

“THE SANTORIO SANCTORII AWARD” – IN RECOGNITION OF THE MOST SUCCESSFUL STUDENTS OF APPLIED KINESIOLOGY

Naming an award or some form of recognition after an individual requires from all decision-makers involved much more than just a moment of inspiration and good will in commemorating a person, or of creating the possibility of recognising and awarding the efforts of other people. In the academic sphere, such a decision means wilfully taking on all responsibilities and commitments associated with creating that award. It is the responsibility of honouring great personalities whose names we dare to borrow and who have contributed to our society to a much greater extent than we generally realise. It is the commitment to further engage in and continue to improve upon their work and to consider the criteria of excellence which these great individuals had followed. Such a decision also requires a profound deliberation as to whether or not the persons who are candidates for receiving such an award or recognition have distinguished themselves in their field or whether or not they are worthy of receiving such recognition based on their work and the results they have achieved.

As is usual in such cases, the mosaic which is made up of the thousands of events in the life and work of this great man from Koper has been put together slowly and persistently. Since it is impossible to describe the contributions Santorio Sanctorii made to the field of natural sciences in only a few sentences - the academy, universal thought and the sphere in which he worked, I shall leave this to my learned colleagues, each of whom brings with them the expertise of their discipline and field. Instead, I shall try to summarise the fundamental starting points which guided us to celebrate Santorio Sanctorii, the great but unjustly forgotten man. I shall also attempt to connect his knowledge and excellence to Koper as it is today, to the young university that was established a few centuries after Santorio, and to the academy – lecturers and students who, even as we speak, are developing many of his ideas and the knowledge that he provided many years ago.

There are at least three significant reasons which justify this award or better yet, oblige us to return Santorio to this sphere with all honours.

The first reason is the fact that Santorio Sanctorii was most certainly one of the greatest and most prominent natural scientists born in Koper, who always and everywhere spoke proudly about the town of his birth. It is quite irrelevant whether or not his father from Cividale del Friuli was a Slovenian (Svetina – as presented by some sources, Šercer, 1950), since the fields to which he dedicated his life's work never had nor never will see any limits. When we as children ran through the streets of Koper, only the name of one street which was called for a great doctor, researcher, scientist, and inventor reached our minds. Later on we learned at school that among other instruments, Santorio contributed significantly to the development of the thermometer. Many other achievements of Santorio are most likely but unfortunately unknown to many people from Koper, to Slovenians and also to the world.

The second reason which gives special meaning to this award is Santorio's academic work and the role which he especially appreciated and to which he completely dedicated himself. Most certainly, the honourable lecturer at the University of Padua,

which was a closest university closest to Koper (and the second oldest university in the world) at the time of the establishment of *Accademia Palladiana*, the Koper Science Association, did not think about on the possibility of establishing the University of Primorska, and this also supports the fact that the University of Primorska was established later on. Even when he specified in his will that six out of ten students who would receive scholarships financed from the fund that was established after his death on the basis of his legacy, should originate from Koper (Grmek, 1953), he most certainly did not even imagine that the study programmes, the bases and knowledge for which he himself provided, would emerge right here.

The third reason is his great legacy of knowledge, inventions and instruments. The restless research-oriented spirit of his research obliges us and gives us the responsibility of following the criteria of excellence set by our fellow citizen, in all aspects of research and teaching.

