CTAHR RE EARCHNEWS May-June 2006 Volume 2, Issue 5

Hawaii watershed research

CTAHR's international activities

Successful grantees

> Dr. Ali Fares works stream-side.

### In this issue

CTAHR's international
connectionsp3
Watershed work p 4
Grants workshop
continues
Winning grants p 9
New grants
New publications p 12



### CTAHR Office of Research

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## From the Associate Dean and Associate Director for Research

n the last four issues of CRN (follow this link to read about these programs Lifyoumissedanyofthem<u>http://www.</u> ctahr.hawaii.edu/ctahr2001/Research/ ResearchNews.html), we featured four very different programs, but with one common thread: partnership. All four programs are comprised of a team of dedicated faculty, staff, and students, and all four have internal and external collaborators to deliver truly integrated programs in research, instruction and extension. This issue is no exception. With less than four years of service, Dr. Ali Fares is one of our newer faculty members in CTAHR. He has done an excellent job in the classroom, as well as bringing in many grants and contracts to support his research program. He has built a productive team with international flavors to tackle local watershed problems, in partnership with many community groups. As you will see in his article, there are many other CTAHR colleagues working in close collaboration with him.

Speaking of international flavors, we have had a lot of overseas visitors in the last month. CTAHR used to have a half-time coordinator to manage our international programs, but since the departure of Dr. Hal McArthur – our last coordinator – our international programs have suffered. Great potential exists for CTAHR to expand our international programs, and we bring you up-to-date on recent activities in our international exchange agreements. If you've been watching the news lately, you must have noticed that taro is again a focus. We are reaching out to the Native Hawaiian communities and working to find a solution to resolve taro issues. We will give you a progress update in the next issue of *CRN*.

As we near the end of the fiscal year, Doug Vincent is happy to announce that we have exceeded previous year's grants/contracts total (we still have one month to go!) and will present a complete analysis in the next issue.

As we enter the summer months, many faculty, staff, and students are picking up speed to conduct research work, while others are planning or taking summer vacations. *CRN* will also take a summer vacation, and will return again in August. Whether you are working or taking a well-deserved break, have a safe and enjoyable

summer!



Ching Yuan (CY) Hu Associate Dean and Associate Director for Research

# CTAHR reaches out beyond Hawaii's shores with international programs

#### By CY Hu

Associate Dean and Associate Director for Research

International programs is an integral part of CTAHR's academic programs. We have many international students enrolled in both our undergraduate and graduate degree programs. Our faculty maintain close working relationships with colleagues from other countries through collaborative research projects. CTAHR currently has international exchange agreements with 14 academic institutions, and while half of these exchange agreements were signed in the late 70's and early 80's, there has been no recent activity since the signing of these memorandums of understanding (MOU).

While accompanying Governor Lingle to the Philippines earlier this year, Dean Hashimoto signed two new MOU's with University of Philippines, Los Banos (UPLB), and Mariano Marcos State University (MMSU). MMSU's Vice Chancellor for academic affairs, Dr. Nancy Balantac, visited CTAHR on May 15, 2006. Dr. Balantac is working with our Associate Dean for Academic and Student Affairs, Dr. Charly Kinoshita, to prepare a meeting agenda in preparation for a visit by MMSU Board of Regents and university administrators in late July. CTAHR has many faculty and staff with UPLB connections and we anticipate that great collaborations will be forged in coming years.

On May 2, 2006, we signed another memorandum of understanding with the National Pingtung University of Science and Technology (NPUST) in Taiwan. NPUST's president, Dr. Chang-Hung Chou, visited Manoa campus and participated in the signing ceremony with Interim Chancellor Konan (photo). While he served as CTAHR's assistant dean for Cooperative Extension, Dr. Po-Yung Lai – the current vice president for academic affairs of NPUST - was instrumental in establishing the original MOU. Several of our faculty members have visited NPUST, including Dr. Brewbaker, who spent one semester there on his sabbatical leave. NPUST provides free housing and some stipends to CTAHR faculty who wish to spend their sabbatical year there, and NPUST also offers two scholarships for CTAHR students who wish to spend one year studying at its campus.



