DNS Alumnus Named as Director of Arkansas Children’s Nutrition Center

The Arkansas Children’s Nutrition Center (ACNC) has named DNS alumnus, Sean Adams, as its new Director. Adams will be the second Director in the history of the ACNC, which was founded in 1994.

Adams obtained his Ph.D. from the Division of Nutritional Sciences in 1994. He was advised by Dr. Jack Odle and his thesis was entitled “Postpartum Development of Hepatic Ketogenesis in Swine.” Adams was also a member of the Nutritional Sciences Graduate Student Association team that launched the now famous, annual NSGSA nutrition research symposium.

“Being a student in the DNS was a great blend of fun and hard work. Many labs had their lights still blazing well into the night! We had a unique opportunity to learn nutrition and metabolism in an integrated, in-depth fashion, and the faculty were exceptionally dedicated and thorough. I’ve always viewed the DNS graduate program as the model other programs should aspire to be.”

In addition to his position as ACNC Director, Adams is Professor and Chief of the Developmental Nutrition Section, Department of Pediatrics, University of Arkansas for Medical Sciences (UAMS), College of Medicine.

The ACNC is a partnership between the USDA-ARS and the Arkansas Children’s Hospital (ACH), in collaboration with ACH Research Institute and UAMS. It is funded by one of the largest federal research awards in the history of the University of Arkansas System, and is only one of two USDA-ARS human nutrition research centers in the U.S. that focuses on children. The Center conducts world-class pediatric research that is aimed at discovering the fundamental biology of childhood brain and metabolic processes and how these are impacted by nutrition, physical activity, and maternal metabolic health status.

“In addition to leading the way in the basic sciences related to child development, we have the goal of applying this knowledge to have a positive impact on the health of children and families in Ark. and beyond. I think my time in the DNS provided a great foundation to tackle this goal, since I had the chance to train with a diverse set of folks interested in fundamental biology and its applications in animal sciences, biomedicine, community health and even neonatal nutrition and metabolism.”

Pictured above: Dr. Adams at the ACNC 20th anniversary Fall Festival with a down-on-the-farm theme.

Written by: Liz Koehler
In Memoriam

Former DNS faculty member Willard Visek, 91, passed away on March 31, 2014. He was born and raised on a farm in Nebraska. After completing high school, he attended the University of Nebraska, studying agricultural sciences. He was a member of the ROTC and was called to active duty during WWII. He spent more than three years, mostly as Master Sergeant for the U.S. Army, in a field artillery unit in France and Germany.

In 1947, Willard returned to the University of Nebraska to complete his bachelor’s degree. He then moved on to enroll in the Department of Animal Sciences at Cornell University, Ithaca. There, he completed his M.S. and Ph.D. in 1949 and 1951 respectively. By 1957, Visek had completed his M.D. at the University of Chicago and made a name for himself with his pioneering application of radio-isotopes to the study of nutrient metabolism.

Willard remained at the University of Chicago following the completion of his medical internship, as an Assistant Professor in the Department of Pharmacology. In 1964, he returned to Cornell University as a Professor of Nutrition and Comparative Metabolism.

He became a Professor of Internal Medicine at the University of Illinois, Urbana-Champaign in 1975, with an appointment in the Department of Food Science. He was also a member of the Division of Nutritional Sciences for more than 25 years. He retired in 1993 as an emeritus professor, and continued to author papers and teach.

Visek was the editor of the Journal of Nutrition for six years, was awarded with the 1985 Osborne and Mendel Award for his pioneering research in ammonia, protein metabolism. His outstanding service efforts were recognized in 1996 when he was awarded the Conrad A. Elvehjem Award by the American Society for Nutrition. He received an honorary Doctor of Science degree from the University of Nebraska in 1980, and was named a University Scholar by the University of Illinois in 1988.

He is survived by his wife of 65 years, Priscilla, his daughters, Dianna Visek and Madeleine Visek Cotts, son, Clayton, and six grandchildren.

I-TOPP Update

With increasing frequency, teams of researchers are being called upon to focus on innovative approaches to address a single critically important and often complex problem. The degree of collaboration and cross-disciplinary approaches is not always intuitive. This semester, the eleven Illinois Transdisciplinary Obesity Prevention (I-TOPP) scholars are immersed in a seminar class focused on better understanding of transdisciplinary research and team science.

