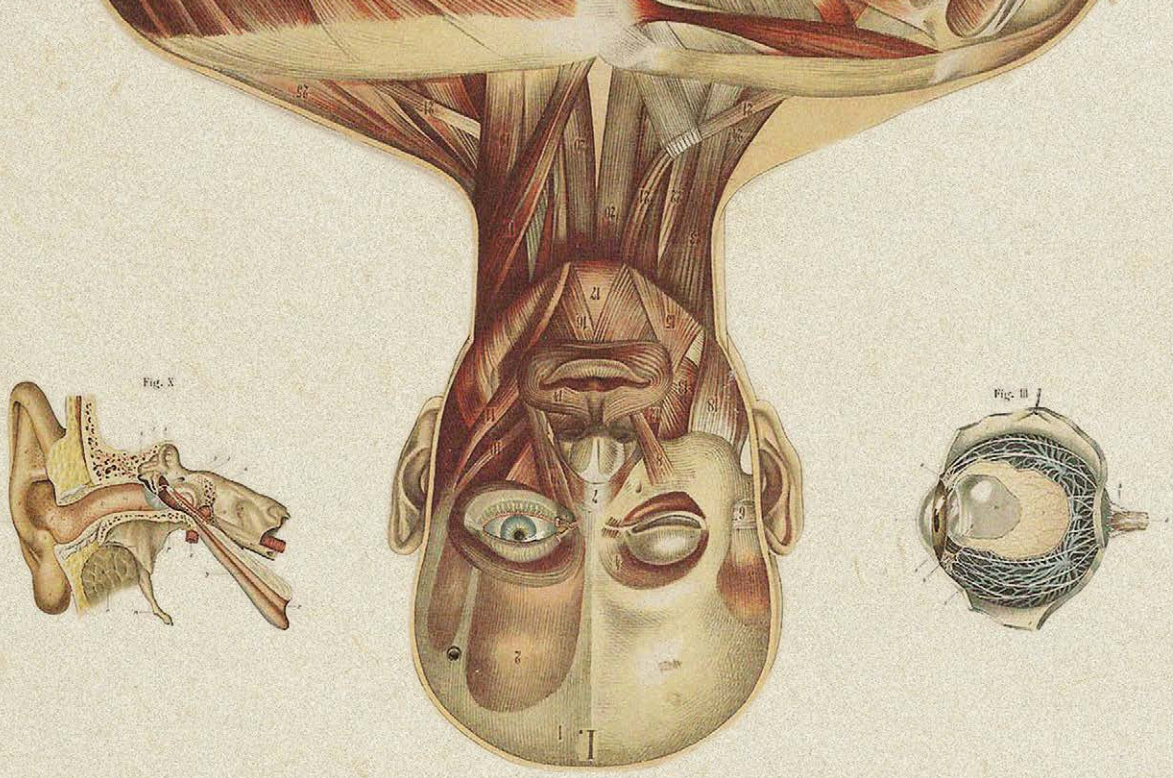
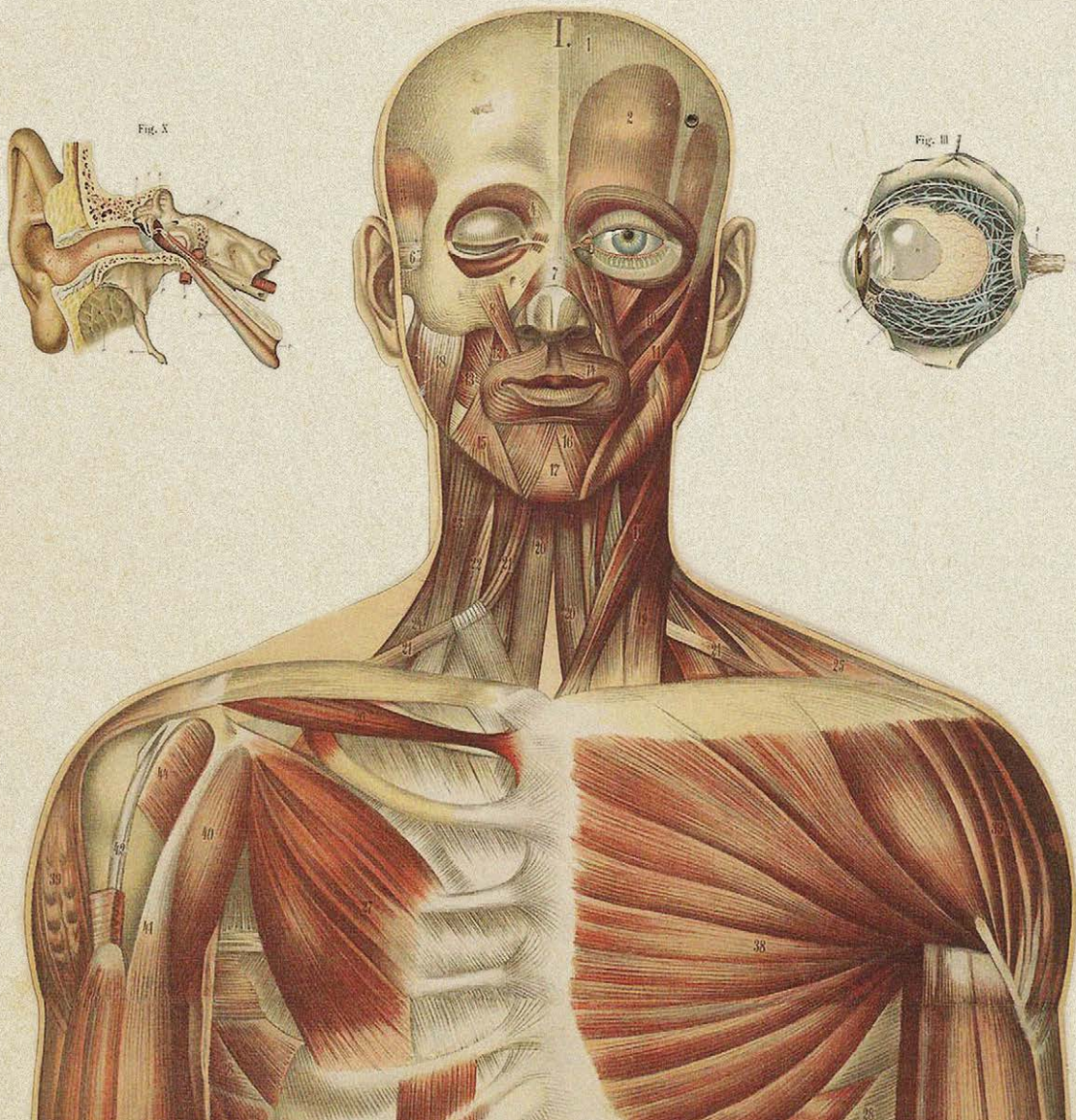


First Faculty of Medicine, Charles University

The Oldest Tradition
with a Youthful Spirit

FIRST FACULTY
OF MEDICINE
Charles University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First Faculty of Medicine, Charles University

The Oldest Tradition
with a Youthful Spirit

Contents

Our faculty is a direct successor of a medical faculty which together with the faculty of liberal arts, faculty of law, and faculty of theology formed the foundation of one of the oldest universities in Europe, the Charles University, since its foundation in 1348. This venerable tradition is a legacy we strive to live up to, but success and reputation of a university are achieved by active work in the present and a vision of future.

The number of persons from the Czech Republic and abroad who would like to study at the First Faculty of Medicine of the Charles University is many times higher than the number of students we can accommodate and constantly increasing. This is why we constantly adjust our admission criteria to choose the most suitable and most motivated candidates. We care about their professional success in healthcare systems all over the world: their success will benefit not only their patients but also contribute to further development of medicine and biomedical sciences.

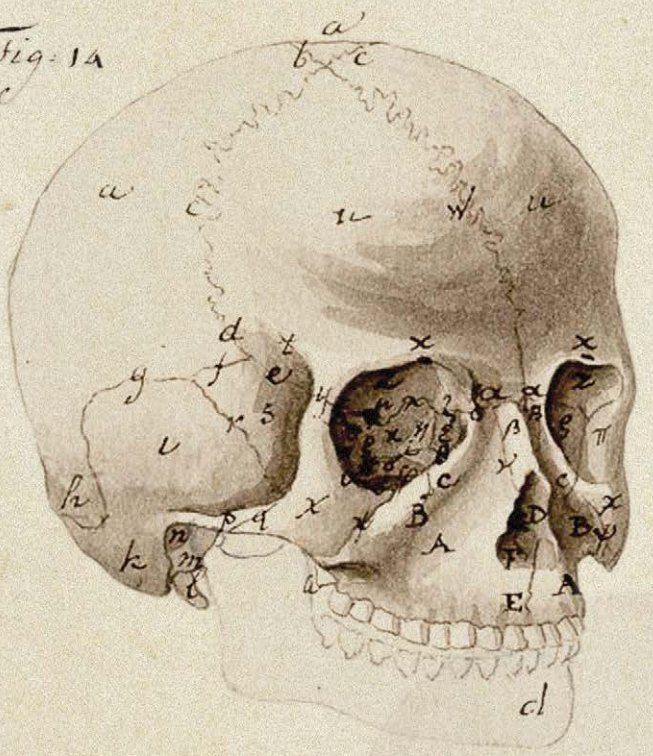
Our undergraduate and graduate students are guided on their path to their goals by outstanding teachers, they profit from a clinical basis that is the largest among all medical schools in the Czech Republic and have at their disposal top medical and scientific technologies. Our alumni are found in leading positions of professional societies and associations, they work as heads of clinics at other medical schools and lead interinstitutional projects and research teams. The First Faculty of Medicine of the Charles University is the most productive institution in biomedical sciences in the Czech Republic and maintains close collaborations with other European and overseas institutions.

Our faculty is also fully aware of its role as a 'corporate citizen'. It uses its status in a dialogue with state and social institutions, participates in legislative work pertaining to improvements of the Czech system of healthcare, and organises numerous preventive programmes.

We perceive the centuries-old legacy of our school as an obligation we are trying to meet to the benefit of current and future patients, an obligation to be transferred as a challenge to the next generation of successful medical professionals.

Professor Aleksi Šedo, Dean of the First Faculty of Medicine

Fig: 1A



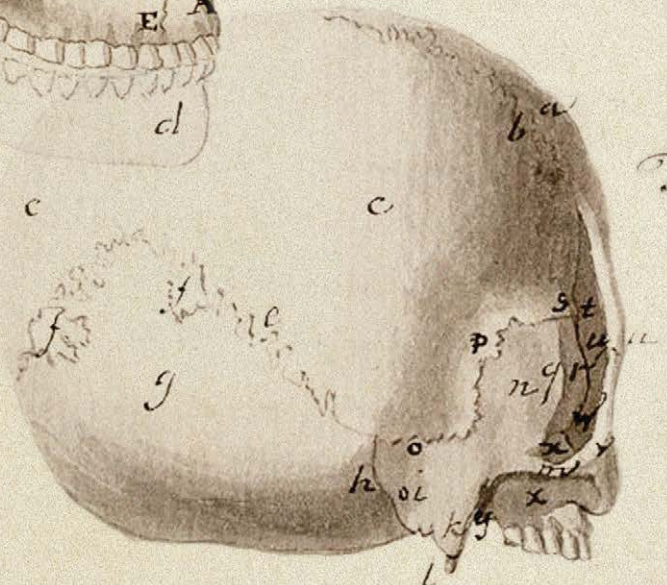


Fig: 35

History

From the Middle Ages Until the Early Modern Era

Prague, the capital of the Czech Republic, is one of the most popular tourist destinations in the world, a place famous for its long and rich history. In fact, already in 965–966 the Andalusian traveller and merchant Abraham ben Jacob (also known as Ibrâhîm ibn Ya`qûb al-Tartushi) described Prague as a town 'built of stone' and a centre of commerce in Central Europe.

It was therefore natural that already in the Middle Ages Prague also became a centre of scholarship. In early medieval Europe, education was mainly the domain of monastic or cathedral schools. The first independent associations of scholars – that is, universities – were established only in the eleventh and twelfth century. In Prague, the older type of learning establishment, a cathedral school at St. Vitus related to the Prague bishopric, also existed and remained active until the High Middle Ages.

Foundation of a university on 7 April 1348

New developments in education came in the first half of the fourteenth century, when after the death of John of Luxembourg (also known as John of Bohemia, 1296–1346), the crown passed to his son, Charles IV (1316–1378), King of Bohemia and Roman Emperor. Once on the throne, he started an ambitious project whose aim was to transform Prague from a regional centre to a city of European importance. One of the things he did in order to achieve this goal was the foundation of a university on 7 April 1348. From the very beginning, this university included also a medical faculty, which makes it one of the oldest such institutions in Europe.

Little is known about the early days of medical education in Prague. About the first generation of professors we know in many cases only their names, but even that indicates something about the scope and size of the Prague university. By 1419, when the university's activity was substantially reduced, medicine had been taught by at least 67 professors. The earliest professors included, for instance, Master Waltherus,

who also served as rector of the School of Virgin Mary Before Týn and died before 1354. A number of university masters had links to the royal court, such as Master Reimbotus Eberhardi de Castro (died after 1363), who was the royal physician to Charles IV and his wife Queen Anna (1339–1362) in mid-fourteenth century. His contemporary, Ioannes Henrici de Nova Domo (died after 1375), who taught in Prague in 1365–1375, held the same position at the court.

"And thus, so that the loyal population of the Kingdom...could achieve education by learning sciences without any longer having to ... travel far and wide in search of science, to turn to foreign nations, ... but could see it as their glory that others come from abroad to them... we have decided...to establish...a studium generale in our metropolitan and especially lovely town of Prague, rich in the fruits of the earth, in pleasing location, and well-equipped in all necessities, and thus abundantly suitable and fitting such a great task."
From a charter by which Charles IV on 7 April founded the Prague university.

By the end of the fourteenth century, our information about the medical faculty is a little more detailed. The most important Prague professors of that time included Master Ioannes Andreae called Jan Šindel (1370?–1449), rector of the Prague university and professor of astronomy and medicine. He wrote several books about medicine and took part in designing the famous astronomical clock in Prague's Old Town Square. Master Gallus de Monte Sion (Havel ze Strahova; died after 1388) wrote a number of treatises such as On the Plague, On the Little Stone, On Waters, The Health Regimen, A Treatise on Urine and others. Another prolific author was Christianus de Prachatitz (Křišťan z Prachatic; 1366?–1439), who wrote on astronomy (Book on the Art of Constructing an Astrolabe) but was also interested in medical subjects (Against the Plague, Herbal, On

Bloodletting). Alongside local academic production, Prague students learned from the standard textbooks used at other European universities. They studied Hippocrates, Galen, Avicenna, and the anthology of medical treatises known as the Articella. Newer medieval works studied in Prague included the Anatomy by Mondino de Liuzzi (app 1260–1326), writings of Arnaldus de Villa Nova, The Surgery by William of Saliceto, and others.

Lectures at first took place in professors' houses, while ceremonial assemblies were held in various Prague churches. Somewhat later, classes moved to Charles's College (that is, the building of current Carolinum) and sources also mention a 'medical college' in Kaprova Street near the Old Town Square.

The Hussite Wars

In the medieval period, the Prague university attracted scholars from various parts of Europe. For instance in 1408–1427, one of its professors was Ioannes Suevus de Monte Leonum (+1427), who is known to have been the rector of the University of Paris in 1400. The most famous figure of this early period is Sigismund Albicus de Uniczow (Zikmund Albík z Uničova; 1358?–1427), who served as the personal physician of King Wenceslas IV (1361–1419) and taught at the university in 1399–1419. He wrote a number of treatises, such as On the Correction of Weather (O nápravě povětří) or Health Regimen (Regimen sanitatis seu Vetularius), and thanks to being in king's favour even became the archbishop of Prague in 1411–1412.

In mid-fourteenth century, the Prague faculty of medicine also played an important role by influencing the foundation and development of several similar faculties in neighbouring countries. For example, the statutes of faculties of medicine in Vienna, Cologne, Heidelberg, Erfurt, and perhaps even Leipzig were co-written by scholars who had studied in Prague.

This promising development of the Prague faculty of medicine and the university as a whole was halted in 1420s by the Hussite Wars. It was a time when religious conflicts wrought enormous damage on the Kingdom of Bohemia – and the university in Prague

had almost ceased to exist. The faculty of medicine survived, but suffered considerable loss of teachers. A notable exception was Paul of Prague, also known as Paulirinus (Pavel z Prahy called Žídek; 1413–1471?), who worked at the Prague university in 1440s before leaving to the Polish Krakow. He also wrote on music and morals. The weakened faculty of medicine survived until early sixteenth century, but by late 1520s all references to it disappear. By that time, the Prague university had only one faculty, the faculty of philosophy, but even that was of merely local importance.

