

NUTRITIONAL SCIENCES DEPARTMENT
NEWSLETTER
College of Agriculture & Life Sciences

GREETING FROM THE DEPARTMENT HEAD

When my Grandmother celebrated her 100th birthday, a reporter asked her how she managed to live so long. Her response was, "I never thought about my age, I just kept a-going." As we go to press, one thing is clear— 2009-2010 is a time of great fiscal uncertainty and change. This presents us with a choice. We can bolt the doors, shutter the windows, and lay low until the wrath passes, or we can "keep a-going" and continue to develop and to execute plans that will secure a sustainable and strong future. Fortunately, our faculty, staff and students have chosen the latter approach.

This past academic year, we began to implement our plan to streamline and to develop undergraduate and graduate courses to improve student-driven learning, to advance student knowledge and to expedite time to graduation. In response to budget cuts, we submitted an unprecedented number of proposals to public and private venues. These included, not only individual research proposals, but collective projects such as a graduate student training grant, a shared equipment proposal, funding for our upcoming conference, and an Anyplace Access for Arizonans (AAA) proposal for online education. So far, the AAA proposal, two of the conference proposals and several individual research grants have been funded. These efforts will help secure our future research and education strengths.

The enormous benefit of well designed and executed plans cannot be overstated. Several years ago the Department developed a General Education course and began offering courses in Summer/Winter Session. Today the revenues generated by this prudent agenda enable us to retain valuable staff. More recently, we began to develop online courses through a USDA grant. This groundwork project allowed a "parlay" into the new funding of the AAA grant. In the coming year, we will introduce five new online courses with a modular design that permits students to tailor their learning to their needs and includes virtual laboratories to increase student interaction. Our online program will secure another revenue stream for the future.

Successful execution of such programs requires a dedicated faculty and staff, and I continue to be inspired by the willingness of our people to work not only for their personal benefit, but also for that of the Department. In my estimation, this is a hallmark of the Professional. The achievements of our faculty and staff are highlighted throughout this newsletter. Read, enjoy and be inspired.



HIGH HONORS AND CONGRATULATIONS

DR. DAVID HARTSHORNE - 2008 Research Faculty of the Year, College of Agriculture and Life Sciences.



Dr. David Hartshorne



Trudy Morrow, Administration Associate

TRUDY MORROW - Administrative Associate awarded the University of Arizona Staff Award for Excellence.

DR. DONATO ROMAGNOLO - Promotion to Full Professor.

WELCOME

Mari Wilhelm, Ph.D. joined our Department faculty in April. Her expertise is Program Evaluation in community-based programs. She is an investigator with the National Children's Study.

Sharon Hoelscher Day joined our Department faculty in April as a Regional Specialist; she works for Cooperative Extension in Maricopa County.

Naren Patel and **Nick Radachi** joined the Winzlering laboratory in Spring 2009. Nick majors in NSC and PSIO. Naren's major is BMB. He is completing his senior thesis in collaboration with the Wysocki laboratory.

Ornella Selmin, Ph.D. joined our Department in May. Her work focuses on the effects of trichloroethylene, an environmental contaminant, on heart development, and folate as a possible dietary antagonist.

Leslie Gunaitlaka, Ph.D. from Arid Land Studies became a member of the Joint Appointed Faculty of the Nutritional Sciences Graduate Program. His research area is phytochemicals.

Congratulations and Welcome to the NSC Baby Boom!

Amber and Randy Burd welcomed Nathaniel Hawke.

Tracy Crane and Todd Vandergraaf welcomed twins, Andries Arie and Owen Gregory.

Pat and Jennifer Murphy welcomed Colin Andrew.

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FACULTY PUBLICATIONS

S. Golng *et al.*

Comparison Between Dietary Assessment Methods for Determining Associations Between Nutrient Intakes and Bone Mineral Density in Postmenopausal Women. (2009) *Journal of the American Dietetic Association*, 109: 899-904.

