Julie Zee, sporting the logo CTAHR’s N.E.W. program, takes a time out.

Providing our community with health-based info

USDA CSREES is now NIFA

CTAHR faculty score $5.6M
From the Associate Dean and Associate Director for Research

A lot has taken place on the union contract renewal in the past month! A quick re-cap: UPHA rejected the “last, best and final offer” which included a 5% salary cut for two years; but, HGEA members have agreed to a similar offer with the same pay cut and 13 days of paid administrative leave. UHPA is negotiating with the UH to iron out the final details of a new contract. Most people believe that a contract with terms similar to those agreed to by the university’s APT and Civil Service bargaining units will be accepted by UHPA any time now. We expect to receive most, if not all, of the salary savings from the new contract. If and when it happens, additional funds will be provided to each unit, and allow us to breathe a bit easier. Although we still do not have the final resolution of the UHPA contract renewal, it does seem the end is near! USDA has received appropriations for 2010. This means we will have access to the federal formula and special grants earlier than it has been in the past several years. These federal funds play a critical role in filling some of the gaps created by the UH budget shortfall.

As a land grant institution, CTAHR is proud of the role we play in providing science and research based information to the local communities. A good example is our Extension Nutrition and Health Program, which is led by Hilo-based Julia Zee, a member of our Human Nutrition, Food and Animal Sciences Department. When I was an undergraduate student, malnutrition was mostly caused by not enough food to consume; while now, malnutrition is mostly caused by the consumption of too much food. Our Extension Nutrition and Health Program has done an excellent job in delivering up-to-date information to targeted groups. You need to read Julia’s piece to appreciate the important work she and her colleagues are doing and how they are making a difference in our local community.

The National Institute of Foods and Agriculture (NIFA) is finally here. NIFA officially took over the duties and responsibilities of the Cooperative State Research, Extension, and Education Service (CSREES). A lot of changes have already been made because of this structural realignment. New leadership is also in place now. Read more about the new transition inside this issue.

As we begin a new federal fiscal year it also marks the beginning of the reporting season. I will send out research project reporting notices soon. Your prompt submission of project progress or termination reports will expedite our writing station reports to meet our reporting requirement. Po-Yung has prepared an update on TSTAR, and Sharee has the award data as well as new funding opportunities. Thanks to Gernot Presting for providing useful links, and access to several DNA databases and websites. We welcome your contribution of any newsworthy items, any subject, any time. If you have not shared your new publications with us, please send them to us right away.

You may want to get a seasonal flu shot if you have not done so. Meanwhile, do wash your hands regularly. Keep healthy, and we will see you back here next month.
Are you familiar with the saying, “Be careful what you wish for”? After losing our Extension specialists in nutrition, and spending years and many meetings asking our Extension Directors (yes, that’s plural) for a Program Leader in Extension Nutrition and Health, our Extension Director Wayne Nishijima agreed that this was something he could support. (For the record, the other Extension Directors agreed in principle but couldn’t see where we would find the funds to hire someone for this job or get someone to do this.) Well, the hiring did not happen. In October 2007, Wayne bestowed on me, for a quarter of my time, the title and responsibility of State Extension Nutrition and Health Program Leader for three years. (Be careful what you wish for, lest it come true.) Fortunately, Wayne has also provided program funds for interisland travel for meetings, program expenses, and professional development. So as Program Leader, I have been asked to tell you about the Hawai‘i Extension nutrition and health program.

Working with KTA Super Stores on the Big Island and Foodland on Oahu, Carissa Holley and others developed, pilot-tested, and conducted agency trainings on the Grocery Store Tour Project, a nutrition education curriculum to teach low-income families about getting the most nutrition from their food dollars. Tour participants were encouraged to buy, cook and eat more fruits and vegetables as they were led through the canned, frozen, and fresh produce aisles. Photo courtesy Claire Nakatsuka.
As part of the Diabetes Detection and Prevention Project, 549 consumers were screened for diabetes last year. Among those screened, 38% had an A1c (average blood glucose) at or above 6.0, which may indicate diabetes or pre-diabetes, as compared to an average of 6% of Hawai‘i’s population who reported having diabetes. At KTA Super Store in Hilo, Mary Ann Crosson checks a shopper’s A1c level using lab-accurate, disposable A1c meters which give results in 5 minutes. Photo by Julia Zee.