During the Thirty Years' War, medicine was taught in the Carolinum, earlier known as Charles's College. The building now houses the rectorate.

It took a hundred years for the situation to improve. In 1618–1620, Bohemia was engulfed in an uprising of the estates. In this conflict between the Catholic Emperor Ferdinand II Habsburg (1578–1637) and his mostly non-Catholic subjects, the Prague university supported the losing side. In the end, the Catholics won and for the next three hundred years, the Kingdom of Bohemia was an integral part of the Habsburg Empire. The uprising of the estates, however, was just a prelude to the Thirty Years' War and while in other parts of Europe the long war was only just beginning, in Bohemia the victorious Ferdinand II Habsburg handed the (non-Catholic) Prague university over to the Jesuits.

Jesuits and the restored university

Jesuits had settled in Prague already in 1560s and their academy, which offered studies of philosophy and theology, successfully competed with the Prague university. It is thus not too surprising that as soon as the Emperor issued a rescript on 9 September 1622, which placed the administration of the university in their hands, Jesuits quickly grasped the opportunity. They restored the missing faculties and opened a new chapter in the university's history. An Imperial edict then established three chairs at the Faculty of Medicine and at first, there were indeed only three teachers here, invited by the Jesuits from abroad. Anatomy and botany was probably taught by Esaias Leschius (+1650), who was also in charge of the botanical garden. His colleague Justus Stroperius of Meersfeld (born around 1635) focused on practical medicine and won some renown as a personal physician to the famous military leader Albrecht of Wallenstein (1583–1634). The third chair was occupied by Francis Roia a Questa Pace (died before 1652), professor of theoretical medicine. Lectures took place in the Carolinum and it should be noted that Roia occasionally carried out autopsies.

The restored faculty at first struggled. It was due mainly to two reasons: The Jesuits competed for influence over higher education with Cardinal Harrach (1598–1667), the Archbishop of Prague. Their argument culminated in 1627 when the irate cardinal forbade Jesuits to award academic degrees. Although the ban was later lifted, the affair made the university less attractive to potential students for a long time. The other reason was the still ongoing Thirty Years' War, which ravaged Europe. Although its outcome for the Czech Lands was already decided, various armies were still passing through Central Europe leaving destruction in their wake. In 1634 they destroyed university's estates, which led to a further decrease of the already low salaries of professors. Under these circumstances, both Leschius and Stroperius left the university. Roia tried to carry on teaching in the 1630s, but in 1636 was expelled from the Kingdom of Bohemia due to a personal conflict.

It was fortunate that by this time Johannes Marcus Marci of Kronland (1595–1667), one of the medical faculty's new graduates, was already teaching here. He helped

the school overcome this critical period. Marcus Marci was the first representative of a new generation of scholars who laid the foundation to the faculty's growth during the Baroque Era. He was soon joined by professors Cornelius Pleyer (+1649) and Nicolas Franchimont of Frankenfeld (1611–1684). During this time, having overcome a period of conflicts between the Emperor, the Archbishop of Prague, and the Jesuits, the university became more stable thanks to the Decree of Union, which in 1654 united Charles's College, i.e., Carolinum, with the Jesuit college in the Clementinum. As a consequence, the Prague university was henceforth known as Charles–Ferdinand University in honour of both its founder Charles IV and Ferdinand II, the emperor who defeated the Czech Estates. This name was then used until 1920s.

The very first autopsy in Prague took place in Reček's College, which stood in current Karolíny Světlé Street. On 8-12 June 1600, Jan Jessenius in front of a 'great assembly of famous and learned men, burghers educated and thirsting for knowledge' conducted something previously unseen in this town: he dissected a dead body.

Prosperity in the second half of the 17th century

During this time, importance of the medical faculty in Prague reached far beyond the circles of academically educated physicians, who were after all few and far between. The faculty was also the most important healthcare institution in the land. As such, it supervised the work of other specialists whose work was related to medicine: apothecaries, distillers, surgeons, barbers specialised in the treatment of hernias, lithotomists, oculists, midwives, and the like. The main representative of the faculty was

a dean and that function was traditionally reserved for the professor who occupied the highest chair. The study of medicine took five years and required previously completed studies at the faculty of philosophy. It was concluded with the defence of a dissertation thesis (which was then published in print) and the taking of the Hippocratic oath. Early on, there also existed the option of becoming a bachelor of medicine but this form of study was discontinued in 1690.

Various indications show that in the second half of the seventeenth century the faculty prospered. First of all, the number of successfully defended dissertations – many of which survive to this day – was clearly on the rise. They also became longer, some approaching two hundred pages, which made them monographs in their own right. Another interesting historical source documenting the development of medical studies is a brief manual called Rules On How Medical Studies Ought To Be Auspiciously Started, Diligently Pursued, and Successfully Concluded, which was published in 1693 for the needs of Prague students by Professor Johannes Franciscus Löw ab Erlsfeld (1648–1725). It is a truly unique source: among other things, it includes a list of subjects and procedures which students had to master to receive the title of doctor of medicine in Prague and a list of recommended books from which they were supposed to learn. Some of these subjects were general and students were supposed to master them in their previous study. These included good knowledge of Latin and Greek, physics, arithmetic, astrology, astronomy, and optics. Some general subjects from natural sciences were also included, as such mineralogy, botany, and knowledge of animals. Specialised medical subjects included anatomy, medical institutions (that is, what we would now call 'methodology'), medical controversies, surgery, pharmacy, study of medical concilia, or medical casuistry.

Professor Löw's manual recommended the study of altogether almost 360 various authors from all parts of Europe: from Spain and Italy all the way to Germany, Poland, France, England, and the Scandinavian countries. Recommended authors include William Harvey, the discoverer of blood circulation, French philosopher René Descartes, Italian physician and biologist Marcello Malpighi, physicist and astronomer Johannes Kepler,

and many others. It was also assumed that students would follow academic journals, especially the German Miscellanea curiosa and Miscellanea Lipsensia, or the French Journal des sçavans. At the end of his brochure, Professor Löw also remarked that good students should travel – and promptly added a list of European medical faculties which students ought to visit while travelling for education. The list includes the traditional Italian universities in Rome, Bologna, Padua, and Pisa, French universities in Paris and Montpellier, but more surprisingly also for instance the Protestant university in Copenhagen (Academia Hafniana).

And finally, we can also see a revival of medical studies in Prague in the production of new textbooks. The first such publication was probably the anatomical handbook Somatotomia antropologica by Professor Sebastian Christian Zeidler von Zeidlern (1620?–1689), printed in 1686. Just a little later, Professor Löw published his abovementioned Rules and a guide to prescribing medicines (both in 1693). In 1710, Dr. Alexander Antonín Ignác Schamský (1687?–1715), graduate of the Prague medical faculty, published a Brief Guide to Practical Medicine. The name of this treatise is, admittedly, somewhat misleading because his 'brief' guide runs to over 800 pages of folio format and is packed with descriptions of hundreds of diseases. Schamský's teacher, Professor Löw, published alongside his Rules several other books, such as a study on measles and smallpox, an essay on paediatric medicine, an 800-pages long textbook of general medicine and an equally extensive treatise on forensic medicine.

An interesting feature of medical studies in early eighteenth century Prague was the fact that some of the students were Irish. As a Catholic establishment, the Prague university was much more accessible to them than Irish schools, which in consequence of the Penal Laws did not accept Catholics or Nonconformist Protestants. Some Irish scholars even rose to prominent positions at the faculty. For instance, Jacob Smith of Balroe (1694/8–1744) served in the 1730s as Dean of the Faculty of Medicine and even as rector of the whole university. His compatriot William MacNeven O'Kelly of Aughrim and Raussenbach (1717–1787) was a professor of pharmacology and helped to draft the reform of medical studies during the Enlightenment Era.

From Enlightened Reforms Until 1848

In what is now the Czech Republic, enlightened reforms are linked to the names of two truly progressive monarchs, Maria Theresia (ruled 1740–1780) and Joseph II (ruled 1780–1790), mother and son. Not all their efforts met with understanding and support from their contemporaries or even today's historians, but their reforms of education and healthcare were mostly very successful. In some cases, their beneficial impact can be felt until the present day. Thanks to these enlightened reforms, the quality of teaching at the Prague university and its medical faculty started to significantly improve in the 1750s.

Some teachers at the Faculty of Medicine were also successful researchers. One of the best known was Jan Křtitel Boháč (1724–1768), professor of natural sciences and botany, and a respected pioneer of not only Czech but international electrophysiology and electrotherapy. Even more famous was Jiří Procháska (1749–1820), a highly talented physiologist whose crucial work on nerve reflex was published in Prague in 1784.

Joseph II continued in his mother's reforms. In 1786, the Faculty of Medicine received a new order of studies. One of its main benefits was that it made study at the faculty mandatory also for future surgeons. Crucially important for the development of clinical education at medical faculties were the so-called 'Directive Rules' (Direktivregeln), which Joseph II issued soon after his accession to the throne in 1781. Based on this directive, general hospitals, maternity hospitals with foundling hospitals and orphanages, institutes for the insane, and institutes for the sick were established in all large towns of the Austrian Monarchy. Moreover, they were supposed to be located close to each other so as to promote cooperation in patient care and in research. It should be noted that this remarkably modern approach to interdisciplinary collaboration functions in the campus of health institutes in Prague's New Town until the present day. The new General Hospital was located in the so-called Institute for Gentlewomen in the Charles Square, while maternity and foundling hospital was placed

in a former chapter house at the Church of St. Apollinaire (opened on 30 July 1789), and hospital for the sick in the building of the former Augustinian monastery in Na Karlově (opened on 1 December 1789). Only the institute for the insane received a new building in the campus of the General Hospital. The General Hospital started receiving patients in late 1790 and early 1791 and clinical education of medics, which previously took place in the hospital of the Brethren of Mercy at Na Františku, was relocated here in the following academic year, 1791/92. Histories of the General Hospital and the First Faculty of Medicine of the Charles University were thus inextricably linked since early 1790s.

The unique importance of the General Hospital for the development of the Faculty of Medicine as a place of education and science was emphasised in a Decree of the Court Committee for Studies, which was issued in early 1811. It stated that professors should be recruited from the ranks of assistants, prosectors, adjuncts, clinical physicians, and surgeons from the departments and clinics. They thus formed a 'nursery of future professors' (Pflanzschule der künftigen Professoren).

An interesting personage of this period is, for instance, the anatomist and pathological anatomist Vincenc Bochdalek (1801–1883), some of whose discoveries still bear his name, most notably Bochdalek hernia and trigonum lumbocostale Bochdaleki.

In the 1840s, the faculty quickly adopted the European fashion of creating another category of university teachers, so-called Dozenten. These were progressive, research-oriented young scholars who could announce specialised lectures, mostly in disciplines which did not as yet have an independent status. In this respect, the Prague faculty in several instances overtook not only the Viennese but even all other European medical faculties. One of the most important 'firsts' of the Prague faculty was the introduction of lectures and clinical demonstrations in obstetrics, which were since 1842 given by Franz Kiwisch (1814–1851).

At this time, a so-called Prague Medical School formed at the Prague Faculty of Medicine. Its members were keenly aware of, for instance, the need to follow international research and to publish the results of their own work. The first of these demands led

to the foundation of a public medical library called Prague Museum of Medical Reading (Prager medizinisches Lesemuseum), which opened in the Carolinum in 1841.

Shortly thereafter, in 1844, appeared the first issue of the faculty journal called Vierteljahrschrift für die praktische Heilkunde (Quarterly Journal for Practical Medicine). This academic journal soon established itself as a respected contribution to European science. It was published four times a year until the end of 1879, thus running to 144 issues.

During the revolutionary years of 1848/49, the Faculty of Medicine did not escape the turmoil and one of the best means of following the impact of the events is the faculty's journal. Its editors reacted to the abolition of censorship with admirable speed and started publishing a separate supplement called Forum für Medizinalangelegenheiten (Forum for Medical Issues) subtitled Interesse des Gemeinwohls und des ärztlichen Standes (Of Interest to Public Welfare and Medical Professionals). It appeared only until the end of 1849, when reaction to the revolutionary events stopped its publication, but even in the short space it published some very interesting proposals for a reform of healthcare, education of all kinds of health workers, etc.

Jan Evangelista Purkyně, the most important Czech biologist and physician.

From 1849 Until the Division of the Faculty in Czech and German One in 1883

In Prague, much like in the rest of the world, the second half of the nineteenth century brought about a rapid development of various theoretical and clinical disciplines. At the Faculty of Medicine in Prague, the situation was somewhat complicated by increasing efforts to introduce the Czech language in classrooms and in academic press.

Jan Evangelista Purkyně (1787–1869), the most important Czech biologist and physician, returned to Prague from Wroclaw in 1850 at the peak of his scientific career. Having founded the very first institute of physiology in the world in Wroclaw, he established the second such institute in Prague and become actively involved in Czech national revival. At a time of relaxation of political atmosphere in early 1860s, he participated in the foundation of the journal Časopis lékařů českých (Journal of Czech Physicians) and Association of Czech Physicians (both established in 1862).

Numerous important personalities worked in the theoretical institutes and clinics. Notable theoreticians include for instance Karl Toldt (1840–1920), a famous anatomist and histologist whose atlas was by 1951 published twenty-two times, or Václav Treitz (1819–1872), a pathologist who in his 1857 study described a hernia which still bears his name: 'Treitz hernia'.

Of the clinicians, let us mention at least the internist Anton Jaksch (1810–1887), a modern-minded specialist with excellent intuition for physical examination and physiological chemistry. Bohumil Eiselt (1831–1908), a broadly educated internist, in 1871 gained a permission to call his department in the General Hospital a 'Czech' clinic of (internal) medicine, while the surgeon Karl Gussenbauer (1842–1903) was with his pioneering operations and publications an important personage of European surgery.

From the Division of the Faculty of Medicine Into a Czech and German One in 1883 Until the Creation of Czechoslovakia in 1918

The Czech Faculty of Medicine

Czech physicians and medical students played a crucial role in the struggle for a Czech university and Czech faculty of medicine. The German side was aware that sooner or later, the Prague university would become in effect 'Bohemised'. That is also why they accepted a political compromise: a split of the Prague university in a Czech and a German one, which happened by a legal act of 28 February 1882. This decree created two in principle equal universities, both of which had equal right to view themselves as successors of the university founded by Charles IV in 1348. Nonetheless, the law had also stated that institutes, clinics, library collections, etc. would go to the university which their current head would choose (i.e., would 'follow the leader'). At the Faculty of Medicine, German professors had traditionally been in the majority and only three heads of clinics opted for the Czech Faculty of Medicine. It was the abovementioned internist Bohumil Eiselt, surgeon Vilém Weiss (1835–1891), and obstetrician Jan Streng (1817–1887). Other institutes and clinics had to be established anew, which is why the Czech Faculty of Medicine was able to start functioning only a year later than other faculties, in the winter semester of 1883/84.

Especially difficult was to establish new theoretical institutes and to find adequately qualified people to lead them. In the end, it was decided that a new building should be quickly erected at the corner of Kateřinská and Ke Karlovu streets, a place which at the time served as a municipal cattle market (the last such market took place on 15 April 1883). The construction deadline was almost impossibly short: the building was to be completed and handed over to the faculty on 1 October 1883 at noon. In the end, the delay was very small and teaching at the Czech Faculty of Medicine started already on 15 October 1883. The building in Kateřinská Street was officially handed

over on 2 November but the first pathological autopsy was carried out there already on 17 October 1883. At first, however, students and teachers were short of equipment, various facilities, textbooks, etc.

The Czechs had hoped that negotiations about the establishment of Czech clinics would proceed more easily. When the university had split in two, the clinic of internal medicine and surgical clinic in the General Hospital opted for the Czech university, but finding a place for other Czech clinics in the already overfilled compound of the General Hospital was difficult.

Jan Horbaczewski, author of the first Czech textbook on medical chemistry.

Attracting good teachers had also proved an uneasy task. While Czech medical terminology started to take shape in the 1860s, for instance on the pages of the Journal of Czech Physicians, even physicians who actively supported Czech national revival were finding it difficult to lecture in Czech. It is, after all, well known that even

T.G. Masaryk, the man who later became the first president of Czechoslovakia, was at first rather apprehensive about lecturing in Czech at the Czech Faculty of Philosophy. When it came to finding the right staff for the institutes of the Czech faculty, the situation was more difficult in theoretical disciplines. It actually turned out to be impossible to find adequately qualified specialists to fill the posts of all heads of institutes. Some of them, however, were outstanding researchers, such as the medical chemist Jan Horbaczewski (1854–1942), called from the University in Vienna, who in 1882 gained fame for achieving a synthetic production of uric acid. The decision to appoint as head of Institute of Pathological Anatomy the young junior physician Jaroslav Hlava (1855–1924) also proved most fortunate: he turned out to be not only an excellent scientist and a pioneer of bacteriology in our lands, but also capable organiser and a popular teacher.