President Chang-Hung Chou of Taiwan's National Pingtung University of Science and Technology and Manoa Interim Chancellor Denise Konan.

Reciprocally, NPUST will be sending 15 students to our campus for a three-week study tour this summer, and a second group of graduate students will also visit Hawaii – including CTAHR – this summer as a part of their graduation tour. Dr. Lai is working with us to develop a new program to allow NPUST graduate students to spend one to two years in CTAHR laboratories for their graduate training. NPUST is also very interested in developing a dual degree program with UHM. We are very excited about the many new opportunities this exchange agreement created for our faculty and students, and it serves as a good model for expansion of our international exchange programs with other institutions.

Drs. Sylvia Yuen, Robert Paull, and Qing Li were also fostering international exchanges as they visited five Chinese universities last summer. We have invited these five universities to send their delegations to visit us and expect their visits later this year and early next year.

International exchange programs not only promote collaborations but also enrich our lives because there is so much to learn from each other on both professional and personal levels. As a college, CTAHR continues to encourage our faculty, staff and students to engage in the international activities.

# Protecting Hawaii's watersheds and riparian environment with the latest science and a dedicated team

#### By Ali Fares

### Associate Professor, Natural Resources and Environmental Management (NREM)

I goes without saying that we must protect our fresh water systems in Hawaii, but few really understand the mechanics of how our water systems get recharged. Looking into the watershed of Manoa, or those surrounding Hilo or in the highlands of Kauai, one might think that the abundance of greenery means the ground over our water channels to streams or into aquifers is protected – but, that might be a faulty assumption! I would like to share some basics of watershed hydrology and introduce you to our projects and our project team.

Upon taking a closer look at the ground cover in our watersheds and next to rivers, we discovered that trees alone are not enough to protect the soil from the high velocity impact of water droplets. And, if those trees or other ground cover are not native, they may not protect the soil like endemic species often do.

When it rains, water percolates into the soil, through volcanic rock, and into a groundwater aquifer but in this case it takes about 20 years for a surface drop of water to reach the underground aquifer. (I suspect you would not wait that long for a cup of coffee!) On the way down, water is "scrubbed" of pollutants and impurities through their adsorption to vadose zone soil minerals and/or bio-degradation. As you might imagine, each time it rains it is important to slow the speed at which rain water travels along the ground to: 1) allow time for it to infiltrate into the soil if the ground is not already saturated, and 2) reduce soil erosion so that soil is not carried into streams, and eventually the ocean. Natural processes take more than 100 years to create just one inch of soil, and having one inch of soil ending up on a reef can extinguish reef life, like coral, for a long time, if not forever. Because it is critical to keep soil covered and our water systems as nutrient-free as possible, we are investigating watershed character and behavior so that we might formulate some options for better management.

One of our Kauai projects is focused on comparing the performance of native and invasive species in the watersheds surrounding Hanalei Bay as riparian buffer vegetation for adjacent streams and consequently on their impact on erosion and surface and groundwater quality. The two photos (below) illustrate this point. In the left bird's-eye image, the trees give the impression that the ground might be covered, so rain falling through



From the air it looks like the ground is covered, but . . .



... not necessarily.

the trees would not lead to soil erosion. However, the right image, which is a ground view of the same plot, shows only a canopy and exposed soil that is susceptible to erosion. In this case, when it rains the soil is eroded and transported by the surface runoff into the adjacent stream. This is the type of situation we are trying to understand and demonstrate sustainable ways on how to remediate.