Quick introduction: I am an Extension Educator in nutrition and health at the Hilo Extension Office on the Island of Hawai‘i. My primary responsibilities are to provide relevant, timely, and informative programs for the general public—I have an active education research project on diabetes detection and prevention and conduct programs and training in nutrition and consumer food safety for parents, school children and teachers, and adults of all ages. For the past two years, I have provided statewide leadership in the area of Extension nutrition and health, built a team of Extension faculty and staff in this program area, and facilitated professional development for all of us.

Beginning in April 2008, CTAHR faculty and staff with Extension projects in nutrition and health have been meeting and, more importantly, been working towards better coordination and collaboration within our program area. We began with brainstorming and discussing key issues faced by Hawai‘i residents, recognizing current Extension projects and programs that address these issues as well as the gaps in our Extension programs, and identifying topics for professional development. The key issues that quickly rose to the top of the pile were Hawai‘i’s high cost of living and our aging population, necessitating programs in resource management skills and healthy aging and healthy families. We all agreed that the growing number of people considered obese, especially among children, and the importance of preventing obesity underlie all of our nutrition and health programs, through nutrition knowledge, basic cooking skills, and physical activity. We also agreed that program sustainability was important to all of our programs—we should be designing our programs so that they can be sustained by the community and continue without being solely dependent on Extension.

Currently, our Extension nutrition and health team members from every county, HNFAS and FCS are Joan
Teaching food skills to families and child care providers, Kami Nishimura and Kimberly Kanechika share low cost, healthy and simple recipes that include a lot of fruits and vegetables. Photo courtesy Claire Nakatsuka.

Foodskills Project
The Foodskills workgroup, led by Carissa Holley to provide training in basic cooking and kitchen skills, connected with programs at the community colleges, Department of Education, and HNFAS. Chef Mark Segobiano conducted training on knife skills for a group of agents—fortunately no fingers were lost that day. The group is now working on producing and procuring a series of videos in food skills, which could be used by community agencies and programs.

A relatively recent change is the establishment of LIFE-II: Lifeskills in Food Education – Integrated and Intergenerational, consisting of the Expanded Food and Nutrition Education Program (EFNEP) and the UH-CES Supplemental Nutrition Assistance Program – Education (SNAP-Ed) to provide practical life skills in food and nutrition for Hawaii’s limited income population (young families to seniors). LIFE-II, under the leadership of Naomi Kanehiro, is allowing for better coordination between and more efficient implementation of both programs in Hawai‘i. Visit the LIFE-II Website for more information: www.ctahr.hawaii.edu/NEW/LIFE-II/index.htm

Three workgroups were initiated based on the key issues. Members of each workgroup identified current projects and resources within CTAHR and UH, gaps and potential collaborators, and the charge for their group. The Resource Management workgroup, led by Nicky Davison, created a list of available programs, materials and collaborators. Relevant materials on food and money basics have been updated and are available online (www.ctahr.hawaii.edu/NEW/curriculum.htm). FCS faculty Michael Cheang, Pamela Kutara, and Diane Masuo also provide resource management training and education for students and consumers.
Healthy Aging Project
The Healthy Aging workgroup, led by Lynn Nakamura-Tengan, began by compiling a comprehensive list of resources for seniors and caregivers across the state. Extension Educators promote healthy aging through programs with seniors as well as in the development of intergenerational programs to reach a broader and interconnected audience. A professional development workshop on intergenerational programs and healthy aging was held last fall with Dr. Matthew Kaplan from Penn State Extension, which led to these promising programs: Ka ʻAha (an intergenerational program to build stronger relationships between generations through fun, daily activities), expansion of the Military Families project (partnering local seniors with military families with children), and Seed To Table (encouraging low income families to grow some of their own food). Learn more about these projects in the months to come. New Maui agent Heather Greenwood is leading the effort in healthy aging and intergenerational programs, including training for caregivers. Visit Heather’s Website: [www.ctahr.hawaii.edu/maui/Intergenerational.aspx](http://www.ctahr.hawaii.edu/maui/Intergenerational.aspx)

HNFAS faculty Joannie Dobbs and Alan Titchenal have also been sharing their efforts in developing and continuing the Got Nutrients? Website [www.manoa.hawaii.edu/gotnutrients](http://www.manoa.hawaii.edu/gotnutrients) that provides daily tips, information and resources on intergeneration nutrition essentials for health on behalf of CTAHR and the Honolulu Subarea Health Planning Council.
What’s coming up next?

