



## Alberto Hurtado



Lima, Peru, 29 Aug. 1901 - 1 Nov. 1983

**Title** Professor of Medicine, Instituto de Investigación de la Altura, Lima, Peru

**Nomination** 11 Aug. 1961

**Commemoration** – I was awarded a great honor and privilege, when President Dr. Chagas asked me to frame a brief, and I would like it to be a solemn moment of remembrance, to pay tribute to a great scientist and an admired colleague: Dr. Alberto Hurtado, who was a member of this Academy since 1961; however, with a deep feeling of sadness I have to say that after months of confining sickness he peacefully passed away in November 1983.

His death was a great toll to Science. Most physiologists all over the world do not hesitate to call him one of the leading pioneers in the studies on the physiological adaptations of human beings to high altitude. He excelled in his research work, carried out at times under very hard and primitive conditions, particularly at the very beginning of his career. Likewise, he will be remembered as a brilliant leader and organizer, first as a Dean of the Faculty of Medicine, in San Marcos University (a post he held for four years between 1956-60) and later on, as a founder and Rector of the University Cayetano Heredia (1966). In both universities he struggled unceasingly in a demanding manner to achieve levels of excellence in all academic activities. Many generations of students envisaged him as a symbol of the moral virtues which dignify a true master. With great vitality and zest, he had an unusual ability to stir the enthusiasm for research in young students, always willing to help and inspire beginners, adhering nonetheless to strict discipline, austerity and strong attachment to moral responsibilities.

Another aspect, probably least known, was his silent and humanitarian crusade, dedicated to the welfare of the needful in his country, a cause which he sustained through the years. No sooner was he appointed Director of Public Health and later on, Minister of Health, he set forth the laws that at a national level benefited the working class, in particular the native Indians working at high altitude. Although research work, more than anything else, was Hurtado's life and devotion, he was a medical doctor profoundly convinced of the potential contribution that Science and medical research in his country could make to improving living conditions. We have to bear in mind that some decades ago in his country (Peru), as in many other South American nations, scientific research work was a task for only a few enlightened and passionate pioneers. There were no full time professors and basic research was regarded with mistrust and considered a luxury only afforded by institutions in developed countries. During his life he had to strive against misunderstanding and the upheavals of political unrest. But two happy events earlier in his scientific career left an unerasable print in his mind. One was the decision to study Medicine at Harvard Medical School, in Boston, USA. In 1920 he had been admitted to the University of San Marcos at Lima, but that was a stormy political year and the University was closed. In Boston, he was qualified as a brilliant student and meticulous experimenter and had the chance to collaborate with a great clinical researcher, Francis Peabody, and as soon he obtained his MD degree he became a member of the staff and collaborated in several papers on basic aspects of lung function and on pathological respiratory distresses. In Boston, he not only witnessed how scientific work was performed at its best but was also deeply involved in studies of the effects on respiratory functions at a low O<sub>2</sub> pressure. This is the natural physical condition under which a large proportion of the population in the Peruvian Andes lives. He refused an attractive proposal to stay in Boston. The preservation of his own identity was not at stake, there was the most pressing inner urge to abide by his feelings and his generous sense of responsibility compelling him to serve his countrymen. The other happy event occurred on his return to Lima. He was fortunate enough to meet one of the most outstanding personalities in Peru, Dr. Carlos Monge, very well known for his studies on the so-called mountain sickness

or Monge's disease. Both made expeditions into the Andes and Hurtado carried out studies upon soldiers of the Peruvian army, Indians and especially on miners living and working under strenuous conditions at high altitudes in La Oroya and in Morococha.

He described, for the first time a serious risk to which are exposed newcomers to the very high mountains, especially children, who can be affected by an acute pulmonary edema which today is known as the Hurtado disease. He also became keenly aware of the stressful conditions of the workers in the mines located at 4,500 meters or above who in large numbers were victims of pneumoconiosis.

When in 1928, he was appointed Associate Professor of Physiopathology in the Faculty of Medicine of the National University of San Marcos, Lima, he brought distinction and high spirit to stimulate basic and clinical research. But money was greatly needed to supplement the scanty budget and the meagre scientists' salaries, and in 1931 he accepted a fellowship from the Rockefeller Foundation which enabled him to continue research on respiratory and circulatory functions in different pathological conditions, at the University of Rochester (N.Y.). He declined a permanent position at that University and returned to Lima in 1935. He preferred to follow the harder and hazardous road of scientific toil in his own country. He strongly felt that the ultimate aim of his endeavour should be to contribute to the scientific development of Peruvian universities. With a large group of collaborators he started the most productive period of his life, trying to investigate the underlying mechanism which produced adaptation to continuous exposure to a high altitude environment in the native Indians. He organized and became the director of the Institute of Andean Biology, which was built at an altitude of 4,540 meters at Morocha.

Time is running out and I am afraid I cannot dwell upon the description of the most relevant discoveries made by him and his group. The number of published papers is large and his main contributions are cited in the classical books of Human Physiology. To date, the Institute continues to be the most important, and in many respects is unique in the Continent.

To come to an end, in speaking of his struggles and successes, I cannot but mention one of the most dramatic and bitterest moments of his life. Political turmoil was threatening the essence of academic enterprise. He became the main protagonist of a crucial controversy over academic liberty in San Marcos University, in 1961. The epilogue was very painful for him, but a turning-point in the history of the Peruvian universities. He refused to accept the political throng and he preferred to resign his post and to remain loyal to his moral principles. This act is one of the greatest tokens of his indomitable uprightness. In the darkest hours he had the fortitude and invaluable support of the love of his wife and family. He became one of the leaders of an ideological movement which never will be forgotten in the historical record of Latin American Universities. Four hundred prestigious members of that University followed him. He endured a very difficult time, but overcoming enormous problems, he succeeded, and a new Faculty of Medicine opened its doors in 1962 in Lima and a new University was created: the University of Cayetano Heredia, today one of the leading institutions in Peru. Hurtado was unanimously elected its first Rector.

Alberto Hurtado not only lives on, as any scientist does, in the work and disciples he left behind. There was in his personality a never-failing spring of moral action which was at least as strong as the search for truth. He has rendered inestimable services to mankind. It is comforting to realize that his memory will remain positively as a source of inextinguishable hope for people striving for a better world.

Hector Croxatto