

NUTRITIONAL SCIENCES NEWS

DIVISION OF NUTRITIONAL SCIENCES • UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN

Vol 18, Fall 2005

NOTE FROM THE DIRECTOR

It was a remarkable and exciting year for the Division of Nutritional Sciences and I am proud to share our accomplishments as well as the achievements of our faculty, graduate students and alumni.

Faculty and students in the Division were well recognized for their exceptional research and teaching accomplishments. Most significantly, Dr. David Baker was elected to the National Academy of Sciences. This highly prestigious honor is a fitting recognition of Dr. Baker's career accomplishments. He was one of 72 new members of the National Academy elected this year. There are ~ 2000 members of the National Academy of Sciences in the 30 scientific disciplines the Academy recognizes. Dr. Baker joins 46 other members in the "Animal, Nutritional, and Applied Microbial Sciences" scientific discipline.

I am particularly gratified to report that the Division of Nutritional Sciences was selected as the 2005 recipient of the highly prestigious 5-year \$500,000 Freedom to Discover Nutrition Grant from Bristol-Myers Squibb. The grant will support research conducted by a multidisciplinary group of Nutritional Sciences faculty members on the topic of "*Defining the nutritional requirements of the developing intestinal ecosystem*". The Division also received another USDA National Needs grant in April 2005. The grant will support two predoctoral fellows to conduct research in the area of "*Soy and Human Health*". Preceptors on the grant include faculty from the Colleges of ACES, Applied Life Studies and Veterinary Medicine. Fellowship funding will allow us to recruit the highest quality students to conduct research in this important area.

We welcomed nine students into the Division in the past year. **See page 7** for more information on these exceptional individuals. Three new faculty joined the Division during the 2004-2005 academic year (**see pages 21-22**). These faculty expand our research strengths in the areas of nutritional genomics and the role of exercise and nutrition in disease prevention.

I am pleased to announce that the Division hired a new Project Coordinator, Ms. Armgard Haken. Armgard received her B.S. and M.S. in Biology from the University of Illinois. She was employed in the Agricultural Engineering Department at UIUC and then by Archer Daniels Midland in Decatur, IL prior to accepting the position in the Division. Armgard is assisting with administering the three Division training grants, maintaining the web site, developing marketing materials for the Division and will be taking a larger role in alumni relations and the Division's endowment initiatives in the future. I am grateful to the College of ACES for agreeing to partially support the Project Coordinator position for 3 years. The goal will be for this position to be self-supporting by the end of the 3-year period.

In closing, I would like to acknowledge the contributions of the faculty and students to the program. Without your hard work and dedication, we would not continue to grow and improve each year. Likewise, the support of campus administrators and the guidance of the External Advisory Committee are instrumental to our success. Last, but not least, our alumni. You are doing an exceptional job of advocating for the program through your successful careers and professional accomplishments. Please do not hesitate to contact me at any time (sdonovan@uiuc.edu or 217-333-4177).



Sharon M. Donovan

Sharon M. Donovan, Ph.D., R.D.

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VISIT OUR WEB SITE FOR
E-MAIL ADDRESSES OF CURRENT
FACULTY & STUDENTS
<http://www.nutrsci.uiuc.edu>

If you have any comments or suggested improvements for the web site, contact us anytime at nutrsci@uiuc.edu

ALUMNI

Visit the *Alumni Information* section under the “*Graduate Students and Alumni*” link on the web site to ensure that your information is up-to-date. <http://www.nutrsci.uiuc.edu/students_alumni/alumni_info.cfm>. If the information is incorrect, simply click on the “*Contact Us*” link at the bottom of the page and e-mail us your current information. *Please let us know if you do not want your information included on the web site.*

You can also use the “*Alumni Update*” form to provide new contact information, employment updates or submit newsletter information at any time of the year <http://www.nutrsci.uiuc.edu/students_alumni/alumni_update.html>.

We have posted an “*Alumni Outcomes Assessment*” form that we ask you to complete and submit on-line <http://www.nutrsci.uiuc.edu/students_alumni/alumni_survey.html>. This information will be used to assist us in program evaluation and improvement. We are requesting that alumni complete the form at 2 and 5 years postgraduation and then at 5 year increments. For example, this year, graduates from 2003, 2000, 1995, 1990...etc, are asked to complete the form. However, alumni are welcome to complete the questionnaire at any time.

The Infamous Jack Sprat Question (and Answer)

For hundreds of Nutritional Sciences students for a quarter of a century, the Infamous Jack Sprat Question was an integral part of Nutritional Sciences 411.

