Prof. MVDr. Michal Bartík, DrSc. – his life and work

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Abstract

Prof. MVDr Michal Bartík, DrSc. was born on September 29, 1921 in the family of a small farmer in Nitrianské Sučany in the district of Prievidza. He studied at the Veterinary University in Vienna (Austria), continued his studies in Brno (Czech Republic) and later also in USA. in form of postgradual studies. After obtaining his degree, he started his work engagement for a short period at the State veterinary diagnostic institute in Bratislava and for some time he worked also in the Buiatric Clinic of the Veterinary Faculty in Brno at the Academician A. Klobouk. Dr. M. Bartík started his permanent and full engagement in Slovak veterinary services on the beginning of January 1950 by his arrival into Department of Chemistry at the University of Veterinary Medicine (UVM) in Košice and he remained here to work completely faithful also in times, when it was not very easy in his life, until his retirement. He laid the foundations of the UVM in Košice and veterinary chemistry, biochemistry, radiology and toxicology at our UVM. He published many scientific and professional articles on nitrates, nitrites, ammonia, urea, various enzymes, beginning with pepsin, trypsin, chymotrypsin, protease of Aspergillus oryzae, arylamidases, kathepsin, LDH and some others. However, he payed the greatest attention to problems of enzymatic substrates, proteinase inhibitors and also to effectors, what was finally connected with the development of various enzymatic tests and kits. Together with coauthors, he published a book of “Veterinary toxicology“, which was translated also into English and furthermore a booklet “Nitrates and urea in animal feeding“. He wanted to publish also another book “Veterinary biochemistry“ for students because he had collected many scientific and professional dates for a long time. However, he did not finished it because of political oppression and disqualification, since he was sudenly politicaaly nonrequired at our university. He organized also postgradual studies for field and institutional veterinary surgeons and clinicians both in Slovakia and also on the level of whole Czecho-Slovak Republic in time of his calm period. Similarly, he was a member of many ad hoc commissions, scientific boards at the ministries, at the Slovak Academy of Sciences (SAS) institutes and committees at our UVM in Košice. On September 29, 2008, it should have been life important anniversary of
87 years of Mr. prof. MVDr. Michal Bartík, DrSc., the former academic official of the University of Veterinary Medicine in Košice, prominent czechoslovak biochemist and toxicologist, nestor of the slovak veterinary biochemistry, toxicology and radiochemistry, long-term university teacher, head of the Institute of Biochemistry, Chemistry and Toxicology of the University of Veterinary Medicine in Košice and the head of Slovak Academy of Sciences' Biochemical laboratory in Košice. His scholars, co-workers, and co-authors of several articles and reports, wanted to visit him and wish him good health and satisfaction "ad multos annos" on the occasion of his important birthday of 87 years this year. However, it was not possible since the first week of his illness has been continually worsening his health state, he was transferred into Brno municipal hospital. Although highly skilled team of human medicine professionals and doctors dedicated him the best knowledge of health care, it was over their power to bend back the worsening of his health state and prof. Bartík succumbed to his illness on January 12, 2008. His funeral has come true on January 21, 2008 at 15.30 h local time in the Municipal Crematory of the city of Brno with the participation of his closest family and relatives, as well as official guests, his friends, both from Bohemia and Slovakia, who expressed him the last great honour and greetings with many funeral flowers and wreaths. Whole funeral ceremony was realized by dean of the St.Jacobs Roman Catholic Church Mr. Slouk, who read his condensed familial speech to all participants of the funeral. Afterwards, speeches of two other speakers followed: the first of them, Assoc.Doc.M.Pavlas, who represented Czech veterinary staff from the University of Veterinary Medicine in Brno, followed by the delivered speech of prof. MVDr V.Šutiak, PhD. representing the University of Veterinary Medicine in Košice, Slovakia. This report has been supported by the grant: Vega 1-2408-05.

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In autumn of this year, academic official, lead Czecho-Slovak biochemist and toxicologist, nestor of Slovak veterinary biochemistry, toxicology, and radiochemistry, long-term university teacher, head of the Institute of Biochemistry, Chemistry and Toxicology at the University of Veterinary Medicine in Košice, and the head of the Biochemical Laboratory of Slovak Academy of Sciences (SAS) in Košice - prof. MVDr. Michal Bartík, DrSc. (see Picture 1) would have lived to see his significant anniversary of 87 years.