Among the clinicians from the first generation of teachers, the most prominent name is that of Josef Thomayer (1853–1927), an outstanding scientist and teacher, but also – somewhat more surprisingly – a popular novelist. He was a modern type of internist who took special interest in neurology and bacteriology.

Soon after the establishment of the Czech Faculty of Medicine, Jaroslav Hlava and Josef Thomayer realised that its academic achievements should be presented to a broader public and decided to establish a faculty journal. The first issue of Sborník lékařský (Medical Almanach), subtitled Časopis pro pěstování vědy lékařské (Journal for the Promotion of Medical Science), appeared already in 1885, and with short breaks and changes of title, this periodic publication of the First Faculty of Medicine still exists and since 2004 appears also in English as the Prague Medical Report.

It should also be noted, however, that most teachers of the Czech faculty had to make certain sacrifices. They focused on writing Czech textbooks and contributing to Czech academic press, and their publications activity in foreign or German journals thereby suffered. Professor Josef Charvát aptly characterised it as follows: ‘Bohemica non leguntur, si leguntur non citatur’ (Czech texts are not read – and if they are read, they are not quoted.).

Moreover, until the creation of an independent Czechoslovak state in 1918, the German faculty received preferential treatment by the Viennese authorities both regarding the construction of new facilities and in increasing the number of teaching positions. Subsidies for the operation of the faculties were usually the same for the Czech and the German faculty, even though the Czech Faculty of Medicine tended to have more students, sometimes even twice as many as its German counterpart.

The German Faculty of Medicine

Due to all of the abovementioned circumstances, the German medical faculty had from its creation in 1882 until the end of the First World War better facilities, greater material support, and a wider choice of staff. Yet even so, it became – just like the German University in Prague as a whole – just a medium-sized faculty and it had to compete for students with the University of Vienna, which many German medics from Bohemia preferred.

Nonetheless, the academic standards of the German faculty were outstanding, which helped it attract students and occupy one of the most important positions within the German University in Prague. Heads of its theoretical institutes included a number of scientists who importantly contributed to the development of their particular discipline. Most important of the anatomists was Otto Grosser (1873–1951), famous for his work in comparative anatomy and embryology, who led the Institute of Anatomy for a number of decades: from 1909 until 1945. The physiologist Egon Steinach (1861–1944) established in Prague a laboratory for general and comparative physiology, the first such institute in German-speaking countries, while the pathologist Anton Ghon (1866–1936) is still remembered in connection with Ghon focus in tuberculosis. The most important representative of general and experimental pathology was Arthur Biedl (1869–1933), an internationally respected endocrinologist whose name is known in connection with the Bardet–Biedl syndrome, while Franz Hofmeister (1850–1922) was an important expert in physiological chemistry and the first experimental pharmacologist in Austria. Of the prominent clinicians, let us mention at least Rudolf Jaksch (1855–1947), internist

and paediatrician whose name is remembered not only in connection with several diseases he was the first to describe, but also in connection with a new, modern clinic of internal medicine. Dermatovenerologist Philipp Pick (1834–1910) turned his clinic into the most prestigious such establishment in all German-speaking Europe. He founded in Prague an association for dermatovenerology, a central journal dedicated to this subject, and described numerous new symptoms of several skin diseases, some of which bear his name (e.g. Pick's erythromelia). His namesake Arnold Pick (1851–1924), head of the psychiatric clinic, was equally prominent as a psychiatrist and a neurologist, and terms such as 'Pick's bundle' or 'Pick's disease' quickly found their way into international academic literature.

The Interwar Period (1918–1938)

After the creation of independent Czechoslovakia, the mutual relation between the Czech and the German Faculty of Medicine had changed. A 1920 law on the relation of Prague universities stated that only the Czech university would henceforth bear the name of its founder, Charles IV. Most other legal norms remained valid, but the new state naturally no longer preferred the German University and prioritised the needs of the Czech one instead. After the First World War, construction activities once again continued apace and by early 1920s, the Czech medical faculty received new buildings for two modern institutes and one clinic. In the 1920s and 1930s, several projects aimed at rebuilding the old hospital compound or constructing a new one were proposed but none was implemented. Some new clinics of the Czech Faculty of Medicine faculty were thus placed in hospitals outside the town centre.

The increase in the number of medics (including female students) corresponded to a rise in the number of institutes and teachers. There were now two clinics of surgery, obstetrics, and gynaecology each, and a number of newly established disciplines received their own institutes. The number of clinics and institutes rose from 25 in 1918 to 37 in 1938. Some of the legendary figures from the first generation of teachers, such as Emerich Maixner, Josef Thomayer, Jaroslav Hlava, and Jan Horbaczewski still remained in leading positions, but generational exchange continued throughout the whole interwar period and the ‘old gentlemen’ were gradually replaced by young, scientifically progressive teachers and scholars.

In early 1920s, the Czech Faculty of Medicine faced an extraordinary task, namely to provide academic staff for new faculties of medicine in Brno and Bratislava. Moreover, despite the continuing language handicap, the Prague faculty nonetheless won respect in academic world and was often sought by foreign academics.

The German Faculty of Medicine maintained its high standards throughout the interwar period. Nonetheless, it had less teachers than its Czech counterpart, their numbers

did not grow as quickly, and – like in the previous period – German academic more frequently moved from one university to another. In the 1930s, moreover, the rise of Nazism added to this natural migration since some academics were due to racial or political reasons forced to leave their posts. Even so, some important academics still remained at the German faculty. For instance, Hermann Hubert Knaus (1892–1970), known as a co-author of the method of calculation of fertile days (Knaus–Ogino rule), significantly contributed to the reputation of Prague gynaecology and obstetrics. Two of the German Faculty of Medicine's most famous graduates completed their studies in 1920: Carl Ferdinand Cori (1896–1984) and his future wife Gerta Theresa Radnitz (1896–1957), both natives of Prague, who in 1947 received Nobel Prize in biochemistry and medicine. Yet as in the previous period, cooperation between the Czech and the German faculty was almost non-existent.

Masaryk's Homes, current Thomayer Hospital, was founded in 1928, ten years after the creation of independent Czechoslovakia. The hospital received its current name in 1954 in honour of Josef Thomayer, an outstanding teacher, one of the founders of modern Czech medical science, and creator of Czech medical terminology.

During the Nazi Occupation (1939–1945)

Like other universities and academic institutions, the Czech Faculty of Medicine, too, was closed by the German occupation regime in the aftermath of 17 November 1939. The German faculty then received preferential treatment, in many cases directly at the expense of its Czech counterpart. Moreover, starting with the academic year 1939/40, the German University became a Reich institution. By that time, its Faculty of Medicine was a profoundly different place than just a year earlier. Large part of its academic staff was replaced (teachers of Jewish origin were expelled and replaced by new arrivals, mainly from the Reich) and study regulations had also undergone significant changes. Study subjects and research programmes came to include various new or significantly changed subjects, mostly in areas deformed by the Nazi ideology (such as racial hygiene) or by preparations for the war. According to some of the faculty's representatives, the wartime was the German medical school's very best time during its existence. The situation dramatically changed with total mobilisation, which took many students and teachers to the war front. Even so, the last graduation ceremonies took place as late as early May 1945.

The German teachers' attitude to the occupying regime and their behaviour in Prague varied from open support of Nazism or mere 'loyalty' to the new regime, all the way to people who managed to behave honourably (not speaking of victims of the racial persecution).

The position of the Czech Faculty of Medicine was completely different. The worst blow came naturally after 17 November 1939, when all Czech universities were closed. Yet the Faculty of Medicine in Prague (and Brno) was in a somewhat special position: while all teaching was immediately stopped and parts of Czech institutes occupied by either military hospitals or by German 'colleagues', a Reichesprotektor's decree issued in early 1940 allowed scientific work in several Czech clinics and institutes to continue. Moreover, the original administrative status was maintained until early 1943,

and only in late 1942 and early 1943 were clinics formally turned into departments of a newly established regional hospital. Regardless of their legal status, however, the actual position of these institutions under occupation was rather dismal. Their functioning was limited and many of their staff dismissed. Some of the employees found work elsewhere, others – especially people of Jewish origin and those active in the resistance movement – were executed or ended in concentration camps and prisons. Their more fortunate colleagues managed to flee the country. Parts of many clinics were occupied and their equipment taken or destroyed. In 1942–1944, several dozen Czech medics managed to finish their studies in Britain and graduate in Oxford: they then worked as physicians in the Czechoslovak army abroad.

Especially dramatic moments came at the very end of the war, during the Allied bombing in February. Prague Uprising in May then signalled the end of the German University. Already during the Prague Uprising, its clinics were taken over by Czech personnel and most of its employees left Prague. It was the actual end of the German Faculty of Medicine, although legally the German University in Prague was dissolved by a presidential decree of 18 October 1945. The Czech Faculty of Medicine resumed its functioning, now also in facilities taken from its German counterpart. New Czech medical institutes were then constituted in the months that followed.

The Faculty of Medicine in 1945–1989

After the war, teaching at the medical school restarted in June 1945. Growing need for new physicians was after 1945 addressed by increasing the faculty's capacity by using spaces vacated by the now abolished German Faculty of Medicine. Moreover, two additional branches of the faculty were established in Pilsen and in Hradec Králové (1945): both later became separate faculties. In 1945–1948, the Faculty of Medicine in Prague increased the number of institutes, the number of employees and of students, and carried out reconstruction of its institutions.

The Communist takeover in February 1948 brought fundamental changes in the organisation of education and healthcare. Within the first couple of years of their rule, Communists managed to gain full control of organisation of higher education as well as other areas of public life, often shaping them according to Soviet models and instilling them with their own ideology. A new law on higher education, adopted in 1950, confirmed this direction and paved the way to further changes. At the Faculty of Medicine, profound changes affected not only the system and content of medical studies, but also the organisation of the faculty, which was in 1953 split in a Faculty of General Medicine, Faculty of Paediatric Medicine, and Faculty of Hygiene. It ought to be noted, however, that decentralisation of medical studies in early 1950s pertained only to the functioning of medical schools. It did not imply any decentralisation of terms of administration or governance of medical faculties. They were all subjected to strict and centralised supervision by the Ministry of Education and organs of the Communist Party of Czechoslovakia.

Medical faculties did not escape the political turmoil of the post-war period. That was true not only of late 1940s and early 1950s, but also of the short period of liberalisation in 1968 and the subsequent era of 'normalisation', which included two periods of increased emigration. Several waves of changes also had an impact on the organisational structure of clinical hospitals (in 1948 they were merged, in 1953 split

in two, and in 1994 again united to form the current General Faculty Hospital). The internal structure of the faculty remained largely in place even after 1945, but the number of institutions had grown at a rapid pace. Many clinics were doubled and new ones established in response to increasing specialisation of various parts of medicine. In 1950, the structure of the faculty changed by the creation of new organisation units, so called 'departments' (katedry), which united a number of institutions belonging to related areas of specialisation. The new departments did not replace the existing institutes and clinics – they were added as a new element in the faculty structure. After 1989, social development brought not only new forms of organisation of the faculty's structure and changes to the curriculum but also a change of name to 'First Faculty of Medicine'.

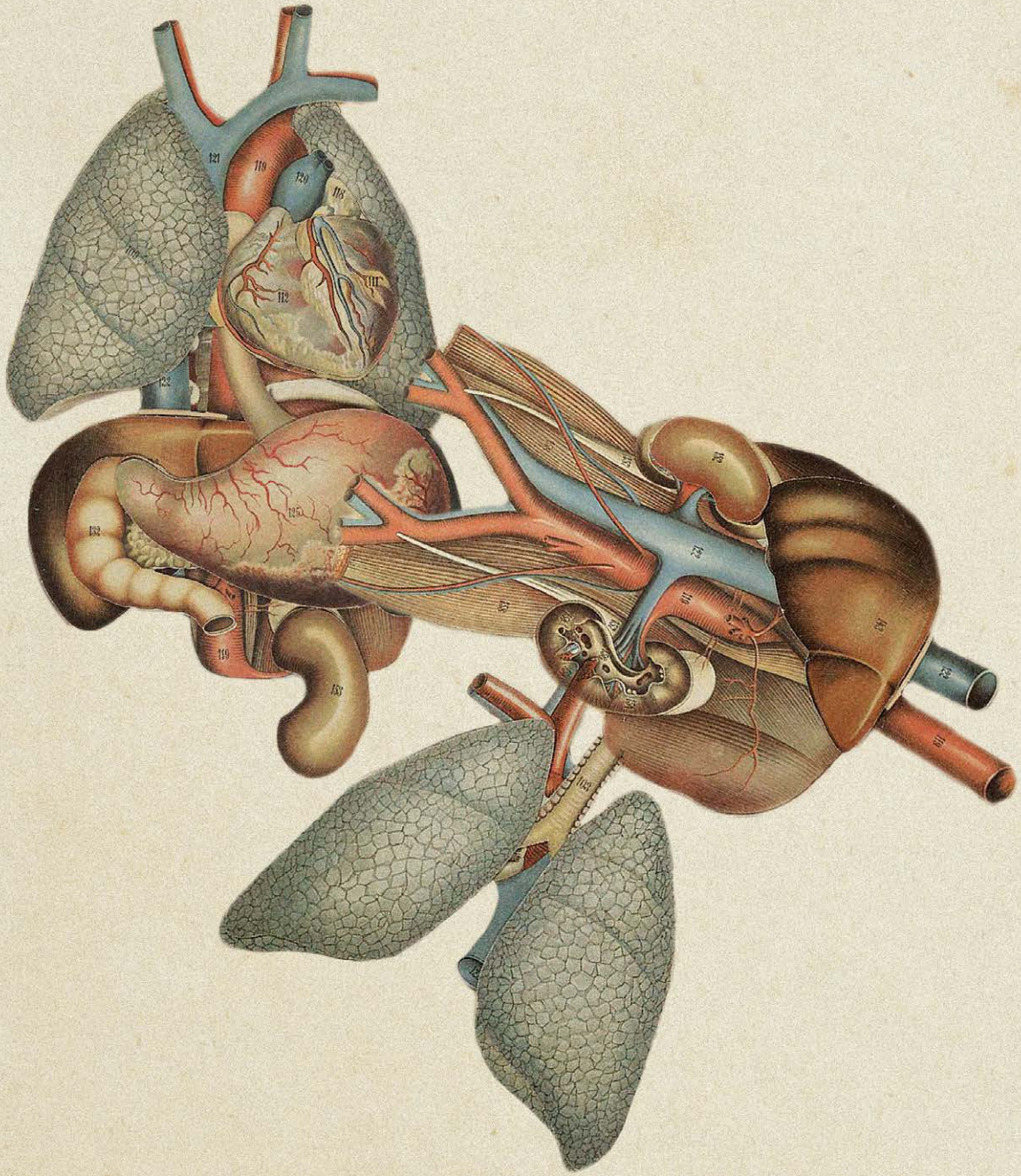
In the historic compound of the general hospital near the Charles Square, construction did not stop even in the second half of the twentieth century. The faculty had placed some of its institutes also in other buildings spread across Prague. Most were after 1990 abandoned and the faculty placed the institutes in more modern facilities (hospitals in Motol, Střešovice, na Bulovce, and in Krč). The only significant new building constructed for the faculty was the clinic of urology completed in 1976.

Although the number of faculty staff grew in connection with the growing numbers of medics, this basic tendency was hampered by economic and often even ideological factors. Gradual increase in the number of teachers was several times suddenly disrupted when their number rapidly increased or decreased within a short period of time. This was especially during the two waves of creation of new faculties, in 1945 and 1953. Reduction in the number of teaching staff due to forced departure of academics and mass professional demotion came immediately after February 1948 and in the aftermath of August 1968, when many staff members affected by the changes chose emigration. The number of medics rose sharply in the first post-war years. After the division of the faculty in 1953, the number of students at all five medical faculties of the Charles University continued to gradually grow. In fact, by early 1990s the faculties had almost twice as many students as in early 1950s (in 1991, the First Faculty of

Medicine had 2,554 students). New personnel policies gradually affected also the social composition of the student body: after all, many students also had to leave due to political reasons, especially during the purges after February 1948. The traditional Association of Czech Medics was due to political pressures disbanded in 1950 (it was supposed to be replaced by a new, universal youth organisation) and re-established only in 1990.

