

Pécs, February 2016





CONTENTS

The Faculty of Pharmacy has now been established (Pál Perjési)

Reconstruction of the **Central Sterilization Unit** (Annamária Apró)

Dr. Emil Fischer turns 75 years old (János Szolcsányi, Zoltán Gregus, Loránd Barthó, Erika Pintér)

"I think my mission is to ensure the department remains the flagship of the Clinical Center... remarked Dr. András Büki (Interview with Professor Andras Büki by Rita Schweier)

"My lecture is successful if I can convey the knowledge necessary for the students, and at the same time have an impact on their attitudes and emotions." (Interview with Professor Zsuzsanna Füzesi by Rita Schweier)

Microvascular Laboratory (Péter József Tóth, Nikolett Szarka)

A Swiss study trip in the field of tracheal surgery (László Lujber)

The herb of the year 2016: chamomile (Matricaria chamomilla) (Kamilla Ács, Györgyi Horváth)

> News and information from departments and clinics

Developments Worth Billions at University of Pécs (Gergely Kottász)

The University of Pécs has become enriched with a valuable ultrasound scan unit, thanks to the Sonarmed Ltd. (Gergely Kottász)

Plácido Domingo became **Honorary Doctor of UP** (Gergely Kottász,

photos: György Mánfai)

Photos

Cover and Photo supplement – From winter into spring (Hajnalka Hajdú, László Molnár, Gergő Papp, Béla Sebők, Dávid Varga, Loránd Barthó)

The Faculty of Pharmacy has now been established

raining at the Pharmacy Program of the University of Pécs, Medical School began in September 2010. The establishment of an independent faculty was the result of an ongoing development to meet all the organizational and infrastructural requirements in every aspect. Therefore, from 2016 onwards, pharmacy students may start or continue their studies at the youngest faculty of the University of Pécs (UP).

There has been a continuous organizational development of the Pharmacy Program in the last 15 years. When the training began, three new pharmacy specialist departmens were established. Today, there are seven educational units which constitute the faculty. Most departments have been established in the last 5-6 years. As a result, all organizational requirements were achieved in support of the faculty. The institutes are headed by nationally and internationally recognized professors and handsomely contribute to the positive reputation of the faculty.

In addition to the professional stability, the Faculty was also required to prove maintainable administrative skills. In order to achieve this precious yet complex objective, the English Program in Pharmacy was launched in 2010 ensuring further income, with an expected annual increase. However, we cannot remain absolutely content with regard to attracting the best Hungarian and foreign students to Pécs, as we should be more efficient in this aspect. Legal confines for the establishment and operation of the faculty are ensured by the Senate of the UP, and on 17 December, 2015 the Organizational and Operational Regulation was signed. According to the Senate's decision, the members of the Council of the Faculty are elected in the first months of 2016, and then it is followed by the constitution of the regulatory documentations for the Faculty. Members of the Council of the Faculty foresee a busy year in 2016. It is very important to highlight that in the establishment of the new faculty, the efforts do not entail additional administrative expenses. Operational requirements, other than the independent faculty's Dean's Office, are ensured by, the agreement of co-operation between the Medical School and the Faculty of Pharmacy, the existing infrastructure and personnel of certain institutes of the Medical School. This is an economic solution and also further provision of the previous high standard administrative management with minimal interference into the daily life of colleagues and students alike.

The operational functionality of the independent faculty means growing responsibility on its new management including development in the fields of education and research, and similarly to economy. Further income resources are in demand to maintain development, therefore providing a wider range of foreign language programme could be an ideal solution, as it was also a previously stated goal. The grounds for new program offers like infrastructural developments, and increasing number of personnel are provided by the opportunity of government-level support for the UP to increase foreign language training capacity. Our efforts may be doubled by the international students already studying at our university, who in sharing their first-hand experience with relatives and friends in their home countries may likely motivate others to become future students at our university.

A professional profile of the Faculty covers the entire spectrum of pharmacy including intra and inter-university level research collaborations. The management of the previous program (now the faculty) finds it first priority towards improving and strengthening collaboration within the institutes, clinics and pharmaceutical companies of the Medical School, as it likely will be both professionally and financially beneficial for all parties involved.

At the moment of establishing the new faculty, I am expressing my honor and gratitude to Professor Dr. János Szolcsányi, the founder of the program, and the senior leadership amongst the university who have been working towards promoting us into a faculty in the last 15 years. The new faculty is a milestone in our life. It is my conviction that the faculty's organization will provide further professional development for the colleagues of the



Editor in chief: Loránd Barthó

Co-Editors: Ferenc Gallyas, Zsófia Duga

Reader editors: Loránd Barthó, Lajos Bogár, Lenke Babarci, Tibor Hollósy, Andrea Ludány Editorial staff: Tamás Kiss ■ Layer editor: Szilvia Czulák ■ Proof reader: Loránd Barthó

Translators: Katalin Eklicsné Lepenye, Judit Hamarné Sávay, Alexandra Szántóné Csongor, Tímea Németh, Anita Hegedűs, Lilla Horváth, Gabriella Nagy, Katalin Váradi, Zoltán Krommer

Editorial address: Admissions and Student Service Center, 7624 Pécs, Szigeti street 12. 4th floor ■ Phone:+36/72-536-001/31129 E-mail: alumni@aok.pte.hu http://alumni.medschool.pte.hu/

specific departments and also a growing prestige for the pharmacy training in Pécs, both at national and international levels that can contribute to the region's industry-attracting capacity development. In order to achieve our strategic goals, we plan further additional collaboration with the management and the departments and clinics of the Medical School.

Pécs, January 2016

Professor Pál Perjési Deputy Dean

The professional recognition of Dr. Tamás Illés

In November 2015, Dr. Tamás Illés DSc was elected as a foreign correspondent member by the Paris National Medical Academy (Académie Nationale de Médecine), established in 1820, "for the outstanding clinical achievements in the surgical treatment of spine deformities, as well as for the new types of spatial presentation of spinal deformities." The nomination which took place earlier, is a body including a permanent number of members. Professor Illés currently works in Brussels leading the Orthopedic Traumatology Clinic of the Université Libre de Bruxelles, Brugmann University Hospital. In addition to undergraduate and post-graduate training, the organization and conduct of clinical research, his most important activity is patient care including the surgery of the spine. Congratulations!

PROGRAM

of the Pharmacy Sciences Forum organized jointly by the Faculty of Pharmacy of Pécs University Medical School, the Working Committee of Pharmacy of the Expert Committee of Medical Sciences of the Pécs Academic Committee of the Hungarian Academy of Sciences and the László Cholnoky College for Advanced Studies

Forum Venue: University of Pécs, Faculty of Pharmacy, Floor 2, Lecture Hall No. 8, Pécs, 2 Rókus Street. The Forum consistently begins at 1700 pm.

25 February, 2016

Dr. Péter Németh (University of Pécs Medical School, Department of Immunology and Biotechnology): Monoclonal Antibodies in Medicine and Drug Development

3 March, 2016

Dr. Miklós Zrínyi (Semmelweis University, Department of Biophysics and Radiation Biology): From Engineering Sciences to Nanomedicine

Dr. Gábor Oláh (University of Debrecen, Faculty of Pharmacy, Department of Biopharmaceuticals): Pharmaceutical Care for Heartburn and Reflux

10 March, 2016

Dr. György Marosi (Budapest University of Technology and Economics, Department of Organic Chemistry and Technology): Innovative Directions of Development in Pharmacy Technology

Dr. Patricia Anna Vincze (University of Pécs, Faculty of Pharmacy, Department of Pharmacy): The Protective Role of Kapsaicin Sensitive Peptidergic Sensory Neurons in Increased Pain Reaction caused by Chronic Stress in a Mouse Model

17 March, 2016

Dr. Ágnes Kemény (University of Pécs, Department of Pharmacology and Pharmacotherapy): Animal Models of Psoriasis

Dr. Milad Ghorbani (University of Pécs, Faculty of Pharmacy, Department of Pharmaceutical Chemistry, University of Pécs, Faculty of Pharmacy, Department of Pharmacy): Synthesis and in vitro Antiproliferative Activity of Dipyridopyrimidinone Derivatives.

April 7, 2016

Dr. Katalin Kapronczay (Semmelweis Medical History
Library and Archives): Pharmacy Historical Rarities in
the Collection of the Library

Dr. Éva Sághy (University of Pécs, Faculty of Pharmacy,
Department of Pharmacodynamics): Investigation of
Transient Receptor Potential and the Role of Pituitary
Adenylate Cyclase activating Polypeptide Receptors in
in vitro and in vivo Systems

14 April, 2016

Dr. Kovács dr. Ildikó Bácskay (University of Debrecen, Faculty of Pharmacy, Department of Pharmacy Technology): Application Possibility of in vitro Cell Culture Model Systems in the Pharmaceutical Technology

Dr. János Bajdik (Meditop Pharmaceuticals Ltd., Pilisborosjenő): Data Supporting Industrial Pharmacy Technology

April 21, 2016

Dr. Fatih Demirci (Anadolu University, Faculty of Pharmacy, Department of Pharmacognosy): Title of the presentation to be determined

Dr. Andrea Vasas (University of Szeged, Faculty of Pharmacy, Institute of Pharmacognosy):

Pharmacological Screening of Plants Occuring in the Carpathian Basin and Isolation, Structure

Determination of Biologically Active Compounds

The program is subject to change!

Dr. Péter Molnár President, dr. Györgyi Horváth Secretary, dr. Pál Szilárd Secretary

Reconstruction of the Central Sterilization Unit

Notably, an investment in the value of HUF 160 Million was recently completed at the UP Clinical Center within the framework of which the sterilization process of reusable instruments will be considerably faster and more reliable implementing the new equipment of the Central Sterilization Unit.

ew and modern equipment were installed at the Central Sterilization Unit of UP Clinical Center in Ifjúság Street, where sterilization of reusable instruments used during surgery is performed. "The Central Sterilization Unit was unfortunately burdened with outdated equipment, some of them 15 years old," – explained dr. Erika Rauth chief medical officer, head of the unit. "Based on regulations, the operational functionality of some of this equipment is no longer considered safe, largely due to the limited servicability, since there in some cases, the non-availability of parts to some equipment, meaning they are beyond repair." To date, three autoclaves (steam sterilizers) have been replaced and three high-capacity instrument washing machines represent a

combined procurement featuring a low-temperature hydrogen peroxide sterilization stabilizing unit in support of the disinfection of thermo-sensitive devices and endoscopes. Additionally, two ultrasonic dishwasher machines are now operational permitting the entire removal of foreign residue from miniature gaps within the instruments.

The investment is supported and financed by TIOP 2.2.6 / 12/1 /B application and thus far has a significant impact not only on the achievements within the clinics including their top-notch, professional staff members, but also towards the effective improvement in assuring patient safety. "The instrument fleet of the clinical center is rather limited, therefore, the turn-over time is considerably short in support of sterile and functional surgical instruments and endoscopes when compared to the patients whose characteristic medical needs require these precious tools. This process is much safer, more reliable and expedites following the recent renovations and improvements." – reported Dr. Erika Rauth.

Annamaria Apró

Program of the Medical and Health Department Scientific Sessions

March 7, 2016

Invited lectures - Professorial Inaugural,

Dr. Lieven Lagae, President of the European Pediatric Neurology Society – University Hospitals Leuven, Department of Development and Regeneration, Pediatric Neurology section: New treatment options in childhood epilepsy (40 minutes) – the guest is presented by Dr. Katalin Hollódy.

Dr. Emese Mezősi – UP, Department of Internal Medicine I, Endocrinological and Metabolism Department: Endocrinology examinations (40 minutes)

21 March 2016

Invited lectures - Forum of Lessons to be learnt

Dr. Péter Lakatos, Semmelweis University, Faculty of Medicine, No. I, Budapest: Genetics via the eye of the clinician: Myth and Reality (40 minutes).

Hypotension and cardiomegaly - a rare disease, rapid diagnosis is the only chance. (Case Administrator: Dr. László Gardos, and Dr. Gyöngyi Németh, Dr. Vera Harmath, Dr. Beatrix Elmont, Zala County University Teaching Hospital, Infants' and Children's Department).

Erythroderma face localized ulceration (Case Administrator: *Dr. Éva Szepeshely, Dr. Roland Gyulai*, UP,

Dermatology, Sexual Pathology and Clinical Oncodermatology; *Dr. Beata Kovacs*, UP, No. I, Department of Internal Medicine, Infectious Diseases; *Dr. Enikő Telegdy*, *Dr. Anna Bátor*, County Vas, Markusovszky University Teaching Hospital, *Dr. Petra Görög*, Pathology, Szombathely).

