

# CTAHR RESEARCH NEWS

March 2006  
Volume 2, Issue 3

**Studying Pacific  
Island nutrition**

**Grants, grants,  
grants**

**Improving  
Chinese taro**

**Dr. Rachel  
Novotny**





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# From the Associate Dean and Associate Director for Research

Taro is *the* hot topic lately in the college. Two bills prohibiting planting and propagation of transgenic taros – and therefore prohibiting research in laboratories, greenhouse and fields – were introduced in this legislative session. Fortunately, both bills were defeated on the Senate floor, but they did stir up a great deal of media attention.

The biggest on-campus interaction happened on March 2, 2006. A native Hawaiian group organized a demonstration in front of Bachman Hall, protesting the patenting of Hawaiian taros and demanding that UH “abandon” our three taro plant patents. At the core of the issue is the belief that Hawaiian taros are considered members of the Native Hawaiian family, and thus cannot be owned. Since these patents – representing *improvements* to taro, not *ownership* of taro itself – are owned by the university and administered by the Office of Technology Transfer and Economic Development (OTTED), President McClain has asked OTTED to work with the UHM’s Chancellor’s office and the General Counsel’s office to respond to this demand. In response to the demonstration, Dean Hashimoto issued a public statement (published by *Ka Leo* on March 9, 2006), clearly describing CTAHR’s positions on transgenic taros

and taro patenting ([http://www.kaleo.org/vnews/display.v/ART/2006/03/09/44108bd2a7914?in\\_archive=1](http://www.kaleo.org/vnews/display.v/ART/2006/03/09/44108bd2a7914?in_archive=1)).

For more than 100 years, CTAHR has conducted taro research for the benefit of growers and it is our obligation and responsibility to continue serving this small, but important, industry. We need to continue informing the public on what we are doing – and more importantly, *why* are we doing it – and we are working with various native Hawaiian organizations and taro growers to develop a solution that’s acceptable to all.

In this issue of *CRN*, the hot topics include: Susan Miyasaka’s (TPSS/Hawaii County) work on improving the disease resistance of Chinese taro; Rachel Novotny’s (HNFAS) nutrition research; and the latest on Brian Turano’s grant writing workshops. Thanks for reading *CRN*!



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

# Nutritional Assessments of Population (NAP) Program

By Rachel Novotny

Program Director and Professor, Human Nutrition, Food and Animal Sciences (HNFAS)

The Nutritional Assessment of Populations (NAP) program works to discover new paradigms for improving health, and focuses on the role of food patterns as it affects body composition, growth and development. Through collaboration and relationship-building, we believe that new findings will be discovered at the edges and intersections of established disciplines and boundaries.

Our primary tools are nutritional and dietary assessments, physical activity, growth and maturation. We study the biological, cultural and natural environments of ethnically and geographically diverse populations and work with communities and clinics using participatory processes, observation and experimentation. We also employ anthropologic and epidemiologic techniques in clinical and community-based settings to study biologic and lifestyle characteristics of ethnic groups (focusing on Hawaii and the Pacific region).

Through these studies, the program hopes to further understand the nutritional causes of variations in growth, maturation, body size and bone mass...all of which are important to the promotion of health and prevention of disease.

Our mission is to further understanding of nutritional and other causes of variation in growth, maturation, body size and bone mass that are important to promotion of health and prevention of disease. Our active projects are:

## Healthy Living in the Pacific Islands Initiative

The goal of this program is to decrease chronic disease through community based participatory methods.

## The Healthy Living in the Pacific Islands; Healthy Pacific Child Program

The goal of this program is to utilize community-based participatory methods to develop and test a food system intervention which will decrease obesity; and to develop a dietary tool to assess diets of children in the Pacific region.

**The Female Adolescent Maturation Cohort** study in collaboration with Dr. Loic LeMarchand of the Cancer Research Center. The goal of this longitudinal study is to identify nutritional and genetic factors influencing indicators of maturation, body composition and growth.

**University of Guam/Cancer Research Center of Hawaii Partnership** grant as a Co-investigator with Dr. Suzanne Murphy on a nutrition pilot study. The goal of the pilot study is to characterize dietary patterns and nutritional status of young adults in Guam.