Dr. Janet Liechty, who is leading the seminar, has personal experience with this topic as she has a joint appointment with the School of Social Work, and the School of Medicine. The objectives of the seminar include learning to apply transdisciplinary (TD) concepts from the literature to critically examine TD research; to explore frameworks for describing and evaluating TD team science engagement, and to apply TD concepts and skills to enhance effective communication about TD to support career planning as an emerging TD scholar and leader. To date, the participants have found the new seminar to be extremely useful.
Two University of Illinois scientists are contributing to World Health Organization (WHO) efforts to fortify condiments and seasonings for use in countries with widespread micronutrient deficiencies.

“In some countries where these deficiencies are widespread, there is consistent use — almost a daily dose — of certain condiments and seasonings, such as soy sauce in Southeast Asia, at all socioeconomic levels, and there’s a real opportunity to correct deficiencies by fortifying these food items,” said Luis A. Mejia, a U of I adjunct professor in food and human nutrition.

According to Mejia, micronutrient deficiencies affect the health and cognitive development of at least one-third of the world’s population, representing 7.3 percent of all global disease. The World Bank has called micronutrient fortification the most cost-effective of all health interventions.

“Just as iodine deficiency has been controlled for many years in the U.S. through salt fortification, we now hope to offer a framework to enrich foods with iron, vitamin A, and other micronutrients in the developing world. Pregnant women are particularly in need of folic acid and zinc to deliver healthy children,” said Allyson Bower, a doctoral student in the U of I Division of Nutritional Sciences.

Micronutrient deficiencies are a real problem in Southeast Asia, specifically in the Philippines, Thailand, Malaysia, Vietnam, and Indonesia; and they also occur in West Africa and in Central America, she added.

Mejia pioneered the fortification of sugar with vitamin A in Guatemala as a scientist at the Institute of Nutrition of Central America and Panama (INCAP), and the program was later expanded to the rest of Central America. Because no single condiment or seasoning is consumed regularly there, sugar was chosen as the vehicle for enrichment.

“Fighting micronutrient deficiencies in this way hinges on finding a suitable food to fortify, and the vehicle chose is usually a prominent part of diet in a particular culture. Soy and fish sauces are promising vehicles in Southeast Asia, but bouillon cubes are better suited for West Africa and curry powder would be a better choice for India and Pakistan,” Bower said.

When a suitable condiment or seasoning is chosen, the legal framework that surrounds fortification becomes important. That’s what the two researchers are working on now.

“For example, Vietnam has a soy sauce fortification program, but Indonesia doesn’t. Indonesia does have regulations that allow fortification of wheat flour, margarine, and rice, but not condiments. So we can tell WHO that the legal framework is present in Indonesia and recommend that the organization expand its efforts there,” Mejia said.

Bower is excited about the opportunity to be involved in this project because it has global implications.

“Sometimes it seems that the research you’re doing can only be applied at a certain ‘niche’ level, but when you’re working with the WHO, you know they’re going to take what you do and apply it to something that’s long-term and worthwhile. It’s especially rewarding to work on a project like this,” she said.

Mejia and Bower contributed their recommendations at a WHO meeting in New York August 26-28. Elvira de Mejia, another U of I nutrition professor, and her collaborators, Yolanda Aguilera and Maria Martin of the Autonomous University of Madrid, Spain, will submit recommendations on industrial processing of condiments and seasonings worldwide.

All findings in the WHO’s Fortification of Condiments and Seasonings with Vitamins and Minerals in Public Health: From Proof of Concept to Scaling Up will be published in the Annals of the New York Academy of Science.

Bower is a doctoral student in the Division of Nutritional Sciences. She is advised by Elvira de Mejia and her research focuses on “Natural inhibitors of dipeptidyl peptidase-IV from culinary herbs and their mechanism of action in mitigating diabetic complications.”

