universities based in Brazil, followed by students from Chile, Peru and Argentina. We also have students from countries like Armenia, Bulgaria, Ecuador, Ethiopia, Georgia, Columbia, Namibia and even Germany. The courses are run via Moodle and Microsoft Teams and are attended by students with very interesting backgrounds, notwithstanding the differences in time zones. The most highly attended course is Latin American Politics, taught by Dr. Springerová

and PhD student Héctor Alejandro Quintanar Pérez, who comes from Mexico. Thirty-five students with similar backgrounds regularly attend the course. Other courses also liked by students include Medieval European History and Theory of Welfare State.

The Philosophical Faculty is preparing a similar programme for the summer semester of the 2020/2021 academic year. At a time when mobility as we used to know it faces many an obstacle, virtual learning has become an attractive alternative for international students and a way how to support existing good relations with international partners. •

We have established a new partnership with Uzhhorod National University

ZUZANA DOSTÁLOVÁ DEAN'S OFFICE, FACULTY OF INFORMATICS AND MANAGEMENT, UHK

The vice-deans from a Ukraine-based university visited FIM. The aim of the representatives of two universities meeting was to establish cooperation.

A Ukrainian delegation visited the FIM UHK at the end of February. The Vice-Dean for Foreign Cooperation Ruslana Žovtani, Vice-Dean for Scientific Activities Maria Kashka, and Vice-Dean for Educational Activities Mariana Popik were members of the delegation.

UHK Dean, Josef Hynek, and Vice-Dean for Development and International Affairs, Petra Poulová, heartily welcomed the representatives of the Uzhhorod National University at the Faculty of Informatics and Management of the University of Hradec Králové in the early hours of the day. After a fruitful and amicable meeting, the visitors were taken on an allround tour of the Faculty and then invited to lunch. Negotiations and dialogue resulted in the representatives of the two Universities again sitting down behind a table and attaching their signatures to the Cooperation Agreement. In doing so, they laid down the grounds for mutual cooperation in student and employee mobility and mobility for academic workers.



"During celebrations commemorating 100 years of the founding of Czechoslovakia, the Faculty decided to become involved in former Carpathian Ruthenia, which used to be a part of our country a long time ago. Thanks to cooperation with the Regional Council President (hejtman) of the Pardubice Region, we managed to select and

The Uzhhorod National University is one of the biggest universities in the Ukraine. It was founded in 1945 as the Uzhhorod State University. It changed its name in 2000 to Uzhhorod National University, as we know it today. The University lies on the slopes of the Carpathians in the beautiful and picturesque town of Uzhhorod, a place much loved by students. The town is the westernmost regional centre of the Ukraine. The University is made up of 21 parts, 20 faculties and the Ukrainian-Hungarian Educational and Scientific Institute.

admit two very talented students last year. They will be studying informatics. Serhii Konar and Denys Danylko received a faculty scholarship and are already in their second year of our programme taught in English," Josef Hynek, Faculty Dean, explains the beginnings of building a cooperation with the Ukrainian-based university: "When we got a letter from the Uzhhorod National University at the beginning of this year, we took it as a logical extension of our interest in this area and we agreed very quickly that the representatives of the Uzhhorod National University would visit us in Hradec Králové. It didn't take long, and we were soon on the same boat with the vice-deans. We signed the agreement, and we will most probably be meeting more Ukrainian students at the faculty in the near future. Our students can look forward to study stays and internships in Uzhhorod. They can study economics and management or informatics. Considering how much Czech tourists love the local landscape and the beautiful mountains, in particular, Uzhhorod is also an ideal destination for our students of tourism." •

Philosophical Faculty UHK will participate in SensiClass, an international strategic partnership

MARKÉTA DOLEŽALOVÁ INTERNATIONAL OFFICE, PHILOSOPHICAL FACULTY, UHK

The Philosophical Faculty of the University of Hradec Králové has adopted the role of partner organisation in a strategic partnership project titled Tackling Sensitive Topics in a Classroom. Together with colleagues from coordinating universities, namely the University of Tartu (Estonia), the SGH Warsaw School of Economics (Poland) and the Central European University (Hungary), a team made up of academic workers from the Philosophical Faculty is going to create didactic tools and materials that will help not only university lecturers to find sensitive and empathetic solutions to potentially conflicting issues having arisen between people of different backgrounds, ethnicities or religion.

A part from contributing to the projects worked on by the other universities, the academic workers representing the Philosophical Faculty and involved in this endeavour were also responsible for creating 2 online courses. The Social Work with Foreigners online course will focus on training future social workers and, in particular, their approach to groups of foreigners. In their online course, Dr. Filip Rigel and Dr. Michal Trousil will combine online activities with personal, contact points.

The second online course, titled Strategies for Creating an Equal and Tolerant Environment for Work with Minorities will be overseen by Dr. Vanda Vaníčková and Dr. Michal Rigel. They strive to develop tools that doctoral candidates, future teachers, and even students themselves can practically use in any school environment.

All materials created by the Philosophical Faculty and the partner universities will be put

to the test during a joint three-day training course, which will be hosted by none other than the University of Hradec Králové at the beginning of 2021. A final sit-down attended by everyone involved in the project will also take place at the University of Hradec Králové in the summer of 2022. All activities will be summarised and the already real impact of the outputs of the project in all participating countries will be assessed.

This is an international project looking towards strategic partnership. It is funded through a grant from the Erasmus+ programme and was launched in December of last year. It will continue until August 2022.



Rector Kamil Kuča honoured 8 outstanding individuals from the University of Hradec Králové on the occasion of the Velvet Revolution of 1989. Great thanks will also be bestowed on everyone who fought the COVID-19 pandemic

JAKUB NOVÁK UHK SPOKESMAN

As tradition would have it, the University of Hradec Králové (UHK) would, under normal circumstances, now be hosting a social gathering at which the Rector would honour prominent researchers and students from UHK that have taken it to heart to advance the reputation of the University. As this is currently not possible due to the COVID-19 pandemic, we have taken the liberty of at least presenting these 8 exceptional persons to you.

CLT A There our scientists and researchers are **V** concerned, their work results usually relate to research, knowledge transfer and publication. Every year, the University of Hradec Králové climbs ever higher in various internationally acclaimed ladders, and peer-reviewed high impact journals are home to its many publications. These people have turned the University of Hradec Králové into an important scientific research centre that can stand up to traditional scientific institutions any day," explains UHK Rector, Kamil Kuča. He notes that the awards go hand in hand with a financial award from Česká spořitelna. Elektrárna Opatovice then supports UHK students in their endeavours to achieve the most exceptional results.

"I have also decided to honour, at least symbolically, each and every student from the University of Hradec Králové who during the so-called first wave selflessly helped to care for the children of healthcare workers, for those most vulnerable in nursing homes, and who made protective face shields, for example. My thanks simply go to everyone who joined the fight against the pandemic. I will give this extraordinary award at the earliest opportunity to our students' representative, him being the chairman of the Chamber of Students of the Academic Senate of the University of Hradec Králové," adds Rector Kuča. He is talking about the many UHK students who were required to be on duty or who volunteered to help.

The Rector's Awards were given to the following individuals:

Faculty of Education of the UHK

Mgr. Zdenka Sokolíčková, PhD

She was nominated for her prestigious project (BO)REAL LIFE: OVERHEATING IN THE HIGH

ARCTIC, which had her embark on a two-year stay abroad on the Svalbard Archipelago, with the University of Oslo, and for a collective monograph titled Kyber a eko. A time-lapse film called Návštěvníci (Visitors) captures both the professional and the personal aspects of her research. It is a feature film directed by Veronika Lišková and co-produced by the Czech Republic, Slovakia and Norway and will be released in theatres in 2022.

Dr. Zdenka Sokolíčková majored in culturology and European cultural studies. She currently specialises in socio-cultural anthropology. She studies how global processes, like climate change, migration and globalisation, manifest themselves locally, how they are interwoven and how people perceive them. She is also interested in ecological ethics.



Bc. Lenka Novotná

She did great at the 2019 Graphics National Awards. Her book Kroj – rodinné dědictví – ornament won the main prize for Artist's Book. She also entered her book in the 16th Triennial of Artistic Bookbinding Competition (2019), which was hosted by the West Bohemian Museum in Plzen. Her book was exhibited and published in the Competition Catalogue.

She devotes her creative artistic skills to bookbinding. Lenka is looking for new ways how to assimilate technological processes and while focusing mainly on artist's books, she tries to apply the topic to selective bookbinding so that the graphics and the type of bookbinding go hand in hand.



Faculty of Informatics and Management of the UHK

prof. Ing. Ondřej Krejcar, PhD

He excels in science and research. When it comes to annual evaluations of his scholarly (scientific) activities, he regularly places amongst the TOP 5 scientists at the University of Hradec Králové. He is a researcher and team member in many projects, including TA ČR ÉTA, TA ČR DOPRAVA 2020+, MŠMT, MPO. He is the winner of awards given by Web of Science – Publons Top Reviewers in Cross-Field – September 2019 and Top Reviewers for Multidisciplinary – September 2018. He has been cooperating with international researchers for a long time. His colleagues hail from Malaysia, Spain, Germany, India, Japan, USA and Norway, for example.