**Healthy Living Hawaii Contract**, State of Hawaii, Dept. Health, Community Health Division. The goal of this study was to develop educational materials characterizing the nutritional properties of local fruits and vegetables.



**The NAP team:** Back (L-R) Jane Yakuma (USA), Ephrosine Daniggelis (USA), Rachel Novotny (USA), Donna Shaver (USA), Nicky Davison (England), Soo Kyung Lee (Korea), Yihe Daida (Singapore), Jason Wong (USA), Caryn Oshiro (USA) Front- Loic Le Marchand (France), Vickie Ramirez (USA), Rita Lee (Hong Kong), Vinutha Vijayadeva (India)

## Rachel Novotny

**Hometown:** Durham, New Hampshire and Belmont, Massachusetts

**Joined CTAHR: 1990**

**Educational history:** BS, Biology, Beloit College; MS, Nutrition, Cornell University; PhD, Cornell University

**Specialization:** International Nutrition

**Current work:** Professor and Researcher in Nutrition

**Languages spoken:** English, Spanish, Indonesian

# Working to improve disease resistance in Chinese taro

By Susan Miyasaka  
Agronomist, Tropical Plant and Soil Science (TPSS)

I grew up in Hawaii and so I am very familiar with both the commercial and historical aspects of taro. My parents fed me poi and laulau as a kid and I still eat taro today. That is why I am passionate about doing what I can to help growers improve their production of taro and help consumers have access to reasonably-priced, good quality taro. As a graduate student working on my Masters at UH back in the 1970's, I worked on Guava seed disease as it related to calcium nutrition. Today, as you can see in the video < <http://www2.ctahr.hawaii.edu/t-star/TSTARHilitePage.htm>>, I am working with a whole team of multi-talented people in a variety of organizations, to come up with solutions for disease-related production issues in Chinese taro.

This is not the only research project I am working on. In fact, I get excited to learn about improving plant nutrition and vigor in other growing systems. Here is a list of my current list of projects:

- 1) Green manures in dryland-grown taro to control root knot nematodes
- 2) Evaluation of conventionally-bred taro varieties for improved blight resistance and good quality poi and table taro
- 3) Inoculation of arbuscular mycorrhizal fungi to improve early growth and establishment of native tree species
- 4) Evaluation of pasture legumes for acid soil tolerance

One of the other projects for the future is on developing a long-term experiment to examine sustainability of specific cropping systems. These would include using taro, legumes, sweet potato and other crops in rotations. I am looking for plant combinations that give long-term sustainability to crop production as they relate to business, soil and environment.



## Susan Miyasaka

**Hometown:** Honolulu, Hawaii

**Joined CTAHR:** 1989

**Educational history:** HS, Kalani High, BS, UC Berkeley; MS, University of Hawaii; PhD, Cornell.

**Specialization:** Plant nutrition

**Current work:** A variety of research on taro and native trees, and sustainable production systems.

**Languages spoken:** English and un petit Francais



# Securing and managing extramural funding: a workshop for faculty

By **Brian Turano**  
Grants Specialist

Jimmy Cliff's refrain "You can get it if you really want, but you must try, try and try, you'll succeed at last," is good advice for faculty submitting grants in this competitive environment. Writing successful grants is a skill that can be learned.

Associate Dean and Associate Director of Research, C.Y. Hu enlisted my help to organize a workshop series to help you make it happen. Workshops will provide a foundation for obtaining and managing competitive extramural funding. Participants will learn how to: find funding opportunities; complete pre-award and post-award paperwork; draft a budget; craft a competitive proposal, hire personnel; manage grant funds; navigate the UH grant filing procedures; comply with Federal, State, and institutional regulations; and generate a proposal for electronic filing through Grants.gov. Workshop presenters include Pua Fisher, Keith Suyat-Terauchi, Allen Shinsato, and Diane Okubo from the Fiscal Office; Terri Hee and Jan Tatsuguchi from PMSO; Janice Muraoka from Personnel; Georgette Sakumoto, Paul Kakugawa, and Linda Lau from ORS; William Dendle from the Committee on Human Studies; Norman Magno and Denise Yee from the UH Regulatory Office; and Mark Burch and Irene Sakimoto from EHSO.