4 April 2016

XXVI. Imre Pilaszanovich Guest lecturer

Prof. Sameh Shehata, Department of Pediatric Surgery, University of Alexandria, Egypt: Medicine in Ancient Egypt (40 minutes) – the guest is presented by: Dr. András Pintér.

Dr. György Velkey, MRE Bethesda Children's Hospital Director, President of the Hungarian Hospital Association: Providing child care to our Health and 21st Century Challenges (35 minutes).

The meetings begin at 4 pm University of Pécs, Medical School, Dr. Donhoffer (No. III.) lecture hall, Pécs, Szigeti út 12.

to be continued in the next issue

Dr. Emil Fischer turns 75 years old

Emil Fischer was born on 24 March in 1941 in a little village called Mike in Somogy county. He went to secondary school in Kaposvár. In 1965, he graduated from the Medical University of Pécs, along with his wife, Dr. Ilona Málovics.

He has been working at the Institute of Pharmacology (later called the Department of Pharmacology and Pharmacotherapy), Medical University of Pécs (later called Medical School, University of Pécs) since 1965. He has been a full professor since 1987, and is currently professor emeritus. He has been teaching pharmacology in Hungarian, German and English to hundreds of medical students distinctively, for many years.

At the beginning of his time spent at the institute, he conducted research under the supervision of future Professor László Szekeres and Professor Gyula Papp; and after they left for Szeged, he became the colleague of future Professor and Head of Department, Ferenc Varga. He carried out research primarily in the field of biliary excretion of foreign compounds by the liver. He has participated in foreign study trips in various pharmacological institutes. He worked with Professor Tihamér Z. Csáky at the University of Kentucky (Lexington, KY) and the University of Missouri (Columbia, MO), and with Professor Fritz Lauterbach at the University of Ruhr (Bochum, Germany) on two occasions with the support of the Humboldt Foundation. During these study trips he carried out research on the mechanism of intestinal sugar absorption. He also studied the role of the intestines in the presystemic elimination of organic compounds. Currently, he is the author of nearly 80 scientific publications.

Dr. Emil Fischer earned his C.Sc. (candidatus scientiarum) degree in 1976, and his DSc degree in 1984. The title of his DSc dissertation was, "The Inducibility of the Hepatic Excretory System and the Intestinal Transport System". Professor Fischer had been a member of the executive committee of the Membrane Science Division of the Hungarian Physiological Society for several years; and, last year, was the chairperson of the Selection Committee

of the Membrane Transport Conference, who is the organizer of the prestigious conference in Sümeg.

He played a major role in the leadership of the Medical School of the University of Pécs. As the president of the Doctoral Committee (later called PhD





and Habilitation Office) from 1997 for 18 years, he had supervised the Doctoral Program of the Medical School and the habilitation procedure of the teaching staff. He had served in the role of the Dean of the Medical Faculty of Pécs for one term. Notably, he was awarded the

Pro Facultate Medicinae Gold Grade Medal in 2004.

"We have been members of the staff of the same institute for almost one and a half generations (since 1970) and had taught medical students for decades: first under the short leadership of János Pórszász, then Ferenc Varga, later for 9 years under my leadership and for 10 years under the leadership of Loránd Barthó. During my leadership, it was us who administered the final exam to the English and Hungarian medical student groups. Our cooperation was smooth and without confrontation, and limited to only these areas: since our research interests differed markedly. From time to time, mainly in the first two decades, we also discussed topics related to the university. On such occasions, owing to his jovial nature, he described the background, which I, as a scientist coming from Szeged, had no knowledge of, with a faint smile. In this respect, I believe, several of my colleagues turned to him for answers; and

his balanced and supportive approach could play a major role in him being appointed to the Dean of the Medical Faculty. Nowadays, we do not meet so often, since scientists awarded the Golden Grade Medal like to spend their time with their family".

(János Szolcsányi, Professor Emeritus)

"I remember with great pleasure the literally colourful experiments carried out under his supervision and initiated by Professor Varga. There was the rose bengal, the amaranth, the eosin (orange red, not green!), the indocyanine green, the bromophenol blue, and the bromsulphalein. After the iv injection, these compounds (organic acids) appeared in the bile of the rats, painting the bile with the colors of the rainbow. Around 1980, our group made its mark with these experiments in the international arena of the hepatobiliary transport research".

(*Zoltán Gregus* full professor)

"Fischer Emil was an excellent colleague. His accuracy, moderation and spiritual balance were always enviable (obviously now, as a retiree, he still possesses these qualities). Five years ago, when we celebrated him, I mentioned to him we could also thank him for a trip to Versailles. He travelled by car (with Ilike) to the Pharmacological World Congress in Paris in 1978; whereas, we, the others, took the plane. This collegiality has always been characteristic of him.



We have a lot in common, however, he has always been void of any violent outburst or sharp conceptualization; and, in this respect, he has strived to set an example, without being too 'direct'. Naturally, his role as the Dean of the Faculty, prevented him from spending as much time at our institute as he had previously; however, the above-mentioned considerateness characterized him during this era, too".

Happy birthday!

(*Loránd Barthó* full professor)

"At first, I met Professor Fischer during the pharmacological seminars. He was my instructor. I can recall well-organised practicals held in a friendly atmosphere. The second time we met was during my job interview in the Department of Pharmacology. He was very friendly and supportive and eventually, I was offered the job. But I must admit, I was the only candidate. We had been working together within the institute for 25 years. I worked in the team supervised by Professor Szolcsányi; and he lead the pharmacokinetic group, together with Professor Varga. Their fields of research were gastrointestinal absorption and metabolism.

He taught medical students in Hungarian, English and German. He was the one who devised the curriculum of Pharmacology in Dentistry, and had also taught it for many years. His balanced, calm and cheerful nature and his ability to compromise were also beneficial when he held senior leadership positions within the university".

(Erika Pintér, Head of Department, full professor)

"I think my mission is to ensure the department remains the flagship of the Clinical Center..." remarked Dr. András Büki

We had an appointment at noon. When calling his secretary I asked her jokingly: 'Shall I bring lunch for him?' because I suspected that he was in a hurry to go somewhere else, after we met. And so it happened. Leaving his downtown apartment he jumps on his bicycle and starts work before 6 a.m. On such occasions he checks his letters and visits emergency patients or his university colleagues who are as busy as he himself. Then, at 7.15 the ward-round starts. He does not look tired or worried, just the contrary, he is smiling when he tells me about not finding his suit belt when changing the cycling outfit because the belt was left in his Pécs home or house at Szederkény. It is fun to talk to him since he understands jokes and, moreover, he even enjoys them. Maybe because his workdays are not about funny situations but rather about serious operations and decisions, about not in the least simple questions of management. When talking about the latter, the mischievous smile disappears from Dr. Büki András's face (who became the head of Neurosurgery Department in 2014).



"Rather because of the latter. Unfortunately I exercise little. Up until the age of 25, I used to play football every day, later several times a week but now only once a week, which is associated with a series of injuries and therefore susceptible to interruptions and therefore, intermittent at best. In addition to cycling, I began swimming, although I am the least successful in this type of sport, it is a shame what I do in water." (*He is laughing – the editor*).

"How is your spine, professor?"

(He is smiling – the editor) "It is said it should be bent under such circumstances but luckily it isn't, it withstands wear."

"Has the new appointment (head of department) changed your daily routine or did you use to get up early and go home late before?"

"I have always worked a lot, and I think I worked with responsibility. By now the amount of work has increased significantly whereas the amount of responsibility brutally." In the role of department head, in consideration to the demands of responsibility it is inappropriate to go on holiday for one or two weeks – although the latter is unprecedented – he cannot get away from it all. Here physical presence is essential, you have to come in, but at least maintain phone connection. Thus my thoughts are continuously around tasks to be solved. I am convinced that this is the only way of doing it well."

"Was it an easy decision to apply for this position?"

"This question was first raised when I first came to the department about 20 years ago. At the time, nurses already started to say that there was no one before me and it was not likely for a madman like me to follow. Therefore, I definitely was the one destined to become the new head of the department. Since then, it has always been an irritating problem which I have always confronted. However, knowing the



squirrel-cage of the health care system, the straightforward carrier could have been interrupted. I didn't think about it seriously, and yet the situation presented the solution. I applied for the post because I felt I had workable plans and because it was a road at the end of which it was obligatory to go on. Progressive mentality should survive and everything advocated until that time should be continued. I would have been happy - and I say this frankly, if there had been a person for the head position. I would have been able to work with much less responsibility, more quietly, dedicating more time to my family as a deputy head. Unfortunately, professor Dóczi, due to objective reasons, could not remain in the role of department head. However, it can also be put like this: I was too weak to say no.

"Within the huge package which represents management of the department, what are those elements that cause the most hard thinking, represent the greatest challenge?"

"There are several elements. Profitable operation is a huge challenge. It could be possible to lead this department to meet the optimum of clinical care at the same time we must take notice of the fact our objectives includes not only appropriate patient care but also attracting new patients to the department. Our field has significant marketing potential and is able to function cost effectively. I think my mission is to help the department to remain the flagship of the Clinical Centre preserving the pureness of this flag. Furthermore, my aim is that the members of my team feel honored aboard this ship. I have one hundred colleagues of which, many of them have bread-and-butter worries living exclusively on salaries they earn, most of which is spent on paying the monthly installments. I pay increased attention to offer them the most within the actual range of financial possibility to the degree

allowed by legal norms. Those employed within the current Hungarian health care system and attain the level our colleagues do deserve everything which can be provided. I have always felt bad when the issue of regulating working out times of rest or the cost-effective use of duty time percents has been raised. However, I am particularly happy that lately, there haven't been any plans regarding payment for duty hours which could directly jeopardize harmonious employment. I want my colleagues to feel, although I haven't always been successful with it, I care for them and try to make sure they don't face more trouble, other than deadlines for payment."

"The presence of Center for Diagnostics makes the life of the department and therefore your life much easier from aspects."

"Yes indeed, the Centre for Diagnostics is a very important partner providing special situation for Pécs' neurosurgery. Owing to my employment experience, I can see in many parts of the country how significantly disastrous it may be if and when funding restrictions are imposed in the sphere of diagnostics. It is a great relief we don't have to worry about the quality of certain examinations. If everything worked so well, as in imaging diagnostics, it would be paradise. It is also good to see that the management of Clinical Centre attempts to do its best towards effectively maintaining the functionality of the department, however, their scope in support of action remains extremely limited. Luckily, great changes have been made owing to tenders won and thus procuring new equipment. Due to this fact, the rehabilitation project arranged and managed by professor Dóczi, 'fell into our lap' and became operational within the organization of the new clinical management. The DSA project was similarly arranged by professor Dóczi, we only had to complete it. Of course, all these generate new tasks since - when launching the new biplane angiography system - it's important to know how to use the capacity released to serve the patients' benefit yet also in the effective training of our new resident doctors. We should also pay special attention to our six resident doctors, for it's truly an honor they chose our department for specialization. The coordination of mentor tasks, on the other hand, represents a serious challenge. In addition to preserving healthy individuals, a team should be built to encourage cooperation among the members, however, at the same time healthy competition should also be created. However, let's admit we haven't been qualified for this since heads of departments are not educated in curriculum design or human communication, in management theory or education itself. In 2007, when I began teaching a European Qualifying Course on Neurosurgery in Lisbon, it was obligatory to participate in an educational training where I was confronted to the degree of our lagging behind in this field. Actually we don't know how to make a specialist of a resident doctor or a real healer of a graduated M.D. Currently I have 6 colleagues who will retire within 5 years. They have spent their lives here and they possess enormous knowledge. I asked them to teach our resident doctors in the same way as they used to teach me in 1992. Of course, those were different times: 'Erika' typewriters existed, patients' case histories were filled in by hand, but the most important is that we talked among one another significantly more than compared with today. That era was a thousand times more humane. Today, while sources of education and knowledge are immediately available, educational modules including much more practice than theory have disappeared. I can remember when I came here, one entire week was dedicated entirely in the examination of patients and discussing cases for hours with the doctor on duty. Nowadays it is not done, not even by my most communicative colleagues. Time is fragmented into snippets

between digital communication. The previous system has been destroyed partly by automatization and sadly, likely due to burn-out. At American neurosurgery departments, resident doctors work like a horse, are on duty as vegetative creatures often times under humiliating circumstances. Following specialization, however, they emerge from the system and know exactly how much lexical and manual knowledge they have accumulated and where they will work and for how much. When compared to this, my colleagues, nearly all over 50 years of age, are treating drunken patients suffering from head injuries, while in consultation with the nurses in the corridor or among inpatients who have recently undergone surgery, at two o'clock in the morning. I think neurosurgeons who, on these terms, felt they were the 'ace' or 'alpha male', as neurosurgeons are frequently referred to, are sick. Unfortunately, after a while this hyper-energetic approach has been lost. This is a typical Hungarian phenomenon because everywhere else it was and is possible to live with much less work, smooth face and much more respect."

