

# SZEM

SZTE UNIVERSITY OF SZEGED

SZEGED UNIVERSITY MAGAZINE | 2018 | 2

**WHAT MAKES  
THE HUMAN  
BRAIN?**

**POEMS IN  
FRENCH**

**SCUBA DIVING  
AS A HOBBY**

**FROM ANTHEM  
TO THE OSCAR**



## Tradition & Innovation

*What is the University's mission?*

This is what the Nobel Prize laureate and former dean of the Universitas, Albert Szent-Györgyi expressed in his inaugural speech arriving to Szeged 90 years ago. The integration of the higher educational institutions that was proceeded in 2000 established the University of Szeged with its 12 faculties. The answers of the Faculty leaders:

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**SZÉCHENYI** 2020



HUNGARIAN  
GOVERNMENT

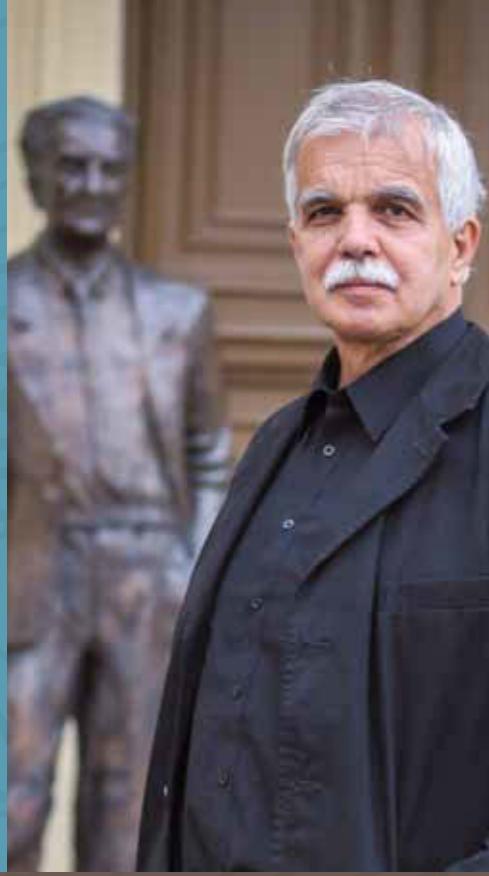
European Union  
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INVESTING IN YOUR FUTURE

# THE SCIENTIST WHO ESTABLISHED A SCHOOL

Albert Szent-Györgyi achieved outstanding goals as a creator of a new schoolhe University of Szeged is proud of its former Nobel Prize winner rector and carries on with his research themes, maintains his spirit and cares for his memory. Prof. Dr László Dux, head of the Department of Biochemistry at the SZTE, held a lecture full of curiosities of science history on Albert Szent-Györgyi's scientific achievements in Votive Church in the autumn of 2018. Szent-Györgyi was born 125 years ago, arrived in Szeged 90 years ago and he brought the Nobel Prize to Szeged in 1937. Later, it unfolded that Szent-Györgyi's research of muscles was restarted with the leadership of Professor Ferenc Guba between 1969-1970. László Dux joined as a first year medical student in 1972, and when he returned from America in 1992, he made it into the main research area of the Department of Biochemistry. Professor Dux has been working as the president of the jury of the Szent-Györgyi Academic Competition since 2012, the 75th anniversary of the "Szeged Nobel Prize". 9 Nobel Prize winner professors attended the conference held in the jubilee year. During 7 years, more than a dozen Nobel and Brain Prize winner researchers held lectures to university students and talented secondary school students, who were invited by the SZTE supported Szeged Scientists Academy and the Foundation for the Future of Biomedical Research in Szeged. This is how the SZTE makes Szeged a Nobel Prize winning city.



## NOBEL-PRIZE

Albert Szent-Györgyi receives the Nobel Prize in Physiology and Medicine "for his discoveries in connection with the biological combustion process with special reference to vitamin C and the catalysis of fumaric acid." This is because – besides vitamin C – he discovers that certain organic acids, such as fumaric acid, malic acid, succinic acid, have a catalyst role in biological oxidation. He recognizes that the three compounds are part of a cyclic process and he is close to discover the basic process of cellular respiration, the citrate cycle. All members of the cycle, including the key ingredient, citric acid, are finally identified by Hans Krebs, and this is why the process is also called the Szent-Györgyi – Krebs cycle.



## MASTER & STUDENT

Szent-Györgyi builds a creativity promoting, Anglo-Saxon style research community at the SZTE. Among his colleagues, the chemist Ilona Banga, born in Hódmezővásárhely, plays a decisive role on the path to the Nobel Prize. In the Szeged laboratory, Joseph L. Svirbely, the American-Hungarian guest researcher helps to prove that hexuronic acid is the same as vitamin C. Biochemist and medical biologist Ernő Annau and László Varga who contributed to the chemical analysis of vitamin C return to the University of Kolozsvár in 1940. With the contribution of biochemist and physiologist Kálmán Laki and medical student László Lórán the "Coagulation Factor XIII" is born in Szeged as a world class achievement. Another lasting discovery is the so-called Guba-Straub Solution used for myosin purification. Bruno Ferenc Straub, the successor of Szent-Györgyi in both institutions in Szeged and Budapest, continued muscle research in the second period and has a significant role in the establishment of the Biological Research Centre in Szeged.



## THE NOBEL PRIZE & FURTHER ON

(...)

1945, April: He is appointed director of the Medical Chemistry Institution of the Budapest University.

1944, February: Board member of a joint stock company for producing and selling vitamin made from paprika.

1943: Secret negotiations with the English. 16<sup>th</sup> December: reports his results in muscle research. He realizes with his colleagues what causes cadaveric while analysing the ATP content of tissues.

1942: Honorary doctorate at the University of Padua.

1940: Rector of the Horthy Miklós University of Szeged.

1939: His new research topic: examining the mechanism of muscle contraction.

1938, April 7<sup>th</sup>: Honorary doctorate of the Szeged University. May 6<sup>th</sup>: elected to regular member of the Hungarian Scientific Academy. Lecturing tour in the US.

1937: The decision of the Nobel Prize Committee. December 1<sup>st</sup>: Honorary citizen of Szeged. December 10<sup>th</sup>: receives the Nobel Prize in Stockholm.

1936: Member of the National Council of Higher Education

1935: Moving from the laboratory in Kálvin Square to the new university building in Dóm Square.

1934: Member of the Karl Ludvig Academy of Halle and of the Société de Biologie of Paris. Dean of the Faculty of Medicine of the University of Szeged. Appointed head of the university's Institute of Organic and Pharmaceutical Chemistry (until 1936).

1932, March 26<sup>th</sup>: The Medical Journal runs an article on Szent-Györgyi's lecture where he announces that hexuronic acid is the same as vitamin C.

1931, autumn: Examinations on whether hexuronic acid contains vitamin C.

1930, October 26<sup>th</sup>: Takes the university cathedra in Szeged, as the head of the medical chemistry institution.

1929, summer: Participates in the world congress of physiology in Boston (USA).

1928: The discovery of hexuronic acid. September: Coming from Cambridge, first time in Szeged. October 1<sup>st</sup>: appointed professor of the Szeged University.

(...)

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*This is what the Nobel Prize laureate and former dean of the Universitas, Albert Szent-Györgyi expressed in his inaugural speech arriving to Szeged 90 years ago. The integration of the higher educational institutions that was proceeded in 2000 established the University of Szeged with its 12 faculties. The answers of the Faculty leaders:*

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Zoltán Novák MD is professor at the Faculty of Medicine of the University of Szeged. He has not only been elected to be one of the best 100 physicians of Hungary, but he also recites in French in his free time.

dr. Zoltán Novák

FROM ANTHEM  
TO THE OSCAR

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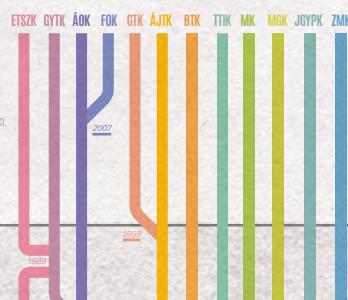
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## Cycling is a way of life



## THE TREE OF LIFE OF THE UNIVERSITY



# Tradition and innovation



Ilona ÚJSZÁSZI



Anna BOBKÓ

In the predecessor of the University of Szeged (SZTE), Nobel Prize laureate Albert Szent-Györgyi served as a rector and dean. In his inauguration speech he explained what the mission of the University of Szeged was "How does the 'fourth generation university of the 21<sup>st</sup> century' correspond to the four-part mission?" This question is answered by the summary of the interviews with the 12 deans of the 12 faculty Universitas founded in 2000 with the integration of local higher education institutions. The interviews have been published on the website of the University of Szeged.

## THE FLAGSHIPS OF MEDICAL AND HEALTHCARE SCIENCES

In addition to the outstanding teaching and research activities, clinical level care is also an important task of the faculties of medical sciences at the University of Szeged. Pharmacists and assisting professions also contribute to improving the quality of life.