*“Writing successful grants is a skill that can be learned.”*

The 10 two-hour workshops take place monthly beginning March 14, 2006. The first five workshops (March-July) are open to all CTAHR faculty. The last five grant writing-specific workshops (August-December) are limited to 12 participants. The goal of these workshops is to enable faculty members to prepare a grant proposal for submission. Attendees must bring the appropriate section of their grant(s)-in-progress for the hands-on exercises. Registered participants will be notified *via* email on what to bring to the workshop. Priority will be given to new faculty members.

To register or for more information, contact Brian Turano ([turanob@cthar.hawaii.edu](mailto:turanob@cthar.hawaii.edu)).

Note: neighbor island faculty will be able to participate through POLYCOM video conference link.

## **Brian Turano**

**Hometown:** Westerly, Rhode Island

**Joined CTAHR:** 2003

**Educational history:** BS, University of Rhode Island; PhD, University of Hawaii

**Specialization:** Genetics and Molecular biology

**Current work:** Grant preparation, evaluation and training.

**Languages spoken:** English



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

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

- Mar 14 Finding Funding that Fits Your Interests**  
Introduction and series overview; online funding searches and dissecting RFPs  
*Brian Turano*
- Apr 11 Drafting Budgets**  
Discussion of budget categories, fringe and indirect rates, travel, allowable costs, subcontracts, cost sharing, and examples of budgets  
*Keith Suyat-Terauchi, Allen Shinsato, Diane Okubo*
- May 9 Pre-Award Paperwork and Procedures**  
Form 5, 5a, 5b, agency forms/certifications, electronic filing *via Grants.gov*  
*Paul Kakugawa, Georgette Sakumoto, and Linda Lau*
- 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*

## Bulletin Board

### New Indirect Cost Rates in Effect

On March 6, 2006, the Office of Research Services announced that new indirect cost rates are in effect immediately. To the extent possible, the new indirect cost rates should be used on all proposal submissions. ORS will continue to accept and process new proposals with the old rates through March 31, 2006, however, all proposals submitted on or after April 1, 2006 must utilize the new rates. For more information go to the ORS web site: [http://www.hawaii.edu/ors/filecabinet\\_rates\\_indirect.html](http://www.hawaii.edu/ors/filecabinet_rates_indirect.html). To read the official memo about this change go here: <http://www.hawaii.edu/ors/documents/rates/FNA2006Memo.pdf>

### ORS Interim Director, Chris Helm, resigns

Interim Director of the UH Office of Research Services Christopher Helm resigned, effective March 10, 2006, to take a position in the private sector. It is my understanding that Kevin Hanaoka, will resume the position of Interim Director and is to be designated as the Authorized Institutional Representative on any new grant proposals.

# Hurry, hurry, step right up – grants!

By Doug Vincent  
Special Program Director for Grants and Contracts

**M**ore and more grants!! Although our grant intake has tapered off a little bit, CTAHR's creative faculty are still bringing in extramural grants and contracts. It is our pleasure to report these recent extramural grants and contracts. In the past nine months of this 2006 fiscal year, CTAHR has brought in MORE extramural grants and contracts than we did in the ENTIRE FY 2005; over a million dollars more. FANTASTIC!! Since we last reported, CTAHR has received 14 more grants and contracts for \$2,105,173. To date, CTAHR has brought in 138 extramural grants and contracts for \$17,842,385! Please congratulate your colleagues; getting grants is hard work. My hope is that as you look through past editions of *CRN*, it will become obvious to you that we are all capable of getting extramural grants and contracts to support the important work that we do. It really doesn't matter whether you are an extension agent, an extension specialist, a professor, or a researcher: there is money out there to support your research or outreach work. But as my former statistics professor used to tell me, "You can't wait for the cow to back up to be milked." Success in receiving extramural grants and contracts is not a passive process – it requires effort. If your skill set needs refreshing or polishing, help is on the way! CTAHR's Grant Specialist, Dr. Brian Turano, is holding a series of workshops on grants and grant funding (see Page 5 and 6 for the topics and schedule). We encourage you to attend these workshops to help you in your quest to find funding. As before, the source of this list is the UH Office of Research Services database can be accessed at: [http://www.hawaii.edu/ors/filecabinet\\_reports.html](http://www.hawaii.edu/ors/filecabinet_reports.html). The database only lists PIs and excludes co-PIs and other cooperators, so we apologize for the oversight. We continue to appreciate the efforts in obtaining these funds and working on these projects. Take the time to thank and congratulate your colleagues. And if you've been successful, please consider mentoring or assisting a colleague with his or her grant applications.