Professional development on Building Extension’s Public Value with Dr. Laura Kalambokidis, University of Minnesota Extension, will be held in December to better understand and substantiate the public benefits—beyond the direct benefits to our program participants—that our Extension programs provide to our communities and to Hawai‘i. (http://www.joe.org/joe/2004april/a1.php) We hope all Extension faculty and staff will join us for this critical topic and timely workshop.

Get Moving for Health Project

The Get Moving For Health (GM4H) project led by Laura Jean Kawamura and Gary Heusel was recently funded through a Wal-Mart Foundation grant to the Hawai‘i 4-H program. 4-H youth-adult partnership teams will be planning and implementing physical activity programs throughout the State during this coming year.

The nutrition and health program team will also be working on program evaluation indicators (i.e., healthy behaviors) that can be part of a national effort to identify common evaluation measurements in Extension nutrition and health programs.
At Kauai’s Agricultural and Environmental Awareness Day, Laura Jean Kawamura taught 500 5th graders about phytochemicals and selecting colorful fruits and vegetables. Teachers were also given educational materials and conducted follow up lessons with their students in the classroom. Photo courtesy Laura Jean Kawamura.

Julia M.K. Zee

Hometown: Hilo, Hawai‘i
Joined CTAHR: 1986
Educational History: MPH, Public Health Nutrition, University of Hawai‘i at Manoa, 1984; BS, Home Economics/Community Nutrition, Oregon State University, 1983.
Specialization: Nutrition and health education
Current Work: Extension nutrition and health, Diabetes Detection and Prevention Project; member of the Nutrition and Health Committee for Program Planning and Guidance, National Institute of Food and Agriculture
Languages Spoken: English

Recent Publications


Zee, Julia M. 14 articles on nutrition and health for the News@UH, UH Manoa’s online newsletter for faculty and staff. 2002-2005.

Recent Grants
An update on RFP for 2010 T-STAR program

By Po-Yung Lai
Special Program Director for Grants and Contracts

This round of the call for letters of intent for the 2010 TSTAR program was successfully concluded on October 2, 2009. This will be followed by the RFP for full project proposals, which are due by the close of business on Friday, October 30, 2009. Those Project Directors (PDs) who have submitted their letters of intent are urged to submit their full proposals before the deadline.

There were a total of 69 letters of intent received; of which, 54 were from Hawaii, 13 from Guam and 2 from the Federated States of Micronesia. Of these, 22 (32%) were assigned to the category of Plant Protection, 12 (18%) to the category of Biotechnology, 16 (24%) to the category of Soil/Water/Environment, and 19 (28%) to the category of Others (livestock/aquaculture/food science/post-harvest processing/nutrition). It is hoped that the same number of project proposals will be submitted.

As specified in the guidelines, proposals received before the deadline will be forwarded to the respective external scientific panels in November 2009. The scientific panels will then convene in January 2010 to review the proposals on the basis of scientific merit. After this review, all the proposals along with the comments of the scientific panels will be submitted to the members of the Pacific Basin Administrative Group in February 2010. The final selection of proposals will be made in March 2010.

Project Directors of those proposals selected are reminded to secure prior approval of the Hatch or McIntire-Stennis projects from CTAHR Office of Research to facilitate the transfer of the approved funds. Also, PDs who have received TSTAR funding in the last five years and have not yet submitted progress reports are urged to do so before December 14, 2009 as CTAHR is required to submit its final version of the TSTAR progress report to Senator Inouye’s office by January 8, 2010. Therefore, the kokua of PDs is requested.