In Makaha Valley on O'ahu, CTAHR is working in partnership with *Mohala I ka Wai*, a community group, and the Honolulu Board of Water Supply. CTAHR is represented by a multi-disciplinary team that includes Dr. Jonathan Deenik, Dr. Tomoaki Miura and myself. The main emphasis here is on the effects of water pumping and invasive species on the stream flow and groundwater resources of a leeward watershed in the island of Oahu. Our upcoming T-STAR video (right) gives you a more comprehensive look at this exciting project. Check here in a few weeks http://www2.ctahr. hawaii.edu/t-star/TSTARHilitePage.htm.

In another effort, we are conducting a long-term water management project. Data from this project will allow us to first develop irrigation water management programs for different vegetable and fruit crops to optimize their yield, and then to help minimize excess water, nutrients and pesticide losses below the rootzone.

The last project our team is working on is a statewide agricultural water use study. It is another multidisciplinary effort that involves six NREM faculty and is led by Dr. Carol Ferguson, Dr. Tomoaki Miura and myself. Federal and State funds support this project and the results will help the Hawaii Department of Agriculture and Hawaii Commission on Water Resource Management develop current and future agricultural irrigation water demands for ten major irrigation systems across the state of Hawaii.

These field research activities are complemented with a strong numerical modeling component across a wide range of temporal and spatial scales. This modeling effort is supported by different projects, among them a project funded by National Oceanic Atmospheric Administration (NOAA) that aims to evaluate the performance of N-SPECT. N-SPECT is a watershed model developed by NOAA as a management tool. Using field measured data, it evaluates the effect of land use changes on pollutant movement through coastal watersheds. This project builds and expands on the watershed modeling work that I am conducting



Our watershed video will be available soon!

in Hanalei. This project is USDA-NRCS funded, and complements a multi-disciplinary effort of many federal, state, and Kauai County Agencies including USGS, NOAA, USDA-NRCS, and community groups. The main goal of this work is to evaluate the performance of a decision management tool – AnnAGNPS – a watershed model that will be used to establish best management practices for different Hawaiian watersheds.

In order for us to handle all these critical water related tasks, a competent team and supportive colleagues are key. The Watershed Hydrology Laboratory benefits from the expertise of many people, including: Dr. Ahmet Dogan, a visiting hydrology professor from the University of Suleyman Demirel University, Turkey; Dr. Akitsu Kimoto, a post-doctoral researcher visiting from Japan; and Dr. Ted Radovich, an assistant researcher from Hawaii. These colleagues have been actively contributing to the different research, teaching and outreach activities of the Hydrology Lab. Mr. Hamdhani, as research associate, has been very instrumental in providing support to most the Hydrology Lab research team. Alan Mair (PhD student) is leading the hydrology component of the Makaha project with the help of NREM's Nghia Tran and Domingos Maria, Research Assistants funded through the McIntire Stennis Project. Mohammad Safeeq and Amjad Ahmed, two PhD students, are working on improving the accuracy of different soil water measuring sensors and water flow and solute transport in the field, respectively. Ms. Chui Leng, a graduate student, is working on the NOAA project with the help of Gongbu Zhaxi and Greg Grigson, two graduate students at the Watershed Hydrology Laboratory. I am very fortunate to have the people in the picture below, to help with the science and recommendations stemming from our collective work. It is our sincere hope that our work can impact planning decisions for a long time to come.

### Ali Fares

Hometown: Manzel BelOuaer, Tunisia Joined CTAHR: 2002 Educational History: BS Horticultural Engineering, University of Susa, Tunisia, 1984; MS Agronomy and Computer Science, University of Florida 1990; PhD Hydrologic Science, Soil & Water Science Department, University of Florida 1996. Specialization: Watershed Hydrology Current Work: Associate Professor of Watershed Hydrology Languages spoken: Arabic, English and French





Front (L-R): Gongbu Zhaxi (China), Dr. Akitsu Kimoto (Japan), Chui Ling Cheng (USA). Middle (L-R): Domingos Maria (East Timor), Hamdhani (Indonesia), Dr. Ahmet Dogan (Turkey), Amjad Ahmad (Iraq), Dr. Ted Radovich (USA), Dr. Ali Fares (Tunisia), Nghia D. Tran (Vietnam), Mohammad Safeeq (India). Back (L-R): Alan Mair (USA), Greg Grigson (USA).