Professor Krejcar focuses his research on image segmentation and recognition, biomedicine, technical cybernetics and ubiquitous computing. They are coffee experts and, among other things, also sheep breeders.

Bc. Evangelina Šťastná

Ms Šťastná has been nominated for saving a human life. She was quick to use the first-aid knowledge and skills she acquired during her one-semester course referred to as Traumatology for Tourism at FIM UHK. When she realised that the gentleman lying on the pavement was not reacting and, as she correctly assessed, was not breathing, she continued resuscitating him until the rescue service arrived. The incident happened in Düsseldorf,

Germany. She displayed the same spirit of self-sacrifice and dedication when she administered first-aid at two traffic accidents.



Evangelina Šťastná is currently making plans to do volunteer work for a year. She will help out with people suffering from mental and combined disabilities.



Philosophical Faculty of the UHK

Mgr. Richard Thér, PhD

Richard Thér is one of the world's leading experts in the study of prehistoric pottery-forming techniques. Always being systematic and purposeful in his work, he has built quite a reputation for himself both at home and abroad. His most significant work includes the development and application of his own study methodology and the identification of techniques involved in creating prehistoric pottery while keeping in mind a sound quantitative basis. His love and devotion in unravelling the technological topics he has adopted is repeatedly supported by external grants. He started working on another (already his third) project supported by the Czech Science Foundation

(GACR) in 2019. He regularly publishes the results of his work in world-renowned professional journals in the first decile and the first quartile of the WoS and Scopus databases. In 2019, a total of 5 of his publications were included in these databases, one in the first decile of each of them.

Mgr. Anežka Pařízková

As part of a student internship at the Honorary Consulate of the Czech Republic in Quito, Ecuador, Anežka Pařízková provided consular assistance during the COVID-19 pandemic to Czech citizens over and above her obligations and with the outmost dedication and care. Anežka will major in Political Science





64

LIFE AT UHK

and Latin-American Studies. Her exemplary approach more than meets and supports the expectations society has on how such graduates should apply their well-learnt organisational skills in the Latin-American region. And her attitude just demonstrates how empathic and

willing she is to help her fellow Czech citizens, who may find themselves in a difficult situation given this crisis period. The Ambassador of the Czech Republic to Peru and Ecuador also showed his appreciation for all that she has done.

Faculty of Science of the UHK

prof. PharmDr. Kamil Musílek, PhD

In 2019, Professor Musílek was the head researcher in 6 research projects overseen by the Czech Science Foundation, TA ČR Éta, Czech Health Research Council, Visegrad Fund and Ministry of Education, Youth and Sports. In the same year he published 13 original articles in various prestigious science magazines in the Web of Science database; 7 placed in the top quartile of the magazines and 1 in the top decile. His articles have been cited many times during the first year of their being published. Professor Musílek applied for several other projects in 2020.

He became a professor in 2019 when he was just 39 years old and he is the first person in Czech history to be awarded the Young Medicinal Chemist in Academia Prize in the same year. The prize is awarded by the European Federation for Medicinal Chemistry.



RNDr. Lucie Vinklářová

Ms Vinklářová was nominated for her excellent experimental results. She published them in 5 articles in peer-reviewed high impact journals in categories Q1 and Q2 according to the Web of Science. She participated in 2 successfully solved external projects as a team member, and in various specific research projects as either the head researcher or a team member. Ms Vinklářová also enjoyed teaching undergraduate students and taking part in disseminating events organised by the Faculty of Science of the University of Hradec Králové. These events were well appreciated by students and participants alike. •





Each year the Chartered Town of Hradec Králové awards annual prizes to individuals living and working in the regional capital. The 2019 Mayor's Student Award for Creative Achievement in the humanities and social and pedagogical fields was awarded to Alžběta Dvořáková. We are proud to say that she is our student and will major in Graphic Design – Multimedia. Congratulations, Alžběta!

Alžběta Dvořáková also holds the 2019
Student Annual Award given by the Faculty of Education of the University of Hradec
Králové for her exceptional creative work in the field of art. During her studies, she won the Award for Best Contemporary Czech Graphic
Art. You see, her piece of work titled Recycle,
Reduce, Reuse (Zrecykluj, zredukuj, zužitkuj) won
1st place in the category Desktop Printing –
Computer Graphics (special prizes for graphic techniques) at the Graphics of the Year (2018)
national competition.



LIFE AT UHK

The Elixir for Schools DIGI Centre educates teachers and students alike in digital technologies at the Faculty of Science

KRISTÝNA VÁVROVÁ DEAN'S OFFICE, FACULTY OF SCIENCE, UHK

One of the Elixir for Schools DIGI Centres has been operating at the Faculty of Science of the University of Hradec Králové since October 2019. The DIGI Centre has taken it upon itself to educate teachers in digital technologies. And even though it has not been open for very long, it already has several regulars.

The objective of DIGI Centres is peer coaching, and so a lot of emphasis is placed on the exchange of experience, mutual inspiration and feedback sharing. Teachers get the opportunity to learn about new tools and they can try them out," explains Mgr. Petr Coufal, the Head of the DIGI Centre. He himself teaches at the Department of Applied Cybernetics (Faculty of Science, UHK) and at primary schools and he has been addressing issues relating to the didactics of information technology for many years.

"It sometimes happens that schools already have the tools, but teachers don't exactly know how to use them or what they can be used for. Last but not least, we try to show teachers freely available materials," he adds.

A space where real teachers, students and graduates can meet

We meet once a month – each meeting revolves around a different topic. Topics cover subjects like Ozobots in teaching, logic games and puzzles, eLearning courses and board games in IT lessons. If teachers attend the course regularly, they receive a certificate, because it is accredited by the Ministry of Education, Youth and Sports. And the course is free of charge. "We invite lecturers to each meeting or we give the lectures in unison with our colleagues



from our Department. But sometimes we delve on topics that the participants themselves suggested," says Petr Coufal.

They come from Hradec Králové or the nearby area. Our courses are attended by practicing teachers as well as trainee teachers and recent graduates.

"As a teacher who is fresh out of school, I am constantly on the lookout for teaching material to make learning fun for my students. The DIGI Centre is like a well full of ideas for me. And I love the almost family-like environment in which we study and learn. I visited most of the lectures and all of them have been an inspiration to me," happily says Iva Zvoníková, a teacher who graduated from the Faculty of Science, University of Hradec Králové. She lives and teaches at a local primary school in Kolín and commutes to Hradec Králové.

And what has she already put to use? "I use the paper and pencil game in my Maths classes, in our after-school classes we play with the Lego Mindstorms robot, and I even took my colleagues along to the lecture on Ozobots. Moreover, after the last lecture that I attended I am now planning and considering which board games I should get for our school. Every time I go to the DIGI Centre I'm filled with inspiration and a strong will to change things. I always come home full of energy and new ideas. And I must say Hradec Králové is a beautiful town and I always like going back," she adds enthusiastically.

The Faculty of Science of the University of Hradec Králové has been working with Elixir for Schools since 2018. It all started when it hosted the Elixir for Schools annual conference for science teachers. "We plan to involve the DIGI Centre at our next conference and we would like to present some tools, because physics and digital technologies naturally go hand-in-hand," concludes Petr Coufal. •

We only had 24 hours to create a winning project. The first signs of fatigue didn't appear until around six in the morning

ZUZANA DOSTÁLOVÁ DEAN'S OFFICE, FACULTY OF INFORMATICS AND MANAGEMENT, UHK

The Faculty of Information Technology of the Czech Technical University in Prague organised the first technological hackathon HackFIT 2020. It took place on 28th and 29th February 2020 and it was no easy feat to participate in. Individual teams had very little time to persuade the judges that their project, and no other, was the number one project. They only had 24 hours to prove themselves. The competition opened at 4 pm on Friday and closed at 4 pm on Saturday. Out of more than 60 talented youngsters, a team of 4 students from the Faculty of Informatics and Management of the University of Hradec Králové took first place. They were awarded prizes worth tens of thousands of Czech crowns. Petr Weissar, a member of the winning team, gave us a short interview after he got over his sleep deprivation and had slept off some of the excitement.

Where did you find out about the competition and how did you put your team together?

The competition details were on the Internet. My friend Štěpán Záliš found out about it and he invited me, Filip Oborník and Tomáš Pařízek to join him. We study at FIM UHK.

What was the topic of the competition? What was the objective?

HackFIT had pre-listed topics from its sponsors. They were topics like the use of web cameras to forecast the weather, the use of

neural networks for the analysis of financial resources and the use of various components for IoT expansion, to name but a few. But you could also pick a topic of your choice and that's why we initially chose The use of sensory data from wearable electronics with data on the use of applications for behaviour detection.