With the retirement of Dr. James L. (Mad Dog) Robinson in 2002, Jack Sprat is no longer part of the course, now renumbered as Nutritional Sciences 511. Accordingly, the answer to the question now can be released.



Question:

**Jack Sprat could eat no fat.
His wife could eat no lean.
Their son, in protest, starved himself.
Metabolically, what does it all mean?**

Answer: Liz Ott penned this response in 1998.

**Jack isn't doing all that bad.
His wife's condition is a bit more sad.
Their son, although he's still alive,
Needs food soon, or he won't survive!**

EXTERNAL ADVISORY COMMITTEE/GRADUATE STUDENT FORUM

The annual Nutritional Sciences External Advisory Committee (EAC) meeting was held on September 7-8, 2005. The graduate students and members of the EAC are provided with the opportunity to interact in private. It is the intention of this EAC/Graduate Student Forum to enable students to receive information regarding options that they may face following graduation, while providing the External Advisory Committee with important feedback from our students that may not be obtainable in other settings. With this in mind, the graduate students are divided into groups that are led in discussion by members of the External Advisory Committee.

This year's topics included:

What steps need to be taken (ie. postdoc) and what other skills (ie. cross-training) should a student prepare for to get the position they desire in academia or industry?

How to balance professional achievement and home life during the process of getting the position desired and after reaching their ultimate goal?

What aspects should one look for in a future employer in regards to pregnancy leave/time off, day care, glass ceiling gender issues, etc?



NUTRITIONAL SCIENCES EXTERNAL ADVISORY COMMITTEE

The External Advisory Committee (EAC) is comprised of leaders in industry and academia. This committee assists the Division in our quest to continually improve the quality of our program. This year we welcomed Richard Black, Eric Gugger, Greg Paul and Roger Sunde to the Committee. We would like to acknowledge the contributions of Gail Czarnecki-Maulden, Samuel Kahn and Eric Lien who will complete their terms on the Committee this year. Thank you!

Dr. Pamela A. Anderson, Current Term 2001-2007.

Director, Medical and Regulatory Affairs, Ross Products Division, Abbott Laboratories, Columbus, OH.

Dr. Richard M. Black, Current Term 2005-2008.

Vice President, Global Nutrition/Chief Nutrition Officer, Kraft Foods Global, Inc., Glenview, IL.

Dr. Robert A. Burns, Current Term 2003-2009.

Research Fellow, Nutrition Sciences, Mead Johnson Nutritionals, Evansville, IN.

Effective November 2005: Global Director of Nutrition, Cadbury Schweppes Science & Tech. Ctr., Whippany, NJ.

Dr. Gail Czarnecki-Maulden, Current Term 2000-2006.

Senior Research Nutritionist, Nestle Purina Product Technology Center, St. Louis, MO.

Dr. Eric T. Gugger, Current Term 2005-2008.

Technology Manager, Nutrition Science, General Mills, Minneapolis, MN.

Dr. Samuel G. Kahn, Current Term 2003-2006.

Consultant: Nutrition and International Food Programs, Potomac, MD.

Dr. Barbara A. Kochanowski, Current Term 2001-2007.

Director, Product Safety & Regulatory Affairs, Personal Health Care, Procter & Gamble, Co., Mason, OH.

Dr. Gilbert A. Leveille, Ad Hoc

Senior Consultant, Scientific & Regulatory Affairs, Cargill, Inc., Denville, NJ.

Dr. Eric L. Lien, Current Term 2003-2006.

Senior Scientific Advisor, Wyeth Nutrition, Malvern, PA.

Dr. Luis A. Mejia, Current Term 2002-2008.

Director, Regulatory and Scientific Affairs, Archer Daniels Midland Company, Decatur, IL.

Dr. Greg L. Paul, Current Term 2005-2008.

Global Director, Nutrition Strategy, The Solae Company, St. Louis, MO.

Dr. Susan M. Potter, Current Term 2002-2008.

Vice President, Health and Nutrition Sciences, Tate and Lyle, Decatur, IL.

Dr. Roger A. Sunde, Current Term 2005-2008.

Professor and Chair, Dept Nutritional Sciences, University of Wisconsin, Madison, WI.



S. Kahn, G. Leveille, S. Potter, L. Mejia, E. Lien, G. Czarnecki-Maulden, B. Kochanowski, R. Sunde, P. Anderson, G. Paul, E. Gugger, R. Black
(not pictured: R. Burns)

The faculty and students thank the Committee members for their valuable contributions to our program.