A Longitudinal Study of Sedentary Behavior and Overweight in Adolescent Girls. (2008) *Obesity*, In Press.

D. Hartshorne *et al.*

Properties of Easily Releasable Myofilaments (ERMS): Are ERMS the First Step in Myofibrillar Protein Turnover? (2009) *American Journal Physiology Cell Physiology*. doi:10.1152/ajpcell.00022,2009.

N. Hongu *et al.*

Reading the Nutrition Facts Label: Step-by-Step Approach [factsheet AZ1477 12/08]. Tucson, AZ: University of Arizona Cooperative Extension. (2008) Online: <http://cals.arizona.edu/pubs/health/az1477.pdf>.

L. Houtkooper *et al.*

Psychosocial and Behavioral Profile and Predictors of Self-Reported Energy Underreporting in Obese Middle-Aged Women. (2008) *Journal American Dietetic Association*, 108:114-119.

Winning Sports Nutrition DVD. (2008/2009) This DVD focuses on important tips on eating and drinking for peak performance for athletes. See website: cals.arizona.edu/sportsnutrition or call 1-877-763-5315 for more information.

K. Limesand *et al.*

Sensitivity of Salivary Glands to Radiation: From Animal Models to Therapies. (2009) *Journal of Dental Research*, invited review.

Suppression of Radiation-Induced Salivary Gland Dysfunction by IGF1. (2009) *PLoS One*, 4(3):e4663.

E. Meuliet *et al.*

In Vitro and In Vivo Activity of Novel Small Molecule Inhibitors Targeting the Pleckstrin Homology Domain of Protein Kinase B/AKT. *Cancer Research*, (in press).

Elucidation of the Role of the Transcriptional Factor NM23-H2 in Activation of c-myc Transcription Through the G-Quadruplex-Forming Element. *Molecular Cancer Therapy*, (in press).

Superoxide Dismutase is Regulated by LAMMER Kinase in Drosophila and Human Cells. (2009) *Free Radic Biol Med.*, 46(6):821-827.

D. Romagnolo *et al.*

Targeting of Aryl Hydrocarbon Receptor-Mediated Activation of Cyclooxygenase-2 Expression by the Indole-3-Carbonol Metabolite 3, 3'-Diindolylmethane in Breast Cancer Cells. (2009) *Journal of Nutrition*, 139(1):26-32.

Factors in the Causation of Female Cancers and Prevention. *Preventive Nutrition*, 4th Edition. In Press.

C. Thomson *et al.*

Time-Varying Effects of Prognostic Factors Associated with Disease-Free Survival in Breast Cancer. (2009) *American Journal of Epidemiology*, Epub, DOI: 10.1093/aje/kwp077.

Vasomotor Symptoms, Adoption of a Low-fat Dietary Pattern and Risk of Invasive Breast Cancer: A Secondary Analyses of the Women's Health Initiative Randomized Controlled Dietary Modification Trial. (2009) *Journal of Clinical Oncology*, accepted.

Cherries and Health: A Review. (2009) *Critical Reviews in Food Science and Nutrition*, in press.

Biomarker Calibrated Energy and Protein Consumption and Increased Cancer Risk Among Postmenopausal Women. (2009) *Journal of Epidemiology*, Epub.

Does a Healthy Diet Help Weight Management Among the Overweight and the Obese? (2009) *Health Ed & Behavior*, Epub.

Multivitamin Use and the Risk of Cancer and Cardiovascular Disease in the Women's Health Initiative Cohorts. (2009) *Archives of Internal Medicine*, 169(3):294-304.

Employing RMR Technology in a 90 Day Weight Control Program. (2009) Heather A. Nelson and Dr. Cynthia Thomson, *Obesity Facts*, accepted for publication.

J. Winzerling *et al.*

Iron Loaded Ferritin Secretion and Inhibition by CI-976 in Aedes aegypti Larval Cells. (2009) *Comp Biochem Physiology B Biochem. Molecular Biology*, 152(4):352-63.