I must confess that more than decade ago we did not have Santorio in mind when we initiated our first research projects which presented the significant basis for the establishment of the Kinesiology Research Centre (IKARUS) at the Science and Research Centre in Koper. Neither was he in our minds during the development of the IKARUS laboratory at the Valdoltra Orthopaedic Hospital; nor later on were his ideas or methods the basis for establishing the new study programme of Applied Kinesiology, already within the scope of the University of Primorska. In truth, we did not see nor acknowledge the significance and value that Santorio had set for our foundation a few centuries ago. Today, when we study his work and admire the ideas which led him to incredible inventions and experimentation, we can acknowledge his greatness and importance. Santorio contributed some of the fundamental tools and keys for understanding the functions of the human body, the starting points for developing physiology, pathology, and the basis for biomechanics. As a pioneer of experimental methodology he opened a new chapter in the natural sciences, especially medicine. By applying mathematics, discussing physical and chemical processes, conducting experiments and performing measurements, he set the path for physiology, biometrics, thermodynamics, and also for the fields which developed on the basis of the challenges of researching the functions of the human body in specific environments and activities, namely kinesiology, biomechanics, kinesiometrics, and ergonomics. His cooperation with other prominent persons of that time (especially with his friend Galileo Galilei) opened a wide horizon of various fields of knowledge and disciplines. Many years passed until we finally acknowledged (unfortunately mostly still on a declarative level) that the added value of an interdisciplinary, or even better, of an integrative approach defines the only right and complete approach in the field of dealing with the human body as a dynamic and open system. And we cannot imagine kinesiology without such guidelines and approaches!

His greatest work *De Medicina Statica* would probably not have earned the grade of such perfection (Nullus liber in re medica ad eam perfectionem scriptus est, H. Boerhaave, 1726), if Santorio had not deeply engaged himself in eight fundamental chapters in all fundamental aspects of human functions with the purpose of studying and understanding health as a complete balance of bodily fluids and as the harmony of internal

opposites. Among those eight chapters, the following parts are still very important for us: the chapter on the quantity and relation of visible and invisible perspiration; on food and beverages, on rest and activity; on motion and stillness. Numerous findings and expressed thoughts are still very important and also unparalleled. Perhaps by adding a note of contemporaneity, we will reopen the discussion and integrate those findings and thoughts as significant in the life of the individual and of society.

By being aware of the fact that no science (especially not a natural science) can be explained without a critical analysis and experiment, and by considering the fact that scientific theory and knowledge cannot be the result of isolated individuals, but a part of a historical development, we have decided to name the award which will go to the most successful students of applied kinesiology after this great man from Koper, Santorio Santorio. At the same time and in the name of current and future generations we also take on the responsibility and commitment which relate to his name and all future award winners.

The temporary senate of the UP FENIKS – Faculty for Ergonomics and Kinesiology Studies at the University of Primorska (in the process of being established), at its meeting on 29 March, 2011, and on the occasion of the 450th anniversary of Santorio Santorio's birth, adopted the following resolution:

“Based on the proposed argumentation, the temporary senate of the UP FENIKS names the award for the best students from the programmes in Applied Kinesiology after Santorio Sanctorii, the doctor, natural scientist and inventor from Koper. A detailed categorisation of awards, their number, the processes of selecting candidates and other issues related to awards are determined by the adopted Rules on UP FENIKS awards.”

On behalf of temporary senate of UP FENIKS

Prof. Dr. Rado Pišot

SANTORIJEVO PRIZNANJE – PRIZNANJE ZA NAJUSPEŠNEJŠE ŠTUDENTE APLIKATIVNE KINEZILOGIJE

Poimenovati priznanje ali nagrado po nekemu zahteva od tistih, ki se o tem odločajo, veliko več kot le trenutek navdiha in dobre volje, da se nekoga spomnimo in omogočimo drugim priznavanje njegovega dela. V akademskem prostoru pomeni taka odločitev zavestno sprejeti odgovornost in obveze – odgovornost do velikih osebnosti, katerih imena si dovolimo prevzeti, ker so naši družbi v preteklosti prispevali veliko več, kot običajno vemo, ter obveze do poglobljanja in nadgrajevanja njihovega dela in upoštevanja kriterijev odličnosti, ki so jih postavili. Zahteva pa taka odločitev tudi poglobljen premislek, ali so tisti, ki bodo morebiti deležni te nagrade ali priznanja, s svojim trudom, delom in rezultati, opravičili ime, čigar priznanje nosijo s seboj.

