

MY UPCE



MAGAZINE
OF THE UNIVERSITY
OF PARDUBICE
2023/2024

Reviving Vanished Monuments

Jiří Kysela's team bringing long-demolished monuments back to life.

6

The Interplay of Bodies and Souls

Adam Procházka's territory is the dance floor. And so are university textbooks.

28

Svoboda the Astronaut: Kašpar Would Be Surprised

He is a combat pilot and he may be the second Czech to go into space.

34

By Plane or Donkey

They've been travelling together since university. Paramedics Martin and Kristýna are on a trip around the globe. It all started with one colourful wall in their flat.

20





24

PEOPLE AT UPCE

Celebrity among Statues

Restorer Zuzana Auská loves extending the life of monuments. Sometimes, she even unravels a secret a monument is hiding.

Read My UPCE
online!



EDITORIAL

Prof. Petra Bajerová, Vice-Rector
for external relations

3

PIXEL

The University commemorated
the anniversary of November 1989

4

PHENOMENON

Reviving Vanished Monuments

Jiří Kysela's team is using augmented reality to bring long-demolished monuments back to life.

6

TOPIC

University has a New
Spin-off Company

One of the University of Pardubice's greatest discoveries, which can detect pancreatic cancer early, is close to being implemented.

10

PHENOMENON

The Snowball Method

A sociocultural anthropologist, explorer, mountaineer and adventurer in mind and body: Libor Dušek.

12

30

PHENOMENON

Vintners from Prehistoric Times

Archaeologist Jan Frolík explores not only the mysterious Areni Cave in Armenia but also, for example, the bowels of Prague Castle.

GENERATION

A change of 180 degrees

Student Ilanit Evchev was born in Ukraine to a Jewish family, and at the age of 6 moved to Israel with her family.

18

MY HOBBY

By Plane or Donkey

They've been travelling together since university. Paramedics Martin and Kristýna are on a trip around the globe. It all started with one colourful wall in their flat.

20

GENERATION

The Interplay of Bodies and Souls

Adam Procházka's territory is the dance floor. And so are university textbooks.

28

ALUMNI

Svoboda the Astronaut:
Kašpar Would Be Surprised

He is a combat pilot and he may be the second Czech to go into space.

34

GENERATION

The Jump from Ghana
to Pardubice

Ama Fobi Osei-Mensah is a student of UPCE. Why is she studying in Pardubice and how is it connected to her home country and family?

38

Cosmopolitan University

In today's world, where borders are gradually disappearing and communication crosses geographical boundaries, it is essential that our university stays open to the world and also ready to receive and share knowledge, experience, and culture with the international environment.

Our university boasts a rich tradition of collaboration with universities, institutions and organisations worldwide.

We aim to develop further and strengthen our relationships with educational institutions, industry, and other organisations. In international relations, we have a crucial role in establishing and maintaining partnerships with prestigious foreign universities and institutions, where collaboration is the key to innovation and mutual enrichment. Together, we strive to strengthen our position on the international scene and aim to create a progressive and cosmopolitan university.

At the same time, we are focused on promoting our university and would like to attract talented students, scientists and academics not only from the Czech Republic. Innovative educational programmes, modern infrastructure and a positive study environment are some of our strengths that convince potential applicants to study at the University of Pardubice.

We try to spread awareness of our institution and its possibilities through promotional campaigns, social media, presentations of the University on the website, and participation in national and international educational fairs. The Department of Promotion and External Affairs keeps our academic community and the public informed

about all aspects of the collaborative work that our university is developing. It monitors and communicates news, events and projects that link us with partner universities and institutions.

We want to provide our students and staff with the opportunity to gain international experience and perspective through student exchanges, internships, research collaborations and other international programmes.

Our university is becoming a multicultural environment that enriches the academic community and prepares students for successful careers in a global environment.

As the Vice-Rector responsible for promotion and external relations, I am honoured to share with you more news, achievements and visions that aim to strengthen our institution in the global context.

Prof. Petra Bajerová, Vice-Rector for external relations



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PHOTO BY Adrián Zeiner

"May peace continue to be with this country. Let anger, envy, resentment, fear and strife pass away, let them pass away..." These were the words of the members of the University Choir during the traditional commemoration of the events on 17 November 1989. Students, employees and the public gathered on the University of Pardubice campus to commemorate the 1989 student strike and revolution by ringing the bell at the auditorium.

Reviving Vanished Monuments

STORY BY Lada Součková • PHOTO BY Adrián Zeiner

Jiří Kysela's team from the Faculty of Electrical Engineering and Informatics is using augmented reality to bring long-demolished monuments back to life. Thanks to their application, tourists can see important buildings that they can no longer find on the streets of cities.

❗ What is the gamification of tourism?

Gamification, derived from the word 'game', means using game elements in non-game areas, such as tourism. It is an effort to motivate users to perform tasks for which they can be rewarded in different ways, similar to a game where they earn points or advance to the next level.

❗ Does your app work like that?

Yes. Our app introduces landmarks that no longer exist today while motivating users to walk around as many of them as possible. Many cities in the Czech Republic had many beautiful, historically valuable buildings in the past that have disappeared over time because they had to give way to roads or newer buildings, for example. Our edutainment app can depict non-existent buildings and important monuments, so the user can see what the monument looked like or how it would look today in the context of contemporary development. Pardubice and Litomyšl, which we cover in the app, have such disappeared monuments. In this way, we can bring them closer to tourists and local citizens who have heard of such sights but don't know much about them.

❗ What can be found in the app?

The user will use augmented reality to view historically accurate 3D models of monuments right where they used to stand. Of course, it is possible to view the models in detail and enlarge or rotate them. In addition, we have prepared short texts in which we mention the most important details from the history of the building, its owners, builders, or other interesting facts of the time. It is a comprehensive guide.

❗ So, does it work similarly to Pokémon GO, where the user uses augmented reality to see a Pokémon, for example, in their living room?

Exactly. It is how the users can use their phone's camera to see the now-defunct Bílá brána (White Gate) or the demolished Pardubice synagogue next to the Dům služeb (House of Services) on Svatá Anežka Česká Street in Pardubice.

❗ What other sights can we see?

In Pardubice and Litomyšl, we have tried to resurrect some of the most significant monuments. In addition to the White Gate and the already mentioned synagogue, which was one of the jewels of Pardu-



bice's monuments and yet nothing remains of it, we have included the well-known Veselka building, the old town hall, which has been replaced by the current one, and the pavilions in Tyršovy Sady Park, which were built for the National Exhibition of Physical Education and Sport. These were magnificent functionalist buildings, of which not a brick remained after the end of the exhibition.

➊ And in Litomyšl?

There, we tried to select significant monuments, and there was also sufficient documentation about them. In this town, too, the application presents the synagogue, then the U Zlaté Hvězdy hotel, the post of-

fice, the villa of the builder Antonín Beba, and Ignác Berger's shoe factory. In this way, they can become familiar to each of the inhabitants.

➋ What was the way to revive these monuments?

A difficult one. I think it brought many grey hairs to our graphic designers (laughs). They created models of monuments based on building documentation, old photographs, postcards, sketches and other materials, which were mostly scarce. We searched archives and private collections all over the region and traced contemporary building documentation. These were often in such poor condition that graphic designers had to decipher the torn or faded pages.



❗ Were you able to get everything you needed?

Not always, and we had to leave some monuments out because of this. It was a bit of detective work. We made a list of buildings we wanted to include, but after several months of searching in the archives, we found that we couldn't supply our graphic designers with all the necessary documentation for some of them. Sometimes, we found contemporary photographs, but they were black and white or coloured. It's hard to say how authentic they were. Therefore, we consulted the materials and the appearance of the monuments with colleagues from the Faculty of Restoration. For example, in the case of the White Gate, we had very little documentation. Although it stood until 1840, almost nothing has survived, except perhaps a contemporary sketch by an amateur painter. The restorers used the material on the roof of the tower to estimate what colour the structure might have been.

❗ And on top of that, hours and hours of programming.

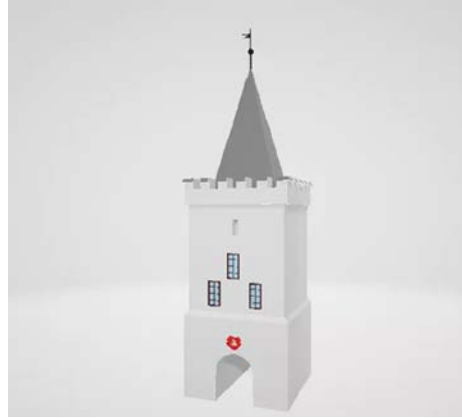
That's right. And we also had to make sure we had valid licenses for everything.

❗ Were there any complications in the process?

We did have one such problem. We had a brilliantly programmed augmented reality that could display a monument in the same place it had stood before. We tested it several times. The White Gate, indeed, sat exactly where it used to be. And then, one day, we arrived at the site in bad weather, when it was cloudy and raining, and the gate suddenly appeared dozens of metres away. We couldn't leave it out, so we had to reprogramme it.

❗ How many times did you have to visit the sites?

Many times. You had to go there and choose the best point to see the building. We wanted to find safe places with good views so that users wouldn't have to view the sights from, for example, the centre of an intersection, a car park, or an area obscured by high-rise buildings and trees.



❗ What is the game element in the app?

In our case, the gamification is that once the user reaches the designated location, a specific monument, they can check it off in the app. When the user has ticked off all the monuments in a given city in this way, they can collect a reward, which will be a local product, from the local tourist information centre.

❗ In the project, you also work with the term 'undertourism'. Can you explain it?

Undertourism points to places that are not often visited by tourists and do not fulfil their tourist potential. The Pardubice Region has long ranked last among other regions regarding visitor numbers, and Pardubice is quite similar. Therefore, our app, in co-operation with East Bohemia Destination Company, tries to offer something more to tourists. We are trying to revive the flow of tourists in Pardubice and the whole region to increase the number of visitors and minimise undertourism.

❗ Your project was launched during the COVID-19 pandemic when tourism suffered a lot. Was that one of the motivations for creating the app?

The COVID era only helped, as it eliminated mass tourism. At that time, the most you could travel to avoid spreading infection was to go with your family. And it is precisely on individual tourism that the app is built, making it possible to use even during bans and restrictions. It is designed for tourists – individuals who like to explore places without a guide – and for those interested in tourism, history and new technologies. They can be tourists, historians, history students, augmented reality enthusiasts, etc.

❗ In your opinion, are gamification and augmented reality the future of tourism?

Absolutely. The development of modern technology is only helping. A few years ago, we would not have been able to implement such an application at all. Today, however, I think tourism based on access to virtual monuments that no longer exist has great poten-

tial. Technology is ever-improving, so gamification and augmented reality are bringing tourism a new kind of activity. People will get newer and smarter mobile phones, making more users use similar elements in tourism. But there are many more trends in the tourist industry, such as film tourism. And out of these, the so-called e-tourism will be among the strongest. It is unique in that it can remind us of no-longer existing places. Only a few people can access historic material, and information about them is often not available online. A typical tourist coming to Pardubice would miss sights like the demolished synagogue or the pavilions in Tyršovy Sady Park.

❶ Why did you start combining tourism and information technology?

I have been involved in information technology and its application in tourism since my studies and academic career. My interest focuses on the constant new opportunities in e-tourism due to the dynamic developments in IT and the tourist industry.

❷ It is probably not an area that can be exhausted so easily.

Exactly. There is constantly new development both in IT and tourism. My colleague and project manager Pavla Štorková and I have published many articles on this topic in professional publications. Ten years ago, we discussed the idea of creating this application to display the disappeared monuments in Pardubice. We already proposed it theoretically at that time. Thanks to grants, we have now been able to bring it to life.

❸ Will the app add more monuments or even cities?