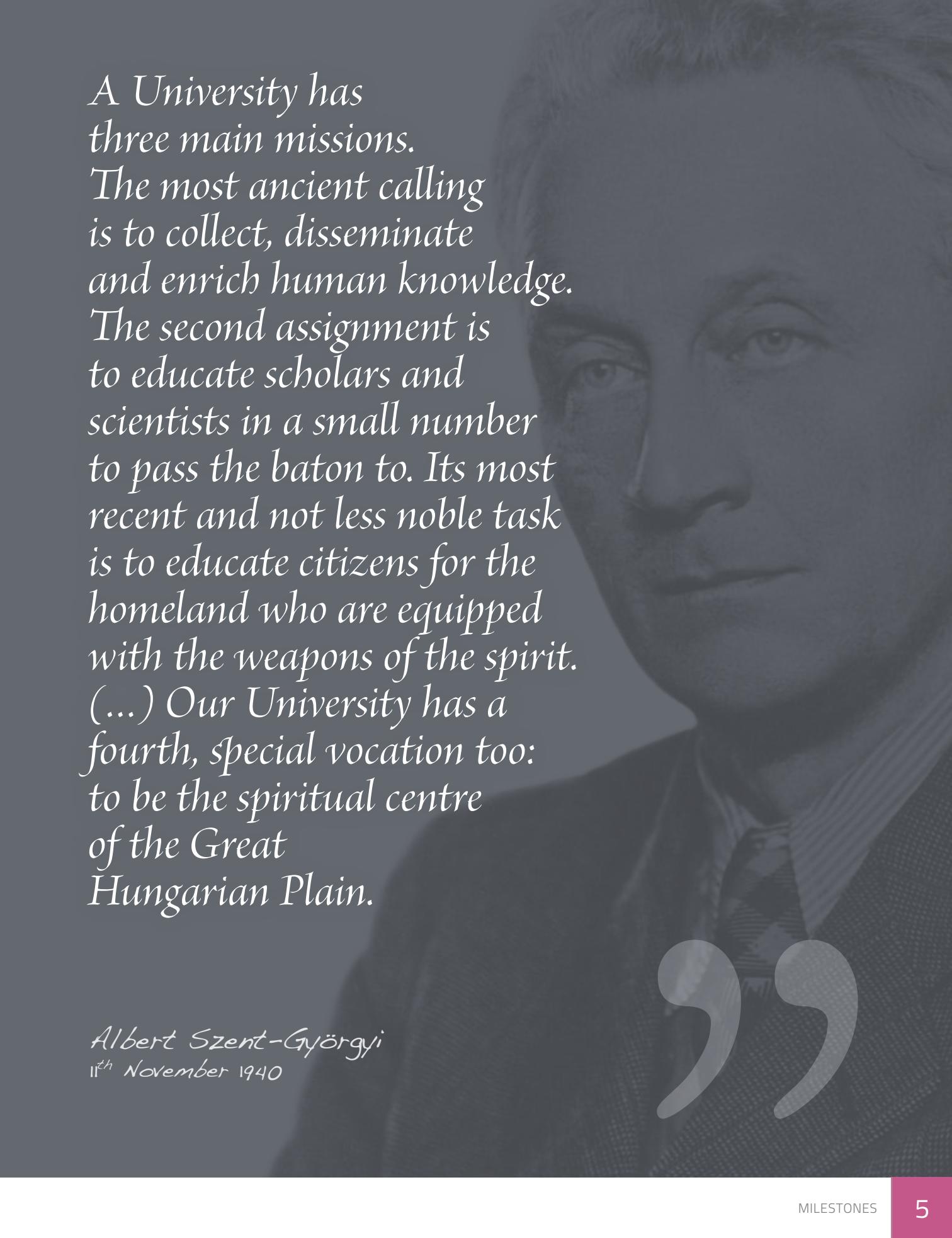
### Measurable performances

'The Faculty of Medicine functions as an integrated faculty of the University of Szeged, so the level of responsibility is different from when it worked as an independent institution of high-

### Modern tools and classrooms

The development project called Klebelsberg II. focuses largely on investments at the Faculty of Medicine. For example, after the refurbishment of the building of the former Surgical Clinic, a Health Science Training Block will be established. SKILL centres will be set up, student spaces, labs and teaching tools will be renewed, and practical training will include IT and 3D technologies. As a result of the renovation and extension of the former polyclinic building in Vasas Szent Péter Street, the Faculty of Dentistry will be able to work meeting XXI<sup>th</sup> century circumstances in a building which is one and a half times larger than the present one. The aim of the Faculty of Health and Social Sciences is to expand its tools and classroom equipment. The renovation of the doctors' and pharmacists' dormitory and upgrading the new building of the Faculty of Pharmacy are also part of the university's short and long-term development aims.

► 6.



*A University has  
three main missions.  
The most ancient calling  
is to collect, disseminate  
and enrich human knowledge.  
The second assignment is  
to educate scholars and  
scientists in a small number  
to pass the baton to. Its most  
recent and not less noble task  
is to educate citizens for the  
homeland who are equipped  
with the weapons of the spirit.  
(...) Our University has a  
fourth, special vocation too:  
to be the spiritual centre  
of the Great  
Hungarian Plain.*

*Albert Szent-Györgyi;  
11<sup>th</sup> November 1940*



**Dr Péter Tóth**  
Dean, Faculty of Music

**Dr Zoltán Gyenge**  
Dean, Faculty of Humanities  
and Social Sciences

**Dr István Bíró**  
Dean, Faculty of Engineering

**Dr György Kovács**  
Vice Dean, Faculty of Economics  
and Business Administration

**Dr József Horváth**  
Dean, Faculty of Agriculture

**Dr György Lázár**  
Dean, Faculty of Medicine

er education' emphasized Dr György Lázár, Dean of the Faculty of Medicine of SZTE. 'We continued the tradition of the Vice Dean of the Faculty of Medicine also being the head of the Albert Szent-Györgyi Clinical Centre. This ensures the integration required for the harmonious functioning of the Faculty of Medicine.' The EU harmonization of the old traditional curriculum was first performed at the University of Szeged of the four dentist training sites of the country – Dr Zoltán Baráth, Dean referred to one of the virtues of the Faculty of Dentistry.

'We would like our students to feel well at the Faculty of Health and Social Sciences of the University of Szeged' Dr Edina Berta Héderné, dean expressed her wish. 'In our Advisory Office, students can request counselling, psychological and legal advice free of charge. We are launching a mentoring program and our tutors pay attention to our students, especially to foreign students.'

According to the Dean of the Faculty of Pharmacy Dr István Zupkó, the measurable scientific performance of the relatively small Faculty of Pharmacy is outstanding: it is the most successful branch of the SZTE based on the ratio of scientific work per researcher.

### Reformed curriculum

'There is a social demand for doctors having basic theoretical and practical knowledge, instead of their being 'specialists'. In our reformed curriculum basic knowledge is accurately determined according to the aspects of practice-oriented training, based on clinical knowledge' Dean of the Faculty of Medicine explained.

The Faculty of Health and Social Sciences plans to introduce electronic curricula for teaching theoretical subjects, and provides more space than before for providing more practical experience. Future paramedical experts – students of nursing, physiotherapy, health visitors and dental hygienists – will already have practical experience before starting to work with patients.

'The training of trainers is taking place on university level, which helps our colleagues to acquire new teaching methods' the Dean of the Faculty of Dentistry explained. The fourth and fifth year students' training means predominantly clinical practice, based on patient care. From this point of view, the Faculty of Dentistry of the SZTE is at the forefront, not only nationally but also on the basis of European



**Dr István Zupkó**  
Dean, Faculty of Pharmacy

**Dr Erzsébet Drahota-Szabó**  
Vice Dean, Juhász Gyula  
Faculty of Education

**Edina Héderné Dr Berta**  
Dean, Faculty of Health  
and Social Sciences

**Dr Zoltán Baráth**  
Dean, Faculty of Dentistry

**Dr Elemér Balogh**  
Dean, Faculty of Law  
and Political Sciences

**Dr László Mucsi**  
Dean, Faculty of Science  
and Informatics

trends. Internationally renowned researchers teach the students at the Faculty of Pharmacy, for example they can learn pharmaceutical chemistry from an academician.

#### The flagships of science

'Most of the scientific achievement of the SZTE is provided by the medical school' Dr György Lázár said. 'So far the international and domestic research projects have provided many opportunities. But we need to draw attention to trend changes: nowadays clinical research is underfinanced. It is the truth despite the fact confirmed by the latest survey of the Hungarian Academy of Sciences: clinical medicine is the flagship of the Hungarian science.'

'In the Faculty of Health and Social Sciences, professions are taught whose scientific acknowledgment can be traced back only a few decades. This disadvantage is offset by their lecturers participating in scientific teams within and outside the University of Szeged' Dr Edina Berta Héderné explained. For example, their physiotherapists seek the answer

to the question how the posture problems of musicians at the Juhász Gyula Faculty of Education and the Faculty of Music can be solved. Led by the Department of Social Work and Social Policy at the University of Szeged, the Faculty of Education and the Faculty of Medicine have been working on identifying the problems caused by premature birth.

'We are involved in an application for implant development with a company in the competitive sector that helps patients with periodontal diseases to receive a new dental implant, which would help restore everyday functions, such as chewing ability' Dr Zoltán Baráth highlighted.

One of the most successful herbal medicine research institutes in Europe is the Faculty of Pharmacy of SZTE. According to Dr István Zupkó, pharmaceutical factories need the knowledge and experience accumulated by the Institute of Pharmaceutical Technology and Drug Surveillance.

The themes explored at the University of Szeged have an impact on the whole society.



#### QS WUR BY SUBJECT, LIST OF DISCIPLINES 2018/2019

**SZTE ÁOK, ETSZK, FOK, GYTK**  
in study fields related to medical and healthcare sciences

**SZTE ÁOK, FOK:**  
in medical training

**4500**



## ARTS AND SOCIAL SCIENCES PRESERVE NATIONAL CULTURE

Most of the visions related to the integration in the higher education in Szeged in 2000 have been fulfilled. The most important condition of this is solidarity between faculties of the University of Szeged. Old traditions still exist: there is a close relationship between the Faculty of Arts (BTK), the Faculty of Law (ÁJTK) and the Faculty of Economics and Business Administration (GTK), which was originally an offshoot of the Faculty of Law.