We consulted with our mentors on this topic at the beginning of the competition and we came to the conclusion that it doesn't have as much business potential as it should have for the final presentation. That is why we decided to go for an alternative topic suggested by Skoda Auto. It was Streamlining production processes with wearable electronics.

How did the competition go? Did you encounter any setbacks?

We entered the competition with two smart watches with Wear OS that we could use to develop the applications; we started programming at five sharp. We decided who would



do what right at the beginning. One person worked on a tablet application to display the dashboard; another person worked on preparing a real-time database in Firestore, and the rest of us worked towards developing the actual application for the watches.

And that's when we came face to face with our biggest problem – Android Studio – while working on the push notifications and the databases, we had to start a new project because of configuration trouble shooting and this cost us valuable time; it took the entire team 2 hours to realise why we couldn't get the database up and running. In the end, the solution was very trivial, as is usually the case.

But you didn't give up and you kept on going. Didn't you lose motivation?

No. Quite the opposite, actually. After all the time we would lost, we were even the more eager to work non-stop the entire night so that the application would be up and running and ready for us to present it. We were all going strong, even when we started getting tired some time around six in the morning. By that time, we already had the first usable version for displaying tasks on employee watches. Therefore, at this point, production leaders could use their tablets to send tasks directly to their co-workers' watches.

But time was running out. Were you up to completing the assignment?

At that point in time all that we had to do was fine-tune exit detection using Bluetooth technology. Which, I am happy to say; we did quite a good job. Around lunchtime we then focused only on our presentation – according to the competition rules, it could not be longer than 5 minutes. We found it very difficult to cram those last 20 hours of work into 5 minutes in such a way that the judges would give us a high score in all the areas under scrutiny, like project applicability, complexity of topic, topic elaboration and overall success of presentation. But in the end we managed to keep to the strict time limit.

So what did you create in the end?

We programmed a solution based on the Firebase Firestore database and an application on Android Wear OS in which employees can comfortably accept tasks, they can see the countdown to the end of the task, and they can also communicate with the production line leader. In addition, all in real time and subject to minimal delay.

What came across to you as the most challenging in your endeavour to create the best project?

I guess that the most difficult thing in the end was to actually present the finished project, because we were already so so tired. But it was all worth it!:)

How would you briefly summarise those fateful 24 hours?

I think I speak for everyone when I say that we are very glad that we participated in the competition – we could try out new technologies and figure out how they are used in practice. We got a taste of what it is like working under time pressure. We got the opportunity to work closely in a team and Skoda Auto liked our work so

much that they invited us to present our proof of concept to the Skoda Auto Development Team and maybe even participate in the actual implementation of the project in practice. Which is absolutely fabulous!

Philosophical faculties decided to fight against traditional myths

TOMÁŠ VODIČKA DEAN'S OFFICE, PHILOSOPHICAL FACULTY, UHK

A new campaign called Humanitky.cz has taken it upon itself to refute hate speech spreading through our virtual space. We have to say no to things like: "useless social junk science, everyone's going to end up at McDonald's anyway, any idiot can major in this subject,". It is time to show everyone that people majoring in the humanities and/or social sciences are not only successful and in demand, but also that the humanities and social sciences hold a firm and often irreplaceable position in our society.

Humanitky.cz is a joint project set up by three philosophical faculties (University of Hradec Králové, University of Ostrava and Jan Evangelista Purkyně University in Ústí nad Labem).

"It's not true that people who have a degree in the humanities or social sciences do not play a vital role in society or that they have no place in the labour market. We have data to support our arguments. Likewise, statements made by politicians that people who have a degree in the humanities are of no value to the economy and that they usually end up at an employment office or that they have to take up an under qualified job anyway are absolutely off track," says Daniela Rywiková, Vice-Dean for International and Foreign Affairs, Philosophical Faculty, University of Ostrava.

"The new promotional videos are also intended to demonstrate that high school teachers who teach subjects like Czech Literature and Language, History, Civics and the like often graduated



from a philosophical faculty," adds Jan Prouza, the Dean of the Philosophical Faculty of the University of Hradec Králové. The new videos, which will soon be available on social networks and the Humanitky.cz website, build on wit, exaggeration and provocation in order to reach the widest possible audience. The Humanitky.cz website then presents dozens of stories about people who graduated from philosophical faculties and who have good jobs in various fields.

STEM/MARK's data say it all

As part of this project, STEM/MARK conducted an extensive survey last year among employers in several selected regions across the Czech Republic. The survey showed that not only are employers interested in these graduates but that they actually view them as being irreplaceable in such fields as education. Among other things, the survey also showed that people who graduated in a subject related to the humanities or social sciences are more frequently recruited

by larger corporations operating in the field of education, public administration, financial and professional services and multinational corporations. Humanitky.cz shows where exactly these graduates find employment.

"The humanities and social sciences have recently become prey to many myths and stereotypes, which we have long strived to address. But it clearly follows from this survey that humanities graduates have a very good chance of prospering on the labour market," Jan Prouza concludes.

This initiative forms part of a project titled Joint Approach of Philosophical Faculties to Improve the Quality and Prestige of the Humanities and Social Sciences II. The project is funded by the Centralised Development Programme of the Ministry of Education, Youth and Sports of the Czech Republic.

The University strives to be quality certified. The prestigious HR Excellence in Research Award is granted by the European Commission

JAKUB NOVÁK UHK SPOKESMAN

Kateřina Vyleťalová has held the position of HR Manager and Quality Manager for this specific project at the University of Hradec Králové since March 2020. Her main task is to obtain the prestigious HR Excellence in Research Award (generally referred to as the "HR Award") for UHK. The certificate of quality is granted by the European Commission for excellence in caring for so-called human resources in scientific environments. What does the HR Award stand for? And what does being a bearer of the HR Award say about the institution itself? Here is an interview with the UHK HR Manager.

You have been employed by our University for a relatively short time. What do you do? What is your objective?

My primary objective is for the University to obtain the HR Award. But it's not just about getting certified. Obtaining the award. A lot of work goes into the process. We must focus

on working conditions and social security, training and development, ethical and professional aspects, and recruitment and selection. Emphasis is also placed on the open and transparent recruitment of new staff at an international level. The HR Award goes hand in hand with many other incentives, like a bonus

for important projects run under selected programmes overseen by the Technology Agency of the Czech Republic. In short, the HR Award stands for prestige at both a domestic and an international level.

And I must say that I have received only support, help and assistance from the UHK administration. It wishes to improve the working conditions of all its employees, even if the project focuses mainly on research and development. In short, UHK wants to be a prestigious university and a good employer.

What phase are we now in?

We kicked off the project in January 2020 and sent an official application to the European Commission in April. Now we have one year to analyse the areas of concern. Everything must be in line with the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers. Therefore, we are now analysing the processes in place at the University of Hradec Králové with a view to the areas defined so that we can propose new solutions and a specific action plan and how to implement it. If we meet all the particulars, we will obtain the HR Award.

You are talking about an analysis of our researchers' working conditions and working environment. Will your analysis also touch on the other employees of our University?

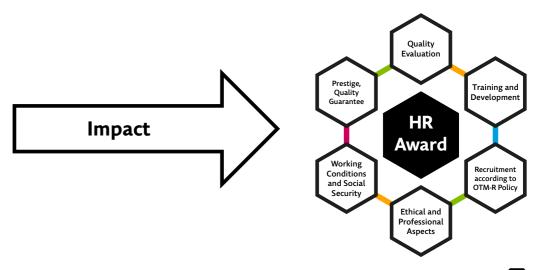
Yes. We are currently evaluating a questionnaire survey that took place at UHK and is
of absolute essence to us. Even if the entire
project focuses on researchers, this is a good
opportunity to find out about how other employees view and perceive their working conditions and working environment here at the
University. The University of Hradec Králové
is one of the biggest employers in the region
and it should have a good reputation and, put
simply, be a good employer. So now we have a
unique opportunity to say what we are happy
about and what gives us wrinkles. Where our
strengths and weaknesses are, what we want to
change, and what we do not want to change.

How many employees took part in your survey? (Which is quite extensive, to say the least.)

We contacted 1,028 people. A total of 581 filled in the questionnaire. That is a total of 57 percent. Of the employees we addressed, 61 percent of them filled in the questionnaire. And of the post gradual students that we spoke to, 38 percent of them did the survey.

What other outputs related to the HR Award will the project produce?

Another thing that we essentially have to do is set up an international advisory commission composed of experts who will evaluate the processes in place at UHK. In this way, we will get relevant and significant feedback



on an international level and this will help us improve the areas concerned and allow us to get closer to the international standard. The international advisory commission will visit us within three years of the start of our project; always at least once a year. We will also be in contact with it via various online applications, which we would be anyway, even if the COVID-19 pandemic had not struck.

Another vital part of the project is us putting in place an adaptation process for both young researchers and new employees.