In the following, let us mention at least a few of the most famous personages whose activities peaked during the first post-war decades. The importance of representatives of the younger generation ought to be evaluated by future historians. In May 1945, the faculty did its best to continue in the tradition of high scientific standards of its institutes and clinics from the First Republic. Most of its professors were by the second half of the 1940s at the peak of their professional career and could therefore influence the scientific development of the faculty and its successors for decades to come.

Students of our faculty during an occupation strike on 4 December 1989, Cori's Hall. The photograph was taken by MUDr. Přemysl Hněvkovský, then assistant at the Institute of Biology, who won the students' trust and spent with them in lecture halls several days and nights as a photographer. They did not allow any other photographer to enter.



Studying

Undergraduate Education

General Medicine

General medicine is studied in Czech or in English as a six-year course leading to a master's degree. The first three years focus mainly on theoretical and preclinical subjects, the last three are dedicated to clinical medicine. In their theoretical training, students learn about the structure of human body (anatomy, histology), its functioning (physiology), and various biochemical and biological processes. During the first half of their studies, students attend lectures, workshops to develop practical skills, seminars, autopsies, and preclinical internships. The second half of the studies is dedicated to clinical subjects. During the summer break, students work as interns in various hospitals. During their studies, students receive a logbook that defines skills and procedures they must be able to carry out, view, or assist in their implementation. The course ends with a state examination that is divided in several parts (internal medicine, surgery, paediatric medicine, gynaecology and obstetrics, hygiene and epidemiology, public healthcare and medical legislation). After successfully completing the course, graduates receive a title MUDr. (medicinae universae doctor).

All applicants for the study of General Medicine must have a complete secondary education. Students are selected based on entrance procedures. Some applicants for study in the Czech language are accepted without having to pass entrance examinations, based solely on their results and grades in secondary schools.

Throughout the course, there is an emphasis on practical skills and their implementation. In theoretical subjects, it takes the form of workshops which include laboratory work, while the anatomy course includes extensive autopsy blocks. The study of preclinical and clinical subjects includes analyses of particular cases. Simulation models are used: both mathematical models and simulators. In addition to traditional textbooks and forms of learning, the First Faculty of Medicine also strongly supports e-learning. Clinical training takes place in several hospitals in Prague, mainly the General University

Hospital and Faculty Policlinic, but also the Faculty Hospital Motol, Thomayer Hospital, Hospital Na Bulovce, and the Military University Hospital.

The course of study at the First Faculty of Medicine is divided in year-long sections and progress is evaluated using a credit system. The study follows the rules and regulations of the First Faculty of Medicine and the Charles University, which are based on the pertinent legislation and adopted by the relevant academic senates. Students can earn a certain amount of credits during their course of study by completing courses in facultative (non-mandatory) subjects.

Students during instruction in the Centre of Medical Simulations, one of the best equipped institutions of its kind in the Czech Republic.

Majority of student agenda can be arranged online, using the Study Information System (SIS) of the Charles University. Some issues related to their study are still settled in person through the Students' Office. The staff of the faculty includes nationally and internationally respected specialists in their fields, who are encouraged to produce textbooks, often in cooperation with other colleagues, faculties, and institutes. Some students already during their undergraduate study become involved in scientific work at various departments and institutes.

Dentistry

Dental medicine is a five-year course. During the first five terms, the study is divided in a theoretical and preclinical part. Afterwards, there follows clinical education.

During the terms dedicated to theoretical subjects, students study anatomy, histology, biochemistry, physiology, microbiology, immunology, pathology, pathological physiology, and pharmacology. In all these subjects, courses are maximally focused on the oral cavity and related organs. The same can be said of courses on subjects related to general medicine, which students take in the fourth and partly also the fifth year of their studies. The aim of these courses is to educate students in those parts of medicine they will need in their regular dental practice while making sure that dentistry does not become isolated from other medical fields.

Instruction in skills necessary in dentistry starts already in the first year, in subject Preclinical Dental Medicine, and continues in the second year. It is taught using simulators in a teaching laboratory where students must master the basic skills that will be needed in the later, clinical part of their instruction in order to start working with patients. Clinical instruction starts in the third year and continues all the way to internships in outpatient clinics in the fifth year of study.

Dentistry students in a phantom hall of the Department of Dentistry.

Instruction in clinical dentistry takes place in teaching halls, which in their interior architecture, instruments and materials used, as well as other facilities, rank among the best teaching facilities available in Europe. Under the supervision of experienced dentists, students are taught here all of the basic procedures used in the various fields of dentistry, i.e., dental surgery, conservative and restorative dentistry, and periodontology. Paediatric dentistry is taught at the department of paediatric dentistry, while orthodontics is taught at the department of orthodontic dentistry.

Non-medical courses

The First faculty of Medicine also offers programmes in various non-medical fields and subjects. In these courses and programmes, there is an emphasis on their link to practical applications and on developing close cooperation between medical and non-medical fields. Their collaboration contributes to the maintenance of high teaching standards in both theoretical and practical education, as well as to successful research and financing of these non-medical fields.

Non-medical courses offered by the First Faculty of Medicine currently include the following:

- Undergraduate (bachelor) degree is offered in addictology, occupational therapy, physiotherapy, nutritional therapy, and midwifery;
- Graduate (master's) course, a continuation of the relevant undergraduate course, is offered in addictology, and occupational therapy.

The addictology course has been granted accreditation for a separate doctoral (Ph.D.) course, guaranteed by the Department of Addictology of the First Faculty of Medicine of the Charles University and the General University Hospital. This is also the only non-medical course that can be studied in English.

Study at the First Faculty of Medicine of the Charles University: Facts and Numbers

Number of students from the Czech Republic: 2,576
Number of international students: 1,411

International students:
Israel 21%,
India 13%,
United Kingdom and Germany 10% each,
Iran 6%,
remaining countries 40%.

Target numbers for incoming freshmen (in both general medicine and dentistry):
in Czech: 450
in English: 150

Students coming from abroad for short-term stays: 184

Number of employees: 1,747
of which professors and senior lecturers: 359
of which employees under 40 years of age: 33.4%

Ph.D. students: 876

Postgraduate Education

Doctoral study programmes (Ph.D.)

The First Faculty of Medicine of the Charles University offers 22 doctoral study programmes in Czech and in English. Graduates are granted the title of 'doctor' (abbreviated as Ph.D. behind the name). Doctoral study programmes are supervised and evaluated by the relevant field boards.

The aim of doctoral programmes is to prepare graduates of master's programmes for independent work in basic and clinical research in one of the main biochemical fields. For each of the programmes, the content and requirements are set by a field board comprised of experts from all participating institutions. Students of doctoral programmes attend some basic courses aimed at improving both their theoretical knowledge and practical (laboratory) skills. Doctoral students can participate in various national and international grant projects.

Doctoral studies are intended for all Czech and foreign graduates of university master's programmes who pass the entrance procedure. Doctoral studies take either a full-time or a combined form: the standard length of study is at least three and at most four years, while the maximum length of study is the standard time extended by five years. Full-time study is possible only for a time corresponding to the standard length of study of the relevant doctoral programme.

Students in doctoral programmes have student status in the sense of the Higher Education Act of the Collection of Laws of the Czech Republic including nude all of its legal and social consequences. To successfully complete their studies, doctoral students must pass doctoral state examinations in the field of their choice and defend a doctoral thesis.

Based on an agreement concluded between the three medical faculties in Prague (First, Second, and Third Faculty of Medicine of the Charles University) and the Faculty of Science of the Charles University, which serves as a training centre, seventeen doctoral

programmes in biomedicine were founded in 1992. Training can also take place in other biomedical research institutions in Prague, which function outside the Charles University, such as various institutes of the Academy of Sciences of the Czech Republic and research institutes of the Ministry of Health of the Czech Republic.

Accredited doctoral programmes

Biochemistry and Pathobiochemistry
Bioethics
Biomedical Informatics
Cell Biology and Pathology
Developmental and Cell Biology
Experimental Surgery
Gerontology
History of Medicine
Human Physiology and Pathophysiology
Imaging Methods in Medicine
Immunology
Medical Biophysics
Microbiology
Molecular and Cellular Biology, Genetics, and Virology
Neurosciences
Parasitology
Pharmacology and Toxicology
Preventive Medicine
Psychology
Specialization in Health Service-Addictology

International postdoctoral fellowships

The work of international postdoctoral researchers at the Charles University is supported by a Post-Doc Research Fund for International Young Researchers. Its goal is to provide, under well-defined conditions, financial support to international researchers who had recently completed their Ph.D. programmes and who wish to participate in the work on a project of the First Faculty of Medicine or another part of the Charles University for at most two years. Only candidates who at the time of presenting their application had already completed their doctoral studies and this took place no more than ten years previously can be considered. Researchers who had already received their habilitation cannot apply for postdoctoral fellowships.

Specialty Training and Lifelong Education

Medical specialty training for physicians and dentists at the First Faculty of Medicine

Specialty training of physicians and dentists has a long tradition and especially during the last decade had undergone many changes. It follows up on undergraduate study, the first stage of medical education, and precedes the longest stage of lifelong medical education which all medical practitioners must engage in. The minimal duration of specialty training is three to seven years depending on the complexity of the specialty and demands of the particular programme.

The First Faculty of Medicine of the Charles University has established a Department of Specialty and Lifelong Education, which in collaboration with coordinators and scientific supervisors at clinical departments provides the organisational structure of these programmes.

Specialty training takes place concurrently with medical practice, under specialised supervision in accredited healthcare facilities, according to the relevant training programme, and based on a logbook for recording procedures, examinations, and operations the trainee performs. Specialty training in a particular field consists of two parts: education during the basic training (24 months) and specialised training (12–60 months). All requirements are listed in the training programme, which defines the total length, extent, and contents of preparation for both the main specialty and complementary fields, the type of accredited institution, mandatory internships and courses, as well as all prerequisites for taking the certification examination and the contents of this examination.

In accordance with the most recent legislation (regulation No. 8/2014 Coll.), medical specialty or specialised medical qualification can be acquired in 46 main fields of specialty by physicians and three fields of specialty by dentists.

Requirements for entering a specialty training programme

To practice medicine, a physician or dentist must demonstrate professional qualification, a requisite degree of health, and legal integrity. Pre-existing professional qualification is acquired by successful completion of an accredited master's programme in general medicine of minimal duration of six years for physicians or a five-year long programme in dentistry.

Physicians and dentists who graduated from undergraduate medical programmes in EU countries acquire the requisite professional qualification in effect automatically, but they are also required to demonstrate knowledge of the Czech language. Physicians and dentists who graduated outside EU-member countries must first undertake a so-called 'approbation examination', where they demonstrate not only specialised knowledge and skills but also their knowledge of the Czech language. After passing this exam, the Ministry of Health of the Czech Republic acknowledges their professional qualification and grants them the right to practice in the Czech Republic. Holders of medical degrees from international universities do not have the right to use the title MUDr. but may use titles granted to them by universities from which they graduated, if such titles had been granted.

After meeting all requirements of their programme with respect to specialised practice, internships, courses, tests, and completion of a certification (attestation) thesis, trainees may register for a certification (attestation) examination. These examinations take place in front of a committee of experts designated by the Minister of Health of the Czech Republic. They usually include a practical part (execution of a clinical or laboratory procedure) and a theoretical part, which may include a defence of the qualification (attestation) thesis. After successfully passing the certification (attestation) examination, the candidate receives from the Ministry of Health of the Czech Republic a diploma attesting to the specialty and specialised qualification to practice in the relevant field.

Alumni of the First Faculty of Medicine

Graduates of the First Faculty of Medicine and employment abroad

In recent years, many of our graduates leave to work abroad, both immediately after graduation and after a successful postgraduate certification. On the one hand, this clearly shows that our graduates can build a successful career not only in the Czech Republic but also elsewhere. On the other hand, however, it poses a risk of a 'brain drain' from the Czech Republic, caused mainly by the relatively lower salaries of physicians in this country.

Prestige of the faculty and quality of teaching

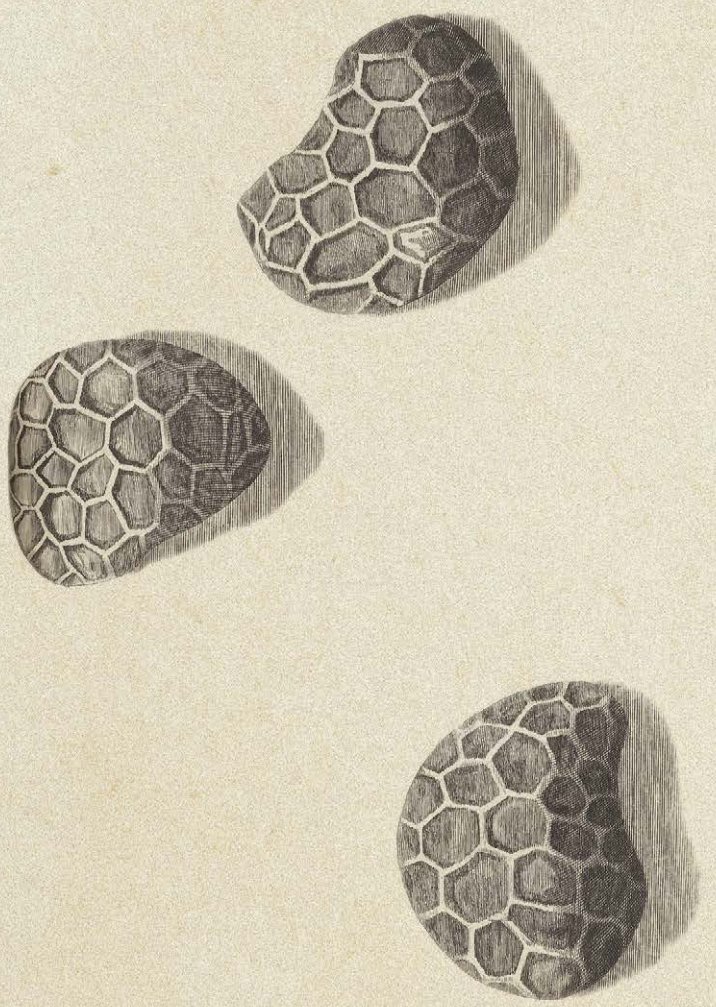
What are the main factors which influence our graduates' chance to find employment abroad? Aside from knowledge of language, which is obviously a key prerequisite, other factors can be divided in two groups: internal, that is, those which can be influenced by the faculty or the university, and external, that is, factors determined by conditions in the particular country of destination.

Two of the most important internal factors are mutually connected: prestige of the faculty and quality of teaching. In these areas, the First Faculty of Medicine is doing extremely well, which is why its Czech and foreign graduates, with all the differences in their national and ethnic origins, find employment quite easily and tend to do well. Our students and graduates also perform well in certification exams, typically for instance in the USMLE exams in the United States. It thus seems that although our students come from many different countries and many different backgrounds, our school produces good physicians, specialists who do us credit and make us proud.

Recognition of diplomas and undergraduate internships

The most important external factor influencing our graduates' changes of finding employment abroad is the recognition of our diplomas in foreign countries. In this respect, the First Faculty of Medicine of the Charles University is also successful. Most countries do recognise its diplomas and with those which do not, our faculty is doing its best to negotiate the recognition of study of medicine and dentistry completed in Prague. Unfortunately, the main reason why some countries do not accept our diplomas is not because of any doubts regarding the quality of study but due to political interests. For instance, in countries where there are relatively many unemployed physicians, local professional organisations can make it difficult for our graduates to find employment because they want to preserve jobs for graduates of their own medical faculties.

In some countries, graduates of the First Faculty of Medicine are in a better position on the job market if they spend part of their pre-graduate clinical internship in their native country. Where it is the case, clear rules must be defined in order to recognise such internship as fully equivalent to clinical internship in our faculty hospital, including a detailed list of medical procedures each student must master, the so-called logbook. In such cases, our faculty organises for students opportunities to spend part of the obligatory clinical internship in their native country by concluding agreements with top, usually university, hospitals there.