### To Educate Playfully

'We put the original diploma of the first rector, Gáspár Menyhárt, Law Professor issued in Cluj Napolca under his photograph. We refer to the past of our faculty also in this way' Dean of the Faculty of Law, Dr Elemér Balogh said. 'An example of the strong internal cohesion of the university is that the ÁJTK and the GTK maintain and operate a joint department.'

'We commemorate the distinguished founders and scholars who graduated from this university or taught here. The list of names is fantastic: the very best representatives of the Hungarian culture have turned up here' Dean of the Faculty of Humanities, Dr Zoltán Gyenge said. 'But it is not possible to live

solely on tradition. Things have to be renewed constantly. It shows our orientation to the present and future that we intend to make the values and colours of the Faculty of Arts visible on the Hungarian and European cultural maps. We have also extended the abbreviation of our name, because besides the traditional liberal arts, our courses in social sciences have also become popular.

The Faculty of Law, the Faculty of Economics and the Juhász Gyula Faculty of Education (JGYPK), among others, are all partners of the Faculty of Arts in the joint training network. This is a characteristic feature of the Universitas. However, the discontinuation of parallelisms existing for decades is also the goal of university leadership.

'The Faculty of Economics is one of the most important training sites for economists in the country. We would also like to transfer this result and quality to our foreign trainings so that a valuable methodology toolkit will be associated with valuable educational content. In an international consortium, we won and became the leader of an application on gamification, designed in collaboration with our partners to work out: how economics can be taught in a playful way. In addition, we consider the role of digitization also

important: in addition to the high level of applicable knowledge, our students also receive IT skills, which also means that software support belongs to many courses' Dr Péter Kovács, dean says. A new idea of the Faculty of Economics is to invite graduates of the alma mater to student clubs and other events related to their specialties so that the younger generation can learn more practical knowledge and experience from them.

### Factors Enhancing Prestige

'The teaching of legal science is commonly considered as a national training field in Europe, therefore courses are held in the mother tongue' – Dean of the Faculty of Law said. 'However, we advertise optional courses in foreign-languages because the students who come here are speakers of foreign languages, such as young people studying in French at the French-speaking (Françophone) Centre. From a professional point of view, it is also important to enhance our international embeddedness. At the same time, our legal training is trustworthy because as part-time lecturers, we invite attorneys, lawyers and tax specialists, distinguished professionals of various fields. More constitutional judges and ministers teach at our faculty than in any other training institution except for the capital. This increases the international, professional, and student judgment and prestige of the Faculty of Law.'

'According to the Hungarian National Scientific Bibliography's (MTMT) Hirsch index, the Faculty of Arts presents great values. Scientific performance and the lecturers' educational quality converge. At a university of science, the importance of the high quality of scientific work has to be emphasized' the Dean said. Workload measurement has been conducted by the Department of Sociology of the Faculty of Arts for five years now. They are glad to pass the method to other faculties of the SZTE because the results of the survey can be used for preparing and making decisions. The distance education section was first launched by the Faculty of Economics, and it is still the only one in Szeged. The development of distance learning is also a cyclical development process and it can be adapted. But running costs of



Dr Péter Kovács  
Dean,  
Faculty of Economics and  
Business Administration

this form of training are high and the construction of teaching and supplementary materials require a new logic from the trainers, as opposed to the traditional ones. This new kind of thinking is encouraged by the EFOP applications of the SZTE, which expand the existing solutions of the SZTE's other faculties and departments that are related to the digitization of the curriculum.

### Messages about Financing

The financing of higher education was restructured by the 2016 Government Decree and since 2017 only the number of students has been taken into account, institutional quotas and scientific potential have been ignored. In other words, while in the past, the budget had three legs: the number of students, institutional and scientific norms, now only student norms exist and the other two norms have ceased. According to the heads of the University of Szeged, this is a very bad "message" because it encourages the "training" of large numbers of students with lecturers of lower academic qualification instead of supporting high quality work.

'It is a fact that the liberal arts field is undersupported, although this field of education and discipline is the caretaker of national culture. As guardians of national culture, humanities and social sciences and the researchers of the field should not be treated as pariahs but as distinguished sciences and scientists' the Dean of the Faculty of Arts said.

Around 2013, the drastic reduction in the number of state scholarships greatly affected liberal arts, law and economics education as well. The Faculty

► 10.

of Economics reacted quickly and efficiently to the new situation: it announced a new scholarship program. This program is constantly expanding: now they have connections with more than thirty companies. International training courses have begun at the faculty: today more than two hundred students are taught in English. This pattern has been followed by other faculties of SZTE also affected by the change.

#### **Headquarters and Community Spaces**

The modernised building of the Faculty of Economics on Kálvária Avenue serves as a model with its roofed courtyard, assembly hall and intimate spaces which have invigorated the faculty's community life.

A similar effect can be expected from the renovation of the headquarters of the Faculty of Law on Tisza Lajos Boulevard. The building, which was once a school and later a court of justice, will be renewed and will receive back its dome tower thanks to the Government's support of 650 million forints. A memorial room will also be established to present the history of the legal education in Szeged to the public. The windows of the ground floor and the first floor corridor will be opened towards the roofed courtyard, creating a huge hall, a community space for lecturers and students where representative programs can also be organized. As a result of the reconstruction of the cellar, the club room and the buffet will have a proper place.

Without financial support, the building of the Faculty of Arts on Petőfi Avenue could only be repainted, so the renovation of this concrete building had to be postponed. However, to commence the work, a compromise needs to be reached on the future functions of the building, based on the common points of concomitant concepts. At the same time, a place has to be found in the Pink Palace of University Street for the novelties of the faculty, such

as the Turkish and Kazakh group connected to the Department of Altaistics or the planned expanded Hungarian studies training, as well as the art management training organized in cooperation with the Faculty of Economics. It would improve the situation if the former gym could be converted into a cafe-like community space for readings and other cultural programs. They have begun to refurbish their classrooms from applications. They would like to renovate and modernize the Auditorium Maximum in such a way that the original atmosphere of the hall is preserved, reminding people that on October 16th 1956, the spark of the revolution started from here. The Faculty of Economics is also focusing both on the traditions and the new values of the Southern Great Plain by working with the Csongrád County Chamber of Commerce and Industry on a project to demonstrate the economic opportunities left by the city and its region unexploited. They also point out that there is a possibility for people to return to the region, even after gaining experience in Budapest or abroad because, among other things, there is a growing number of companies that settle in Szeged and its vicinity due to the fact that here is the University of Szeged, the knowledge base and training centre on which they can develop.

#### **QS WUR BY SUBJECT, LIST OF DISCIPLINES 2018/2019**

**SZTE BTK** ■ in study fields related to Linguistics

**SZTE BTK** ■ in study fields related to Arts



# ENGINEERING EDUCATION HAS BEGUN

Nature sciences, technical and agricultural training courses are popular in areas where industry and agriculture are of high account.

## Integration and Profile Cleaning

Engineer training is a precondition for industrial development and attracting capital to the Southern part of the Great Plain Region. Mechanical and electrical engineering are the two classical majors. The previous is taught at the Faculty of Engineering (MK) while electrical engineers can obtain their degree from the Faculty of Science and Informatics (TTIK) of the University of Szeged. The Rural Development

Agrarians program is now offered by the Agricultural Faculty of SZTE in Hódmezővásárhely (MGK).

'The future of the Faculty of Engineering has been established by adding a technical, a mechanical and a mechatronic profile to the traditional food engineering training which we have had since 1962' Dean of the faculty, Dr István Bíró emphasized. The long-term goal is to develop a technical profile instead of the agricultural one. The Faculty of Agriculture in Hódmezővásárhely also belongs to the University of Szeged and it enjoys many benefits of the integration. 'For example, our model farm has been transformed into a university-owned business association and in the middle of the last decade the introduction of the Bolognese system was supported by the co-operation between faculties' the Dean of the faculty, Dr József Horváth added. 'In the spirit of "one science - one university unit" it would be ideal and appropriate if the Faculty of Science and Informatics were responsible for the coordination of teaching Physics, Chemistry or Biology' Dean of the Faculty of Science and Informatics, Dr László Mucsi said. In his opinion, it would be good if basic research were carried out autonomously, but education should be based on good research groups.

## Co-operation Between Faculties

The educational strategy of the Faculty of Science and Informatics of SZTE is based on the Kolozsvár (Cluj, now in Romania) tradition dating from 1784 and the nearly 100 years of the university in Szeged, as well as on regional, national and international needs and relationships. In the past decades, IT, technical education,



## 5 RESEARCH INSTITUTES 1 INTERDISCIPLINARY CENTRE

In September 2018, the Interdisciplinary Centre for Excellence (IKK) was established. It consists of 5 parts: Research Institute for Materials Science, Photon-Laser Research Institute, Research Institute for Pharmacology, Smart Systems Research Institute and Research Institute for Translational Biomedicine. These research institutes involving different areas of science are dynamically organized working communities that will pool research groups and make it possible to employ researchers who will bring here new research topics. This centre will deliver research, development and innovation funding to the research teams provided by the maintaining ministry and it will also monitor the use of finances.

and high school teacher training have become involved. The faculty offers a complete range of trainings for applicants in the natural sciences and IT from basic education to doctoral programs.

