## Food Drive Reflects Boise State's Heart

How big is Boise State's heart? Big enough to account for donations of more than a ton of food and in excess of \$2,600 in cash and online contributions. That equates to about 9,675 meals.

Boise State's first-ever campuswide "Have a Heart Food Drive" prompted an outpouring of support. Members of the Boise State community joined with alumni and friends of the university to support the February drive. All donations benefited the Idaho Foodbank, which provides food to agencies and organizations that help feed the hungry in Idaho.

Two barrels full of dog and cat food also were collected during the food drive for the Pet Food Pantry, a joint effort by several local organizations, including the Idaho Foodbank, Meals on Wheels and the Idaho Humane Society.

Valentine's Food Drive



BOISE STATE E R STATE

## **HIGH-TECH MICROSCOPES AID INDUSTRY**

Take a peek into the Center for Materials Characterization and you'll likely find faculty and students probing the internal structures and properties of materials —



on a scale well below that registered by the human eye.

You might also find someone from the valley's semiconductor industry examining the nanostructure of a microscopic computer chip, or a local doctor checking the pathology of a skin cell sample.

Using high-tech tools such as the Analytical Transmission Electron Microscope or the X-ray Diffractometer, both academic and industry researchers are able to study the atomic structure of substances ranging from metals to polymers and everything in between.

This comes in handy when a problem is discovered, such as a newly developed solar cell that's responding oddly or a computer chip that is failing. By utilizing Boise State resources, manufacturers can examine materials on an impossibly small scale to figure out how atoms and molecules are interacting and whether the material is reacting in some unexpected way. "They need to compare different materials to see how they are working and to see how materials change over time or through heat or corrosion," says Peter Mullner, director of the Center for Materials Characterization. "This equipment allows them to document each step of the process."

While many large companies such as Micron have their own high-tech microscopes, most small to mid-size businesses can't afford the \$1 million price tag and rely on Boise State as a vital partner in their research and development processes.

Since the university's primary goal is to prepare students to enter the work force, equipment in the Center for Materials Characterization is designed to handle a broad range of tasks, unlike similar instruments designed to handle just one or two highly specialized tasks.

"We are very well equipped to handle industry's challenges," Mullner says.