Just a final note, Dean Hashimoto received good news announced jointly by Senators Inouye and Akaka on October 8, 2009 that the Senate approved the Conference Report for the Fiscal Year 2010 Agriculture Appropriations Bill. Its final enactment is now pending the signature of the President. In this bill, the same level of funding was ear-marked for a number of agricultural initiatives, including TSTAR, in which CTAHR will be directly or indirectly involved.
The new federal fiscal year 2010 started on October 1, ushering in a major re-structuring at the United States Department of Agriculture (USDA). For quite a few years now there were concerns that agricultural research has not received its fair share of funding compared to other research agencies. For example, The National Institutes of Health has a budget of $30 billion for medically related research and the National Science Foundation has a budget of $6 billion to conduct research in basic science and engineering related projects. In comparison, the USDA’s research funding will be $2.6 billion this year. Leaders in the Public and Land Grant Universities decided that something had to be done to reverse this funding trend and after considerable effort during the last several years, the National Institute of Food and Agriculture (NIFA) was born. NIFA officially replaced the old Cooperative State Research, Extension and Education Service (CSREES) within the USDA. CSREES was the agency responsible for distributing and managing extramural research funding provided by the federal government, while the Agriculture Research Service (ARS) is the USDA intramural research agency. ARS received a budget of $1.25 billion and NIFA received a budget of $1.34 billion this year. The hope is that the new name change will come with an understanding for the need to enhance USDA funding, however we will have to wait and see.

The White House has appointed Dr. Rajiv J. Shah (an MD), who led the agricultural-development program at the Bill & Melinda Gates Foundation, to serve as the USDA’s first “chief scientist,” and the Under Secretary for research, education and economics. The USDA named Roger N. Beachy, founding president of the Donald Danforth Plant Science Center in St. Louis, to serve as the first director of NIFA. Dr. Shah addressed the Western Directors during the Western Directors’ Joint Summer Meeting this July. He emphasized that his goal is to seek a significant increase in agricultural research funding but he requests that we remain patient for now to allow him to work within the administration. He did not elaborate on the definition of “significant”. Dr. Shah indicated that he wants to commission “breakthrough” research by emphasizing a few select areas, similar to the approach of the Gates Foundation. The five focus areas are climate change, sustainable energy, childhood obesity, food safety, and global food security and hunger. With the exception of the last focus area, all of the other four areas were identified by the land grant system previously as high priorities. Dr. Shah would like to boost funding for the competitive grant program, Agriculture and Food Initiative (AFRI) which replaced NRI. AFRI received a $262 million budget this year compared to $201 million received by NRI last year, which is a 30% increase. I did remind him about the importance of formula funding which is critical for our existing infrastructure, and was glad to read his later comment in the media that he has pledged that the “USDA would continue to support research on local agricultural problems such as wheat scab in the Midwest and stated that ‘We realize production systems are local.’” Just for the record, Hatch funding was at $207 million last year while this year it is at $215 million, a 1% increase.

The message is clear: Formula funds will stay; however, do not expect a major infusion of new money any time soon. On the other hand, competitive AFRI grants will continue to receive more new funds. We need to take advantage of this new infusion of research dollars. So, let’s sharpen our pencils (or clean our keyboards) and write that winning proposal.
Get grants while they’re hot!

By Sharee Pepper
Grant coach

The following list includes some current funding opportunities that may be of interest to CTAHR faculty. If the deadline is too short for this year, it is still a good indication of the likely due date for next year. Let us know if we can be of any assistance with developing and editing your grant application.

For information on submitting grants electronically on grants.gov the following publication may be useful. USDA, NIFA Grants.gov Application Guide – A guide for the preparation and submission of NIFA applications via grants.gov.

**Agriculture, Rural and Community Development Grants**

- **USDA, NIFA - Agriculture and Food Research Initiative (AFRI) Competitive Grants Program** (Note: includes prior NRI grants)
  **Deadline: all have expired (use as guide for 2010)**

- **USDA, NIFA - Community Food Projects Competitive Grants Program**
  **Deadline: November 19, 2009**
  http://www.nifa.usda.gov/funding/rfas/community_food.html

- **USDA, NIFA - Business and Cooperative Programs Value-Added Producer Grant Program**
  **Deadline: November 30, 2009-10-08**
  http://www.rurdev.usda.gov/rbs/coops/vadg.htm

- **USDA, Western Sustainable Agriculture Research and Education (SARE) - Farmer Rancher Grant (FRG)**
  **Deadline: Dec 04, 2009**
  https://wsare.usu.edu/grants/RFA/FRG_10.pdf

- **USDA, Western Sustainable Agriculture Research and Education (SARE) - Professional + Producer Grant (PPG)**
  **Deadline: Dec 04, 2009**

- **USDA, NIFA - State and Regional AgrAbility Program**
  **Deadline: December 18, 2009**
  http://www.nifa.usda.gov/funding/rfas/agrability.html