Michal Bartík came from pictorial surrounding of Nitrianske Sučany in the district of Prievidza, where he was born in the family of a small farmer on September 29, 1921. He passed his high school studies in public gymnasiurn in Prievidza, where he successfully graduated during difficult times of World war II (in 1941). Successfull graduation encouraged him to continue his studies at university and he decided to study veterinary medicine. As there were no opportunities to study veterinary branch in Slovakia and universities in Czech Republic had been closed, young Michal decided to study in Vienna (probably because of his extraordinary knowledge of German language besides other languages he spoke). Therefore, he subscribed to Veterinary University in Vienna in 1941. However, because of the war, he was able to pass only 7 semesters. He spent time in Vienna perfecting very intensively his knowledge of German language, which was very useful for him later for creative scientific and publication activities.

After the end of World war II, Michal Bartík, student of veterinary medicine, changed the previous university for Veterinary University in Brno, where he finally finished his studies. He graduated by defending his dissertation thesis named „Intoxication by spray irrigation substances containing dinitroortho cresol“ and he obtained degree MVDr. on February 15, 1947. After obtaining the degree, he worked for a short time in State Veterinary Diagnostic Institute in Bratislava. During his studies partially in Vienna but mainly in Brno, he had adressed mainly to chemical sciences. That is why it was not surprising that he started to work as an assistant at first, later as specialist assistant in the Institute of Chemistry in Brno. That position influenced him for his whole life, because since that time he strongly inclined to chemical sciences. He dedicated himself to chemistry, although temporarily, he worked also on Buiatric clinic at the Veterinary University in Brno (at Academican A.Klobouk, who made himself famous by so-called Klobouk’s pig disease). However, he fully subscribed to Slovak veterinary services on January 1, 1950 by arriving to the Department of Chemistry of Veterinary University in Košice. On that work place, he stayed firm even at times when he had it difficult in his life.

We can see that he stands among lead and the oldest founders and members of educationalists at our Veterinary University (at that time called University of Veterinary Medicine) in Košice (along with Academican J. Hovorka, prof. MVDr. J.Vodrážka, DrSc. and others). From the start, he built intensively his work place and provided education and research after a teacher from Faculty of Medicine of University of P.J. Šafárik in Košice, MUDr. A. Neuwirt, taught here for one semester (winter semester 1949/50). MUDr. Neuwirt stopped willing to provide education here because on one hand, he was busy at his original work and on the other hand, there are fundamental differences between humans and animals.

Dr. M. Bartík had a difficult job with building his work place because at that time, almost everything started with provisional conditions. Later, when he was given some room to work, especially in 1952, he fulfilled and organised necessary activities of education and research with enthusiasm. He also organised building and fitting rooms and equipment and he continued with deliberation until 1971. Thanks to his purposefulness and systemacy, he
helped to transform the Department of Chemistry into the Institute of Chemistry, Biochemistry and Toxicology.

Doc. M. Bartík (at that time already) tried hard to provide the work place with modern technologies. This aspiration was hindered with various complications and difficulties, however, it can be stated that similar technologies could be found very rarely in Slovakia in chemical and biochemical laboratories. If the devices that he needed could not be purchased or acquired by donation, he made them by self-help. On his work place, he had a constructing shop with skilled technician (Jozef Běřeš) and very creative assistant (Ing. K. Zwick). That was the reason why his work place was so modern at that time that it was unique in the region of Košice. Later, already in the function of vice-dean for pedagogy, doc. M. Bartík helped to provide similar shop also to other teachers and research workers at our Veterinary University (under the guidance of Ing. M. Rudič there were two more workers working full time). Technician with assistant working in the shop made devices that could not be bought in Slovakia or abroad and if they were not able to do so, they co-operated with workers in the whole-university shop. Mr. J. Běřeš and Ing. Zwick did not work only under the guidance and in accordance with concepts of doc. M. Bartík but there were also for example Ing. J. Mešter, Ing. I. Havassi, MUDr. M. Teleha, RNDr. A. Šamo, MVDr.I. Rosival, MVDr.P. Kačmár, MUDr.I. Ondruš, MVDr. V. Šutia, MVDr. J. Legáth, RNDr. I. Škriňaková–Šutiaková, who were making concepts, and also other workers of the Institute. In that manner we succeded for example in making little analytic camera for watching and analyzing activities of enzyme LDH and others. Furthermore, we managed to make special borer for constructing Conway’s containers for microdiffusion studies and some other devices (microburettes, rotator, decapilator, picker of magnetic mixers etc.).