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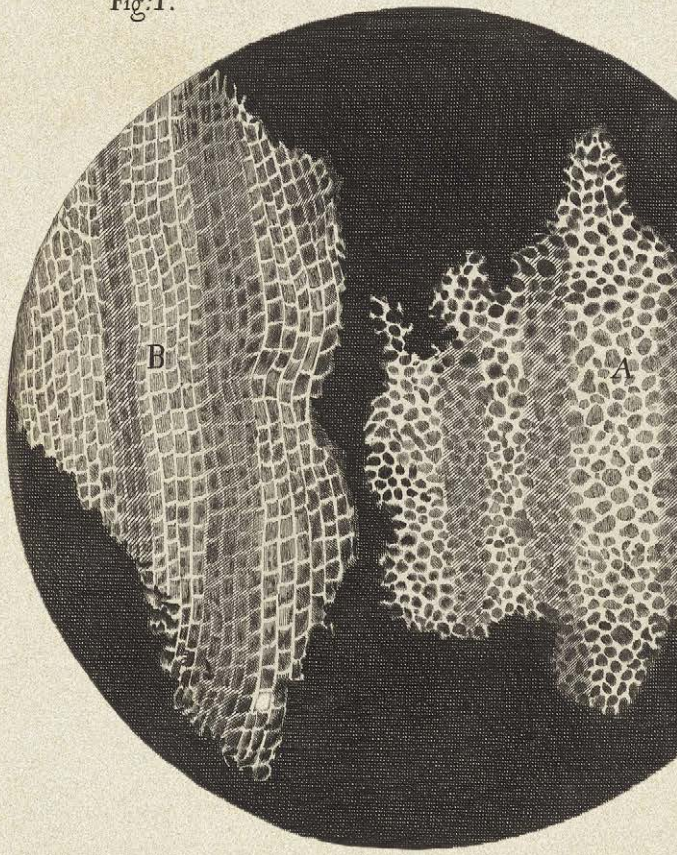


Science & Research

Honouring Our Traditions

The First Faculty of Medicine is a direct successor of one of the faculties which were part of the Prague University already at its foundation in 1348. This long tradition is reflected also in its scientific achievements. For instance, Jan Evangelista Purkyně, co-creator of the cell theory and discoverer of Purkinje fibres, had worked at this faculty. Other discoveries made by scholars of our faculty include the work of Jan Janský, co--discoverer of blood groups, or Vratislav Schreiber, who importantly contributed to medical knowledge as one of the first people to describe the importance of the axis of hypothalamus–pituitary gland–peripheral gland with internal secretion. This discovery laid the foundations to a better understanding endocrine regulations and contributed to treatment of their disorders in clinical practice. In medical genetics and haematology, international textbooks speak of the discovery made by František Heřmanský, who together with Pavol Pudlák described a recessive syndrome which combines albinism, disturbances of blood clotting, and disorders of the lungs and intestines: it is now known as Hermansky–Pudlak syndrome.

The present

Current research continues in this tradition and develops it. It is carried out at theoretical, but also preclinical and clinical institutes, often in collaboration with other important scientific institutions, both domestic and international. The quality of research conducted at our faculty is demonstrated by the fact that according to results gathered by the Science, Research and Innovation Council of the Government of the Czech Republic, our faculty is not only the most important institution of medical research in this country, but one of the leading domestic research institutions in general.

The main directions of our research cover all of the most important groups of diseases: we study their molecular mechanisms and new diagnostic methods and

treatments. Our research emphasises search for new prevention methods, especially in connection with cardiovascular and oncological diseases but also metabolic disorders, including rare congenital life-threatening disorders. Attention is also paid to research of neuroscience (neurological and psychiatric disorders), blood cell formation, rheumatologic diseases, disturbances of the immune system, and stomatology.
Our faculty is active in applied research: we own or jointly own several inventions, patent applications, and utility models related to the diagnosis and therapy of a wide range of diseases. Our applied research includes a unique service called SeniorInspect, which enables seniors, including those with serious health complications, to lead active lives in their home environment. From a technological and functional point of view, this programme is currently the very best that assistance systems can offer. One of the advantages of faculty-based research is the chance to collaborate with specialists from a wide range of theoretical and clinical fields. It is irreplaceable and unique in providing effective access to both human and technological resources. Productivity of our research activity is reflected in the quantity and quality of publications by workers of the First Faculty of Medicine of the Charles University. Every year, many of their articles appear in high-impact journals or are published abroad as separate studies, which brings them to the attention of international peers.

Cardiovascular diseases

One of the key areas on which research at the First Faculty of Medicine focuses is foetal development of the heart, especially its electrical conduction system and electric activity, which are studied using optical mapping. This is of essential importance for a better understanding of the origin and spread of arrhythmias. Intensive research of new diagnostic methods of atherosclerosis is also carried out: in conjunction with research of genetic polymorphisms, it could enable diagnosis in earlier stages of the disease, and thus also more efficient prevention and simpler and more cost-effective therapy. Our researchers have also been studying new ways of establishing cardiopulmonary bypass in the treatment of cardiac and vascular diseases.

Oncological diseases

Our faculty had achieved remarkable results in the research of gynaecological tumours, malignant lymphomas, tumours of the bladder, squamous cell carcinomas of the head and neck, and glioblastomas. In addition to the study of tumour cells as such, our researchers have also been investigating the area of tumour stroma, that is, the environment which stimulates the growth and spread of a tumour. We believe that focused manipulation of mutual interactions between cells of the tumour and the stroma could in future be used in therapy. Findings of researchers from our faculty also help predict the formation of micrometastases in carcinomas of the cervix. In another internationally important result, our researchers achieved a better understanding of the importance of enzyme of dipeptidyl peptidase IV and its homologues (DASH) for the biology of brain tumours. The significance of oncological research at the First Faculty of Medicine is demonstrated by prestigious studies, published abroad, dedicated to normal and pathological melanogenesis and cell biology of the glioma, which were organised and edited by scientists from our faculty.

Metabolic diseases

Research of metabolic diseases is one of the traditional priorities of the First Faculty of Medicine of the Charles University. Our researchers have described molecular mechanisms of genetically determined disorders of lysosome enzymes. These inherited diseases tend to progress fast and without timely intervention often result in death of the affected children. Our research identified new genetic mutations causally related to the establishment of the disease. Equally devastating for further life can be innate disorders of the mitochondria. Our researchers had participated in the description of a new mitochondrial disorder TMEM 70.

Neurosciences

A significant success of research at our faculty is the discovery of nerve cells which contribute to the regulation of human emotivity. The potential contribution of this

discovery to a better understanding of numerous psychiatric diseases is self-evident. Our researchers have also focused on a comprehensive research of narcolepsy and managed to describe the causes of some types of this disorder, including its molecular basis. Unique in international context is our study of women suffering from narcolepsy. Our researchers managed to define new indication criteria for a highly effective biological therapy, which extends the time before the patient becomes disabled. A pioneering study conducted by our scientists had described the positive impact of bone marrow transplant in multiple sclerosis.

Haematological disorders

Our research focuses mainly on the study of molecular mechanisms of normal and malignant blood cell formation, including the study of microRNA. Our scientists described the importance of PU.1 gene in myeloid leukaemia. Influencing its regulation presents itself as a promising treatment of this disease. Research at the First Faculty of Medicine of the Charles University also focuses on the metabolism of iron, mainly its transport by erythropoietin (EPO) and subsequent mobilisation, especially in inflammatory processes. These results could help improve treatments of blood cell formation disorders. Our scientists had also come up with new methods of tissue engineering using mesenchymal stem cells from bone marrow, which could lead to the development of cell therapies of bone defects.

Rheumatic disorders

The First Faculty of Medicine of the Charles University had importantly contributed to research of antibodies which recognise cyclic citrullinated peptides and their clinical use. This discovery significantly improved diagnostic methods of rheumatoid arthritis, a serious autoimmune disease. Other research led to improvements in a highly effective biological treatment of some rheumatic and autoimmune disorders.

Future prospects

Science and top-level research are an integral part of activities of the First Faculty of Medicine of the Charles University. The faculty participates in the work of the recently established Biotechnology and Biomedicine Center of the Academy of Sciences and Charles University in Vestec (BIOCEV; www.biocev.eu). Students and scientific workers of the First Faculty of Medicine of the Charles University work there on projects which focus on developing therapeutic and diagnostic methods, biomaterials and tissue engineering, cell biology and virology, as well as functional genomics.

The Center for Advanced Preclinical Imaging (CAPI, capi.lf1.cuni.cz), a multimodal institute equipped by the latest imaging technologies, including Magnetic Particle Imager, will also encourage further development of science and research. CAPI is part of a the CzechBioImaging and EuroBioImaging consortium. It was established in order to implement the latest imaging technologies in both basic and applied research conducted not only by research teams of the First Faculty of Medicine of the Charles University but also other scientific institutions in the Czech Republic and the EU. Technologies available at the CAPI are extraordinarily advanced not only within the Czech Republic but also in a broad international context.

The Centre of Tumour Ecology is a culmination of their long-term efforts. It is an institution where several teams of scientists combine their expertise. Results of their research, which is based on earlier investigations of ontogeny of embryonic ontogeny and biology of adult tissue stem cells, are then shared and further developed by three groups from the First Faculty of Medicine (from the Institute of Anatomy, Institute of Biochemistry and Experimental Oncology, and a group of Medicinal Chemistry at the BIOCEV), a group from the Faculty of Science of the Charles University, and two institutes from the Academy of Sciences of the Czech Republic: Institute of Molecular Genetics and Institute of Animal Physiology and Genetics.

Financing of Research

Research funding at the First Faculty of Medicine relies on several main sources. The most important long-term institutional support source is PROGRESS, a programme which distributes in a non-competitive manner financial resources allocated from the state budget to the Charles University. The main goal of PROGRESS is to ensure stability and long-term development of research organisations and to maintain and improve scientific work at national and international level. Within the First Faculty of Medicine, financial resources obtained from PROGRESS are further allocated according to bibliometric results achieved by individual PROGRESS programs during the previous programming period. The largest research programs supported from PROGRESS at the First Faculty of Medicine include Oncology, Cardiovascular diseases, Pathophysiology, Neurodegenerative disorders, and Metabolic disorders.

Apart from the PROGRESS, Charles University operates University Research Centres (UNCE), which contribute to long-term development and support targeted research of excellent teams dedicated to basic and translational research.

Another program, PRIMUS, was set up to encourage outstanding young scientists with long-term international experience to establish new research groups at the Charles University.

The Internal Grant Agency of the Charles University (GAUK) operates highly competitive calls for students matriculated at Charles University.

All research groups at the First Faculty of Medicine are encouraged to regularly respond to annual calls for targeted research support from national grant agencies and to set up contractual research programmes in collaboration with the private sector.

The Czech Health Research Council (AZV), which operates under direct jurisdiction of the Ministry of Health of the Czech Republic, grants targeted funds in the field of applied biomedicine to both young and experienced applicants.

The Czech Science Agency (GACR) is an independent public organisation supporting

basic research in all scientific fields from public funds for experienced as well as young and early-stage researchers based on calls for proposals.

The Technology Agency of the Czech Republic (TACR) is an organisational unit of the state, which supports research, experimental development, and innovation in close cooperation with the private sector.

Patents of the First Faculty of Medicine

Our faculty achieved significant results also in applied research. It owns or co-owns 19 inventions and 21 utility models relevant to diagnostic and therapeutic methods of a wide range of diseases and disorders. Some of these inventions were created at the First Faculty of Medicine of the Charles University in collaboration with other Czech universities, the Academy of Sciences of the Czech Republic, or various foreign institutions, such as the University of Wisconsin, USA, or Ludwig-Maximilians-Universität München, Germany.

Examples of patents

Our patent portfolio includes mainly inventions relevant to the diagnosis and treatment of cancer. Nine patents and invention applications are relevant to this area. Further six patents and applications deal with wound treatment, regenerative medicine, and stem cell research.

Method of isolating epidermal neural crest stem cells

This is a joint Czech–American invention, which describes a new method of isolating multipotent stem cells from hair follicles. These cells can be differentiated so as to produce various cell types (from cartilage cells all the way to neurons), which are then deployed to replace defective cell populations in patient's body using tissue engineering techniques.

A polymer carrier for keratinocyte cultivation with active saccharides

This is a joint invention of the First and the Third Faculty of Medicine of the Charles University and the Institute of Macromolecular Chemistry of the Academy of Sciences of the Czech Republic relevant to treatment of extensive burn injuries and trophic defects. It offers a simpler method of cultivating autologous skin cells, their multiplication, and

subsequent transplantation to the wound site. The grafting of biologically active, highly mannosylated oligosaccharides onto synthetic polymer carriers results in a relatively simple selective cultivation of epithelial cells, which can then be used for targeted healing of a skin defect. In 2002, this discovery was awarded the Czech Head National Award of the Czech government.

Combination of antibodies or their Fab fragments for use as a medication or pharmaceutical substance containing such antibodies or their Fab fragments
This is a joint invention of the First Faculty of Medicine of the Charles University, the Institute of Molecular Genetics of the Academy of Sciences, and the Institute of Animal Physiology and Genetics of the Academy of Sciences of the Czech Republic. The patent describes a new biological therapy of squamous cell carcinomas of head and neck. It uses specific monoclonal antibodies to block the information flow between tumour cells and their support cells in the tumour stroma. Molecules whose activity is blocked are identified using a transcriptome of the tumour stroma on a genome-wide level in combination with proteomic analysis. This treatment method could be used to supplement existing and established tumour treatment methods.

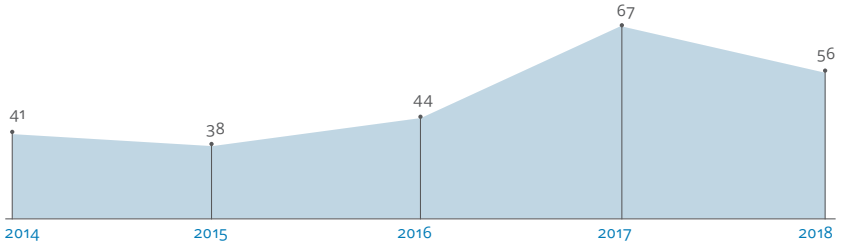
Instruments for medical examinations, especially colonoscopy
Researchers of the First Faculty of Medicine of the Charles University had developed innovative diagnostic instruments, such as a new instrument set for endoscopic examination, which could contribute to earlier diagnosis of colon tumours.

The First Faculty of Medicine of the Charles University is an important centre of applied biomedical research in the Czech Republic. Thanks to its high research potential, our researchers keep working on many other inventions and discoveries which could have practical applications and help patients in the Czech Republic and abroad.

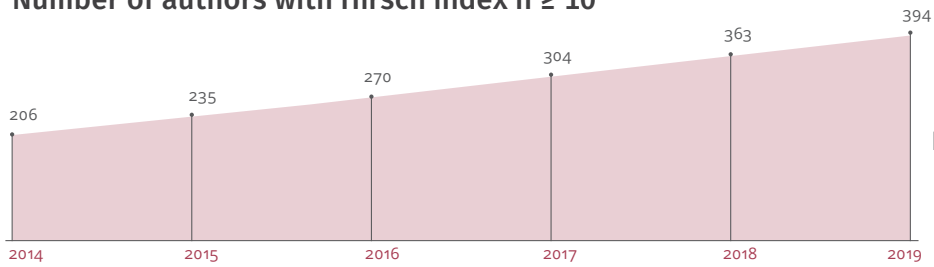
Bibliography

The First Faculty of Medicine is one of the leaders in biomedical research. Each year, faculty members produce almost two thousand scientific works, both in basic and clinical research. Each year, members of the faculty publish around 580 original books and articles and 75 overview publications. In 2018, authors from the First Faculty of Medicine had been quoted 40,000 times and this number keeps increasing. Most important publications tend to belong to the fields of biochemistry, neurology, nephrology, gynaecology and obstetrics, toxicology, psychiatry, and endocrinology. Many of these articles are published in journals which are in the world of science considered the most prestigious, such as The New England Journal of Medicine, The Lancet, Nature, The Journal of the American Medical Association (JANA), Journal of Clinical Oncology, or European Heart Journal.

