

## Intel International Science and Engineering Fair: Second Place Award

**J**arek Kwiecinski, a 10<sup>th</sup> grader at Albuquerque Institute for Math and Science who conducted his science fair project under the mentorship of UNM Department of Biology faculty Drs. Robert Sinsabaugh, Marcy Litvak and David Van Horn, won second place in the Earth & Environmental Sciences category at the Intel International Science and Engineering Fair in Pittsburgh, Pennsylvania held May 10-15, 2015. The competition, which included more than 1,700 students from 70 countries around the world, “was an incredible and unforgettable learning experience,” said Kwiecinski. The award for his project “Improving the Carbon Use Efficiency of Soil Microbial Communities” came along with \$1,500 and an asteroid named after him!



Jarek talks with a scientist about how he added amendments to soil to improve soil quality and habitat, allowing for increased microbial growth.

# INTERNATIONAL SCIENCE FAIR WINNER MENTORED BY UNM BIOLOGY DEPARTMENT FACULTY AND STAFF

**U**nder the leadership of University of New Mexico Department of Biology **Drs. Robert Sinsabaugh, Marcy Litvak and David Van Horn, Jarek Kwiecinski**, a 10<sup>th</sup> grader at Albuquerque Institute for Math and Science (AIMS), studied “Improving the Carbon Use Efficiency of Soil Microbial Communities” for his science fair project for the 2014–2015 school year. It was the result of three years of building his knowledge and experience of adding amendments to soil that improve soil quality and habitat, allowing for increased microbial growth. This is important because, in the face of increased CO<sub>2</sub> emissions, controls on large natural CO<sub>2</sub> sources need to be better understood.

In the Central New Mexico regional science fair, Jarek was selected as a regional representative to the Intel International Science and Engineering Fair in Pittsburgh, PA in May 2015. He won several significant awards, including first place in senior division Environmental Science and eight special awards, with cash prizes totaling about \$1,200! In the state science fair, he was awarded third place in Environmental Science and four special awards.

Jarek was introduced to these Biology Department researchers via **Jennifer Schuetz**, the Bosque Ecosystem Monitoring Program (BEMP) science coordinator, who is also an adjunct faculty member in the department. Three years ago, Jarek and his classmates at AIMS monitored a BEMP site in Albuquerque. After getting to know Jarek through this project, Jennifer mentored him in his science fair project two years ago, and last year Jarek began his award-winning work with soil microbial communities with UNM Biology professors and Ph.D. students.



**Jarek discusses his science fair project with guests at the Central New Mexico regional science fair open house.**