**Presenters at the
September 2005 EAC Meeting**

Amanda Bergschneider-Newell (M.S. candidate), Kelly Swanson (Assistant Professor), and Jessica Campbell (Ph.D. candidate)

A reception for EAC members, faculty, students and administrators was held at Dr. Donovan's home on September 7, 2005.



Committee member Gil Leveille and Emeritus Faculty member Dave Baker



Faculty member Mary Ann Lila and M.D./Ph.D. candidate Tristan Kraft



Committee members Sue Potter and Eric Gugger and Director Sharon Donovan



Ph.D. candidates Marcela Cortes, Christina Sherry, Kristin Harris, Committee member Pam Anderson and Ph.D. candidates Marcela Araya-Roldan, Victoria Vieira



Faculty member Lee Beverly and Committee member Eric Lien

Ph.D. candidate Marcela Araya-Roldan, Committee member Eric Gugger, Ph.D. candidates Jessica Campbell, Kristin Harris and Kirstie Canene-Adams



Kraft Foods Human Nutrition Endowment



In 2002, Kraft Foods established a \$1M endowment in the Division of Nutritional Sciences, which provides funding for undergraduate scholars in the Department of Food Science and Human Nutrition, graduate fellows in the Division, unrestricted support for the Division and a Kraft Endowed Professorship.

In late 2004, the endowment commitment was fulfilled and we are currently in the process of selecting the inaugural holder of the Kraft Professorship.

Kraft Undergraduate Scholars

The Department of Food Science and Human Nutrition selected the following undergraduate students to receive a \$2000 Kraft Scholarship for the 2005-06 academic year.

Leslie Selcke is a Junior in Food Science.

Aili Sun is a Junior in Food Science.

Sophia Torres is a Junior in Food Science.

The Division is extremely thankful to Kraft for their generous support of our academic programs and looks forward to our continuing collaborations.

Endowment Fund Giving Opportunities

Thank you to those of you who have supported the Division through contributions to the Endowment Fund and the Annual Fund. Your generosity is greatly appreciated and is providing critical support for our students and programs.

If you have not taken the opportunity to support your alma mater, please consider making that step in 2006. You can donate to our unrestricted Endowment Fund or remember a former professor by donating to the following established accounts:

- ***Nutritional Sciences Endowment Fund***
- ***David H. Baker Nutrition Scholar Award***
- ***Toshiro Nishida Research Award***
- ***James L. Robinson Nutrition Impact Award***
- ***Willard J. Visek Lectureship***

It is easy to make a contribution on-line. On our web site under the "Endowment Fund" tab, you will find a link <http://www.nutrsci.uiuc.edu/endowment_fund/contributions.html> that will allow you to use a credit card. Alternatively, you can send a check to the Division office. Please make the check payable to the "University of Illinois Foundation" and indicate your account preference on the check subject line or in a letter accompanying the check. If you work in industry, please inquire whether your company participates in a matching program. Your donation is tax deductible.

A primary goal is to establish 5 endowed graduate fellowships; we have 2 through the Kraft Endowment. Currently, the Provost will match the interest off the endowed fellowship account so that it only requires \$150,000 to endow a named graduate fellowship rather than \$300,000. If you or your company would like to consider that option, please contact Dr. Donovan (sdonovan@uiuc.edu).

Summer 2005

Nancy Engelmann, M.S. candidate, B.S. 2005 in Molecular and Cellular Biology, UIUC. *Advised by John Erdman.*

Kristin Reifsteck, M.S. candidate, B.S. 2004 in Dietetics, FSHN, UIUC. *Advised by Kelly Tappenden.*

Emily Tomayko, M.S. candidate, B.S. 2005 in Dietetics, University of Georgia, Athens. *Advised by Ken Wilund.*



Back row: Ren-Hau Lai, Jennifer King, Nikki Ford, Kristin Reifsteck, Jennifer Woodard

Front row: Nancy Engelmann, Tara Rogers, Min-Jung Park, Emily Tomayko

Fall 2005

Nikki Ford, M.S. candidate, B.S. 2005 in Animal Bioscience, Penn State University. *Advised by John Erdman.*

Jennifer King, M.S. candidate, B.S. 1999 in Animal Sciences, UIUC. *Advised by John Erdman.*

Ren-Hau Lai, Ph.D. candidate, B.S. 1999 in Civil Engineering, National Central University, Taiwan; M.S. 2002 in Civil Engineering, University of Michigan, Ann Arbor; B.S. 2005 in Traditional Chinese Medicine, Beijing University. *Advised by Elizabeth Jeffery.*