Everything depends on finances. The app's development is financially, personally and time consuming,

and its development is conditional on receiving another grant. A lot of monuments have fallen in the last century. The ones we have captured are just a fraction of them. If additional funding could be found, we would add many more to the monument application.

❹ Were any Faculty of Electrical Engineering and Informatics students involved in developing the app?

FEEI students gave us feedback during my classes and participated in brainstorming sessions where we discussed what could be added to the app. Then, they had the opportunity to test it. The Ph.D. students of the Faculty of Restoration and the Faculty of Chemical Technology were also involved in its creation.

❺ Even students of the Faculty of Chemical Technology?

Yes. We got a willing Ph.D. student from the Department of Graphic Arts and Photophysics to collaborate with us, who helped as a graphic designer to create 3D models of all ten monuments.

❻ Do you like to travel?

Yes. I like to spend my free time travelling and discovering new places and monuments, not just the ones that have disappeared.

❼ Do you use these tourism elements in your travels?

Not really, because there is no such possibility in the Czech Republic yet. So far, we haven't found any such app or at least a similar format in our country. It's such an uncovered place, which we thought was a great pity. The technology is already well-prepared, so we thought we could go for it.

CV

Ing. Jiří Kysela, Ph.D.

(1981)

- He graduated in Applied Informatics at the Prague University of Economics and Business.

He then obtained his Ph.D. in the same field at the University of Hradec Králové.

- Since the beginning of his career, he has been working on e-tourism and information and communication technologies that influence the development of service provision in tourism.
- His research interests include operating systems, web engineering and wireless computer networks. In his spare time, he enjoys time with his family and travelling.

University has a New Spin-off Company

STORY BY Lada Součková • PHOTO FROM The Neuron Foundation

One of the University of Pardubice's greatest discoveries, which can detect pancreatic cancer early, is close to being implemented. The advanced detection by Prof. Michal Holčápek's team could become the world's first screening method for this type of cancer. To this end, the University of Pardubice has cooperated with a private company to establish its first spin-off company, called Lipidica.

The vast majority of patients who receive a diagnosis of pancreatic cancer die. The chances of survival with this disease are in the order of 1%. In fact, the detection of pancreatic cancer usually occurs only at the final stage, when doctors can do very little. However, that could change thanks to scientists from the University of Pardubice. The team around Professor Michal Holčápek from the Faculty of Chemical Technology has devised a method to detect pancreatic cancer at an early stage, or even before the outbreak – and only from blood.

The University of Pardubice will now try to translate the revolutionary method into practice in its first spin-off company, called Lipidica, in which they have joined forces with FONS JK Group, a.s., a Czech holding company operating clinical laboratories and IT companies focused on healthcare. "We found a partner who decided to support further research financially. Establishing a spin-off company means we can take this groundbreaking discovery to the next stage, making it a globally used method," explains the Rector of the University of Pardubice, Prof. Libor Čapek.

Pancreatic cancer is the 10th most common type of carcinoma. Recognising the insidious disease in time is problematic because it has no typical symptoms. There is currently no ap-

proved non-invasive method of early detection and no preventive screening programme in the world. Late diagnosis is the main reason for the high percentage of deaths. Up to 87% of patients succumb to the disease. In 2022 alone, more than 2,400 new cases were diagnosed in the Czech Republic.

"Early diagnosis significantly improves the effectiveness of existing treatments and patients' chances of survival. Our holding company has the background and strong expertise in laboratory diagnostics and health information systems. This joint project is also a great opportunity for us to bring prevention and healthcare to the next level," says Ing. Zdeněk Jirsa, a Member of the Board of Directors of FONS JK Group.

For early detection, a routine blood sampling is sufficient. It then goes to a specialised laboratory where the exact concentration of more than 150 lipid species that comprise the lipid profile is examined. "Afterwards, we compare the profiles of cancer patients with those of healthy patients, which are statistically different," says Prof. Michal Holčápek.

Lipidica's task is to carry the discovery through a clinical study that will validate the research results, which will take about three years. After that, there is a chance that doctors will accept the

Lipidica Wins the Neuron 2023 Award

Lipidica, a.s., a joint project of the University of Pardubice and FONS JK Group, a.s., has been awarded the Neuron 2023 Prize for its outstanding combination of science and business. The first spin-off of the University is to put into practice a methodology for early diagnosis of pancreatic cancer from blood. The method is based on a discovery by chemist Michal Holčápek from the Faculty of Chemical Technology, who works with his international team on lipid analysis and its applications in medicine. "The fact that an employee of the University of Pardubice is the team leader that won the Neuron Prize is a great honour for the University. Founding Lipidica was a step in the right direction. The combination of our scientists and the technological professional background of the FONS JK Group holding is already showing its potential in a short time. I am convinced that thanks to it, the patent for the detection of pancreatic cancer will be put into practice in the shortest possible time," says Libor Čapek, Rector of the University of Pardubice.

results, and this groundbreaking method will become a globally recognised screening method used for the early detection of pancreatic cancer. Patients will have a chance to learn the result in just three weeks after a conventional blood test and have a better chance of successful treatment and a prolonged life.

The world-renowned scientist Michal Holčápek has been involved in lipid analysis since the beginning of his career and published his first publication on the topic in 2009. Only 14 years later, he managed to obtain his first grant, which enabled him to start research in finding a biomarker for cancer, resulting in filing and obtaining two patents. "When I saw the results in 2017, I had everything re-measured because I didn't believe it was possible. It was something completely revolutionary," recalls Professor Holčápek. The results of the follow-up research were published in, among others, the prestigious journal *Nature Communications*.

While Lipidica will now work on translating the results into practice, Professor Holčápek's team, including students from

the Faculty of Chemical Technology, will work on the research's second branch. It will attempt to explain the biological mechanism of why variations in lipid profiles in patients' blood occur. "When I see the strength and quality of the results, I feel the responsibility and pressure to see this research through to the end because it has potential," adds the successful scientist.

Lipidica is based in the newly renovated building of the Medila Polyclinic in Štrossova Street in Pardubice. The location of the spin-off in this place is symbolic, as the University of Pardubice is already familiar with the building. "In the past, there was a military hospital here, and then the University of Chemical Technology in Pardubice, later the University of Pardubice, had laboratories here," said Zdeněk Jirsa from the FONS JK Group holding company, which brought funds, equipment and employees to Lipidica. The University of Pardubice came up with the licence and trained the staff.



The Snowball Method

STORY BY Zuzana Paulusová • PHOTOS FROM Libor Dušek's archive, Lenka Čermáková

The hills in his home, the Krkonoše Mountains, soon became too small for him. Gradually, he reached the big mountains. Central Asia enchanted him not only with its peaks but also with its ethnic groups. Sociocultural anthropologist, explorer, mountaineer and adventurer in mind and body, Libor Dušek, began to explore them and returned to them as home.

❶ You recently returned from your last expedition to Afghanistan, Pakistan and Tajikistan. What did you explore there?

Yes, I spent two months there. I spent the first half in Wakhan, Afghanistan (the Wakhan Corridor is a sparsely populated area in the north-east of Afghanistan – ed.). Then, I moved to Pakistan for the second half of the time. I visited the Kalash ethnic group and the Wakhan ethnic group living in the Shimshal Valley. These are the most remote people from the Wakhan Corridor, basically the most isolated Wakhan people, and they are fascinating.

❷ What are they like?

That would be a long story, but they are mostly friendly, honest, hospitable and truthful.

❸ How do you get to them? What do you do to gain their trust?

Given their nature, getting closer to them is not hard. The important thing is the first step – when you meet the right people, which happened to me years ago, you get a kind of ticket to move on. The Wakhis are an ethnic group that has operated on clan structures so far. My research is not just about the elites; it's about talking to the underprivileged, the poorer sections of society. If you get to know someone important from that village or even a few villages in the

wider area, you are automatically respected by the wider community.

❹ Can you speak their language?

I only know a few words of Wakhan. I can't communicate with them like I do with you now. I'm a little better at Farsi. But I need somebody to translate. Most of the time, my guides help me with that. They're educated and speak decent English. It works both ways because, for them, it's a prestige to be a guide for a European. It's a kind of reciprocal help. Their social credit gets raised, and I can carry out regular research.

❺ Do you have a language barrier elsewhere?

It's easier in Pakistan, where practically everyone speaks English. Tajikistan is also fine because everyone my age and above speaks Russian, and the younger ones speak English. Only Afghanistan is more problematic from this point of view.

❻ How do you plan such a research expedition?

If I go to research and gather information, I live with these people for a while. That means I'm involved in the activities they're doing, while researching their lives. Not counting sleeping, I'm really with them 24 hours a day, seeing how they express themselves, what they say, and participating in regular rituals, be it the ordinary ones like working or eating, or the extraordinary ones.

➊ Like what?

I participated in the Eid holiday, Kurban, in Arabic this year. It's an important Muslim food festival during which the locals get enough meat once a year.

➋ How do they usually eat?

They tend to eat dairy products, cereal pancakes, and mashed potatoes or rice for dinner. Fortunately, in the last two years, a humanitarian organisation has taught them to grow vegetables in greenhouses, which they can harvest three times a year thanks to the climate. Finally, they have some vitamins because even fruit trees are scarce and have only been there for the last decade. Before that, there were none.

➌ How much material do you collect in one expedition?

I collect material all the time, every day. This year, for the first time, I took a computer. I used to write everything down in a notebook; in small print, I would cover dozens, if not a hundred pages and then transcribe everything. Now, I also do sketches or write the framework of an article. Every evening, I try to write everything down in two ways, both as a diary and as bullet points in which I summarise observations of sociocultural events. It is a common anthropological practice.

➍ Do you already know during the research what the material will become and what form it will take?

That's an exciting process, as it often changes. After a week in the field, you think you have a clear idea that you have discovered a phenomenon. After a long time, you find it's a little different. It's a constant cre-

ative process that evolves by trying to be as precise as possible. The background of reality is different from what it first appears. Here, the proportionality applies that the longer you are in the field and the more literature you read, the deeper your knowledge gets. The better you can deliver an academic output as an article or publication.

➎ What are you going to get out of this latest trip?

I am preparing two scholarly articles and a Czech-English scholarly photobook from this year's research. I hope to make it happen.

➏ Do you go into the field alone?

Yes, more alone these days. I return to the same places in the Wakhan, although I try to get to other villages and meet new people. This area is mostly the same because there are not so many Wakhis. Even when I go alone, I never really get lonely, as I feel a sense of belonging and a synergy with them. Moreover, I already have acquaintances all over the place who generate more acquaintances. In contrast, on a mountain expedition, we always work in a team, at least two people.

➐ Do you also have good friends there?

I have a lot of friends there. I don't have to worry about where I'm going to sleep. They tell me: you haven't been to this village before, so tell Abirbek, he is my cousin, he will take care of you. When I get there, they're waiting for me, because the rumour will reach them that I'm coming. I'll get more data, interesting people and new sociocultural knowledge. It's snowballing.



🕒 **Have you ever been scared?**

I always say that getting scared is undesirable and wrong, but it is desirable and necessary to be worried. My feeling is that once you're really scared, with a tingle running down your neck and cold sweat trickling down your back, you are one foot in the grave. And that already affects your thinking. That's why I'd rather just worry.

🕒 **Have you experienced this?**

Exceptionally. Not when I was exploring, more like when I first started climbing. Worry is a good regulator of meaningful action. Fear already makes me see the tunnel. Maybe my boundaries are pushed; it's individual.

🕒 **You've been refused entry several times because of the situation there. Were you angry that you couldn't carry out your plans?**

Not angry. In these countries, you always have to count on plan B or C because it doesn't work here like in Europe. You have to assume that things don't always turn out the way you planned and the way you were promised. A whole set of unexpected circumstances can come into it. It may have something to do with that worry and fear. I've been going to the East for over twenty years. This part of the world is a sensitive thing, as they say. It takes a certain amount of cultural pre-understanding; otherwise, you can get disillusioned, disappointed, maybe even shocked and disgusted. Then, that is a mistake.

