



THE MAN WHO BUILDS THE FUTURE

In researching science and technology based companies in America, it is almost certain that the name of Dr. Noubar Afeyan will be read in its history. He has helped build several life science and technology startup companies and has participated in launching successful new ventures. He is also actively involved in building the future for Armenia.

interview ANI GARIBYAN

photos COURTESY OF ARCHIVES OF NOUBAR AFEYAN

Dr. Noubar Afeyan is co-founder of PerSeptive Biosystems, LS9, Antigenics, Color Kinetics, Helicos BioScience Corporation and EXACT Sciences. He is Managing Partner and CEO of Flagship Ventures; a venture capital firm he also co-founded. He is a senior lecturer at the Massachusetts Institute of Technology and teaches entrepreneurship at MIT's Sloan School of Management. He received his Bachelor of Science in Chemical Engineering and his PhD in Biochemical Engineering. Afeyan is a recipient of the Ellis Island Medal of Honor and has co-founded three Armenian organizations: Armenian High Technology Council of America, YerazArt and Armenia 2020. Armenia 2020 is an organization that connects present day Armenia to Armenia in 2020. The Coordination Board of Armenia 2020 includes: Raffi Festekjian, Andre Andonian, Andrew Mkrtychyan, Noubar Afeyan, Pierre Gurdjian, Robert von Rekowsky and Ruben Vardanian. AMERIA, Armenian-European Policy and Legal Advice Centre, McKinsey & Company and Troika Dialog are partners of Armenia 2020. Some of

the current projects Armenia 2020 is working on are Student 2020 club, "which promotes creative, intellectual, cultural and spiritual development by implementing joint projects with local and foreign organizations," and Summer Camp in Dilijan. So who is the man who builds our future?

Q Tell us a little about yourself.

I was born in Beirut, Lebanon. My family and I fled the war in Lebanon and immigrated to Montreal, Canada in 1975. Soon after, I left for Boston to pursue my PhD at Massachusetts Institute of Technology (MIT) and have been here ever since. I am now married to my lovely wife Anna and have four children; Armine, Taleen, Lena, and Alexander.

Q To receive a PhD in Biochemical Engineering from MIT is quite an accomplishment. What is Biochemical Engineering?

The field is quite new and began emerging in the 1980s. The discipline brings together engineering and chemical engineering to biology. Biochemical Engineering gives us the set of tools to analyze and solve problems that span the world of technology and biology. These tools are used in healthcare, engineering and renewable energy. For instance,

Adnexus, a Bristol-Myers Squibb R&D Company uses biochemical engineering in order to engineer nanoscale proteins to target specific diseases to neutralize them, specifically against cancer.

Q You have co-founded Flagship Ventures. What is Flagship Ventures?

Flagship Ventures was founded in 2000 and is a venture capital firm that invests in early stage technology based companies that focus on life sciences and energy. We currently have an active portfolio of over 40 companies and manage over \$600 million.

Q Would you name some of the companies you have assisted through Flagship Ventures?

One of our clients was Color Kinetics which was acquired by Philips in 2007. This company created lighting systems. They light up the colorful columns at LAX's International Airport. They also recently transformed the stadium for Super Bowl XLIII. Celera was another client of ours. Their mission is to sequence the human genome. Flagship Ventures co-founded LS9 which is a renewable petroleum company that researches renewable energy. The company engineered bacteria that can generate diesel fuel from sugar and was awarded the Emerging Tech, Green and

Clean Award by the Silicon Valley/San Jose Business Journal.

Q You have achieved great success in business. What about teaching? Do you enjoy it?

I enjoy teaching. At first I thought that it would be difficult to teach students about entrepreneurship. I had to think back and try to ask myself what I would like to inform students about this field.

Q Last year, you were awarded the Ellis Island Medal of Honor. What does that mean to you as an Armenian-American?

You know, I have only been an American citizen for two years now and I guess I would not have been awarded this award had I not become one. This award is noteworthy for me. There is a big ceremony involved with the award and I was among others who make a difference in their profession, their local communities and their homelands.

Q What did the award mean to your family?