**Dulal Borthakur (MBBE)**

*Analysis of a Hybrid Recombinant Protein to Increase the Specificity and Coverage of in Vitro Diagnostic Kits for Mycobacterium.*  
HCF-Leahi Trust. \$29,815.

**Kenneth Grace (PEPS)**

*Funding for Research of Mutual Interest*  
Department of Agriculture. \$14,000.

**Daniel Jenkins (MBBE)**

*A Model for Monitoring Ecological Impacts of a Plant Biosecurity Release Event Using Conventional and Novel Methodologies*  
DA-Dept of Agriculture. \$500,000.

**Charles Kinoshita (Admin)**

*Planning Grant for Transforming Agriculture and Environmental Technician Education in Hawaii*  
National Science Foundation. \$117,367.

**Tomoaki Miura (NREM)**

*Multi-sensor Translation of EOS Reflectance and Vegetation Index Products for Long Term Continuity with AVHRR: EOS Science Proposal*  
Nat'l Aeronautics & Space Administration. \$75,156.

**Norman Nagata (TPPS)**

*Identification and Control of Plant Pests and Diseases Affecting the Landscape, Turfgrass, and Golf Course Industries*  
Maui-Office of Economic Development. \$4,998.

**Robert Paull (TPSS)**

*Landscape Research*  
University of Hawaii Foundation. \$2,000.

*Solar Water Disinfestation for Produce Washing*  
Hawaii-Dept of Agriculture. \$29,982.

**Robin Shimabuku (PEPS)**

*Diamondback Moth Pesticide Resistance Management Program for Crucifer Growers on Maui*  
Maui-Office of Economic Development. \$5,000.

**Mark Wright (PEPS)**

*Initial Exploration (in Africa) and Genetic Work to Accelerate Efforts at Biological Control of the Erythrina Gall Wasp *Quadrastichus erythrinae* Kim*  
Tri-Isle Resource Conservation & Development Council. \$40,000.

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**Barbara Yee (FCS)**

Culture and Cancer Literacy Among Immigrant Women  
University of Illinois. \$15,600.

**Sylvia Yuen (CoF)**

*Memorandum of Agreement Relating to ADAD Prevention Services*

DOH-Alcohol & Drug Abuse Division. \$600,000.

*ADAD School Survey*

Hawaii-Dept of Health. \$596,255.

*2006 Hawaii Kids Count Plan Guidelines*

Annie E Casey Foundation. \$75,000.

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# Open grants!

U.S. Department of Agriculture  
Natural Resources Conservation Service  
Grazing Lands Conservation Initiative

**Deadline: April 3, 2006**

<http://www.nrcs.usda.gov/programs/glci/>

U.S. Department of Education  
Life Skills for State and Local Prisoners Program

**Deadline: April 3, 2006**

<http://a257.g.akamaitech.net/7/257/2422/01jan20061800/edocket.access.gpo.gov/2006/pdf/E6-2174.pdf>

U.S. Department of Health and Human Services  
Centers for Disease Control and Prevention  
Workplace Violence Prevention Research

**Letter of Intent Deadline: April 4, 2006**

<http://www.cdc.gov/od/pgo/funding/OH06-004.htm>

U.S. Department of Health and Human Services  
Substance Abuse and Mental Health Services  
Administration

Recovery Community Services Program

**Deadline: April 4, 2006**

[http://www.samhsa.gov/Grants06/RFA/TI\\_06\\_004\\_rcsp.aspx](http://www.samhsa.gov/Grants06/RFA/TI_06_004_rcsp.aspx)