Differential Regulation of Transferrin 1 and 2 in Aedes aegypti. (2009) *Insect Biochem. Molecular Biology*, 39(3):234-44.

FACULTY IN THE NEWS

Dr. Burd was featured in the College of Agriculture and Life Sciences 2008 Arizona Agricultural Experiment Station Research Report, for his work on "Sensitizing Tumor Response to Cancer Therapy: Research Targets Melanoma and Brain Cancer."

Drs. Going and Hongu were featured in the College of Agriculture and Life Sciences 2008 Arizona Agricultural Experiment Station Research Report for their project, "Stealth Health Promotes Physical Activity: Engaging Sedentary Youth Through Computer Technology."

Dr. Houtkooper was selected as the Co-Chair for the Working Team on Engagement and Service for the University of Arizona 2010 Accreditation review by the North Central Association on Accreditation and School Improvement.

Dr. Limesand was selected as a Reviewer for the NIH Career Development & Fellowship Awards.

Drs. Meuliet, Romagnolo, and Thomson were all nominees for the Sydney E. Salmon, MD, Distinguished Junior Investigator Award.

Dr. Thomson achieved Board Certification as a Specialist in Oncology Nutrition. Dr. Thomson was also selected as 2009 Chair for the W1002 USDA Research Committee, Bioactive Food Components & Health and was nominated for the 2009 Life Sciences Awards, sponsored by the Christopher Columbus Fellowship Foundation.

NEW GRANTS

Critical & Accessible Training in Health & Nutrition for Arizonans.

Investigators: **Randy Burd, Kristen Limesand, and Joy Winzerling**

Funded by: Anyplace Access for Arizonans, State of Arizona

Development of Novel Anti-Cancer Drugs for the Treatment of Colon Diseases.

Principal Investigator: **Emmanuelle Meuillet**

Funded by: Arizona Partners in Sciences, Research Corporation

Partners for Healthy Active Adolescents, Companeros Para Adolescentes Sanos y Activos.

Principal Investigators: **Jennifer Reeves and Scott Going**

Funded by: U.S. Department of Education

Research Frontiers in Nutritional Sciences Conference Grants.

Principal Investigator: **Donato Romagnolo**

Two grants funded by: Susan G. Komen for the Cure, and GlaxoSmithKline

Announcing 2009 "Research Frontiers in Nutritional Sciences Conference"

October 8 - 9, 2009

The University of Arizona, Student Union Grand Ballroom

1303 E. University Boulevard, Tucson, Arizona 85721



Program is approved for 10 CEU's by the American Dietetic Association

FOR ADDITIONAL INFORMATION CONTACT

Theresa Spicer at tspicer@ag.arizona.edu (520) 621-7126 or
Trudy Morrow at morrow1@email.arizona.edu (520) 621-3096

Register NOW! <http://nutrition.arizona.edu/nsconf/>

Current funded grants to support conference include: Susan G. Komen for the Cure, and GlaxoSmithKline.

FACULTY PRESENTATIONS, SEMINARS, AND CONFERENCES

DRS. BURD AND LIMESAND

"Involvement of p53 Family Members in Radiation-Induced Salivary Gland Damage *in vivo*." International Association for Dental Research, Miami, FL, April, 2009.

Poster Presentations: "Radiation-Induced Salivary Gland Dysfunction Results From p53-Dependent Apoptosis." Gordon Research Conference on Salivary Gland and Exocrine Research, Galveston, TX, February, 2009.

DR. GOING

"Childhood Obesity/Diabetes Prevention in Indian Country: Making Physical Activity Count", Native American Research Training Center, San Diego, CA, December, 2008.

DR. HONGU

Presentation: "GPS HIKE" at Sipes White Mountain Wildlife Area, AZ, April, 2009.



