One hundred semesters of educational and scientific work accomplished for Charles University in Prague and its First Faculty of Medicine by Professor RND. Vladimír Novotný, DSc.

# Brandejský P.

"In recognition and appreciation of many years of work in education and science, and expressing genuine pleasure found in the hope of further continuity of this work, I appoint Professor Vladimír Novotný, RND., DSc., born in Netřebice on 2<sup>nd</sup> June 1921, a professor emeritus of Charles University in Prague."

Prof. Ing. Ivan Wilhelm, CSc., Rector of Charles University, on 8th January 2001

Mailing address: Doc. Petr Brandejský, MD., Ph.D., Institute of Sport Medicine of the First Faculty of Medicine, Charles University, Salmovská 5, 120 00 Praha 2, Czech Republic, Phone: +420 224 965 717, E-mail: petr.brandejsky@lf1.cuni.cz

This appointment, connected with an important anniversary in Professor Novotný's life, was preceded by the Memorial Medal of Charles University, awarded in 2000 "professori RNDr. Vladimír Novotný, DrSc., de anthropologia medica functionali contenda atque excolenda optime merito nummum memorialem tribuir...", on the occassion of completing a hundred semesters of uninterrupted educational and scientific activity at the 1st Faculty of Medicine of Charles University in Prague.

These awards (and – before that – also the medal of 1st Faculty of Medicine as well as other honours outside the Faculty) present a challenge to try to outline the profile of Professor Novotný as a teacher, scientist and organiser, and to mention – specifically but not in full – at least some of his major achievements, often firsts, in each of the spheres of his activity, particularly in the view of his 80th birthday, which has already passed without pomp and circumstance.

## Professional profile

- Doctor of Natural Sciences (RND.) in the field of anthropology, graduated with honours from the Faculty of Natural Sciences of Charles University on 17<sup>th</sup> July 1950
- Candidate of Biological Sciences (CSc.) letter of appointment of 22<sup>nd</sup>
  September 1960 by Charles University
- Associate Professor (Doc.) habilitation at the Scientific Council of the Faculty of General Medicine of Charles University in Prague on 29<sup>th</sup> June 1964; letter of appointment of 1<sup>st</sup> January 1966 by the Minister of Education
- Doctor of Biological Sciences (DSc.) letter of appointment of 19<sup>th</sup> April 1990 by Charles University
- full Professor (Prof.) procedure towards appointment at the Scientific Council of the 1<sup>st</sup> Faculty of Medicine of Charles University in Prague on 19<sup>th</sup> December 1991; letter of appointment of 2<sup>nd</sup> September 1991 by the President of the Czech Republic
- Professor Emeritus of Charles University letter of appointment of 8<sup>th</sup> October
  2001 by the Rector of Charles University in Prague

#### **Educational activity**

Thanks to his physiological background in anthropology as well as to the topics of his thesis, which involved the issues of sports medicine, Doctor Novotný was admitted to the Section of Physiology at the Institute of Sports Medicine at the Medical Faculty – at that time there was only one medical faculty at Charles University in Prague – on 1<sup>st</sup> November 1950. His new superior was and outstanding physiologist, Professor V. Kruta, a wartime British Royal Air Force serviceman. One of the older colleagues here was Doctor V. Seliger, with an already very extensive professional experience at that time. Being real experts with wide professional knowledge, they both required the same approach to educational activity from their new assistant as well, charging him with extensive

responsibilities in education. For Doctor Novotný, this was a hard but – as he says – very useful school, which every young university teacher should experience, being perfectly prepared for the lessons and demanding towards both students and himself. Doctor Novotný's first university students were those enrolled to study physical training at the School of Pedagogy, and the theme of the course was physiology and hygiene of physical training. By that time, the Institute of Physical Education and Sport (which later would be transformed into the present-day Faculty of Physical Education and Sport of Charles University) had not existed. Both lectures and practicals were held on the second floor of the Institute of Anatomy of the Medical Faculty of Charles University, with the entry from Salmovská Street. Also the student's summer-time training camps involved tuition, and therefore the teachers had to read lectures and examine the students outside Prague as well. This was the first experience of Doctor Novotný as a university teacher.

