



NEWS from JOHN A. BURNS SCHOOL OF MEDICINE

University of Hawai'i at Manoa

March 2007



Ice: new UH studies show how it can kill

Young people who use the illegal stimulant crystal methamphetamine, known as "ice, more than triple their risk of cardiomyopathy, a disease of the heart muscle.

Dr. K.K. Yeo and colleagues from the John A. Burns School of Medicine examined records of 143 Honolulu men under the age of 45 hospitalized with serious heart problems, and found that 40% of them were users of "ice."

(Story continues on Page 2)

New vaccine may help end lower genital tract cancers



Hawaii women are participating in clinical trials on vaccines that could reduce the prevalence of the human papillomavirus (HPV) linked to genital warts, pre-cancer and cancer of the lower genital tract.

HPV infection is very common, with more than 70% of all women exposed to HPV at some point during their lifetime. There is no cure for HPV infection, although in most women the infection goes away on its own. But some high-risk forms of HPV could lead to cancers of the cervix, vulva, vagina, anus, or penis. *(Story continues on Page 3)*

A Message from the Dean

How does the Medical School help our community?

This newsletter describes a few ways: JABSOM researchers are pioneers in helping infertile couples conceive children; testing new vaccines for HPV infections; and finding how crystal meth use damages the heart and brain. You'll learn why a JABSOM scientist is called the "father of dengue research."

And read about how student Nikki Higa isn't even waiting to get her medical degree before unselfishly helping others.

Just a few reasons to be very proud of our John A. Burns School of Medicine.



GARY OSTRANDER
Interim Dean

JABSOM student Nicole Higa has used her life-saving skills, but not in the way you might think

During the Christmas break, the second-year JABSOM student was riding a shuttle van at the Turtle Bay Resort with her boyfriend, a medical student attending school in Michigan. The driver, an employee of Turtle Bay, suddenly lost control of the vehicle and the van began accelerating towards a woman pedestrian pushing a stroller.

Nicole and her boyfriend rushed from their seats, attempting to steer the van away from the woman, but the vehicle struck nearby trees. "At that point I blacked out and I don't remember anything after that," she says. Fortunately the woman and the baby in the stroller only suffered minor injuries. Nicole wasn't as lucky.



The speeding van was heading directly for a woman pushing her baby stroller.

The impact of the collision slammed Nicole into the windshield of the shuttle bus, fracturing several vertebrae, shattering her cheekbone, and severely cutting her scalp. Fortunately, the spouse of the near-victim was a vacationing paramedic from California and came to the aid of Nicole and her boyfriend, who was also seriously injured.

After several weeks in intensive care, Nicole is now back at school, out of her neck brace but still bearing scars of the crash and resulting surgery.

"I think we reacted in a way anyone would have in that situation. I'm just thankful no one was killed." she says.

UH leads the way on crystal meth studies

(Continued from Front Page)

The study, which appears in the *American Journal of Medicine*, represents the first scientific documentation of the profound cardiac effects of 'ice' on young people, say researchers in JABSOM's Department of Medicine.

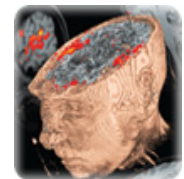
Another JABSOM study examined electrocardiograms of 158 adult users of crystal meth across the country, and found that more than 27% were suffering heart abnormalities. The study is being published in the April edition of the journal *Addiction* by **William Haning, MD, and Deborah Goebert, MD**, of JABSOM's Department of Psychiatry.

"We believe this is the first demonstration of clinical significant heart abnormalities among meth-users, and this information may be useful in motivating users to quit," says Dr. Haning.

Learn more

Other researchers at JABSOM are using cutting-edge technologies to track the effects of drug use on brain function in real time. Read about their pioneering efforts in the UH research magazine *Kaunana*, summer 2006 issue.

[Unlocking the Secrets of the Human Brain](#)



Helping Southeast Asia fight AIDS

JABSOM'S AIDS Clinical Research Program now reaches internationally with the recent opening of an office in Bangkok, Thailand - a partnership with the Thai Red Cross AIDS Research Centre and the U.S. Armed Forces Research Institute of the Medical Sciences. JABSOM's **Cecilia Shikuma, MD** (center of photo, in the white coat) took part in its ribbon-cutting ceremony.