U.S. Department of Agriculture  
Natural Resource Conservation Service  
Pacific Islands Area Conservation Innovation Grant FY  
2006

**Deadline: April 5, 2006**

[http://www.ctahr.hawaii.edu/vincent/NRCS\\_Pacific\\_Islands\\_Conservation.pdf](http://www.ctahr.hawaii.edu/vincent/NRCS_Pacific_Islands_Conservation.pdf)

U.S. Department of Health and Human Services  
Substance Abuse and Mental Health Services  
Administration

Treatment for Homeless

**Deadline: April 6, 2006**

[http://www.samhsa.gov/Grants06/RFA/TI\\_06\\_005\\_homeless.aspx](http://www.samhsa.gov/Grants06/RFA/TI_06_005_homeless.aspx)

U.S. Environmental Protection Agency  
Community Action for a Renewed Environment (CARE)

**Deadline: April 10, 2006**

<http://www.epa.gov/oar/grants/06-01.pdf>

National Science Foundation  
Postdoctoral Research Fellowships in Biological Informatics

**Deadline: April 10, 2006**

[http://www.nsf.gov/publications/pub\\_summ.jsp?ods\\_key=nsf04539](http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf04539)

U.S. Department of Agriculture  
National Integrated Water Quality Program - Conservation  
Effects Assessment Project

**Deadline: April 11, 2006**

[http://www.csrees.usda.gov/funding/rfas/conservation\\_effects.html](http://www.csrees.usda.gov/funding/rfas/conservation_effects.html)

U.S. Department of Agriculture  
National Integrated Water Quality Program

**Deadline: April 11, 2006**

[http://www.csrees.usda.gov/funding/rfas/water\\_quality.html](http://www.csrees.usda.gov/funding/rfas/water_quality.html)

## Test your knowledge of CTAHR Experiment Station History

Q1. In 1905, HAES planted 3 acres of cacao in Hilo. Where did they get the planting material and from whom?

Q2. In 1914, HAES employee, J. Edgar Higgins, was finishing up his leave, and then instructed to go where?

Q3. In 1915, HAES was doing work on litchi. How much was litchi selling for per pound back then?



U.S. Department of Interior  
National Park Service  
Federal Save America's Treasures  
**Deadline: April 18, 2006**  
<http://www.cr.nps.gov/hps/treasures/index.htm>

National Fish and Wildlife Foundation  
The Nature of Learning Start-Up Grants  
**Deadline: April 19, 2006**  
<http://www.nfwf.org/programs/tnol.cfm>

U.S. Agency for International Development  
Angola Agricultural Development and Finance Program  
**Deadline: April 21, 2006**  
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=7989>

Lance Armstrong Foundation  
Issues of Cancer Survivorship  
**Letter of Intent Deadline: April 24, 2006**  
<http://www.livestrong.org/atf/cf/%7BFB6FFD43-0E4C-4414-8B37-0D001EFBDC49%7D/2006%20issues%20of%20survivorship%20rfp.pdf>

U.S. Department of Agriculture  
Youth Farm Safety and Education Certification Program  
**Deadline: April 24, 2006**  
<http://www.csrees.usda.gov/fo/fundview.cfm?fonum=1093>

U.S. Department of Agriculture  
Food and Agricultural Sciences National Needs Graduate and Postdoctoral Fellowship Grants Program  
**Deadline: April 28, 2006**  
<http://www.csrees.usda.gov/fo/fundview.cfm?fonum=1280>

U.S. Agency for International Development  
Amazon Basin Conservation Initiative  
**Deadline: April 29, 2006**  
<http://www.grants.gov/search/search.do?mode=VIEW&oppld=8162>

U.S. Department of Agriculture  
Western Sustainable Agriculture Research and Education  
**Deadline: May 1, 2006**  
[http://wsare.usu.edu/grants/docs/cfp\\_TarTrain06.pdf](http://wsare.usu.edu/grants/docs/cfp_TarTrain06.pdf)

National Fish and Wildlife Foundation  
Pulling Together Initiative  
Public-Private Partnerships to Manage Invasive Weeds  
**Deadline: May 1, 2006**  
<http://www.nfwf.org/programs/pti.cfm>