After Professor Kruta left for Brno (1954) and Doctor Seliger to the Institute of Physical Education and Sport (1959), the physiological section of the Institute merged with its clinical section, leaded by Professor J. Král, which resulted in a change of topics in Doctor Novotný's educational activity. Lectures for medical students were focused more on anthropology. Nevertheless, Doctor Novotný also included the physiological aspect, which - from the primarily somatometric sports anthropology of that time – gave rise to the later (and present-day) medical functional anthropology. Later, when examinations in sports medicine were introduced, he started examining medical students as well. He was an exacting examiner, but when students lacked in deeper knowledge, Doctor Novotný supplied the missing information in detail, so that – as he commented humorously - they would at least leave the exam with such a level of knowledge that they had been expected to come with. After the establishment of two more medical faculties - Faculty of Paediatrics and Faculty of Hygiene - he also taught their students, as well as those in the branch of stomatology at the 1st Faculty of Medicine of Charles University.

Then, for the first time, the topics from medical anthropology were included among optional lectures in the official List of Lectures of the 1st Faculty of Medicine of Charles University. Therefore the students were given a chance to extend their knowledge (application of anthropological knowledge in medical practice) gained in regular lectures on sports medicine. These have been read by Professor Novotný to the medics for more than half a century – at the time to foreign students at the Faculty who are taught in English.

Another demanding and time-consuming activity was leading the students' scientific interest group at the Institute. As Associate Professor Hornof, the founder of the group, had left, Professor Král put Doctor Novotný in charge and he was then leading the group for more than thirty years. Moreover, as a chairman of the board of medics of the Health Care Council of the Czechoslovak

Association for Physical Education and Sports he was also in charge of regular refresher courses for medics of all medical faculties in the country, including Slovakia. These courses consisted in annual three-day topic-directed workshops for the most active medics, where lectures on the latest achievements of medical science – each time from a different field – were given by outstanding Czechoslovak specialists in sports medicine as well as allied branches of medicine. These workshops were organised by Doctor (later Associate Professor) Novotný in turns in various cities possessing a medical faculty. This was on purpose, to give the students a chance to familiarise – step by step – with work at various institutes of sports medicine. To enhance the practical importance of all that, these medics were required to work all the year round either at the institute of sports medicine of the respective faculty, or as medical personnel in sports clubs.

The interest, that Doctor Novotný aroused in the students, was so great that he launched a project, unique in medical education in this country – he organised small scientific students' conferences in the field of sports medicine. It enabled students to present results of their first research and to gain the experience in writing and presenting scientific reports. These conferences were held every year, and in total eighteen conferences were organised. For the best papers presented, he provided the chance of publication in a professional journal. To all that Professor Novotný consciously sacrificed much energy and spare time, but he was happy to add a new creative touch to his educational activity each time. With the students he got on well, although he always required high standards of behaviour as well. Really gratifying is that many of those students (some of them as Head Physicians nowadays) have been coming to see him at the Institute, with pleasant memories of their students' conferences.

Professor Novotný has always extemporised his lectures for medics; he has never read out his texts, and with any topic he has always given examples of application in medical practice ahead. And he keeps doing so even nowadays, in his eighties.

When listing Professor Novotný's educational activities, we must not forget invitations to read lectures for students at universities abroad – in the Federal Republic of Germany, Switzerland, Romania, Austria and elsewhere. In preparation for these lectures he was particularly meticulous, always considering a different mentality of foreign students, including different responses and questions, marked with intellectual curiosity, often unusual back home. Nevertheless, there were some invitations from abroad that he did not get a chance to meet. Therefore – however demanding it might be for him personally – he accepted even unexpected invitations to read lectures for university students, made without prior agreement when visiting scientific establishments abroad. This was an activity that meant representation of his field and country abroad and involved international scientific contacts as well as friendly acquaintances with foreign representatives of sports medicine and

anthropology. Professor Novotný's contacts involved (and in many cases still involve) both Europe and overseas. For his outstanding scientific and organising capacity, he was repeatedly put in charge of supervising students at their holiday-time clinical placements abroad, which made extraordinary demands on the teacher's authority and language command. Professor Novotný managed to carry out these tasks without any problem as well, and this was often acknowledged by the students themselves as he went back home, which is certainly not a common case. For many years he also read themes of medical anthropology for the Institute of Further Education of Physicians and Pharmacists, as well as for doctors before their postgraduate speciality exams in sports medicine.