Min-Jung Park, Ph.D. candidate, B.S. 2002 in Home Economics, and M.S. 2004 in Molecular and Cellular Biology, Pusan National University, Busan, Korea. *Advised by Greg Freund.*

Tara Rogers, M.S. candidate, B.S. 2005 in Dietetics, FSHN, UIUC. *Advised by Karen Chapman-Novakofski.*

Jennifer Woodard, M.S. candidate, B.S. 2005 in Chemistry, minor in Anthropology, UIUC. *Advised by Kelly Tappenden.*

August 2004

Renu Stephen, M.S. Current Position: Doctoral candidate, Arizona State University, Tempe, AZ. *Advised by Kelly Tappenden.*

October 2004

David Albin, Ph.D. Current Position: Postdoctoral Fellow, USDA Eastern Regional Research Center, Wyndmoor, PA. *Advised by Kelly Tappenden.*

Anne Bartholome, Ph.D. Current Position: Senior Scientist, Novartis Medical Nutrition, St. Louis Park, MN. *Advised by Kelly Tappenden.*

Jamie Baum, Ph.D. Current Position: Postdoctoral Scholar, Cellular & Molecular Physiology, Penn State University College of Medicine, Hershey, PA. *Advised by Don Layman.*

Edward Jacobson, M.S. Current Position: Arrow Communications, New York, NY. *Advised by Don Layman.*

December 2004

Brian Berg, Ph.D. Current Position: Postdoctoral Fellow, Dept of Neurology, Rush University Medical Center, Chicago, IL. *Advised by Rod Johnson.*

Kajorn Kitiphongspattana, Ph.D. Current Position: Postdoctoral Scholar, Dept of Medicine, University of Chicago, IL. *Advised by Rex Gaskins.*

Emily Petr, M.S. Current Position: Dietetic Intern, Vanderbilt University, Nashville, TN. *Advised by John Erdman.*

Kenya Thomas, M.S. Current Position: Applying to medical school. *Advised by Sharon Donovan.*

Victoria Wade, Ph.D. Current Position: Research Analyst, Grants and Special Projects, Black Hills State University, Spearfish, SD. *Advised by Keith Singletary.*

May 2005

Simone Sinclair, M.S. Current Position: Seeking employment. *Advised by Matthew Wallig.*



Advisor Rod Johnson and Brian Berg

2005 Officers

Chair.....Marcela Araya-Roldan	Co-Chair.....Christina Sherry
Treasurer.....Dolores Doane	Co-Treasurer.....Denise Walker
Reporter/Secretary.....Gerardo Nava	Webmaster.....Meredith Barnes
Executive Committee Representative..Tristan Kraft	

2004-2005 MARGIN OF EXCELLENCE AWARDS

Travel Awards

The objective of the travel award program is to encourage students to present their research at national and international professional meetings by helping to defray the costs of travel to these meetings.

Fall 2004

Aline Andres
 Amanda Bergschneider-Newell
 Jessica Campbell
 Kirstie Canene-Adams
 YeWon Cheon
 Tristan Kraft
 Brian Lindshield

Spring 2005

Dolores Doane
 Mengyuan Du
 Marlene Guillon
 Adam Reppert
 Susan Zaripheh
 Xiangfeng Zhang



2005 Research Awards

The research award provides students with experience preparing research proposals and helps to support high quality research conducted by those students. The primary criterion for selection is the quality of the proposed research.



Pascasie Adedze
 Aline Andres
 Jessica Campbell
 Kirstie Canene-Adams
 YeWon Cheon
 Cheryl Dikeman
 Mengyuan Du

Jessica Hartke
 Hyun-Young Koo
 Brian Lindshield
 Karen Ochonicky
 Chad Stroud
 Barbara Yudell
 Susan Zaripheh

2004-2005 FELLOWSHIP RECIPIENTS

JBT Fellowship
(College of ACES)

Cheryl Dikeman
 Brian Lindshield
 Tory Parker
 Adam Reppert
 Barbara Yudell

***USDA National Needs
Fellowship***

Predoctoral
 Meredith Barnes
 Susan Evans
 Layne Norton
 Chad Stroud

NIH Fellowship

Predoctoral
 Jennifer Croix
 Christopher Guest
 Bianca Maples
 Victoria Vieira

Postdoctoral
 Jessica Buchanan
 Jason O'Connor

University Fellowship

Amanda Bergschneider-
 Newell
 Katrina Sprengelmeyer

***Kraft Human Nutrition
Fellowship***

Christina Mack
 Lilly Sueiro

CONACYT Scholarship
(Mexican Government)