The collocation European or international standard has come up multiple times. To what extent is the project associated with the HR Award related to the international and foreign affairs of our University?

To a very essential extent. UHK strives to stand shoulder to shoulder with international universities. The aim is to gradually create a working environment that any university can be proud of. That means a more attractive career in a scientific and research environment, meeting needs in the field of education and professional development, experience and support for foreign and cross-sectoral mobility.

Extensive pressure is placed on attracting young researchers to work at the University, mentoring being done by experienced people, and interconnecting with a pan-European network of researchers; all this is then closely linked to open and transparent recruitment. We want equal opportunities for everyone, and we strive for our human resources to be taken proper care of.

Let me just briefly again touch on the questionnaire, which is to help you analyse the processes in place at UHK. What about the results of the anonymous survey?

The project team for HR Award is now analysing the questionnaires in detail.

We will soon provide detailed information about the results of the survey. They will be presented and discussed at our joint academic meetings and other UHK forums.

I really need to emphasise that the objective of the future analysis is not to show what someone is doing wrong. On the contrary. This is an absolutely unique opportunity to say what we are good at and which areas need to be brought up a notch or two.

So, we have a filled in questionnaire. We will have a process analysis. What is next?

We will use the analysis and the survey results to make an action plan. In fact, we are already working on it. The bodies of the European Commission will evaluate all these materials. You see, the Commission decides whether UHK is worthy of the HR Award. I firmly believe that together we will succeed. If we do, the HR Award will open doors to international projects, to science, and our University will be a much sought-after partner.

I hope we succeed. Thank you for your time.

It is I who am grateful for your time and interest. I too believe that we are well on our way to being certified. We would like to view the University of Hradec Králové as a company that takes good care of its people. Good working conditions are reflected in sound scientific and research outputs and results. We have all it takes to get the HR Excellence in Research Award. •

Swimming across the Chanel is like climbing Mount Everest. Along with all the magic and misery you can imagine

PETRA KUBAŘOVÁ DEAN'S OFFICE, FACULTY OF EDUCATION, UHK

For long-distance swimmers, the English Channel, also simply referred to as the Channel, is a place where records are made, tears of joy and despair are shed, and where you can overcome your own limitations and really get to know yourself. Jana Procházková's lifelong dream came true on 12 July 2020 when she reached her destination – Cap Gris Nez in France. She was one with the sea for 14 hours and 14 minutes and experienced all the magic and despair the Channel can dish out. During her swim, she occasionally met the odd jellyfish or a pod of dolphins. But cargo ships steered well away from her.

The English Channel is 33 km wide at its narrowest point. But the currents are treacherous and increase the number of kilometres the swimmers have to overcome. The temperature of the water is around 16 °C, which is a fatal fact for many. Over the past few years, it has been possible to swim only in one direction, from England to France, which is the slightly more difficult option because the currents and tides get stronger the closer you get to France. This is also where most swimmers give up. An accompanying ship sails next to the swimmer at

all times. The ship's captain knows the sea like the back of his hand and guides the swimmer so that they reach their destination in safety.

Where did the idea to swim across the Channel come from?

I remember my first long-distance race. I was about 12 years old. It was the first time that I had heard about people swimming across the English Channel and, to be honest, it was just something that I could not fathom because I knew what it was like to participate in a 3 km race there.

So what motivated you to swim across the Channel?

I guess the person who motivated me most was my mom. She used to run marathons and ultra-marathons at the time. I saw what the human body can withstand, how much physical exertion you can expose it to over longer periods of time. I told myself that perseverance might be one of the things I inherited.

The idea to swim across the Channel cropped up six years ago. How did you physically prepare for it?

Yes, the idea crossed my mind when I was in 9th grade at primary school at a time when I had to choose which secondary school I would



74

be going to. In the end, I went to the Sports Grammar School in Plzen because it let me continue with my swimming career and attend school at the same time. The main reason was that I enjoyed swimming and wanted to join a professional swimming team. The fact that my school helped sculpture me and prepared me to swim across the English Channel was a major bonus. Not only did I swim hundreds of kilometres during my 4 years at the Grammar School, but I also learned how to plan my workouts and how to get myself ready outside water. So I learnt a lot at my Grammar School, and this helped me when I left Plzen and needed to work out on my own. In addition, I was able to lead circuit-training courses at the UHK Sports Club.

What did you have to do to get ready? What, in fact, goes into getting ready for such a difficult endeavour?

Are you asking me what one has to do to be able to swim across the Channel? – You must swim and swim and swim again! True, I may make it look easier than it actually is. Long-distance swimming, especially in the sea, is naturally quite specific. Endurance undoubtedly plays a huge role. You can practise it outside of swimming by running and cycling. I personally prefer running. In addition to training in water, you need to work on your abdomen. You have to have a strong core and good shoulders, as weak shoulders are the downfall of any swimmer. Training outside of

water is good not only for making you stronger and compensating your weaknesses, it also makes training and working out more fun and diversifies your efforts.

And what role does the mind play in one's performance? Did you at any point in time get scared or find yourself in a difficult situation?

It generally applies to all sports that the mind is much more important than how fit and ready you actually are. What I am trying to say is that if your head is letting on that you do not believe in yourself, you are very likely to fail, even if you are well prepared and ready physically. Your state of mind also influences how you train. I already knew in 2018 that I would be in top condition in the summer of 2020. But when the pandemic hit Europe, it was March and suddenly everything had changed, and I was unhappy. I went to England a month in advance to get clear of quarantine. I knew then and there that I had done the right thing and that in so doing I had boosted my chances at succeeding. The swim itself was alright. What, however, was a bit unpleasant was the strong current that I encountered as I neared France. The current prevented me from reaching the coastline for another 2 hours and I just could not reach the shore. But I wouldn't call it a crisis. I admit that I did question whether I was mentally prepared for the swim, but I was so excited about the experience itself that there was simply no space for a crisis to set in.



Jana Procházková

is a third-year student at the Faculty of Education, University of Hradec Králové. She will be a first stage primary school teacher when she graduates from university. Jana is a very sporty person and loves swimming and running in her free time. She also loves travelling and listening to music and she enjoys taking photographs and working with grownups and children.

"My university teachers' supporting my writing was of vital importance to me," says writer and UHK graduate, Jakuba Katalpa

KRISTÝNA VÁVROVÁ UHK ALUMNI CLUB

Jakuba Katalpa, whose actual name is Tereza Jandová, graduated from the Faculty of Education, University of Hradec Králové. She majored in Literature, Language and Culture. Like many other writers, most of her work initially ended up in her bottom drawer. But she didn't give up and went on to publish her first short story in 2000 and as she herself says, her studies at the University of Hradec Králové played a major role in her success. Her latest novel, *Zuzanin dech*, was published in September 2020 and has been well received by reviewers and readers alike. What memories does she have of Hradec Králové and to what extent have her studies impacted her work?

What comes to mind when you hear Hradec Králové?

Lots of things. A beautiful city, classmates, the bridge over the River Elbe, and the congregation of school sisters, where I lived. Nostalgia gets the better of me, as is the case with most people who go back in time when they were in their early twenties.

You majored in Literature, Language and Culture. What made you choose this field of study at our university?

It (Editor's note: this field of study) really caught my eye. If I am not mistaken, we were the first group of students to take up the course after it had been opened. I have always been drawn to language and literature, am myself a writer, and have spent hours and hours labouring over all types of books. Apart from studying Literature, Language and Culture at UHK, I also took up Czech Studies in Prague. To me, my studying at the University of Hradec Králové meant I would get a great education.

What were you like as a student?

Meticulous. Enthusiastic. Sometimes a little inconsistent and sometime even a little lazy. But I did enjoy my studies.



What skills did you learn and acquire at UHK that you still draw on today?

Probably my being systematic and patient. I like to keep my things in order and I prefer not leaving things undone or unfinished. The UHK also taught me to stop and think things

76

through; to look at things from various perspectives and to analyse them.

Which teacher do you still remember and why?

I remember associate professors Poslední and Dvořák. Their lectures on Czech Literature were full of enthusiasm, zeal and devotion. Both of them managed to draw us into the topic under discussion. They shared their personal experiences with us and it was obvious that they knew exactly what they were talking about and that it gave them great joy to be able to pass their knowledge on to us.

Have any of your teachers influenced your work?

I kept the fact that I was a writer secret for a very long time. Until one day, Associate Professor Dvořák discovered my secret and openly asked me about it. I showed him some of my work. He liked it and encouraged me to pursue my writing ambitions. I very much value his support.

How did you get your pen name, Jakuba Katalpa?

I have always been of the opinion that it is the text, not the author that is important. The person is not what counts. That is why I decided to use a pen name. In a playful way. I changed the masculine form of the name Jakub into its feminine form, Jakuba, and the surname Katalpa comes from the trees that grow in a park in Plzen.

Do any of your novels reflect the time you spent studying at UHK?

