Michael Bergman, MD, FACP NYU School of Medicine



Martin Buysschaert : Could you discuss your journey as a student from the USA to Louvain and then your journey back to the USA to practice medicine?

Michael Bergman: I was young at the time, about 22 years old before coming to Louvain after completing four years of College. The question as to why did I come

to Louvain? In College, my area of concentration was psychology. However, I decided to go into medicine in the last year so rather than taking the required basic science courses in the US, I decided to attend UCL as it is amongst the best European schools where the essential premedical courses are given in the three years of candidature. I considered enrolling in KUL, have a background in German, but selected UCL since I had always wanted to learn French. I spent 5 and 1/2 years at UCL and then returned to the US for the stage. I liked Louvain very much and worked very hard to succeed. I also thrived being in Europe and started to learn basic French. Some colleagues returned to the US, but as I made friends here and enjoyed the experience of being in Europe attending an excellent university, I decided to stay. I appreciated the rigorous academic background with considerable course work in the basic sciences (biochemistry, physiology, ...). Furthermore, we had excellent professors and I developed a deep appreciation of learning. I felt that medicine was not just a profession to be practiced, but importantly represents an intellectual process as well. The curriculum was excellent and I was well prepared for my subsequent training when returning to the US.

M.Buysschaert : When you came back to the USA for your internship, did you feel ready to manage patients ? You received an excellent theoretical background, but was it also adequate from a clinical perspective?

M.Bergman : That's an excellent question . The theoretical background in UCL was really excellent but the exposure to clinical work, even with the stage, was still less than what my American colleagues experienced

in medical school. Nonetheless, much of the basic clinical work could be learned in 6 months. The class sizes in the US are relatively smaller in comparison to UCL providing greater opportunity to obtain clinical experience during the medical school curriculum. However, I believe that if you do not develop a strong understanding of the basic sciences, this can never be subsequently learned. You can always learn to practice medicine, but there is only one chance to fully comprehend the fundamental basis upon which the practice of medicine is founded. UCL excelled in this aspect which I appreciate to the day and try to share with students in the US.

After finishing my studies at UCL, I completed three years of training in internal medicine at the University of Maryland. Of the approximately 30 interns, I was the only one accepted who had studied outside the State of Maryland. I then completed fellowship training in endocrinology and metabolism at Yale University, Columbia University and Albert Einstein College of Medicine which included considerable time spent in research, particularly in diabetes.

M.Buysschaert : During your studies, you had many examinations. Did you have any problem with the language ? Were you fluent in French?

M.Bergman : I was more fluent in French then than I am now. I spent six months at the Institut des Langues Vivantes, which helped. If you want to learn a language, you have to force yourself to practice. It is relatively easy to master scientific French but conversational, literary French is clearly more complicated. I deliberately moved into an apartment building where mostly European students resided in order to improve my fluency. However, they wanted to practice English as I wanted to speak French! I became very close with a family that spoke no English which made a very big difference in my fluency.

Some examinations were written although most were oral. I felt that if the professors recognized that you understood the material, this was more important than being fluent in French. Although there were exceptions, many professors had spent time abroad so they clearly had a very good comprehension of English and were tolerant. M.Buysschaert : When you went back to the USA, you worked in Maryland, but when did your career in diabetology/endocrinology start ? What were your activities before your actual position?

M.Bergman : My interest over the years has mostly been in diabetology. I had an opportunity to do research during my residency at the University of Maryland in the laboratory of a pediatric endocrinologist with an interest in autoimmune diseases. I pursued a fellowship in endocrinology as it is the only way to develop an expertise in diabetes. Yale University had a very strong program in diabetes where I spent most of the first year doing research which I continued thereafter at Columbia and Albert Einstein.

M.Buysschaert : Now your main field of interest is diabetes, particularly pre-diabetes which was the topic of your lecture a few days ago, could you summarize the main messages ?

M.Bergman : My interest in prediabetes and diabetes prevention evolved over the years as I realized patients with diabetes could avoid often complex and unfortunate situations. Blood sugar levels rise very slowly over the course of many years before diabetes develops. Therefore, by identifying individuals at high risk very early on, it is easier to prevent progression with intervention including life style modification involving diet, exercise and weight loss, most often without the need for medication. Once diabetes develops, several medications are often required including insulin and even then glucose control remains less than ideal for many with the constant risk for the development of complications. So, prevention presents a real opportunity to make a difference by identifying individuals at risk, before diabetes develops. The challenge, of course, remains the optimal approach for identifying individuals at high risk- an area of research interest in collaboration with Professor Buysschaert and others.

M.Buysschaert : Last question concerning the studies in USA. In Belgium, it's more complicated, there is a numerus clausus but there is still a lack of doctors in general medicine. What is the system in the USA ? Is there a numerus clausus ? Are there a lot of candidates ? Is it easy to apply ? **M.Bergman :** New York University (NYU),as most medical schools, has hundreds of applications for every position making it very competitive. The class sizes are generally small in the US making it difficult for many to gain admission despite having excellent credentials. The selection process is therefore rigorous and occurs *before* being accepted whereas in Belgium and other European schools, the first year class size is considerably larger as the selection process occurs *after* acceptance into the first year class. This format at least gives students an opportunity to determine if they have the ability to become physicians.

M.Buysschaert : And what is the cost of these studies ?

M.Bergman : Annual tuition for medical school approximates 55,000 USD at NYU and other medical schools in the US. Some schools may be somewhat cheaper but are still expensive considering that medical school extends for 4 years. Furthermore, college education for the baccalaureate degree is also four years and tuition in many private schools can be equally expensive. Therefore, few select internal medicine for specialty training, as opposed to radiology or surgery, and, for those that do, fewer still choose endocrinology as a subspecialty. Other subspecialties that are more profitable such as cardiology and gastroenterology are highly preferred permitting more rapid repayment of accumulated educational loans. Furthermore, many get married, have families, rent or purchase a home adding to their considerable financial burden. This explains the shortage of endocrinologists in the US particularly in rural areas.

M.Buysschaert : So, can students from lower social class get into medicine ?

M.Bergman : Yes, there are opportunities for the less fortunate to enter into medicine. Scholarships are available and bank loans can be obtained at a relatively low interest rate. Furthermore, state subsidized medical schools charge a much lower tuition. The University is sensitive about not discriminating against less fortunate students and endorses a more equitable system. For example, I recently attended a NYU fund-raising dinner which raised 5 million USD for scholarships. NYU would like to admit students that are very good but otherwise could not afford the cost.

M.Buysschaert : Thank you so much for this great interview.