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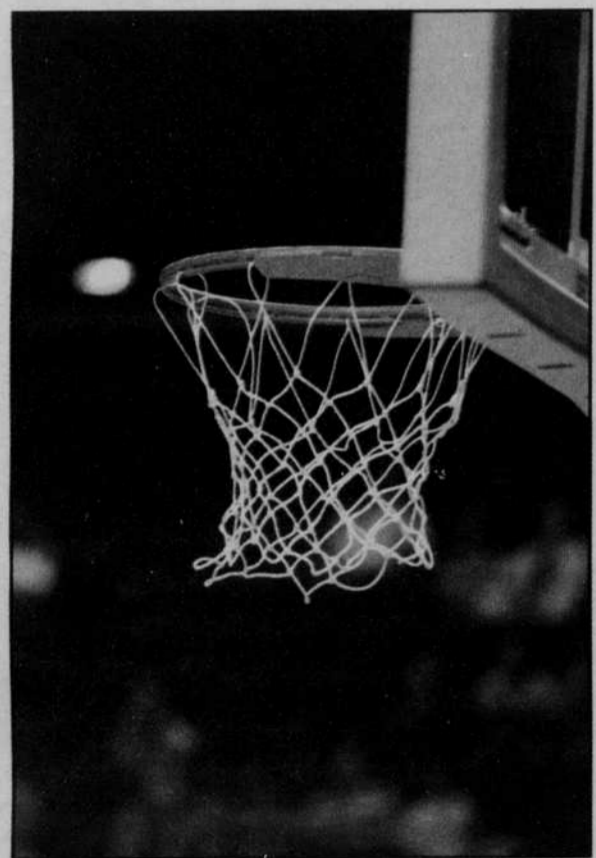
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The independent campus newspaper for the University of Oregon

Military: Department of Defense allotted \$419.3 billion budget for 2006

Continued from page 1

5 percent of University research funding over the past 40 years.

Other universities across the country, including Oregon State University in Corvallis, accept DoD grants.

OSU spokesman Todd Simmons said DoD grants accounted for 7 percent of OSU's overall research budget of \$209 million during the 2004-2005 fiscal year.

"It hasn't been anything that's generated any controversy on this campus," Simmons said.

Linton said the amount of military funding at the University as a percentage of all research funding has been relatively stable over the past 15 years, explaining the slight spike during the 2003-2004 fiscal year as two years of funding for the Brain, Biology and Machine Initiative administered at once.

More heavily used federal funding sources are the National Institutes of Health and the National Science Foundation, Linton said.

This funding is consistent at universities nationwide.

During the 2003 fiscal year, the NSF spent nearly \$4 billion on science and engineering at universities, while the DoD spent \$2.5 billion, according to the NSF's Survey of Federal Science and Engineering Support to Universities, Colleges and Nonprofit Institutions.

However, the DoD's budget is substantially larger than that of the NSF, and it is increasing at a faster rate. According to the Budget of the United States Government, the DoD has a \$419.3 billion budget for the 2006 fiscal year, up 5 percent from 2005 and up 41 percent from 2001.

The NSF has a \$5.6 billion budget for 2006. This is an increase of 2 percent from 2005, but it is still much smaller than the DoD's budget.

"Most (researchers) go to DoD to get money because that's where the money is," Stahl said. "It's the same reason Willie Sutton robbed banks."

The Association of American Universities, which University President Dave Frohnmayer is on the executive committee for, includes 62 public and private research universities in the U.S. and Canada. In May 2004, the AAU Executive Committee wrote a letter to the Defense Subcommittee of the House Appropriations Committee urging the DoD to fund more research at colleges and universities.

A statement on Edugate, a Web site with information about educational programs in science, mathematics and engineering that are fully or partially sponsored by the DoD, discussed the mission of DoD research grants.

"At the Department of Defense, we base our strong commitment to quality education on the realities of life," the statement said. "Without well-educated Americans we cannot have a well-educated military force and without such a force we cannot hope to successfully defend our nation against those who seek to diminish us and our freedom. Mathematics and science skills are, therefore, vital building blocks of our democracy, and work to the benefit of all Americans."

Linton said DoD funding is often more reliable for researchers than NSF and NIH funding.

"In an ideal world, the value of the NSF and NIH would be recognized at a level where projects worthy of support would get support," Linton said.

Linton said any University research that is funded by the DoD could just as easily have been funded by the NIH or NSF, and that sometimes researchers switch back and forth between NSF and DoD funding for the same project based on whichever source is most convenient at the time.

"It's not that the DoD is steering us into areas we're not already interested in at a basic level," Linton said. "It's another source of funding that helps us pursue those interests."

Linton said DoD funding gives the University the capacity to do more research by providing equipment and research facilities. For example, DoD funding helps the Lewis Center for Neuroimaging with basic operating expenses.

"I don't make any distinction between its impact and that of NSF," Linton said. "Any time you can bring more funding sources to bear on faculty work, they're going to be better scholars."

