

# SCIENCE BUDDIES in Action



## Student

Junxing "Cici" Chen  
Concord, California

## Awards

Bio-Rad, Best Biological Project in Senior Division  
Contra Costa County Science and Engineering Fair 2008, Grand Award  
Contra Costa County Science and Engineering Fair 2008, 1<sup>st</sup> Place Category Award  
Intel International Science and Engineering Fair (ISEF), 3<sup>rd</sup> Place Grand Award  
Mirant, Alternative Fuels Project Award  
Northern California Western Nevada Junior Science and Humanities Symposium, awarded 1-year scholarship to UC Lawrence Hall of Science  
School science fair, Best in Show Award  
School science fair, 1<sup>st</sup> Place Category Award

## Overview

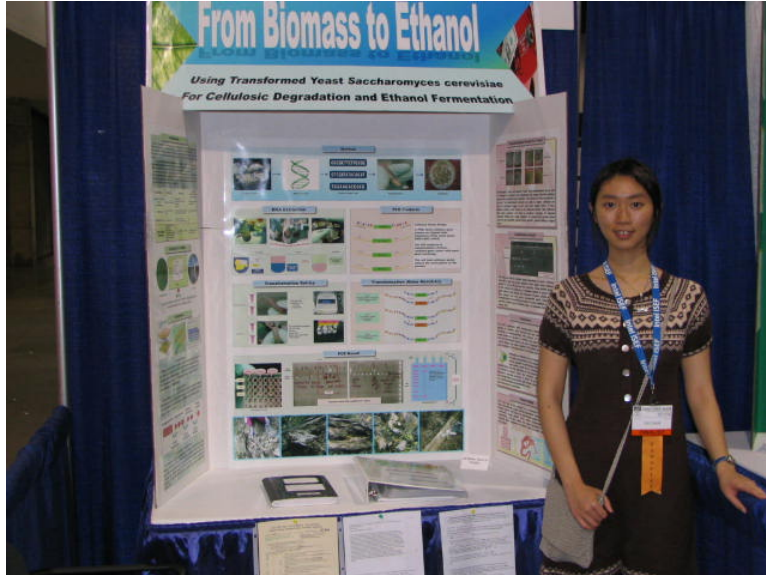
Junxing "Cici" Chen, a junior from Concord, California, is a relatively recent immigrant from China. Born in Xian, she and her family came to this country when she was 14 years old. Despite having to adapt to a new culture and language, Cici quickly became a top student at her high school. In her sophomore year, with the help of her biology teacher, Karen Kelly, she conducted a science experiment in which she studied residual *E. coli* on kitchen cutting boards. She took her project to the 2007 Contra Costa County Science and Engineering Fair, and received a 1<sup>st</sup> Place Award in the Biological Sciences category.

The following year, when she was a junior, Cici once again decided to enter the county fair. The project she exhibited was far more complicated than her first; she tackled the subject of alternative fuel sources by developing a means of extracting the materials used in ethanol fermentation from any plant, not just sugarcane and corn. Instrumental to her method was genetically altered yeast with the ability to perform cellulosic degradation. Ms. Kelly again provided Cici with valuable assistance, and the Joint Genome Institute (JGI) granted her the guidance, resources, and lab time



necessary for genetic alteration. Science Buddies aided her as well, for she often sought answers to her questions using the Ask an Expert resource.

Cici won top honors for her project at her school fair before going to the county fair, where she impressed once again. She took home two special awards and the Best in Category Award for Biological Sciences. She also received the Grand Award in the senior division, qualifying her to compete at the international level in the 2008 Intel ISEF in Atlanta, Georgia. Science Buddies helped her again by providing practice judging sessions to prepare her for international standards. Thanks to her hard work and preparation, Cici was awarded the 3<sup>rd</sup> Place Grand Award in her division, Energy and Transportation. She made Contra Costa County history as the first student from the CCSEF to win an award at the international competition.



In addition to JGI, Science Buddies, and Ms. Kelly, Cici's mother, who works at U.C. Berkeley, also gave her help and encouragement. Cici is currently involved in an eight-week program at U.C. Berkeley in which she is researching synthetic biology. U.C. Berkeley is at the top of her list of college choices, followed by Stanford University. She plans on majoring in microbiology, bacterial studies, or biotechnology. In her spare time, Cici enjoys manga, animation, and having fun with her friends.