### Amjad Ahmad

Hometown: Mosul, Iraq Joined CTAHR: 2003 Educational history:

B.Sc. Crop Science, University of Mosul, Iraq; MSc. Crop Science, University of Mosul, Iraq

Specialization: Field crop production and

statistics Current work: Research assistant, Natural Resources and Environmental Management Languages spoken:

English, Arabic

#### Chui Ling Cheng Hometown: San Jose, California

- Joined CTAHR: August 2005 (as a graduate student in NREM)
- Educational history: BS, Biological
- Science, UC Davis Specialization:

Hydrologic modeling Current work:

Evaluating performances of

N-SPECT and AnnAGNPS

Language spoken:

English, Cantonese

### **Ahmet Dogan**

- Home country: Turkey Joined CTAHR: 2006 (visiting faculty member from Suleyman Demirel University, Isparta, Turkey).
- Educational history: BS (1991), Civil Engineering, METU, Ankara, Turkey; MS (1993) Civil Engineering (Hydromechanics), METU, Ankara Turkey; PhD (1999) Civil Engineering (Water Resources Research), University of Florida, Gainesville, FL.

Specialization: Water Resources Engineering, Surface-Subsurface Hydrology, Groundwater Modeling. Current work: Research Associate Languages spoken: English, Turkish

anguages spoken: English, Turkish

### Hamdhani

Hometown: Palangkaraya, Indonesia Joined CTAHR: 2005 (as a research assistant)

- Educational history: BS, Agricultural Social & Economic, University of Palangkaraya (Indonesia); MS, Natural Resources and Environmental Management (Hydrology), UH Manoa
- Specialization: Electromagnetic soil water content sensor calibration and installation.
- Current work: Specialist in hydrological instrumentation in the Watershed Hydrology Laboratory, Dept. of NREM-UH Manoa

Languages spoken: Indonesian, English

### **Alan Mair**

Hometown: Kailua, Hawaii Joined CTAHR: 2004 (started PhD program) Educational history: BS Electrical Engineering, University of California, Santa Barbara MEng Environmental Engineering, California Polytechnic State University, San Luis Obispo Specialization: Watershed hydrology Current work: Research assistant, Mākaha valley watershed study

Languages spoken: English, Tagalog

### Domingos Maria Hometown: Dili, East Timor

Joined CTAHR: May 2006

Educational history: BS, NREM, UH Manoa, 2006

Specialization: Hydrology

- Current work: Field and Laboratory Technician of Upper Makaha Valley Watershed Study
- Languages spoken: English, Indonesian, Tetum, Kemak and a bit of Portuguese

### Theodore (Ted) J.K. Radovich

Hometown: Waimanalo, Hawaii Joined CTAHR: 1991 as an undergraduate. Most recently, 2004.

- Educational history: Ph.D., Horticulture and Crop Science, The Ohio State University; M.Sc. Horticulture, UH Manoa; B.Sc., Horticulture, UH Manoa.
- **Specialization:** Ecology, physiology and quality of vegetables and other high value crops.

Current work: Assistant Researcher in Hydrology. Languages spoken: English, Gambian Mandinka

### Mohammad Safeeq

Hometown: Siddharth Nagar Joined CTAHR: 2006 (as a graduate student) Education history: BTech, Agricultural Engineering, CSA University Kanpur (India); MTech, Agricultural Systems and Management, IIT Kharaqpur(India). Specialization: Hydrology Current work: Pursuing PhD in the department of NREM Language spoken: English, Hindi, Urdu