The establishment of specialization plans, such as logistics or industrial product and design engineering mean a new perspective for the teachers of the Faculty of Engineering that can be realised with the support of the Faculty of Health and Social Sciences and nutrition science with the support of the Faculty of Education.

The basis of cooperation within the university is teaching common subjects to the students of other faculties as well. This works well between the Faculty of Agriculture and the Faculty of Pharmacy in the postgraduate master courses on herb- and spice cultivation and processing. English-language mathematics courses are provided by the instructors of

the TTIK to the students of the Faculty of Engineering. It is an advantage for the Faculties of Science, Engineering and Agriculture that their educational fields and courses are supported by the government.

### Applications and Company Commissions

'To deliver good lecturers at the faculty, a good research background is needed – Dean Dr László Mucsi said. 7 institutes of TTIK cover all the great branches of science belonging to the Faculty – Biology, Physics, Geography and Geology, Informatics, Chemistry, Environmental sciences (including some parts of technical and agricultural sciences), Mathematics and the full administration of research related to these. 'Performance is funded through applications. We are at the vanguard in this area, not only within the University of Szeged but also nationally. The Faculty of Science of SZTE is increasing the number of its industrial commissions and research results in cooperation with nearly a hundred companies and institutions.'

Out of the technical development projects of the Faculty of Engineering, the Dean emphasized the research conducted together with SolvElectric Ltd. whose aim is to explore the possibilities of plant forcing and cultivation in artificial light. 'ContiTech Industrial Ltd. in Makó is also an important partner and we have developed a conveyor belt for food for another company. Our colleagues have also joined a project to develop a drilling mould for dental implants.' In the field of research and development, the Faculty of Agriculture is involved in the implementation of a cross-border, so called Interreg project coordinated by the Department of Microbiology of TTIK. According to Dean Dr József Horváth, this example also confirms that the Faculty of Agriculture is well-prepared for the beginning of a new era of Hungarian agriculture. The application of digital technologies, automation, and precision economy mean the future also in agriculture.



**373**

**RESEARCHERS**  
of the University  
(SZTE)

**16**

**RESEARCH GROUPS**  
supported by the Hungarian  
Academy of Sciences (MTA)



**19**  
**DOCTORAL  
SCHOOLS**

**110**  
**PHD  
programmes**

*The main development opportunities for the SZTE are the development of a new faculty of electrical engineering and IT, the modernization of medical education and the development of the infrastructure of healthcare trainings.*

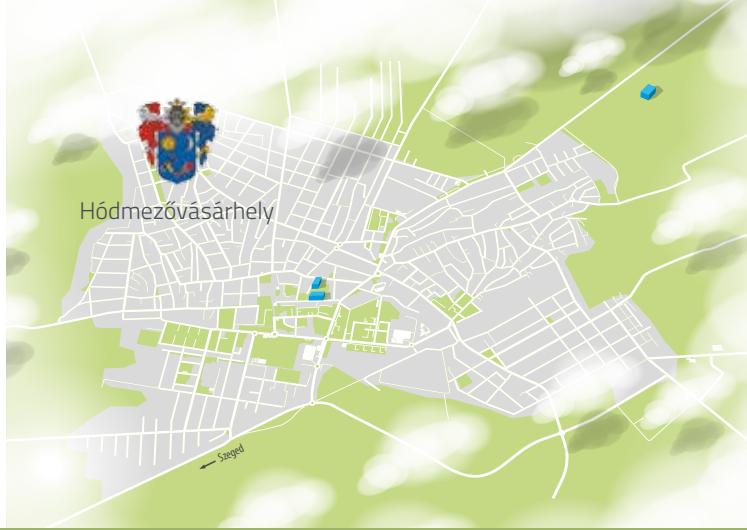
Prof. Dr. László Rovó,  
Rector, PhD,  
10<sup>th</sup> November 2018

**QS WUR BY SUBJECT,**  
LIST OF DISCIPLINES  
2018/2019

SZTE MGK in study field  
related to agriculture

SZTE TTIK in study fields related to nature  
sciences, on the list of Chemistry programmes





## SZEGED - HÓDMEZŐVÁSÁRHELY AXIS

It is a nearly 100 year's legacy of the University's largest faculty that students' training has to be organized at distant points of Szeged, in 10 school buildings and training areas. Dean Dr László Mucsi's development priority list is the following: more research laboratory buildings related to Physics and Chemistry; a new educational building for Informatics; building a new dormitory. He thinks a supply of adequate accommodation would increase the number of Hungarian and foreign students in every faculty of the university.

'Where a machine works, an engineer finds work' the Dean of MK said. Dr István Bíró hopes that after Kecskemét and Debrecen, Szeged will be the next in the automotive industry investment series. He also announced that the decision about supporting the development of buildings and laboratories of the Faculty of Engineering with 5 billion forints is coming to a head. Hódmezővásárhely has maintained the tradition of agrarian education for over 120 years. It is a town with the largest administrative district of the Hungarian

countryside. The Dean recommends the town to students as it provides pleasant environment for them in a rural area with dormitory accommodation and social network. According to the Dean, the operation of the faculty exemplifies that Hódmezővásárhely and Szeged belong to the same economic development zone, which, with the interlocked railway and tram line, the tramway, planned to be built by 2021, will also be made attractive to investors.



# IS THE NEW FACULTY OF MUSIC GOING TO BEAR BÉLA BARTÓK'S NAME?

'We want to be the best art education institution in the country and in the Great Plain-Bánság-Vojvodina region! Some people may think that the chance is small. But I know from experience that one who targets himself in the middle will fall down. We have to measure ourselves against the stars' said the dean of the Faculty of Music (ZMK), Dr Péter Tóth. The dean Gyula Juhász Faculty of Education (JGYPK), dr. András Döbör's ambition is that Szeged Universitas has to offer the most complete teacher training range in Hungary.

## Synergies within the university

'All the advantages of a small faculty of music in a prestigious university can be seen here' described the dean the situation of the Faculty of Music. According to him, it is good about the similar-sized cities as Szeged that people of the same interest find each other. 'It is worth coming to Szeged instead of Vienna, because here we can get through Central European culture and the taste of Béla Bartók to students. In co-operation with the 11 faculties of the university, we manage to solve, for example, the maintenance of infrastructure or teaching certain common subjects like acoustics or art history to students of other faculties as well.'

'The SZTE-brand was born as a result of the integration and the attractiveness of Szeged as a university city is also contributable to our mass trainings which radiate out nationwide. We consider it important to incorporate the latest scientific results into our work' the dean of the Faculty of Education emphasized. 'In order to strengthen the teaching and research work, young teachers are supported by a faculty grant to obtain their academic degrees.'

► 16.



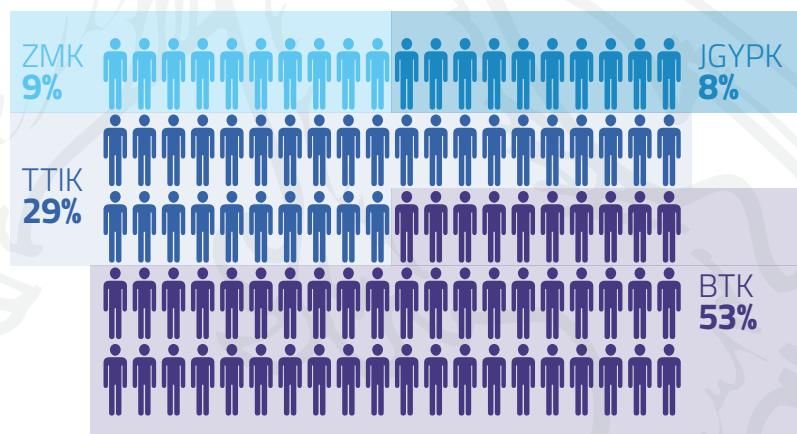
Dr András Döbör  
Dean,  
Juhász Gyula  
Faculty of Education

