Tribune

LHS Students Team Up with MIT Scientist

Ten Million Dollar Monsanto Challenge Comes Home to Livingston High School

Dr. V. A. Shiva Ayyadurai, a member of Livingston High School's (LHS) class of 1981 and Hall of Fame honoree, will conduct an open public forum at the high school on Monday, December 21, from 7 to 9 p.m.

Dr. Ayyadurai is challenging Monsanto, a corporation that produces genetically modified plants, by offering the company his \$10 million building in Cambridge, Massachusetts, if Monsanto can prove the existence of safety assessment standards for GMOs (genetically modified organisms).

Many major crops such as soy, corn, and cotton, and most recently, GMO salmon, have been approved for public consumption, he says.

Earlier this year, Dr. Ayyadurai's research team at the International Center for Integrative Systems collaborated with LHS students and faculty, across a series of four peer-reviewed scientific papers, to demonstrate that genetic engineering disrupts normal plant metabolism resulting in accumulation of formaldchyde (a known carcinogen) and depletion of glutathione (a powerful anti-oxidant).

The conclusion of the research asserted the need for testing the predictions, and the need for standards for GMO safety assessment.

Dr. Ayyadurai said, "The fact is there are no standards for GMO safety assessment. This important conclusion has not been presented clearly in the mainstream media, neither by the pro- or anti-GMO side. The current 'standards' are self-reporting akin to you or I creating our own standards for emission testing of our ear, and simply informing the DMV that the car is safe. This is precisely what is happening with GMOs."

Speaking at the forum will be four LHS students, including Cori Kollin, Rachael Olovyannikov, Phoebe Konecky and Zachary Zamore, who are pursuing their research interest about GMOs in the LHS Science Research program. Last May, the students received co-authorship credit of a literature review published in a scientific journal.

When Dr. Ayyadurai became a Hall of Fame honoree in 2014 and visited LHS, he connected with the school's Science Research Program and began a working relationship between his company, Cytosolve, and these four students.

The premise of the working relationship is to expose the students to research strategies used at Cytosolve to investigate real world issues. The December 21 forum is an outgrowth of that collaboration.

Dr. Ayyadurai says that more testing is needed to determine the effects of genetic modification on plants and the resulting impact on human health. He is challenging corporations that produce genetically modified plants, in this case Monsanto, to provide evidence that testing has been done and that humans are not at risk when consuming genetically modified foods.

At the forum on December 21, the scientists will share what they have learned from their research on GMOs. Monsanto has been invited to participate in this informationsharing event.

LHS principal Mark Stern will introduce the program.