"Then where to find the extra energy to train resident doctors?"

"Resident doctors themselves are the answer to this question: all of them are wide-eyed, intelligent, active, feature a positive attitude and this also has a beneficial effect on us, too. We simply are obliged to hand over to them the knowledge accumulated over 40 years."

"The reason for your optimism can be you have an outstanding team and you don't have to fight for the prestige of the department, owing to professor Dóczi's heritage."

"That's right. Luckily the testator is an active member of the department even today, he continues his work as a mentor, setting a fine example. He is indeed, such a doctor and such a person who attracts patients with unbelievable persuasion. It is an interesting situation when one takes over such heritage which symbolically can be called a shining column. Because what happens if this column falls on him? Looking back on the past two years, I think the most important result today is it is stable and I am particularly happy that Professor Dóczi participates in supporting it (he is smiling—the editor)."

"I believe that daily team-discussions contribute to this interdependence experience."

"Yes, working within a clinic differs from working in a general or county hospital emphasizing the value of daily interaction among the team. Neurosurgeons, no matter in which part of the world they are employed, suffer from 'alphamale' disease. They consider themselves to be 'non plus ultra', yet their colleagues think they are ill mannered and arrogant. At the same time, they make their decisions jointly, in teams. Feudal, one-person surgical decision making still exists in traditional medicine, however it is no longer fashionable among neurosurgeons. The explanation suggests today we have experts whose standards and ideas reach the European level."

"Who are the members of the 100-member staff of the Neurosurgery department?"

"We have 10 Specialists of Neurosurgery, 6 Resident Doctors, an Endovascular Team, a Neuroradiologist Intervention Specialist and also a colleague, Dr. Hudak, who is not a state employee and whose endovascular intervention activity meets world standards. *Attila Schwarcz*, SeniorL, Deputy Head of Department, is the leader of our Spinal Surgery Profile and is also a member of the 3-member National Spine Committee, of which, regarding his age, is a great achievement and honour. *Zsolt Horváth*, Clinical Oncologist – Head of the General Ward – deserves immense credit for working out and maintaining Neuro-Oncological

PÉCS MEDICAL SCHOOL HERALD

Radiosurgical Interventions. The entirtey of this operation is carried out in cooperation with Professor Mangel and his team. Professor István Balás, is the Head of the Functional Team working jointly with Professor Sámuel Komoly's team in setting a fine, nationwide example. Ferenc Kövér, Clinical Head Physician is the Director of the Centre for Diagnostics, however, he actively participates in diagnostic consultations at our department and helps us to find answers to extremely complicated cases owing to his exceptional knowledge. Often we ask for his help on the hour when complicated cases emerge. Ferenc Vető, Assistant Lecturer, provides invaluable support in child- neurosurgery when consulting in reference to acute cases at the departments of Obstetrics and Pediatrics. He is a very important link in this team, as is *Erzsébet Ezer*, Head Physician who is the Head of the Multi-disciplinary Intensive Care Unit. I also can only speak in the highest regards towards Iván Péley, Head Physician, Head of the Rehabilitation Unit. I am very proud that each big field is represented by excellent experts.

The rehabilitation center currently has 29.6 posts including those doctors who work for the rehabilitation ward in support of patients with head injuries of the Neuro-Rehabilitation Unit at the Rehabilitation Center. Permit me to acknowledge our formal departmental nurses were transferred to the center who expressed an interest in this field, which physically is very demanding. The center has a team of 3 Physiotherapists, the leader being *Anita Velényi*, including six independent rehabilitation experts belonging to this team. Work at the center is very inspiring and I love going there for ward-rounds because, in addition to entering a new building, I can see dramatic changes towards the improvement of patients' conditions that demonstrates the effectiveness of the work. Therefore, we can think about ourselves as to what we want to in the role of surgeons, yet operations performed in the theater contribute only to 30% of recovery. From the Specialist supply point of view, the three units are most difficult to manage as they are the operatal theater including the angiography theatre, the general ward and the neurosurgical intensive care unit. Although in the theater there is no lack of staff, the work load is tremendous. As compared to previous numbers at the ICU we now have an additional two more beds. Of the 11 beds, 10 are financed by the National Health Found. All of the beds are monitored and almost all of them are ventilated. Their equipment was partially financed through European research sources. Our neuro-monitoring capacity attains world standards and only 20 other centres in Western-Europe have the identical capacity. However, our major concern is the lack of nurses at the ICU, 1.8 nurses/bed, which is somewhat below the minimum requirements and, as of yet, we cannot increase the number to normal. These nurses perform work similar to that of other two old big ICUs in terms of ventilation and tasks related to patient number, the difference is that their number/bed is half of the nurses at other ICUs. Luckily, the number of doctors is more satisfactory owing to the help of Department of Anaesthesiology and Intensive Therapy and of Professor Bogár. Therefore, the Rehabilitation Unit also has specialists of intensive care on duty from other departments. Work at the ICU has always been the 'trademark' of our department praising the unbelievable efforts and high-quality healing of the entire ICU staff. Since I have been working at the department over the last 20 years, I haven't been able to recall cases of patients developing decubitus at the ICU. I must admit I can't even imagine how such a high-level care can be provided while lacking capacity. The same can be said about our nurses on the ward: their number is also less than required, they are overburdened. Their life, however, has been

made a little easier due to the establishment of the emergency department, which means drunken patients with injuries are admitted there. Administrative staff members are also an important part of our life who provide weekend duty in a selforganized system transcribing texts from digital dictaphones, which is an inevitable part of prompt documentation. Nursing management, finance team and my secretary are also members of the team. I keep emphasizing I will be the head of department only if other conditions allow it, until my Head Nurse, my Finance Director and my Executive Secretary all are employed here, because there are no more three colleagues with such working ability as Orsolya Román, Attiláné Németh and Rita Bogyay. For example, yesterday evening I arrived back to the department at 18:30 hours and while I was trying to find my keys, my Secretary opened the door. She was still in the office because she hadn't been able to finish work by that time. Then I saw the Finance Director, who was there for similar reasons and this has happened several times, I also need to mention my Information System Manager and colleague – *Ernő Bognár* – as well, who was working during the Christmas holidays in order to finish the installation of computers by the evening of 31 December. All my colleagues are exceptionally devoted and this is a great gift for me.

"Before we met today you had participated in performing a minor surgery. How many operations do you perform?"

"Unfortunately not enough, although it is the theater where I can relax and focus only on the real work. A surgeon is a surgeon because he operates on patients. I think neurosurgery is especially characterized by the need for continuous training since one can learn from each operation and even more, this manual activity demands ongoing development. Initially everyone creates a surgical portfolio. How the contents of this portfolio evolve in the future depends also on advances in his field. When I came to the department all I wanted was to be a vascular surgeon who performs a huge amount of aneurism operations. At that time we had 50 aneurism surgeries a year - now we have 200. Then all of them were open surgeries while now there are 15 altogether of this type. The essential question is, if a neurosurgeon can be experienced in each profile in the 21st century. For a long time my answer has been yes to this question, however, change of generations took place, in Western-Europe it has long been over, which resulted in need for specialization in the future. I am very happy that major spinal surgeries requiring immobilization are led by such a neurosurgeon as Professor Schwarcz, whose expertise meets and often exceeds European standards, whose manual skills are unquestionable and in addition to this, he possesses exceptional mental abilities while being hard-working as well. I would not even think that I am able to perform these instrumented spine surgeries lasting for 5-6 hours successfully, and in addition to this, I can also function as a cranial specialist. This is why teams are vital as is the respect for their leaders thus making it possible for neurosurgery to function as a network of specialists.

"You are also the head of International Neurotrauma Association. How much burden associated with this lies upon you?"

"Well, nowadays, alot (he is laughing – the editor). Very soon I will be travelling to Cape Town for the four day conference but before this I am teaching a course. I used to be the member of the European Neurosurgery Association, too, and I managed to establish very good contact with its Director, Ms. Susie Hide, who is English and is the daughter of a retired professor of neurosurgery. She has transformed the above



association into a highly professional organization and has strategized to help to move the International Association towards a higher level of professionalism, all at a considerably minimum salary. We are planning four business meetings, including the plenary session, during which we will try to transform this team which gathers from event to event into a membership based prestigious organization. We have succeeded in strengthening our connection with the official journal of the American Neurotrauma Association, which is the leading neurotraumatological journal of the world including an impact factor of at or about 4. I would like to add to it as a 'B' journal the Hungarian Neurology Review, which is also a journal possessing impact factor, written in English. Parallel to this we are trying to create associate membership in support of our members in the neurotraumatological subdivision of the European Association. There are several things however, which worry me although these don't represent much work rather alarming thoughts. Otherwise it was not an easy decision to undertake the leadership of this worldwide organization because the Hungarian team is small, half of the members are American and it consists of leading American professors. In addition to all the above, ensuring professionalism is paramount is not always an easy task.

"Where does the research which intends to pay increased attention to minor head injuries, funded through the Department of Defense (DoD), USA, now stand?"

"Our research is multi-tiered. The DoD funded these programs through a tender by Banyan, Inc. The good news is the study called Vigilant, which focuses on data collection, will take place as a clinical study, likely in February; we are in possession of all the permissions and contracts. This will be a major source of revenue in support of our clinic, and this won't be a study allotted based on added clinical value, but only an

ordinary clinical study. What is especially welcome in this cooperation is that Banyan has included, and continues to include us in the analysis of results. We managed to develop a widespread network of connections. Today, we are subcontractors to General Electric, as partners in a consortium, and take part in setting up a decision support system for neurotraumatology. The analysis of the data generated in the study by the IT team of the Hungarian subsidiary of GE is under constant discussion. However, our biggest triumph is in the role as partners within the big European research program, FP7, we enjoyed the opportunity to cultivate contacts with future partners in applications. For example, one of the areas of research, where we are present as contributors, is the examination of the trauma related disorders of hemostasis.

There is a study, called Tahiti, only involving a few institutions within Europe and we are likely becoming involved. Briefly, a very expensive piece of diagnostic equipment, a ROTEM, will be shipped here, to accurately determine bleeding disorders. In our field of emergency medicine, this could serve a life-saving importance. There is also great potential for cooperation within the field of investigating biomarkers, notably when it comes to dementia and biomarkers which appear years following a stroke. Our own research highlighting the data in patients suffering from brain damage from the Diagnostics Center is worthy of mention. This research investigates the circumstances of the injury, its morphological appearance on MR pictures, and the relationship between probable outcome and

effectiveness of the therapy.

"How does the Hungarian Brain Research Program fit into this line of research?"

"The program has two pillars in which we are involved in. One of them is in clinical research, where we mainly investigate the behavioural and cognitive deficit, the appearance of biomarkers and changes in MRI pictures in minor trauma, and in the other one in which animal trials are taking place. It is important to note in some fields, basic research has become a hobby for its own sake, and unfortunately research into neurotraumatolgy is no exception. What this means is no research results published in the last 30 years proved beneficial to the patients. It was realized in the last decade the value of basic research is in translational studies, meaning basic research will have a clinical relevance, and it investigates phenomena, that are observable at the clinic; in other words, research questions do have clinical relevance. It was a great leap forward for the Hungarian Brain Research Program, when it procured an MRI which computes fine structures, chemical components and certain reactions, by running a software program similar to those in the larger MRI machines used in clinical investigations. Therefore, it has become possible to look into the same questions, and to put the results of basic research in correlation with trials performed on rats. In addition to the MRI, the role played by biomarkers is also significant. When an animal is injured during a trial, the amount of certain polypeptides and amino acids that result from the breakdown of proteins increases, and we can make inferences from this. As the same markers multiply in humans, we can link the two phenomena and their therapies. As a result, researchers and clinicians are finally speaking the same language and can interpret the results

PÉCS MEDICAL SCHOOL HERALD

"Are you currently focused on a particular field of research?"

"I am mostly interested in the short term aspects of brain trauma, which are difficult to investigate. Today, many people make a carrier or a PhD out of how a scratch on the head can evolve into dementia within 40 years. This topic is considerably quite fashionable. We have known for some time that repeated blunt trauma, for example in boxers, results in dementia pugilistica, therefore, these sport's injuries actually endanger cognitive functioning, and can lead to relatively early dementia in a high percentage of cases. I have some notions, why this is so, but they are difficult to prove in animal trials."

"When earlier it was brought up that you were born in Kaposvár, you were quick to point out that you are from Balatonlelle...?"

"I was merely born in Kaposvár, I spent my childhood in Balatonlelle, then I attended the Percel Mór Secondary Grammar School in Siófok, and the students there particularly dislike the students of Kaposvár. This was an inferiority complex at Siófok, as Siófok was always at the second place behind Kaposvár in Somogy county."