History, prevalence

Chemistry professor Tom Dyke, who came to the University 31 years ago and previously served as interim vice provost for research, said he conducted DoD-funded research in the early and mid-1980s, studying the structure of molecules held together by intermolecular forces such as microwaves and radio frequency light. These findings may have been applied to communications devices, he said.

Dyke said he doesn't consider the DoD grant any different from other research funding he has obtained over the years and said that faculty members should be free to pursue research funding from any source that doesn't violate University policies.

"I think it's a straightforward academic freedom issue," Dyke said. "Faculty need to be free to pursue teaching and research free of political pressure groups that would try to constrain that freedom."

"After all, there are many political viewpoints in this country and many different groups that would like research to be different from what it is. Should we stop work on evolutionary theory because there are groups that don't believe?"

Three Oregon universities — the University, OSU and Portland State University — share DoD funding through the Oregon Nanoscience and Microtechnologies Institute.

University chemistry professor Jim Hutchison heads ONAMI's Inherently Safer Nanomaterials and Nanomanufacturing initiative, which is funded by the U.S. Air Force.

"The outcome, I think, is going to be a really terrific option for the U of O to develop safer nanomaterials and nanomanufacturing methods that wouldn't be possible without that funding," Hutchison said.

Hutchison said that in his work with the Air Force, he has learned that the military is an organization with a lot of people who need the same things that civilians need, such as medicine, clothing and food, and that his contacts at the Air Force research labs care about the impact of their materials on the environment and on human health.

Applications

Bogart, the peace studies graduate student, said he's most concerned about how the research DoD funds

pay for is used.

"I'm not really against any of the projects, per se," Bogart said. "I'm against the Defense Department putting them together in a horrible package to be used for future wars."

Linton said he does not know what all the applications of DoD research at the University have been. Research conducted at the University is not classified, Linton said, and it is published in publicly accessible scientific journals, so anyone could use it for anything.

"It's a distinction between the development of fundamental knowledge and the application of it," Linton said. "How it ultimately gets used by society is not something we can really control or even predict."

Stahl said most DoD research has harmless and even beneficial short-term uses but said that even trying to make the Internet faster could have homicidal implications, as soldiers might use a very fast Internet connection to control, from a safe distance, robots that kill enemies on the battlefield.

"The Defense Department realizes that to control the world, which is the aim under the present administration, we need the best technology," Stahl said.

One DoD-funded project that has come under particular scrutiny from those opposed to military research is the Brain, Biology and

"It's a distinction between the development of fundamental knowledge and the application of it. How it ultimately gets used by society is not something we can really control or even predict."

RICH LINTON | Vice President for Research and Graduate Studies

Machine Initiative.

"BBMI is the one that really stands out as being connected to the FCS (the U.S. Army's Future Combat Systems) program," Bogart said.

The FCS program, which Bogart named as one of his top concerns, "is the core of the Army's efforts to ensure that the Army ... will move, shoot and communicate better than ever before and better than any opponent it will face in the 21st century," according to the program's Web site.

An April 2004 University report entitled "Federal Priorities" describes some defense applications for military research conducted at the University.

Uses for knowledge obtained from the BBMI include, "optimizing the training of performance of military personnel, such as their ability to function in stressful and complex environments and to improve the integration of human and machine. Examples include developing the ability to 'lock out' undesirable battle responses, or to assess a soldier's suitability to particular military tasks involving aspects such as attention, decision making, emotion, memory and communication," according to the report.

Stahl said the BBMI might use its biology component to find the genes that cause emotions and block the expression of those genes.

"We'll get rational treatments for sympathy so soldiers don't sympathize with the enemy," Stahl said.

Michael Posner, psychology professor emeritus and BBMI coordinator, said he wasn't aware of the Federal Priorities report until people opposed to military research brought the claim about locking out undesirable battle responses to his attention. He spent a weekend going through every paper he'd ever written about the BBMI searching for the sentence and then discovered that the sentence in question came from what he

described as a document produced by the University's public relations department in 1998.

"It is kind of an offensive sentence, but it doesn't really describe the work very well," Posner said.

Boyd, the University's federal affairs director, wrote in an e-mail that the Federal Priorities report is prepared by the University's Office of Public and Government Affairs in consultation with senior University staff, and that the BBMI description in the 2004 report included some language, such as the phrase "lock out," that predates Linton and the current government relations staff.

Posner said that to his knowledge, recipients of DoD grants are not required to submit any documents about possible defense applications of their projects.

Posner also said that using knowledge of genetics to prevent people from experiencing emotions is not likely in the near future.

"It doesn't seem like the way genetics actually works," Posner said.

The Budget of the U.S. Government, available online at www.gpoaccess.gov/usbudget, said the DoD's research efforts include technologies — such as improved camouflage that stands up to harsh conditions — that can help military personnel do their jobs safely and more effectively. Projects also include detectors for improvised explosive devices, chemical and biological agents, radioactive materials, aerial sensors and hypervelocity missiles.

Improving communications is also one of the department's goals.