Absolutely. But it's nothing specific. Just an atmosphere. A lightness of being. An airiness. It may be related to the fact that we had lectures in a new, modern, glass building full of light. It was a very inspiring and stimulating environment.

What advice would you give students who are considering a writing career or who use their bottom drawer far too much?

I would tell them to never give up and to keep going. I would tell them to work on their texts and to listen to them, because at some point in time your work is complete, finished, the text itself will tell you so, and that is when you need to summon up all your courage and find a publisher. Good luck! •



Jakuba Katalpa

(*1979, actual name Tereza Jandová)

A Czech writer and artist. She has been publishing short stories and novels since 2000. Her first novel Je hlína k snědku? (2006) was nominated for a Magnesia Litera Award. Hořké moře (2008) was nominated for the Jiří Orten Prize for young authors under the age of 30. And her novel Němci was nominated for the Josef Škvorecký Award and the Czech Book Award in 2017.

UNIVERSITY – a new application for university students is here

ZUZANA DOSTÁLOVÁ DEAN'S OFFICE, FACULTY OF INFORMATICS AND MANAGEMENT, UHK

Students from the Faculty of Informatics and Management, University of Hradec Králové, have developed an application that will make university students' life much easier.

Petr Weissar, Michal Černý and Dušan Salay have created an application that they very distinctly call Univerzita (Editor's note: University). The application has been designed to help university students find their way around their faculty and the university. Not only around the campus, but also in terms of lectures, exams and course credits. The new application is equipped with basic functions, such as STAG. It will help you find your study schedule, timetable, building details and lecture room numbers. And you can even check out your classmates and their schedules. In addition to that, you can use the application to register for your exams and course credits and it will even automatically calculate your credits. So the application can help you keep an eye on what you've fulfilled and what you still need to do. An integral and inseparable part of the application is a function that sends you notifications that always keep you up-to-date about any changes, such as the cancellation of a class, or a new exam date. In the future, the developers plan to advance the application by adding another function allowing students to find out about various job opportunities. It will also include a module for teachers that they can use to upload students' grades in real-time.

This new application builds on an already existing application, namely the UHK Helper, which saw the light of day in September 2016. At that time, it was not nearly as sophisticated as it is today, and the number of users has increased about eighteen times. "Associate Professor Poulová approached us and told us that it would be a good idea if the Foreign Office could send notifications to students about lectures and summer school. So, we came up with a notification module that turned into the UHK Helper



application," Petr Weissar explains how the application came about.

But the problem was that the original application construed for Android was created in Java, so we couldn't modify it. "We realised that the UHK Helper cannot be further enhanced and developed. We did some research and realised that Informatics and Management Faculty students quite like the application and that many universities actually do not have such an application. So we decided to make it available to universities and students nationwide. And we started from scratch. We used Kotlin, a cross-platform programming language designed to fully operate with Java, and state-of-the-art technology," adds Michal Černý. "The improved version needed a more robust solution. We decided that to facilitate and speed up the whole process it would be more sensible to find someone else who has more experience in the field and who will help us." That is when Dušan Salay came into the picture. He focused on finding server solutions, on how to send notifications.

About 500 users are currently using the application in test mode. The creators planned to get the application up and running by the end of the summer semester in 2020. It is accessible for both Android and iOS operating systems. You can download the app here. •

Lenka Novotná won the main prize at the 2019 Graphics National Competition for her book Kroj

PETRA KUBAŘOVÁ DEAN'S OFFICE, FACULTY OF EDUCATION, UHK

The award-winning book is based on embroidery motifs sewn into folk costumes worn in Kyjov and adorned by the author's great-grandmother. Lenka Novotná graphically processed the individual patterns and in this way created her book, Kroj (Folk Costume). The book is 145 × 145 mm in size and is Coptic bound. The book is kept in a little box that apart from the book itself also boasts photographs of the author's cousin wearing a traditional folk costume.

Lenka Novotná won the main prize for her book in the 2019 prestigious Graphics National Awards. She is happy and overwhelmed: "Succeeding in what you consider to be one of your main artistic activities, in which you constantly strive to improve and excel, and which for me the creation of artist's books and playing around with book binding without a doubt certainly is, inspires me and makes me want to do more. I really appreciate the Award," acknowledges Lenka Novotná.

She devotes her creative artistic skills to bookbinding. "I am looking for new ways how to assimilate technological processes and while focusing mainly on artist's books, I try to apply the topic to selective bookbinding so that the graphics and the type of bookbinding go hand in hand," says Lenka Novotná. Lenka is a student at the

Department of Art, Visual Culture and Textile Studies, Faculty of Education, University of Hradec Králové.

Lenka Novotná first became involved in bookbinding while attending the Secondary School of Applied Arts in Ústí nad Orlicí. The combination of graphics and books fascinated her to such an extent that she chose to focus on her artist's book as the topic of her graduation thesis. She learnt the basics in bookbinding during her post-secondary education bookbinding studies at the Secondary School of Graphics in Brno. It was then that she progressed towards her first success when she got honourable mention in the student handicraft bookbinding competition. She then went on to university. She enrolled into a bachelor's degree programme and studied graphic design – multimedia at the



Faculty of Education in Hradec Králové. She has created several artist's books, including the award-winning Kroj. Lenka Novotná is now in a master's degree programme run by the Faculty of Education of the University of Hradec Králové and is studying to be an art teacher at primary and secondary art schools.

Lenka devotes her free time to learning about technological procedures and how to incorporate them into new ideas. The last weekend workshop on handmade paper that she took part in opened many a door into the world of paper and books for her.

Lenka does not only lean towards peaceful activities, such as making artist's books and

bookbinding in general, she also enjoys making original posters for small-scale punk festivals. "Even though I have to uphold my colleagues' visions and expectations, I try to maintain my own approach and breathe visual purity and clarity into the posters and allow people who are thinking of attending the festival to get a dose of authenticity," she explains.

A total of 419 pieces of art were enrolled in this year's 26th Graphics (2019) National Awards. The best, totalling 213 pieces of art and 19 artist's books, were exhibited at the Municipal House in Prague. Eleven main category awards were presented according to format and individual graphic techniques. •

Bc. Lenka Novotná

won the main prize for her artist's book Kroj in the 2019 prestigious Graphics National Awards (computer graphics, 145×145 mm). Ms Novotná created the book as part of her bachelor's thesis under the guidance of MgA. Petr Hůza.



The University of Hradec Králové organised a one-week IT Day Camp

ZUZANA DOSTÁLOVÁ DEAN'S OFFICE, FACULTY OF INFORMATICS AND MANAGEMENT, UHK

In the last week of August, the Faculty of Informatics and Management opened its doors to elementary school pupils with its IT Day Camp.

Co-organised with the Faculty of Science, the camp was attended by 21 children aged 10 to 14. The camp mostly focused on IT-related activities and was held under the auspices of the Ministry of Education, Youth and Sports as part of the Popularisation of Information Technology Fields Programme, a joint project overseen by the University of Hradec Králové,

Prague University of Economics and Business and the Technical University of Liberec.

The morning programme consisted mainly of educational activities. Our young students were let in on some software coding secrets and they could try out various techniques for themselves. They also learned the basics of

LIFE AT UHK



computer graphics and had lots of fun with virtual reality. "We did some coding every morning and there was always a special programme in the afternoon. I think I mostly enjoyed Monday's course on Micro:bit coding. We learned what such a thing can do, and most importantly, we got to take the Micro:bit home so that we could program it ourselves," said Matěj from Hradec Králové.

The afternoons were devoted to cultural and sports activities. We visited the Observatory and Planetarium in Hradec Králové. Martina Jandová gave a lecture on healthy lifestyles. After the lecture, the kids got a shot at preparing some healthy and nutritious meals. One afternoon was devoted to sports activities.



Friday afternoon belonged to the Hradec Králové Regional Police Directorate. The police gave a lecture on internet security and privacy and taught the kids some self-defence. The camp organisers also organised a day trip to Skoda Auto. "This was the first time that we had organised a one-week day camp for children but based on the feedback that we got from both the children and their parents I am happy to say that they all enjoyed it very much, which, to be honest, was the objective of the camp. So, if everything goes well, there'll be another camp next year," concludes Helen Holubičková, one of the main coordinators of the camp and the Head of the Institute of Continuing Education of the Faculty of Informatics and Management, UHK. •





On Monday, 14 September 2020, representatives of the University of Hradec Králové (UHK) and the construction company Metrostav signed a contract for the comprehensive renovation of the interior premises of the Philosophical Faculty (UHK) of the University of Hradec Králové on Svoboda Square in Hradec Králové over the course of the upcoming nineteen months. The project should be completed and handed over by April 2022.