New vaccines may alter women's medical care

(continued from Front Page)

JABSOM researchers **Santosh Sharma, MD and Lori Kamemoto, MD, MPH**, are Hawaii principal investigators for two large multi-site international HPV vaccine trials. They have been conducting these clinical trials at the UH Medical School for the past three years, including studies on the first federally-approved HPV vaccine.

"The HPV vaccine is the most exciting news in women's health care in the past few years, and we are grateful that Hawaii women were able to contribute to these studies," says Dr. Kamemoto, a member of the Departments of Medicine and Obstetrics & Gynecology.

Annual Pap smear screening and genital wart treatment accounts for a large proportion of gynecology patient visits in the United States. The cost of the management of abnormal Pap smears is more than \$3 billion, and the management of genital warts is more than \$160 million per year in the U.S.

**"... the most exciting news
in women's health care in years"**

Dr. Kamemoto says this is expected to change in the next decade or so, as HPV vaccine use will likely alter Pap smear guidelines due to the decreasing prevalence of HPV related disease. New HPV vaccine studies and studies in men are also underway, and these results will be available in the coming years. Especially important is the potential for HPV vaccines in resource-poor countries where cervical cancer is the first or second most common cancer in women, and there is minimal access to Pap smear screening.



Medicine ball-ers

Medical students make time for play, too. **Joan Delto, MS2**, fires off a shot just beyond the reach of **Sean McElligott, MS2**, and also tends to a fellow player's sprained finger.

First- and second-year JABSOM students compete in a community medical basketball league.

Photos by **Justin Young, MS2**



Got ideas for future newsletter items? Send them to:

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JABSOM in the news

In vitro not risky, study finds

Star  Bulletin .com
February 26, 2007



A Hawaii researcher's work shows that tools for fertilization do not increase genetic disorders

Couples using in-vitro fertilization or other assistive techniques to have children need not fear increased genetic risks from mutations, Hawaii and Texas researchers reported today. Results of a study examining reproductive technologies and mutations in mice "should reassure couples that these techniques do not lead to any increased risk of genetic abnormalities," said [Dr. Ryuzo Yanagimachi](#), University of Hawaii professor emeritus.

THE STRAITS TIMES

Singapore

February 18, 2007

Once bitten, twice shy? Not for this Dengue Man

He is dubbed the father of dengue research and was among key experts called in to help deal with Singapore's worst ever dengue outbreak in 2005. Professor [Duane Gubler](#) talks on how being bitten by mosquitoes and catching the disease are all part of a day's work

Professor Duane Gubler knows exactly how it feels like to be a research monkey - the man better known as the father of dengue research was infected with dengue himself in a lab experiment gone wrong.

In 1972, a year after he began his career in dengue research at the faculty of tropical medicine and medical microbiology in the University of Hawaii School of Medicine, he was trying to coax a dengue-infected mosquito to bite a monkey when it turned on him.



HawaiiBusiness

February 2007

Photo by Cory Lum

MEDICINE FOR DUMMIES

Stan, short for "Standard Man," is the latest and greatest in medical training mannequins. With all his wonderful traits, Stan is putting the University of Hawaii's John A. Burns School of Medicine (JABSOM) at the forefront of the latest medical school trend.

Star  Bulletin .com

Monday, March 12, 2007

UH biologist lauded for research

A new gene therapy technique published by the **University of Hawaii** and **Medical College of Georgia** researchers is one of the top 10 in a list of the 100 most influential publications in the field last year. In seventh place was a paper published by [Dr. Stefan Moisyadi](#), molecular biologist in the Institute of Biogenesis Research, John A. Burns School of Medicine, and [Dr. Joseph M. Kaminski](#), radiation oncologist at the Medical College of Georgia Cancer Center. The work of Moisyadi and Kaminski "has implications for the gene therapy process by which human diseases are treated by introducing new genes in their DNA," said W. Steven Ward, interim director of the Institute for Biogenesis Research.