🕒 **So, you haven't experienced real culture shock?**

No, I've never had that in my life. As far as the mountains are concerned, I've been learning them gradually. I was born in the Krkonoše Mountains and criss-crossed them all. I was in the Beskydy Mountains when I was 14, in the Tatras when I was 15, in Romania when I was 18, in Ukraine when I was 20, and

in Kyrgyzstan when I was 21. And then, it led me to Afghanistan – such a natural path. But I imagine that if I had been a 16-year-old turning up where I later got at 27, I would indeed have had culture shock. Anyway, I'm a person who pays attention to preparation. I find it a kind of intellectual training. Even when it comes to mountains, you can't just leave the office and climb a seven-thousander. First, you have to go for a run or scale the local rocks.

🕒 **Did you have time to go climbing on your last visit?**

Not now, as I was doing a lot of research. But I still went up to the mountains for five days. I wanted to check out a valley where there hadn't been an expedition since 1978. Next year, I want to go to Afghanistan with a climbing group for a month, and we want to climb two seven-thousanders. But not to be lazy and neglect science, we will also link it with science.

🕒 **How? What can we look forward to?**

We will make a climbing film reflecting the Czechoslovak footprint in the Wakhan Valley in the Hindu Kush and map our climbing. By the way, the first Czechoslovak expedition in this place was in 1965, and the last was in the Shakawr Valley in 1978. Since then, no one has been there because of the historical and political context. We want to try to make a first ascent or repeat something. Maybe even with skis, if we can. The second film I want to make is purely ethnographic about how the Wakhis live in this area.

🕒 **Have you tried documentaries before?**

Yes, in 2018, I made a film about the phenomenal mountaineer Miroslav Šmíd. Two years later, we made a film called *Boys 1970*, charting the steps of a tragic Czech expedition in Peru, and I published a book about it in parallel. And this year, I made a film about a Krkonoše veteran called *No More Breath*. Of course,





more people are involved in the movies, such as professional cameramen, editors and directors. I tend to be the author of the theme, script, or producer.

8 The latest documentary continues your long-standing Krkonoše interviews.

For a long time, I have been working on research among Krkonoše veterans, which is perhaps closer to oral history than ethnographic research. I'm primarily interested in the historical-political events between the 1930s and 1950s and how local people saw all the turbulent changes and political realities as children and teenagers. They've been phoning me to recommend some living contemporaries, so it's kind of self-paced.

8 Do people still enjoy it?

Yes, they do. Every month there is an interview with a veteran in the *Krkonoše – Jizerské hory* magazine. And then, I include the most interesting ones in the book *Krkonošští rodáci vzpomínají* (Krkonoše Natives' Memoirs). We are about to reprint the second part,

the sixth part will be published in spring 2025, and I am nearing the seventh part. I would also like to re-view this, but there is no time yet.

8 In the documentary, you focused on the life of a Krkonoše veteran: Mr. Zdeněk Jiříčka. Why did you choose him?

Mr. Jiříčka was recommended to me by a colleague from KRNAP. I have heard quite a lot of similar stories – an old gentleman who worked hard as a farmer, sacrificing his whole life for it. Every story is unique and special, but with this gentleman, several factors came together – already six years ago, I thought I must make a film about him one day.

8 Why?

For one thing, he has impressive non-verbal movements, his facial expressions are incredible, and so are his optimism and smiles. He uses some remnants of the Krkonoše dialect, but most importantly, being 85 years old, he is still vital and farming, albeit in a limited way. Nowadays, we would rather say that



"I have been climbing and mountaineering for about 15 years. It is an amazing area, so I try to combine sport with field research and look for people from the mountains' ethnic groups who live at altitudes from 2,000 to 4,000 metres above sea level. I also like to go a little higher to the kingdom of snow and ice and ski occasionally."

he does gardening, but on a rather large scale. He is strongly connected to the place. By the way, every second person in Afghanistan is like that, and they don't even have to be old.

➊ Is it very different to make a documentary and write a book on the same subject?

When you write a book, the story you want to tell is crucial. With filmmaking, it's not just about the narrative. You also have to have enough pictures. You can't endlessly play drone images, countryside and leaves swaying in the wind. There has to be a plot.

➋ You describe your documentary as a poetic, ethnographic-artistic essay about the disappearing farmers of the Krkonoše Mountains.

Yes, because it's based on the main character remembering what it was like in his youth and adolescence, and the imagery is accompanied by what he does today. So, for example, he scythes the meadow, cuts wood and does a lot of other things while being 85,

which is extraordinary in itself. That accompanying line is the agricultural year, which mirrors his biography and thoughts. I knew clearly from the beginning how I wanted to capture it and the details that are reflected there.

➌ How is his story different?

Few people around us have a more exciting story and a much more dramatic one than Mr. Jiříčka. But most of them are not as active because of their age, so it would be impossible to tell their story well visually. I would have to search a lot for footage from film archives and mix it with illustrative shots, and that's not how I want to make documentaries. I want authenticity above all!

➍ What was the response to the documentary?

Incredible! At the premiere in Jablonec nad Jizerou, where Mr. Jiříčka was also present, the historic cinema was full of more than 400 people. The same situation repeated at other screenings in the au-





CV

Mgr. Libor Dušek, Ph.D.

(1983)

- Sociocultural anthropologist, publicist, ski mountaineer and climber from the Krkonoše Mountains. He is a teacher and researcher at the Department of Social and Cultural Anthropology, Faculty of Arts and Philosophy, University of Pardubice.
- His research focuses on Afghanistan, Pakistan, Tajikistan and the broader region of Central Asia.
- He has conducted long-term field research in the Krkonoše Mountains and other mountain regions, cultures and continents, and he also studies the phenomenon of mountaineering and human-mountain interaction.
- He also lectures, screens and exhibits his original photographs at outdoor festivals and other events. He is the author of several scientific studies, monographs and popular books.
- He takes part in mountaineering expeditions – in 2016, as the leader of the successful Ski Naw Shakh expedition – 7,495 m; in 2018, as the leader of the world's first ascent of the Karl Marx Peak – 6,724 m; in 2019, as the leader of the ski mountaineering expedition in the Cordillera Blanca. For the summer of 2024, he is preparing a mountaineering-ethnographic expedition to the Afghan Wakhan.
- He hosts *Na štandu* (At the Belay Station), a mountaineering podcast.

turn. People love it. In the following year, we are planning screenings for schools because, besides its historical and regional significance, the film has, let's say, some educational and ethical overlap. So that kids can understand the principle of relating to things and places. Here again, I see a parallel with Afghanistan. There, people have a very different relationship with material things than in the industrial West or the countries of the global North. In my work, all this is intertwined.

8 You often discuss how social anthropology brings exotic Afghanistan and Czech Krkonoše together. Where does this connection come from?

It is the mountains. Based on my research in Asia and the Krkonoše Mountains, I have noticed that people

who have lived in the mountains for a long time have a slightly different, specific approach to life – they are more hardened. People living in the Krkonoše Mountains today don't have that anymore, but when I talk to people in their eighties or nineties, I notice it in them. They lived in poverty, which was hard for them, especially with the political situation. But they didn't whine or complain about anything. They took it well and more with joy. This phenomenon is similar for people in the mountains of Afghanistan and Pakistan. It's a combined mentality. It is also partially related to the agricultural year. It could also be summed up in a similar attitude towards one's native place and a certain connectedness to the land. And it's very similar, whatever mountains we're in.

A change of 180 degrees

STORY BY Zaan Bester, Zuzana Paulusová • PHOTO BY Adrián Zeiner

Ilanit Evchev studies Masters in Organisation and Management in Healthcare. She was born in Ukraine to a Jewish family, and at the age of 6 moved to Israel with her family. How did she even get to Czech Republic? A very interesting life, context, background, history. This is her story.

❶ Why did you move to Israel? What was that all about?

My story begins when the Soviet Union fall apart, and Jews had the opportunity to emigrate to Israel. During the Soviet Union emigration to another country was very difficult because it was almost not allowed. The idea of emigrating was my grandfather's. He believed that we as Jews need to live in Israel. So when I was six years old, we moved to Israel.

❷ Did you speak Hebrew?

No. But today I consider Hebrew to be my mother tongue and the language in which I think and dream.

❸ How did that change happen?

I think that change happened when I started to go to school. Unfortunately, my classmates didn't accept me because of the language barrier that I had. And I think that this is why I started to push myself and started to learn this language. I really forced myself to learn the language to fit into the society and community.

❹ Society in Israel is not homogeneous. The people who are Jewish are not such a uniform group. The population in Israel is multicultural. The Jews who live in Israel came from around the world, from different countries. So, everyone brings their own beliefs and their own culture to Israel and this is very interesting to see. For example, as a Ukrainian Jew, we have special dishes. Jews who came from Morocco, for example, have their special dishes and so

on. It is very interesting to see how it really is a melting pot of the world's people in a way, unified by the one religion.

❺ While we associate Israel with Judaism and with being Jewish it's not just a country of one faith. You mentioned that you grew up with the mosque close to the synagogue close to the church...

Yes. That's why I think that the population and the culture in Israel is very interesting and unique. In Israel, the Jews, Arab Muslims and Arab Christians live together. It's very special. All of them bring something special. I think that is why population is so unique and rich – because of the different backgrounds and different faiths. There was a mix of everyone.

❻ Let's move on to your studies. You completed your bachelor's degree in nursing in Israel. But your high school education had quite a different focus...

Yes. I actually studied at a high school of art and music, and I planned to be an opera singer. Now I sing only to my patients, to help them feel better.

❼ How did you to move to nursing?

I think the change happened when I started to hear my mother's stories from her work. She was working in a hospital as a sanitation worker. She brought home the stories about her friends from work and about nurses and how they care about their patients. It was really inspiring for me. I was very inspired by these stories and that's why I decided to change direction from the arts to nursing.

❶ You had a part-time job in hospital when you were studying. How did you think about your career in the future and what you wanted to do?

I think the fact that I was exposed to a lot of departments during my work helped me to decide when and where I want to work. During my practical work I could do a little bit in the neurology department, in orthopaedics, in oncology. I got exposure to different fields in healthcare.

❷ And in the end, you decided for oncology. Why? It may seem like a very depressing field to work in.

My journey in oncology was a little bit traumatic for me. At the start I was very afraid of this department. I didn't want to go to work there actually. But they needed help in this department. So, I went there, and I was surprised to see that the crew was really great. It changed my mind and it changed my point of view about oncology. I started to realise that oncology is different for what I thought. It's very beautiful to see how the end of life is very important, because death is part of our life.

❸ You also worked in home care and hospice care. What would you say was the most meaningful experience for you from this time?

I think that the most meaningful experience for me was the fact that I was there for people who were dying. And I was there for their families. This is very important. And another meaningful experience for me was when I took care of the grandfather of my friend. It was sad but very meaningful for me. I could support my friend and her family through this difficult process.

❹ You got married and then you and your husband decided to move to the Czech Republic. How did the Czech Republic appear in your life plan?

It all started eight years ago when we came to the Czech Republic for the first time as tourists. We saw that the culture and the nature and all around was

perfect for us. I don't know how to explain it. It was just a match for us. And we started to think about it, that we needed to make a change because we live once. So, we started to think about moving. And the Czech Republic was at the top of the countries that we wanted to live in.

❺ How long have you been living in Pardubice?

We moved here about a two and a half years ago. I started to think about studying second degree. And I did it. I am studying my master's degree in organisation and management in healthcare at the Faculty of Health Studies at University of Pardubice.