DR. HOUTKOOPER AND SHARON HOELSCHER DAY

Dr. Linda Houtkooper and Sharon Hoelscher Day, Cooperative Extension, were featured speakers at the 2nd Annual Generations of Women's Luncheon, a fundraiser for the Arizona Osteoporosis Coalition.

DR. LIMESAND

"Regulation of p63 in Normal and Irradiated Salivary Glands." Gordon Research Conference on Salivary Gland and Exocrine Research, Galveston, TX, February, 2009.

Special Study Section on a Translational Application of Gene Silencing Strategies to Oral and Craniofacial Disorders, Reviewer, NIH/NIDCR.

DR. MEUILLET

Invited Presentation: "Minisymposia Drug Discovery: Lead Optimization" "Novel Small Inhibitors Targeting the Pleckstrin Homology (PH) Domain of Akt." 100th AACR meeting, Denver, CO, April, 2009.

DR. THOMSON

"Dietary Interventions for the Promotion of Breast Cancer Survival," University Medical Center, Tucson, AZ, March, 2009.

"Assessing Dietary Change in Intervention Studies: The Women's Health Initiative." ICDAM. Washington, DC, June, 2009.

"Effects of a Variable Dose Vegetable Feeding Trial on Plasma Carotenoids, Oxidative Stress and Inflammation in Overweight Post-Menopausal Women." IFT. Anaheim, CA, June, 2009.

"Association Between Weight Loss Response and Sleep Among Overweight Women Participating in a Weight Loss Intervention Trial." FASEB. New Orleans, LA, April, 2009.

OTHER AWARDS, PRESENTATIONS, AND ARTICLES

Vanessa A. Farrell, Ph.D., R.D., C.S.C.S., spoke at the April 23rd Bone Builders Volunteer Training in Maricopa County educating volunteers on ways to prevent osteoporosis through nutrition and exercise. For more information on Bone Builders go to: <http://www.bonebuilders.org/>.

Jennifer Reeves, M.Ed., Associate Research Scientist was named to a three year term on the National Physical Best Steering Committee representing the Southwest District Association for Health, Physical Education, Recreation, and Dance. Physical Best is a comprehensive health-related fitness education program designed to help children develop the knowledge, skills and attitudes for a healthy and fit life.

Nicole R. Stendell-Hollis, M.S., R.D., was featured in the Student Notes section of The Digest for Fall 2008 with an article titled "A High Lycopene Tomato Feeding Study in Healthy Adults."

GRADUATE DEGREES

Master of Science



Amy Butalla

Amy will graduate in August 2009 and hopes to continue working at the University of Arizona in nutrition and cancer research. She plans to pursue further education in the medical field.

Kelly Morrow

Kelly will begin a dietetic internship at Virginia Tech in Fall 2009 and plans to pursue clinical practice as a dietitian, although her future geographic location has yet to be determined.

UNDERGRADUATE STUDENT AWARDS, AND PRESENTATIONS

Janki Bhakta of the Winzlering laboratory received an Honors College Spirit of Inquiry Undergraduate Research Grant. She has been accepted into the Undergraduate Biology Research Program in Biology and majors in MCB.



Salena Meyer

Congratulations to **Salena Meyer** who was among several other students selected to be a McNair Scholar by the McNair program at the U of A, a TRIO program dedicated to increasing the number of student groups entering the Ph.D. programs. This is a two year program that provides underrepresented student groups with research funding for the summer to work in a nutritional science research lab, as well as travel funding to present their work at

Berkley in August of this year. She was also named the Outstanding Sophomore of the Year by the Honors College for 2009.

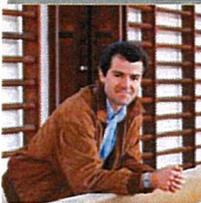
Martha I. Mosqueda presented "Using Geospatial Technology and Collaborative Mapping in Vulnerable Populations to Promote Physical Activity" at the 18th Annual Statewide Arizona/NASA Space Grant Symposium, Memorial Union, Arizona State University, on Saturday, April 18, 2009.



