I consider Ladislas Robert as my real mentor. I am very lucky that life permitted me to meet him, work with him and become his friend. I remember our first meeting in Budapest during a biogerontology meeting, where he was invited as keynote speaker. I was a young scientist at the beginning of my career presenting my work on elastase activity and aging. Dr. Robert showed much interest in my work, and this was the starting point of a long lasting relationship. I have learnt a lot from him, not only from a scientific point of view, but also how to be an open-minded humane scientist. His approach to sciences was unique: to be specific, but nevertheless taking into consideration many other aspects of the question. This is why his original contributions to the field of atherosclerosis, connective tissue biochemistry and aging are so large and fundamental. He created a school around him with many of his students becoming leading scientists all around the world. As most of the great scientists, he is more then just a scientist. He can integrate many other ways of thinking such as philosophy, mathematics, and like many “polyhistors” the history of science. His contribution to the field of aging research, by contributing to establish the modern biogerontological research is of fundamental importance.

TF: Dear Professor Robert, thank you for accepting to give me this interview. I know that you are still very active. Perhaps we can start to review your scientific career so the readers make acquaintance with you. What were the prominent steps of your scientific career?

LR: The very first important step was when I was accepted as an apprentice in the Biological–Microbiological laboratory of the Charity Hospital in Budapest (where I was born) right after my baccalaureate in September 1942. I learned there a great deal from the Director of the laboratory, Dr. Hegedüs (the son of the famous architect who built Hotel Gellért and its Spa) and his second, Mrs. Ilona Mandoki. I read a number of books on medical sciences and pathology, mainly in German and acquired the basic knowledge of medically oriented biological experimentation. I had to leave this hospital lab in March 1944 when the Germans invaded Hungary. Between 1942 and 1944 I could visit some of the University Departments (who accepted Jewish students), listen to lectures and do even some practical work. By far the most impressive of these lectures were those of Prof. Theodor (Tivadar) Huzella, chairman of Histology-Embryology Department of the Medical Faculty. He showed micro-films taken with reflected light showing cells climbing on collagen fibres. I kept a vivid souvenir of these
dynamic demonstrations of cell-matrix interactions. His concepts on the extracellular matrix (The intercellular Organization. Published in 1941 by G. Fischer, Iena, in Germany) and inspiring lectures did a great deal to inspire my future orientation. The second major event was in Paris, in 1950 when I was accepted at the French National Research Center (CNRS) as a career investigator. These were the most important events determining the beginning of my scientific career. The final prominent steps concern the attribution of the Verzar Medal at the Vienne University in 1994 and the Novartis Prize of the International Society of Gerontology in 1997 in Adelaide, Australia.

Starting in aging research

TF: How did you come to the field of aging research?

LR: Nearly unconsciously, as Mr. Jourdain in Molière’s play, Le Bourgeois Gentilhomme, who discovers that just speaking represents “making prose”. I started in enzyme kinetics and time was on the abscissa of experimental curves. I was always fascinated by the concept of time. More recently, in 1994, I published a book entitled “Les temps de la vie” (Times of life, Flammarion, Paris). Two encounters highly contributed to this choice: our specialisation in connective tissue research helped to meet Fritz Verzar, a Hungarian born physiology professor in Basel, Switzerland, who discovered the aging of collagen fibres, now attributed to the Maillard reaction I wrote several reviews on his work for his 120th birth anniversary. He was a very inspiring scientist. We remained good friends until his death at 93 years, and still active in his institute. The other important figure was Prof. Laszlo Haranghy, my first professor of Biology and Pathology during my early medical studies. He founded the first Gerontology Research Institute in Budapest, and wrote the first book on centenarians (Gerontological Studies on Hungarian Centenarians, Akademiai Kiado, Budapest, 1965). We kept in touch until his tragic death and continued with his successor, Prof. Edit Beregi, at the head of the Gerontology Institute at the Semmelweis Medical University in Budapest.

In the 1970s the director of INSERM (French equivalent of the British MRC), Prof. C. Burg invited me to join the first study section which gave out grants for aging research in France. These colleagues and events rendered conscious my engagement in gerontological research.

TF: I heard the name and met many well-known scientists. I think for the young scientists this is important to have mentors they can follow and trust. You have been very lucky to meet all these interesting and charismatic scientists. Nevertheless some should impress you more than others. Who were the most impressive masters that influenced your career, research and thinking?

LR: Besides the persons already mentioned, it was undoubtedly Prof. M.-F. Jayle, head of biochemistry at the Paris Medical School who played an important role in this respect. He became blind by preparing ethyl peroxide, quite an explosive synthesis, used as a substrate for the quantitative determination of haptoglobin. He discovered this glycoprotein, an inflammatory marker, which combines stoichiometrically with haemoglobin and potentiates its peroxidase activity. A large number of determinations were carried out in his department in collaboration with clinicians in a variety of pathologies. This method became a routine procedure for clinical laboratory used in the diagnosis of a variety of diseases, often in parallel with the determination of “seromucoid” (x1 acid glycoprotein), an other appreciated acute phase marker. Prof. Jayle proposed me to test his hypothesis to explain the origin of these acute phase glycoproteins. His hypothesis was original, but proved to be only partially true: the inflammatory degradation of connective tissue macromolecules (glycoconjugates) was supposed to result in the increase of circulating glycoproteins. Much later it was shown that the origin of serum-glycoproteins was the liver, their increased synthesis being elicited by inflammatory cytokines. Ed Sarcione, in Buffalo, NY, who carried out the critical experiments with perfused liver preparations and radioactive labeling to demonstrate that liver is the major site of acute phase glycoprotein biosynthesis, is still a good friend. We could show, however that besides the above mentioned glycoproteins one can demonstrate lower molecular weight glycopeptides in the blood serum during