### Securing and Managing Extramural Funding: contini **A Workshop Series for Faculty**

Tuesdays, 2-4 pm; Ag. Sci. 219

#### **Jun 13 Compliance Issues**

Human and animal subjects, recombinant organisms, hazardous materials. importation of organisms Bill Dendle, Norman Magno, Denise Yee, Roy Takekawa, Hubert Olipares, Irene Sakimoto, Mark Burch

### **Jul 11 Post-Award Paperwork and Procedures**

Hiring personnel, purchasing supplies and equipment, travel, project recording, FTE certification, and CRIS reports Janice Muraoka, Pua Fisher, Jan Tatsuguchi, and Terri Hee

### Aug 08 Defining and Writing **Objectives and Hypotheses**

Hands-on writing and critiquing objectives and hypotheses (limit 12)Brian Turano

### Sep 12 Generating Measurable **Outputs and Impacts**

Introduction to the Logic Model and follow-up exercise to draft outputs and impacts for your project (limit 12) Doug Vincent and Brian Turano

**Oct 10 Building a Compelling Case** Stresses the importance of finding supporting statistics, a concise primary literature review, and a strong significance statement (limit 12) Brian Turano

### Nov 14 Experimental Design/Methods

Rationale, approach, methodology, expected results, potential problems, alternative approaches, and summary of impacts (limit 12) Brian Turano

### Dec 12 Abstracts

Presentation of the key elements of an abstract, followed by a hands-on exercise (limit 12) Brian Turano

### **Another great funding year for CTAHR!**

### By Doug Vincent

**Special Program Director for Grants and Contracts** 

lthough the "grant season" is winding down CTAHR faculty are still bringing in the "bucks." To date, CTAHR has exceeded \$19.6 million dollars in extramural grants and contracts this fiscal year. This is the second best year in CTAHR's history and we still have over a month to go in the fiscal year. While it is doubtful that we will reach the \$24 million dollar level we saw in FY 2004, what is gratifying about this year is that we are way ahead of the total number of awards over previous years. To date, we've had 150 awards -17 ahead of last fiscal year. The message in these numbers is that more and more of you are out there "fishing" and being successful. Fiscal year 2004, our record year, was punctuated by several very large dollar amount grants, e.g. the USAID Iraq grant. While we like to see BIG grants and contracts, it is also very important that we see MORE grants and contracts, and that's what you've done this year. We've had a very good year and the year's not over yet. Funding agencies don't just give us money: we have to go after it and we have to earn it. We are earning their trust. As our programs get stronger and develop strong track records on fulfilling expectations, reaching objectives and making impacts, we have less to prove with the funding agencies. But the work is not done when we get the funds - we must deliver and have impact - that's the agreement we make with the funding agency. Think of it in terms of a "Bond Rating" or a "Credit Score." As we (both as individual principal investigators and as a College) do better, the funding agencies recognize that we are folks who can deliver, and we represent less of a risk. Congratulations to these new grant recipients and congratulations to CTAHR for working so hard to bring in the "bucks." Below are new grants received since we last reported them:

### **Grace Fong (COF)**

Learning to Grow, 2006-2007. *Hawaii Department of Human Services.* \$588,156.

### Mike Kawate (PEPS)

2005 Minor Use Pesticide - Western Regional IR-4. *University of California – Davis*. \$44,700.

### Qing Li (MBBE)

Minor Use Pesticide Research-Western Region IR-4 (Hawaii). *University of California – Davis*. \$45,000.

### **Arnold Hara (PEPS)**

Chemical Management of the Invasive Erythrina Gall Wasp, Quadrastichus erythrinae Kim, (Hymenoptera: Eulophidae) on Native and Landscape Erythrina spp. *Hawaii-DLNR*. \$29,500.

