

## **CU-Boulder students continue stellar record in international math modeling competition**

April 17, 2013 • Natural Sciences, Engineering, Academics

Two University of Colorado Boulder undergraduate student teams have been named among the 11 top winners from a field of 5,636 teams that entered the 2013 international Mathematical Contest in Modeling this spring.

Only 375 teams, or 6 percent of those entering the contest, were from the United States. The others were from Canada, China, Finland, Germany, Hong Kong, India, Indonesia, Ireland, Mexico, Malaysia, Singapore, South Korea, Sweden and the United Kingdom.

CU-Boulder had two teams designated as “Outstanding Winners” in 2012 as well, and has had a total of 13 Outstanding Winner designations since 2000.

“I don’t know any other university, from anywhere in the world, that has that track record,” said Anne Dougherty of CU-Boulder’s Department of Applied Mathematics. “This is a testament to our excellent students and exceptionally strong undergraduate program.”

One of the 2013 problems focused on developing an effective, feasible and cost-efficient strategy to meet projected water needs in a given country, while the other challenged students to develop the “ultimate brownie pan” to maximize heat distribution and cooking potential in an oven.

Results of the contest, which took place at the students’ home institutions Jan. 31-Feb. 4, were announced by the Consortium for Mathematics and its Applications on April 5.

One of the two CU-Boulder teams designated as an “Outstanding Winner” was comprised of students Gregory McQuie and David Thomas of aerospace engineering sciences, and Yueh-Ya Hsu of applied mathematics. The team also was awarded the Mathematical Association of America Award.

The other “Outstanding Winner” from CU-Boulder included students Christopher Aicher and Tracy Babb of applied mathematics, and Fiona Pigott, who is double-majoring in mechanical engineering and applied mathematics. The team also was presented with the Society for Industrial and Applied Mathematics Award.

Dougherty served as faculty adviser to both teams. Any undergraduate CU-Boulder student was welcome to participate.

A third team of CU-Boulder students entered the contest and was designated a “successful participant.” That team included students Runnan Lou of aerospace engineering, Weiming Zhang of applied mathematics and Xinyu Shen, who is double-majoring in math and physics.

According to the contest rules, the students had 96 hours to decide which of two problems to complete, research their problem, come up with a mathematical model, program a numerical model and write a report.

### **Quotes**

“I don’t know any other university, from anywhere in the world, that has that track record,” said Anne Dougherty of CU-Boulder’s Department of Applied Mathematics. “This is a testament to our excellent students and exceptionally strong undergraduate program.”

Text copied from: <http://www.colorado.edu/news/releases/2013/04/17/cu-boulder-students-continue-stellar-record-international-math-modeling>