

Prof. Aaron J. Ciechanover

2004 Nobel Laureate for Chemistry Speaks at NIST

by Panthita Punyaneramtdee (Pan Pan)

Bridges – Dialogues towards a Culture of Peace is an annual series of lectures held in South East Asia since 2003.



This year they are being held throughout Thailand, the Philippines and Cambodia. The goal of Bridges is to promote understanding and trust through dialogue and communication between societies in Southeast Asia with their diverse cultures and faiths, as well as with people from other parts of the world. These dialogues are meant to bring us together in a culture of peace. Many Nobel Laureates, artists and celebrities have taken part in these lectures.

Fourteen RIS students attended the latest lecture on science at NIST on October 30, 2009 and responded with appreciation. Prof. Aaron J. Ciechanover is a 2004 Nobel Laureate for Chemistry, a Distinguished Research Professor at the Faculty of Medicine of the Technion Israel Institute of Technology in Haifa and a member of the Advisory Board of the International Peace Foundation. After listening to Aaron Ciechanover, the students were able to obtain a lot of new information and knowledge.

information that can be used to benefit people or harm us. Once it is possible to map individual human genomes quickly at low cost, this information could be used to determine if someone is susceptible to a disease and help cure them. On the other hand, however, it could also be used against individuals if the information were to get into the wrong hands.

During the question and answer session, Dr. Ciechanover interacted with students from five schools. More about his research was explained in the answers that he provided to student questions. While doing his PhD, Aaron Ciechanover was part of a research team that discovered the ubiquitin system, which is a system of degradation of unneeded proteins in cell, and won him and his research partners, Avram Hershko and Irwin Rose, the Nobel Prize. This system is also involved in the repair of DNA molecules, which Dr. Ciechanover explained, needs to occur multiple times per second in the average cell.

On the whole, this trip was a fabulous opportunity to hear an expert speak about his field. All of the students enjoyed the trip, as did the chaperone, Ms. Julie Cook. We look forward to more similar opportunities in the future as the Bridges lectures continue.

To learn more about the Bridges lecture series, please visit www.peace-foundation.net.

Aaron Ciechanover first studied medicine after high school and served as a military physician in the war in 1973. After completing his 3 years of required service, he turned his career to biochemistry because he believed that being a doctor did not suit him. Therefore, he earned his PhD in biochemistry before doing a post-Doctorate degree at MIT. Dr. Ciechanover emphasized the importance of choosing a field that is enjoyable for you. Having changed his field from medicine to biochemistry, Dr. Ciechanover told the group that he found his research to be a hobby rather than work. He encouraged students not to be afraid to change careers if they wanted to.

A second topic in his lecture was related to the implications of the Human Genome Project as it relates to disease prevention and privacy of information. He spoke of the double-edged sword of