### Hot, fresh grants!

U.S. Department of Agriculture Food and Nutrition Service WIC Special Project Grant Program Deadline: June 5, 2006 http://www.fns.usda.gov/oane/MENU/DemoProjects/ WICSPG/WICSPG.htm

U.S. Department of Justice National Institute of Justice Research & Evaluation on the Abuse, Neglect, and Exploitation of Elderly Individuals, Older Women and Residents of Residential Care Facilities Deadline: June 6, 2006 http://www.ncjrs.gov/pdffiles1/nij/SL000746.pdf

U.S. Department of Agriculture Risk Management Agency Research and Development Risk Management Partnership Deadline: June 8, 2006 http://www.rma.usda.gov/news/2006/04/rfard.html

U.S. Department of Agriculture Rural Development Distance Learning & Telemedicine Program Deadline: June 12, 2006 http://www.grants.gov/search/search. do?oppId=9045&mode=VIEW

U.S. Department of Agriculture Western Regional Sustainable Agricultural Research and Education (SARE) Research and Education Program Deadline for Pre-applications: June 14, 2006. http://wsare.usu.edu/grants/docs/req\_re\_07.pdf U.S. Department of Agriculture Human Nutrition and Obesity, NRI Deadline: June 15, 2006 http://www.csrees.usda.gov/fo/fundview.cfm?fonum=1095

U.S. Department of Agriculture Animal Genomics, NRI Deadline: June 15, 2006 http://www.csrees.usda.gov/fo/fundview.cfm?fonum=1066

U.S. Department of Agriculture Plant Biosecurity, NRI Deadline: June 15, 2006 http://www.csrees.usda.gov/fo/fundview.cfm?fonum=1521

U.S. Department of Agriculture Air Quality, NRI Deadline: June 15, 2006 http://www.csrees.usda.gov/fo/fundview.cfm?fonum=1062

National Science Foundation Plant Genome Comparative Sequencing Program Deadline: June 16, 2006 http://www.nsf.gov/publications/pub\_summ.jsp?ods\_ key=nsf06555

U.S. Environmental Protection Agency Consequences of Global Change for Air Quality Deadline: June 20, 2006 http://es.epa.gov/ncer/rfa/2006/2006 star gcaq.html

Centers for Disease Control Diabetes Prevention and Control in the Americas Deadline: June 20, 2006 http://www.cdc.gov/od/pgo/funding/DP06-001.htm

U.S. Department of Health and Human Services Administration on Aging National Resouce Centers on Older Indians, Alaska Natives and Native Hawaiians Deadline: June 30, 2006 http://www.aoa.gov/doingbus/fundopp/fundopp.asp

U.S. Fish and Wildlife Service National Coastal Wetlands Conservation Grant Program Deadline: June 30, 2006 http://www.fws.gov/coastal/CoastalGrants/pdfs/ grantsgovcwg07.pdf

U.S. Agency for International Development Central African Regional Program for the Environment Landscape Program Implementation 2006-2011 Deadline: June 30, 2006 http://grants.gov/search/search. do?oppId=9297&mode=VIEW Louis R . Cappelli Foundation Programs Serving At-Risk Youths Deadline: June 30, 2006 http://www.cappelli-inc.com/lrc.shtml

U.S. Department of Agriculture Foreign Agriculture Service Technical Assistance for Specialty Crops Program Deadline: July 1, 2006 http://www.grants.gov/search/search. do?mode=VIEW&oppId=7869

U.S. Department of Commerce National Oceanic and Atmospheric Administration Climate Program Office Deadline: July 25, 2006 http://grants.gov/search/search. do?oppId=9283&mode=VIEW

National Science Foundation Science and Society Deadline: August 1, 2006 http://www.nsf.gov/publications/pub\_summ.jsp?ods\_ key=nsf05588

U.S. Environmental Protection Agency Fate and Effects of Hormones in Waste from Concentrated Animal Feeding Operations (CAFOS) Deadline: August 9, 2006 http://es.epa.gov/ncer/rfa/2006/2006\_star\_cafos.html

Centers for Disease and Control Childhood Agricultural Safety and Health Research Deadline: August 16, 2006 http://grants1.nih.gov/grants/guide/rfa-files/RFA-OH-07-002.html