Martha I. Mosqueda

Daniel Sotelo (W. Klimecki), a Nutritional Science Sophomore received The Honors College Spirit of Inquiry Award.

ALUMNI UPDATE



Pedro J. Teixeira, Ph.D.

Pedro Teixeira earned his Doctoral Degree in Nutritional Sciences at the University of Arizona in 2001. His advisors included Drs. Timothy Lohman (primary advisor), Scott Going, and Linda Houtkooper. At the University of Arizona, Dr. Teixeira also participated in two NIH-funded longitudinal clinical trials. He later returned to his alma mater, the Faculty of Human Kinetics – Technical University of Lisbon, Portugal, where he is currently an Assistant Professor of Nutrition, Physical Activity, and Obesity. He leads a young and thriving research group (more details available in www.labes.fmh.utl.pt/obesity).

Two of Dr. Teixeira's current research interests are the study of obesity, focused on psychosocial predictors and consequences, and physical activity behavior research, particularly in the context of weight control. The Department of Exercise and Health at the Technical University of Lisbon and its faculty are active participants in several pan-European projects related to physical activity and/or obesity, including the European Youth Heart Study, the IPAQ (International Physical Activity Questionnaire) Project, and the EUROBESE Project (EC FP6).

Pedro Teixeira has published 35 international peer-reviewed articles and several book chapters, and presents his work regularly at international scientific meetings. He is a proud mentor of 10 graduate students, a reviewer (or Editorial Board member) for several leading journals in nutrition and health behavior. He has been an Executive Board member of the Portuguese Obesity Society and of the International Society for Behavioral Nutrition and Physical Activity (ISBNPA) for a number of years. He has recently been nominated to run for President-Elect of ISBNPA and currently Chairs the Local Organizing Committee for the ISBNPA's 2009 annual meeting, hosting about 600 people from all over the world.

He continues to visit Tucson and the University of Arizona regularly, finding great pleasure and meaning in remembering his Graduate Student years and the wonderful experience this region, this University, and especially its people afforded him, between 1997 and 2001.

Nutritional Sciences Ph.D. graduate **Margaret Flowers** has been invited to join the laboratory of Dr. Myles Cabot at the John Wayne Cancer Institute in Santa Monica, CA. Margaret's long standing interest in lipid metabolism and her nutritional sciences expertise made her an attractive candidate for the postdoctoral position, where she will be able to design her own project within the context of the lab's goals of improving treatment outcomes and survival following a cancer diagnosis.

This newsletter is also available online at: <http://nutrition.arizona.edu>. If you would like to receive our newsletter via email, please contact Theresa Spicer at 621-7126 or email tspicer@ag.arizona.edu.

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NUTRITIONAL SCIENCES CLUB

Pam "Davie" Linker, 2009-2010 Club President;
Dr. Patricia Sparks, Club Advisor

A Special thanks to Dr. Sparks and her students for hosting a Holiday Appreciation and Celebration in December. Students from her classes and laboratory joined to make delicious delights. Joint appointed faculty, graduating seniors and community affiliates were invited to the celebration. A special guest and family member of the Klingenberg Scholarship Fund, Dan Klingenberg, also joined the celebration.

NutClub Buzz - The Nutrition Club collected 2,244 pounds of food at their Spring Food Drive. This brought the total amount the Club collected in the 2008-09 academic year to 5,700 pounds, or just a little more than 21% of the University's total contribution to the Community Food Bank.

Members of the Nutrition Club were also instrumental in helping promote the success of the Farmers' Market sponsored by the University of Arizona. They could be found helping set up, manning booths and breaking down every week and contributed countless volunteer hours to this endeavor.