"The 2006 Budget supports

substantial investments in advanced technology to provide advantages over our enemies, particularly in remote sensing and high-performance computing. U.S. intelligence capabilities are employing advanced technology systems to exploit, process, and produce information from enemy signals, imager, and human and other sources," the budget said. "These developments are improving our ability to detect and counter the broad range of threats facing the United States, reaping benefits for both U.S. forces and homeland security."

Stahl said that while administrators at universities are aware of the uses of military research, many of the researchers themselves are not aware, or choose to do the research anyway to improve their status in the scientific community or increase their salaries.

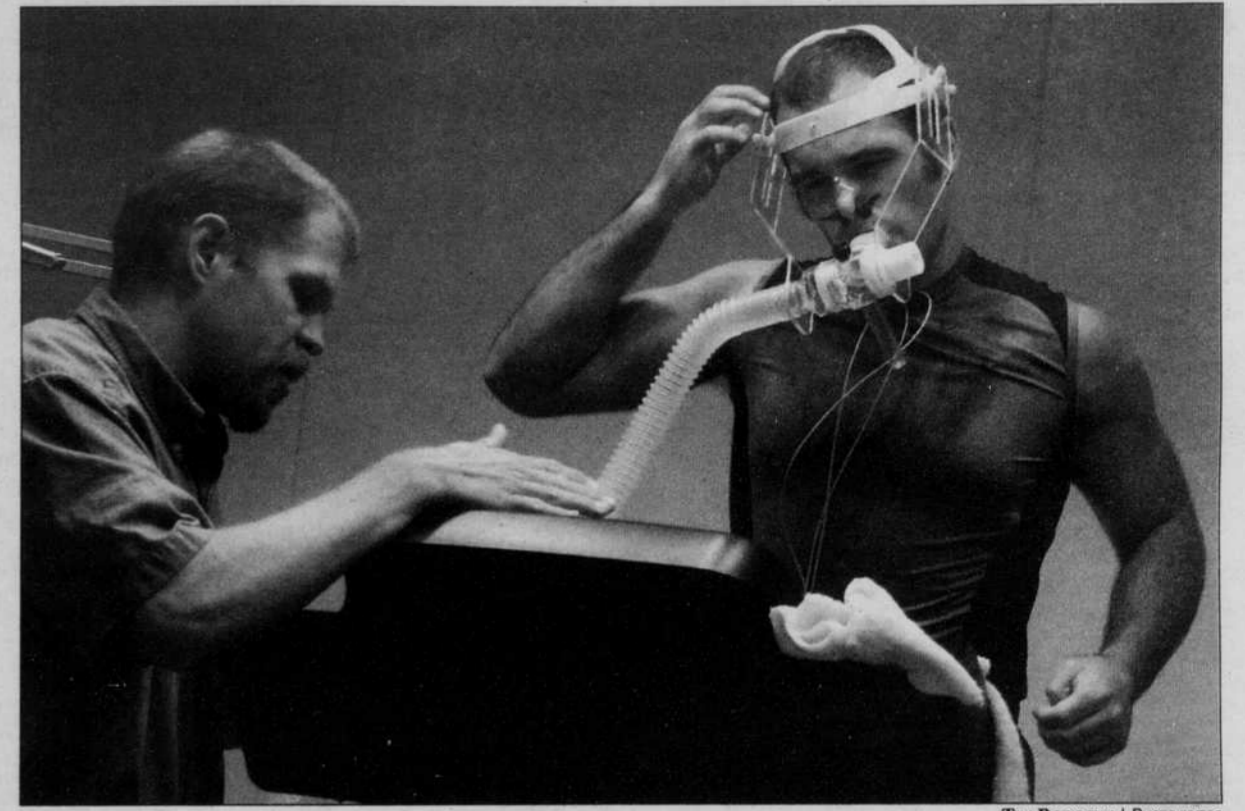
"I think they just don't face it, face the degree to which the American military is the world's greatest threat to peace," Stahl said.

Options for the future

Keyes said that as far as the University Senate is concerned, military research may be part of a larger issue of externally funded research. For example, some schools that accept research funding from pharmaceutical companies have found this to be a problem.

Keyes said he doesn't know if the University Senate has the power to make University researchers stop accepting DoD funding.

"There are certainly faculty members who would be very upset with



Chris Minson, an associate professor of human physiology, left, helps Gregg McCord, graduate student in human physiology, prepare for a demonstration of the University's new environmental chamber, which was funded in part by the U.S. Department of Defense.

other faculty members telling them what kind of research they could do and what kind of funding they could accept," Keyes said.

Stahl said if the University quit doing military research, it would not have a noticeable impact on the military unless it started a trend and other universities also quit doing military research.

"To what extent does the U of O want to be complicit in illegal military aggression?" Stahl said.

Linton said the issue of military funding is impossible to escape.

"To think that we can and should isolate ourselves from anything that connects to the military is not feasible and probably not desirable," Linton said. "The further we're isolated and divided from the military, the less opportunity we have to impact on it in positive ways."

Linton said that the country must make decisions about priorities

from an informed perspective. While funding science and technology to thwart terrorists will protect national security and other interests in the short term, a long-term solution to global problems will require the sort of understanding and knowledge that comes from the humanities disciplines, Linton said.

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