Balance Bar Food Company Community Grants Deadline: August 30, 2006 http://www.balance.com/grants/GrantTemplate.aspx?type =2&entryid=2&m=modules/rules

National Fish and Wildlife Fund U.S. Department of Agriculture Natural Resource Conservation Service Conservation on Private Lands Deadline for Pre-proposals: September 1, 2006 http://www.nfwf.org/programs/nrcsnacd.cfm

Environmental Literacy Grants Deadline for Letter of Inquiry: September 1, 2006 http://www.starbucks.com/aboutus/grantinfo.asp?cookie %5Ftest=1&fav%5Ftest=1

Laura Jane Musser Fund Collaborative Process in Environmental Decision Making Deadline: September 5, 2006 http://www.musserfund.org/environmental.htm

### Laura Jane Musser Fund Rural Initiative (Hawaii is a specific target) Deadline: September 5, 2006

http://www.musserfund.org/rural\_initiative.htm

U.S. Fish and Wildlife Service Partners for Fish and Wildlife Program Deadline: September 30, 2006 http://www.fws.gov/partners/pdfs/grantsgov06partners.pdf

U.S. Department of Commerce National Institute of Standards and Technology (NIST) Small Grants Program Deadline: September 20, 2006 http://www.grants.gov/search/search. do?oppId=7452&mode=VIEW

Laura Jane Musser Fund Intercultural Harmony Deadline: October 10, 2006 http://www.musserfund.org/intercultural\_harmony.htm

U.S. Department of Agriculture Animal Biosecurity Coordinated Agricultural Projects (CAP) Deadline: October 31, 2006 http://www.csrees.usda.gov/fo/fundview.cfm?fonum=1522

U.S. Department of Agriculture Western Regional Sustainable Agricultural Research and Education (SARE) Professional Development Program Deadline: November 1, 2006 http://wsare.usu.edu/grants/docs/req\_pd\_07.pdf

National Gardening Association Home Depot Youth Garden Grant Program Deadline: November 1, 2006 http://www.kidsgardening.com/grants.asp

U.S. Department of Agriculture Western Regional Sustainable Agricultural Research and Education (SARE) Farmer Rancher Grants Deadline: December 6, 2006 http://wsare.usu.edu/grants/docs/req\_fr\_07.pdf

U.S. Department of Agriculture Western Regional Sustainable Agricultural Research and Education (SARE) Professional + Producer Grants Deadline: December 6, 2006 http://wsare.usu.edu/grants/docs/req\_pp\_07.pdf U.S. Environmental Protection Agency Office of Research and Development Broad Agency Announcement Conferences, Workshops and/or Meetings Deadline: January 18, 2007 http://www.epa.gov/ord/grants\_funding/pdfs/BAA conferences\_011806.pdf

U.S. Department of Defense Defense Advanced Research Projects Agency (DARPA) Defense Sciences Research and Technology Deadline: Open (through February 9, 2007) http://www.grants.gov/search/search. do?mode=VIEW&oppId=8019

### Important items in the calabash

1. New Policy on Industry Sponsored Research Agreements.

Per memo from Jim Gaines, Interim VP for Research and effective immediately, the <u>UH Office</u> of <u>Technology Transfer and Economic Development</u> will review and negotiate sponsored industry research agreements between the University of Hawaii and any external private industry sponsors, under the following circumstances:

- a. Research Agreements funded solely with private industry monies.
- b. Paid for solely with federal flow-through Small Business Innovation Research (SBIR) funding.
- c. Paid for solely with federal flow-through funding from the Small Business Technology Transfer (STTR) program
- d. Paid for with a combination of funding as described in items a.-c.