"Did you dream one day of becoming an unequalled surgeon even back then?"

"It may sound odd, but I really did dream of neurosurgery even before the entrance exam. I was inspired in grade 7, when I read a long article about this field in a magazine. Fundamentally, I always yearned to become a doctor. There was an old army surgeon, the GP at Balatonlelle, who was a good friend of our family. Once he gave me a medical bag, and my fate was forever sealed. Then a young married doctor-couple found its way to Lelle, and our family became friends with them. The husband became the Doctor of the Agricultural Combinat of Balatonboglár, and his wife worked as a family doctor. When I was writing my final examination in physics at secondary school, my father had an infarction, so he could not be there with me, and it was our friend, the doctor, who brought me to the oral exam. The medical school was therefore an obvious target, but my job became more difficult, when I found out that is nearly impossible to get a position at this clinic. At first I was working with István Merchenthaler, at the Department of Anatomy. He was a fantastic mentor, and in the end he eventually relocated to America. It was by his side that my conviction of doing this really was bolstered. When István left, Zsolt Liposits and I continued the work originally initiated with him, and we also worked with Professor Sétáló. At that time I conducted many surgeries on rats under a surgical microscope, and then I was transferred to the Department of Neurosurgery to take part in the National Scientific Students' Associations Conference. I did research as a sort of underhand, in support of the investigations of Professor Gallyas at the Gallyas Laboratory. It is important to note, at the time of Professor Mérei, no students were allowed to set foot in the clinic. I knew Sanyi *Hudvágner*, he was the Head of Anaesthesiology, at the time, sometimes I snuck in to visit him, and to see first hand, what the patients within the clinic were like, in terms of injury. So, I could not dream of a job here, and when Professor Flerkó, to whom I am very grateful, offered me a position at the Department of Anatomy, I began my career there. Meanwhile, I was planning a move to America, but the military enrollment intervened. While serving, I recieved a call from Mr. Zoli Horváth, who I know as an excellent surgeon and exceptional person, describing to me how one of their colleagues, who was in a professional delegation, did not return from America. This, of course, opened the door of the clinic for me, or else the position will cease to exist. The decision was in the hands of

Professor Dóczi, as a female Neurologist was also applying, but in the end, thanks to the recommendations from Professor Gallyas I was awarded the position. How much Professor Dóczi regretted this I am not sure (he laughs – ed.), because I did not turn out to be one of his more manageable colleagues over the ensuing 20 years. As a second or third person within an organization you can allow yourself some liberties the head of the organization surely cannot. I had the intuition to criticize without being too critical. I am maybe a little less abrasive and distinctively accurate. I see things in black or white, and my instinct includes an edginess, in which I was considerably too undiplomatic to conceal. When it came to my succession, it was a serious concern whether or not I can develop a rapport with the colleagues. I have to mention no one has yet trained me on how to handle this. Yet, even today I have problems with being polite to norm violators, especially if we have already discussed it numerous times. Many of my neurosurgeon colleagues lead their department as a "one man show", because it is comfortable, and does not increase the build-up of plaques on the coronaries. This is why my aim is to always leave the negotiation table with a good taste in our mouth, even if it does not always completely end as we wished."

"When you choose your profession did you know what you are getting into and what this career entails?"

"Not at all. My wife calls me an idealist. I am prone to bury my head in the sand, and just work and work. On my honor, I went out of my way to figure out what I am getting into. I meticulously built everything towards realizing my dream, I was purposeful about it. I read a great many books on neurosurgery, and on every second Friday, when the II. Surgery was on call at the hospital of the Hospitaler Order; I assisted at the operations at night. It is a fact, that at the time the clinic's setup was very bad, and we could only contemplate what was happening inside, it was not worth to fight for getting in and this was an important lesson for me. Whenever I have the chance to speak with our students I emphasize that our institution is an open one, anyone, at any time can attend a surgery. Incidentally, in the new curriculum the students receive little instruction on neurosurgery."

"Where do you find the beauty in this profession?"

"According to psychology, and we were taught this at the university, those of us who become surgeons are indeterminate and have low self esteem. The entirety of medicine and medical care is about the same, as providing care is ultimately an act of self verification. Naturally, I am debating this point, and aside from it, what I found enjoyable in this profession is the pure manual delight. Under the surgical microscope, I was almost working in a virtual reality, on a different plane, when performing experimental operations on animals. This other plane is miraculous. Today, I am astonished by the minimally invasive procedures, when we remove things from vital places without touching them. Professor Schwarcz used to constantly tell us, a surgeon knows exactly what he tries to achieve, and at the end of the surgery he examines if indeed, he achieved it. If on the control records I see what I wanted to achieve then I performed my job well. This does not necessarily make me a good surgeon but I did the job well. If I did not see it, that does not mean I am not a good surgeon, but I have to think hard about what I did wrong, was the problem my goal, or the method, or the subject. Every few months I encounter a case which reminds me that I am not in control of the universe, and we are not masters of life, we were merely given a chance to slightly correct "the colors".

"Dealing with important nerve formations, which are maybe the most sensitive areas of our bodies, I think you have more acute encounters with the goals in life and death, than those working in other specialities. How do you

endure and handle these encounters?"

"I remember the names of those operations which were considered unsuccessful and in which I played a role in, even to this day, despite, admittedly, having a poor memory for names. The saddest part is that it does not matter what I do, and how well I do it, I cannot influence the fate of most of our oncology patients or the suffering of the families. In cases with potentially poor outcomes, the hardest part is stopping on the verge of becoming too involved. Today, this level of involvement is obviously lower than it was 20 years ago, when I started out professionally. But even today it sometimes taxes me and wears me down. We cannot introduce our own emotions into the sorrow dilemma the family faces, but we must remain credible, therefore we cannot distance ourselves from it either. I am not a doctor who attends the funerals of its patients, but medical failure hits me hard. I cannot tolerate, when I have to struggle with irrationality, stemming from personal ignorance. In our oncological cases, we often meet frills of alternative medicine, with the lunacy of homeopathy, and it appals me. I respect the faith of my patients, I believe in knowledge, in hard work, and in the consequences of our actions and sacrifices. I also believe if we help others, we better ourselves, and contribute in moving the world forward.

"You have five children, two of which are grown – a young man of 22 and a younger girl of 16 – and you have three small sons, 6, 4 and two. Would you like them to follow in your steps?"

"We have shown the first two children a frightening example, as with my first wife, working all the time. I had pondered on the oldest son following in my footsteps, but we have successfully vaccinated him against medicine, and my daughter, as well. The youngsters are pampered whenever they are at the clinic; all of my colleagues go out of their way to entertain them. At home, they often ask me about the brain, how a surgery works, and in my room they always clamor to put their hands on the skull. Of the three young ones, the two older absolutely desire to be like me, and the youngest is inseparable from his mother. Hopefully, none of them becomes a neurosurgeon, as I know neurosurgeon dynasties and the successors have a difficult time. It is hard to realistically assess achievement in the shadow of a professor-father, or even next to one, especially at the same university, and it may be even unhealthy.

"How can you come to grips with the three small children and when do you have the time?"

"Admittedly, it is difficult. When the smallest graces me with ten seconds of his attention, then he either kicks me or scales me, so that is how the literal grappling begins ($he\ laughs-Ed$.). We play a lot of board games with the biggest, and the middle child often joins, but he prefers to flip the board when he gets bored. Enter my wife, who wisely steps in to help me out. Life is a delightful struggle with three children at nearly the same age. However, at times fishing or reading some literature is welcomed. I can only be entirely by myself when I am swimming."

"What literature do, or would, you read?"

"Le jour ne se lève pas pour nous" by Robert Merle, was recently published in Hungarian, and I managed to read it over the holidays. In the summer, Satantango proved refreshing for me, and it would be nice to dust off the books I read at the university: the books of Dos Passos and the USA trilogy or the Manhattan transfer. Unfortunately, I was unable to finish the former, so I have to make up for this one day soon. A book by

Professor András Büki would like to introduce his new colleague:

A prominent new colleague joined the Department of Neurosurgery, as of 1 February, 2016!

Dr. Ádám Kuncz (PhD), neurosurgeon, graduated from the Faculty of General Medicine, Medical University of Szeged in 1982. From 1982 to 1985 he worked at the Department of Neurosurgery of the Markusovszky Hospital in Vas county. Then, he continued his work at the Department of Neurosurgery of the University of Szeged up until 2014. Notably, he obtained a Specialty Certificate in neurology in 1986 and in neurosurgery in 1989. He had been taking part in the



Hungarian and English undergraduate and postgraduate education during his time spent at the university. He carried out experimental research in the field of brain volume regulation, and clinical research in cerebrovascular diseases and cranial nerve vascular compression syndromes. He has participated in study trips including Bonn, Stockholm, Mainz and Göttingen. Between 2005 and 2010, he had participated in training programs in neuroendovascular intervention in Miskolc, Szeged and Uppsala. He had worked abroad for almost 8 years in Ireland, England, Sweden and the United Arab Emirates. In 2006, he obtained a PhD degree in clinical neuroscience, and, in 2011, a certificate in Health Services Management at the Faculty of Economics, University of Szeged. His fields of interest include cranial nerve vascular compression syndromes and cerebrovascular disorders. Currently, he is the author of 53 scientific publications and 63 presentations. The primary tasks of the Department of Neurosurgery, University of Pécs, includes the emergency and endovascular treatment of ischemic stroke, and the education of the residents.

Krisztian Ungváry on the Don Bend was just released, and I am really eager to read it."

"Your room is quite puritanical. Do you prefer uncrowded space and simple, functional furniture?"

"I did not move into this room, until, with help from the Dean, we managed to find suitable space for Professor Dóczi. By the way, it is symmetrical to this room, but the balcony was not intentionally built. He moved his furniture over there, as he had grown quite accustomed to them over the years, and I wanted to furbish a functional office, that is simple and bright. Three years ago, when we were drafting the big European application, I saw the office of one of the biggest European intesivists, *David Melon*, who runs the Intensive Therapy Clinic at Cambridge. That room happened to be a fragment of this in size, and was perhaps even simpler. That picture had an impression on me, as it was neat, bright and spacious. Whoever comes in here can sense that the person living here is not the ruler of this room, merely its temporary tenant. For me this message is of utmost importance.

Rita Schweier Photography: László Kalmár

"My lecture is successful if I can convey the knowledge necessary for the students, and at the same time have an impact on their attitudes and emotions."

The Feedback Committee of the Medical Faculty is concerned with students' feedback concerning the education including their satisfaction, specially, their opinion in reference to the lectures and practical training. The predecessor institution, POTE, also considered it important to show teachers, whether their intentions are in accordance with the expectations of students. Over the years, the paperbased data collection process was replaced by online methods as a result of modernization. Even though the student population changed significantly, the importance of feedback remained the same. The Committee focuses on these changes, the process of modifying expectations, and parallels in the development of new methods and attitudes, which help

successful adaptation to constant changes. A workshop was organized in November in order to develop teachers' skills and to present international models, including a discussion centering on their own research results emphasizing the need to increase attendance of lectures. We recently met with Professor Zsuzsanna Füzesi, the Head of the Feedback Committee of the Medical Faculty, and inquired about the efficacy of this workshop, including other relevant topics.

"How has the students' attitudes changed towards education during the last few years?"

"The students today are not better or worse than students of the 20th century, they are just different. The reason for this lies in changes of circumstances, mostly influenced by the development of web-based databases. Earlier, the focus of education was providing a vast amount of information, and today, it is rather about forming attitudes, highlighting contexts, and solving problems. The discrepancy is that the education is organized along on an old paradigm at the University of the Pécs Medical School, including the entire educational spectrum worldwide. This old paradigm is based on the idea of academic skills. The whole system was invented in the past, when there was no public education, and the aim of education served the needs of the industrial revolution. With the establishment of the public education the situation slightly changed, however, provision of information remained the most important aspect. Generations grew up like this, but this is no longer effective. The concept of intelligence has also become more complex today. At the same time, the rapid changes in our world are difficult to follow, as teachers are not able to foresee the development of medicine, technology, or health care 10 years from now. Digitalized health care may enable personalized therapies, but at present we often



have to rely on closed regimens and schemas. The knowledge that we are able to provide today most probably will not be suitably adequate for students 10 years from now. But they will certainly need to be solution-oriented, and be able to answer situations, which are unpredictable today. Consequently, the aim is to enhance creativity and open-mindedness so that they can solve situations which cannot be answered based on their studies from the course-books alone. On the other hand, a very good fundamental knowledge is necessary.

"How did the students formulate their expectations in the survey? How is effective knowledge transfer described by them?"

