

## FALL CONVOCATION October 9 & 10, 2014

## **Convocation Address By Dr. Ahmed Zewail**

1999 Nobel-laureate and pre-eminent statesman

An honorary Doctor of Science, honoris causa, was conferred on Dr. Ahmed Zewail during the Beedie School of Business and Faculty of Science ceremony on Friday, October 10, 2014. The following is Dr. Zewail's Convocation address:

You might hear some distortion in my voice; I have a little bit of cold, but no Ebola or any of that stuff.

Thanks, Madam Chancellor, thanks to the President and the faculty, especially the one that voted for me. And I thank, of course, the students, the parents, and the friends for this special day.

Today, I will not preach for you. I have four children, and I know from my wife's and myself experience on events like this, they are not interested in the convocation speaker to go on and preach. And you really don't want to listen to and of that stuff; you want to get to the party. And so I'm going just to leave you with bullets. They all emphasize one word. If I can get you, all graduates, to go home today with this one word, then I succeeded. And this word is called *passion*. That is the word I want to leave you with today.

So, -- and you can look it up if you like to find about it -- when I was your age, I did not know what a Nobel Prize is -- and this is true. I came from a very distinguished, historical country called Egypt. Alexandria Library was the shine of the world in science and technology. I went to the University of Alexandria myself, but during my time, the Nobel Prizes were for the West. You'd hear about it in America, in Europe, in Canada you have some, and so on. So I didn't really think of this. But for some reason, I was truly passionate. And I don't know where it came from. Is it genetic? Is it the food I was eating? I have no idea. I was passionate about acquiring knowledge. I was passionate about learning. I didn't even have a pressure from the family at the time. But my drive to learn more and more is actually what took me to America. True, I was the first of my class, but that was not enough. I had to have my own passion that drives me. And go to the best institution in the Western world.

Going to United States, I encountered numerous challenges. Don't believe anybody that tells you that the challenges before were less or more. Your generation have certain challenges, we had other challenges. My challenges were scientific--as I mentioned I was first in my class, but our sciences were different from what I'm learning at the new institution. So I had to learn all of these languages. Culturally, (()) the challenge. I come from the quote, unquote, "the East" and I'm now going to the "West". The culture is somewhat different and one has to readjust into this new culture, and to assimilate in it in a positive way; and that takes energy. And finally, is the political opportunities or political challenges. Again, we come with different ideas and we come with different ideologies, and these political challenges were quite significant when I arrived in 1969. But again, passion wins. Passion wins. Because I survived

and I became in the United States for more than forty years, acquiring many of the positions that I could not have dreamed of achieving when I was at your age. It was *passion* that took me through all of these challenges.

Beginning with the research at Caltech -- Caltech is a wonderful institution, produced to the world so far thirty-five Nobel Prizes in the Sciences and in the Medicine. And to be among such faculty was intimidating. And so we were thinking of whole new ideas. My idea at the time as an assistant professor, and as you heard from Professor Gary, was to visualize how atoms move on (( )) space and time. If I have listened to all the experts, including some Nobel Prize winners at the time, who said "this cannot be done", I'll be in violation of things called the uncertainty principles and all of that stuff. Not only that, they saw in it that there might not be too much of a way of application or usefulness. Well, that didn't stop me. And again, it was passion that wins. Because, at the end, with my group at Caltech --we did the work in less than ten years from being hired as an assistant professor that was cited by the Nobel Prize. Usually, the Nobel Prize in Science and in Medicine is given close to the age of 70-80. I was very fortunate to be the sole recipient in the early 50 of my age. So it's not only me, it's the passion, the enthusiasm to what I wanted to be doing.

Being concerned about the world of the have-nots, as you also heard in the introduction. This is something close to my heart. For a long time I wrote about it. I got actively involved in Washington, in Egypt, in many other places. I met numerous officials about this issue. Well, a huge number of people told me I was wasting my time. Especially that happened after the Nobel Prize or I could have stayed in California and enjoyed the beaches and enjoyed my family, which actually I feel guilty about them because I was travelling most of the time. So I could have dropped all of that stuff of the helping the have-nots, but again, it was *passion* that wins.

Today, we began in the Middle East one of the premiere institutions of the City of Science and Technology. I thank the previous government and the current government for naming it after me and making it one of the centres of excellence. And this, by the way, we did all of this in less than three years, but after many, many years of effort to try to get it where it is. So what is the moral of this *passion* story? One word-- one. And here I'm going be just giving three bullets, not too many.

One, develop your own *passion*. Work on it hard. It's not easy, but if you find it, you'll be the happiest person on earth. I guarantee you; you will jump from bed at 6 o'clock to go to work. So develop your own *passion*, and in the process be compassionate and optimistic.

Two--and you will see this with time, education and knowledge are the power engine that can change our world. We are not going to change our world with wars, and (( )) and all of that stuff. We are going to change our world by the soft power of education. I am convinced -- I traveled the world over -- and I am convinced that the price of one F-16 can make a huge difference in the world of today. Huge! Education in classrooms and in Africa and in Asia and we'll be a better planet.

And finally, be compassionate. When you are on the way up or at the top, do not forget those who are struggling at the bottom. When you are on the way at the top, try, try hard to do something about those at the bottom.

And the last message: have fun. Have fun. Graduation really means to have fun. Not in the bars, and not to get drunk and stoned and all of this stuff; no, I meant enjoy all the great things that exist in life, culturally, athletically; there's so much in your country and others that you can have fun. I always remember this, because my late father for some reason had this motto always and he transmitted this to me all along: Enjoy it, because life is too short. Congratulations.