Written by: Phyllis Picklesimer
Focus on Students

New DNS Students

Kathryn Austin
M.S. Candidate
B.S. in Clinical Nutrition
Advisor: John Erdman

Joseph Beals
Ph.D. Candidate
M.S. in Health and Exercise Science
Advisor: Nicholas Burd

Megan Caputo
D.V.M. - Ph.D. Candidate
M.S. in Animal Science
Advisor: Rodney Johnson

Reina Geier
M.S. Candidate
B.S. in Genetics
Advisor: Roderick Mackie

Sookyoung Jeon
Ph.D. Candidate
M.S. in Food and Nutrition
Advisor: John Erdman

Lauren Killian
Ph.D. Candidate
M.S. in Food and Nutrition
Advisor: John Erdman

Alexandra Lundquist
M.S. Candidate
B.S. in Psychology
Co-advisors: Brent McBride and Sharon Donovan

Sasha McCorkle
M.S. Candidate
B.S. in Food Science
Advisor: by Charles Hillman

Laura Moody
M.D./Ph.D. Candidate
B.A. in Neuroscience
Advisor: Yuan-Xiang Pan

Cassandra Nikolaus
M.S. Candidate
B.S. in Dietetics
Advisor: Sharon Nickols-Richardson

2015 NSGSA Nutrition Symposium

March 19, 2015

Guest Speaker
Dr. Michael Grandner
Professor
Department of Psychiatry
Perelman School of Medicine
at the University of Pennsylvania

Mini-Symposium
“Nutritional Sciences: Impacting Health at Every Age”

Faculty Presenters:
Yuan-Xiang Pan
Sharon Donovan
Margarita Teran-Garcia
Karen Chapman-Novakofski

Student Recognition

Winners of the 2014 NSGSA Quiz Bowl
Pictured (l to r): Katie Robinson, Nadine Aubourg (FSHN), Brian Leyshon, Richard Bukenya, Dr. Donovan and Annabel Biruete

2014-2015 Fellowship Recipients

CONACyT Fellowship:
Annabel Biruete
Diego Hernandez-Saavedra
Evelia Milan Noris

I-TOPP Fellowship:
Natasha Cole
Julia Kim
Katie Robinson

Jonathan Baldwin Turner Fellowship (ACES):
Kathryn Austin
Allyson Bower
Lauren Killian
Brian Leyshon

Kraft Foods Human Nutrition Fellowship:
Joseph Beals
Alexandra Lundquist
Cassandra Nikolaus

USAID BHEARD Fellowship:
Richard Bukenya

USDA NIFA Pre-Doctoral Fellowship:
Anthony Wang

University Fellowship:
Laura Moody

Results for the “List of Teachers Ranked as Excellent” are based on Instructor and Course Evaluation (ICES) questionnaire forms maintained by Measurement and Evaluation, UIUC Center for Teaching Excellence.

Spring 2014:
FSHN 220
Principles of Nutrition
Brendon Smith*
Brigette Townsend

College of Medicine 606
Vanessa Peters

*Indicates an outstanding ranking (top 10%)

Fall 2014 New DNS Students

Pictured (l to r): back row: Sasha McCorkle, Alexandra Lundquist, Renae Geier, Megan Caputo, Cassandra Nikolaus and Joseph Beals; front row: Lauren Killian, Kathryn Austin, Sookyoung Jeon and Laura Moody
Awards, Service and Personal Achievements

• Kirsten Berding was awarded Margin of Excellence Research Award and Student Travel Funds.

• Annabel Biruete was awarded a 2014 Graduate Student International Research Grant from the College of ACES Office of International Programs to examine the differences in dietary patterns between hemodialysis patients from the UK and US and its association with nutritional status and food security.

• Allyson Bower is a co-partner in a World Health Organization (WHO) project. She is reviewing the global regulatory landscape for the fortification of condiments and seasonings in an effort to determine if micronutrient fortification will combat micronutrient deficiencies around the world. She participated in a WHO meeting in New York and her work will be published in the *Annals of the New York Academy of Sciences*.