"The most important problem occurs once they enter higher education and discover their creativity is already impaired by the education system, as personality does not fit into this system. In most places, although there must be exceptions, a unified curriculum is used and the person is not taken into consideration when teaching students. Therefore, when students are admitted to the university their mentality is pragmatic. Their aim is to survive lectures and exams, which is often supported by our teaching methods as well. The most important expectation of students concerning lectures and practices is the preparation for upcoming exams. It is reflected by their feedback: a lecture is good if they know exactly what to study, even without individual thinking and effort.

In the preparation of the workshop including my colleagues Adám Schlégl and Balázs Ernyei, an online research was made for teachers to survey their opinion about the criteria of a good lecture. The study revealed a totally different preference, for example, exam preparation was the last criterion mentioned. Additionally, differences were found in other dimensions as well. While the students prefer dynamic, vigorous lectures, the teachers are focusing on the information, data and facts submitted. In reference to students, it is also important

that they can take notes easily during the lectures, on the other hand for teachers it was less essential. It is obvious the expectations of the two parties often do not meet. Consequently, even though the lecturers are wellprepared, the students are sometimes dissatisfied."

"Despite these discrepancies the situation may be solved if the lecturer is an enthusiastic, and a sparkling personality, and it is also helpful if he or she involves the students as partners during the classes."

"Precisely. During the first few years, a special emphasis is beneficial in regards to a supportive attitude as students often feel lost in the large university system. Later, this relationship is also important due to the teacher's role as a model. The clinicians who work with them have an immense impact on their decision on what specialization they select. If the lecturer has no special personality, and does not have exceptional presenter qualities, but he/she is emphatic, takes into account reasonable requests of students, clearly defines the requirements, moreover, he or she is predictable and reliable, and students are going to admire him or her. The role models are especially important in clinical practice. Every movement or meta-communication matters and students either reject it, for example, if a patient is treated unfairly, or consider worthy in regards as a suitable model to follow.

"What are the useful recommendations, guidelines for teachers as a result of the workshop?"

"The most important key is they should possess the courage to change. This does not mean to modify the background in their presentations, because it is technical question and helps only briefly. They should think over what makes their lecture, practice or seminar enjoyable. If it is boring for me as a teacher, it will be boring for the student. The teacher should be enthusiastic and convinced that his/her lecture is going to be the best in the world. We have to fight for our students' attention every day, and it also entails experimentation, which can also have pitfalls. A new method might not bring the expected success at first, but it can be refined later, so we can say, at the very least, we tried something different. Unfortunately, we, as instructors, also lose our creativity in the mass education system. While we might be creative in our scientific work, we do not have the energy to do so in teaching, and we usually follow age-old traditions. It is well known that all changes are time and energy consuming, but they have immense dividends and offer pleasure to the person who worked towards effecting these changes. At the same time, it provides an opportunity to learn about ourselves and about the methods we employ. The real compensation is the students' interest and positive feedback.

Every teacher should discover his/her own way. There is no universal methodology as we teach different subjects. It is evident that a biochemistry teacher has a more difficult task than I have. However, it is possible to improve efficacy and satisfaction everywhere by using more interaction and raising awareness, as it was suggested by the results of the survey.

We broke up into small groups during the workshops, in which teachers developed methods on how

Dr. Zsuzsanna Füzesi professor graduated in 1978 and achieved her Doctor of Medicine degree in Pécs, later she earned her sociologist degree at the Faculty of Arts of Eötvös Lóránd University. As a member of the Behavioral Sciences Department she participates in undergraduate, postgraduate and PhD education at the medical school, and at other faculties and universities. She is a core member of the Doctoral School of Demography and Sociology. She has a leading role in several national and international basic and applied research projects. She is a member of the Faculty Council, since 2013 a representative of the Senate of the University of Pécs. She has been committed to quality teaching and responsible partnership of students in education. Therefore, she is willing to experiment with new methods, primarily in small groups. From 2006, she is the Secretary, and since 2010 the Head of the Feedback Committee. The objective of the committee is to assist the work of teachers based on the feedback, in support of their efforts towards meeting or exceeding the expectations of students. The committee's work is well established in consistent and ongoing research.

to arouse and keep up the students' interests. We do not own the philosopher's stone, it is more commonly referred to brainstorming. One idea was to use trigger films at the beginning of classes, which are 1-2 minute motivation videos, to enhance creative thinking. Some teachers emphasized the importance of personal involvement, for example providing opportunities for students to make decisions in a given case. The use of digital technology was a fundamental question in our discussions."

"Can you define the criteria of a good lecture after all?"

"It is difficult to define, but let me describe my experience: my lecture is successful if I can convey the knowledge necessary for the students, and at the same time have an impact on their attitudes and emotions. The excitement is important, including potential questions left open so that students feel that they are engaged in the common thinking process. I also find it essential for lectures to beneficial messages. The students will remember the lecturer's tone, dynamism, meta-communication, and very likely, lasting impression of a meaningful message. They will study the remainder from the course-books or notes. This is my definition of the "ideal lecture", but of course there are other concepts, which are also appropriate."

"What was the interest like toward the workshop?"

"More than 100 people registered, the council chamber was full, which entirely satisfied our goal. There were less clinicians, as they are overwhelmed with work. Since we all teach the adult generation without qualification, the idea of didactic-pedagogical communication training was suggested by the participants. Although no mandatory, it is a chance and must be offered to those who wish like to improve in this area. I myself usually attend these courses if and when I can, as it proves beneficial and I also learn a great deal about myself. It is part of our mental well-being, if we are contented with our role as a teacher, and consider it important that we meet hundreds

of students each year who absorb our messages. Moreover, students are extremely grateful if they meet a good teacher, since the impersonal attitude starts already in kindergarten. They only meet few people who can serve as a model for them. We should be authentic in our profession and also behave maturely with emotions. The good news is that we can learn this. Someone who is not satisfied enough with his scientific career; still waiting for the Nobel Prize, can become a successful teacher if he/she invests enough energy into this. I believe that if you would like to become a good teacher through conscious self-improvement, you will become a better researcher and person at the same time. We have the potential to be an immense impact on our students; therefore the direction of this effect is essential."

"It would be beneficial if the students were more motivated?"

"That is exactly right, but they are just as overwhelmed as the teachers. It was brought up during the workshop that we should assess what we expect from our students in different subjects, and whether these requirements can be fulfilled. It is almost impossible to expect them to attend the lectures, be enthusiastic and creative and look for new opportunities to widen their knowledge. This generation has a pragmatic way of thinking and knows what is considerable worthy to invest in. If they can achieve the information in ten minutes, instead of the forty-five minute lecture, they will choose the ten minute version. So, we need to fill the forty-five minutes with something, which is only available from us, and this is definitely not the information itself. Let me talk about my field: today, behavioural science subjects gained more importance among students, because during these classes they obtain information about the interdisciplinarity of the special fields and the patient is in the focus. Here they receive something new, which makes them more motivated in their medical profession. They realize how their knowledge is related to practising medicine."

"Would it be more effective to have more practical classes? Do lectures have a justified role in the education today?"

"The solution is in between the two forms. The traditional lecture has its role, if it is not just about conveying information. I also try to make this type of education more complex, not only to provide data, but to convey attitudes, to raise questions and to communicate and think interactively. Of course, the frontal method makes it difficult, but it is not impossible. It is also a useful method to ask students to prepare in advance and during the lectures and/or practices and we discuss the topics raised. I need to emphasize that few teachers educate a lot of students in today's system. Most of them teach in three languages, and have a number of classes, so it is a vast effort. We should be careful what to ask from them as they easily can burn out."

"Till, you seem to struggle with the impossible."

"Yes, it is actually true and if changes are required as an external constraint, we are not able to take a step forward. The management continuously indicates the problems of understaffing and overworking the teachers, including other difficulties, such as the lack of seats and classroom availability in support of the students. The inner motivation to change and achieve mental well-being can only generate changes in teachers, which also helps them to cope with difficulties. Just imagine how positive feedback from the students can re-energize teachers towards a feeling of elatedness and sincere motivation?"

"If I fully understand, the aim of teachers should be to exemplify motivation and a positive outlook, even if and when it is impeded by circumstances. But how can you motivate someone to be happy?"

(laughing – editor.) "Happiness means we are satisfied with our lives, or with certain dimensions of it. We ourselves can build up our own happiness. Happiness will not find us; we have to create the conditions to it. If I perform well as a teacher, it brings me pleasure, as being a teacher is one of my most relished roles. I prepare a feedback for myself following each course of mine, and critical remarks are as important as positive reinforcement. Several times it is not me, but the method I use which provides something extra to the students and they make the best out of it. Teamwork provides an immediate impact upon one another. In this way, they learn a new approach or a different a knowledge, which enriches them."

"What is the next task of the Feedback Committee following the workshop, namely after data-collection, gaining experience and summary?"

"We are going to perform the student surveys each semester. Additionally, the Vice-Dean for Education asked us to host more workshops, of which the aim is to develop and enhance teacher. We all feel the need to have these voluntary meetings regularly, especially to discuss our problems and struggles. You might feel helpless alone, and it is easier to find answers to questions in the light of others' concerns. For example, I recently learned from a colleague of mine that students need clear requirements in a written form at the beginning of the semester in order for them to identify with expectations. The afore-mentioned workshops will be supplemented by organized trainings improving skills and methods. Our task is to develop the conceptual framework and to realize these concepts. Fortunately, the Dean's management supports the strategy of improving quality of education. There are professionals who help our training within the faculty, but external experts are also involved. Ms. Katalin Barabás, for instance is a teacher from Szeged, who has been working on the methodology of educating medical students, and in addition, she is indeed a charming personality. We already had the opportunity for training as part of a specific project program, but the information cannot reach to those most in need. We have to work on a more democratic information system, so that everyone can become actively involved. I believe, including many of my colleagues, our knowledge and skills are not fully prepared once we begin our employment with the university. The improvement of these goals is primarily important for us; but it is not useless for our students, either."

> Rita Schweier Photo: Dávid Verébi

Microvascular Laboratory

he Microvascular Laboratory can be found in the Department for Translational Medicine, which formerly was known as the Department of Pathophysiology and Gerontology. In our laboratory, we examine the abnormal morphological and functional adaptation of cerebral (cerebri media, basilar artery) and other (aortic, carotid and femoral arteries, small veins) arteries, and the pathomechanisms (oxidative stress and inflammatory processes) participating in these processes primarily in high blood pressure and following a traumatic brain injury.

Intracerebral hemorrhage has the highest mortality rate and is responsible for 10-15% of all stroke incidences. Its major risk factor is hypertension. Previous studies found various diseases (cardiovascular diseases, hypertension) or trauma could alter the regulation of the vasomotor tone by the endothelium and the smooth muscles.

In our wire myograph system, we examine the isometric response of arteries isolated from rats and mice, using various vasomotor substances whose mechanism of action is already known (receptor mediated agonist and antagonists). In our pressure myograph system, we examine the intrinsic vascular responses given to hemodynamic forces. In our research we prefer the use of animals featuring high blood pressure, stroke, traumatic brain injury and medicated animals.

In addition to functional research, our colleagues have the opportunity to apply cell biological methods, such as PCR and Western blot. A fluorescent microscope and a laser Doppler machine are also at our disposal.

In our laboratory we are proud to be able to work together with Professor *Åkos Koller*, who is an internationally renowned researcher (the Vice Rector of the University of Physical Education) and has numerous foreign research connections, and Dr. Péter József Tóth, who has returned from the USA where he received the prestigious research award from the American Heart Association, and also won the János Bolyai Research Fellowship Award. Dr. Nikolett Szarka, PhD student, who was awarded the Marie Curie Research Fellowship; Ivan Ivic,



PhD student, also received the Marie Curie Research Fellowship Award, and *Zoltán Németh*, who is on the threshold of earning his PhD degree, are all prominent members of our esteemed staff.

Dr. Péter József Tóth and Nikolett Szarka

A Swiss study trip in the field of tracheal surgery

Congenital or acquired trachea stenosis often results in life-threatening severe respiratory insufficiency, and generally requires emergency medical intervention. To ensure adequate and operational airways, a tracheotomy is performed, which, in certain cases, can prevent an acute life-threatening situation, however, does not provide a long-term solution. Tracheotomy cannot offer causal only symptomatic treatment and, in addition, does not guarantee free airflow in the narrow passageways located in the lower part of the trachea. Tracheotomy often makes subsequent tracheal reconstructive surgery more challenging or even impossible. The ENT clinic of the University of Lausanne, which lies on the shores of Lake Geneva, is the most renowned center of tracheal surgery in the world. Professor Monnier and his successor, Dr. Kishore Sandu, from Switzerland, in cooperation with American and Italian professors have been offering courses which are highly regarded by professionlas in this field, for



years. This year I was offered to participate in the Cadaver Dissection Workshop held on 25-27 January. More than 25 specialists from 35 countries from all over the world attended the workshop. In Hungary, tracheal surgery is still in its early stage. In Pécs, the Department of Otorhinolaryngology, Head and Neck Surgery intends to maintain pace with the latest procedures. Therefore, it was especially useful that I attend this course and practice the technically demanding tracheal surgical procedures on sheep larynxes, tracheas and esophagus. In acquiring the vast experience gained in the course, I can now freely admit to the already immense selection of surgeries performed within our clinic likely will expand with new surgical expertise.