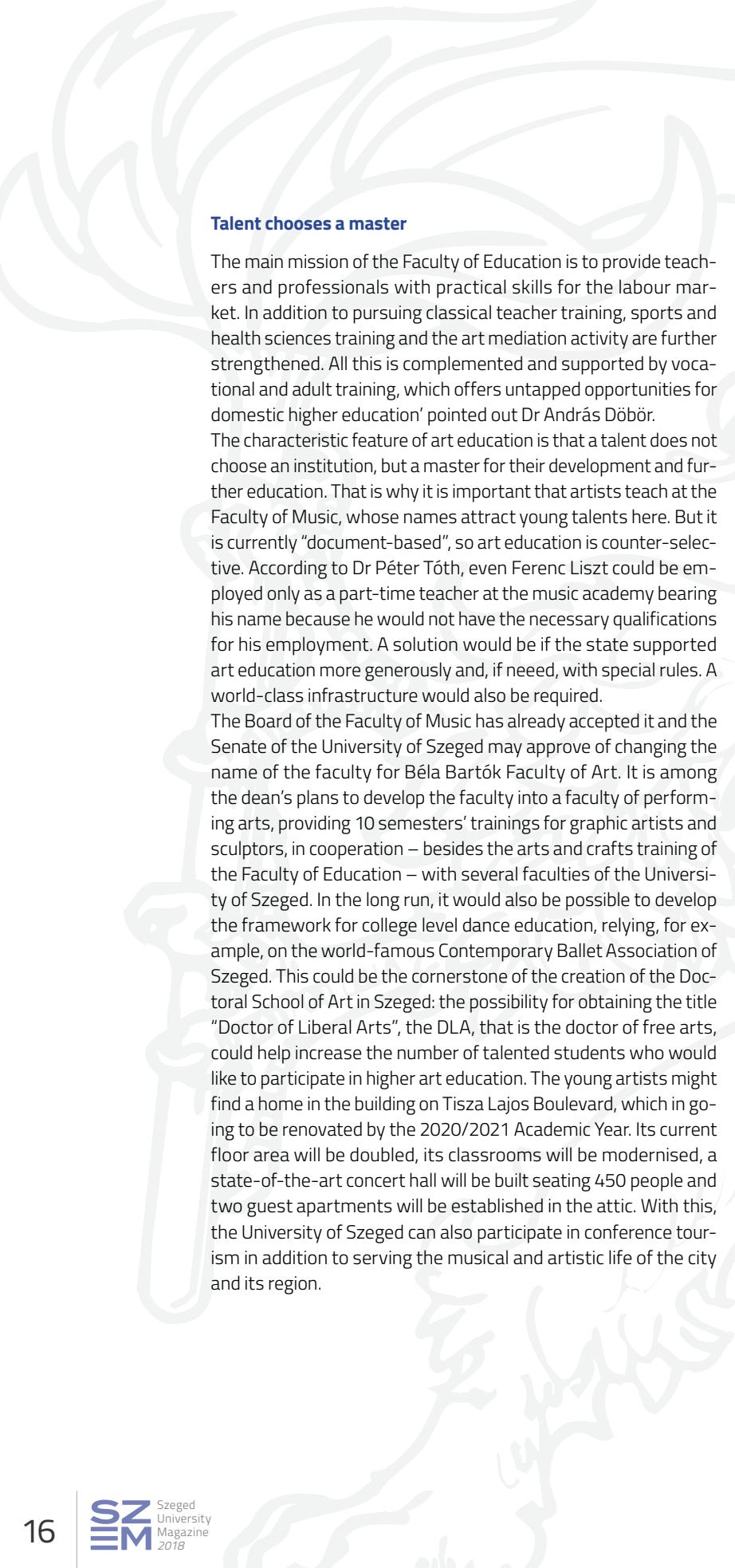


1128

PEDAGOGY STUDENTS  
*(undivided programme)*

## DIVISION OF PEDAGOGY STUDENTS *(upon faculties)*





**THE UNIVERSITY IS IN  
A LEADING POSITION  
ON A GLOBAL RANKING**

2018/2019

SZTE | UNIVERSITY OF SZEGED

In the Best  
10% of Ranked  
Institutions of  
the World

**TOP  
10**

**26 000** ranked institutions

#### Talent chooses a master

The main mission of the Faculty of Education is to provide teachers and professionals with practical skills for the labour market. In addition to pursuing classical teacher training, sports and health sciences training and the art mediation activity are further strengthened. All this is complemented and supported by vocational and adult training, which offers untapped opportunities for domestic higher education' pointed out Dr András Döbör.

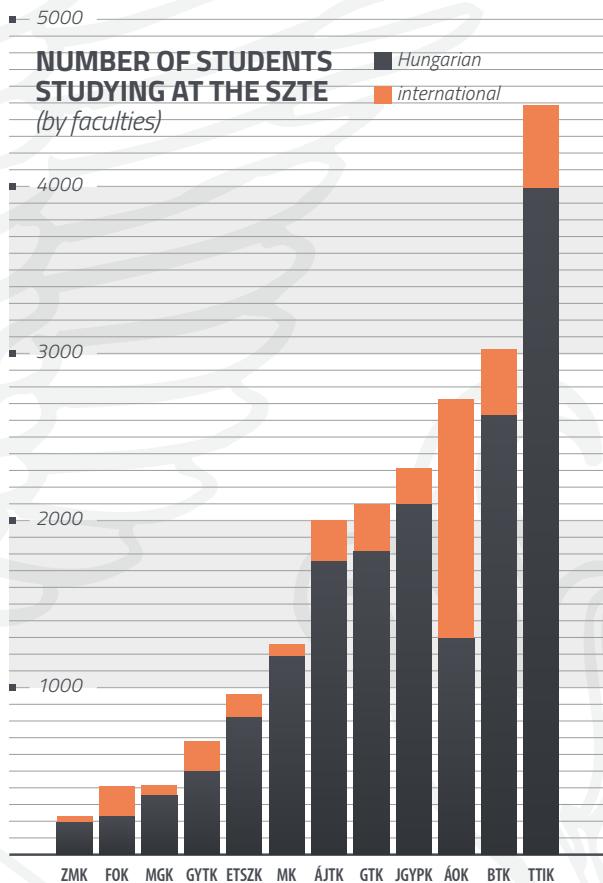
The characteristic feature of art education is that a talent does not choose an institution, but a master for their development and further education. That is why it is important that artists teach at the Faculty of Music, whose names attract young talents here. But it is currently "document-based", so art education is counter-selective. According to Dr Péter Tóth, even Ferenc Liszt could be employed only as a part-time teacher at the music academy bearing his name because he would not have the necessary qualifications for his employment. A solution would be if the state supported art education more generously and, if needed, with special rules. A world-class infrastructure would also be required.

The Board of the Faculty of Music has already accepted it and the Senate of the University of Szeged may approve of changing the name of the faculty for Béla Bartók Faculty of Art. It is among the dean's plans to develop the faculty into a faculty of performing arts, providing 10 semesters' trainings for graphic artists and sculptors, in cooperation – besides the arts and crafts training of the Faculty of Education – with several faculties of the University of Szeged. In the long run, it would also be possible to develop the framework for college level dance education, relying, for example, on the world-famous Contemporary Ballet Association of Szeged. This could be the cornerstone of the creation of the Doctoral School of Art in Szeged: the possibility for obtaining the title "Doctor of Liberal Arts", the DLA, that is the doctor of free arts, could help increase the number of talented students who would like to participate in higher art education. The young artists might find a home in the building on Tisza Lajos Boulevard, which in going to be renovated by the 2020/2021 Academic Year. Its current floor area will be doubled, its classrooms will be modernised, a state-of-the-art concert hall will be built seating 450 people and two guest apartments will be established in the attic. With this, the University of Szeged can also participate in conference tourism in addition to serving the musical and artistic life of the city and its region.

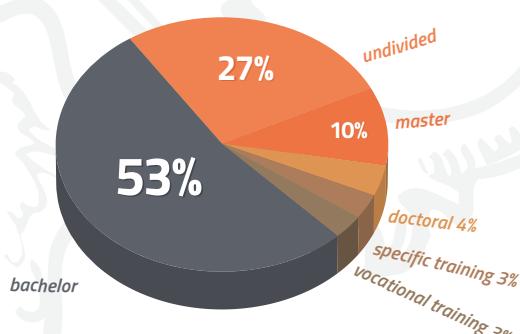
Quacquarelli Symonds (QS)  
World University Rankings (WUR),  
world ranking 26,000 universities

**20 595**  
STUDENTS

<  SAN MARINO  
**33 400** inhabitants



#### STUDENTS OF THE SZTE BASED UPON THE LEVEL OF THEIR STUDY PROGRAMME



**758**  
STUDY MATERIAL  
**353**  
STUDY  
MATERIAL  
IN HUNGARIAN



#### E-LEARNING ARCHIVE IN THE UNIVERSITY LIBRARY

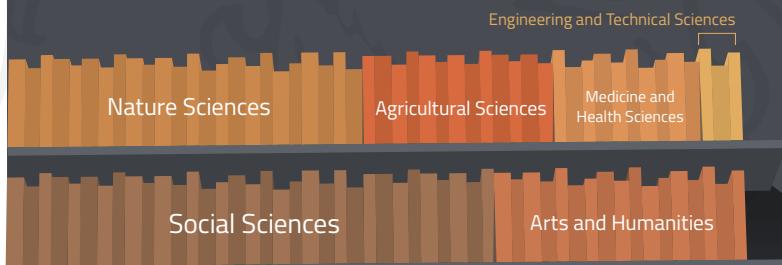
► Bernadett Kocsis

A new collection was added to the repository of the Klebelsberg Library of the University of Szeged. The Repository of Educational Resources (ETA) is the central supporting system of electronic course materials created and developed at the University.

As part of the implementation of the University Open Online Education strategy, the purpose of the new archive is to ensure long-term preservation, appropriate processing and provision of course materials.

Educational materials and aids, online educational packages, textbooks, presentations, lecture notes, visual images, videos and sound recordings for educational use are all available in the multi-disciplinary learning material archive. Students complete a course individually, study the required course content and even test their knowledge with the help of online materials. The archive provides valuable resources for those who are writing their thesis, taking a correspondence course or would like to study outside of their major.

About 500 course materials can be accessed in the continuously expanding archive. Members of the academic staff are uploading new lecture notes and learning materials while library staff members are adding archived electronic materials, so the number of available e-learning materials is expected to double by the end of the year. The searchable platform offers course materials from all faculties and fields of study of the University. A detailed view of the materials is also available thanks to the thematic categorisation.



# Poems in French

Ilona ÚJSZÁSZI



Zoltán Novák MD is professor at the Faculty of Medicine of the University of Szeged. He has not only been elected to be one of the best 100 physicians of Hungary, but he also recites in French in his free time. In their working time, they teach university students while they are in search of a remedy for incurable diseases, they create innovative inventions or explore the secrets of space. What do they do after changing the white cloak after finishing at work? How do the teachers and researchers of the University of Szeged spend their free time? Zoltán Novák MD, professor at the Faculty of Medicine of the University of Szeged answered our questions in the topic of 'Scholarly Hobbies'.