From the beginning of his work at the Faculty he participated in writing several small textbooks on sports medicine (in some cases as an editor as well) and he contributed to the first high-volume textbook of sports medicine written by Professor Král. He also contributed to the first textbook of anthropology by Professor Fetter (of the Faculty of Natural Science of Charles University), and wrote a textbook on physiological problems for the students of the Faculty of Education of Charles University, as well as some more texts for students.

In all his educational activity he has not only transmitted professional knowledge to his students, but also – setting an example himself – has always tried to bring them up to be worthy representatives of their *alma mater*. (He cannot stand behaviour that shows a lack of culture, or using substandard language.)

Then, in 2000 Professor Novotný completed one hundred semesters of continuous educational activity at the First Faculty of Medicine of Charles University, which has continued up to nowadays.

# Scientific activity

In university students, the first spark of scientific thought is usually either activity in students' scientific interest group, or – in some fields of study – writing of a diploma thesis. The diploma thesis of the prospective professor Novotný was dealing with monitoring of the response of heart rate and blood pressure to exercise related to the individual somatotypes. It decided that immediately after the graduation, he was engaged at the physiological section of the Institute of Sports Medicine of the Medical Faculty of Charles University.

The setting that he entered was characterised by the highly demanding style of work, typical to Professor V. Kruta, the Head of the physiology section of the Institute, and to Doctor Seliger. Studying literature every day, attending evening lectures at the Physicians' House every week, working scrupulously, regardless of time, even when the others have "knocked off". That was the time when computers were beyond one's wildest dreams, and statistical calculations were also done with tables of logarithms. One did not speak much at work; the routine was friendly but scrupulous, and therefore efficient in the terms of work.

As Doctor Seliger was, apart from other things, concentrated on the changes of heart rate following exercise, the first task of Doctor Novotný was an objective evaluation of heart rate following some top performances in sport (Fig. 1). This work brought him his first scientific satisfaction, as early as one year later when a publication of testing athletes at the Strahov Stadium – including both pictures and text – occurred in *Czechoslovak Life* (1951). At this stage of work, Doctor Novotný was the first to manage, making use of original phonocardiographic device, developed at the Institute, to record the maximum heart rates in top-performance cross-country skiers, following their maximum physical load at a competition. Some findings were totally unexpected and seemed even implausible at that time, but later they were confirmed by telemetry; consequently, this publication has often been quoted as the first of this kind.

At a time, Professor Kruta put Doctor Novotný in charge of spirography. Here, the first task was to identify relation between the values of maximum lung ventilation and various breathing rates (Fig. 2). This work was published later for clinical use in patients. He published also other spirography tests, focused on breathing reserves in sportsmen, relations of forced expiratory volume (FEV) to movement of the diaphragm (together with Professor Král and Doctor Hornof), and influence of exertion during sport performance on potential development of



emphysema (together with Doctor Hornof). Another first was the voluminous work on spirography investigation of vital lung capacity in top-performance sportsmen – males and females – of nearly all branches of sport and establishing its relation to theoretical levels. Another work by Doctor Novotný resulted in his first publication in foreign professional journals (Italian Medicina sportiva), which pointed out that

Fig. 1 – V. Novotný's first scientific tasks (1950): testing the changes in heart rate at various speed of running on an endless carpet (developed at the Institute, as one of the first in Europe).

examination of "per second" expiration, important in clinical practice at that time, is virtually irrelevant for the level of performance in sport. Then a series of other publications followed, focused on spirography tests as well as on the research of changes in vitamin C levels in urine following heavy exertion in sport. These were Doctor Novotný's first years in scientific research.