❻ Isn't management a move away from patients, that you are sitting in an office doing paperwork every day? Why the change in direction?

In my opinion, this is not a change of direction because eventually I want to open my own private clinic of alternative medicine. In this clinic I want to work with the patients. I want to be a manager and caregiver also.

❼ How do you integrate these seemingly opposite approaches: alternative and mainstream medicine?

The reason was that I was exposed to a lot of patients for whom the combination of mainstream medicine and alternative medicine was very good with – for example – pain. For the people that suffered from pain, their level of pain was reduced and the number of pills that they took for the pain was drastically lower. People say there is a link and sometimes it's interesting to think about how.

❽ What advice would you give to people about living and dying?

I think and I saw that the people are afraid of death. Because of my journey I realise that we need to accept death because this is a part of our life. Eventually as humans we will all die. You must not be afraid of dreaming. We have a short life. We need to embrace changes, and not forget our family and friends.



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with Ilanit here!

By Plane or Donkey

STORY BY David Žáček, Adéla Korečková • PHOTOS FROM Kristýna Svobodová's archive • ILLUSTRATION BY Veronika Beňová

They've been travelling together since university. Paramedics Martin Suchý and Kristýna Svobodová, graduates of the Faculty of Health Studies, are currently on a trip around the globe. It all started with one colourful wall in their flat.

❗ Who came up with the idea?

M: We've always had the idea to go around the world. It was a dream. I wanted to do it with a friend on a bike, and Týna wished to do it on foot.

K: So, we changed it a little bit. We crossed the friend out and the bike, too. Then we painted one wall in the flat with chalkboard paint. We drew a map of the world on it and marked our way.

❗ Where did you go first?

K: We started in Nepal because we both love mountains. Then we went on to Thailand. Nepal is quite challenging, so we needed Thailand to rest. And we also knew we would be spending some time in the region. We didn't quite know where to go from Thailand because we originally wanted to visit Vietnam, but found it raining there. We ended up in Laos. From there, we returned to Thailand and flew to the Philippines. From the Philippines, we moved on to New Zealand, where we are now docked for an extended period.

❗ Such a trip seems to be costly. Do you make money in the process, or do you have some savings – and that's enough?

M: When travelling, you never know what will happen the day after tomorrow. It has to be planned and thought about. We paid for the first part of the trip from our savings and worked partly; we are earning money only now in NZ.

K: It was manageable because we helped ourselves by volunteering. It's a project called WorkAway, which

is a platform where locals offer accommodation and food in exchange for you helping them. It aims to connect with the community and help the locals. For example, we were helping to renovate a hotel, working maybe five hours a day. Some people were generous enough to lend us a scooter. We were in Thailand for three weeks like that, which helped us immensely to cut costs. We repeated the same thing in Laos, also for three weeks.

❗ Where in New Zealand do you work?

K: We ran out of money there. We bought a camper van, which we plan to live in for a year. Because the most money you can make is on a farm, we went there for two months and picked kiwifruit.

❗ You haven't finished in New Zealand yet but are suddenly in Pardubice?

K: My sister got married, and so did two other friends. So, we came here for three weddings, which is a perfect reason to go home. We have Working Holiday Visas in NZ, valid for a whole year. We arrived there this March, and we are already going back again. But now we're going to do a different job. We are heading to a ski resort because it is now winter there. We will operate the snow guns there and get a season pass.

❗ What are you planning for next April?

K: We probably won't be able to tour New Zealand because we also work there. We are considering staying on the islands for another year if possible.

M: You can't extend your working visa as it's only for

one year. But it's possible that a certified employer will offer you a work visa for a more extended period. We want to go back to the paramedic profession we studied. You can't do that in NZ because European degrees aren't recognised, but you can in Europe. Iceland is possible, where English is accepted, and the salary conditions are decent.

Q There's one continent that hasn't been mentioned yet – America. Isn't that appealing to you?

M: Yes, it is. Both South America and Canada. We could also use the Working Holiday Visa to Canada again for a year. So that's also under consideration.

Q But you started travelling when you were at university, thanks to the Erasmus+ programme.

K: I did it first. I spent my second year in Finland and then recommended it to Martin. He went to Malta. And after graduation, we went to Ankara, Turkey, for a graduate internship together. It was always for two months in a hospital.

M: We tried to get into the intensive care unit. You need to have all that paperwork beforehand, but it was problematic. Even though we had it arranged, it was different in the end. So, we drove an ambulance across town with the pensioners. And then, we had

the adult emergency room, which was more interesting, although they didn't let us do too many things there. There was a language barrier because people don't speak much English in Turkey.

But the medics took over, and they guided us.

Q How was it compared to Finland, for example?

K: Not comparable. I'd only known the practices here from the district hospital until then. When I arrived at the big hospital in Turku, I felt like I was in a shopping mall. There were exhibitions installed, everything was modern and beautiful, not at all like a hospital. Moreover, it was well equipped; every nurse had a computer. But I think we have already moved a lot in this direction in the Czech Republic.

Q You can also compare with Czech hospitals because right after your state studies, you joined the Department of Anaesthesiology, Resuscitation and Intensive Medicine in the hospital in Hradec Králové.

M: We do remember that fondly. In addition to this job, we worked part-time at the dispatching centre in Pardubice, at the ambulance in Chrudim and the rescue service of the Hradec Králové Region. It even happened that we dreamt about working in our de-



partment while travelling. One night, and even both at the same time. It was a good start in life.

Q Was there any time to travel at that point?

K: We took our first big trip together after the degree examination. We went to Iceland for a month. And we were still poor students with 4 000 in the bank going to the most expensive country in Europe. We bought the return ticket there, even though we thought we'd earn it there. That didn't work out. We hitchhiked around Iceland with our backpacks. We slept in a tent and got wet. But it was great. Then we started working in Hradec, and travelling got a little easier. You can do many things if you have an income and no kids. We went to Costa Rica during COVID, which was the worst time. Everything was banned, and we didn't know until the last minute if we would go. We had to take a test at the Vienna airport a few hours before we left to make it work out in time, even with the change of planes. That was tough. Then again, it looked like we wouldn't make it back to Europe.

M: The antigen test was required. But those tests weren't there yet. So, full planes were coming into Costa Rica and going out empty because people still had to figure out how to do it. Some got back through other countries, but we eventually discovered that one hospital in the capital already had the tests. After Costa Rica, we went to Kyrgyzstan, Sri Lanka, and crossed the Pyrenees. But it wasn't enough.

Q You have experienced incredible things on your travels. Is it true that they make beer out of moss in Iceland?

K: It's pretty likely because nothing else grows there.

Q I've heard that when a tree falls across the road in Iceland, drivers on opposite sides swap cars and exchange keys with the other driver, and get them back later. Does that describe the Icelandic mentality?

K: There are no trees there; they don't grow. The only forest in Iceland is in one national park. There's a

joke: "What do you do if you get lost in an Icelandic forest?" "Stand up and look around."

Q In Kyrgyzstan, it's said you took a taxi or did you ride a horse?

K: It's a poor, post-Soviet country. There are mountains there, it borders China and the Himalayas start there. And it's true that these types of transport work in the region. We took a taxi for 300 km to get somewhere and 300 km back, which didn't cost us much. Plus, after the pandemic, we were pretty much the only tourists. We were greeted everywhere. We were even photographed. I love horses and was looking forward to riding them. The problem is that Martin is afraid of horses.

M: What if it bit me?

K: But we got over it. We borrowed horses for a few days. They don't think much of sending a guide there. They just ask you: Can you ride a horse? Then go.

M: Sometimes, it turned out that Týna was riding, and my horse was munching grass and didn't want to go on at all. No respect! We just stood there, and it grazed for an hour. Eventually, the local tow truck had to come and get me; two eleven-year-old boys on donkeys got me off the horse and onto the donkey, and off we were.

Q What were your experiences in Sri Lanka?

K: We arrived about a month before the economic crisis hit, and the country had to declare bankruptcy. But we didn't experience anything. It wasn't until the last few days before we left that we learned that they were running out of paper and fuel and we might not be able to get to the airport.

K: Otherwise, Sri Lanka was beautiful. You can surf there, which I don't do because I fear sharks. So, we only stayed by the sea for a few days at the beginning and then went inland to the tea plantations. The ride on the local buses was probably the most adrenaline-filled experience. Those drivers are indeed crazy! Just imagine fitting a cyclist, a motorcyclist,





a car next to it on a classic two-lane road and then a truck which overtakes it. And the same thing from the other side. But they have a Buddha statue. When they pass and honk, the Buddha protects them.

Q Did the bus take you to the end?

K: Well, it didn't. As the driver was revving up the engine a lot, it cut out halfway. He fiddled with it for a good hour and a half. Then we drove a few kilometres, and it started to smell again. We were all thrown off the bus and told a new one would be coming. But we knew how it works. So, we hitchhiked the rest.

Q Did you sleep in a hotel or somewhere in the countryside?

M: It wouldn't have been possible with Týna in the countryside because she is afraid of snakes.

K: I'm afraid of almost the whole animal kingdom. In Sri Lanka, we changed accommodation quite a lot. It's cheap there, so you can afford a hotel with a pool. We weren't always in places that had something like that. So, we experienced low-cost accommodation in someone's home and a beautiful hotel.

Q And tea in Sri Lanka?

K: We learned to drink black tea with milk, which is really in there. The tea plantations are beautiful; they're in the mountains, in the hills. The green plantations, fog, and tea pickers were probably the best experience in Sri Lanka. We enjoyed tea parties at home for several months afterwards.

Q You are both graduates of the Faculty of Health Studies at the University of Pardubice, where you studied to be paramedics. Why did you choose this field of study?

K: I was in the water rescue service all my childhood and liked it. So, I thought I could follow it up. I wanted to be outside, not in an office.

M: I first started as a cook. But I realised I didn't want to be locked in a square room with one window and a grill behind me for 12 hours. I wanted to do something outside that wasn't monotonous and stereotypical. So, I searched around and finally found this exciting field at the University of Pardubice.

Q When did you hit it off?

M: We were classmates. In my first year, I looked at the girls in my class and said, "Not this one. I don't want her around my neck" (smile).

K: We were friends at first, and in my second year, I moved into a shared flat with my classmates. And then, in the third year, we studied together for internal medicine and have been with one another ever since. I studied in Martin's room, and then I stayed there.

Q You finished your studies four years ago. How do you remember it?

K: We have absolutely perfect experiences, and we love to remember. We had a great class, bonded over by the difficulty of it all. How hopeless we felt at exams, model tests and in practice. This feeling brought us all very close; we were such a family. We also have a lot of experiences from events like the ski course, mountain rescue, summer mountain course, scuba diving, and driving course.

Q So, would you recommend the Faculty of Health Studies to others?

K: We had great teachers who even supported us in the exams. And they joined us in our events.

M: Definitely! I was never university material, and going there was more or less an accident. But now, in retrospect, I refer to those years as the best time of my life. It was really cool.

Celebrity among Statues

STORY BY Zuzana Paulusová • PHOTOS FROM Zuzana Auská's archive

Originally, restorer Zuzana Auská wanted to work with paper. Nowadays, she is glad she got her hands on stone at the Faculty of Restoration. She loves extending the life of monuments – from the beginning to the end of the process. Sometimes, she even unravels a secret a monument is hiding – as in the case of the statue of Christ in Kutná Hora.

🕒 The Christ of Kutná Hora was your first independent action. How do you remember it?

I remember it fondly, as I liked the statue very much, and it was also my final work. The Christ was such a sad figure, sitting with his head in his hands. We used to call him "Christ at the dentist".

🕒 The statue has become quite popular recently.

Yes, it's inappropriately found itself in the gallery where people sit and take pictures with it and even put their photos on Instagram.

🕒 Has the statue returned to its original location?

