

# Honors College student plays MythBuster to steel import doubters

*Part of a series profiling undergraduate researchers provided by University of Pittsburgh Office of the Provost.*

## By Niki Kapsambelis

For years, it was hard to talk about the decline of Pittsburgh's steelmaking industry without also mentioning the increase in foreign steel manufacturers. Competition for cheaper steel had a dampening effect on the Pittsburgh economy, or so the common thinking went.

It took an uncommon student to show that, in recent years, that theory has been wrong.

Enter Jeff Ernshausen, a member of the Honors College who is already majoring in economics and history, and plans to declare a third major in philosophy now that he's in the fourth of his five years of undergraduate study. While taking a course called Economy of China in the spring of 2006, Ernshausen decided to explore the steel trade issue in a semester-long research project required for the course.

"He came to me and said he wanted to look into the question of how trade affects the local economy," says Professor Thomas Rawski, who taught the class and thought Ernshausen was certainly up to the task. "It was already clear to me that he was a very unusual student."

Like most casual observers, Rawski and Ernshausen entered the project expecting to learn that trade with China has had a negative impact on Pittsburgh. But just the opposite was true.

"What he discovered was, in reality, there is a thriving export industry that is earning substantial revenues and creating substantial employment," Rawski says. "It was a quite unconventional paper; it allowed him to meet all sorts of interesting people that neither he nor I knew anything about. He discovered things that many people did not understand and also learned something about how international trade works in the process."

According to Ernshausen, while foreign imports from Europe, Japan and South Korea did hurt the U.S. steel industry during the 1970s, the impact of China has been different. Because the Chinese consume more steel than they produce, their demand has had a positive impact on producers everywhere. And in Pittsburgh specifically, the industry has adapted to make high-quality products – a level of proficiency that China has yet to achieve – so its manufacturers turn to Pittsburgh for help.

"One of the things about the research that simplified it a lot for me was that I didn't need to figure out if Pittsburgh steel-makers were sending their products to China," says Ernshausen. "All that mattered was the price of their goods on the world market had gone up."

Ernshausen used trade data from the United Nations to predict the shortage or surplus that China had in various categories and forecast the effect China would have on the steel market. To test his theory, he looked at Pittsburgh companies to see what they were producing and determine how China's demand for steel affected their businesses.

Rawski introduced his student to several people, including the vice president of a local engineering company that sells high-pressure valves for steel plants to India and China. That executive, in turn, introduced Ernshausen to others in the business community.

Rawski does note that the economic picture in China has shifted, and in 2006 the country suddenly jumped to a big export surplus for steel, a trend he expects to continue for several years.

Though surprised by the findings, Rawski was not exactly shocked by the quality of Ernshausen's work.

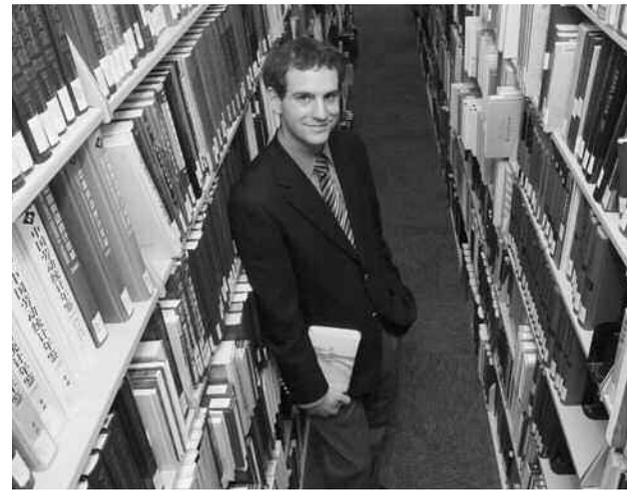
"On the first day of the course that he took from me, it became clear in the first 15 minutes that there were students who were way beyond what you'd expect in terms of insight and willingness to push into the extremities, and he was the leader of the group," Rawski notes.

Originally from a town outside Toledo, Ohio, Ernshausen was drawn to Pitt by a full scholarship as well as the lure of its world-class philosophy program.

"I didn't really know what level of research undergraduates could do," he says, and he credits Rawski with supporting his work.

"He was always available; I could join him in his office almost anytime," Ernshausen says. "He's brilliant, so it helps to have someone who really understands China to be able to guide my thinking."

In addition to an internship with the Allegheny Conference on Community Development, Ernshausen also serves as the economics editor of the Pitt Political Review and is in the process of launching a nonprofit, GreenLight Pittsburgh, which plans to purchase and distribute fluorescent light bulbs for the University campus as part of a greater effort to prepare for car-



**Jeff Ernshausen, an economics and history undergraduate, researches in the University's East Asian Library to determine the effect on the Pittsburgh steel industry of trade with China. (Photo by James V. Burke)**

bon emission reduction.

As he approaches his last year as an undergraduate, Ernshausen is unsure about future plans. He may pursue a graduate degree in economics or apply for an internship with the Federal Reserve. Ideally, he has thought about expand-

ing GreenLight Pittsburgh, though he acknowledges, "That's sort of pie in the sky at this point."

"I'm really one of those folks who wants to set himself up to do anything," Ernshausen says. "But I also try to stay grounded in what I'm doing."

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