Brain: Lectures address attention and reading

letters, numbers and symbols, and asked them to monitor the changes in all three.

While all participants were aware of what they were supposed to be doing, some were able to complete the task better than others. People who performed well tended to be people who also did well on intelligence tests based on problem solving.

"Almost everyone with an IQ below 100 is failing almost all of the trials," Duncan said.

This correlation, where people who perform well on one test tend to perform well on other tests, is called Spearman's g. But Spearman's g does not explain what intelligence is.

"Our everyday concepts like intelligence don't have a very definite definition," Duncan said, although he referred to research conducted by University psychology professor emeritus Michael Posner, which found that children who take attention training perform better on problem-solving-based intelligence tests.

About 60 people, including faculty, graduate students and undergraduate students, primarily from the psychology and computer science departments, attended Duncan's lecture.

Duncan worked at the University in Posner's laboratory as a post-doctoral fellow from 1976 to 1978.

Another psychology lecture occurred Saturday morning, and the weekend continued with a live telecast in the Lillis Business Complex from the Oregon Health Sciences University in Portland .

Guinevere Eden, director of Georgetown University's Center for the Study of Learning, spoke about the brain processes associated with dyslexia, a condition where people have difficulty reading and recognizing words.

Eden said that as people become more experienced at reading, their parietal lobes — regions of the brain that are involved in processing touch and taste as well as language — become more involved in the process.

According to functional magnetic resonance imaging scans, which measure brain activity by monitoring blood flow to various parts of the brain, people with dyslexia have less activity in their parietal lobes when they read than other people.

Dyslexia can now be identified early in life, using both behavioral evidence and brain scans, and techniques for helping people with dyslexia improve their reading skills have been developed.

"There's really no excuse for not identifying these children early on and beginning the intervention," Eden said. "The cost if you wait is enormous."

Psychology and neuroscience professor Helen Neville, who is on BBMI's executive committee, said after the lecture that BBMI offers many public lectures throughout the year, covering topics such as brain imaging, education and the role of genes in brain function.

Some of these lectures are specifically designed for parents and educators to teach them ways to facilitate healthy development of children's brains.

"BBMI is all about studying the mind and brain from many different perspectives," Neville said.

Contact the business, science and technology reporter at esylvester@dailyemerald.com

Higher education board approves health center

KLAMATH FALLS — The Oregon Board of Higher Education approved a plan to build a $10 million health care professional training center at the Oregon Institute of Technology.

School officials want to build a 40,000-square-foot facility to meet increasing student demands for health care training.

OIT President Martha Anne Dow told the board Friday that university facilities have reached or exceeded capacity, forcing the school to turn away 238 potential health care students in 2002. Last year, OIT had to reject 150 qualified medical imaging students.

The number of OIT students in professional health care programs increased from 728 in 2002 to 1,167 this fall. State employment figures indicate another 48,000 new health care workers will be needed by 2012.
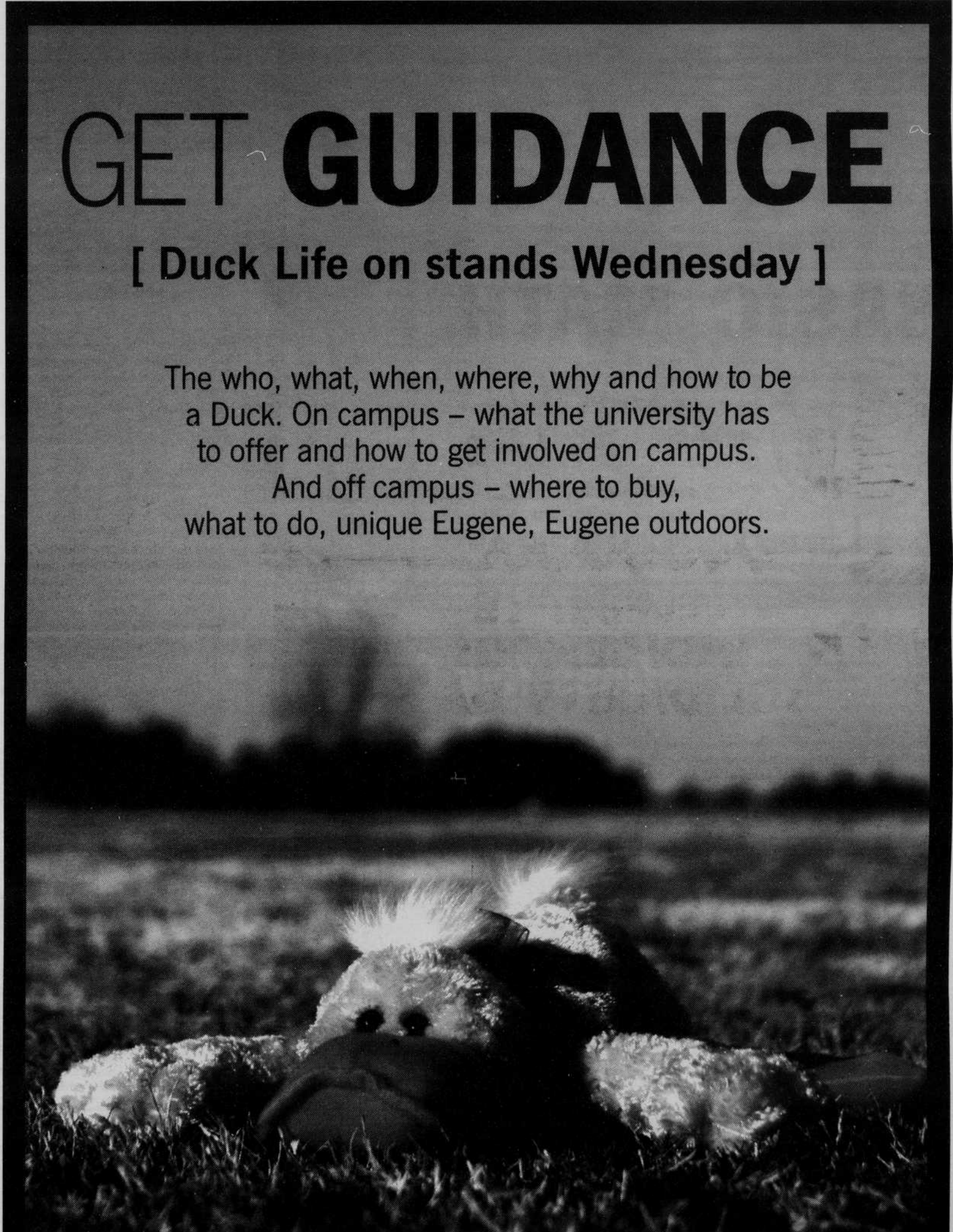
—The Associated Press