Our building on Svoboda Square has not been up to scratch for a long time and it has not been able to meet the growing demands on study infrastructure, so we are very pleased to have been able to obtain a subsidy from the Ministry of Education, Youth and Sports and to have signed the contracts with the contractor. We hope that in two years' time the entire Faculty will be able to move back and enjoy their tastefully restored premises and the new, well-equipped classrooms and offices, including an entirely new wing," says Jan Prouza, the Dean of the Philosophical Faculty, adding that for the duration of the reconstruction, the Faculty has moved to Building E on Vít Nejedlý Street in Hradec Králové.

The total cost of the renovation has been set at CZK 199,500,000, while the Ministry's subsidy amounts to CZK 169,500,000.

"We had expected the Ministry's contribution for the project to be CZK 20 million lower and the University to contribute more, but since we prepared the Faculty well for the construction, we managed to clinch a higher subsidy. Considering that UHK's total annual Government subsidy is about CZK 340 million, the additional 20 million is a significant help," says Aleš Klicnar, the University Bursar. The comprehensive reconstruction will also entail the erection of a new wing to increase student capacity. In 2022, the Faculty will open to over 1200 students.

"The building has certain heritage features, but since our Metrostav Division specialises in listed buildings, we don't expect any surprises to crop up and we believe that the reconstruction will proceed smoothly. We are happy to participate in such a project here in Hradec Králové and to have the opportunity to show the quality of our work, which is why we so very much appreciate being here today,"



comments Martin Sirotek, Metrostav Director of Division 9, which won the tender.

"The reconstruction of our "Philda", as we cordially refer to the Faculty, is not the only ongoing extensive investment on the part of the University. Over fifty percent of the apartments at Palacký Dormitory have been modernised. During the next fourteen days we would like to start reconstructing the roof, the balconies, the stairways and other common premises. The cost will be about CZK 25 million," Rector Kamil Kuča reveals future investment plans.

After the restoration of the Philosophical Faculty, the Faculty of Education will follow. "We have completed the project preparation stage and we have submitted the investment plan to the Ministry for evaluation. If all goes well, we should receive the investment registration decision by the end of the year, after which we can issue a call for tenders. I expect that construction work will start during the finishing stage of the renovation of the Philosophical Faculty, which will allow us to use the new premises in part also for the relocated Faculty of Education," explains Bursar Klicnar. •



MATYÁŠ STRNAD DEPARTMENT OF PUBLICITY AND COMMUNICATION, UHK

Even though this year didn't let us meet in person at the very places science comes alive and where play and learn go hand in hand, and we couldn't celebrate Researchers' Night properly, the University of Hradec Králové still did its very best through its abundant online programme. The main advantage of the online and live broadcast is that most of the recordings will be available even after 27th November, when the Researchers' Night was officially held. Recordings of the event are available at uhk.cz/nocvedcu.

Tam glad that we [the University of Hradec Králové] managed to present interesting scientific and research achievements even during these difficult times. I think that the Online Researchers' Night was a worthy substitute for the physical event," comments Professor Ondřej Krejcar, Vice-Rector of the University of Hradec Kralove for Scientific and Creative Activities.

What are UHK Faculties up to?

The Faculty of Education showed future nursery and elementary school teachers how to use robotic toys to help preschool children develop how they think about computers and information technologies in general. We showed them how the bee-bot works, what the







youngest children can learn with it and how it can help them.

The Faculty of Informatics and Management targeted a slightly older age group when it presented its FIM Bot. The student project for the development and assembly of a humanoid non-autonomous robot is still not complete, but the robot has already taken on its physical form and it can perform basic tasks. The finished robot should serve as an avatar that could possibly substitute humans in hazardous environments.

Experts from the Philosophical Faculty are examining the various ways technological progress affects our current society. The

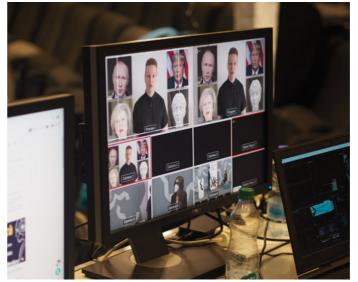
phenomenon of fake news is nothing new; we encounter fake and/or fabricated news on the Internet on a regular basis. It is also becoming increasingly more difficult to detect inauthentic information in so-called deepfake videos and so stealing one's identity has never been easier.

Scientists from the Faculty of Science can now use sophisticated algorithms to collect and analyse huge datasets that record vital signs. This is especially good news for homes that care for the elderly. Special sensitive sensors are able to detect irregularities and immediately alert the nursing and medical staff. Today, this monitoring system simplifies the work of doctors who care for patients infected with Covid-19.



UHK's live broadcast also welcomed guests from the Hradec Králové Observatory and Planetarium, who explore the universe with the help of state-of-the-art inventions. Robotic telescopes allow the observation and recording of the sky at any time of day or night even in the absence of human operators, who merely need to set up the system and then let the robot do the rest.

The entire programme of Researchers' Night in Hradec Králové and from other institutions across the Czech Republic is available at nocvedcu.cz/en. •



LIFE AT UHK LIFE AT UHK

Let's be objective about Europe. The EUforka project busts myths about the EU

ANNA FLIEGEROVÁ, BARBORA PETROVIĆOVÁ STUDENTS AT THE DEPARTMENT OF POLITICAL SCIENCE,

PHILOSOPHICAL FACULTY, UHK

EUforka, a project created and run mostly by students, informs the general public about events and developments in Europe. The project also tries to monitor and rectify any false or misleading news that have been disseminated to the public. The project operates on social platforms such as Facebook and Instagram and runs a website of its own where longer articles are published. Students from the Department of Political Science (Philosophical Faculty of the University of Hradec Králové) have recently joined the project.

↑ lthough the core of the EUforka team **A**is formed by students from Palacký University in Olomouc (UPOL), the project itself is a collaboration of university students from all over the Czech Republic. It is open to anyone who wishes to improve public awareness about Europe and participate in busting myths regarding the EU.

EUforka is currently coordinated by David Broul, a former undergraduate and currently a graduate political science student at UPOL. He is also a student senator of the Academic Senate of the Faculty of Arts and an EU Careers Ambassador for UPOL. "We are happy to note that our young colleagues Anna Fliegerová and Barbora Petrovićová, both political scientists, have joined our cause and that they are so enthusiastic about it. Apart from getting first-hand experience working in a team, processing sources in foreign languages and doing editorial work, our new colleagues will also come by many new and important skills. We believe that they will find their contribution to the project to be rewarding; we need to fight against lies and misinformation by presenting facts and relevant arguments," the Olomouc coordinator David Broul comments.

"We joined the project as part of our practical training, and we have been impressed by the positive and professional approach of the organisational team right from the very onset. Our task is



to write articles that present accurate and verified information; these articles must be pleasant to read and educational at the same time. As students of political science, we are thrilled by the main purpose of the project, which is to fight both incidental and calculated manipulation and lies circulating in the public domain. But we also appreciate the opportunity that we have been given to learn more about what goes on in the European Union and generally also in Europe. We are also interested in the broader aspect of things; for example, our first article was about the Nagorno-Karabakh Conflict. Our participation in the project also proved to be an invaluable opportunity for us to learn how to write not just academic

papers but also how to write for the general public. This is a skill in its own right, and it will certainly help us in all of our future academic and professional endeavours. Naturally, what we appreciate most is the fact that we can give the public true news and debunk fake news," the two students from the Department of Political Science assess their participation in the project.

"Anna and Bára taking part in the EUforka project makes me happy, and I enjoy seeing how enthusiastic they are about this worthwhile cause. In my view, EUforka is a very commendable project,

and I hope that it will succeed, despite having to fight a very powerful enemy in the way of all the misleading bits of information that are currently circulating in the public space and that spread, by their very nature, at a much higher speed than true facts," the Dean of the Philosophical Faculty of the University of Hradec Králové, Jan Prouza, who teaches at the Department of Political Sciences, praises the two students. •

The University of Hradec Králové is proud to join a project that supports top notch athletes

JAN PETRUŽÁLEK DEPARTMENT OF PUBLICITY AND COMMUNICATION, UHK

As most of us know, studying at a university tends to be a difficult endeavour in itself. Add a daily training regimen and regular competitions and you have a big challenge on your hands. The same applies to student athletes enrolled in the UNIS scholarship programme set up by the VICTORIA University Sports Centre, which operates under the Ministry of Education, Youth and Sports. The primary objective of the programme is to help students who are talented athletes by creating better conditions that will allow them to study and do sports at the same time.

The range of sports that are eligible for ■ support is extensive – included are track and field, target shooting, rowing, and team sports such as hockey, volleyball, floorball, and many others. The scholarship available to individual athletes depends on their sports performance and classification, and ranges from 5 to 15 thousand Czech crowns per month. The support also includes many other benefits available to the student athletes at their home universities.

The project currently covers almost 400 athletes from 21 Czech universities, and we are proud to announce that our students have also been included in this elite group. Eight of our students have been admitted to the

programme, and we have set up our own university sports team for our athletes – the hockey players Lukáš Bezděk, Luboš Kozák and Michael Gaspar, the cross-country skier Petra Hančová, the cyclist Tomáš Ševců, the badminton player Michaela Fuchsová, the table tennis player Martin Koblížek and the field hockey and floor hockey player Barbora Čecháčková, who is also a member of the national team.