Of the following period of his activity, it is surely worth to mention the first, pioneering complex anthropological information obtained by examination of the world's best cyclists, boxers, rowers, rhythm gymnasts, volleyball players, etc. at World and/or European Championships held in Prague. Therefore further international publications by Professor Novotný include the paper (together with Associate Professor Titlbachová) presented and published at the FIMS World Congress in Luxembourg, describing anthropological characteristics of some top-performance sportswomen, another one on favourable as well as adverse particular features in the bodily development of boxers, presented at the next FIMS congress in Moscow, and more publications at the FIMS congresses in

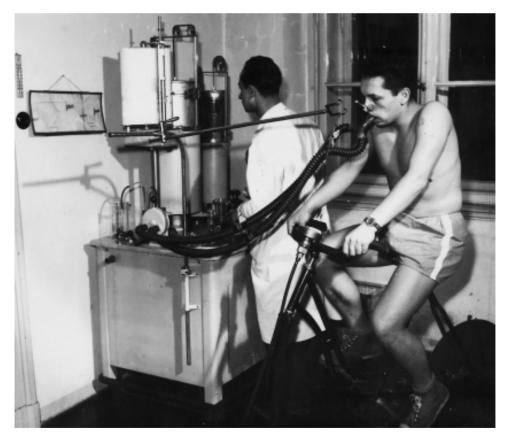


Fig. 2 — Testing the capacity of respiration on a Spiroergograph-Test Schärer apparatus, a unique device at that time (1951).

Hannover, Vienna and Tokyo. Another comprehensive study is *Bodily development* of sportswomen (included as a chapter in the monograph *The woman and sport* by Doctor Kvapilík et al.), dealing with specific somatometric traits, body composition, somatotypes and biological ages of top-performance sportswomen in various fields of sport. Also the plantographic screening of the foot arches in top-performance sportsmen and – then – in common population, tested within the International Biological Programme (IBP), generated completely new knowledge. In sportsmen, the differences in building the foot arches under influence of different sport activities; in common population, the previous erroneous assumptions were corrected that the body weight might be directly related to the building of the foot. The previous assumptions may possibly be valid in case of genetically predisposed individuals.

Another scarcely explored field that Professor Novotný focused on was studying the biological age of juvenile sportsmen. One of the first publication in this field (following establishing the original methodology) was that prepared together with Doctor Kučerová, pointing out some hazards due to extraordinary load imposed on girls in childhood by figure skating, and later by sport gymnastics. Professor Novotný's works also pinpointed the diversity and development of particular indicator of biological age in various kinds of sport during adolescence as well as the possibility of adverse consequences, especially when a heavy load in sport commences very early, sometimes as early as in pre-school age.

As Professor Novotný's experience was growing, he also started showing his foresight and creativity, trying to give momentum to the progress of methodological approaches in anthropology as well. Thus, he developed a suggestion for automation of somatometric measurement (published at ILO in Geneva), constructed the lordosigraph to compute the curvature of the vertebral column, and developed the method for evaluation of posture by means of photosomatograms. He constructed the first electronic calliper for more precise measurement of the quantity of body fat, contributed – together with Doctor Żeníšek – to devising a new hydrometric method using deuterium oxide to establish the body composition, introduced the method of fluorescence pedobaroscopy in sports medicine, and devised a method for evaluation of plantograms. Professor Novotný developed a method to establish the biological age in juvenile sportsmen, a method to establish the primary and secondary components of the somatotype and their relation to functional values, and quite a number of other methods which nowadays are just considered as common routine in both anthropology and sports medicine.

Perhaps most time throughout the years of Professor Novotný's scientific activity was devoted to the problem of body composition. From this field, long series of his publications arose. The most dominant (apart from the above mentioned development of original methodological approaches) is establishing the differences in body composition in various sports activities in nearly all fields of sport in both

males and females (published in the German journal Medizin und Sport as well). It allowed him to conclude that in persons who keep exercising up to an advanced age the loss of water in the body tissues (established by hydrometry using  $D_2O$ ) will be lower than that in keeping with the age.