Dr. László Lujber, Associate Professor

The herb of the year 2016: chamomile (Matricaria chamomilla)

The US Department of Herbal Pharmaceutical Company in the year 2016 selected chamomile as herb of the year. Several national researchers have studied the herb from both a pharmacognosical and rural perspective. Invaluable breeding areas are located in the Tiszántúl (Trans Tisza) region within the European Union. Therefore, it is a real Hungarian speciality, often referred to as "Hungaricum". Although the benefits of **chamomile** have long been utilized in medicine, the results of new research and studies are still expanding the use.

Belonging to the family Asteraceae Chamomile (Matricaria recutita L.), it is a native, especially in Eastern Europe and Asia Minor, but is also present in Australia and America. It can be found in our country in wild fields among saline soils. It is a light and warmth-loving, often overwintering plant with a height of 5-10 centimeters, but the cultivated species attain a height up to 80 centimeters! It features lance-shaped leaves. Its yellow tubular flowers of 1.5-2 cm stand away from the main stem at the top or at the end of side branches. From April through August, during the flowering period, it develops a cone-shape, and inside it is hollow, can easily be separated from similar species (e.g. Matricaria inodora L., Matricaria discoidea DC.). Chamomile flower heads (Matricariae flos) liquid extract (Matricaria extractum fluidum) and essential oil (Matricariae aetheroleum) are described in the Eighth Hungarian Medicine Book. The liquid extract is made primarily from the flowers and has a characteristic odor and bitter-taste which contains

at least 0.3% of **blue essential oil**. The chamomile oil present in the flowers by 0.5-1.5% is obtained through water vapor distillation. Its typically dark blue color is due to its **chamazulene** content. In the oil, in addition to the fore mentioned chamazulene enin dicicloether and large quantities of oxidized **sesquiterpenes** and their derivatives (e.g. alphabisabolol, bisabolol oxide A) often occur. In the flower flavonoids (e.g. apigenin, luteolin, patuletin) and glycosides, coumarins (e.g. Umbelliferone, herniarin) and 10% of mucus can be found.

Indications: The effect of chamomile is characteristically anti-inflammatory for skin and mucous membranes and this has been successfully used as a medicinal form of treatment for centuries, yet the herb also features smooth muscle antispasmodic, antibacterial and immune-stimulant properties. Its anti-inflammatory effect is due to flavonoids and essential oils found in chamazulene, and its derivatives alpha-bizabolol, while the smooth muscle spasmolytic effect is due to flavonoid and enindicicloether components. Today, a number of animal studies have demonstrated apigenin, bisabolol and chamazulene inhibit lipoxygenase (LOX) and cyclooxygenase (COX) enzymes and chamazulenecarboxylic acid selectively inhibit COX-2. Human studies, in which it is generally compared with a steroid as control, also confirm the anti-inflammatory property of chamomile. In **dermatology**, the herbal aqueous or alcoholic extract and the essential oil of chamomile is an antiphlogistic successfully



applied in contact dermatitis, eczema, pressure sores, and burn treatment. The essential oil is a common component in pediatric formulations (ointments, creams, tinctures), e.g. Herpesil gel, ointment Psoratinex. Additionally, its extract can also be used for mouth and throat cleansing and gum tincture (e.g. Tinctura Three, Tinctura adstringens FoNoVII). The antimicrobial properties of chamomile have been demonstrated in vitro by various techniques for multiple species of fungi and Gram-positive bacteria. Today, particularly during the inhalation for cold symptoms, it is used to relieve bronchitis (e.g. Naturland Breath ointment for adults, Naturland ointments). It is also used for the preparation of various skin care products in the cosmetics industry, and for vermouths in the **spirits industry**. Chamomile aqueous extract, which contains flavonoids, mucus and essential oil components, is internally consumed as tea for intestinal problems and gastroenteritis, including treating gastrointestinal pain, dyspepsia, and nasal symptoms (e.g. Species carminativa, Species gastrica VII.). In a human study which examined the effects of chamomile's anti-inflammatory analgesic effects on gastrointestinal complaints, 104 patients were originally enrolled. During the six weeks of treatment with α -bisabolol and apigenin 7-glycosides standardized chamomile extract, the condition of each patient improved as a result. In 44.2% of the cases, the complaints were completely eliminated. Animal studies have demonstrated in vivo the preventive effect of the aqueous extract of chamomile on experimental ulcers. Chamomile

today is used for ulcer diseases as a supplement, as well as in various "drug holidays" of various therapies. Previously, the aqueous extract was used externally as a warm wrap for ocular inflammation, vaginitis and also for slow healing wounds, hemorrhoids and treatment of leg ulcers. We wish to call the attention to the fact that when there is no information on the microbiological purity of the chamomile product, it should not be used for any of the above purposes! It can also be found in ointments for hemorrhoids, varicose veins due to the antiphlogistic effect of the essential oil (e.g. Unguentum haemorrhoidale VII. Inter-herb Kalmil Plus varicose vein cream).

Dosage: With tea, the recommended daily amount for adults: consumption of 3 g drug to 150 ml of water daily between meals for 3-4 times. From the 50% alcoholic extract, 3-6 ml is recommended. Externally, for gargling or as paint the infusion of 3-10% or 1% liquid extract or 5% tincture should be used. In the case of inhalation, a few drops of

essential oils are recommended to use in one litre of warm water (60°C) instilled.

Side effects and contraindications: chamomile can be used safely; it has no interactions with other medicinal products. Some recent studies, however, suggest the interaction of chamomile and analgesics. In case of pregnancy, it can be used as a tea with appropriate caution. However, the use of essential oil is not recommended in pregnancy, asthma or high blood pressure. Allergic reactions in some cases, are due to contamination with mayweed (*Anthemis Cotula*, stinking chamomile), so in case of a high-quality chamomile, allergic reaction rarely occurs. However, if the patient has a known allergy towards other kinds of Asteraceae, chamomile should be applied with caution, due to the possibility of cross allergy.

Dr. Kamilla Ács, pharmacist, PhD student Dr. Györgyi Horváth, associate professor

Mózsik Gy, Abdel-Salam OME, Takeuchi K (Eds):

Capsaicin-Sensitive Neural Afferentation and the Gastrointestinal Tract: From Bench to Bedside

Published by INTECH, Rijeka, 2014, ISBN: 978-953-51-1631-8*

The book discusses the latest national and international achievements in the gastrointestinal capsaicin research. It is necessary to understand the background to assess whether capsaicin stimulates (in low dosages, however, in high dosages, it inhibits) the function of afferent nerve endings. Capsaicin releases CGRP (calcitonin gene-related peptide) and SP (substance P) neuropeptides

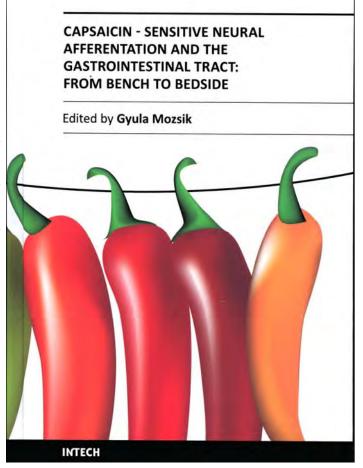
through the TRPV1 stimulation. Animal experiments have demonstrated that small doses of capsaicin (orally) prevent gastric and intestinal damage induced by various chemical agents. In humans, it facilitates the healing of mucosal inflammation induced by non-steroidal anti-inflammatory drugs, alcohol or *Helicobacter pylori*.

The book comprises of 364 pages, and describes in six sections and 11 chapters the function of capsaicin-sensitive nerves in cell culture, animal models, healthy humans and patients. The book summarizes the results of an international, thorough laboratory, human drug development and clinical pharmacological research. Four chapters detail the results of different institution of UP, like the Department of Pharmacology and Pharmacotherapy, Pharmaceutical Chemistry (now part of the Faculty of Pharmacy), the First Department of Medicine, Department of Clinical Chemistry and Pannon-Pharma pharmaceutical company (Pécsvárad). These include the discovery made in Pécs highlighting the positive impact of capsaicin when applied to the gastrointestinal tract, in addition to animal and human experimental results, the different steps of drug development, design, and licensing of the tests performed.

The book also discusses how the University of Pécs implemented "innovative drug discovery and development" between 2005 and 2013.

Gyula Mózsik

* The editors of the book are Professor Abdel-Salam OME (Cairo, Egypt), who earned his PhD from UP in 1996, Takeuchi K pharmacological researcher (Tokyo, Japan) who earned his Doctor Honoris Causa in 2002 from the University of Pécs.



Contents

Preface Section 1 Historical, Physiological and Pharmacological Backgrounds of Capsaicin(oids) in Gastrointestinal Tract Chapter 1 Discovery and Mechanism of **Gastroprotective Action of Capsaicin** János Szolcsányi Section 2 Plant (natural) origin capsaicin(oids) and their necessary regulatory chemical qualifications required by the international authorities Chapter 2 Pharmacobotanical Analysis and Regulatory Qualification of Capsicum Fruits and Capsicum Extracts — A Survey Mónika Kuzma, Tibor Pást, Gyula Mózsik and Pál Perjési **Section 3 Observations with Isolated Gastric Cells** Obtained from the Rat Stomach Allyl Isothiocyanate, a Pungent Ingredient Chapter 3 of Wasabi and Mustard Oil, Impairs Gastric Paracellular Barrier in Primary Cultures from the Rat Stomach via TRPA1-**Independent Pathway** Kimihito Tashima, Misako Kabashima, Kenjiro Matsumoto, Shingo Yano, Susan J. Hagen and Syunji Horie Section 4 Observations with Capsaicin(oids) in the **Gastrointestinal Tract of Animals** Chapter 4 **Cooperative Effects of Neuronal Nitric** Oxide Synthase and Endothelial Nitric Oxide Synthase on Gastric Hyperemic Response to Intragastric Capsaícin Syunji Horie, Masaki Raimura, Kenjiro Matsumoto, Takao Namiki, Katsutoshi Terasawa, John V. Priestley and Kimihito Tashima Chapter 5 **Modulation of Capsaicin-Induced Gastric Protection by Endogenous Prostaglandins** through EP2/IP Receptors Koji Takeuchi **Mechanism of Capsaicin-Stimulated Gastric** Chapter 6 HC0₃- Secretion – Comparison with Mucosal Acidification Koji Takeuchi and Eitaro Aihara Chapter 7 The Role of Capsaicin-Sensitive Afferent **Nerves in Gastric Mucosal Protection Initiated Centrally or Peripherally under**

Experimental Conditions

Stable Gastric Pentadecapeptide BPC 157,

Somatosensory Neurons and Their Protection and Therapeutic Extensions —

K. Gyires

a Survey

Predrag Sikiric

Chapter 8

Chapter 9 Lafutidine Protects the NSAID-Induced Small Intestinal Lesions Mediated by **Capsaicin-Sensitive Afferent Neurons** Kikuko Amagase and Koji Takeuchi **Observations with Capsaicin in the Human** Section 5 **Gastrointestinal Tract** Chapter 10 Capsaicin-Sensitive Afferent Nerves and the **Human Gastrointestinal Tract** Gyula Mózsik, András Dömötör, József Czimmer, Imre L. Szabó and János Szolcsányi Section 6 **Development and Industrial Production of** Capsaicin(oids)-Containing Drug and Drug **Combinations: Preclinical Dossier, Chronic** Capsaicin Toxicology, Pathways of Classical Clinical Pharmacology in Human Healthy **Subjects and in Patients** Capsaicin is a New Gastrointestinal Chapter 11 Mucosai Protecting Drug Candidate in **Humans** — **Pharmaceutical Development** and Production Based on Clinical **Pharmacology** Gyula Mózsik, Tibor Pást, Tamás Habon, Zsuzsanna Keszthelyi, Pál Perjési, Mónika

INVITATION

Kuzma, Barbara Sándor, János Szolcsányi,

M.E. Abdel-Salam Omar and Mária Szálai

Department of Paediatrics, Medical Faculty of Pécs University invites you cordially to the

26th Imre Pilaszanovich Memorial Lecture.

Guest Speakers

Professor Sameh SHEHATA (The Medical Faculty, University Alexandria / Egypt).