### 2. Getting ready for Grants.gov

Winston Churchill is quoted "Better to take change by the hand, before it takes you by the throat!" Mandatory migration to Grants.gov and on-line submission of grant proposals to federal agencies is in progress. Many federal agencies are already accepting proposals through Grants.gov. Many more will be moving to Grants.gov for the next funding cycle, including USDA. As described in the April 2006 CTAHR Research News, Grants. gov has a robust search engine for searching for federal funding. Once you have located a grant opportunity for which you wish to apply, you must check to see if it is available to apply online. To apply on line, the first step is to download the PureEdgeViewer. Once you download the viewer, you can download the RFA and you can view

and complete the application forms online. Once completed you can submit the proposal electronically to ORS for approval and to the funding agency. For more information, go to the ORS web site or visit the Grants. gov <u>Visual Guide</u>.

 The Office of Research Services has announced a new version of the ORS Form 5 effective immediately. You can find the new ORS form 5 at this web site: http://www.hawaii.edu/ors/filecabinet\_forms.html. If you have past forms "bookmarked" on your browser, please replace them with the current forms found at the web site. ORS explained that these forms were revised to include new certifications for Principal Investigators for Grants.gov proposal submission. ORS is now required to have specific language to verify accuracy on file with each proposal submission.

### Faculty publications hot off the press!

### **Greg Burland (NREM)**

Bruland, G.L., and C.J. Richardson. 2006. An Assessment of the Phosphorus Sorption Capacity of Wetlands in the Painter Creek Watershed, Minnesota, USA. *Water, Air, and Soil Pollution* 171:169-184.

### **David Christopher (MBBE)**

Lau, T.S.L., Eno, E., G. Goldstein, G. C. Smith, C. and Christopher, D.A. (2006). Ambient levels of UV-B in Hawaii combined with nutrient deficiency decrease photosynthesis in near-isogenic maize lines varying in leaf flavonoids: Flavonoids decrease photoinhibition in plants exposed to UV-B. *Photosynthetica*, 44(3): 394-403.

### John Griffis (TPSS)

Griffis, J., and M. Manners. 2005. Inheritance of fruit color in Surinam cherry (Eugenia Uniflora L.) – A preliminary study. *Proc. Fla. State Hort. Soc.*, 118:198-199.

### **Christi Hardy (NREM)**

Hardy, Christi, Steven Y. Nagano, and Michael Robotham. 2006. Docent Manual Development for the Oahu Urban Garden Center. *Journal of Extension*, April 2006, 44(2), Article number 2TOT3. http://www.joe.org/joe/2006april/ tt3.shtml

### **Russell Messing (PEPS)**

R. H. Messing and M. G. Wright. 2006. *Front Ecol Environ* 4(3): 132-140.

### Yong Li (HNFAS)

Mustapha, A. and Li, Y. 2006. Molecular Detection of Foodborne Bacterial Pathogens. In: J.H. Maurer (ed), *PCR Methods in Foods*, pp. 69-90, Springer, New York.

Fu, C.J., Carter, J.N., Li, Y., Porter, J.H., and Kerley, M.S. 2006. Comparison of agar plate and real-time PCR on enumeration of Lactobacillus, Clostridia, and total anaerobic bacteria in dog feces and the feasibility of bacterial DNA as a total rumen bacterial marker. *Letters in Applied Microbiology*, 42:490-494.

Li, Y., Zhuang, S., and Mustapha, A. 2005. Application of a multiplex PCR for the simultaneous detection of Escherichia coli O157:H7, Salmonella and Shigella in raw and ready-to-eat meat products. *Meat Science*, 71:402-406.

### Simone Prado (PEPS)

Prado, S., D. Rubinoff and R. Almeida. 2006. Vertical Transmission of a Pentatomid Caeca-Associated Symbiont. *Ann. Entomol. Soc. Am.*, 99(3): 577-585.

### **Daniel Rubinoff (PEPS)**

Rubinoff, D., and W. Haines. 2006. *Hyposmocoma molluscivora* Description. *Science*, (March 10, 2006) 311:1377.

### and finally . . .

Congratulations to Dr. Charlie Weems (HNFAS) on receiving the 2006 CTAHR Researcher of the Year award.