It hasn't because it has no clear context; it was in the church's collections, but its original location is not known exactly. It may have been removed because this iconographic statue type used to be perched on top of a church column.

🕒 What else have you found out about the statue?

Its depiction has changed over the years. Initially, it was Jesus Christ contemplating. But the latest layers that have appeared on the statue, which probably came in the early 20th century, have made it look like Jesus Christ suffering, with the wounds of the crucifixion visible on his body.

🕒 How did you arrive at this?

Through the different colour layers that we gradually uncovered. Similar sculptures have between three and fifteen layers of different finishes. Here, there

were four. And it was by overlapping the original layers that the statue changed its original meaning.

🕒 Do monuments always hold a secret?

Yes, it's not entirely unusual. Although, for example, with the statue of Christ in Kutná Hora, we could not decipher everything precisely. We would have to continue removing layers.

🕒 Do you remember any other secrets?

For example, the restoration survey of the Baroque stone statue of St Wenceslas of Lažany. It has yielded new insights into the life of its creator, the sculptor Georg Vatter. He was educated in Prague, later moved to Budyšín and then entered the service of the Polish prince Lubomirski. According to the available literature, the path of Georg Vatter disappears at this point. The discovery of a statue of St Wenceslas signed by him in 1735, moreover in eastern Bohemia, was thus very surprising. How the statue or its creator came to be in a small village in Eastern Bohemia could not be ascertained, so almost ten years of unknown movements and works were added to the biography of George Vatter.

🕒 Did the statue of Empress Sissi you worked on also have some secrets?

There was an interesting story behind the whole collection of artworks that included this statue. My colleagues from the museum in Prešov, Ludmila

and Jakub Šnajder, prepared an exhibition called NEVRÁTENÉ (UNRETURNED) about the lost objects of the Hungarian Andrassy family. Thanks to extensive historical research, they put together at least part of the vast collection of this noble family. They returned them, at least temporarily, to their original place in the manor house in Humenné.

⌚ What condition was the statue of the Empress in when it came into your hands?

The plaster statue of Empress Sissi was significantly damaged; her arm was broken, and the little dog at the Empress's feet had no head, so I added these parts. The Prešov Museum just approached me about the restoration. They wanted to include the statue in an exhibition.

⌚ Are the missing parts of statues always added?

It's often done with statues. It is possible to present them as torsos and not complete them, which is an entirely relevant approach. It depends on what the object is. Conservationists are also involved in such a decision – if it is a registered monument or if it is in a museum's collection – then their staff and often the investor are involved too. The restorer's recommendation is also important. Sometimes, the commissioning body clearly gives the requirement, and you then decide whether or not it is possible.

⌚ How do you work in the field?

It's challenging but exciting. What I like about it is that I get to go into places and situations I probably wouldn't get to as a regular tourist. It's a different type of experience. You spend time in a place, and it grows on you whether you want to or not.

⌚ What has got under your skin in this way?

My colleagues and I have been spending a lot of time

around Králiky lately. They have fantastic nature there, but at the same time, it feels quite deserted. It's hard to say if I would ever visit such places without having the opportunity to work there.

⌚ What kind of sights did you take care of there?

I was mainly involved in restoring the Calvary in Heřmanice, which had lost its original colour and needed to be fixed. I also cared for the marble cross in Dolní Hedeč, located in the fields opposite the monastery. This particular object was in my studio, but I enjoyed the environment during the fitting and finishing work. It was probably the most beautiful location I have worked in so far. There is a breathtaking view of the monastery and the town of Králiky.

⌚ Do the locals come to watch you work?

Sure, for the locals, you are usually an attraction; they come to you, ask questions, and are interested. On the one hand, that's nice, but it also puts specific demands on you. Plus, it depends on where you're working. If you're in a busy place with many people in a day, it can be a bit uncomfortable. But if someone asks me now and then, I'm glad. I feel happy that people are interested in my work.

⌚ How do they perceive your work?

The fact that the sculptures and other objects are being repaired is generally perceived positively. They're part of the landscape, people are used to them, and they're aware that they're deteriorating, but they kind of have that in the background. Then, when something happens around the statue, it draws their attention back. And when they see that you're doing a particular intervention, they're curious to see how it turned out. I understand that sometimes, a temporary transformation of an object may not be under-



standable to them. For example, when a desalination wrap is applied to a statue, people often get scared that it will stay that way. I think restoration deserves more explanation. It's such a quiet profession.

🕒 You've recently returned from Kácov. Why were you there?

We, the Faculty of Restoration, work there in the castle's Baroque chapel. It has preserved the Baroque stucco with the original polychromy. It's an amazing, unique thing. Our master's and bachelor's students are doing the restoration there. The bachelors are in charge of the murals, and the masters deal with the 3D objects, the polychrome stucco. I accompanied our masters in sculpture restoration.

🕒 Will you be going back, or have you finished?

We will be going there until the beginning of December when the work will be interrupted because of the winter, and we will be back again in the spring. The students have studio work now.

🕒 How are the restorers doing in the winter?

Is it a period of rest for you?

Often, most of the work is interrupted. Winter is generally more difficult for a restorer. A more experienced one can organise their work and time and find suitable projects for this period. Either they take the sculptures to the studio or find objects that can be restored during the winter. It is possible, for example, in castles, which, on the other hand, might welcome work outside the main visitor season.

🕒 And what about you as statue restorers?

Sculpture work is somewhat specific. Most of the time, it's outdoor sculptures and objects that are restored on site, so most of the work takes place during the season, roughly from March to November. In addition, restoration is often tied to various grant programmes, which usually end in the autumn.

🕒 Can you still bring some objects into the studio?

Yes, for example, those from museums or sculptures that are dismantled if necessary. If you are dismantling a sculpture, creating a new base and then reassembling it, you can transport it and work on it in the studio over the winter. It also depends on the arrangement with the owner. When the statue does not need to be dismantled, it is restored in situ, i.e. on-site.

🕒 What did the stone do to win you over?

I originally wanted to go into book restoration at our faculty. But my uncle, a sculptor, led me to work with sculptures. He thought I was good at modelling, so he sent me to Litomyšl to do sculpture. I didn't resist him then, and I'm glad I'm here. He helped me a lot with preparing for the entrance exams.

🕒 How did your preparation go?

I modelled copies, like finished casts, still life and then portraits. It is also a classical preparation that takes place in the art studio of our faculty. When applying to us, you must deliver your work and show a certain level. Students from art schools already have a portfolio ready; others have it more complicated and have to prepare it by themselves.

🕒 You are now working at the Faculty of Restoration and pursuing a Ph.D.

When I finished my master's degree, the doctoral programme was not yet open. My supervisor, Jakub Ďoubal, suggested I stay at the faculty as an assistant and participate in research projects. I liked the environment, and when I later got the opportunity to apply for a Ph.D., I took it. If you want to stay in the field and participate in research projects, it is better to broaden your education.

🕒 What do you do as part of your Ph.D. studies?

I work on the retouching of polychrome sculptures placed outdoors. I have been involved in the surface treatment of sculptures and their colouring since my master's studies. As part of my Ph.D., I am researching how durable the materials used for colour retouching are in outdoor environments. It is a laboratory experiment. The materials under investigation will not be applied to real objects. But in my practice, I even try to use some of these materials in restored works.

As part of my Ph.D., I am researching how durable the materials used for colour retouching are in outdoor environments.

🕒 How does the work on an object begin?

Before the contract is tendered, a survey of the object is carried out, and a restoration plan is set. Then, when you get the contract as a restorer, you start again with the survey, but you already have something to build on. You start from the study of the preserved condition and the investor's requirements, and if necessary, you refine the concept of intervention. It is based on the state of the monument. Sometimes, it's just routine interventions, but other times, the work is more complex.

🕒 What does such a survey tell you about the monument?

It can tell us if there is any damage to the object that is not obvious at first glance. It is typical of stone monuments that they may contain water-soluble salts that significantly damage them. We can also guess they are there by the appearance of the object. You know, we always start with a visual survey.

🕒 What do you pick up with the naked eye?

For example, I can see there are salt blooms on the object. If you suspect the presence of salts, you take samples and send them to the laboratory for analy-



sis. Depending on whether or not the object is salty, you decide what to do next. The desalination itself is a rather demanding operation. Moreover, its results may not be evident at first sight, but it can help a lot to reduce the amount of salts in the object. If the desalting does not take place, there could be further problems in the future. Sampling is also done, for example, when exploring the colour layers. In general, this is a chemical and technological survey. The final step is an art-historical survey.

❗ Does this help you put the monument in context?

Yes, with the help of archives and literature. Commonly, objects were moved in the past. And occasionally, we can discover some incredible background or curiosity. Our Department of Humanities helps us a lot with this research. They're very knowledgeable, so they can explain many things to us or advise us on where to look. That's a crucial thing for restoration. We always emphasise that it's an interdisciplinary field, and consulting with other experts is essential.

❗ Does each monument require roughly the same amount of time for care?

It depends on its condition and also on what the aim of the intervention is. A standard intervention time for a usually large statue with a pedestal is perhaps a month of intensive day-to-day work. However, it takes longer because of technological pauses, so eventually, the intervention may last three months.

❗ Does it happen that something doesn't turn out as you expected?

It can happen since every object is unique, and you can't predict everything 100%. We try to prevent this as much as possible by doing much testing. It precedes every step of the materials we're going to use. This process helps us define the risk of failure at the beginning of the research. Precisely because these are valuable objects, partial tests are critical. The processes need to be streamlined.

❗ Do you see your work as a mission?

Yes, in a way. We try to extend the life of the pieces of work. Restoration is a very specialised activity but quite expensive because it's labour-intensive. My work is fulfilling; I have a unique opportunity to take care of objects and be in contact with them. Plus, as restorers at the Faculty of Restoration, we have a good reputation, and that's something to be proud of.

CV

MgA. Zuzana Auská

(1993)

- She is a graduate of the Faculty of Restoration and works in the Studio of Restoration and Conservation of Stone Sculptures and Related Materials.
 - She is currently studying a doctoral programme at the same faculty.
- She is engaged in retouching polychrome sculptures and researching their colouring.
- She has restored a number of statues and other objects, such as the statue of Jesus Christ in Kutná Hora (diploma thesis), the stone cross in Dolní Hedeč, the stone Calvary in Heřmanice, objects from the collections of the museum in Prešov – the statue of Empress Sissi, a polychrome Christ, a ceramic jug and others.
 - In her free time, she likes to go to the theatre or read some of her favourite books.

The Interplay of Bodies and Souls

STORY BY Adéla Korečková, Lada Součková : PHOTO BY Michal Král

His territory is the dance floor. And so are university textbooks. Successful Czech dancer Adam Procházka represents the Czech Republic worldwide and is now trying to make the Faculty of Economics and Administration dance.

8 You and your partner recently came first and fourth in two categories at the Hanoi competition. What does this success mean to you?

It means we've finally got back into our dance training, which has been slightly behind lately since we both started the university. And I have to say, we hit it off right away.

8 Are you nervous?

There are nerves at every competition. While my dance partner Veronika has pre-competition jitters, I'm calm. I don't start to get stressed until I get on the floor, but it only lasts a minute. Once the music begins, the stage fright goes away.

8 Then came the European Championship. Was it your first experience of the championships?

Unfortunately, we didn't reach the quarter-finals, but our Czech national team was excellent. In the past, we danced at the World Championship in Elbląg, Poland.

8 When is the dance season?

The whole year. You can do a hundred competitions, but it's about thirty competitions at the higher level, where my partner and I dance. Every dance couple must schedule their season to use it properly and get some awards.

8 How demanding is the preparation for a competition?

It always varies a bit as it depends on how many couples are entered in the competition. Depending on that, we train for a different number of rounds. If there are 30 couples on the dance floor, the competition will be three rounds. But we must have at least two rounds on top, so we train for five to six rounds to get a good turn.