A really unique study originated from the chance to observe a Czechoslovak high platform diving Olympic champion from the age of 8 (when she did not even have the idea of her future career in top-performance sport) through her two Olympic participations up to the age of 23 when she retired from competitions. It is definitely not difficult to examine an Olympic champion, yet nobody else has managed to have one under observation from childhood to retirement. For this reason the study, published in English, met a really wide response. Another unique study was that based on examination of E. Z., the Czechoslovak Olympic hero, at the age of 71, compared with the values recorded at his heyday in sport (1954, 1955) by Doctor Hornof, assisted then by Novotný as a young doctor.

The years rolled on when Professor Novotný was in charge of the scientific programmes of the Ministry and Government (with the results always classified in category A), or when he participated in the screening of Czechoslovak population within the International Biological Programme (IBP HA). Co-ordinator of the program in the country, Professor Seliger, then put Novotný in charge of processing the data of anthropological examinations from all Czechoslovak institutions of Sports Medicine.

Obvious in Professor Novotný's publication is the frequent occurrence of topics with clinical relation to common population. Indeed, apart from the above mentioned studies with Associate Professor Hornof as co-author, which involved pneumology, we can list publications dealing with the problems of paediatrics (together with Associate Professor Trefný), cardiology (with Professor Král), hypertension (with Associate Professor Chrástek), hyperlipidaemia (with Associate Professor Horák), obstetrics (with Professor Doležal), radiology (with Associate Professor Středa), etc. This category also includes publications of prophylactic screenings of chosen groups of common population, especially in the middle and old age, as well as recent team work with the Institute staff, including the publication on results of examination of a nuclear power plant operators in *International Journal of Anthropology*. Further, one of Professor Novotný's recurrent topics is the question of relations of an individual's primary somatotype and secondary components to specific health risks and possibilities of early prophylactic measures.

Thus, Professor Novotný created a concept of medical functional anthropology, and built up the first laboratory of this kind in sports medicine, frequented up to now by young and old alike, playing sport or not, who keep coming for advice. Anthropology with an originally clearly defined focus on sport (somatometric characteristics of sportsmen) then became functional (relation of somatometric traits to functional tests) to merge into clinically applied anthropology eventually.

A glimpse at the list of Professor Novotný's publications for last more than fifty years makes it obvious that not all of them can even be mentioned here. Up to the middle of 2001, it included five monographs in English, 311 studies in professional journals at home and abroad (published in Czech, English, French, Russian, Polish, Serbian, German and Spanish), and 334 lectures at scientific conferences, congresses and universities in Czechoslovakia and nearly all Europe. They are marked with high standards of expertise, ringing forth an important shift in scientific knowledge considered valid not only in anthropology and sports medicine but also in other fields of medical science.

## Organizational activities in science

The years spent in science and education inevitably resulted in taking top organiser's posts as well. Apart from organising activities with the medics at the Faculty (leading the students in the scientific interest group up to awards in national competitions) Professor Novotný was engaged – above all – with the task arising from the field of sports medicine. He was the member of Health Care Council of the Czechoslovak Association for Physical Training and Sports (organising the above mentioned refresher courses and conferences of the medics). For many years he held the position of the Secretary of the field board of the Ministry of Health for sports medicine, whose Chairman was Professor Král, and he served as the Faculty administrator for scientific activities of the Institute. Professor Novotný also participated in organising several conferences and symposia on sports medicine, and for many years he was a deputy of the head of the Department and Institute Professor I. Král. For this reason, when the latter was forced to retire (because he had signed the manifesto 2,000 words), Professor Novotný – rather reluctantly as a non-party man – had to act as the Head of the Department and Institute from 1970 to 1973, and again, after Associate Professor Horák's death, from 1987 to 1988. In his capacity as the Head, Professor Novotný showed his unforgettable organising and diplomatic abilities and his steady, upright character, in times that were often critical for the Institute (when quite a number of staff members emigrated). In both educational and scientific aspect, his leadership was worthy of Professor Král, the founder of the Institute, with whom he constantly stayed in contact.