U.S. Department of the Interior  
Water 2025: Preventing Crises and Conflict in the West  
**Deadline: May 5, 2006**  
<http://www.doi.gov/water2025/RFP2006/>

Robert Wood Johnson Foundation  
Active Living Research -- Childhood Obesity  
**Deadline: May 10, 2006**  
<http://www.rwjf.org/applications/solicited/cfp.jsp?ID=19317>

U.S. Environmental Protection Agency  
Collaborative Science and Technology Network for Sustainability  
**Deadline: May 17, 2006**  
[http://es.epa.gov/ncer/rfa/2006/2006\\_star\\_cns.html](http://es.epa.gov/ncer/rfa/2006/2006_star_cns.html)

U.S. Department of Agriculture  
Animal Growth and Nutrient Utilization, NRI  
**Deadline: May 17, 2006**  
<http://www.csrees.usda.gov/fo/fundview.cfm?fonum=1067>

Department of Health and Human Services  
Administration for Children and Families  
Special Improvement Project  
**Deadline: May 24, 2006**  
<http://www.acf.hhs.gov/grants/open/HHS-2006-ACF-OCSE-FI-0005.html>

National Science Foundation  
Hydrologic Sciences  
**Deadline: June 1, 2006**  
[http://www.nsf.gov/publications/pub\\_summ.jsp?ods\\_key=nsf06545](http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf06545)

U.S. Department of Agriculture  
Rural Youth Development Grants  
**Deadline: June 1, 2006**  
<http://www.csrees.usda.gov/fo/fundview.cfm?fonum=1420>

U.S. Department of Agriculture  
Higher Education Multicultural Scholars Program  
**Deadline: June 1, 2006**  
<http://www.csrees.usda.gov/fo/fundview.cfm?fonum=1110>

National Science Foundation  
Plant Genome Comparative Sequencing Program  
**Deadline: June 16, 2006**  
[http://www.nsf.gov/publications/pub\\_summ.jsp?ods\\_key=nsf06555](http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf06555)

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>

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](http://es.epa.gov/ncer/rfa/2006/2006_star_gcaq.html)

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&opId=7869>

National Science Foundation  
Science and Society  
**Deadline: August 1, 2006**  
[http://www.nsf.gov/publications/pub\\_summ.jsp?ods\\_key=nsf05588](http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf05588)

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 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&opId=8019>

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# Faculty publication success

**A**s with grants, we are equally proud of faculty publications and other scholarly output. Please keep the citations (in print, only) coming to my office so that we can share and celebrate your accomplishments!

## Harry Ako (MBBE)

Ako, H. and Nip, W.K.. 2006. "Enzyme classification and nomenclature" (invited). Pages 135-154 in Y.H. Hui, W.K. Nip, L.M.L. Nollet, G. Prliyath, and B.K. Simpson, editors, *Food Biochemistry and Food Processing*. Blackwell Publishing, Ames, Iowa.

Tamaru, C.S., Tamaru, C.C.T., Fitzgerald Jr., W. J., Ako, H., and Sato, V.T., 2005. "Advances in the culture of striped Mullet" (requested). Pages 439-456 in Anita Kelly and Jeffrey Silverstein, editors, *Aquaculture in the 21st Century*. American Fisheries Society.

## Answers to our pop-quiz

Q1. In 1905, HAES planted 3 acres of cacao in Hilo. Where did they get the planting material and from whom?

A1. From Hon. E.W. Gurr, of Tutuila, (American) Samoa. Note: a relative, Mr Peter Gurr, currently works Department of Agriculture in American Samoa.

Q2. In 1914, HAES employee, J. Edgar Higgins, was finishing up his leave, and then instructed to go where?

A2. Mr. Higgins got instructions to proceed to Honolulu via Cuba and Florida. He then made extensive observations on pineapple, citrus fruits, avocado, mango and others. That knowledge was brought back to Hawaii.

Q3. In 1915, HAES was doing work on litchi. How much was litchi selling for per pound back then?

A3. 60 to 70 cents a pound.