Dr. Nancy Ho is a research professor in the School of Chemical Engineering at Purdue University. She received her Ph.D. from Purdue's Department of Biological Sciences. After completing her studies, she remained at Purdue to develop methods for the study of DNA. However, starting in 1980, she focused her efforts on using recombinant DNA techniques to improve industrial microorganisms. Her most well-known work has been the development of recombinant *Saccharomyces* yeast, widely known as the Ho-Purdue yeast, which can effectively produce cellulosic ethanol from all types of cellulosic plant materials – such as corn stalks, wheat straws, wood, grasses and waste paper products. Her lab at Purdue University continues to improve the yeast to make it produce cellulosic ethanol even more efficiently.

Dr. Ho foresaw the need for a global company to market, further improve and develop the yeast for cellulosic ethanol production and for the production of other fuels as well as endless green chemicals. She founded Green Tech America, Inc. (GTA) in West Lafayette, Indiana in 2006 to commercialize the best Ho-Purdue Yeast developed in her Purdue laboratory for the production of low-cost ethanol from cellulosic biomass. GTA's scientists continue to innovate in the development of new Ho-Purdue Yeast derivatives that can co-produce high valued co-products such as various industrial enzymes during ethanol production. This capability will greatly increase the monetary return of ethanol producers and enable the biomass-based renewable transportation fuel industry to be sustainable. Recently, one corn ethanol producer found that the Ho-Purdue Yeast could produce corn ethanol more efficiently than the yeast they used routinely for corn ethanol production. The corn ethanol producer has already licensed the Ho-Purdue Yeast to produce both corn and cellulosic ethanol in their plants. Dr. Ho believes that other corn ethanol producers will follow suit – producing both corn and cellulosic ethanol using the Ho-Purdue Yeast in their plants. This will help to produce more cellulosic ethanol without the costs of building new plants. This can also help corn ethanol producers to produce more ethanol, at least 20% more ethanol, in each plant without requiring using more corn.

Dr. Ho has received numerous honors for her development of the cellulosic ethanol-producing Ho-Purdue Yeast including the R&D 100 award in 1998, the Discover Magazine award in 1999, the recognition by Indiana Senator Richard Lugar as an Energy Patriot in 2006, and the recognition by President George W. Bush for her commitment and dedication in the development of the necessary technology to produce fuels from renewable cellulosic resources – for which she was invited as the President's guest to attend his State of the Union Address on January 23, 2007. In addition, President Bush also sent her a letter in which the president said "Your hard work and dedication are helping to build a safer, more secure future for our Nation".

In addition, on March 23, 2011, Purdue University launched its Difference Makers website. Dr. Ho was honored by being chosen as one of the first of Purdue University's Difference Makers: http://www.purdue.edu/differencemakers/energy.html>.