Another sphere of organisational activities for Professor Novotný was his original field – anthropology. For many years he was the scientific (general) secretary of the Czechoslovak Association of Anthropology at the Czechoslovak Academy of Sciences. Quoting Professor K. Hajniš, who was later the Head of the Institute of Anthropology of the Faculty of Natural Science of the Charles University, "Professor Novotný represented Czechoslovak anthropology in the board of medical sciences at the Academy". Professional prestige and outstanding organisational ability of Professor Novotný as a leading representative of Czechoslovak anthropology also led to great activation of foreign relations and high international recognition of

this field. The wide range of foreign professional contacts, as well as participation of scientists from all over the world at congresses and conferences held in this country, proved the appreciation of the level of Czechoslovak anthropology abroad. Professor Novotný was a co-organiser of the First and the president of the Second and Third Doctor Aleš Hrdlička International Anthropological Congresses, and the organiser and chairman of both international symposia of functional anthropology. Highly important is also his editorship of proceedings of all these international events, published in English. In everyday activities of the Association, he insisted on regular, monthly evening lectures. He initiated organisation of Anthropological Days, which have taken place every other year up to now. As a member of the editorial board of the Journal of the Czechoslovak Association of Anthropology at the Czechoslovak Academy of Sciences, published in Brno, he promoted printing of the regular information about the life in anthropology in this country. Further, he designed the logo of the Czechoslovak Association of Anthropology at the Czechoslovak Academy of Sciences, as well as that of the field of medical functional anthropology (both elaborated by artist M. Med). Logo have ever since occurred on all official stationery of the Association, as well as on scientific publications (Fig. 3, Fig. 4).

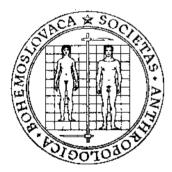


Fig. 3 – The logo of the Czechoslovak Association of Anthropology at the Czechoslovak Academy of Sciences (designed by V. Novotný, elaborated by artist M. Med).



Fig. 4 – The logo of the field of medical functional anthropology (designed by V. Novotný, elaborated by artist M. Med).

When listing Professor Novotny's activities in anthropology, those that should be mentioned include his membership in examining boards in the field of anthropology, his work as a member and chairman in the boards for awarding the degrees of Candidates and Doctors of Sciences, Associate and full Professors, his external examination of grant projects, etc.

Many scientific associations paid tributes to Professor Novotný. These include honorary membership of the Czechoslovak Association of Anthropology at the Czechoslovak Academy of Sciences, the Czechoslovak Association of Sports Medicine, the Czechoslovak J. E. Purkyně Medical Association, as well as

membership of prestigious European and world scientific associations, let alone many medals and diplomas of honour. Among these, paramount are the Charles University Medal, the medal of the 1st Faculty of Medicine of Charles University, Doctor Aleš Hrdlička Medal awarded by the Czechoslovak Association of Anthropology at the Czechoslovak Academy of Sciences, the J. E. Purkyně Medal awarded by the Presidium of the Czechoslovak Academy of Sciences, the Palacký University Medal from Olomouc, the silver badge of honour of the Faculty of Natural Sciences of Charles University, the gold badge of honour of the Czechoslovak Association for Physical Training and Sports, and many others, the latest of which is the honorary title of the "professor emeritus of Charles University in Prague".

### Last but not least: The personality

Although Professor Novotný does not like speaking about himself, this time we managed to persuade him to let us to look into some details of his life that have not been included in any publications on the occasion of his previous anniversaries.

Professor Novotný was born on 2<sup>nd</sup> June 1921 in Netřebice, South Bohemia, in a school where his grandfather worked as headmaster. Perhaps this environment predetermined his future career in education, although in his youth, as he says, he had never considered becoming a teacher. In childhood he lived with his parents in Prague. The environment of the family was very harmonious. His father deeply loved literature and his mother was an excellent piano player. He was brought up to respect the spirit of democracy and humanity, emphasising such values as honour, genuine modesty and responsibility in any kind of work.