• Peter Fitschen passed the National Strength and Conditioning Association (NSCA) Certified Strength and Conditioning Specialist (CSCS) exam, was awarded a Margin of Excellence research grant and gave an invited talk at Purdue University on “A science-based approach to weightlifting and cardio.” He published an abstract with the American College of Sports Medicine and four manuscripts in the Journal of Sports Medicine and Physical Fitness, International Society for Sports Nutrition and Exercise Metabolism, the Journal of the International Society of Sports Nutrition, and the Journal of Renal Nutrition (in press).

• Michelle Johnson received the 2014-2015 Wolfe Award from the College of Medicine.

• Virginia Luchini received a Feeding Tomorrow Scholarship from the Foundation of the Institute of Food Technologists.

• Nathan Pratt has found much success through his internship with Abbott Nutrition. There, he analyzes the dietary intakes of a cohort of lactating mothers as part of a larger clinical trial. His published peer-reviewed article discussing nutrient intakes from food of lactating women, was a primary driver in the rebranding of the Similac Breastfeeding Supplement. The research is cited on the package as a primary reference. Due to his accomplishments, his work also influenced the change in continuing education articles for lactating women. He was selected as the recipient of the Research Park Intern Award for Most Outstanding Graduate Student.

• Anthony Wang received the 2014 Early Career Investigator Award from the Pediatric Obesity Society. He also received the Pediatric Obesity Society Poster of Excellence Award, which highlights early career investigators in a prestigious field of research focusing on pediatric obesity.

• Patricia Wolf published a paper entitled “Intestinal and Systemic Inflammatory Responses Are Positively Associated with Sulfidogenic Bacteria Abundance in High-Fat-Fed Male C57BL/6J Mice” in the Journal of Nutrition. She was also invited to join Gamma Sigma Delta.
Sharon Donovan is representing ASN as part of the eNutrition Academy. She continues her term on the Food & Nutrition Board at the Institute of Medicine of the National Academy of Sciences, serves as an Associate Editor for *Nutrition Reviews* and on the Editorial Board for *Gut Microbes*. She also served as a Supplement Guest Editor for the “First Global Summit on the Health Effects of Yogurt,” which was published in the *American Journal of Clinical Nutrition* in May 2014. Dr. Donovan is working to develop the Learning Library within the American Society for Nutrition, which she initiated as ASN President in 2011-2012. She also served on two NIH grant review panels and gave six invited talks in locations such as Purdue University, Philadelphia, San Francisco, Ghana and Japan.

**John Erdman**, Jr.
Professor of Nutrition  
Dept. of Food Science and Human Nutrition  
College of ACES

**Duncan Ferguson**  
Professor of Pharmacology and Department Head  
Dept. of Comparative Biosciences  
College of Veterinary Medicine

**Gregory Freund**  
Professor and Department Head  
Dept. of Pathology  
College of Medicine

**Charles Hillman**  
Associate Professor  
Dept. of Kinesiology and Community Health  
College of Applied Health Sciences

**Sharon Nickols-Richardson**  
Professor and Department Head  
Dept. of Food Science and Human Nutrition  
College of ACES

**Kelly Tappenden**  
Professor of Nutrition and Gastrointestinal Physiology  
Dept. of Food Science and Human Nutrition  
College of ACES

**Margarita Teran-Garcia**  
Assistant Professor  
Dept. of Food Science and Human Nutrition  
College of ACES

**Josh Smith**  
Nutritional Sciences Graduate Student

**Matthew Wallig**  
Faculty Member Since 1989

**Hans Stein** has given 38 invited talks in the last 12 months with 25 of them outside of the United States.

**Kelly Swanson** was promoted to Full Professor in August 2014 and has given invited talks in Colorado, Chicago, England, Scotland, Missouri and Washington D.C.

**Matthew Wallig** was recognized in September for his 27 years of teaching, research and service with a mini-symposium and reception. He was acknowledged for his many contributions to the Department of Pathobiology and Veterinary Diagnostic Laboratory, College of Veterinary Medicine; the Division of Nutritional Sciences, College of ACES; and to the disciplines of toxicology and pathology.
Kirstie Canene-Adams (Ph.D. 2007) accepted a position with Kraft foods in Nutrition Research where she supports the Gevalia and Maxwell House coffee business and Kraft Cheese and Dairy.