8 Is it more challenging to find a female or male dance partner?

Of course, there is a more significant shortage of male dance partners. Dancing often becomes a hobby for many young

women, whereas guys are not really into dancing, and I would say they are kind of stubborn. I played ice hockey first. It was only later that I changed my ambitions and started dancing. And I wouldn't change it.

8 What is the interest in dancing among young people?

I think the popularity is growing now, thanks to StarDance or social media, where our leading dancers – like world or European champions – film and post their dance videos that are spreading fast among the youth. Kids see it, and it teaches them to move to music, which is essential for dance. By watching trendy videos from masters who dance the styles in them, viewers get context, bringing them closer to the dance. The popularity of dance has grown, but of course, it is still not as popular as, say, hockey or soccer.

8 Do you have a favourite in this year's StarDance series?

My favourite, Richard Krajčo, has already been eliminated. Among the dancers, my favourite was Daniel Kecskeméti, paired with singer Tereza Mašková. But unfortunately, they left the competition in the next round.

8 Can you imagine being a dancer in StarDance?

I can imagine it, but I have other priorities currently, so I don't actively try for such cooperation.

8 And being a judge?

Since I recently passed my third-class judging exams, I don't think that would be a problem. But judging on StarDance is very difficult because the performances are very different, and you have to consider who is on the floor at the time.

8 What dances do you like more?

It's the ballroom ones. Dance, for me, is the interplay of two bodies and two souls. I think that in standard dances, this interplay is more evident; in short, they are more based on pair harmony. Each has to respect the other, and when that doesn't happen, it

shows. In Latin dance, on the other hand, the dancers have different poses and variations where they are far apart and can go their way.

❶ And your favourite dance?

The Argentine tango.

❷ How much time a week do you spend training?

Veronika and I train every day of the week except Tuesdays when I have my fitness exercise. On weekdays, we spend three hours training and at weekends, thanks to our facilities at the dance school, even more.

❸ That's a lot of time together. Do you have cabin fever sometimes?

I have to touch wood, but luckily not. We have a lot in common and spend a lot of time together, but we each have our own lives. And our fitness training is separate, so while I'm in Pardubice, Veronika trains in Prague. That way, we always clear our heads and are ready to do the next training together again.

❹ How long have you been dancing together?

For over two years. We met in Prague through a coach. It took us less than a week and a half to synchronise, which doesn't mean the synchronisation was good. But we didn't have more time because we wanted to go to the national championship in a few weeks. So, we had to quickly go to a competition as a dance couple to find out what we could do. And we found out that we were pretty good at it.

❺ Do you have a goal in the dance world?

We are now preparing for the World Championship in Latvia,

where we would like to make it to the quarter-finals, which we didn't at the European Championship.

❻ You travel a lot with your dancing.

Veronika and I have travelled almost all over Europe for dancing. But I love Vietnam, as it's the furthest we've gone together.

Plus, we spent a whole week there this year, even though the competition only took two days, so we had time to get to know the local culture and taste the food. Most of the time, however, we have much less time and only fly in and out.

❼ Do you have any interesting stories from your travels?

For example, we almost didn't fly to Vietnam this year because the Vietnamese embassy made a mistake in our visa and misspelt the expiration date of our passport, so the airline wouldn't let us on the plane. We had to sign an agreement that if anything happened, we would not pursue them or settle any disputes with them.

❽ You study Economic Policy and Public Administration at the Faculty of Economics and Administration. How do you find the time to prepare?

It is challenging to combine any top sport with university studies, but I try my best. The exam period will tell me how I'm doing.

❾ Do you have a plan about what you would like to do after school besides dance?

I don't want to turn away from dance. I'd like to run a dance school where you need experience in running a company and finances.

"It is challenging to combine any top sport with university studies, but I try my best. The exam period will tell me how I'm doing."



Vintners from Prehistoric Times

STORY BY Lada Součková • PHOTOS FROM Adrián Zeiner, Jan Frolík's archive

Why did the world's oldest winemakers mix blood into wine, and why did they bury children in caves? Archaeologist Jan Frolík from the Faculty of Arts and Philosophy explores not only the mysterious Areni Cave in Armenia, which is the earliest known winery, but also, for example, the bowels of Prague Castle, which was a burial paradise.

❶ Do you like wine?

I like wine, so I have it occasionally.

❷ And what do you think wine from the world's oldest winemakers tasted like?

The wild wine that grows in Armenia, and whose grapes anyone can pick there today, is delicious, so I think it would have made good wine in prehistoric times. On the other hand, I know that they mixed wine with blood in the cave of Areni, and I would not like to drink that.

❸ Why would they mix blood into it?

We don't know. The cave suggested that wine was made more for ritual purposes. It probably wasn't a product for regular drinking but for ceremonies. But we don't know much about it, nor do we have a comparison with any other site in the world.

❹ How far back would we have to go to taste it?

We are talking about 3,500 to 4,000 BC, the Late Stone Age. It was characterised by farmers cultivating simple fields and grazing cattle. Society also discovered metal for the first time, which was a great

innovation. Coincidentally, evidence of the earliest copper work was found in the Areni cave.

❺ How did winemakers live and work back then?

They did everything by hand, of course. Since they didn't have iron or alloys, they just used simple tools. They probably had cultivated vineyards; I doubt they would pick wine anywhere. Even the production was done by hand and foot, where they pressed the grapes in large containers. Some people in Armenia still make wine this way today, and the drink is perfect.

❻ Your team found that the winery was much larger than expected. Without digging into the ground, you could discover where the objects might be. How did you do that?

We found that we only know 20% of the cave so far. In this area, containers and other evidence of wine pressing have already been uncovered. The rest remains hidden for now. But thanks to geophysics, we've found places that show exactly where pots and the like could be. So, in the future, we have many hints about where to continue our excavations.



❶ It sounds like magic. How does it work?

In the cave, we used GPR, which sends beams inside the ground that come back transformed. Their curvature can be used to draw, for example, circles marking vessels. Non-invasive geophysical methods allow us to find out as much as possible about the site without damaging it by digging and uncovering. Once we start digging, we already know how many layers there are and what we're getting into.

❷ What objects did the cave hide?

Objects made of organic matter are rarely preserved because they decompose, but Areni is such a curiosity on its own. Although the cave is originally karst, i.e. formed by the action of water, its archaeological layers are absolutely dry. As a result, objects made of organic matter have not decomposed. Therefore, we can see a 3,500-year-old cloth with a colourful pattern, a preserved basket made of grass, and even a wooden milk jar for a toddler or the oldest leather shoe in the world. There is practically nothing like it elsewhere in the world. It tells us far more about the society, its daily life and equipment than if we had found only shards and stone tools.

❸ And some wine vessels?

There were huge containers that I would liken to a large amphora – the Armenians call them karas. There's a curious one among them. It has stars painted on it, like a dragon and a sun. Interestingly, the bottom of the jars was always pointed, so they couldn't stand on their own but had to be stuck

somewhere. Why couldn't the vessel stand by itself if it was to ferment wine? We also ask ourselves how people at that time could make, for example, a one-and-a-half-metre high pot without a potter's wheel and other conveniences. We documented one karas in detail last year. Our next step will be to try to make a replica to make wine in it. Wild wine still grows around the cave, so the raw material should be available (laughs).

❹ Human remains have also been found. Who did they belong to?

Three vessels, which were originally used for wine, contained skeletal remains of four people. They were a young man in his 20s, a boy of about 12, a 10-year-old girl and a toddler whose remains could not be sexed. However, none of the remains are complete. They always have a skull, but all are missing the lower jaw. It was probably some kind of special burial.

❺ How does one explain that someone buried the bodies in the winery?

Burials in large containers are known, but we will probably never know why these individuals were chosen and placed in this cave. There's no other explanation than ritual. They must have got skeletons from somewhere and selected matching parts to put in the containers. It supports the idea that the preparation of wine and the handling of metal in the Areni cave were part of rituals of which, unfortunately, we know nothing.

🕒 Your team created a digital representation of the skulls. How is this done?

The older a person gets, the more the skull imprints what kind of muscles they had, whether they were more muscular or thin. From that, mathematical methods can be used to reverse-engineer the face. Of the four skulls, we only reconstructed three because the young child hadn't formed the ligaments on the head sufficiently yet, which would have left some features for us to follow in the reconstruction. We'd thus be creating just a kind of an averaged baby. But in the other three cases, we can virtually look into the faces of the cave dwellers of that time, who can be considered the oldest inhabitants of Armenia.

🕒 What did the earliest Armenians look like?

The same as today, i.e. people of light white race. In the end, we opted for light brown hair and eyes. It is debatable as to what they were really like, as hair and eye colour can only be determined from DNA, which unfortunately has not been obtained. However, colleagues in Armenia will certainly try again so that we can give an even more accurate likeness to the individuals.

🕒 You've also created a 3D model of the cave, the surrounding environment and objects. Can they now be studied by scientists around the world?

They can. Nowadays, anyone can look into the virtual cave and study it in great detail without GETTING inside. Researchers can explore the cave in advance in their office on the other side of the world and go to the site with a specific question already in mind. Another benefit is that we have fixed the current state of affairs because the condition of places and objects, perhaps a hundred years from now, will certainly be no better than today.

🕒 Why do the Czechs explore a place in Armenia?

Armenia is a beautiful but not a rich country. There are simply things they can't spend much money on, even though the Armenians are incredibly proud of their past. It gives foreign expeditions a chance to get involved, as they can bring helping hands and instruments, which is our case. In 2016, we went there for the first time because we could offer the geophysics I've already spoken about. They also welcomed the fact that we could provide 3D models as well. Then, they showed us the opportunity to do archaeological excavations, which I jumped at. I take the fact that we can do research around Areni as a sign of great confidence because they haven't allowed any other research team there yet.

🕒 You are going to return to Armenia later this year. What are you going to do?

Because we know that people didn't live in the cave, we'll explore the surrounding area to find out where they lived and grew vines. The cave is in a very nar-

row valley that widens in two places. It is these that will be of interest to us.

🕒 How many times have you been to Armenia?

Seven. Six times on business and once on vacation. I raved about Armenia so much at home that my wife and I went there on vacation. We visited traditional sites like the nearby Noravank Monastery and met my Armenian colleagues and friends. And, of course, we were also in Areni.

🕒 The students of UPCE have already travelled to Armenia with you. What does such a trip look like?

I will go there again with three or four of my best students this year. For them, it's an internship because they get involved in archaeological research. But I also try to combine the work with the fact that we're getting to know Armenia. That's why we also visit some other sites.

🕒 But let's move away from Armenia. You've also been researching Prague Castle for a long time. What does your research look like?

We should be proud of the archaeological research of Prague Castle because, in two years, it will be a century since research has been going on there. It was initially a scientific project but soon became a rescue excavation. When something is being reconstructed, we do research to not lose evidence of the past by building something new. During that time, a considerable amount of knowledge has been accumulated, dating back to prehistoric times, because the site was already inhabited at that time, up to the 19th century. It shows us both what it looked like in the past and what everyday life was like for the people who lived there.

🕒 One of your projects is Prague Castle as the centre of the Czech state in the light of burial. How many people were buried there?

We don't know all the tombs, so I can't give a definitive number. But over the hundred years, about 1,500 graves have been explored. It may seem like a lot, but we must consider how long Prague Castle has existed.

🕒 What did it tell you about itself?