*- How long have you been pursuing your hobby?*

- Poetry recitation is an old love of mine. I even won a national poetry recitation contest when I was young and I played with professional actors as a member of Paál István's Szeged University Stage. For example, in 1972, I played with prominent actors such as Ági Margitai and Miklós Tolnai in the piece 'Eternal Electra'. I also took part in a Poetry Day show with Attila Nagy and

Gizi Fekete. Later, as a member of the 'Minerva' literature stage, I had the honour to work with director Árpád Árkosi and László Konter, who became the director of the theatre in Békéscsaba. Recently, marking the 100th birthday of the legendary French teacher Béla Kovács, I recited a poem in French from my beloved poet Verlaine.

*- What do you enjoy in reciting, what does it add to your life?*

- The experience gained from

performing on stage helps a lot in holding professional lectures, it gives you a routine.

*- What's the most memorable experience in connection with your hobby?*

- Our group, the Szeged University Stage achieved great success when performing Peter Handke's absurd piece. We played four and we were all offered to attend the Institute of Theatre Arts. Three of my other friends did so: a graduate of the Hungarian-French ma-



*Pulmonary medicine - from birth to passing away? This was the title of the presentation held by Dr. Zoltán Novák, awarded with Korányi Frigyes memorial medal and ring, at the 60th jubilee session of the Hungarian Respiratory Society, who had previously been selected as one the 100 best Hungarian physicians by Hungarian Haszon Magazine. The Professor of the Faculty of Medicine at SZTE has chosen medicine instead of professional acting.*

jor of the University of Szeged, Tamas Dunai is now a famous Mari Jászai award-winning actor; teacher trainee Ildikó Fehér, who is an actor now and János Ács, who became a well-known Mari Jászai award-winning director. I was a medical student at that time and I stayed as I had been preparing for a medical career since the age of 10 – I wanted to heal children.

- ***What is your field of research?***

- As a pulmonologist I'm dealing with respiratory examinations. I have published papers on this field, for example in the journal of the Hungarian Respiratory

Society (MTT). We are trying to bring the age limits of respiratory function tests forward as early as possible and our methodology has also been published in international journals. Being the head of one of the units of the Paediatric Department of the Szent-Györgyi Albert Health Centre of SZTE, I am dealing with pulmonary problems. Also, 90% of child patients in my general care practice are also treated with respiratory diseases.

- ***Is there a relationship between your work and your hobby?***

- Yes, there is, for example, I have recited poetry at events dedicat-

ed to professionals specialized in pulmonary. My affinity towards theatre also helps me in my university teaching. I always find it challenging to attract and hold students' attention. I also deliver lectures at professional programs of paediatricians and pulmonologists. I am often interviewed by journalists in order to disseminate information, for example during the pollen season or on the World Day of Smoking. This is just as much a part of my medical work as when I give a video interview for the further training of general practitioners about allergic illnesses of the airways.



# Diving in his Spare Time

 *Anna BOBKÓ*  
 *Dávid MUCSI*

Biologist Dávid Mucsi, graduate of the University of Szeged, spent a month doing research in Hermanus, South Africa. He observed sharks, measured their hormone levels and studied them with video traps.



*David Mucsi graduated from the Faculty of Science and Informatics at the University of Szeged with the specialization of supraindividual biologist. In addition to the University of Szeged, he was a guest student at ELTE where he completed four marine biology courses. He wrote his thesis on the mandibular adaptation of cartilaginous fish species.*



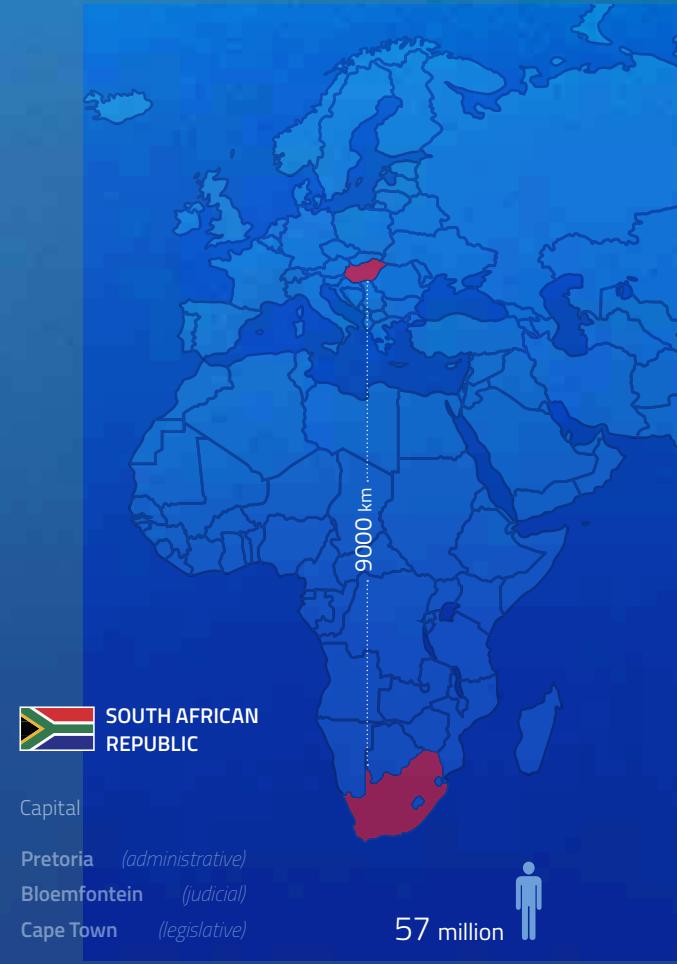
- You have chosen an interesting research topic and if we consider the fact that Hungary does not even have a sea...

- Sharks and rays have always been interesting for me since I was a child and the fact I was already doing scuba diving at the time when I had to choose the topic of my thesis helped me in making my final decision. In the beginning I was a little uncertain about the subject as it was hard to imagine how to do such research in a country with no access to any sea, but luckily, on the different social networking sites of research groups dealing with sharks, I spotted an opportunity for a trainee position a month in the Hermanus Shark Conservancy in South Africa. I applied and I got accepted a few weeks after.

- Could you tell us about your experiences in Africa?

- The research centre is in a town in a fantastic bay about 120 kms away from Cape Town. The head of the South African Shark Conservancy (SASC), Meaghan McCord Gray, made it possible for me to deal with eight different shark species including the 'big white'. We carried out morphometrical measurements and took DNA samples. I learned how to catch a shark and participated in some ongoing research, such as measuring stress hormone levels

Cape Town  
Hermanus





Blue sharks (*Carcharhiniformes*)



282 species

of sharks in the presence of sea-lion scent and assessing the population of white sharks living in False Bay. We placed video traps in the sea, which provided information about the diversity of local species. We also marked sharks. Apart from working on the site, we also focused on the documentation and analysis of the measured data. Once a week we took part in lectures where we got an insight into the work of guest lecturers supported by National Geographic and other recognised nature research firms. Weekdays were spent with work (sometimes even Saturdays, too). On the weekends, however, we went diving in nearby waters.

- *What kind of prior education do you have in diving?*

At the University of Szeged, Attila Cseh introduced me into the world of diving; I am grateful to him for the stable foundations. Currently I'm a Divemaster in the SSI diving system, and I participate in trainings as well along with András Rácz and Róbert John, who are acknowledged representatives of technical dives. My regular dive sites include several points in the Adriatic Sea and certain safari routes in the Red Sea. I had the privilege get to the Laccadive Sea surrounding the Maldives, where I could dive with great manta rays and whale sharks.

- *What was your most exciting experience in diving or working in Africa?*

- During diving, I met a huge variety of species, such as sea lions, chimaeras. During one of these tours, we went by boat further than the Cape of Good Hope to dive with blue sharks in the open waters. It was a fantastic experience to dive with white sharks: they swam a few meters ahead of us with their deep, pitch-black eyes. From the mainland, I saw hundreds of dolphins, whales, seals and once I met a baboon family. All that I saw, learned, experienced during these four weeks have added a lot to my present knowledge.

- *What are your further goals and plans?*

- Currently, I'm studying for my master's degree at the University of Veterinary Medicine. I visualize shark ethology as my main research topic, which will hopefully contribute to the understanding of these wonderful animals.