Beginning from the school years, he did exercises at the Sokol sports association and took part in the historic Sokol National Rally in 1938. He competed in athletics and later became fond of tennis, skiing, and then canoeing or kayaking down the Czech rivers. He was happy to explore the old Vltava, before the construction of dams; he even managed to float down on genuine log rafts along a part of the river. Apart from sport, he was chosen to read at school concerts, and took part in the pantomimes as well. He remembers acting in a play about the Sleeping Knights in Blaník Mountain on the stage at Mlynářka in Košíře, a building now only remembered in cabaret songs of the old Prague.

At the grammar school too, Novotný was deeply interested in theatre, music and literature, which was abundant in his father's library. He admired the genius of K. Čapek's works, and knew many poems by J. Wolker by heart. Every week and sometimes even more frequently, he used to stand behind the gods at the galleries of the National Theatre and Smetana Concert Hall. That was the era of the famous conductors – scrupulous V. Tallich and young R. Kubelík – as well as opera singers such as S. Muž, Z. Otava, M. Krásová and M. Podvalová, and master actors such as V. Vydra I, E. Kohout, L. Dostalová and O. Scheinpflugová, and many other great artists of the stage. This absorbed Novotný so much that he learned many operas

by heart, and ever since has had the scores of most Czech operas, as well as some operas by foreign composers, in his library. Lessons of music with Professor Kimla as well as the attempts of writing librettos and film reviews augured a prospective career in culture, most probably in dramatics, perhaps that of a director or literary manager.

Nevertheless, in the last form at the grammar school he was, thanks to his science teacher, so absorbed in human biology that he eventually chose a career in natural science. However, he finished his secondary education in wartime when the Nazi occupants closed Czech universities. After an extension course at a business college, he had to wait for his university education for more than three years, being mobilised to work in an aeroplane factory. During the revolution of May 1945 he was in Prague fighting a barricade, and later, as a member of the Students' Legion, he secured some of the University buildings where the occupants still stayed.

Then the years at the university followed, and only his most intimate friends knew that – while studying at the Faculty of Natural Science – he also attended two semesters of Sorbonna extensions at the E. Denis Institute in Prague. At the same time he widened his knowledge of basic anatomy and physiology, he attended seminars of declamation at the Faculty of Philosophy and Arts of Charles University, and even organised matinées of poetry.

The scope of his interests was always really wide, and his love of nature was very serious. That was why he looked upon "voluntary" agricultural work as a chance to get into touch with nature and country life. He was happy to learn how to bind sheaves and stock them, to pick the hops and even to dry them, which requires a special skill. Moreover, he experienced a little bee keeping. In his first years at the Institute he always managed to organise a hiking party of his friends (and sometimes colleagues among them), showing them gradually round all the mountain ranges in Czechoslovakia, up to the Vihorlat far in the East. Photographs prove that he even had a swim in the mountain lakes of the High Tatra, covered with drift ice, and crossed the highest ridges of the mountains. These, however, were never merely sports or tourist activities: there was always an intentional underlying goal. Thus, he paid tribute to the Czechoslovak Army heroes at the memorial in the Dukla Pass and to the French heroes at the memorial by Strečno, and explored the mountain pathways, which had seen the hard life of the guerrilla paratroopers and home partisans during World War II.

Nevertheless, with the workload and duties increasing, he started to sacrifice a substantial part of his holidays to writing books and studies, or to preparation of congresses, and the personal interests began to subside gradually. Still, he always managed to spend some of the days off with his family, and – in particular – wandering around his beloved South Bohemia.