Mary Dean Coleman-Kelly (M.S. 2001) was elected to the Nutrition Dietetic Educators and Preceptors (NDEP) Council as the Area 6/7 regional coordinator as well as the Chair of the Task Force to improve the Dietetic Internship matching process. She was also selected to complete the Penn State Emerging Leaders program and is the Director of the Didactic Program in Dietetics, where she led the Penn State University DPD program through the 10-year onsite accreditation review.

Nancy Engelmann (Ph.D. 2010) is currently serving a one-year term as co-chair of the Ohio State University Postdoctoral Association and was selected to give a presentation at the June 2014 International Carotenoid Society’s Symposium in Park City, Utah. Her talk was entitled “The Kinetics of 13C-Lycopene and 13C-Phytone in Healthy Adults.”

Kristin (Reardon) Gustashaw (M.S. 2001) is the owner and founder of Gold Coast Nuts, a one-of-a-kind ECommerce business providing customers with the sale of premium, quality nuts, dried fruits and a nutritional blog which answers questions pertaining to their products in diet. She is married to Ben Gustashaw and has three children – Isaac, 8, Xavier, 5, and Dawson, 2.

Brian Lindshield (Ph.D. 2008) was promoted to Associate Professor with tenure starting this academic year. He and his wife, Erika were married December 2013 and their first child, Nicholas Justin Lindshield, was born October 24, 2014.

Catherine Peterson (Ph.D. 1994) was awarded the Human Environmental Sciences (HES) Distinguished Teaching Award for 2014 from the University of Missouri.

Keri (Kles) Poi (Ph.D. 2002) welcomed her third child and first son, Felix Quinn, on May 3, 2014.

Christina Sherry (Ph.D. 2009) is an advisor to the ASN Young Professional Interest Group and part of the ASN Transition Team. She also received the Abbott President’s Award and was an invited speaker at Bowling Green State University’s Nutrition Symposium. In addition, she was a contributor to an article published in Food and Nutrition Science and the first author for an article published in the Journal of Nutrition.

Barbara Steward (Ph.D. 2009) welcomed a daughter, Danica Valerie Steward, on May 20, 2014.

Gabriel Wilson (Ph.D. 2011) worked as a Nutrition Coach at IMG Academy in Bradenton, Florida from February – May 2014. In June, he accepted a position as the Head of Science and Innovation with Maximum Human Performance (MHP) in West Caldwell, New Jersey.

2014-2015 External Advisory Committee

Joshua Anthony, Ph.D.
Vice President
Global Nutrition, Research and Development
Campbell Soup Company

Tom Boileau, Ph.D.
Senior Principal Scientist
Scientific, Nutrition and Regulatory Affairs
Kraft Foods Group, Inc.

Robert Burns, Ph.D.
Vice President
Health and Nutrition Policy
Grocery Manufacturers Association

James Fleet, Ph.D.
Professor and Director
Interdepartmental Graduate Program in Nutrition
Purdue University

Susan Johnson, Ph.D.
Professor and Director
The Children’s Eating Laboratory
University of Colorado

Matthew Kuchan, Ph.D.
Section Head
Discovery Research
Abbott Nutrition, R&D

Robert McMahon, Ph.D.
Associate Director
Global Discovery and Analytical Sciences
Mead Johnson Nutrition

Luis Mejia, Ph.D.
Adjunct Associate Professor
Food Science and Human Nutrition
University of Illinois

Marianne O’Shea, Ph.D.
Senior Director
PAF Global Nutrition
PepsiCo

Ralphenia Pace, Ph.D., R.D., L.D.
Department Head
Department of Food and Nutritional Sciences
Tuskegee University

Martha Stipanuk, Ph.D.
James Jamison
Professor of Nutrition
Division of Nutritional Sciences
College of Ecology
Cornell University

Jeffrey Zachwieja, Ph.D.
Senior Vice President for Nutrition Research
Dairy Research Institute

Help us keep track of other alumni!
We always try to keep in touch with our alumni, whether it be through this newsletter, social media or direct mailings. Through the years, we have lost touch with some alumni.

If you have an email or mailing address for the following DNS alumi, please let us know via email at nutritionalsciences@illinois.edu.