Squaliformes (*Squaliformes*)



121 species

Carpet sharks (*Orectolobiformes*)



42 species

Monkfish (*Squatiniformes*)



24 species

*Is a very nice  
& calm shark*



<b>Porbeagle</b>	( <i>Lamniformes</i> )	<b>16</b> species	<b>Sixgill-sharks</b>	( <i>Hexanchiformes</i> )	<b>5</b> species
<b>Bullhead-sharks</b>	( <i>Heterodontiformes</i> )	<b>10</b> species	<b>Sawfish</b>	( <i>Pristiophoriformes</i> )	<b>5</b> species

### Nurse-sharks | *Ginglymostoma cirratum*

## PROFESSIONAL EXPERIENCE

## Dual training

experience in a professional environment,  
professional experience

remuneration / grant, employment  
after graduation

## ■ Cooperative training

in addition to the obligatory professional experience:

**90** business days / year  
**8** bachelor

payment  
70 business days /  
last 1-3 semesters

7 *no estore*

Development of

8  
*vocational  
trainings*

11  
*short-term  
trainings*

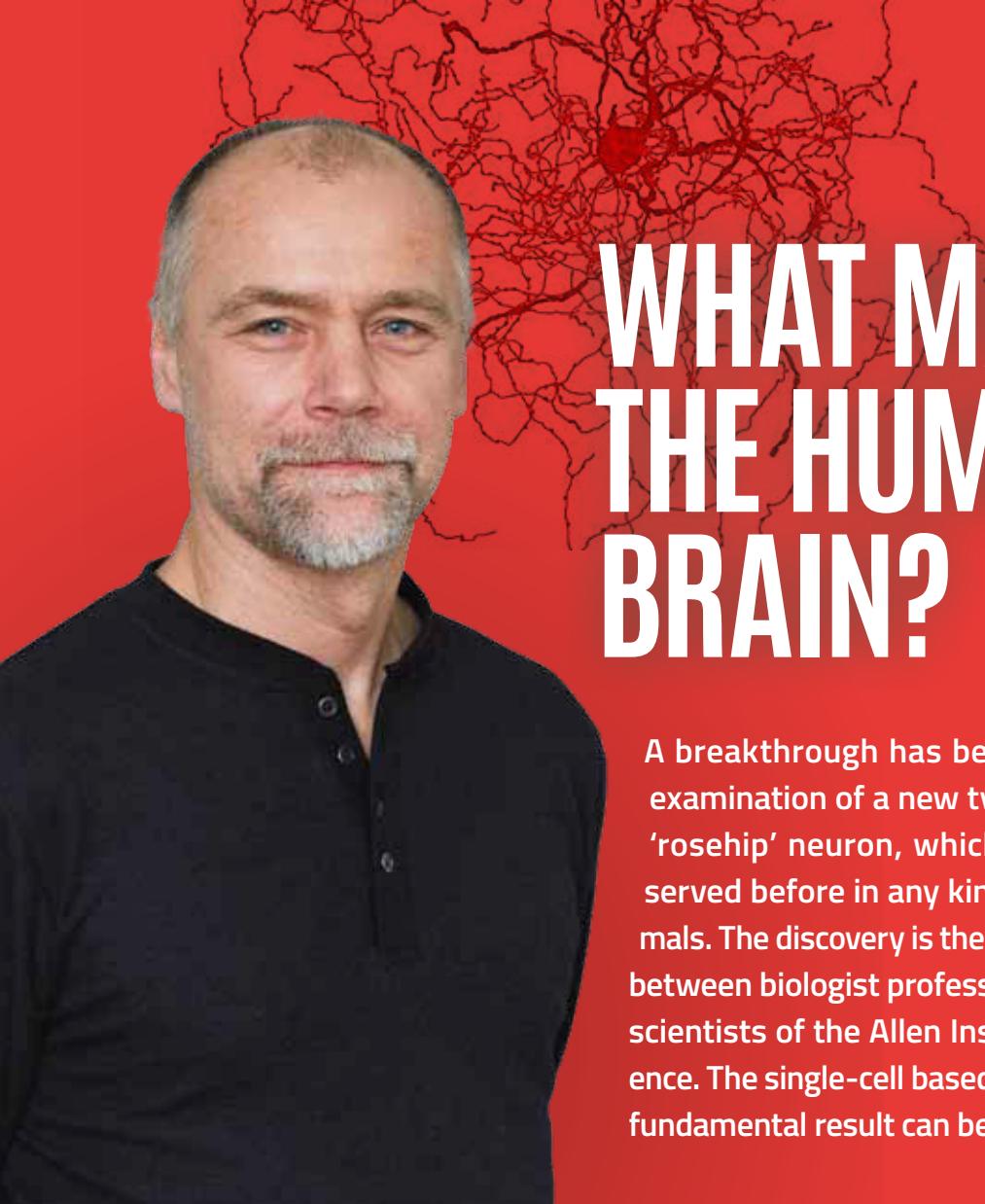
Available at 5 faculties of the SZTE - Faculty of Law, Faculty of Humanities, Faculty of Economics, Faculty of Engineering, Faculty of Agriculture, Juhász Gyula Faculty of Education, Faculty of Science.

# **ALUMNI MENTORING PROGRAM IS ALSO AN UNDERGRADUATE COURSE**

**Alumni Mentoring Program**, a uniquely organised project which is used only at the University of Szeged (SZTE) in Hungary, started its 10th cycle in the autumn of 2018. Nearly 50 companies and 300 students have joined the project so far.

In the Alma Mater Alumni Mentoring Program of the University of Szeged, university students can apply for a four-month long mentoring program allocated to postgraduate specialists who graduated from SZTE. The alumni members of the University of Szeged will share their professional knowledge and job experience with undergraduate students. This will help students to create a realistic image of their chosen profession and to become acquainted with employers' considerations during the university years, which can help them to find a suitable workplaces after graduation. The project started in 2014, currently it is functioning in the framework of the EFOP 3.5.1-16 application called 'Developing dual and cooperative higher edu-

cation, vocational higher education and postgraduate specialist study programme' Dr. Judit Fendler, Chancellor of the University delivered speech at the jubilee event of the project. She emphasized that the program also fits into the national policy objectives and the University's third mission objectives, as it encourages the most talented students to stay in the southern region of the Great Plain instead of working abroad. 'Since 2017, the program has been available for the 'suspended' as well as for correspondent and foreign students. In 2018 it has also been announced as a university course' added Dr Márta Görög, Rector's Assignee responsible for Alumni Affairs. The program was expanded to help the SZTE's enrolment activities: in the AMUP, which is the Alumni Mentoring Program's Substitution Program, current students of the SZTE mentor secondary school students.



# WHAT MAKES THE HUMAN BRAIN?

A breakthrough has been achieved by the examination of a new type of neuron called 'rosehip' neuron, which has not been observed before in any kind of laboratory animals. The discovery is the result of cooperation between biologist professor Gábor Tamás and scientists of the Allen Institute for Brain Science. The single-cell based method leading to a fundamental result can be used in diagnostics.

The new type of neuron discovered by academician Gábor Tamás and his team in the Cervical Neuronal Network Research Group of the Hungarian Academy of Sciences (MTA) and the University of Szeged (SZTE) was named 'rosehip' nerve cell owing to its shape.

"Rosehip" neurons belong to the group of so-called inhibiting cells. The strategies of these cells are that they do not randomly spread

their synapses, their connections to the so-called 'pyramid cells' and other neurons commonly found in another part of the cerebral cortex, but they select sites carefully. The specialty of the 'rosehip' is that it creates its relationships with other neurons with precision that we did not know was possible. For this reason, this cell has functions that are not available in other systems' Gábor Tamás, professor of

the Department of Life Sciences, Organizational and Neurosciences 'This 'rosehip' has an ability which acts as if the branches in the delta of river Danube were disconnected one by one. My colleague Gábor Molnár examined how the waves flow between the 'pyramid cells', from the centre of these cells to the end of dendrites, which are then quasi 'amputated' by the 'rosehip neuron' referred to the division of labour



Ilona ÚJSZÁSZI



Anna BOBKÓ

within the research group the academician who is also co-chair of the National Research Program's Discoveries Pillar.

'I and my colleague Eszter Boldog found some key genes a few years ago that are characteristic of these nerve cells. We were primarily interested in the function of these cells: we wanted to know what they look like and how they are built into the surrounding neural networks' the professor of the SZTE recalled the beginnings. 'We started to investigate the messenger RNAs of the 'rosehip' cells, systematically using the method developed jointly with the group of László Puskás, working for the Szeged Biological Research Centre of the Hungarian Academy of Sciences.' The Allen Institute for Brain Science deals with the special properties of the human brain. I became member of the institute's advisory body because - thanks to neurosurgeon Professor Pál Barzó and our collaboration with the Department of Neurosurgery - our laboratory had developed a method since the early 2000s that was later taken over by many laboratories. We taught these how tests based on human brain tissue have to be performed. As this project was progressing, several issues emerged that made the need for co-operation between them and us obvious' the academician explained. This co-operation with the Allen Institute for Brain Science now has a formal basis: the US National Institutes of Health have decided to consider the „How many kinds of cells does the brain consist of?” problem as a central issue and provide a significant amount of support for this

research. In this prominent research, only two other European laboratories can participate. The first fruit of the project on the 'rosehip' nerve going on for 2 years within this formalized framework is the publication issued in the Nature Neuroscience journal on August 27th, 2018.

The American Institute found that 11 human nerve cells can be found in the outermost layer of the cerebral cortex, while only 4 in that of the mouse. The common denominator between the cells of the cerebral cortex of these two creatures is just one cell type: the neuroglia form cell, which is probably a very ancient cell, which explains why it functions somewhat differently than the others - pointed out the professor of the SZTE this new context. He expects that the number of cell types that make up the brain will be between 70 and 100. Currently, about 10 cell types are distinguished in the first of the six-layers of the cortex studied by the researchers of the University of Szeged. 'What is shocking is not the fact that there is a cell that is certainly not present in the mouse, but the fact that the majority of human neurons are molecularly different from the cells of the most commonly used animal model' emphasized Gábor Tamás. As a next step, they would like to find out whether 'rosehip' neurons are present outside the examined parts of the cortex. The MTA-SZTE research group has also begun to study whether 'rosehip' neurons change in different neurological disorders, i.e. in diseases. 'We want to know how some cell types or their networks function together in various diseases.'

## CELL THERAPY LABORATORY RESEARCHES

The projects of SZTE contribute to the expansion of the knowledge base and the establishing of researchers of the future, as both young researchers and students are involved in them. The Cell Therapy Laboratory is the result of an SZTE project.

Within the framework of the Project EFOP 3.6.1 the researchers of SZTE also carry out researches that have effects on each stage of the human life cycle or interconnect several interdisciplinary research supporting activities. An example of the latter is networking or the enhancement of healthcare knowledge transfer.