My family was honored. I have a difficult time saying "NO!" to organizations and committees that ask for my assistance, especially when dealing with the advancement of Armenia. I am involved in many more committees aside from the ones I have mentioned. To receive this award, it somewhat validates



☐ Note:

Armenia 2020 is a scenario-building initiative that focuses on the identification of alternative development models for the Republic of Armenia until the year 2020 and the elaboration of development scenarios for the country. The strength of the project is the mix of participants with diverse viewpoints; it aims to bring together committed and accomplished Armenians from Armenia and all over the world. To learn more about Armenia 2020, visit www.armenia2020.org.



the time I have spent outside of my home and away from my family in order to make a difference.

☐ What is your favorite Armenian Word?

Abaga [ah-bah-gah] — the future.

☐ Do you like the word because of the way it sounds or its meaning?

Its meaning... future.

☐ Since we are on the topic of the future, tell us about Armenia2020.

Armenia 2020 is a scenario-building initiative that focuses on the identification of alternative development models for the Republic of Armenia until the year 2020 and the elaboration of development scenarios for the country. In founding this organization, we thought to ourselves, “How can we be helpful to Armenia?” As an entrepreneur and a businessman, I knew that we would need to look at the future of Armenia and examine where the country should be and where we would like it to be. We began to think of Armenia in 2020. We must connect the future to the present. With the expertise of McKinsey and Company (a management consulting firm), we researched extensively

from 2001-2005 in trying to figure out what Armenia is competitive in and how we can make Armenia attractive to global investors. Our research shows us that Armenia has competitive resources in tourism, financial services, information technology and healthcare services. Education is also a key topic of Armenia 2020. We need to make sure that we educate all Armenians (Diaspora and native) about Armenia, Armenians and the Armenian culture.

☐ Is the Armenian government involved with Armenia 2020?

Yes, the Armenian government, with its National Competitiveness Council of Armenia, which is chaired by Armenia’s Prime Minister, Tigran Sargsyan, has worked closely with us in identifying key sectors of Armenian economy.

☐ Have you visited Armenia?

Last year alone I visited Armenia six times. Since 2001 I have been to Armenia four to five times a year.

☐ What were your initial thoughts of the country, its condition and its people?

The first time I was in Armenia was in 1972 for two weeks and did not return until 2001. Armenia’s conditions have worsened since

1972. It is difficult to transition from a society where the government takes care of everything to a democratic and capitalistic country. The physical appearance of the county was worse in 2001 than in 1972. That said, there has been a great amount of improvement since 2001 and today and I am hopeful that these change will continue to be made and at more rapid pace.

☐ What is your favorite spot in Armenia?

Republic Square in Yerevan is very beautiful with its grand architecture. I enjoy going to Malkhaz Jazz Club, relaxing and listening to great jazz music.

☐ What hopes do you have for Armenians in the Diaspora, specifically in the United States?

I hope that the relationship between the Diaspora and Armenia will change significantly. We need to understand that the nucleus of the Armenian race is Armenia. At the moment, Diaspora’s Armenians are a loose network of people that have something in common. I hope that the Diaspora’s connection to each other becomes Armenia and Armenia’s betterment. I would like Armenians to work together to

have every Armenian on the same footing no matter what part of the world they live in.

☐ What will Armenia be like by 2020?

In 2020 Armenia can economically reach the living standards of the Baltic States. Lifestyle expectations will rise. The flow of people moving and living in Armenia will be larger than that of Armenians moving out. The mindset of Armenians will shift from survivor to someone who lives life and tries to improve life for themselves, their families and fellow Armenians.

I had read about Dr. Afeyan in an Armenian newspaper and knew of him because he had recently received the Ellis Island Medal of Honor. I wanted to find out more about him, so naturally,...I Googled him. His name appeared in over 10,000 pages on Google. After reading and learning more about him, it is no wonder why the pages were endless. As I interviewed Dr. Afeyan, it became evident that though he is extremely successful in his field as a biochemical engineer and an entrepreneur, he is modest and humble. He is the success story we should take notes from. ☐