Sandra D. Simons (Ph.D. 1974) • Hye Y. Kim (Ph.D. 1992)
Dear DNS Friends,

Celebrations are important. They provide an opportunity to recognize good work and to say thank you. Due to the efforts of many talented faculty, staff and students, the Division of Nutritional Sciences has many reasons to celebrate.

For example, most recently Illinois Governor Pat Quinn announced $3.5 million for a new Feed Technology Complex. The state-of-the-art complex will replace the century-old feed mill on St. Mary’s Road. The facility will provide researchers (many with appointments in the Division of Nutritional Sciences) the ability to process customized animal feeds and will support world-class research and educational programs in crop and animal sciences, nutrition, and food sciences. The facility will be used to develop and test new technologies that can be applied to the manufacture of animal and human foods, and will support research on safe food production, animal nutrition, and sustainable livestock practices. The total estimated cost of the project is $13.3 million. Archer Daniels Midland Company agreed to invest $1.5 million in the project. The university and College of ACES are also contributing. After many years of proposals, this announcement was indeed a celebration.

Next, building on a long-standing relationship and College of ACES are also contributing. The facility will provide researchers (many with appointments in the Division of Nutritional Sciences) the ability to process customized animal feeds and will support world-class research and educational programs in crop and animal sciences, nutrition, and food sciences. The facility will be used to develop and test new technologies that can be applied to the manufacture of animal and human foods, and will support research on safe food production, animal nutrition, and sustainable livestock practices. The total estimated cost of the project is $13.3 million. Archer Daniels Midland Company agreed to invest $1.5 million in the project. The university and College of ACES are also contributing. After many years of proposals, this announcement was indeed a celebration.

Thirdly, a substantial gift for a new biomedical swine research unit in the College of ACES will increase capability for research regarding learning and memory in young pigs with the goal of understanding how nutrition affects brain development in human infants. Mead Johnson Nutrition awarded $945,000 to Dr. Ryan Dilger, another DNS faculty member, to fund the new facility.

These are just three examples of the tremendous nutrition-related research being recognized on this campus.

As you peruse this newsletter and learn more about the celebrations and the happenings in the DNS, please take time to think about how this program has added value to your life. Then, consider ways you can participate in the DNS. We look forward to hearing from you! To learn more, contact Kimberly Meenen at (217) 333-9355 or kmeenen@illinois.edu.

---

### Giving Options

- **DNS Excellence Endowment Fund/Project DEED (#773001)**: Provides permanent funding for the recruitment and retention of the best graduate students and enhanced research and professional development experiences for all DNS students
- **DNS Excellence Fund (#336514)**: Provides current funding for research and professional development opportunities for DNS students
- **DNS Annual Fund (#332984)**: Provides unrestricted support for DNS
- **David H. Baker Nutrition Scholar Award Fund (#771806)**: Recognizes students who display excellence in research as documented through peer-reviewed publications, awards and research grants
- **James L. Robinson Nutrition Impact Award Fund (#772698)**: Recognizes students who display excellence in professional service through activities in the NSGSA or to promote and enhance DNS and/or nutrition at the campus, state or national level
- **Frank W. Kari Memorial Award Fund (#773054)**: Provides travel awards to DNS students to present their scientific findings at professional meetings, such as Experimental Biology
- **Toshiro Nishida Research Award Fund (#772951)**: Provides support for travel to national and international scientific conferences to DNS Students
- **William C. Rose Award Fund (#770331)**: Provides travel awards to DNS students to attend scientific conferences in the field of nutritional sciences

---

Support DNS

The Division launched its Endowment Initiative in 2001, and we are very thankful to the faculty, students, alumni and friends who have supported DNS through contributions to the Endowment Fund and the Annual Fund. Contributions of all amounts are greatly appreciated. DNS would like to ask that you consider taking this opportunity to help secure our brilliant future by making a new contribution or an additional contribution to your alma mater.

---

**Project DEED**

Project DEED is an effort to increase the DNS endowment fund by $250,000. These endowment funds will provide permanent support for the recruitment and retention of the best graduate students and strengthen the educational experience of all DNS students. To donate to Project DEED, use account #773001.