Later, thanks to his activities, doc. Bartík was named an extraordinary professor. It happened also because he was at that time working with his co-workers also on building radioisotopic work place (Ing. Mešter, Ing. Blahovec, Ing. K. Petrlulaková and MUDr. Ondruš). Extraordinary prof. Bartík was head of that work place since beginning of 1950’s until January 15, 1971, when the Institute was dismissed from political reasons and he was backed down from the function of the head of the Institute. On the incentive of political background, new Institute of Pathologic Physiology and Biochemistry was found. There were only Department of Biochemistry and Toxicology that stayed after the changes on the new Institute.

Extraordinary prof. Bartík, as an active man, kept vivid contacts with various work places on the world (since his studies in Vienna, in Brno, but mainly after his studying stay in USA). The most intensively he co-operated with Veterinary University in Brno (see Picture 2) but also with Heyrovský Institute of Palography and with Institute of Biochemistry and Pharmacology in Prague. It is not surprising that on the basis of good relationship with prof. A. Janeček and after tuition of another Czech friends, he established into studying plans of our university a new studying subject – Veterinary Toxicology. Teaching of this subject, however, was for some time provided alternatively on the work place of Pharmacology at our university. Since school year 1953/1954, extraordinary prof. Bartík succeeded in providing remarkably good quality of teaching of that subject thanks to his function as a dean of the UVM. He taught basic veterinary chemistry from the start and later biochemistry until school year 1988/89 with enforced breaks from political reasons (especially between years 1971 - 1980). For some time, he taught also veterinary toxicology. With his systematic and hard work he rised to become an acknowledged worker of veterinary pedagogy at that time in Slovakia. In 1965, he obtained invitation to provide lessons from biochemistry also in Veterinary University in Brno after prof. Janeček’s leaving. However, he refused it. It is
surprising that although that was relatively lucrative offer (especially when he had very positive emotions towards that city, what became evident during the last part of his life, when he moved to live in Brno), he decided to stay in Košice and build the work place by using his knowledge acquired during his studies, work and studying stay in USA.

Besides teaching mostly in Slovakia, he was professionally active in the whole Czechoslovak Republic at that time. Besides previously stated functions, he was a member of convocation at our Veterinary University for many years, he was a head of comission for defending dissertation thesis and tutor of many internal and external candidates for scientific branch of biochemistry and toxicology. It is pleasing to inform on that place that authors of this report (V.Š. and his wife) are bound to him for having the chance of being taught by him.

Concerning his exact degree gradation, it is essential to state that in 1955, he became delegate lecturer, in 1957 he became lecturer and in 1962, he became extraordinary professor. He acquired his scientific degree of Candidate of Sciences by defending his scientific tract named „Some of quantitative relations of metabolism of nitrates and nitrites at livestock with consideration of methemoglobinemia“ at Veterinary University in Brno. Agricultural University in Nitra degreed him Doctor of Sciences after defending his dissertation thesis named “Biochemistry of intoxication of domestic animals by nitrates and nitrites and basics of its chemical diagnostics“. He defended this work at Veterinary faculty in Košice in 1968.

Prof. Bartík knew that success in pedagogy depends also on success in science. That is why he was so active in acquiring technical equipments and building his personal background of specialists and scientific workers. Consecutively, he helped to found Biochemical Laboratory at Slovak Academy of Sciences (SAS) in Košice. This work place started to evolve and between years 1969 – 1970, prof. M Bartík was encharged with managing it. Unfortunately, he was in that position for such a short time because out of political reasons, he was abruptly backed down from that position, although there were already his first valuable results from research. They watched mainly dynamics of changes of free amino-acids by automatized analyzer unit – Prague and Žiar type – in connections with burden of nitrates and nitrites on various animals, mainly sheep. In that time, prof. Bartík worked intensively on various problems – intoxicification by nitrates, nitrites, urea and ammonia, problems of various types of enzymes (pepsin, trypsinom, chymotrypsin, protease Aspergillus oryzae, arylamidases - mainly leucyl- but also lyzyl-arylamidase, kathepsin, lactatedehydrogenase and some other enzymes), synthesis of enzymatic substrates, proteinase inhibitors, and many more enzyme effects.