Kot je običajno in kot se v takih primerih tudi spodobi, se mozaik, ki v sebi nosi tisočero dogodkov, tudi v življenju in delu velikega Koprčana gradi počasi in vztrajno. Ker je njegov zgodovinski prispevek naravoslovni znanosti, akademiji, univerzalni misli in prostoru, v katerem je delal, še posebej pa Koprju, nemogoče predstaviti v nekaj odstavkih, pa tudi zato, ker bodo to storili kolegi, ki so po stroki primernejši, bom poskušal v tem kratkem povzetku osvetliti le nekaj temeljnih izhodišč. Ta so nas vodila do odločitve, da proslavimo Santoria Sanctoria, velikega, žal večkrat pozabljenega Koprčana, in ga prek mostu znanja in odličnosti povežemo s sodobnim Koprjem, mlado univerzo, ki se je rodila nekaj stoletij pozneje, in akademijo – s profesorji in študenti, ki še danes razvijajo prenekatero njegovo misel in davno tega njim ponujeno znanje.

Obstajajo vsaj trije pomembni razlogi, ki opravičujejo dejstvo, ali morda bolje rečeno, nam nalagajo odgovornost in obvezo, da Santoria vrnemo v ta prostor z vsemi častmi.

Prvi je dejstvo, da je Santorio Sanctorii prav gotovo eden največjih in najpomembnejših naravoslovcev, rojenih v Koprju, ki je svoje rojstno mesto vselej in povsod s ponosom izpostavljal. Ali je bil oče iz Čedadu tudi po rodu Slovenec (Svetina – kot predstavljajo nekateri viri, Šercer, 1950) niti ni pomembno, saj področja, katerim je posvetil svoje delo in življenje, nikoli niso in niti ne bodo poznala meja. Ko smo se kot otroci podili po koprskih ulicah, je do nas seglo le ime ene od teh, ki je nosila ime po velikem zdravniku, raziskovalcu, znanstveniku, izumitelju. Pozneje smo v šoli izvedeli, da je med številnimi drugimi instrumenti pomembno prispeval k razvoju termometra. Veliko več od tega, in tega je ogromno, pa je žal številnim Koprčanom kot tudi Slovencem in širšemu svetu še neznanega.

Drugi razlog, ki priznanju daje poseben pomen, je Santorijeva akademska zavest in vloga akademizma, ki jo je posebej cenil in se ji povsem podredil. Prav gotovo se takratni častitljivi profesor najbližje Koprju (v svetovnem merilu druge najstarejše) padovanske univerze ob ustanovitvi koprskega znanstvenega društva *Accademia Palladiana* ni ukvarjal z mislijo o primorski univerzi, kar pa ne zmanjša njegovega prispevka, da se je ta veliko pozneje tudi zgodila. Tudi ko je v svoji oporoki posebej izpostavil, da mora biti kar 6 od 10-ih študentov iz Koprja, katerim finančno podporo naj omogoči sklad, ki naj bo po njegovi smrti ustanovljen iz njegove zapuščine (Grmek, 1953), si gotovo

ni zamišljaj, da bodo ravno v tem prostoru nastali študijski programi, katerih osnove in znanja je pričel razvijati prav on.