The main benefits following from UHK's involvement in the UNIS project include the scholarship money on the one hand, and the various regeneration contributions and assistance in dealing with any conflicts between sports and school activities on the other hand.

UHK ANNUALLY 2020



Students participating in the project mostly appreciate that they have more time to train and participate in competitions, and that they receive more support from their teachers.

The project is also open to any future UHK students who excel as athletes. Once they enrol at our University, they may apply for the scholarship and become part of our elite University Sports Team. •

Once again, students and companies met at the JobStart trade fair. UHK graduates are an inspiration

GABRIELA SKÁLOVÁ INFORMATION, COUNSELLING AND CAREER CENTRE, UHK

KRISTÝNA VÁVROVÁ UHK ALUMNI CLUB

On the 4th of November 2020, the JobStart career trade fair went online for the first time; but students in search of a job or an internship did not miss out on anything.

"We had to solve many technical problems, such as to transpose what normally amounts to two stories of employers' trade booths and many a flock of students into the online space, while preserving as much from the original programme as possible," describes Petra Pavlíčková from the Information, Counselling and Career Centre of the University of Hradec Králové (ICCC), which organises the trade fair.

Students took to ZOOM to listen to lectures by Martin Horák, the Director of the Labour Bureau in Hradec Králové, Jiří Štěpán from the Technology Centre in Hradec Králové, and Boris Váňa, the Headmaster of Comenius Elementary School in Hradec Králové, to name but a few.

"The greatest challenge was to create the sense of excitement and bustle that you would normally enjoy at a trade fair, in the online space. We tried



our best to arrange direct and live communication whenever possible, and thanks to the willing approach of the participating employers, I hope we have succeeded," continues Gabriela Skálová from the ICCC. All students and employers were invited to exchange their contact details and to communicate informally. Employers had the opportunity to introduce their working environment, and what they expect from new recruits, and present their open internships and positions. Students could meet their potentially new supervisors and colleagues and learn many a useful thing. The afternoon was devoted to a panel discussion hosted by the Philosophical Faculty (UHK) on the labour opportunities available to people who have a degree in the humanities and/or in social sciences. The event also offered an opportunity to introduce various important representatives of regional authorities and Philosophical Faculty UHK graduates.

JobStart was attended by employers like Laxus, TTC Marconi, Salinger, Adastra, the Regional Police Directorate of the Czech



Republic, Skoda Auto, Česká spořitelna savings bank, Manpower, SEMIRAMIS and Studio Animato. The general partner of the event was Kooperativa.

UHK graduates advise: Be active, seize every opportunity!

Another special feature of this year's JobStart was the unusually high number of UHK graduates who gave lectures on their current projects and successful ventures. The morning lecture series was opened by Štěpán Bartyzal. He founded Český Trh Práce and created recruitment software known as Recruitis.cz. Mr Bartyzal graduated from the Faculty of Informatics and Management, UHK. He addressed his motivational speech to students and fresh graduates in search of their first job. The motto of his talk was "A good job waits for nobody, but I will find it myself."

Pavel Čejka, another FIM UHK graduate, who joined the event from London, where he works as a Senior Manager, CEE & CEE in Tableau, appreciated the friendly and lively atmosphere of the event. "It was great. I enjoyed both the lectures and my discussions with students. Everyone was very friendly and laid back; we had a nice debate in English in one of the chat rooms. I had a good time and will be back next year," Pavel Čejka concluded. •

UHK Annually in a nutshell



January

In January 2020, all of the senators present at the meeting of the Academic Senate of the Faculty of Education elected to vote for the current Dean, Associate Professor PhDr. MgA. František Vaníček, PhD, which means that he will head the Faculty for another four years. He was re-appointed by the Rector in June 2020 and will hold the office until June 2024.

February

In February, the Academic Senate of the University of Hradec Králové sat down to elect the new Rector of the University of Hradec Králové. The Senate opted for Professor Kamil Kuča. He will hold the office of Rector of the University of Hradec Králové for the second time in a row. A world-renowned toxicologist, he received 22 out of 24 votes. "I am very happy to have been re-elected and I will do my best to stand up to the task and the responsibility. I would like to thank everyone who voted for me and who entrusted me with the authority to continue on our way. I see my being re-elected as confirmation of the fact that we have picked the correct course for our journey and that the University would like to keep going in this direction. We might be a regional university, but we have global ambitions," Rector Kamil Kuča commented on his February re-election. •

The UHK Student Ball in February 2020 saw a record turnout, with extra 400 tickets in demand compared to last year. Lucky Band, The Valentines, Pomlky and many other performers were present. The headliner of the program in 2020 was DJ Pavel Cejnar, and the official opening of the ball was enriched by a performance of the street dance school Timedance, which has been operating in Hradec Králové for over 10 years. Unlike in previous years, the Rector and the representatives of the Faculties arrived to meet registered graduates at the University's Alumni Club.•



"It was good to see the faculty full of students again, all dressed up in different shades of blue and enjoying themselves. I am also always happy to see the diversity of interests, skills and talents that our teachers and students let discover every year at our celebrations," said Josef Hynek, the Dean of the Faculty.

The Faculty of Informatics and Management celebrated its 27th birthday. For the third time in a row, students and university staff organized a celebration called "Blue Bash." Visitors could listen to unconventional lectures by students and academics alike, enjoy performances by local bands, or play a game of darts, chess or other board games, taste the delicacies of foreign cuisines, have a chat in English, Portuguese, Russian, Spanish or even Japanese in the language corners, or learn how to tie a bow tie with the Dean. Since blue is the heraldic colour of the Faculty, visitors could also participate in the BBBB - the Best Blue Bun Bake-off. Despite the inclement weather at the beginning of the event, students and staff created a huge blue heart on Václav Havel Square. •



March

For the twelfth time in a row, the Faculty of Informatics and Management held a job fair called HIT Career. This year, thirty-five companies participated in the all-day event where students had the opportunity to learn about current job offers, temporary jobs and internships, or they could consult with company representatives on matters concerning possible topics for their bachelor's or master's thesis. There was also much talk about practical project assignments. The event included the TRIANGL competition. It focused on student projects that were implemented as part of a cooperation between students, companies and the University. At the end of the event, representatives of the Faculty met with the representatives of the companies as part of the event referred to as Blue Faculty - Your Partner. Here participants could further develop their cooperation, set up contacts or have a friendly chat over light refreshments.

90

UHK ANNUALLY IN A NUTSHELL

UHK ANNUALLY IN A NUTSHELL

UHK ANNUALLY IN A NUTSHELL



May

Professor Josef Hynek was re-elected Faculty Dean during a public meeting attended by the Academic Senate of the Faculty of Informatics and the UHK Management Board. He received all 9 votes in a secret ballot. His main goals for his next term of office include the accreditation of new study programmes in both Czech and English. The Faculty is also preparing a double degree programme in unison with prestigious partner Sun Yat-Sen University in Taiwan. "I would like to thank the members of the Academic Senate for their support and their votes, and also for their willingness to come together and make the election happen. Originally, it was supposed to take place on April 7, but of course, this was not possible given the overall situation in our country," said the re-elected Dean of FIM UHK, whose priority remains, among other things, to educate and train Faculty employees.



In June, Bohemian scholar, long-time university lecturer and Associate Professor PaedDr. Božena Plánská, CSc., passed away. Božena Plánská worked at the Department of Czech Language and Literature at the Faculty of Education since 1994, where, among other things, she was Head of the Literature Department. She directed her research towards 19th century Czech literature. In her analyses, she approached literary works with great humility, while exhibiting a most fascinating in-depth knowledge of philosophy, history and culture, as illustrated in her most recent monograph published in 2015 under the title: Relationships and Their Depiction in 19th and 20th Century Literature.