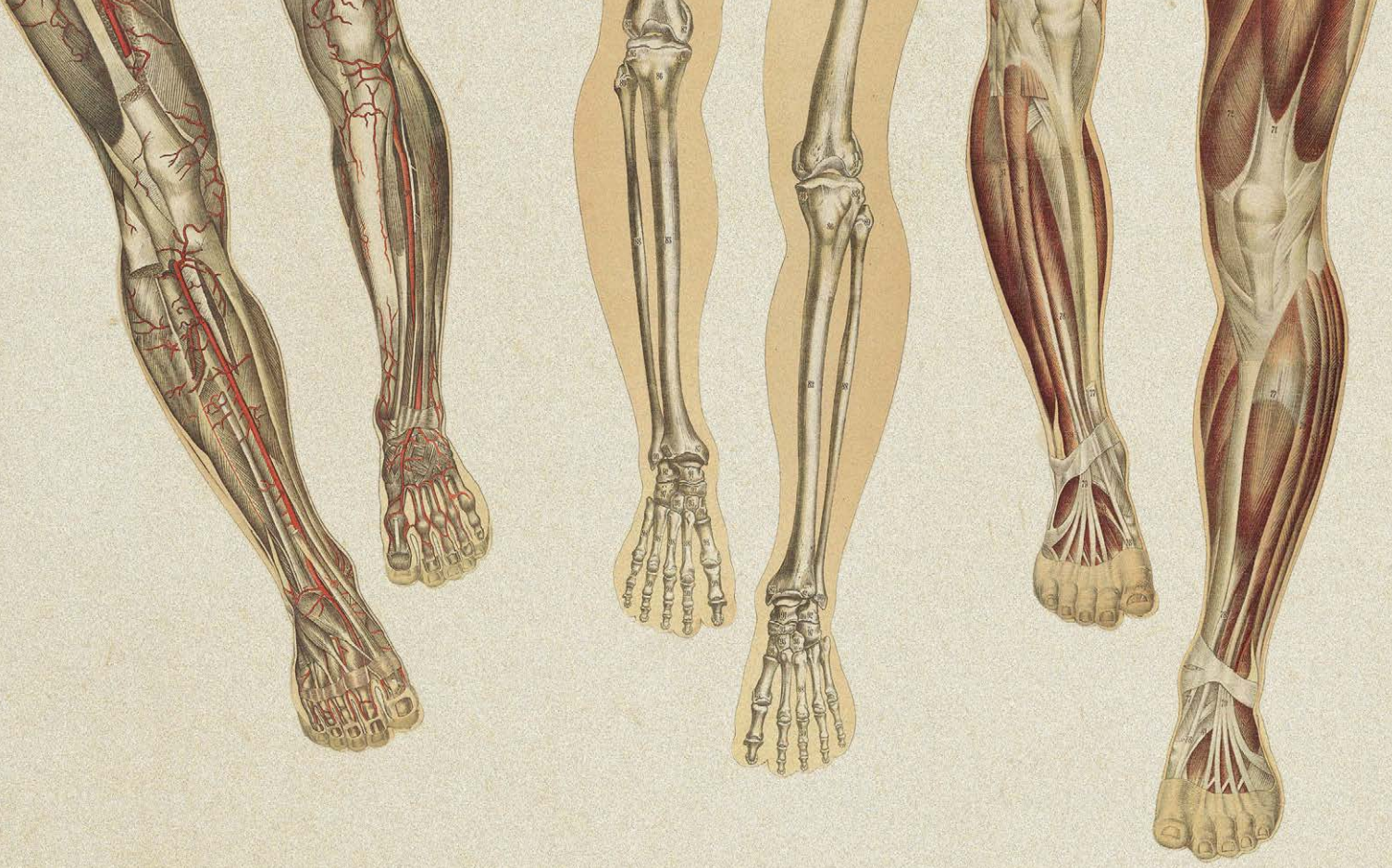
Number of articles in journals with impact factor IF ≥ 10



Number of authors with Hirsch index h ≥ 10



Institutional Hirsch index h = 139



Development

Development

Anything that does not develop, stagnates. At the First Faculty of Medicine, we are well aware of it and development is therefore one of the issues to which we pay the greatest amount of attention, interest, and support.

We view the fact that we are a traditional medical school with a tradition spanning over almost 700 years not only as a privilege but also as an obligation. To us, history means tradition, experience, and roots. All this is also important in the way forwards, in development and courage not to live only in the past. It helps us be firmly anchored in the present and face the future. This is why we aim at developing the legacy of generations that came before us, generations which made sure the school kept pace with the development of medical education, which necessarily also entails research and scientific activity in this field.

Nowadays, this would not be possible without modern, but also very expensive equipment and facilities. At our faculty, thanks to wonderful enthusiasm of many people – from junior assistants, lecturers, and heads of research teams, all the way to the staff of the Dean's Office – we managed not only to keep all the requisite facilities operational but also to update and develop them. Thanks to this enormous effort, we are not just a well-kept relic of the past but a modern faculty which plays a role in setting new trends and directions of development.

Since the school's location in the historical centre of Prague leaves little space for the construction of new, modern buildings 'on a green field', we focus on modernising existing facilities in the historical buildings. We do our outmost to make sure they meet the requirements of modern teaching and research and respond to trends in both of these core areas of our activity. We are succeeding thanks to a strategy based on a responsible economic approach which emphasises sustainability of created infrastructures and thanks to good results in fundraising, in recent times especially from European structural funds.

Medical simulations

Thanks to this, students of the First Faculty of Medicine are taught preclinical, mainly theoretical subjects, in buildings which are historical but their lecture halls, laboratories, autopsy theatres, and other teaching facilities are fully modern. Students learn also in our continuously expanding Centre of Medical Simulations, located in the building of the Institute of Physiology. The faculty, however, has at its disposal many other simulators at various clinical departments, for instance for phlebotomy training, birth, urethral catheterisation, or laparoscopic operations. At the Department of Dental Medicine, practical instruction relies on dental phantoms.

Facilities of the Centre for Advanced Preclinical Imaging include a magnetic particle imager, a unique technology that enables a direct detection of position of paramagnetic particles in oscillating magnetic field.

Centres and specialised departments

Scientific staff, postgraduate students of biomedicine, but even motivated undergraduate students can work not only in laboratories furnished to high scientific standards, but also in centres and specialised departments which can in many cases be compared

with respect to their equipment, environment, and facilities with the best that is available internationally.

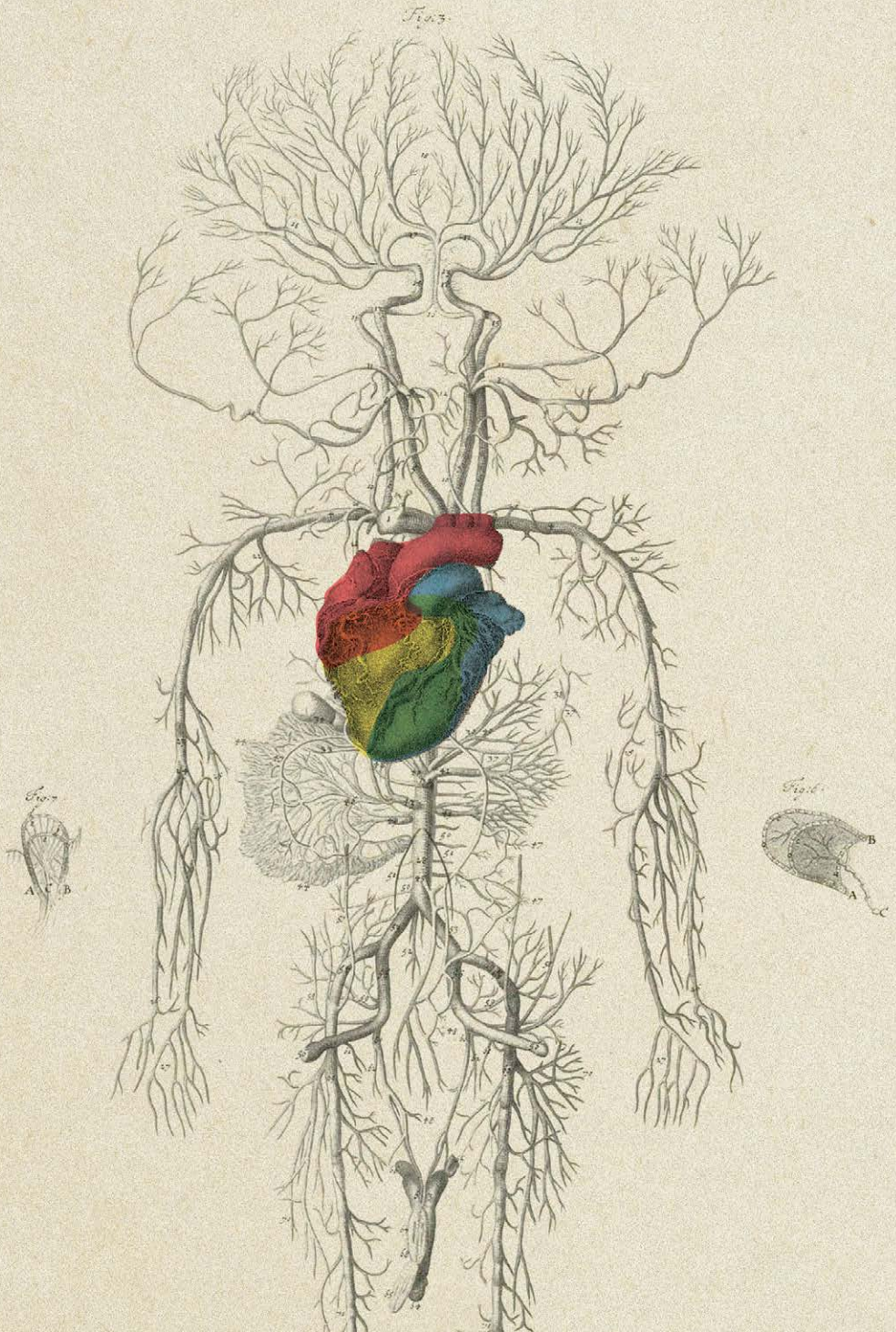
One of such centres is definitely the **Centre for Advanced Preclinical Imaging (CAPI)**, which belongs to the best equipped centres of its kind anywhere in the world. In addition to a comprehensive range of 'classical' imaging methods for research using small animal models, it is one of but a handful of research centres in the world that have a magnetic particle inspection (MPI) machine.

Another facility that belongs to our faculty and has at its disposal outstanding technological facilities, especially in the field of electron microscopy, is the **Imaging Centre for Biomedicine and Medical Nanotechnologies** at Purkinje Institute or the **National Centre of Medical Genomics**, for which our faculty functions as its national coordinator.

Institute of Biotechnology and Biomedicine of the Academy of Science and Charles University in Vestec (BIOCEV), whose participant is also the First Faculty of Medicine, opened in 2016.

Thanks to our faculty's important role in the **BIOCEV** project, which is one of the six large Centres of Excellence, researchers from our school have open access to its service

departments ranging from the Imaging Methods and Centre of Molecular Medicine all the way to the Centre of Molecular Structure and OMICS Genomics and Proteomics.
Outstanding quality of many of our institutes and departments is reflected in their inclusion in the **National Network of Scientific Infrastructure** (CzechBioImaging, EATRIS-CZ, BBMRI, NCLG). Parts of this network even belongs to a pan-European platform, which in turn enables our students and scientists to access the most advanced technological equipment within this wider base.
High quality of research is attested further by the fact the faculty received support for an important project of **Centre of Tumour Ecology**, in which the First Faculty of Medicine features as its project coordinator.
In near future, we expect that the **Campus Albertov** project, in which we collaborate with the Faculty of Mathematics and Physics and the Faculty of Sciences of the Charles University, should offer much further improvement. Its realisation should not only facilitate further access to the latest technological equipment but also a closer cooperation between outstanding researchers from many different areas of science.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Daily Life

Buildings of the Faculty and of the University Hospital

The First Faculty of Medicine of the Charles University is located in the historical centre of Prague in the vicinity of several churches founded by Charles IV. Some buildings of the faculty are close to the Charles Square, others are located in the Albertov area. Together with buildings belonging to the Faculty of Science and the Faculty of Mathematics and Physics of the Charles University, they form a unique university campus. This was the workplace of for instance Albert Einstein during his stay in Prague but also of many important personages of Czech medicine and natural sciences. The two parts of the campus are linked by so-called Albertov stairs with a wonderful view of Prague. These stairs are the location of traditional stair-climbing races, daily movement between lectures, and often also of some of the most romantic moments of student life.
Theoretical institutes of the First Faculty of Medicine have been undergoing a thorough renovation to make sure that their historical nature goes hand in hand with modern functionality. Clinical education takes place for the most part in the General University Hospital, but some subjects are taught also in other hospitals in Prague (in the Motol University Hospital, Bulovka Hospital, Thomayer Hospital, Military University Hospital in Prague, and Na Homolce Hospital) and to a lesser extent in some institutions outside Prague.

Building of the Dean's Office

The construction of building of the Dean's Office started in April 1883 and in just six months, about one third of the current compound was completed so that a ceremony which marked the opening of these facilities for teaching could take place already in October of the same year. In 1886, as the number of Czech medics grew and the space no longer sufficed, side wings were extended and linked by a single storey corridor. The last part of the compound was built in 1897 by a further extension of one of the wings. This building currently houses also:

- The Department of Stomatology, which prepares students of the master's programme of dentistry and belongs to leading research institutions.
- Jan Jesenský's Museum of Stomatology, a unique institution with a collection so rich it attracts experts from far and wide. At the moment, the museum serves mainly scientific and learning purposes, but it is also accessible to the public.
- The Institute of Medical Biochemistry and Laboratory Diagnostics, which carries out both basic and specialised laboratory tests and provides consultations and consultancy services in clinical biochemistry, cytogenetics, haematology, clinical microbiology, and immunology. It is one of the leading research institutions of the faculty.

Building of the Dean's Office of the First Faculty of Medicine of the Charles University. Its construction started in 1883.

The Institute of Anatomy

The building of the Institute of Anatomy was constructed in 1877–1882. In recent years, it had undergone various reconstructions of teaching halls and science laboratories, so

that it now meets the most demanding criteria placed on modern teaching of human anatomy and on facilities needed for research, which focuses mainly on morphology and cellular biology. Library of the Institute of Anatomy has in its collection specialised journals starting in mid-19th century and almost 20,000 volumes of scientific literature, including historical editions.

The Museum of the Institute of Anatomy houses preparations used in the study of normal human anatomy as well as preparations used in the study of comparative anatomy of vertebrates, their body plans, and similarities with human anatomy. The museum serves mainly the students of medical faculties and the Faculty of Sciences of the Charles University, but is also used in research.

The building of the theoretical institutes (U Nemocnice 5)

Almost in parallel with the Institute of Anatomy, there grew in its neighbourhood a large corner building intended to house other theoretical institutes of the medical school. In autumn 1879, the Institute of Medical Chemistry and Institute of Experimental Pathology moved into facilities well equipped for teaching and scientific work.

The building currently also houses:

- The Institute of Biochemistry and Experimental Oncology, whose main task is to educate undergraduate students of master's and bachelor's programmes. It focuses on medical chemistry and biochemistry, pathological biochemistry, and biochemistry of free radicals. Research at this institute deals mainly with issues related to the biology of tumour cells and oncogenetics.
- The Institute of Pathological Physiology, which provides instruction in pathological physiology to undergraduate students of master's and bachelor's programmes with focus on basic biomedical research in functional genomics and proteomics, experimental haematology, and study of the causes and mechanisms on the level of disruption of normal cellular functions.
- The Institute of Biophysics and Informatics provides instruction in biophysical science and information technologies to undergraduate students of master's and

bachelor's programmes.

- The Institute of Nuclear Medicine provides a full range of up-to-date diagnostic tests in nuclear medicine including PET/CT and SPECT/CT, specialised laboratory testing, and outpatient radionuclide therapy to clinical departments. It also participates in teaching medical students including graduate specialisation training in nuclear medicine.
- The Centre for Advanced Preclinical Imaging (CAPI), which was created to implement the most advanced technologies in basic and applied research conducted not only by scientific teams of the First Faculty of Medicine of the Charles University but also other research centres in the Czech Republic and the European Union. In addition to in vivo imaging, the CAPI also participates in the development and testing of new imaging probes and technologies.

The Institute of Scientific Information: The Library

The building which currently houses the Institute of Scientific Information used to be the home of the Second Institute of Pathological Anatomy, which was in 1858 built and opened by V. Treitz. The Institute of Scientific Information moved to the U nemocnice street no. 4 only in 2000 and nine years later, the whole compound underwent a comprehensive reconstruction. Given the historical nature of the building, the facilities have been sensitively modified. Study rooms feature modern equipment and optimally interconnected storage facilities linked with a loan counter provide comprehensive library and information services including access to electronic resources. The building currently also houses:

- The Institute for the History of Medicine and Foreign Languages, which provides, among other things, courses in the foundation of Greek and Latin medical terminology, but also English, German, French, and Russian courses, as well as Czech language courses for international students. The Institute moreover organises seminars on the history of medicine and its research focuses on investigation of various subjects from the history of medicine and history of diseases.

Purkinje Institute

The origins of this building are integrally linked to the name of Jan Evangelista Purkyně, professor of physiology who gained renown with his discoveries regarding cells responsible for some of the basic functions of the heart, the eyes, etc. This professor, who was also active in bacteriological and histological research, lectured in embryology and histology at the university until his death in 1869. The building intended to house the institute of histology and embryology was constructed in 1923–1925 and in the end, it also housed the institute of biology and the institute of physiology. In 1937, to mark the 150th anniversary of Purkyně's birth, the building was named after him. Purkinje Institute, a purist building from the first half of the twentieth century, is currently considered one of the most interesting examples of Czech architecture of that era.
The building currently houses:

- The Institute of Histology and Embryology, which has been since its foundation providing instruction in histology and embryology. In addition to teaching obligations, institute staff also participate in research projects.
- The Institute of Pharmacology, which provides courses in pharmacology not only to students of our medical faculty but also of the Faculty of Education of the Charles University, University of Chemistry and Technology in Prague, and to students of the Faculty of Physical Education and Sport of the Charles University. Staff of the institute works on various research projects in collaboration with several institutes of the First Faculty of Medicine and of the Academy of Sciences of the Czech Republic.
- The Institute of Biology and Medical Genetics, which provides instruction in biology, genetics, human biology, and clinical genetics. Staff of the institute teach not only students of our faculty, but also students from the Faculty of Science of the Charles University and University of Chemistry and Technology in Prague.