DEPARTMENTAL SEMINARS

Dr. Leslie Gunatilaka, Director and Professor. Center for Natural Projects Research and Commercialization. "Fighting Cancer with Phytochemicals."
February 18, 2009

Dr. Mari Wilhelm, Associate Professor. "The National Children's Study: A Nutritional Perspective."
February 25, 2009

Dr. Patricia Thompson, Assistant Professor. Mel & Enid Zuckerman College of Public Health. "Vitamin D Receptor as a Ligand Dependent Tumor Suppressor in the Colon."
March 25, 2009

Dr. Robert Rhoads, Assistant Professor. Department of Animal Sciences. "Coordinating Myogenesis and Angiogenesis: A Novel Role for the Satellite Cell in Muscle Growth and Regeneration."
April 15, 2009

Dr. Paul St. John, Associate Professor. Department of Cell Biology and Anatomy. "Alzheimer's Disease: Mechanisms of Disease & Strategies for Treatment."
April 22, 2009

Dr. Betsy Dokken, Assistant Professor. Department of Medicine. "The Role of Glucagon-like Peptide-1 in the Inflammatory Response Associated with Myocardial Ischemia-Reperfusion Injury."
April 29, 2009

AN INTERVIEW WITH DR. SCOTTIE MISNER

Dr. Misner is the State Coordinator for the Extension Food and Nutrition Education Program (EFNEP) and Supplemental Nutrition Assistance Program-Ed (SNAP-ed, formerly the Food Stamp Nutrition Education Program). Both programs provide nutrition education to low income adults, families, and youth, while collecting data on food intake and nutrition education of participants. We recently interviewed Dr. Misner for her work with these programs in education and research.

Q. Tell us briefly what you study in your research.

I am involved in nutrition education and how behavior affects nutritional intake. We have two current multi-state projects that are sponsored by USDA. The first is a project looking at how to motivate parents to promote intake of calcium rich foods among early adolescents; the second is a project that is related to the use of data from the EFNEP Program.

Q. Describe your current research and ongoing projects.

For the calcium research project Arizona is one of eleven states gathering information on how parents influence their children's intake. For the EFNEP project, Arizona is one of twenty two states determining quality of life of EFNEP participants and whether our current evaluation techniques are still valid after forty years.

Q. You have listed several collaborations, how do these fit in with your program?

We have several collaborators including social service agencies, Wellness centers, schools, the YMCA, and Parks and Recreation centers. These collaborators provide "matching" funds that increase our outreach efforts to the community and provide more nutrition and physical activity opportunities to low income audiences.

Q. What do you think is the most important contribution that you have made to your area of science?

I think that my most important contribution is, perhaps more than a scientist, as a community professional working with our education team to provide more food resources, referrals to social service agencies, and nutrition education to those in need.

Q. Why is it important?

People are hungry and need information and ideas on how to stretch their food dollars to provide simple and nutritious meals to their families. This is especially important in these lean economic times. One-fourth to one-third of those in need actually receive food stamp benefits.

Q. What community groups have you worked with as partners and what are the benefits to the participants of these groups?

I've worked with public health agencies, WIC, Community Food Banks, EFNEP, schools and after-school programs, preschools, YMCA, Parks & Recreation, Community and Wellness centers, and Indian Health Service. The benefits of our programs are to provide nutrition education, training and curriculum to teachers, food demonstrations to participants on using low fat, nutritious recipes, and newsletters to parents and seniors.

Q. Can you further describe your programs for the State of Arizona?

SNAP-Ed is the largest domestic food and nutrition assistance program for low income Americans and serves as a source of demand for products of American farmers and food industries. In 2008, the SNAP program served about 24.8 million Americans each month and USDA had an annual outlay of about \$37.5 billion. SNAP-ed individuals and families are eligible for food stamp benefits and most require food assistance. The University of Arizona Cooperative Extension is the largest partner in the Arizona Nutrition Network (AZNN) administrated through the State Department of Health Services participating in the SNAP-ed program. Program funding has doubled for each of the past three years and will increase again in FY2010. Our SNAP-ed program will have a budget of about \$5.6 million and will serve eight counties with 17 separate units. These units provide salaries in the counties for 26 positions and part-time work for several NSC employees.