What I appreciate most is that our research has taken the Castle's past deeper into history. Schools still teach that it was founded under Prince Bořivoj and St. Ludmila. However, we already know a centre had been there a hundred years earlier. Not much of the prehistoric settlement remains because it was erased by later rebuilding. As for the burial sites, I found it interesting to look into the life of people in the 9th or 10th centuries. We know what they might have eaten, what they looked like health-wise, what objects they used. One of the burial sites contains the remains of members of the princely entourage, i.e. the highest-ranking people who lived in the castle. They carried, for example, shells from the Atlan-

tic and Indian Oceans, and women were buried with piles of gold and silver jewellery. From this point of view, it is the richest burial site in Bohemia.

❶ **One of your recent researches concerned a grave that could contain the remains of the abbess Mlada, which have been sought for a long time. Has that been confirmed?**

That remains to be seen. Occasionally, someone says that remains have turned up that could be Mlada's. Some were from the Baroque period, which was not Mlada, and others were found during the research in 1959. They looked promising until anthropologists showed they belonged to a person of about 16. But Mlada died at a later age. Using extra DNA, we finished the job by finding out the person was a male. But now we've reached the grounds of St George's Convent and St Anne's Chapel, where the search for Mlada's grave has been going on for 350 years. One grave has been associated with either abbess Agnes, who died in 1228, or abbess Kunhuta Přemyslovna, who died in 1321. We used radiocarbon dating to help us solve this mystery, but it turned out that the grave dates from around the year 1000.

❷ **So, it wasn't either of them.**

I didn't believe it at first and thought it was a mistake,

but other methods confirmed it. So, we started thinking about who died around the year 1000. It must have been a significant person to be buried in such a place of honour. It only points to abbess Mlada. But again, anthropologists have complicated things. Since almost nothing of the skull survives, sex was determined by the pelvis. There are 18 features on the pelvis that can be used to determine gender. But in this case, four indicate a man, four a woman, and the remaining ten are right in the middle. I thought the chances of this happening were slim to none, but it did happen. We also tried to get DNA. Unfortunately, in the 1960s, it was common practice to fill the bones from research with a preservative that covered the DNA. That's why, I say, it's probably Mlada's grave. It would have to be a Přemyslid if it were a man, but we don't have a candidate from that time.

❸ **So, will Mlada become a cold case?**

If we really can't get the DNA, we'll have to wait and see if some new method comes along to help. Or an anthropological survey of several thousand other pelvises that tells us that this unusual trait can be attributed to one side or the other. The best case scenario is that, we will know in a few months, otherwise in many years.



CV

PhDr. Jan Frolík, CSc.

(1956)

- He studied prehistory and history at Charles University in Prague.
- In 1982, he received his PhD degree, and in 1987, he defended his dissertation and received the scientific degree of CSc (a Candidate of Sciences).
- His research interests include medieval and modern cemeteries, medieval towns and fortified settlements.
- He has participated in extensive archaeological excavations in many Czech towns and cities; his work often focuses on the Chrudim region.
- In his free time, he enjoys travelling, especially to the Mediterranean, or reading, for example, detective stories.

SVOBODA THE ASTRONAUT: Kašpar Would Be Surprised

STORY BY Tereza Karanská, Lada Součková • PHOTOS FROM Adrián Zeiner, Aleš Svoboda's archive

**He may be the second Czech to go into space.
So far, Aleš Svoboda, a graduate of the Jan Perner Faculty
of Transport Engineering, is a combat pilot and
the one who met Vladimír Remek.**

❗ What is the difference between a cosmonaut and an astronaut?

Basically, the meaning of both words is the same. The former Soviet Union and the countries cooperating with its space programme used the term cosmonaut, while the term astronaut was used elsewhere. Maybe, in China, they have something else. Officially, I am a member of the European Space Agency's reserve astronaut team.

❗ You made every little boy's dream come true. Was it your dream, too?

Yes, it was my dream, too; since childhood, I was interested in space, cosmonautics, and aviation. But the main thing is still missing – to make a space flight.

❗ When did you think you might become an astronaut?

It was on my mind around 2009 when the previous selection of astronauts occurred. At that time, no one from the Czech Republic could participate because we became a member of the European Space Agency (ESA) only at the very end of the selection process. Now, it was the first opportunity for the Czechs.

❗ As a pilot, you were trained on a centrifuge. What's it like?

The centrifuge was part of the aero-medical training I received in Sweden. It's all about learning to recognise the symptoms that can signal that a loss of consciousness is imminent. During the G-load we experience in flight, the brain goes bloodless. Learning to catch it early and reduce the G-load before unconsciousness occurs is important. Also, you have to learn to increase your resistance to overload to the desired level, which is an increase in the load up to 9G, and stay there for some time. Flying a Gripen fighter is specific. The rise in G-load is very fast, as you can go from 1G to 9G in a second and a half. It's so quick that the natural physiological responses that help the body cope with such a load don't kick in. The pilot has to defend against it actively, and that's what training is all about.

❗ So, what happens to the human body at such a moment?

Due to centrifugal force, everything weighs nine times more than usual. When the pilot wants to move his head, it's more challenging because the head is suddenly much heavier, which puts a lot of strain on the neck muscles. During manoeuvring and aerial combat, 6G and 9G overloads are very demanding and often painful. It is often difficult to lift the arm

and control anything with it. The same force acts on the blood and pushes it downwards so that the brain becomes bloodless, which manifests in a narrowing of the field of vision or a loss of colour vision. When a pilot sees in black and white, it's one of the borderline signs that it's time to relax. The next stage is a blackout, which is a loss of consciousness caused by an insufficient blood supply.

❶ Have you ever fainted?

No, but sometimes I get bruises and little red dots all over my body from flying. It is caused by the blood pushing into the lower parts, the legs, the back, and the palms, where the capillaries often get engorged, crack and cause the red dots. We also fly in vests with various equipment and are strapped in ejection seats by a harness system. Occasionally, we get pushed somewhere, which results in a bruise. There can be a painful aspect to flying a Gripen, but it's nothing that couldn't be managed.

❷ Do you have a post-landing programme to get you back on track?

We don't. We get out and go for a coffee (laughs). But of course, we have recommendations from physiologists on how to warm up the exposed muscle parts or take care of ourselves in the long term so that we can be in shape and manage just fine.

❸ What happens when the alarm goes off, indicating a sharp take-off?

The pilot must be able to get dressed as quickly as possible and find out what is going on. In the background, there is a huge action and a sequence of events related to command, control and coordination. It's a big rush, but it's not undirected, as it's normal for us, and it's been drilled often. We have been monitoring some situations for a long time, so we expect an intervention to occur. There, the stress is significantly lower.

❹ Can you keep a cool head about it?

No, not so much in the beginning. The most critical moments are when I'm putting on my gear at a great pace, and meanwhile, there's a lot of information running from various communication systems that need to be responded to or at least acknowledged. Then, I must run to the plane and start the launch process. That's where the sequence of activities is most busy, but again, everything is automated, so there's not much to think about. Only when the aircraft is up and most of the systems are in process can we find out if we are meeting the time standards. At that point, we are more at ease because we know we can take off on time and be where we need to be.



🔵 How common are sharp take-offs?

It depends on whether we are in the Czech Republic or a foreign operation. Our country is in the middle of Europe and not an exposed area, so it is pretty calm. We have a sharp take-off about once a month, and it is almost always a take-off to transport aircraft that have lost communication for some reason. There is heavy air traffic over the Czech Republic, and a plane not communicating with air traffic control is a potential threat to other aircraft. It is therefore necessary to find out what is happening as soon as possible. Sometimes, we fly to small sport aircraft whose pilots may not even know they are flying somewhere they have no business being.

🔵 And in foreign operations?

There is significantly more activity. Every three years, we participate in the Baltic mission, providing airspace security for Lithuania, Latvia, Estonia and adjacent international waters as part of the NATO alliance. This area is close to Kaliningrad and the Russian Federation, and the Baltic Sea is quite busy, so our activity there is significantly higher. On the last mission in 2022, our squadron had over 40 sharp hits in six months, which means two take-offs a week. In the Baltics, of course, we do not fly to airliners but to military aircraft that are not allied.

🔵 And how do you know if something is going on in the air?

In the Czech Republic, we also keep a 24/7 on-call shift. We always have two fighter jets on standby, which can be in the air within 15 minutes and carry out the tasks we receive from the superior level. Our superior level is the alliance operations centre

based in Germany. That's where they monitor the air situation over Europe. We have two such centres in Europe. They have geographically divided territories – north and south of the Alps. When something happens, be it a transport aircraft in trouble or some suspicious activity by military aircraft over the Baltic, they look at where they have standby fighters deployed and give them a task.

🔵 What is the working day of a Gripen pilot in Čáslav like?

There is flying almost every day. We have to follow a specific regime at all times, which includes, among other things, a controlled diet. So, when we arrive at work, we go to the pilots' mess for breakfast, where the flight surgeon approves the menu. Then begins a series of briefings, decisions and planning for the flying experience. We have briefings focused on the weather forecast, the aircraft we'll have ready, the airspace we'll use, and coordination between the squadrons and the civilian entities. The pilots then go about preparing for the flights they have scheduled. Then, they fly them, and we do a joint flight analysis. That's when we learn the most. The whole flight is recorded in the aircraft, and we can then review all the parameters, trajectories and so on and assess whether everything was OK from a flying safety point of view. We also reflect on the tactics and the execution of the task – if we could perhaps do it better next time.

🔵 You've become an ESA reserve astronaut. What does that mean?

It's mostly a win-win situation because I can keep doing what I enjoy. I can continue to fly the Gripen, participate in foreign exercises and operations, and



“I think Jan Kašpar would be surprised at the rapid progress that has been made since there were planes like the Blériot, which often looked more like a piece of furniture than a plane.”

be part of our squadron. But at the same time, there is a chance that I could participate in space flight and space missions. I am thrilled that after more than 40 years, the Czech Republic is represented in the astronaut programme. So, we will wait with our colleagues from the astronaut reserve team to see if we will be assigned a mission. Only at that point will our intensive training begin.

❶ You met Vladimír Remek, the only Czechoslovak astronaut in space. Did you ask him for any advice?

Some advice came out of our conversation. It was very beneficial for me because we don't have many people in the Czech Republic who have been on a space flight or been part of a real space programme. Mr. Remek's experience is the only one we have. I am glad he told me how it was then and gave me his opinion on where space science is heading nowadays. We also talked about the overlap of the space programme. It's not just about astronauts but overlaps with all space activities and applications. We are all used to using GPS or ATMs that are GPS time-controlled. There are many such applications. In addition, there is industry involved, and in the Czech Republic alone, we have 50 companies in the space industry that are at the cutting edge doing things that nobody else in the world can do. So, it often overlaps with science and research.

❷ What were his first words when he found out he had a successor?

He was happy, of course. We agreed that it was time for a country like the Czech Republic, besides sending Hurvínek into orbit, to finally get involved in real activities such as astronauts and manned spaceflight.

❸ Besides Hurvínek, the Mole also looked into space. Would you like to take something with you?

I would take myself; that might be enough (laughs). I would take a talisman that symbolises something I have a connection to – the Czech Republic, the university or my aviation background.

❹ How did your family take the idea that you might go into space?

They're thrilled and share my joy. As for the risks and fears, it won't be so bad because it's nothing new that would surprise them. The fighter pilot's job I'm doing now may be riskier than spaceflight. So, the family are used to it.

❺ Pardubice is connected with Jan Kašpar and the beginnings of Czech aviation. What do you think he would say about how aviation has moved on?

He'd be surprised at how fast progress has been made since there were planes like the Blériot, which often looked more like a piece of furniture than a plane. There was a lot of progress, especially around World War II and the 1960s. It's always motivated, and when the motivation is the space race or the fear that a geopolitical adversary might be ahead in strategic matters, it accelerates development. Today, ESA's programme is 100% focused on peaceful and civilian uses.

❻ How do you remember your student years at the University of Pardubice?

