

OSU/ETIC Success Story

ETIC-directed investment at Oregon State University since 1999 has enabled the OSU College of Engineering to dramatically increase capacity and capability, deliver top talent and ideas, spin out new companies, and produce tremendous results across the board.

The total number of OSU engineering graduates is up by 40 percent—from 543 in 1999 to 739 in 2006.

Total research funding at the OSU College of Engineering has more than doubled—from \$12.3 million in 1999 to more than \$27.5 million in 2006.



Keeping Oregon—and the World—Safe from Tsunamis

ETIC funding helped build a team of OSU Engineering faculty researchers who now work in association with *the largest and most-wired Tsunami Wave Basin in the world.*



It was the unique combination of professor Cheri Pancake's expertise in information technology and OSU's civil engineering infrastructure that enabled OSU to win a \$4.8 million NSF grant to build the tsunami basin. Hiring computer science professors Ron Metoyer and Jon Herlocker to join Pancake, as well as wave and tsunami experts Dan Cox and Harry Yeh, has made the OSU wave basin world-class: researchers anywhere in the world can participate in real-time experiments.

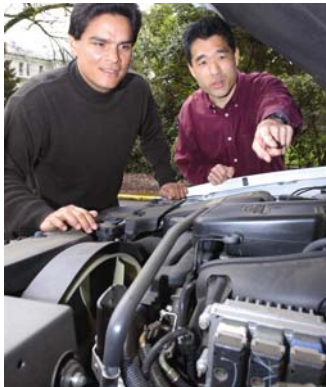
Thanks to this stellar team of people, OSU Engineering is developing better early warning systems that will spread the word faster next time a tsunami strikes...which will ultimately save many thousands of lives.





Taking Care of Oregon's Highway Infrastructure

Using ETIC funding, the OSU College of Engineering hired two new faculty, José David Porter Medina and David Kim, who have helped the Oregon Department of Transportation and the state of Oregon develop a *creative solution for replacing the state's gas tax*. The unique wireless technology system developed by Kim and Porter is so innovative and successful that the state of California and the rest of the nation have taken notice.



ETIC funding enabled OSU Engineering to build this team of extraordinary researchers who are showing California, and the rest of the world, how to attain stable funding for highway infrastructure.

ETIC funding also played a role in OSU bridge research, which saved the state millions of dollars in repair costs by analyzing the condition of Oregon bridges.

Helping Oregon's Economy Flourish

Technology is now a key part of most Oregon industries, from forestry and agriculture to clean power and transportation. ETIC funding has enabled the OSU College of Engineering to hire new professors in key fields.

These new faculty members are developing:

- buoys to harvest clean energy from the motion of ocean waves
- better treatments for breast cancer
- more efficient biodiesel production methods
- better tools the high-tech industry, and more.

ETIC is helping OSU build teams of extraordinary people to produce astonishing, innovative results.





The Oregon State University Extension Service is providing non-formal education for pre-college rural 4-H and other youth to boost their technology skills, increased awareness of science and technology careers, and advancing entrepreneurial abilities. Since the start of the biennium these programs have reached nearly 3,000 rural 4-H and other youth, including those from a variety of under-represented groups, residing in 27 rural counties. ETIC support enables the OSU Extension Service to present engineering and technology related youth summer camps, 4-H clubs, special events, after school classes and in-school educational presentations to enhance and inspire rural youth toward bright futures.

