

## **A Short Account of the Early History of the Faculty of Medicine at Uppsala University**

*After-dinner Speech at the inauguration of Uppsala University PET  
Centre, September 10, 1991*

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Mr Speaker of the Swedish Parliament, Magnifice Rector, Distinguished Guests:

In connection with the inauguration of our PET (Positron Emission Tomography) Centre we have arranged a symposium on "PET today and in the future". Many distinguished pioneers and experts in the field have accepted our invitation to let us share their experience, and to all of them - especially our guests from abroad - it gives me a very great pleasure to extend a most hearty welcome. As some of you are in Uppsala for the first time, Bengt Långström - your scientific host - suggested that I in the form of a short after-dinner speech should give you an account of the early history of the Faculty of Medicine at Uppsala university<sup>1</sup>.

When Uppsala university was established in 1477 - in the then spiritual and secular centre of Sweden as the first in Scandinavia - it did not contain a medical faculty even if the papal foundation bull granted permission to teach and graduate students not only in theology, law and philosophy but also in medicine.

Not until the university was re-established in 1595, after a long period of suppression of its activities during the epoch of the Protestant Reformation, it was decided to erect a chair in medicine, which was, however, not filled until 1613, two years after the start of the reign of King Gustav II Adolf, which marked Sweden's entry into the so-called Great Power Epoch. The university too was caught up in this great transformation with a series of reforms. The number of professors in all fields was doubled, and so from 1624 a

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<sup>1</sup> Modified after: Karin Johannisson: A Life of Learning. Uppsala university during five centuries, 1989.

second medical chair was established and we can start to talk about a medical faculty, with one professor responsible for clinical medicine, in theory and praxis, and one for basic fields, such as physics, botany and anatomy. Up to 1774 there were only these two chairs in the Faculty of Medicine, but during this early period there were two pairs of contemporary professors of more than national importance. The first pair in the second half of the 17th Century were Olof Rudbeck, who charted the course and function of the lymph vessels, and Petrus Hoffvenius, who was the first to introduce bed-side medical teaching in Uppsala. Olof Rudbeck in 1662-63 constructed - on the roof of the then main university building, Gustavianum, - a Theatrum Anatomicum with room for 200 observers. He also laid out a botanical garden for medical herbs, now known as the Linnean Garden. I recommend you to visit the Anatomical Theatre and the Linnean Garden during your stay in Uppsala.

Together Rudbeck and Hoffvenius also tried in the 1660ies to set up a university hospital in Uppsala, almost in the same time as academic hospitals for the first time were started in Paris and London. However, not until after their death the so-called Oxenstiernska House in 1708 was bought as premises for the first academic hospital, Nosocomium Academicum, on the initiative of Professor Lars Roberg. The Oxenstiernska House has been rebuilt and nowadays serves the faculty of law.

The second great pair of contemporary professors Carl Linnéus and Nils Rosén were both appointed in 1740. They were later, after knighthood, named von Linné and Rosén von Rosenstein. They served in a new political era in Sweden. The autocratic monarchy had collapsed after the last great war and was replaced by an elected parliament as the dominant power.

The new economic policy to rebuild the country was profoundly stimulating, especially for the natural sciences. Scientists such as Celsius, Torben Bergman, Scheele from the Faculty of Philosophy and Linnéus and Rosén von Rosenstein from the Faculty of Medicine soon transformed Uppsala university into a world-rekknowned seat of learning. Linnéus was responsible for natural history and pharmacy. In Rudbeck's botanical garden - now as earlier mentioned called after him - he grew medical herbs. He established that plant sexuality could constitute the basis for a completely new systematics, but he also

made interesting clinical medical observations, not least in neurology. Rosén von Rosenstein was the keenly observant clinician with great practical experience. He became well known throughout Europe for his Textbook in Paediatrics, which was translated into a number of foreign languages.

After this period of enlightenment a conservative ideology began to permeate the university in the early 19th Century. Whereas the historical and philosophical sciences now occupied the centre of the stage, the natural sciences were confined to the wings, perhaps except for botany. But medicine, too, turned philosophical and the medical faculty did not awaken until under pressure from the new Medico-Surgical Institute, Karolinska, in Stockholm, and a proposal in the parliament that the faculty should be moved from Uppsala to Stockholm.

New men, who took active part in the relatively rapid development that took place within the natural science disciplines during the second half of the 19th Century again changed the picture. The Medical Faculty got several new chairs in theoretical disciplines such as medical chemistry, physiology and pharmacology. It got a new, for the time, very modern academic hospital on its present site in 1867. The Medical Faculty contained names such as the professor in physiology, Fritiof Holmgren, the first to discover that impulse transmission from sensory organs to the brain was an electrical phenomenon, and the professor in internal medicine, Salomon Henschen, who made some of the basic discoveries of the topical pathology in the human brain, such as the cortical localisation of vision and relations between topical lesions and afatic problems.

The medical faculty in the end of the 19th Century had got a structure and a crew that was well prepared to take good care of , as well as part in the rapid development of medicine into a science during our century. This, however, is present day history and I would not dare to pass any qualitative judgement on the rapid evolution in our century. Let me only as an indication of the rapid development give you the following figures.

When I began my medical studies here in Uppsala in 1941 there were 14 full professors and members of the Medical Faculty, half of them representing basic fields and half of them clinical fields. Now 50 years later there are 66 full professors who are members of the faculty, 40% of them representing basic and 60% of them clinical fields.

It is more difficult to give you any qualitative indicators. But you may be interested to know that the medical faculty has housed two Nobel prize laureates, Alvar Gullstrand, who got his prize in 1911 in physiology and medicine for his works on the dioptic of the eye and Robert Barany - then in Vienna - who got the prize in 1915 for his work on the physiology and pathology of the vestibular apparatus. It also may be of interest to add two Uppsala prize laureates in physics, father and son Siegbahn, and two in chemistry, The Svedberg and Arne Tiselius. Their work on spectroscopy and biochemical separation techniques, respectively, have been of great importance also for medical science.

Perhaps I should also mention that in the 1960ies, 70ies and 80ies large-scale building operations have been carried out to supply modern premises for natural sciences and clinical medicine. Works, of interest here, include the large Biomedical Centre, the new facilities for the Department of Radioactive Sciences with a large new particle accelerator and a storage ring and rebuilding and extension of the University Hospital - now in the 90ies the PET Centre.