Tretji razlog pa je njegova velika zapuščina znanja, izumov in instrumentov. Njegov nemirni raziskovalni duh nas posebej obvezuje in nam nalaga odgovornost, da pri svojem raziskovalnem in pedagoškem delu sledimo kriterijem odličnosti, ki jih je že dolgo tega postavil naš someščan. Ko smo pred dobrim desetletjem pričeli s prvimi raziskovalnimi projekti, ki so pomenili pomembno osnovo poznejšemu Inštitutu za kineziološke raziskave (IKARUS) na ZRS Koper, nato razvoju laboratorija IKARUS v Ortopedski bolnišnici Valdoltra in nato v okviru Univerze na Primorskem tudi novim študijskim programom Aplikativne kineziologije, moram priznati, da še nismo uvideli teže in vrednosti, ki jo je našim osnovam pred nekaj stoletji postavljaj Santorio. Šele ko danes preišljamo njegova dela in občudujemo zamisli, ki so ga vodile do neverjetnih izumov in poizkusov, se zavemo njegove veličine in pomena. Santorio je namreč prispeval nekaj temeljnih orodij in ključev za razumevanje delovanja človeškega organizma, izhodišča za razvoj fiziologije, patologije, podlage biomehaniki. Kot začetnik eksperimentalne metodike je naravoslovni znanosti, posebej medicini, odprl novo poglavje. Z vključevanjem matematike, obravnavo fizikalnih in kemičnih procesov, eksperimentov, merjenjem je zarisal pot fiziologiji, biometriji, termodinamiki ... in področjem, ki so z izzivom po obravnavi delovanja človeškega organizma v specifičnih okoljih in aktivnostih razvili: kineziologiji, biomehaniki, kineziometriji, ergonomiji. Njegovo sodelovanje z nekaterimi drugimi velikani svojega časa (še posebej s prijateljem Galileom Galileiem) mu odpira široko obzorje prepleta različnih znanj in disciplin. Veliko let je minilo, ko smo (žal še večinoma le na deklarativni ravni) ponovno doumeli, da je dodana vrednost interdisciplinarnega ali morda še boljše, integrativnega pristopa, tisto, kar je v obravnavi človeka kot dinamičnega in odprtega sistema edini pravi in celosten pristop. In ravno kineziologije si brez takih usmeritev in pristopov ne moremo zamisliti!

Njegovo največje delo *De medicina statica* si ocene take popolnosti (Nullus liber in re medica ad eam perfectionem scriptus est, H. Boerhaave, 1726) verjetno ne bi prislužila, če se ne bi s ciljem preučevanja in razumevanja zdravja kot popolnega ravnovesja telesnih tekočin, kot harmonijo notranjih nasprotij, skozi VIII temeljnih poglavij Santorio natančno poglobil v vsa temeljna področja delovanja človeka. Med njimi so za nas še posebej pomembna poglavja o količini in odnosu vidne in nevidne perspiracije; o hrani in pijači; počitku in aktivnosti; gibanju in mirovanju. Številne ugotovitve in izrečene misli so še danes ne le izredno aktualne, temveč še vedno tudi nepresežene. Morda jim bomo z dodano noto sodobnosti ponovno odprli obravnavo in jih kot pomembne končno umestili v življenje posameznika in družbe.

Ob zavedanju, da nobene znanosti (sploh pa naravoslovja) ne moremo razlagati brez kritične analize in eksperimenta, ter ob dejstvu, da znanstvene teorije in znanje nasploh ne morejo biti plod osamljenih posameznikov, temveč del zgodovinskega razvoja, smo se na osnovi predstavljenih dejstev odločili poimenovati priznanje za najuspešnejše študente aplikativne kineziologije po velikem Koprčanu Santoriju Sanctoriu. Hkrati sprejememo v imenu sedanjih in prihodnjih generacij tudi vso ustrezno in pripadajočo odgovornost in obvezo do njegovega imena in vseh prihodnjih nagrajencev.

Začasni senat Fakultete za ergonomske in kineziološke študije Univerze na Primorskem (v ustanavljanju) je na svoji seji, na dan 29. 3. 2011, ob 450-letnici rojstva Santoria Sanctoria sprejel naslednji sklep:

»Začasni senat UP FENIKS na osnovi predložene utemeljitve imenuje priznanje za najboljše študente študijskih programov Aplikativne kineziologije po koprskem zdravniku, naravoslovcu, znanstveniku in izumitelju Santoriu Sanctorii. Podrobna opredelitev vrste priznanj, njihovo število, postopke izbora kandidatov in druga vprašanja, povezana s priznanji, se določijo s posebnim pravilnikom o priznanjih UP FENIKS.«

V imenu začasnega senata UP FENIKS

prof. dr. Rado Pišot