- **Monsanto Fund Grant**
  **Deadline: January 1, 2010**
  http://www.monsantofund.org/asp/Qualifications_and_Procedures/Main_Menu.asp

- **U.S. Environmental Protection Agency (EPA) - Approaches to Assessing Potential Food Allergy from Genetically Engineered Plants**
  **Deadline: January 7, 2010**

- **USDA – NIFA, AFRI – Agriculture and Food Research Initiative - Soil Processes**
  **Deadline: January 16, 2010**
  http://www.nifa.usda.gov/fo/soilprocessesafri.cfm

- **USDA, NIFA – Disaster Resilience for Rural Communities**
  **Deadline: January 20, 2010**
  http://www.nifa.usda.gov/funding/rfas/pdfs/10_disaster.doc

- **USDA, NIFA, AFRI - Plant Biology: Environmental Stress**
  **Deadline: January 29, 2010**
  http://www.nifa.usda.gov/fo/plantbiologyenvironmentalstressafri.cfm

- **USDA, NIFA, AFRI – Microbial Biology: Microbial Associations with Plants**
  **Deadline: February 16, 2010**
  http://www.nifa.usda.gov/fo/microbialbiologyplantmicrobeassociationsafri.cfm

- **USDA, NIFA, AFRI - Plant Biology: Growth and Development**
  **Deadline: March 2, 2010**
  http://www.nifa.usda.gov/fo/plantbiologygrowthanddevelopmentafri.cfm

- **USDA, NIFA, AFRI - Animal Genome: Genetics and Breeding**
  **Deadline: March 5, 2010**
  http://www.nifa.usda.gov/fo/animalgenomegeneticsandbreedingafri.cfm
$ - USDA, NIFA, AFRI – Integrated Solutions for Animal Agriculture  
**Deadline: March 16, 2010**  
http://www.nifa.usda.gov/fo/integratedsolutionsforanimalagricultureafri.cfm

$ - USDA, NIFA, AFRI - Biology of Weedy and Invasive Species in Agroecosystems  
**Deadline: April 20, 2010**  
http://www.nifa.usda.gov/fo/weedyandinvasivespeciesafri.cfm

$ - USDA, NIFA - Western Sustainable Agriculture Research and Education Program  
Sustainable Agriculture Tours  
**Deadline: Open until funding is exhausted**  
http://wsare.usu.edu/grants/docs/RFA_SAT.pdf

$ - USDA, Rural Development  
Community Facilities Loan and Grant Program  
**Deadline: Applications accepted on an ongoing basis**  
http://www.rurdev.usda.gov/rhs/cf/brief_cp_grant.htm

$ - Farm Foundation Grants  
**Deadline: Applications accepted on an ongoing basis**  

**Education**

$ - UH Alumni Association (UHAA) - Scholarship  
**Deadline: October 30**  
www.hawaii.edu/admissions/aid.htm

$ - USDA, Western Sustainable Agriculture Research and Education (SARE) - Professional Development Program Grant (PDP)  
**Deadline: November 03, 2009**  

$ - NSF -ADVANCE: Increasing the Participation and Advancement of Women in Academic Science and Engineering Careers (ADVANCE)  
**Deadline: November 12, 2009**  

$ - NSF - Undergraduate Research and Mentoring in the Biological Sciences (URM)  
**Deadline: March 2, 2010**  

$ - Human Frontier Science Program – Short Term Fellowship Program  
**Deadline: rolling – applications accepted year round**  
http://www.hfsp.org/how/appl_forms_STF.php

$ - NSF – Active Funding Opportunities  
**Deadline: Multiple**  
http://www.nsf.gov/funding/pgm_list.jsp?org=NSF&ord=date
Environment, Water, Energy, Invasive Species Grants

$ - SeaWorld & Busch Gardens Conservation Fund Offers Funding for Wildlife Conservation
**Deadline: December 1, 2009**

$ - NFWF, USFWS, BLM, USDA - Bring Back the Natives (BBN): A Public-Private Partnership for Restoring Populations of Native Aquatic Species
**Deadline: December 1, 2009 (Pre-proposal)**
[http://www.nfwf.org/AM/template.cfm?section=charter_programs_list&template=/CM/ContentDisplay.cfm&ContentID=13995](http://www.nfwf.org/AM/template.cfm?section=charter_programs_list&template=/CM/ContentDisplay.cfm&ContentID=13995)