Our nutrition and fitness educators from community nutrition education research have trained teachers to provide nutrition, wellness and physical education for in-school and after-school activities. They have also provided ways to encourage physical activity in both children and adults daily routines. Basic research findings have enabled our groups to provide more effective strategies for parents to influence their children to eat more nutritious foods especially calcium rich foods.

This past year, statewide, Cooperative Extension faculty and staff had 355,909 nutrition education contacts. County faculty provided 214 food demonstrations. These demonstrations show participants how to make cheap, nutritious meals using local

fruits and vegetables, reduce fat in their diet and increase dietary calcium. Arizona Food Stamp (SNAP) participation increased 25.7% this past year. The average per-person allotment was \$112.19. The total people receiving food stamp benefits in December 2008 increased 63,049 people over that for December 2007. One in 10 Americans now receive SNAP/Food Stamps, although not all eligible residents receive the benefit.

Our State EFNEP budget is \$667,000 yearly for 5 counties in Arizona. The program is funded by USDA and employs the equivalent of 16 nutrition educators. Over 70% of the participants are minorities. Last year EFNEP served 3,069 program families and 4,702 youth. EFNEP aims to improve the health and well being of limited resource families and youth. Annual data confirms program success as participants: improve their diets (increase intake of fruits and vegetables); improve their nutrition practices (88% make healthier food choices and read nutrition labels); stretch their food dollars (83% improve food resource management by planning meals and shopping with a grocery list); handle food more safely (66% improve food storage and thawing practices); and increase their physical activity rates (40% more often do 30 minutes of moderate physical activity each day). An example of some of our activities follows in the report from the Arizona Nutrition Network.

Spring Nutrition Education Outreach from the Arizona Nutrition Network (AzNN)

The Nutritional Sciences unit of the AzNN provides nutrition education curriculum, resources and materials for the classroom, after-school program curriculum, teacher and staff trainings, and technical assistance for schools and agencies serving food stamp eligible families in Pima County. In March, AzNN coordinated a National Nutrition Month campaign, included a Wii contest. Debbie Baker from Estes Elementary won the prize pack for her kindergarten class. She noted, "I strongly believe that students who explore and have many experiences with food are more likely to taste and be comfortable trying new foods. I hear from parents regularly that their children are bringing home the information they are learning at school."

AzNN also sponsored Fun, Fitness, and Nutrition Field Days and other nutrition-integrated special events at 15 participating schools across five local school districts. With the teachers participating in the field days they contribute to environmental change at the schools by implementing the nutrition/physical activities that are provided. A "Go with the Greens" week-long activity also was conducted in March with participating Sunnyside middle schools. Student activities included utilizing the nutrition integrated activity van as well as food tastings, plus other activities to promote the benefits of consuming green vegetables.

The AzNN team includes: Vanessa Farrell PhD. R.D., Jennifer Reeves, M.Ed, Heather Ottenbacher M.S., R.D., Laurel Jacobs MPH, and Jennifer Martinez. The Principal Investigator of SNAP-Ed (AzNN) is Dr. Scottie Misner.



From left: Students identify mystery vegetables at Amphi Middle School's fitness field day.

Further Work in Department Outreach

In January-May, 2009 El Rio Community Health Center (Susan Marks, MPH, Wellness Program Manager) and Department of Nutritional Sciences (Kay Hongu, Ph.D., R.D., Assistant Nutrition Extension Specialist) had a joint program, "El Rio Health Promotion Program" at Liberty and Drexel Elementary Schools. Participants were teachers and staffs at the schools. This 8-week program focused on making small steps to improve health and to increase wealth by developing fitness plan at home. Nutrition students, Jamie M. Wise and Martha P. Kataura led the program.