I was studying Transportation Engineering, a master's follow-up programme, which I fondly remember because I was there with a colleague with whom I still fly the Gripen. We enrolled in Pardubice when we started training at the Air Training Centre in Pardubice after graduating from the University of Defence in Brno. We knew we needed to complete our engineering education, so we considered combining it with training, where you have working hours and duties as a professional soldier and pilot. UPCE was considered, especially as it had a transportation faculty with an aviation overlap.

❼ Do you have any other work goals?

One of them remains the space flight. We'll see if fate favours it. I don't have any other big goals professionally. My long-term interest is to continue in fly combat. In our squadron, I'm responsible for combat pilot training, creating various operational documents, and creating how we do that business in the air. I want to be a part of the future of our tactical air force, perhaps even concerning selecting a new type of aircraft to replace the Gripen.

The Jump from Ghana to Pardubice

STORY BY Zaan Bester, Zuzana Paulusová • PHOTOS BY Adrián Zeiner

Ama Fobi Osei-Mensah is a very energetic young woman from Ghana, studying Regional Development and Governance at the Faculty of Economics and Administration. Why is she studying here at UPCE and how is it connected to her home country and family? Come and meet Ama.

📍 You did your Bachelor's degree in Ghana and now you're doing your masters here at UPCE.

I went to the University of Education in Winneba, Ghana. I studied all about management – office management, economics, accounting and so on. I majored in economics and when I was done, I said yes, it's time for something new.

📍 How did you get to Pardubice? It's not a very logical jump from Ghana to the Czech Republic...

After I finished serving my country, I got the opportunity to come to the University of Pardubice through a friend, family acquaintance who actually came to school here in Pardubice and he recommended the University of Pardubice be safe for me. I also did my research about Pardubice and the Czech Republic. Honestly, I hadn't even heard about the Czech Republic.

📍 Not the most popular place when you are reading the information about it in Ghana...

Yes, but I saw some interesting things, interesting facts about the Czech Republic. The most interesting one was: OK, so this is in the centre of Europe. I can move around everywhere that I want. I have access

to like 26 countries and the cost of living is low. The Czech Republic is known to have a very high quality of higher education. So, I said OK then let me move on. Let me take this opportunity as I have gotten it and I tried and here I am.

📍 How long you have been here?

I have been here for over three years. But I have been to Lithuania for three months for an exchange programme. Actually my programme, that is the Regional Development and Governance, is a Joint Study Programme between University of Pardubice and Academy of Vilnius University in Lithuania. It was one of the attractive aspects of this course for me, because I get to study in two different universities with two different experiences, from different lecturers, meeting different people, and it was a very nice experience.

📍 It is interesting, especially because you are studying the free flow of capital in Europe, in the EU...

My master's thesis is on the free movement of capital in the EU and it's quite a novelty for me because I would be able to get into what it is actually about, what are the challenges and also be able to give my

opinion on what the EU is doing and trust me, it is not a small task. But it is very interesting as I have been reading and reading, and also with the support of my supervisor, Dr. Jana Janderová. She has helped me a lot.

➊ That is great to hear. It is probably giving you an interesting perspective on the topic. because you are not an insider of the EU. That it's an outside perspective must be interesting as well.

Yes, it is. I get to see what other people are thinking, what other people have propounded, what other people have already said about this particular freedom. So I get to be in the shoes of other people, be in my own shoes and also be in the shoes of the EU to be able to give my opinions and conclusions on this particular freedom, so it is a very interesting thing for me.

➋ This would also be something which is interesting when you think back in Ghana – the African Union. Is there any possibility to apply some of the principles there?

Yes, the African Union could. It really has much improvement to build on from year to year. The EU has

achieved a lot of things with this community and this free movement of capital is, let me say, the binding glue of all the movements. So with this study, I would be able to make some recommendations even to my part of the world: what we can also do to improve, and also to have what the EU has. Perhaps not right now, but in the years to come.

➌ Your family influenced your decision to study economics. What was your way into this whole field of business?

My dad is a farmer and my mom is a retired nurse. My mom was a financier because you know, farming doesn't have a job security and has many ups and downs. My dad was the caretaker of foodstuffs and those things. So when I was growing up, I told my dad I'm going to study business and he asked why. And I said: because I want to invest in what you do. I could actually turn this traditional farming business into something much more contemporary. We grow palms on our farm. So we also produce palm oil. So why can't I make something out of this? Make a business out of it? Research on it and make it more



presentable to the outside market, not only locally but internationally. We can sell it outside Ghana, we can go to the European market, we can go to the US market and so on. So that is how I went into studying business from secondary education, and I went to management and economics as a major. I want to actually divert into agriculture.

❶ Did you also go and promote the products of your farm? Were you like the salesperson?

Yes, I did it while I was still a child at school. This is nothing like child labour or something (laughs). I was the topmost marketer of banana for my dad because I had a special way of selling it. The traditional way of selling bananas in Ghana is putting it in a metal pot and selling it on your head. But what I used to do was put them in baskets, cover them up with tablecloth and then go to my mother's workplace, that's the hospital, and market it to her colleagues and they'll be like OK, you are selling bananas? Where are the bananas? In the basket. Wow. OK, give me some. I used to sell everything that I took out, so I was really earning for myself and my parents with doing this business. And it was really nice.

❷ You mentioned about some of the produce you grow on your farm – bananas, corn, palm tree and palm wine come from them, and also something called a plantain. What is it?

It's really looks like a banana and you get it from the farm.

The main difference between the plantain and the banana is that it is not a fruit, but is actually something like a tomato. So you will have to cook it before you can eat it. You cannot eat it raw. So in Ghana we have different ways of preparing it. You boil it, you fry it when it's ripe and you can roast it. When you boil it, you can also mash it and it becomes something like potato here in the Czech Republic. And you can buy plantain in Globus and try it.

❸ Really? It's great that you don't have to import them all the way from Ghana...

Yes. Trust me, I hadn't eaten potatoes before. So what was I going to eat in the Czech Republic? Is it going to be only rice, eggs and bread? And one Ghanaian who was here introduced this to me. You can get your plantain in Globus. OK, so I went there. Then I found it, and I think I am the top customer of plantain in Globus.

❹ And what about the palm wine? I had never heard of palm wine before... What's this?

One interesting thing about the palm tree is that none of its parts goes to waste. After we get the palm oil from the palm fruits, you can even use their mesh out of it to make fire in the house. You can also use the kernel to make oil again, which we call the palm kernel oil. It's like a vegetable oil. And then the leaves could be manufactured into brooms to sweep the house. When the palm lifespan is over we fell them and we sell these falling trees to palm wine tappers. Then they tap the wine from the palm tree. So that is where you get the palm wine and it's a very sweet wine. When you get it right from the tree, is very hot, but it hasn't been boiled. You can ferment it and get gin out of it.

❺ In the fields on your farm mushrooms grow quite readily, but I was interested to find that you have not picked up the Czech hobby of mushrooming despite your familiarity with mushrooms. Why is that?

I actually didn't know that there is this culture of picking mushrooms in the Czech Republic. But in Ghana, as I talked about the palm when we are done tapping the wine, then the tree that has been already tapped brings forth mushrooms, so we pick them ourselves and we can even sell them. We can use them to prepare food. So I am looking forward to find a Czech friend who would take me to pick mushrooms because I really love mushrooms. I have so many ways of cooking mushrooms.

❻ You said that the approach to education in the Czech Republic is very different for you from in Ghana. It was even fun here and you even played with Legos at some point.

The traditional way of learning in Africa or in Ghana is theoretical when it comes to our part of education, that is the humanities or the sciences side. But when it goes to engineering faculties then I think they are much more into practical. We go to school and we memorise facts, and when it comes to examination time, you write the facts, but then usually you forget the work later. But when I came here, it's more of a student-centred education. I get to present my own work, I get to research, I get to find different sources, what people are saying, I get to play in the classroom with Legos to solve problems. We were also exposed to the Six Thinking Hats, which was really, really interesting. I can use it anytime in my life, not only educationally, but if I'm going through something then I can use it to solve any problem that I am en-

"I love Pardubice. The place is quiet. The first day I arrived, I remember. I slept the whole night and I woke up at midday the next day. I didn't hear any car horns, any cock crowing. Nothing like that to wake me up. But ironically, I missed that because I have been accustomed to that for over 20 years of my life."

countering. So I love it that I am even contributing to what I am learning. So learning becomes more fun and I get to gain more and more because it is also entertaining. And I will remember everything.

➊ What are some of the things that you have found in the Czech Republic or Pardubice, that you really like or appreciate that are different from being back home?

One thing that really got me is the independent nature of the people. The people are like of themselves. They do stuff for themselves, they think about themselves, they're independent. Kids get on buses and travel to school by themselves, on their own. Doing what they want to do and they're also conscious about what they are doing. The fact that they're independent, they do not abuse the fact that. And another thing is the political mindset. I came here in September and I think in October or November it was time for elections and I didn't hear any campaigns. I didn't hear any politician coming door to door as it is in Ghana begging for votes. But it got to that time and the people voted. So it looks to me as if the people are, let me say, critical thinkers when it comes to politics. They know who they want to vote for and they know what they want, what is benefitting them from this person and what is making them vote for this person. In Ghana it is not like that. People are partisan by their DNA. The family voted for this party, so you will vote for them for the rest of your life.

➋ Is there anything about life in the Czech Republic that you wish you could transplant to Ghana?

The transport system for example. I talked about it already and about a political way of thinking of the people. Maybe it would be through education, but we really need that because it is one of our downfalls. But something from Ghana that I would want to implement here is the sense of community that we have. In Ghana you never pass someone and not greet the person. There's some acknowledgement that you meet a person. That is something that I would really love to see here because I've been in Czech Republic for over a year and I have no Czech friend. I live on the same floor with Czech students and they do not reach out or seem to want to be friends. But one thing I learned about that is that

this is the nature of Czechs because of the communist era. I see that it is changing because the kids I meet these days, even with their parents, they greet. I hope it changes when they grow up.

➌ There are a few other students from Ghana at the University, it's around 20 students. Are you all one happy little Ghanian family?

We are a community. We acknowledge each other. If I meet a Ghanian person, I know the person. I would talk to the person. But that doesn't mean we are close or the closest of friends. Just because somebody is from the same country as you does not mean that you will all get along and be friends. Not every Czech is a friend to all Czech people. It's funny that sometimes you meet someone and they ask: Where are you from? I'm from Ghana. I know someone from Ghana. He's called so-and-so. There are over 5 million people just in my city, so I will probably not know him (laughs). But hopefully that is some kind of attempt to make some connections.

➍ Some people might be afraid to say she is black or to use the word black as a descriptive word. What would be your response as a black person?

Yes, I feel like I know what they feel. If I say this person is black then I'm segregating or I'm discriminating by colour but that is a fact: I'm black. So if you say I have a black friend, I have a black student or this person is black, that is not you being racist. Because what other ways are there to describe the person the best? I have a story of this. I travelled to Germany to my friends. I wasn't part of the chit chat but I just arrived and they were talking about another black person who is a guy. And I asked them who they were talking about. He mentioned the name and I still didn't know the person, so he said: He's like you. And I said: Like me as in a girl? And he said no. He is black. So yes, just say the words: He's black.

Sometimes you go to the shop and the kids with their mothers are looking at us. As the parents just pull them away. But we do not hurt. We don't bite. I asked my friends, why are they looking at us this way? OK, maybe it's because of your hair. OK, they should then ask. Hello, your hair is nice. Or just saying hello is also nice. That is always an invitation to people to open up. Because in the end they will find you are friendly and a nice person.



Listen to the podcast with Ama Fobi here!



Pardubice

University city full of opportunities

Jan Perner was a Czech designer and builder of railway lines. He is the guardian of the Pardubice railway station. One of the faculties of the University of Pardubice bears his name.





**Go to School
or out into Nature
in a New Hoodie**