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### The heat is off

Doctoral student Brett Wong wins an esteemed national research award for studies of heat stress

BY ANTHONY LUCERO NEWS REPORTER

niversity doctoral student Brett Wong is making a name for himself in the scientific world. Wong, who is studying physiology, has published a research article on how the body deals with heat stress in this month's Journal of Physiology. The research also garnered Wong the highest national student research award from the American College of Sports Medicine in May.

"It was a great honor," Wong said about receiving the award, which is a national competitive award for doctoral students.

Wong's research, co-authored by former doctoral student Brad Wilkins and Human Physiology Assistant Professor Christopher Minson, has the potential to help diabetics, the elderly and people with multiple sclerosis lower heat stress, which is a health risk if body temperature is too high. Wong said common health problems related to high heat stress include fatigue, lightheadedness and nausea

Wong, who works in collaboration with the University's Exercise and Environmental Physiology Laboratories, has studied heat stress and body temperature before, but the award recognized work Wong did on heat stress related to histamine receptors. The primary function of these receptors is to lessen the rate of blood flow to the skin and regulate the body's temperature.

Wong said he showed that the body's function for increasing skin blood flow and mediating sweat response, or the vasodilatory pathway, contains a certain histamine receptor (called H1) that

can regulate heat stress by its production of nitric oxide, which is not present in a second histamine receptor (H2) in humans. Essentially, the specific receptors, when paired with the nitric oxide, can regulate and lower body temperature protecting the body from heat stress.

Minson, who helped co-author the research, said the aim is to help people in the long run, but there is a need to learn the basic science first.

"We've investigated certain mechanisms that have been around for 75 years but never fully understood; histamine, specifically, is something new for us to study," Minson said. "We want to know what's happening in the bodies of healthy people and take that to sick people and see what part is defunct.

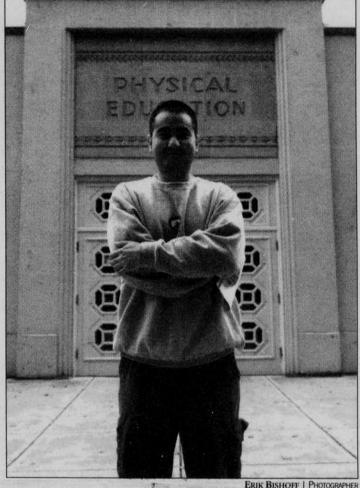
The laboratory uses several tools to measure skin blood flow. Wong put student volunteers - and himself - into a water-perfused suit that keeps body temperature at 100 degrees Fahrenheit.

With the suit on, Wong could test the rate of blood flow during heat stress by sending antihistamines through a microdialysis machine and then by observing the changes through the lab's laser Dopler monitor. He also had a thermometer to measure body temperature.

The extensive procedure and the analysis began in September 2003, Wong said.

John Buckwalter, a chairman the American College of Sports Medicine who sat on the research award committee, said heat regulation and its studies are very important in sports medicine.

"What stood out was the



ERIK BISHOFF | PHOTOGRAPHER

Human physiology doctoral student Brett Wong's award-winning research on heat regulation is an important component of sports medicine

sophistication of Wong's paper and specifically his looking at how blood flow is controlled during exercise," Buckwalter said.

Buckwalter added although the organization says 'American,' it's more of an international competition with many students like Wong vying for the award. University of Minnesota Professor William Roberts, an ACSM member who finalizes the student research winner, echoed praise for Wong's research.

"This is a pretty competitive award," Roberts said. "Hopefully this will further his studies and can help improve health in exercise.

Furthering his studies is what Wong has in mind. Wong said he plans to finish up his doctorate, and from there, continue research and teach in a University setting.

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#### **★** AMERICA VOTES 2004 ★

## Student registration numbers pass 7,500

The Student Vote Coalition exceeded its goal and contributed to an increase in campus activism

BY MEGHANN M. CUNIFF

The Student Vote Coalition had its work cut out for it this election season.

Not only did the group want to register at least 7,500 University students to vote, it wanted to make sure those students actually voted.

The first part alone may seem lofty enough -7,500 newly registered voters would be more than any get-out-the-vote effort the University has ever seen. And to some, the latter goal may have seemed like wishful thinking because of the demographic's reputation for political apathy.

But on Oct. 12, the coalition, a combination of the ASUO and other student groups on campus, had exceeded its goal by registering 7,669 voters. A week removed from the election, student leaders say it is clear the new voters will have an affect on the state legislative process.

ASUO President Adam Petkun, board chair for the Oregon Student Association, spoke before the State Board of Higher Education on Friday and said state legislators were impressed when he told them about the University's registration drive and get-out-the-vote efforts.

"Their jaws would drop when they heard how many students we registered to vote," Petkun said.

He said one of the most frequently asked questions from state legislators when talking about student issues is how many students are even registered to vote.

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LAUREN WIMER | SENIOR PHOTOGRAPHER

Pumping a small red ball to increase blood flow, freshman Tiffany Liewer donates blood on Friday for the first time at the third annual Civil War Blood Drive.

### Student turnout grows at Civil War Blood Drive

The University looks to go 2-1 in the third annual donation competition against rival Oregon State, which runs until Nov. 17

Visit www.lmbb.org for information about how to

get involved with the Lane County Memorial Blood

Bank. For information about American Red Cross.

donation opportunities, visit www.givelife.org.

BY KATE WEBSTER

As students make tailgating and post-game plans for Saturday's Civil War football game, some students are preparing for a different matchup between the University and its Corvallis rival. GET MORE

The Lane County Memorial Blood Bank and the American Red Cross are holding the third annual Civil War Blood Drive until Nov. 17. For the past week, these

two organizations, with the help of the University's Student-Alumni Relations Board, have volunteered on- and off-campus recruiting students and community members for the drive.

Volunteers have been stationed at the EMU and Bean Complex to assist blood donors by signing them up for the drive and escorting donors to and from the bloodmobiles.

Music major Jethro Higgins said the donation process was smooth and well worth his time.

"It is an easy yet worthy community service because it only takes an hour, but it can make a big difference," he said.

Junior Kerra Schmidt, SARB blood drive chair,

said she has noticed "a good student turnout this year" and that the blood drive's student turnout has grown each year.

The amount of students attending the drive this year leads me to believe that we could win the competition this year,"

Schmidt said. So far, the University has a 1-1 Civil War

Blood Drive record. "Every 24 minutes someone needs a blood

transfusion in Lane County and one donor has the ability to save three people's lives," Lane BLOOD, page 8