Title

"Medicine in ancient Egypt" (40 min)





Dr. György Velkey (director-general and head physician at Bethesda Children's Hospital of the Hungarian Reformed Church, president of the Hungarian Paediatric Association, president of the Hungarian Association of Hospitals)

"Our child health care and challenges of the 21th century" (35 min)

Venue: Main (theoretical) Building of the Medical Faculty

of Pécs University

1st floor, Donhoffer Lecture Hall Date: 4th April 2016 (Monday) 16:00

NEWS AND INFORMATION FROM DEPARTMENTS AND CLINICS

Department of Anatomy

- The mini-symposium of the Pharmaceutical Research Section of the National Brain Research Programme organised by Richter Gedeon Ltd., was held in Budapest on 6th January 2016, in which *Andrea Tamás* presented the latest results of the MTA-PTE (Hungarian Academy of Sciences-University of Pécs) "Lendület" ('Momentum') PACAP research group in connection with Parkinson's disease.
- Nine members of the Department of Anatomy participated in the IBRO workshop held on 21-22 January 2016 in Budapest including poster presentations: Dóra Reglődi, Andrea Tamás, Balázs Gaszner, József Farkas, Alexandra Váczy, Adél Jüngling. Additionally, Tamás Gaszner, László Kovács and Zsófia Szabó participated in the role of student researchers. PhD students also took part in the "Hungarian Neuroscience Doctoral Conference" event organized for them on the day preceding the conference.

1st Department of Internal Medicine

- The Third Budapest Cardiology Days workshop highlighted the topic "Life-years Regained Metabolism and Cardiovascular Diseases" 13-14 November 2015, *László Bajnok* from the Department of Endocrinology and Metabolism gave a paper on "Disturbances of lipid metabolism and the risk of cardiovascular diseases".
- Emese Mezősi lectured on "Cushing's Disease" and László Bajnok offered a lecture with the title 'The Critically III Patient' during the "9th Endocrinological Post-graduate Training Course" organized by the 2nd Department of Internal Medicine of the Semmelweis University, 27-28 November 2015.
- Representing the Cardiology and Angiology Workgroup, *Dávid Kovács*, PhD student, attended the post-graduate training course organized by the Swedish company, Perimed, in Stockholm, 19-21 November 2015. The course provided an opportunity to gain in-depth information about the technical background and operational use of the laser Doppler in research and clinical work, together with tissue-oxygen and carbon-dioxide meters and

- the toe sphygmomanometer also available at our Angiology sub-department. Our aim is to further facilitate the spread of non-invasive angiological diagnostics already widely used at an international level.
- The leader of the Department of Endocrinology and Metabolism of our Clinic, *Emese Mezősi* presented a lecture at the symposium entitled "Individualized Management of Well- differentiated Thyroid Cancer" in Athens, Greece, on 5. December 2015 with the title "Predictive value of single-photon emission computed tomography after radio-iodine therapy in differentiated thyroid cancer".
- The head of the Department of Infectology, *Zoltán Péterfi*, presented a lecture with the title "The Relationship Between Addictology and Liver Diseases" on 28. January 2016 at the mandatory post-graduate training course organized by the Department of Psychiatry and Psychothearpy, University of Pécs, and also presented a second lecture entitled "The Pulmonological Aspects of HIV/AIDS" at the elective post-graduate training course organized by the Hungarian Association of Pulmonologists on 30. January 2016 hosted by the same institution.
- Representing the Department of Cardiology and Angiology, *Kálmán Tóth* presented a summarizing lecture with the title "Novel Research Results New Antidiabetics" at the "Heart Insufficiency Days" at the "8th MKT" 22-23 January 2016, Hajduszoboszlóin addition to chairing the diabetes and heart insufficiency sections. At the same event, *Tamás Habon* presented a lecture entitled, "Sarcopenia" in the section: "Treatment of patients with cardiac insufficiency", and also fulfilled the role of chair.
- The annual congress of the Oncopulmonological section of the MTT was held in Budapest 3-5 December, in which Zoltán Balikó, representing the Pulmonology Workgroup, was the chairperson of two sections and also presented our experiences on the Roche Symposium highlighting our patients with adenocarcinoma receiving Avastin. Veronika Sárosi was invited to present a summary lecture with the title, "The Role of Molecular Targeted Therapies in Patients with Brain Metastases", and gave another lecture entitled, "Immunotherapy for all Patients

- with NSCLS?" at the subsequent BMS Symposium.
- The mandatory post-graduate training course of the Hungarian Association of Pulmonologists was organized in Budapest, 29-30 January 2016, including a program which has been planned by *Zoltán Balikó* for several years. This year, special attention was devoted to rare infections with pulmonological manifestations, including a lecture by *István Ruzsics* on casuistics with the title "Pertussis, as a Cause of Collapse". Our colleague from the Department of Infectology, *Zsuzsanna Nemes*, was also invited to give a lecture during this honoured event.

2nd Department of Internal Medicine and Nephrology Centre

■ The National Meeting of Delegates of the Hungarian Medical Chamber elected *István Wittmann* in November 2015, to be the president of the Ethics Committee of the Hungarian Medical Chamber, thereby, at the same time, a attaning a membership among the leaders of the Hungarian Medical Chamber.

Department of Physiology

- Several members of the Department of Physiology participated in the "Conference for PhD and Student Researchers" organized by the Neuroscience Centre of the University of Pécs and the Szentágothai János Research Centre, 5-6 November 2015. Anna Budai offered a lecture as a PhD student, including the title "Evaluation of Random Dot Stereotests in Clinical Practice", Gábor Horváth's paper featuring the title: "Reaction times upon cyclopean stimuli with crossed and uncrossed binocular disparity refer to the existence of processing mechanisms with different contrast sensitivity". András Czigler a member of the Student Researchers' Society offered a lecture including the title: "The use of adaptive threshold finding algorythms in the definition of visus and contrast thresholds". Notably, Anna Budai, Gábor Horváth and András Czigler were awarded a second prize in their section.
- The Homeostatic Regulation Research Group led by Professor *Zoltán Karádi* and the Motivation and Learning Research Group led by *László*

Lénárd, both from the Department of Physiology, made their first appearance at the "Szentágothai Seminar" organized jointly by the Neuroscience Centre of the University of Pécs and the Szentágothai János Research Centre. Following Professor Karádi's general introduction, Professor Lénárd introduced his research group including his lecture entitled: "The Role of Monoamines and Peptidergic Mechanisms in the Central Nervous System Regulation of Learning- Reinforcement and Memory". This was followed by lectures including Rita Gálosi on "MRI Examinations in Rats: The Use of Manganese Contrast as a Novel Possibility for the Identification of Cerebral Structures Taking Part in the Regulation of Behaviour", Zoltán Petykó offered his lecture "Responses of Medial Prefrontal Cortical Neurons During Appetitive Pavlovian Conditioning", László Péczely offered his lecture "The Role of Dopamine Receptors of the Ventral Pallidum in Memory Consolidation", Tamás Ollman offered his lecture "The Role of Neurotensinergic Mechanisms in the Regulation of Behaviour", Erika Kertes offered her lecture "The Effects of Substance P on Learning and Reinforcement Processes" and Anita Kovács's lecture was entitled "The Effects of RFamid-type Peptides (FRFP-1 and RFRP-3) on Food Uptake and Behaviour in the Central Nucleus of the Amygdala". Subsequently, Professor Karádi introduced the presentations given by members of the Homeostatic Regulation Research Group including his lecture entitled, "The Functional Significance of the Limbic Prosencephalonic Glucose-monitoring Neuronal Network". From this Research Group, Edina Hormay presented "The Investigation of the Role of Cingular Cortical Glucose-monitoring Neurons on Feeding and Metabolism" and Bettina Csetényi offered her presentation "The complex functional features of orbito-frontal cortical glucosemonitoring neurons".

■ Several members of the Department of Physiology took part in the IBRO Workshop 2016, 21-22 January, in Budapest with the following posters: *J. Pálhalmi* et.al.: "Single Molecule Imaging of AMPA Receptor in Live Neural Network of Adult Mouse Brain"; *J. Pálhalmi* et. al.: "A Novel Method for Analysing Lateral Diffusion of Single Receptor Molecules in the Plasma Membrane"; *F. Lengyel*, and *I. Ábrahám*: "Rapid Action of Estradiol

on Cortical Actin Network: Superresolution Microscopy Studies"; G. Horváth et.al.: "RTs to Cyclopean Stimuli Reveal Disparity Tuning and Different Contrast Sensitive Mechanisms for Processing Crossed and Uncrossed Disparities"; J. Radó: "Measurement of Visual Contrast Threshold and Reaction Time in Awake Behaving Cats"; J. Radó et al: "Characterisation and Calibration of Polarised LCD and OLED Displays for Presentation of Dynamic Random Dot Patterns of Controlled Luminance and Contrast"; A. Budai et. al.: "Screening of Amblyopia in Preschool Children -First Results of a Clinical Study".

Department of Pharmacognosy

■ Colleagues from our institute participated in the conference entitled "9th Actual Flora and Vegetation Research in the Carpathian Basin" 12-14 February, 2016 Budapest including: *R. Csepregi* et.al.: "The Dispersion and Ethno-botanic Data of *Anthyllis Vulneraria*, *Galium Mollugo* and *Veronica Beccabunga* in Transylvania"; *V.L. Balázs* et.al.: "The European Dispersion of *Helleborus* Species and Their Role in Folk Medicine"; *V.L. Balázs* et.al.: "The Allopathic Effects of *Helianthus Tuberosus* s. l. on Native and Adventive Species".

Department of Otorhinolaryngology and Head and Neck Surgery

attended a course on nasal and nasal sinus surgery organized by the Hradec Kralovei ENT Clinic in Brno, Czech Republic 24- 27 November 2015. The course offered a perfect opportunity towards gaining further in-depth knowledge in the area of rhinology and also to establish contacts at the international level. In addition to theoretical lectures, the course also included a dissection practice on a cadaver, which allowed participants to practice both endoscopic and open surgical techniques.

Department of Forensic Medicine

■ Our colleagues participated in the scientific meeting with case presentations of the Association of Hungarian Forensic Specialists (MIOT) 15. January 2016 including the following lectures: *Viktor Soma Poór* and colleagues: "Drowning? – Demonstra-

tion of Novel Diagnostic Methods Through a Case"; *Dénes Tóth* and colleagues: "More than natural!? The Histopathological Role of Forensic Medicine on Suspicion of an Unnatural Death—a Case Presentation".

Department of Translational Medicine

- Members of our department presented the following papers at the IBRO Workshop Conference, 21-22 January, in Budapest: N. Füredi et.al.: "Metabolic and Functional Morphological Effects of Alpha Melanocyte Stimulating Hormone and MC4 Receptor Antagonist (HS024) on Urocortin 1 Neurons of the Central Projecting Edinger-Westphal Nucleus"; M. Solymár et.al. "Neural and Non-neural Transient Receptor Potential Vanilloid-1 Channels Differently Mediate the Vasomotor Responses to Changes in pH"; A. Mikó et.al: "The Role of the Transient Receptor Potential Vanilloid-1 Channel and Regulatory Neuropeptides in the Agerelated Changes of Body Mass in TRPV1 Desensitized Rats".
- The name of our department unit changes from Department of Pathophysiology and Gerontology to Department of Translational Medicine.

Department of Surgery

- Zalán Szántó offered a lecture at the Annual Conference of the Onco-pulmonological Section of the Hungarian Association of Pulmonologists in Budapest, presenting the results of the first year of lung cancer screening with a mobile application.
- András Vereczkei was invited to participate at the faculty and committee meetings of the winter conference of the "European Association for Endoscopic Surgery" in Amsterdam.

Department of Urology

■ Three-dimensional laparoscopic surgeries have been performed at the Department of Urology since the end of last year. This technique makes surgical orientation easier for the surgeon, thus contributes to an increased safety of more complex interventions.

Developments Worth Billions at University of Pécs

The government of Hungary has recently decided to grant 24 billion forints in support of the developments related to the Modern Cities program at the University of Pécs (UP).

s is well known, in the spring of 2015 the government of Hungary and the Pécs City Council reached an agreement towards developing the framework of the Modern Cities program, a significant element of which is to enhance the quality of higher education. Owing to this agreement, the first university of Hungary, the University of Pécs, is now immersed into the strategic development which is promoted by the government including a substantial fund, forms an integral part of this program.

Gabriella Földesi, the Director of the Ministry of Human Capacities, remarked at a press conference on Tuesday, "The University of Pécs is of key importance to both the Hungarian higher education institutions and to the life of the region and within the city. One could say that the university is the jewel of the city of Pécs. It is important to stress the foundation of this development is the agreement between Pécs, a city with county rights, and the university, and this development is most certainly supported by the government. The Hungarian state supports the implementation of the project by allocating 4.5 billion forints

beginning in 2016, and in 2017 the allocation will reportedly increase to 12.3 billion forints and in subsequent years it will exceed 4 billion forints. I, as a representative of the Ministry of Human Capacities, steadfastly assure you of our support", emphasised the Director of the Ministry.