The Institute of Physiology

This, the second oldest institute of physiology in the world, was founded by J. E. Purkyně

on 6 October 1851. The current building was constructed in the first stage of construction of the Albertov campus in 1904–1908. In June of the following year, the Institute of Physiology started functioning in part of the current building and in 1908, another wing was added. The institute currently provides courses in physiology, practical physiology, medical physiology, general symptomatology, and ECG. Its main research focus traditionally consists of two main areas: electrophysiology of the heart muscle and ontogenesis of functions of the central nervous system.

The building currently also houses:

- The Institute of General Practice, whose main task is to teach undergraduate students of master's and bachelor's programmes. Its teaching facilities include a model office of general practitioner and a laboratory of clinical skills.
- The Department of Rehabilitation Medicine, which provides courses in rehabilitation medicine, occupational therapy, and physiotherapy not only to students of our faculty but also to students of the Czech Technical University in Prague, Faculty of Physical Education and Sport of the Charles University, Faculty of Health and Social Sciences of the University of South Bohemia, and Faculty of Medicine of Palacky University in Olomouc.

The Institute of Immunology and Microbiology

The building of this institute, completed in 1907, was likewise part of the first wave of construction of the Albertov campus. It was built for the German University. During the interwar era, a western wing was added. The institute provides courses in immunology and microbiology not only to students of our faculty but participates also in the instruction of students from the Third Faculty of Medicine of the Charles University, Faculty of Sciences of the Charles University, University of Chemistry and Technology in Prague, and Czech Technical University. Research at the institute focuses on investigation of pathogenetic mechanisms of autoimmune diseases with emphasis on the role of antibodies in their emergence.

The building currently also houses:

- The Institute of Hygiene and Epidemiology, which provides courses on current health risks to individuals and populations. Its research focuses on reproduction risks, issues stemming from fast economic and civilisation development, and the subject of assessing medical fitness to work.

Hlava Institute

In 1913–1921, a monumental purist building based on a project by Alois Špalek and August Kožíšek was purpose-designed and built for the first institute of pathology in the Czech Lands. It quickly became famous for its dissection halls, which protrude in half-circles from the northern wall of the institute to provide the halls with optimal light for autopsy. The institute was opened in 1922 by Jaroslav Hlava, a well-known Czech pathologist. The institute currently provides courses in pathological anatomy to students of master's and bachelor's programmes. Staff of the institute is also active in research projects focused especially on oncology, pathology of the urogenital system, haematopoiesis, as well as pathologies of the breast tissues.

The building also houses:

- The Institute Forensic Medicine and Toxicology, which provides courses in forensic pathomorphology, forensic toxicology, forensic immunochemistry, biomechanics, and subjects from medical law. Research activities of the staff focus on pathomorphology, forensic traumatology, and forensic toxicology. The institute also works together with state authorities to bring objective evidence in investigations of suspected criminal activities.

The Academic Club: Mladota Palace, better known as the Faust House

The history of the Faust House reaches to times before the foundation of the New Town of Prague in 1348. At that time, this was the location of the court of Dukes of Opava, which was, however, during the Hussite Wars (1419–1434) 'spoiled and ruined'. Even in times that followed, the house did not bring good fortune to its owners: Jaroslav Kapoun of Svojkov, who purchased the house in 1501, was executed as a criminal, while

another of its owners, the well-known adventurer and alchemist Edward Kelly, had to run from justice. The house is currently owned by the municipality of Prague 2, which has been renting it on a long-term basis to our faculty, which uses it to operate its Academic Club known as 'Fausťák'. The serene space of the ground floor offers during the academic year a broad range of concerts, exhibitions, and discussions. One of the best known regular events held here is the 'Chair for Dr. Faustus', which takes place once a month. It features interesting and important guests not only from the faculty but also public life.

Faust's House, whose history started before the foundation of the New Town of Prauge in 1348, now houses the Academic Club of the First Faculty of Medicine of the Charles University.

The General University Hospital in Prague

The General University Hospital in Prague, with which the First faculty of Medicine shares over thirty departments, forms the largest teaching base of the faculty and is its highly valued partner. This hospital's activities had been linked to the medical school right from the start: clinical instruction of students started here already in academic year 1791/92. The hospital thus has the longest tradition of academic medicine in the territory of the Czech Republic and has been, ever since its foundation, an important research centre. Numerous operations and treatments that received international acclaim were undertaken here for the first time and the same applies to discoveries

made in the hospital's laboratories. In 2020/2021, the hospital celebrates 230 years since its foundation.

Motol University Hospital

Motol University Hospital, with which the First faculty of Medicine shares three departments, is one of the most important healthcare institutions in the Czech Republic. This is due not only to the range of medical specialties practiced here but also thanks to its almost unique concentration of all operations in one place, that is, in two compact adjacent buildings. This helps bring together specialised medical and nursing teams from many areas, which can join and provide truly comprehensive care.

Bulovka Hospital

Bulovka Hospital, with which the First Faculty of Medicine shares six departments, provides comprehensive medical care especially to patients from its natural catchment area. In many cases, however, it treats patients from all over the Czech Republic. This applies especially to its Department of Infectious and Tropical Diseases, the only facility in the Czech Republic capable of providing care to patients with highly infectious diseases. Of historical interest is the fact that it was here that Acting Reichsprotector Reinhard Heydrich succumbed on 4 June 1942 to injuries he sustained during an assassination on the 27th of May.

Thomayer Hospital

Thomayer Hospital, with which the First Faculty of Medicine shares five departments, is one of the largest healthcare facilities in the Czech Republic. It bears the name of Professor Josef Thomayer, an important Czech internist. The hospital provides high-level specialised medical care as well as working facilities to specialists from numerous medical fields. It focuses mainly on paediatric medicine, traumatology, oncology, and pneumology but maintains high standards also in other clinical areas.

The Central Military Hospital – Military University Hospital Prague

The main aim of the Central Military Hospital, with which the First Faculty of Medicine shares seven departments, is to provide high-quality, safe, specialised medical care based on the most advanced treatment methods and approaches available, to the benefit of health and quality of life of patients. Being the only military university hospital in the Czech Republic, the Military University Hospital is a training, learning, and research facility of the Czech Army. This hospital was the first in Central Europe to acquire international accreditation of the Joint Commission International, which attests to the top level of quality provided here.

The Institute of Rheumatology

The Institute of Rheumatology, with which the First Faculty of Medicine shares one department, is the most important institution dealing with rheumatic diseases in the Czech Republic. During its existence, it won the reputation of an internationally respected centre in rheumatology. Research at the Institute of Rheumatology is generally speaking focused on discovering the pathogenetic mechanisms of development of rheumatic disorders and their long-term supportive treatment with the aim of finding new diagnostic and therapeutic methods.

The Institute of Haematology and Blood Transfusion

The Institute of Haematology and Blood Transfusion, with which the First Faculty of Medicine shares one department, is the largest centre dedicated to haematology in the Czech Republic and it has been here for over sixty years for everyone who needs truly specialised treatment. It focuses on the full range of issues pertaining to haematopoiesis, from cancers all the way to heritable or acquired non-cancerous diseases. Highly specialised healthcare provided by this institute goes hand in hand with successful research and implementation of new scientific results to laboratory diagnostics and treatment of patients.

The Structure of Faculty Management

Dean, Vice-Deans, and Dean's College

The top representative of the First Faculty of Medicine of the Charles University is the dean, who is elected by the Academic Senate. The dean is elected for four years and may serve at most two consecutive terms. The dean and his or her deputies, vice-deans, lead the faculty and are responsible for its activities to the rector of the Charles University. Vice-deans and representatives or other parts of the management jointly form Dean's College, an advisory body that may also put forward initiatives and proposals.

The Bursar and Dean's Office

Dean's Office is an executive body responsible for the economic and administrative functioning of the faculty. Its various departments are in charge of the administrative

organisation of studies, economic agenda, technical administration of faculty's facilities and buildings, and the like. Operations of the Dean's Office are, in collaboration with the relevant vice-deans, directed by a bursar responsible for internal management and economic functioning of the faculty. The bursar is subordinate to and appointed by the dean.

The Academic Senate

The Academic Senate and Scientific Council are two self-governing bodies of the faculty invested with far-reaching decision-making powers. The Academic Senate is the top organ of academic self-governance. It elects the dean and can considerably influence the operation of the faculty. It has 30 members who are elected every three years. Half of them are elected by students, half by the academic staff. The Academic Senate influences faculty's policies and aims, adopts internal regulations, the budget, and other important documents.

The Scientific Council

The Scientific Council approves study programmes and discusses policy documents. It has a decisive voice in the appointment of new professors and habilitation of senior lecturers (docents), and generally voices its opinion on issues related to the scientific quality of teaching and research at the faculty. The Scientific Council is appointed by the dean and approved by the Academic Senate. Members of the Scientific Council are important specialists from the faculty but also from institutions, including international ones.

Expert Committees

Expert committees and informal workgroups are established for particular tasks. They are mostly appointed by the dean or the Academic Senate.

Faculty's Activities Aimed at the General Public

The First Faculty of Medicine communicates important medical subjects not only to specialists and professionals but also to the broad public. Its aim is to use an accessible format to inform about its scientific and research activities and new developments in medical education. The faculty participates in and itself organises various festivals and cultural and social events.

At many opportunities, we also educate the public about the basics of the first aid. We regularly help with awareness campaigns regarding cancer prevention: events organised by the faculty often include, for instance, training of self-examination of breasts and testes using various ingenious models. We also help with addiction prevention, training of dental hygiene both in children and adults, prevention of cardiovascular diseases, and in other areas.

Several times a year, the faculty opens its doors to the public. We regularly organise days of open doors for persons considering study at our faculty. Our 'Number One Try-Out' events, where the public can try how our medics are taught, are already a tradition. Each year, we also open to the public unique collections from the Museum of Comparative Anatomy and the Museum of Stomatology. The First Faculty of Medicine also publishes a journal called Jednička, intended mainly for students, teachers, and scientists.

Medics' ball

Each year, the faculty organises a representation ball of medics in the Žofín Palace. It has already taken place more than 130 times and with interruptions necessitated by wars, its tradition is over 150 years long. The Medics' Ball is often seen as the top event of the Prague ball season and references to it are found in various books and films.

Concerts from the series Faculty at the Heart of Karlov

Based on the initiative of the First Faculty of Medicine and medical students, who wished to bring more life to the university campus at Albertov and Karlov, a series of concerts of classical and spiritual music called Faculty at the Heart of Karlov started in 2005 and has been running ever since. Regular spring and autumn concerts intended for both the general public and academic community of all Prague universities take place in churches at and near the campus.

A series of concerts of classical and spiritual music called 'Faculty at the Heart of Karlov' was launched in 2005 based on the initiative of the First Faculty of Medicine and its students.

Series of discussions 'Chair for Dr. Faustus'

Since 2000, the faculty has been organising a series of discussions called Chair for Dr. Faustus, whose aim is to present to the public and the academic community top specialists whose lives and careers are linked to the First Faculty of Medicine. We also often host other important representatives of science, medicine, and social and cultural life in the Czech Republic. The atmosphere of these discussion evenings is much enhanced by the location: the historic Faustus House and its unique genius loci.

University of the Third Age

The First Faculty of Medicine offers one of the forms of life-long education, University of the Third Age, aimed mainly at audience past retirement age. This is an optional form of study, where students over four terms learn about the biological foundations of medicine and the basics of theoretical and preclinical medical fields. Because this programme is intended solely as a way of satisfying the interest of members of the general public, graduation from it does not constitute qualification for employment as any sort of medical personnel.

Alumni Club of the First Faculty of Medicine

Relatively recently, in 2015, an alumni club was established at the First Faculty of medicine. Its aim is to maintain contact between the faculty and its graduates from both medical and non-medical fields after graduation. The club offers ways of looking up fellow students, organises meetings of classes of particular years or medically specialised meetings, offers various club bonuses, and much else. The club also welcomes international alumni of the First Faculty of Medicine, who can register via www.alumni1lf.cz/en.

Student Associations

There are several student associations active at the First Faculty of Medicine. These associations are self-governing and their activities are supported by the faculty. Student associations and clubs regularly participate in numerous events organised by the faculty but also prepare their own events including various charity projects and health awareness campaigns.

Association of Czech Medical Students

This association follows up on a tradition whose foundations have been laid already in 1863. It is open to all students of the First Faculty of Medicine. It offers space for relaxation and socialising and organises various student events. Association clubroom includes not only a relaxation zone but also a quiet study and library, which features, among other things, various medical literature in English. The association participates in many volunteer events and awareness campaigns. For a number of years, it has been running a 'buddy programme' for international students, where incoming international students, especially at the beginning of their studies, can turn for advice and help to students who study in the Czech programmes.

IFMSA CZ

The International Federation of Medical Students' Associations is an independent apolitical student organisation uniting over 1.2 million medical students from 101 countries all over the world. It is officially recognised by the United Nations and the World Health Organisation as an international forum of medical students. In the Czech Republic, it is represented by its Czech branch, the IFMSA CZ. The IFMSA CZ organises mainly research and clinical internships in hospitals all over the world and education projects on human rights and public and reproductive health for both the general public and medical students.

Czech Dental Students Association

This association of students of all fields of dental medicine and stomatology from all over the Czech Republic mediates stays abroad, help in professional growth, and various activities to enrich their professional and student lives. This association is member of the International Association of Dental Students, through which it organises exchange stays for domestic and international students. Via international research internships, it helps students participate in research. It organises for its members various educational events where they have the opportunity to try new materials or techniques. The association also participates in prevention campaigns aimed at the broad public.

MEDSOC

This is a student society of the English parallel at the First Faculty of Medicine. Its mission is to help students of the English parallel to adjust to life at the First Faculty of Medicine and help them do well by choosing the right study resources and strategies. This society also organises social events and extracurricular activities and serves as a support network. MEDSOC organises highly popular seminars about jobs abroad and workshops on preparing for international licensing exams. MEDSOC is a non-profit,

volunteer-based organisation. There is no formal membership. All students are welcome to attend MEDSOC events and get involved in its activities.

Czech Association of Addictology Students

This organisation brings together students of bachelor's, master's, and doctoral studies of addictology. Its main aim is to support these students, promote this field, and to establish collaboration with professionals who work in addictology services and with international universities. The association also organises public awareness campaigns whose aim is to increase awareness of the principles of addictology, dispel misconceptions related to this field, and promote certain basic concepts of addictology among the general public.

Association of Physiotherapy Students

This organisation serves physiotherapy students in the Czech Republic. Its aim is to establish contacts with educational, healthcare, and other institutions, both domestic and international. It organises educational, cultural, and charity events.

Student Association of Nutrition Therapists

This non-profit student organisation unites students of nutrition therapy from Brno, Prague, and other towns and cities. Its aim is to educate students and in collaboration with other organisations, schools, and institutions improve public awareness of nutrition and nutrition therapies.

Student Platform Occupational Therapy (SPOT) Prague

This association serves students of both bachelor's and master's programme in occupational therapy at the First Faculty of Medicine of the Charles University. Its aim is to work towards accomplishing the visions set by APOT Europe student association, founded in 2014 as part of the European Network of Occupational Therapy in Higher Education (ENOTHE).

Student Activities

Several interesting projects and regular events, which found their place in the public and academic life, were founded on the initiative of students of the First Faculty of Medicine, student associations, or in collaboration with them.

Student Tutor Project

Student tutors are more advanced students who function as a sort of guides to incoming students of both medical and non-medical courses. Before the beginning of an academic year, each tutor is put in charge of one study group, i.e. about 25 students, whom he or she helps with their first steps at the faculty. Tutors help by offering advice on accommodation in student dormitories, choice of textbooks, or share their experiences with various courses, exams, or teachers. This project has been running for a number of years and is highly successful. The MEDSOC, an association of international students, organises a similar activity for freshmen of the English parallel.

World Health Day

Students who are members of the IFMSA CZ each year join the World Health Day, a day appointed by the World Health Organisation. The main aim of this project is to improve public awareness regarding prevention and maintenance of health. Students prepare an educational tent for the public, where people can, for free, have their blood sugar, blood pressure, BMI, percentage of body fat, or waist circumference tested and measured. The tent also includes stands dedicated to first aid, healthy diet, or advice on smoking cessation.