One of the most important developments of the project is the establishment of the accredited Cell Therapy Laboratory, which is used by many institutes as well as in the Clinical Centre's Biobank Network (ST and KKBH). The lab and the network makes promoting and establishing the implementation of modern technologies both in patient care and special post-secondary education possible - besides the scientific results brought about by interdisciplinary research, using both the patients and the database.

The Cell Therapy Laboratory, meeting international standards and requirements, will be able to isolate and culture primary-, stem- and progenitor cells to be used in clinical therapy in the future, as well as to manufacture bone and cartilage implants.

## THE BENEFIT OF BASIC RESEARCH

How can the results of neuroscience research be applied in completely different directions? The MTA-SZTE Cervical Neuron Network Research Group also serves as an example.

'No other organ has as many cells as our brain. That is why we had to develop the single-cell, highly sensitive method in the recent years. It will make it possible to answer long-standing questions for doctors establishing a diagnosis. For example: it can be detected what cells a certain tumour derives from. In cancer it is often the metastasis that can be identified not the primary tumour. By taking a sample from the metastasis and carrying out a pathological examination, it will be possible to find out where the primary tumour is and from which types of cells the tumorous disease started' explained Gábor Tamás, professor of the University of Szeged, who cooperates with colleagues in Szeged and Budapest to find out how they could make this method even more usable.

# FROM ANTHEM TO THE OSCAR NOMINATION



For the musician brothers, István Benedekfi and Zoltán Benedekfi the University of Szeged was their Alma Mater, but today they are spreading knowledge as lecturers of the University. The young talents are associated with an own course, a unique performance style and a soundtrack nominated for Oscar.

Zoltán Benedekfi began to get acquainted with the violin at the age of 7, István Benedekfi has been playing the piano since the age of 11. The brothers were enrolled to music school by their mother. Both of them graduated from the Faculty of Music of the University of Szeged. What opportunities does the Alma Mater provide them with? 'Owing to a scholarship granted by the City of Szeged I could compose the Albert Szent-Györgyi Anthem. The lyrics of the piece specially dedicated to the

University was written by László Janik. The premiere in 2012 was followed by the performance with an orchestra and a choir on the Szent-Györgyi Awards Ceremony in 2017, which was an exceptional opportunity' said István Benedekfi. 'The Faculty of Music is small, therefore the atmosphere is quite cosy. I owe incredibly much to my teacher, Ferenc Szecsődi. We regularly give concerts at the Autumn Cultural Festival of the University, at doctoral inauguration and graduation ceremonies' István Benedekfi added,

'Silent Film with Live Music', this was the title of the university course instructed by the brothers in 2017. – 'The improvisatory lesson was the idea of Izabella Füzi, she brought the movies and we provided the music, so in other words while the film was running, we created the music that was appropriate for the given scene in the film. There is a great interest in this course, and 80 students have already signed up this academic year' the musicians said. The Benedekfi brothers are also known as composers. Their



name is associated with the soundtrack of the Oscar nominated film 'Dung dot', i.e. 'Do not Burn It!'. The film was set in the Vietnam War of America and its soundtrack won the Golden Dragon Prize at the 19th Fukuoka International Film Festival. The sentence 'Two People - Four Instrumental Effects' has become a trademark of the young talents. 'The main point is to incorporate instruments that do not belong to our main profile. The violin is accompanied by drum and the piano is accompanied by electric piano or synthesizer. This is how many times the four instruments are played by two people at the same time. It is a unique experience to make music in this way, at the same time it is very intense both spiritually and physically, but the romantic musical tastes that are typical of us can be expressed with this way of performing. We try to influence emotions and passion by music' the brothers added. It is the enormous melodic world combined with highs and lows that creates deep emotions in many people.



Bernadett KOCSIS

Anna BOBKÓ

# Cycling is a way of life

Many students and associates of the University of Szeged go to work by bicycles. Gábor Dávid Kiss, Associate Professor of the Faculty of Economics (GTK), who has been organizing the Critical Mass (CM) for many years, considers city cycling a good thing, and he also points out that very good tours can be done on two wheels starting from Szeged.

Cycling in the city means consciousness towards the environment, it's a way of life. For Dr Gábor Dávid Kiss, DSc of the University of Szeged (SZTE), cycling is a joy of movement, and it has no bearing on the environment either. The bicycle is the fastest vehicle in Szeged: you do not have to wait for it, and as there are now bike stations in many places, you can easily park them.

We also wanted to know whether he, one of the organisers of Critical Mass programs in Szeged thinks there will be a need to revive the big cycling co-op-

eration some time after the last CM event. 'As with truck or motorcycle programs, cycling programs will be demanded in the future as well. Nowadays, cycling tours are becoming more and more popular, and courier competitions have also been organised in Szeged on several occasions. If an enthusiastic team gathers again that is willing to organize the event, mass events will be possible to be held in the future, but not necessarily within the framework of CM.' We like to say that Szeged is a city of bicycles. Concerning the whole population, modal split is 20%, that

is, if someone has to go from A to B, then 20 percent of the residents will choose the bicycle. Now that students are not provided with a free public transport pass, they may choose cycling instead, which is also supported by the bike station building programs. Fortunately, in most parts of the city, you do not have to use old types of stations damage spokes. Szeged can be considered as a city where it is convenient to live, especially if it is compared to Budapest. The fact that it is easy to ride a bike contributes to this feeling. 'If we consider the congestion of



## BICIKLIN SZEGED

*at the University*

Éva Eső ANTAL  
 Anna BOBKÓ





**64 km**  
**BIKE TRACK**

bicycle parking stations near the university buildings, SZTE is definitely a workplace of cyclists. I know that many of my colleagues also ride their bike on the way to the faculty because it is much faster than any other means of transport – a lecturer added at the Faculty of Economics and Business Administration, who also likes to take cycling tours. A Szeged-Röszke-Mórahalom circle is a very pleasant trip, with a stopover at the buffalo reserve at Mórahalom. The Szeged-Algyő-Vásárhely-Kardoskút-Orosháza route is equally beautiful, especially in the spring when the salty bush blossoms and in winter when the landscape is covered with snow. In addition, it is worthwhile visiting the pine forests of Kelebia: riding on the bicycle lane along the Highway 55, turn left at the juncture to Öttömös if you long for the smell of pines on the Great Hungarian Plain.



**20 %**  
**SZEGED** is on the ride



## FROM ANYWHERE TO ANYWHERE

Hedvig, an art student of Szeged has asked students about why they like to ride bicycles. Bence Papp, a second-year student of the Faculty of Arts of SZTE: 'In Szeged, any place can be reached by bike in twenty to twenty-five minutes.' Maria Yurasova, a guitarist from St. Petersburg, Russia, a first year student at the Faculty of Music of SZTE: 'For me, one of the most important things is the active time I spend cycling between lectures and practice. These 5–10 minutes I spend cycling home from college or back, mean a great rest for my brain and my body. A lot of fresh thoughts come to my mind during the several short rides, and I usually feel better due to riding.'



**20-25 min.**

## GREEN TITLE

The University of Szeged is the Greenest of University of Hungary, and it has been improving its prestigious position in the Indonesian UI GreenMetricRanking of World Universities survey since 2010. It is based on environmental awareness, the pillars of which are selective rubbish collection in the buildings of SZTE, the use of solar energy, heat wells, heat pumps, grey water systems, PlanibelTri glass technology, mini solar systems and geothermal heating systems, as well as encouraging and supporting cycling in the city. For example, with the 140 bicycle storage facilities at the Attila József Study and Information Centre, the SZTE has joined the 'Cycle to Work' project, developed its Bicycle Strategy and has earned the 'Bike-friendly Job' title.



Find other hiking trails and a bicycle blog at:  
[www.biciklinszeged.hu](http://www.biciklinszeged.hu)

# THE TREE OF LIFE OF THE UNIVERSITY

The University of Szeged (SZTE) is the first or second best successful Hungarian institution of higher education, which offers academic studies in 13 training areas. The University of Szeged is an internationally acknowledged, fourth generation university embedded in local cultural life, which carries out and utilizes fundamental research, provides health care and stimulates regional economic development.

The SZTE was established on 1st January 2000 with the integration of the institutes of higher education in Szeged and Hódmezővásárhely. The predecessors of the 12 faculties of SZTE, all proud of their achievements and traditions, were created in different centuries and half of them outside the region. The tree of life of the university describes the development of the scientific fields as well.

Going back in time:

**21<sup>st</sup> century** - 2007: Faculty of Dentistry (FOK).

**20<sup>th</sup> century** - 1999: Faculty of Economics and Business Administration; 1962: Faculty of Engineering (MK); 1957: Faculty of Pharmacy (GYTK); 1938: Faculty of Health Sciences and Social Work

**19<sup>th</sup> century** - 1896: Faculty of Agriculture (MGK); 1880: Faculty of Music (ZMK); 1873: Juhász Gyula Faculty of Education (JGYPK).

**18<sup>th</sup> century** - 1784: Faculty of Natural Sciences and Informatics (TTIK); 1775: Faculty of General Medicine (ÁOK); 1774: Faculty of Law (ÁJTK).

**16<sup>th</sup> century** - 1581: Faculty of Humanities and Social Sciences (BTK). István Báthory, Prince of Transylvania and King of Poland, issues a founding letter in Vilnius on May 12, 1581, setting up a Catholic university with faculties of liberal arts and theology. This is where the University of Szeged derives its intellectual history and institutional roots.