In his office, Kamil Kuča, the Rector of the University of Hradec Králové, delivered appointment letters to those Vice-Rectors who will take up their positions effective from 1 July 2020. "We are going to face many challenges in several areas over the next four years. In my first term, I focused mainly on the internationalisation of

the UHK and the development of science. Now we need to focus on our staff and students. The team of Vice-Rectors that I have handpicked has all the qualifications and skills to develop the existing strategy of growth for our University," commented the UHK Rector, Kamil Kuča, at the start of the ceremonial presentation of the appointment letters. Professor Kamil Kuča himself was appointed to the office by the Minister of Education, Youth and Sports, Robert Plaga, at the beginning of June, also with effect from 1 July 2020. Dr. Pavlína Springerová, Vice-Rector for Strategy and Development and the authorized deputy of the Rector, is in charge of the well-being of UHK academic workers and employees. She is currently also overseeing the



HR Award project. Associate Professor Petra Marešová, Vice-Rector for Student Affairs and Cooperation with Practice, is new to the team of Vice-Rectors. The Department of Science and Knowledge Transfer, the T Gallery and the University Library will be managed by the Vice-Rector for Science and Creative Activities, Professor Ondřej Krejcar, who stepped up from his previous office of FIM's Vice-Dean in the same area of expertise. The last member of the team is Dr. Leona Stašová, she is now Vice-Rector for International Affairs and Head of the Department for International Affairs. The Bursar, Aleš Klicnar, and the Head of the Rector's Office, Soňa Došková, remain part UHK's management board. •



June

New Faculty of Education leadership

In June, František Vaníček took over the symbolic sceptre of the Faculty of Education as the new Faculty Dean. He chose Nella Mlsová (Vice-Dean for Science, Research and Art, Authorised Deputy of the Dean of the Faculty of Education), Zuzana Hromadová (Vice-Dean for Student Affairs and Accreditation), Daniela Vrabcová (Vice-Dean for International Affairs), Jindřich Vedlich (Vice-Dean for Development, Life-Long Training, Legislation and Projects) and Michaela Mádlová (Vice-Dean for Practical Training) to join his team of vice-deans who will lead the Faculty with him in the upcoming years. •

92



August

The Faculty of Informatics and Management welcomed new students in the last week of August. The 23rd annual introductory Welcome to FIM lecture was traditionally organized by the student team that goes under the name of First Steps to FIM (PKNF in Czech), which is led by Dr. Věra Strnadová. The lecture, which lets prospective faculty students in on the most important information concerning their studies, took place despite ongoing fears surrounding the Covid-19 virus. The organisers were well prepared in advance, and broadcast the lecture live through the Faculty's YouTube channel. Security precautions were also very much in place for students attending the lecture on site. With the event attended by one hundred and seventy prospective university students, the introductory lecture was held in two rooms holding a limited number of people. •



September

As in the previous eight years, the Dean of the Faculty of Informatics and Management, Josef Hynek, did not miss out on the opportunity to visit a mixed-age country school on 1st of September, the first day of the school year. This time, he visited the Elementary School in Zámrsk. Three first-year pupils joined the school. The Dean wished them lots of success in all they do and a good start at this, a new stage in their lives. He also gave them small gifts. Then, together with the Headmistress, Kateřina Brandová, an alumnus of the University of Hradec Králové, and the Mayor of Zámrsk, Zuzana Tvrzníková, he had a look around the school; a brandnew polytechnic classroom is currently being built there.

On your marks. Get set. Go!

This year, the introductory lecture for all first-year students at the Faculty of Education was presented online. After introducing the Faculty's management board, the Study Department gave students some advice on how best to kick-off their studies, as well as some tips on student life at the Faculty. Although the

course of study is somewhat unconventional this year, given the current epidemiological measures, we believe that together we can make it work. We are ready to help and assist all our students throughout the academic school year with any academic or personal problems.





The Faculty of Science celebrated its 10th year. It has produced 3,000 graduates and dozens of scientific projects over the past decade.

On 1 September 2020, the youngest faculty of the University of Hradec Králové celebrated a ten-year anniversary. Over the past decade, it has managed to grow into an institution that may pride itself on many educational and scientific success stories.

The Faculty of Science accredited several new study programmes, one of which is rather unique; it is the only study programme in the Czech Republic that offers education in the field of Toxicology from undergraduate to PhD level.

In 2017, the Faculty relocated to new premises, once a standalone building had been erected for the Faculty at the Na Soutoku Campus with modern facilities for both students and teachers and with almost three dozen state-of-the-art laboratories. Consequently, the

Faculty may now fully engage in all its scientific and research activities. In the few years of its existence, the Faculty managed to author or co-author 14 research projects under the Czech Science Foundation, 13 projects under the Technology Agency of the Czech Republic and many other national and international projects.

"We have just finished our first startup decade. What will the next one be like? I wish all of us many content students and lots of breakthrough research projects. And I hope the public awareness of our Faculty will spread from Hradec Králové to the entire world," commented the Dean of the Faculty of Science, Jan Kříž. •

On 1st September, the Philosophical Faculty of Hradec Králové celebrated its 15th year

The Faculty, which was established on 1st September 2005, was originally named the Faculty of Humanities, but became the Philosophical Faculty on 1 December 2007. In the first few months of its existence, it used to be located in "The Cube", a low prefabricated

building at the compound of the Bishop Gymnasium. In May 2008, the Faculty operated from Svoboda Square and since September 2020, it has been temporarily situated in Building E on Vít Nejedlý Street due to building renovations.

October

On 8 October 2020, the Department of Social Pedagogy and the Department of Social Pathology and Sociology of the Faculty of Education organised the XXIV International Scientific Conference SOCIALIA. This year's online meeting subtitled Multidisciplinary Aspects of Helping was dedicated to issues regarding helping and helping professions. Helping is a fundamental category of social pedagogy and is applied in working with

different target groups of children, young adults, adults and the elderly, both healthy and at risk. The interdisciplinary perspective has contributed to deepening the collaboration of workers from many professions in solving problems in practice. At an academic level, the aim was to initiate discussions between professionals and to seek possible directions for research on topics touching on helping and the helping professions. •



Due to the current pandemics, the Book Fair, which would otherwise be organised as part of the nation-wide XXIV Library Week, had to be conducted in an unconventional format. Instead of the on-site trade fair, the Book Fair was presented in the form of a documentary based on interviews with important literary personalities.

Together with the main guests of the Book Fair, Associate Professor Maria Macková and Dr. Michal Jareš, we focused on the detective genre, which is undoubtedly the most popular literary genre among Czech readers. Jakub Novák invited our guests to a round table. The podcast was published on the UHK website. Marie Macková presented her latest novel in the field of historical-detective genre, The Story of the False Braid, while Michal Jareš discussed his book History of Czech Detective Fiction, which he co-authored with Pavel Mandys. •



Sadly, Associate Professor PhDr. Svatopluk Pastyřík, PhD passed away in October. He was a linguist and Bohemist, and a long-standing member of the Department of Czech Language and Literature of the Faculty of Education. Svatopluk Pastyřík specialized in Czech linguistics, onomastics and the didactics of the Czech language. He is the author of several professional monographs and wrote a number of university textbooks. He did not stop working even after he retired, as he continued to publish and lecture. His love for his grandchildren also led him to write for young readers, in whom he strived to develop a desire to learn about the past of his hometown.

It grieves us to say, that Associate Professor PaedDr. Jiří Štýrský, CSc. passed away at the beginning of December. Jiří Štýrský was a long-standing member of the Department of Recreology and Tourism and he was an excellent teacher, geographer and anthropologist. He was an experienced traveller, and above all, a good friend and a great colleague. His mark remains indelibly inscribed, as he helped establish the Department of Recreology and Tourism under the Faculty of Informatics and Management. He was one of the leading Czech figures in the Department. He received several awards for his contributions to the Faculty. He has fascinated generations of students with tales of his travel exploits. "Jirka, we all miss you very much already," the Dean, Josef Hynek, concluded his eulogy with a great air of sadness.



December



The management board of the Faculty of Informatics and Management organised a Christmas celebration for all international students who could not go home to their loved ones for the holidays. The Dean, Josef Hynek, wished everyone good health and expressed his conviction that just as Christmas is a symbol of hope, new beginnings and the arrival of brighter days, so will it also be the beginning of a turnaround in the fight against the epidemic, thanks to worldwide vaccination. Everyone could choose a gift of his or her choice under the Christmas tree. People could choose from a selection of faculty sweatshirts, hats, gloves and scarves, which was certainly appreciated by all in the coming winter months.



A proud regionally-based university with global ambitions.



















UHK Annually 2020

Electronic edition and archive of older issues: https://www.uhk.cz/en/university-of-hradec-kralove/about/media-and-pr/magazines.

Please send your articles to zpravodaj@uhk.cz.

UHK Annually is published in printed form once per year. It is updated through regular electronic newsletters released by the University of Hradec Králové. To subscribe, please go to: www.uhk.cz/en.

Next issue deadline: 12 November 2021.

Editorial Board: Mgr. Jakub Novák (editor in chief), Mgr. Petra Kubařová, Mgr. Zuzana Dostálová, Bc. Tomáš Vodička, Mgr. Kristýna Vávrová, Mgr. Matyáš Strnad.

Proofreading: Mgr. Matyáš Strnad, Mgr. Soňa Jančurová.

Translation: Gertrude Mark.

The Editorial Board reserves the right to abridge or edit any article.

Cover photos: Jan Drašnar.

Photographs by: UHK Archive, UHK faculty archives, UHK students and employees' private archives, Jan Bartoň, Elizabeth Bourne, Ing. Franšitek Hašek, Ondřej Littera, Tomáš Pánek, Zdeněk Puš, Jakub Severa and GASK, Anna Vitvarová.

Graphics and typesetting: Ing. Martin Werner.

Printed: Tiskárna Brázda.

Printing of 350.