$ - USDA, NIFA – Air Quality
**Deadline: March 5, 2009**

$ - National Forest Foundation: Community Assistance Program
Local Forest Partnerships Fund
**Deadline: proposals accepted on a rolling basis throughout year**
[http://www.natlforests.org/consp_05_cap.html](http://www.natlforests.org/consp_05_cap.html)

$ - National Geographic Conservation Trust Offers Funding to Preserve Earth’s Resources
**Deadline: Open**

Families, Youth and Children Grants

$ - CHS Foundation
Rural Youth and Leadership Development
**Deadline: rolling – applications accepted year round**
[http://www.chsfoundation.org/programs/ryld.htm](http://www.chsfoundation.org/programs/ryld.htm)

Financial Grants

**Deadline: rolling – applications accepted year round**
[http://www.mmifoundation.org/GrantSeekers.asp](http://www.mmifoundation.org/GrantSeekers.asp)

$ - Hitachi Foundation: Business and Communities Grants Program
Grants Address Economically Isolated Communities
Interested organizations may submit an online inquiry to provide information about project ideas at any time and the Foundation’s will determine if it fits their priorities.

Health, Nutrition, Food & Biomedical Grants

$ - Centers for Disease Control and Prevention (CDC), National Institute for Occupational Safety and Health (NIOSH) - Centers for Agricultural Disease and Injury Research, Education, and Prevention (U50)
**Deadline: November 30, 2009**

$ - FDA & NIH - Center for Food Safety and Applied Nutrition (CFSAN) – SBIR & STTR
**Deadline: December 5, 2009**

Science Grants

$ - USDA, NIFA, AFRI – Arthropod and Nematode Biology and Management: Tools, Resources, and Genomics
**Deadline: April 1, 2010**

NSF – Active Funding Opportunities
**Deadline: Multiple**

$ - National Geographic Society – Waitt Grants Program
**Deadline: Rolling**

UH, Hawaii and Regional Grants

$ - UH, University Research Council - Faculty Travel Funds
Proposal Deadline: rolling – applications must be in >4 weeks before travel.
[http://www.hawaii.edu/urc/pdf/factravel_g.pdf](http://www.hawaii.edu/urc/pdf/factravel_g.pdf)
Faculty publications

David Christopher (MBBE) – Christopher Lab on cover of Plant Physiology

CTAHR MBBE research group discovers a new mechanism regulating protein degradation and cellular disassembly during fruit ripening in pineapple.


Shu Hwa Lin (FCS)

Rachel Novotny (HNFAS)


Gernot Presting (MBBE) - Hawaiian Algal Database released

A detailed and complete inventory of Hawaiian biodiversity is essential for understanding the changes brought about by global climate change and other factors, such as human impact. The Hawaiian Algal Database (HADB) showcases the red algal biodiversity of the Hawaiian Islands, and includes geographic references to collection sites (displayed on a map), as well as photographs and DNA signature sequences ("DNA barcodes") for each specimen, thus allowing comparison of specimens worldwide. Database development and implementation was performed by graduate student Norman Wang in the [Presting laboratory](http://www.hawaii.edu/~mbbe/) (MBBE), and the database was populated by numerous researchers in the [Sherwood laboratory](http://www.botany.hawaii.edu/) (UH Botany). For a detailed list of contributors and features, please see the recent publication. The newly implemented “BLAST” search function that can be used to query the database using DNA barcodes is not described in this publication. Funding was provided by a National Science Foundation “Biodiversity Surveys and Inventories” grant to Sherwood and Presting.
### CTAHR awards from 9/15/2009 to 10/28/2009 as reported by UH ORS

<table>
<thead>
<tr>
<th>PI Last Name</th>
<th>First Name</th>
<th>Department</th>
<th>Proposal Title</th>
<th>Sponsor Name</th>
<th>Award Amount</th>
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<td>DeBaryshe,</td>
<td>Barbara D</td>
<td>Center on the Family</td>
<td>Hui a’o mua, The Cooperative for Early Learning: An Early Reading First Project</td>
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<td>Hara,</td>
<td>Arnold H</td>
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<td>Andrew G</td>
<td>College of Tropical Agriculture and Human Resources</td>
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13 awards for --> $5,603,315