Everybody who knew him, knew that science and research was always the priority of his professional orientation and he sacrificed a lot to achive his goals. He used the results from his research as a base and main resources for his teaching work. He also inspired many workers with that approach. Thanks to his inspirational and strategic skills, University of Veterinary Medicine succeeded in attainning except others also one of the last scientific grants Vega: 1-2408-05.

We managed to develop a lot of methods for chemical diagnostics of intoxifications, we also managed to solve problems with apparatus diseases. Results of his creative work were various methods of studying malfunctions, prepared enzyme sets and radio-substrate sets. On the other hand, there were experimental works of scientific, popular – scientific, specialist publications and school books. Besides those, he published in many magazines abroad and at home.
Prof. Bartík wanted also to publish a school book about Biochemistry and he gave a lot of hope to it. He had been collecting materials and information for the book for a long time, however, in time of his peak creative ambitions, he became undesirable at the university out of political reasons (two of his children did not return from abroad). Consequently, he lost his position as a head of the Institute of Chemistry, Biochemistry and Toxicology, a head of the Department of Biochemistry and Toxicology and he even lost his position as a head of the Laboratory of Biochemistry at the Slovak Academy of Sciences in Košice. Also, he was not allowed to teach for some time. His degreeing for a ordinary professor was blocked in already 1970. Our university by this decision lost a lot because of that. Among others, school book of biochemistry, which could have served a lot of students and specialists, was not published. We had to teach from human medical books, which were not satisfying for veterinary studies (what realised already MUDr. A Neuwirt who found out how crucial the differences between humans and animals are). The book would have been as valuable and useful instrument for us as prof. Bartik’s book Veterinary Toxicology was.

President of Czecho-Slovak Republic degreed him ordinary university professor finally on September 1, 1980 and consequently, he was allowed to teach but his scientific and research work was partially still limited. Later, he lived to see his justification (August 2, 1990) for unfair long lime constraint and he was honoured and morally rehabilitated for his courageous citizen attitude. However, he did not gain back enough strength to write the book of biochemistry, although he used to be always full of energy, strength and endurance. Moreover, in his most difficult times, his wife died and he could not find again his previous vitality after that. In the meantime, he maybe found out that new attempts to fulfil his previous determinations are too much for him at that time, so he gave up his aims, although his organization skills, working energy, strong will and endurance. Also, his colleagues gave him umbrage when published his biochemical teaching materials under the heading of a collective of workers although the coordination, structure and content were his own work. This experience signed him until the end of his work involvement.

At the end we were surprised when after his rehabilitation, he stayed in Košice for some short time (until the end of June 1990) and then he decided to move to Brno where his family lived. After arriving to Brno, he worked for a short time in Department of History of Veterinary Medicine at Veterinary and Pharmaceutical University in Brno and later he finally retired. He spent the last part of his life with his son Michal and his family. After worsening his eyesight, Miss Liduška, who he loved until the last day of his life, also took care of him.

At the end of last year, we got a message that he was seriously ill. Although highly skilled team of human medicine professionals and doctors dedicated him the best knowledge of health care, it was over their power to bend back the worsening of his health state and prof. Bartík succumbed to his illness on January 12, 2008. His funeral has come true on January 21, 2008 at 15.30 h local time in the Municipal Crematory of the city of Brno with the participation of his closest family and relatives, as well as official guests, his friends, both from Bohemia and Slovakia, who expressed him the last great honour and greetings with many funeral flowers and wreaths. Whole funeral ceremony was realized by dean of the St. Jacobs Roman Catholic Church Mr. Slouk, who read his condensed familial speech to all participants of the funeral. Afterwards, speeches of two other speakers followed: the first of them, Assoc.prof. M.Pavlas, who represented Czech veterinary staff from the University of Veterinary Medicine and Pharmacy in Brno, followed by the delivered speech of prof. MVDr V.Šutiak, PhD. representing the University of Veterinary Medicine in Košice, Slovakia. Authors of this report wanted to show reader some important milestones of prof. M. Bartík’s life and thank him for everything he made for them and for all veterinary staff of
Slovakia and Czech Republic. Mr. professor, you have been strict (even to yourself) and you have been a good friend but also a good example of patience and suffering hardship of life. You have become unforgettable not only for us, but also for many people from our university and for many others from Slovakia and abroad.

Picture 2 Prof. MVDr. M. Bartík, DrSc. with some of his co-workers and friends

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