Nowadays, retired, he spends the academic year in Prague, with the Institute, and the summer in the Bohemian Forest. For relaxation, he loves listening to

baroque and renaissance music, and to Gregorian chant. Both his exercise routine and his old affection for literature manifest in his own, characteristic way. That is to say, his walks in the mountains of the Bohemian Forest are aimed at learning the places populated by the heroes of K. Klosterman's novels, be it the lumberjacks under the slopes of Luzný, glass blowers near the lake of Laka, or the old wise farmer Sepp of Ranklov, whose farm Novotný tried to trace in the heath. At the rapids of the Vydra he can hear the tune of Smetana's Vltava, noted down right there by the composer. He is a regular visitor to the Chodsko region as well: here, he climbed the legendary hill of Čerchov to celebrate his eightieth birthday, and here, using the trilogy by I. Š. Baar as a guidebook, he comes in search of places where the local inhabitants, the proud Chods, defended the rights of the Czech people. He also frequents Putim, with the resting-place of lan Cimbura, described as a paragon of a strong and honest man in the novel. In the town of Písek, Novotný likes to stop at the site where the old Putim Gate used to be found, and overlooking the Otava below, he can see the Moon above the river with his mind's eye, as the Czech poet F. Šrámek did. He searches for the pathways where the heroes of the novel Mists over the Marshlands walked. and locations known thanks to Pensive land by L. Stehlík.

Very special for him are the ponds of Vodňany, where his great-grandfather was a warden, and the gardens of Český Krumlov castle, once kept up by his granduncle, the pomologist. With nostalgia he passes by the school in Netřebice where he was born, the old school with a little chapel. He also loves hiking in the Nové Hrady Mountains, and then, in the monastery garden in Vyšší Brod, he recalls that every year he travels from Jindřichův Hradec up to the mighty hill of Roklan, just like Petr Vok in his monologue from *Zuzana Vojířová* by J. Bor, a role which Novotný used to declaim as a youth. Then he comes back again to his holiday home near Churáňov and – seated at his typewriter – carries on working at the first textbook of medical functional anthropology, as his mind keeps revolving around science and much of his experience calls for publication.

The above lines, based on an interview with Professor Novotný, ultimately characterise him. Although he spent all his life in the city of Prague, which he admires, deep in his heart he still is a South Bohemia dweller, loving his country, nature and honest labour, wherever he may meet it. We have known him just like that for years. Both demanding and helpful with students, friendly with his colleagues, creative and scrupulous at a time in science, a critical mind, an excellent organiser. Another interesting feature was his way of dealing with the closest co-workers. During fifty years when he was employed at the Institute, he worked with quite a number of laboratory technicians, coming and going in turn. He never addressed any of them by her first name, and always kept his distance. He just required full concentration on scientific work. On the other hand, he was always helpful and understanding, and did not hesitate to grant a day off whenever there were any serious reasons. Not only the results in science prove this, but also



Fig. 5 - V. Novotný as Professor Emeritus of Charles University.

the fact that all those ladies are glad to come to see him at a reunion, kindly remember working together, and some of them came even from abroad to celebrate Professor Novotný's eightieth birthday (Fig. 5).

Even in his eighties, Professor Novotný keeps frequenting the Institute, reading lectures, examining the clients of the Institute and his anthropological consultation clinic, publishing and keeping up contacts with research establishments abroad. His strength comes, above all, from the safe haven of the family – his wife, always patient and understanding his concentration on science, as well as his sons, both of them successful in medical profession, who he has raised in the same spirit of high demands on everything

you do, up to the same high standards that he has always tried to keep himself. All the time, his study is a venue for friendly discussions among anthropologists as well as sports medics. Being really active all the time brings forth mental agility which even fifty-year-olds may envy him.

Novotný was the first associate and later full professor of anthropology at a medical faculty in this country (and now a professor emeritus of Charles University), the founder of medical functional anthropology, and the author of many original methods and discoveries. His publications are quoted respectfully, which I have been a witness to at a recent scientific conference where an English scientist mentioned him in his lecture. Professor Novotný is a model scientist, an outstanding educator, and a man of deep spiritual and moral principles, who also by his demand for firm principles and moral behaviour has much contributed to science as well as to education of generations of physicians and anthropologists. He is a personality who has deserved to be remembered in the history of Czech as well as world anthropology, sports medicine, First Faculty of Medicine and Charles University.

Ad multos annos!