

To whom it may concern,

I, **Hojjat Abdollahpour Karizi** (son of Hassan, holder of National ID No. 092-565294-6, issued in Mashhad, born on April 19, 2001), was graduated from Sadeghi Distinguished High School in the field of Experimental Sciences, obtaining High School Diploma with a GPA of (out of 20.0).

I have participated in a number of research contests and activities as well as scientific Olympiads. I am highly interested in pursuing my studies in General Medicine.

I have been interested in sports and art since I went to school. I have been very active in kung fu and table tennis. I have taken part in some international competitions (in kung fu). I got the first place in international fighting competition. In another international competition I got the second place in martial arts. I have the SOTO technical degree in kung fu, too. I have got the first place, second place and the third place in different ping-pong competition since I started playing table tennis. About art I can mention that I am a professional guitarist. I used to be the guitarist of KANON FARHANGI ROSHD's band. We had a lot of live shows in different ceremonies and occasions.

I have to mention that I have invitation letter from TARAS SHEVCHENKO NATIONAL UNIVERSITY OF KYIV in general medicine but for some personal reasons and problems I don't want to go to Ukraine and prefer study in your university.

One of the major factors persuading me toward research is that since my childhood, I have been seeing my father suffering from CP disease (Cerebral Palsy) which led to severe disability in my father in a way that the uses of upper and lower organs and even speaking have become very hard to him and that he knows that his motor abilities will decrease in future. This subject has been in my mind since childhood and it is a motive to me to work and research in the field of central and peripheral nervous system; since my childhood, I have wished to recover my father; through the time, I have collected a wide range of information on nervous system and search for valid contents in this regard. I wish to see happiness in the eyes of my father.

I have done many tests and researches in the field of biology, animal anatomy, and biochemistry, through which I have obtained valued experiences. Through 12 years of education, I have been among the best students of the high school in the scientific and ethical fields; unfortunately, in 12th grade and in the final term exams of the first semester, I obtained lower grades in some courses because I fell sick seriously.

I, accompanied by the laboratory group of my high school, have obtained the 1st Rank among the boy participants. I was in charge of the biology of the group; collaborating with other students, we obtained the highest grades in biology and chemistry courses; our photos and names were published in daily and the education office appreciated us; we were introduced in dailies as the future scientists of the country.

I do not intend to exaggerate on my capabilities and potentials but based on my knowledge, former experiences and results, it is noteworthy that I can compute tests in mind and perform designs as well. In this way, since I don't have enough knowledge of the details on factors and reaction affecting tests' components, 30-40% of the results may be incorrect. I am not sure that the aforesaid is an advantage but I have told it as a fact.

Considering my deep interest in Medicine, I intend to pursue my studies in this field and implement my future plans on the same basis. I am sure that most people may have seen some people suffering from cancer or other special diseases to whom all physicians have said that there is no more possible cure for that; despite to the physicians' ideas, some of them have been seen later with cured body; in my idea, the reason is the neural system and genes, specially the brain. Considering that all messages and instructions of body are based on the activities and interactions of brain and the

only factor that may result in such phenomena is the aforesaid. In believe that human beings have a wide range of undiscovered capabilities and potentials in gene and brain arenas.

I have planned in this way for my future and I have always asked myself that why there are some people who their brains work well and they have a wide range of advantages to their surrounding individuals while they are sitting on wheelchairs based on disorders and injuries to the sensory-motor nervous system. One of my major future objectives is to do some researches on central and peripheral nervous system and its further recognition and how to regenerate nerve cells like people suffering from spinal cord amputation but the general status of their Spinal cord and nerves is healthy. We may culture embryonic stem cells of embryonic layers (endoderm, mesoderm, and ectoderm) in vitro; we may control their division and distinction using genetic manipulations or nanoparticles. Or, we may perform the transfer of pluripotent potential of the embryonic stem cells to Adult stem cells in the stage of Blastocyst for the required cells. Or, upon providing time plan and program to stem cells like the proliferation of cells up to desired time and going of other cells to G₀ cell cycle for preventing tumor and etc., where this program is similar to the program of Apoptosis (programmed cell death) by natural killer lymphocyte cells and killer T lymphocyte cells using enzymes and protein combinations.

My other research fields include improving the quality of brain activity and eliminating its disorders and research on the cell cycle of neurons and customizing some connections of this cycle and working on CP disease (Cerebral Palsy) and improving the connection of environmental neurons with central ones.

Of course, upon increasing my knowledge and information in the field of Medicine, I wish to provide efficient researches to others and improve the life quality of patients.

This is my wish: even if I fail through all my researches and my lifetime will not be enough to reach conclusions, there would be even a sentence in my researches which help physicians and researchers in this path.

About these ambitious thoughts and even impossible in medicine, I should mentioned that I deeply believe in realization of thoughts and beliefs as I have imagined and wished to do the aforesaid, like the invention of airplane where before its invention, some people have dreamed flying. They have dreamed it while it was impossible to others. Ultimately, two brothers realized this dream and invented airplane; although, it was not like the modern types of which but it led to the invention of modern airplanes.

This is to appreciate you for providing foreign students the chance for introducing themselves and share their thoughts with experienced professors and instructors of the field. I hope to take steps toward reaching a day in which neural disorders may be treated as easy as a regular flu.

Sincerely Yours,

Hojjat Abdollahpour Karizi