In Healthy Prague a Healthy Tooth

Future dentists from the Dental Students Association of the Czech Republic each year go out into streets and advise children and adults how to clean their teeth to limit

the growth of plaque and prevent gum diseases and the formation of carries. They demonstrate the correct technique of removal of dental plaque using models of the oral cavity and various dental implements: toothbrushes, dental floss, interdental brushes, and plaque detectors.

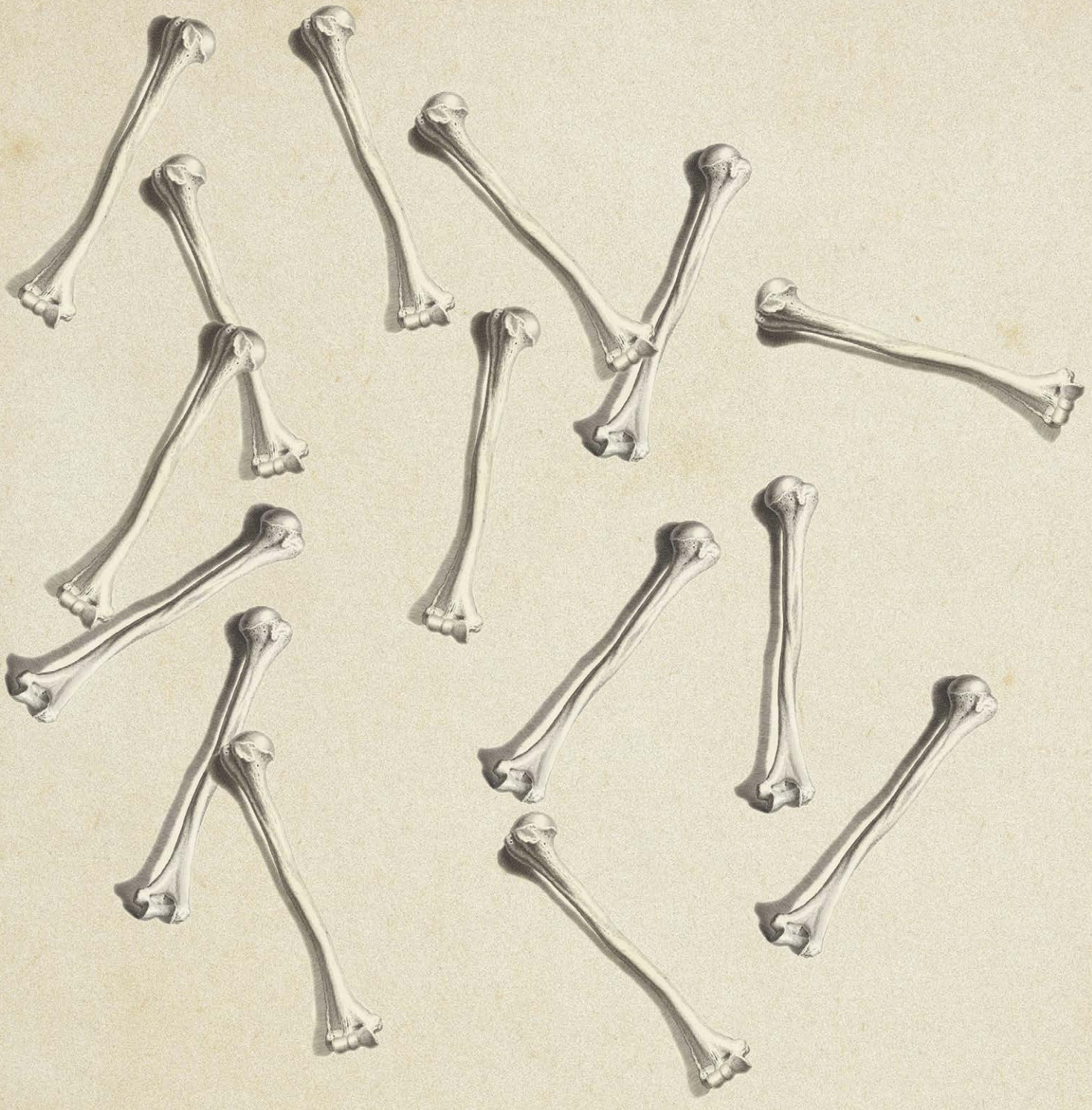
Teddy Bear Hospital

The aim of the Teddy Bear Hospital Project, organised by the IFMSA CZ, is to help pre-schoolers overcome their fear of 'white coats'. Students visit kindergartens, where using a play, they place children in the position of doctors who take care of their favourite plushies. This helps children realise that the doctors' aim is not to hurt but to help.

The Teddy Bear Hospital Project organised by the International Federation of Medical Students' Associations in Czech Republic (IFMSA CZ).

The Feast of St. Nicolas

Each year, at the beginning of Advent, students from the Association of Czech Medical Students participate in celebrating the feast of St. Nicolas. They visit not only paediatric departments in hospitals but also geriatric clinics to cheer up patients there. They hand out small presents to children and adults and sing Christmas carols to help usher in a pre-Christmas atmosphere.



Practical Information

Practical Information for Applicants

The faculty offers two programmes in English: General medicine is a 6-year course leading to a master's degree and title MUDr. (Medicinae Universae Doctor; equivalent to MD, Doctor of General Medicine). Dentistry is a 5-year course leading to a master's degree and title MDDr. (Medicinae Dentium Doctor; equivalent to DDM, Doctor of Dental Medicine). These degrees are fully recognised within the EU and most other countries recognise them at least to some extent. Prior to applying to our faculty, prospective students are encouraged to ask the authorities or relevant professional bodies of the country where they intend to practice medicine for information regarding the conditions of full registration and recognition of a degree acquired at the Charles University.
The First Faculty of Medicine of the Charles University is listed in the World Directory of Medical Schools published by the WHO. It is also included in the Directory of Postsecondary Institutions published by the US Department of Education, and it has qualified to participate in programmes under Higher Education Act of 1965 (HEA) and the Federal Student Financial Assistance Programs (Title IV, HEA programs) in the USA. The First Faculty of Medicine of the Charles University also takes part in the Federal Family Education Loan Stafford Program (OPE ID Number G33004).

The admission procedure

Applicants must provide a certified proof of completion of secondary education (a copy of their secondary school diploma translated into Czech and attested by a Czech notary). Applicants with a US education background must have a college degree or at least 2 AP courses in either biology, chemistry, or physics, while those who apply with A-level results are required to have A Levels in at least three subjects in the same academic year in order to be eligible to apply. Other national (e.g. CBSE) or international (e.g. IB) curricula are also acceptable. Applicants who meet these requirements are then selected based on the results of their entrance examinations.

Applicants should send us a complete Electronic Application Form via e-mail. The form must be sent on time to take the entrance examination in Prague. Alternatively, it is possible to apply through one of our authorised agents (listed on our website) who organise examinations in various countries and many of whom offer preparatory courses of different length.
After passing entrance examinations in biology, chemistry, and physics (which at the moment means earning over 214 out of the total of 300 points), a personal interview (up to 30 points), and obtaining a total of at least 244 points, applicants receive a letter notifying them whether they have been accepted. Then they are required to confirm their intention to enrol in the Faculty database (Student Information System, SIS), pay a tuition fee, and attend the first year enrolment in September.
Detailed instructions, electronic application forms, important deadlines, as well as a list of examination subjects and sample questions are found in our regularly updated website at en.lf1.cuni.cz/admission-process.

Transfer students

We accept students from other medical schools up to the third year of study. All transfer applicants must successfully pass entrance examinations for the relevant academic year. Recognition of subjects completed elsewhere is decided by the Vice Dean or the guarantor of the respective subject. In general, there must be at least 90% equivalency in course length and contents. According to the Dean's provision No. 13/2015 of 7 September 2015, only exams and credits graded Excellent (A) or Very good (B) can be recognised. Another point transfer applicants ought to consider is the requirement of passing an examination in Medical Czech by the end of the third year: students need to be proficient in medical Czech in order to be able to communicate with patients during their clinical rotations.

Practical Information for Erasmus Students

The Erasmus Programme aims at promoting mobility and cooperation in academic education in Europe. Its main goal is to improve the quality and increase the volume of student and scholar mobility, to strengthen multilateral cooperation both among European academic institutions and between academia and industry, and to improve transparency and compatibility of academic qualifications.
Charles University has been active in the Erasmus Programme since 1998 and since that time, the numbers of student and teacher exchanges has been consistently on the rise. Those who wish to experience academic life abroad can choose between Student Mobility for Studies, which amounts to either one semester or one full academic year abroad, and Student Mobility for Traineeship, where the minimum duration of stay is sixty days. Academic year consists of two semesters (terms). The winter semester starts at the beginning of October and the summer semester starts in mid-February and runs until the end of June.
Erasmus exchange students attend some courses together with students of the English parallel, but other courses are designed especially for them. Some subjects are taught in blocks of one or more weeks with practical parts and lectures held every day. Then there are also courses spanning over an entire semester, which take place once a week. Exchange students can find accommodation in the student dormitories of the Charles University. They can also join the Society of Czech Medical Students and profit from the possibility of being assigned a 'buddy' who can help them arrange various practicalities on arrival or take part in guided tours and trips organised by the Society.

Admission procedure
A sending institution which has a bilateral agreement with our faculty nominates a student. We then communicate with the student to adjust his or her study plan. This is followed by an online registration and the Application and Learning Agreement are

sent to the receiving institution. Detailed information is available at our regularly updated website at en.lf1.cuni.cz/erasmus-.

Practical Information for Postdoctoral Fellowship Applicants

The First Faculty of Medicine tries to attract promising postdocs who would engage in research within a specific field. Candidates for fellowships are selected by the relevant research center, institute, or clinical department of the Faculty.

Requirements

The relevant research center, institute, or clinical department of the Faculty must have the necessary facilities (premises, technical resources etc.) to accept international applicants and offer them research fellowship to work on the research project in question. Charles University must have the requisite financial resources to cover the costs of the research project, including applicants' salaries. Postdoc research fellows are recruited to work on a research project for a period of two years. Only applicants who received their Ph.D. degree no more than 10 years prior to the application deadline are eligible.

Procedure

The relevant research center, institute, or clinical department proposes a viable research goal to be addressed by the applicants' projects. Details of the proposed research goal are communicated to the relevant faculty department and then made public by posting them on the faculty and university website as well as relevant international websites. These details are also communicated directly to any foreign institutions which have a research partnership with the faculty.

After consulting with the relevant research center, institute, or clinical department which posted the research project, an applicant develops a detailed project plan and submits it to the faculty by the stated deadline. Every application must include a CV and a list of publications, a statement from applicant's Ph.D. supervisor, and a letter of recommendation from the head of the department or institute where the

applicant completed his or her doctoral studies (see ‘Application for a Postdoc Grant at the Charles University’ and ‘Letter of Reference’).

A Faculty committee consisting of five members is appointed by the Dean. This committee evaluates the project, issues a recommendation, and determines the order of applicants. The final decision about admission is approved by the Dean.

Practical Information for Scientists and Visiting Professors

Scientists

The First Faculty of Medicine is highly active in cooperation in international research and development. It welcomes scientists from foreign academic institutions to conduct research within a specific field on a temporary or permanent basis.

Requirements

The relevant research center, institute, or clinical department of the Faculty must have the necessary facilities (premises, technical resources etc.) to accept a scientist for work on the research project in question.

The Faculty must have the financial resources to cover the costs of conducting the research project, including the applicants' salary.

Procedure

The relevant research center, institute, or clinical department proposes a viable research goal. Details of the proposed project goal are communicated to the relevant department of the faculty and then made public by posting them on the faculty and university websites and on the relevant international websites. These details are also communicated directly to any foreign institutions which have a research partnership with the faculty.

After consulting with the relevant research center, institute, or clinical department which posted the research project proposal, the scientist who wishes to apply develops a detailed project plan and submits it to the faculty. The documents must include a CV, a list of publications, and a letter of recommendation from the head of the department or institute where the scientist works.

The Dean's Board of the faculty evaluates the documents and eventually recommends the proposal to the Scientific Board of the faculty for approval.

Visiting professors

Following a decision by the Rector issued on the basis of recommendation by the Research Board of the relevant faculty or institute, teachers from universities outside the Czech Republic whose position corresponds to the Czech position of 'docent' or 'profesor' (i.e., Associate and Full Professor, respectively) may, during their stay at the Charles University, use the title 'Visiting Professor of Charles University'. The award of this title is governed by Article 42 of the Constitution of Charles University. Visiting professors have the same rights and duties as other members of the academic community with the exception of the right to vote for candidates to the academic senates and the right to be elected to the academic senates.

Procedure

The relevant research center, institute, or clinical department proposes that the title Visiting Professor be granted to a teacher from a university outside the Czech Republic whose position is Associate Professor or Professor. The following documents ought to be provided for further processing: a letter of reference, detailed CV, a list of publications, a detailed description of cooperation with the teacher or the university the scholar in question comes from.

A Dean's Board of the faculty evaluates the documents and, if satisfied, recommends the proposal to the Scientific Board of the faculty for approval.

Validation and Recognition of Equivalence of Foreign Diplomas Issued by Elementary and Secondary Schools and Training Colleges

In cases where the Czech Republic is not bound by an international treaty to recognise the equivalence of diplomas testifying to formal education completed in a particular foreign country and graduates of foreign educational institutions who received certificates of completion of basic, secondary, or higher education from a foreign educational institution need to have the validity of their diplomas or certificates recognised, such graduates can ask the relevant regional office (in Czech: 'krajský úřad') to:

- issue a certificate of recognition of equivalence of a foreign diploma in the Czech Republic, or
- to issue a decision regarding the recognition of validity of a foreign diploma in the Czech Republic (in Czech: 'nostrifikace').

Application for recognition of a certificate of education completed in a foreign country is submitted to the department of education of the regional office relevant to the applicant's address in the Czech Republic. The requisite form can be obtained from the relevant regional office or through the webpages of the Ministry of Education, Youth, and Sports of the Czech Republic.

Deadline for processing an application is determined by Act No. 500/2004 Coll. of Code of Administrative Procedure, as amended, and it is 30 days after the submission of all necessary documents, eventually after passing differential (validation) examinations. In complicated cases, the deadline may be extended.

A regional office may issue a certificate of recognition of a diploma awarded by a foreign school only when the content and extent of the education programme corresponds to the curriculum of an elementary or secondary school or training college with a generally similar programme of studies.

In case the content or extent of education in a foreign school is partly different from its nearest Czech equivalent, the regional office requires the applicant to submit to a differential (validation) examination (in Czech, 'nostrifikační zkouška'). Its purpose is to ascertain whether the applicant's knowledge and skills correspond to the goals and content of education according to the relevant general educational programme in the Czech Republic. A differential (validation) examination may include practical testing. Applicants who are not citizens of the Czech Republic are not required to take a differential (validation) examination in the subject of Czech language and literature. From 2019, the Faculty can provide nostrification of foreign high school diplomas (for the purposes of enrollment into the General Medicine and Dentistry programs) as well as college degrees (for the purposes of enrollment to the PhD programs).

Recognition of Degrees and Qualifications Granted by Foreign Universities and Other Academic Institutions

Only public universities may recognise foreign university diplomas, the exception being education in the area of military and security forces, which is decided by the Ministry of Defence and the Ministry of Interior of the Czech Republic. Private universities and colleges do not have this authority and may not issue any certificates to that effect.
In particular cases, decision about diploma recognition is taken by a public university which offers a programme with a similar curriculum.
A list of accredited programmes of studies at Czech universities can be accessed at the webpages of the Ministry of Education, Youth, and Sport, section Education, Tertiary Education.

Recognition procedure is initiated based on a written application (in appendix) of the foreign university graduate (applicant), which is submitted through the Rectorate of the Charles University. As part of the recognition procedure, the content and extent of study at the relevant foreign university is compared to the curriculum of the relevant programme offered by a public university in the Czech Republic.
If the foreign degree is recognised, Rector of the Charles University issues a certificate of equivalence with education achieved by graduating from the Charles University.
University diplomas from some countries with which the Czech Republic concluded an agreement to that effect are *eo ipso* deemed equivalent and no further certificate of equivalence is required.
Charles University contacts the foreign university where the applicant graduated in order to verify information about the applicant's studies and authenticity of documents submitted by the applicant together with his or her application.
By recognition of university education, the academic title granted by a foreign university to its graduate is also recognised. The holder of a foreign diploma thus has the right to

use only the academic title or other appellation of a university graduate that is listed in his or her title. Certificate of recognition of foreign academic education does not give the applicant the right to use academic titles such as MUDr. or MDDr., which are granted according to §46 of Act No. 111/1998 Coll. on Higher Education.

FIRST FACULTY
OF MEDICINE
Charles University

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