Zsolt Páva, mayor of Pécs, a city with county rights, commented, "The university is one of the main resources of Pécs, which can channel the everyday life of the city into the direction of a significant development with its capacities and research base. Owing to the developments within the university to be implemented in the framework of the Modern Cities program, including enormous infrastructural and intellectual developments which are to be launched in Pécs, we can be sure that the city itself will benefit from them in the future".

József Bódis, Rector of The University of Pécs, attaches historic significance to this opportunity and commented, "Our institution, which is to celebrate its 650th anniversary next year, has arrived at an important milestone with this government decision, since developments of this magnitude have been unprecedented in the field of education in the history of the university. Our primary aim is to increase the number of international students, which presently is 2700 students from 80





countries, to approximately 5000 at the UP. It is obvious that the South-Transdanubian region, its entire population, and our Hungarian students will indeed benefit from the developments to a large extent".

Additionally, it was also expressed at the press conference of which, although it is the clearly the medical training which is often interpreted as the flagship of this project because the Medical School has always been remarkably popular with students originating from beyond our border, it is by far not the only field involved in the proposed developments. Non-medical health sciences and technological disciplines are also becoming more and more attractive for students intending to join the lifeblood of Hungarian higher education from abroad, nor should economic and social sciences be forgotten, since there are programs in foreign languages available in these disciplines at the UP. Notably, the building complexes of the Clinical Centre will also undergo development as part of this program, simultaneously serving three distinct objectives including the improvement in the treatment of its patients, medical students will be able to acquire practical knowledge in settings competing with the standards in Western-European hospitals, and lastly, the environment in support of medical research, which can be considered one of the main breakouts of Hungarian higher education, will also undergo vast improvement.

Zoltán Jenei, the Chancellor of University of Pécs, urged the situation within the University of Pécs will face in the next few years is not only a tremendous opportunity but also an enormous responsibility. The Chancellor values the importance of the program being implemented in accordance with the developmental plans of the city and the county council. "Our objective is to establish a much more competitive university environment than the present one at both domestic and international levels within the next few years", summarised the Chancellor.

Attila Miseta, Dean of the Medical School, University of Pécs, highlighted the role amongst university senior leadership who launched the English and German programs in medical training, which gave rise to the present opportunity. "The present theoretical building block was designed for 200 students annually but, in contrast, we have launched academic programs totalling 600 students annually. Hence, medical training has reached the limits of its capacity with regard to both its infrastructure and its human resources in instructors, therefore increasing the number of instructors and infrastructural development are inevitable in this field", he remarked.

Tamás Decsi, the Director-General of the Clinical Centre, has said, "The clinic plays a part in medical training by teaching 2500 classes annually. Therefore, it is extremely important to improve the circumstances of doctor-patient-medical student encounters and, owing to these developments, to provide conditions, settings and state-of-the-art medical devices equipment which promotes professional and effective medical training from all aspects."

All speakers at the press conference agreed that, in addition to students and instructors, the inhabitants of the region can also benefit from the developments to be implemented in the framework of Modern Cities program at the University of Pécs. In addition, owing to the investments a significant boom can be expected in both the construction and services sectors, which can materialize in the creation of new jobs in the short term and the prosperity of the South-Transdanubian region in the long term.

Source: UP (Gergely Kottász) Photos: Szabolcs Csortos

The University of Pécs has become enriched with a valuable ultrasound scan unit, thanks to the Sonarmed Ltd.

The diagnostic device, worth costing 12 million Ft, represents the latest technology and patient care philosophy and was a recent welcome donation at the bequest of Sonarmed Ltd., the Hungarian distributor of the Samsung ultrasound devices, to the Radiology Clinic. The courtesy is a part of the strategic collaboration between the University of Pécs (UP) and the Samsung Electronics Hungary, Ltd.

Tithin ceremonial confines, the UP received an ultrasound scan made by Samsung, which represents the latest generation mobile diagnostic device on 22 February, 2016. The device will play an important role both in patient care and medical training.

The commonly referred to, "Point of Care" device, represents the patient-centered philosophy in which the patient no longer has to endure such lengthy travel plans in support of the diagnostic and care needs. "Today, the diagnostic device is transported to the patient," emphasized *Dr. Péter Bogner*, the Director of the Radiology Clinic. The easily transportable scan unit is the most modern device ensuring accurate ultrasound screening which can be used on the spot in support of the need, thus accelerating diagnosis and intervention.

Dr. József Bódis, the Rector of the University of Pécs, pointed out in his welcoming speech the device will not only play an important role in patient care but also in medical training, since high-technology equipments are the inevitable requirements for high-standard medical

training. "We are committed to further raising the standard of the already existing highly prestigious medical training at the University of Pécs, Medical School (UPMS)," he emphasized.

"Without modern devices, there is no longer highstandard patient care", claimed *Dr. Tamás Decsi*, Director of the Clinical Center of the UP. He added that achievement and maintenance in servicing the above requires a lot of effort and our own resources, as in 2015, only two billion Ft was spent on this objective from project resources, at the same time, gestures like a distributor's donation of a device free of charge is also very important.

Mr. László Giay, the Executive Director of the Sonarmed Ltd., and the distributor of Samsung ultrasound devices in Hungary illustrated, the courtesy is partly due to the long years of an excellent partnership between the company and the UPMS, on the other hand the fruit of the strategic collaboration agreement signed in 2014 between the UP and Samsung Electronics Hungary, Ltd. According to the agreement, the university, as Hungary's accentuated innovation centre, and the company in the role of one of the world's leading electronic manufacturers and designers work together upon mutual research development and education projects which likely will increase the educational and scientific potential of the UP and the region's current health standard.

Source: UP (Gergely Kottász)

Mrs Endre Rugási, unexpectedly, has passed on

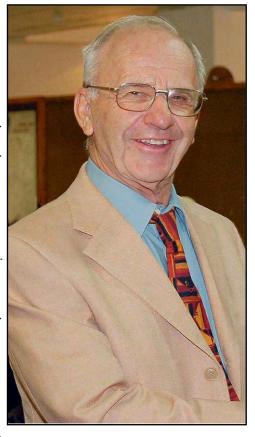
It is with sincere regret to inform you that Mrs Endre Rugási, PE Instructor and a respected Staff Member at the Department of Sports Facilities, unexpectedly expired on 23 February, 2016, at the age of 61.

May we continue to remember her spirit with deep fondness.

Dr. Sándor Pácsa, Former Colleague of the Department of Medical Microbiology and Immunology, passed away on 31 January 2016

Sándor Pácsa was born on 6 April, 1936 in Szigetvár. He received an MSc degree in biology in 1961followed by a two-year specialist training in virology at the National Institute for Public Health. He earned his doctorate in 1962 at the Semmelweis University with the thesis of "Factors Influencing the Growth of Virus in Cell Culture". In 1978, he defended his PhD thesis entitled "Relationship Between Genital Herpes Simplex Virus Infection and Cervical Carcinoma". In 1961, he began employment at the Virology Laboratory of Baranya County National Public Health and Medical Officer Service, then moved up to a position at the University Medical School of Pécs, Department of Microbiology directed by professor Karoly Rauss, where he was responsible for establishing a virology laboratory in support of the institute. He participated in nationwide screening programs which studied the immunization effects of oral polio vaccine and the genetic properties of isolated poliovirus strains. During this period, he also conducted studies on the effects of antiviral compounds on the propagation of DNA and RNA viruses. The research results were published in Nature Magazine with co-authors of Olga Hankovszky and Kálmán Hideg. (Pácsa S., Hankovszky OH, Hideg K.: Derivatives of 2-aminoethyl-guanidine and of a eugenol as virus inhibitors. 1965; 208 (5008): 409).

Between 1966 and 1971, he created a virology laboratory and was teaching virology at the University of Medicine in Ghana where he also participated in the WHO study which promoted the global eradication of smallpox. Later, as an external examiner, he returned to Accra university accepting the invitation from Ghana Medical School for another three years. Following his return to Hungary, he was appointed associate professor and was asked to direct the Virology Laboratory of the Institute of Microbiology. Since 1982 he actively participated in the special course curriculum, "Microbiology of Tropical Infectious Diseases", launched within the framework of the institute. He initiated a variety of new research topics, including the link between tumour and viral development and the study of viral infection effects on fetal damage.



Sándor Pácsa had the remarkable ability of finding new areas of research and collaborations directly improving the quality of patient care. He was the first to initiate the ELISA technique in the country with the primary aim to detect virus-specific antibodies. Based on this method, together with chief physician Béla Pejtsik, he later organized a nationwide AFP screening program to detect neural tube closure defects. It deserves special mention that he ensured the laboratory background and experience which led to the birth of the first Hungarian test-tube baby at the Clinical Department of Obstetrics and Gynecology.

From 1985 and onward, his commitment of 23 years, he conducted extensive teaching and research work in a wide spectrum of virology at the Institute of Microbiology of the Medical School of Kuwait University and in 2005, he was appointed professor. Under his guidance, a high number of students gained MSC and PhD degrees. As a virologist consultant he was also aiding clinician work on a daily basis. Following his retirement, he was helpful towards the establishment and accreditation for the virology division of a local private laboratory. Upon his diagnosed illness in 2014, he sought the comfort of his home.

Sándor Pácsa was not only an excellent researcher and educator, but also a wonderful person who won the love, admiration and respect of his colleagues everywhere, both at home and abroad. Notably, one of the Kuwait professors fondly remembers him shortly after learning of his death, "He was a truly wonderful man. Not just a superb virologist and a good teacher, but also such a compassionate, cheerful, helpful human being. What an excellent combination of a good person and a good academician. Everyone in our Medical School and the Ministry of Health who knew him is saddened by this news."

Dr. Júlia Szekeres, Dr. György Szűcs

Plácido Domingo became Honorary Doctor of UP

Maestro Plácido Domingo, one of the world's most celebrated opera singers, widely recognized and respected former member of the "3 Tenors" was recently awarded a Doctor Honoris Causa title by the Senate of the University of Pécs, 7 February 2016.

The Rector of the University of Pécs and the Senate of the University of Pécs inaugurated Plácido Domingo, opera singer, conductor, founder of Operalia World Opera Competition, General Director of Los Angeles Opera and former member of the "3 Tenors" as Honoris Causa on Sunday, who was nominated to receive this honorary title by the UP's Faculty of Music and Visual Arts in 2011. The explanatory memorandum stated in support of the Doctor Honoris Causa title, the University of Pécs expresses its respect and acknowledgement and desires to recognize Plácido Domingo's artistic greatness including his services on behalf to the City of Pécs, as a patronage of the European Capital of Culture Program in 2010.

"It is always a pleasure for me to welcome such a world-famous artist among our honorary doctors as Plácido Domingo", said József Bódis, Rector of UP. "Our Faculty of Music and Visual Arts has achieved more and more success in the international arena in recent years. Among our professors and students, there is a world class trombone player, there are world famous violinists and it will take some effort to name all our excellent colleagues. Therefore, I believe that within this

the world-famous tenor for the honorary doctoral award, emphasized, "The Faculty of Music and Visual Arts is proud that following José Carreras' inauguration in 2007 another musical eminence joins the ranks of our Honorary Doctors, who enioved a close relationship with the City and the University for many years. Ms. Ilona Tokody, Honorary Professor of our Faculty, formerly worked together



with Plácido Domingo, and interestingly, their "La vie de Bohéme" record was one of the most well-known versions of the opus in the world," affectionately recalled the dean.

Source: UP (Gergely Kottász) Photo: György Mánfai





discipline we are also approaching in an honourable way towards the 650th Anniversary of our university. We could hardly find better ambassadors in support of the related series of anniversary events, than our globally known and respected honorary doctors", emphasized József Bódis.

Following this, Plácido Domingo has received the certificate of Doctor Honoris Causa and the gown as the symbol of belonging to the professors' community of the University of Pécs. In his welcome speech, the world-famous artist commented on his personal experiences, "Ifirst visited Hungary in 1973, and throughout my career I have worked with outstanding Hungarian artists in the world of opera. I have a great love, amiration and respect for the excellent Hungarian composers — Béla Bartók, Zoltán Kodály, Franz Liszt, Franz Lehár, and Ferenc Erkel, among others. Not to mention the fact that as a passionate fan of the Real Madrid football team, in the city where I was born, I was a great admirer of Ferenc Puskás, who was one of our star players for many years," added Plácido Domingo.

Tamás Lakner, the Dean of the Faculty which nominated























Front and back cover:

From winter into spring

Photos of Hajnalka Hajdú, László Molnár, Gergő Papp, Béla Sebők, Dávid Varga, Loránd Barthó