Marcela Cortes
 Gerardo Nava

Fulbright Scholarship

Mina Mojtahedi



Back Row: Lee Beverly, Adam Reppert, Tory Parker, Brian Lindshield,
 Meredith Barnes, Christopher Guest

Middle Row: Victoria Vieira, Jennifer Croix, Bianca Maples, Lilly Sueiro

Front Row: Barbara Yudell, Christina Mack, Cheryl Dikeman,
 Marcela Cortes, Susan Evans

Attention Alumni: If you have internship opportunities available at your company, please let the Division office (nutrsci@uiuc.edu) know so that we can inform our graduate students.

On January 19, 2005, the recipients of the Baker and Robinson Graduate Student Awards were announced. The **David H. Baker Nutrition Scholar Award** is given annually to the most outstanding graduate student majoring in Nutritional Sciences at UIUC; and the **James L. Robinson Nutrition Impact Award** is given annually to the graduate student who has made the greatest extracurricular impact on the Division of Nutritional Sciences.

A cash award of \$500 is provided to each award recipient and the recipient's name is added to a plaque permanently displayed outside the Division office.



Jessica Hartke received the "James L. Robinson Nutrition Impact Award"

Brian Berg received the "David H. Baker Nutrition Scholar Award"



Sharon Donovan (advisor), Jessica Hartke and James Robinson

David Baker, Brian Berg, and Rod Johnson (advisor)



2005 NISHIDA AWARD

On May 4, 2005, the first recipient of the Nishida Graduate Student Award was announced. The **Toshiro Nishida Research Award** is given annually to a Nutritional Sciences student at UIUC to help foster professional development by supporting travel to scientific conferences.

This award is supported by a permanent endowment established in the UI Foundation by Dr. Nishida, his former students and friends. The \$500 prize is awarded as partial reimbursement for expenses incurred for registration and/or travel to the meeting. The recipient's name is permanently displayed on a plaque outside the Division office.



Meredith Barnes received the first "Toshiro Nishida Research Award"



Toshiro Nishida, Meredith Barnes, and Lee Beverly (advisor)

STUDENT AWARDS AND ACHIEVEMENTS

Meredith Barnes received a Graduate College Conference Travel Award to attend the 65th Annual Scientific Session of the American Diabetes Association meeting held July 10-14, 2005 in San Diego, CA where she presented "Rate of decline in blood glucose affects noradrenergic activity in the ventromedial hypothalamus". She was selected for membership in Gamma Sigma Delta Honor Society (Agriculture). Meredith also ran the Coca Cola Zero Rock 'n' Roll Marathon in San Diego, CA on June 5, 2005.

Jessica Campbell was selected for membership in Gamma Sigma Delta Honor Society. She received first place in the ASN Dietary Bioactive Components RIS, Student Poster Competition. Jessica published the following manuscripts and book chapters: Campbell JK, Erdman JW, Jr. (2004) Tomato, lycopene, and prostate cancer. In: Bendich A and Deckelbaum RJ, eds, Preventive Nutrition: The Comprehensive Guide for Health Professionals, Third Ed., Totowa, NJ: Humana Press; Campbell JK, Canene-Adams K, Lindshield BL, Boileau TWM, Clinton SK, Erdman JW, Jr. (2004) Tomato phytochemicals and prostate cancer risk. *J Nutr* 134:3486S-92S; Canene-Adams K, Campbell JK, Zaripheh S, Jeffery E, Erdman JW, Jr. (2005) The tomato as a functional food. *J Nutr* 135:1226-1230.

Jennifer Croix was married to Alex Jerez-Roman on January 18, 2005. Congrats!

Dolores Doane serves as the Nutritional Sciences Graduate Student Association (NSGSA) co-treasurer; she became a member of the American Society for Nutrition (ASN) and will serve on the ASN Student Interest Group Executive Committee from 2005-2008. She presented her first abstract/poster at the Experimental Biology meeting in San Diego, CA in April 2005. Dolores was acknowledged on the Incomplete List of Teachers Ranked as Excellent by Their Students for ANSC 362 (Animal Physiology). She trained with Team in Training (through Leukemia Lymphoma Society) for her first marathon and also ran the Coca Cola Zero Rock 'n' Roll Marathon in San Diego, CA on June 5, 2005 in under 5 hours.

Nancy Engelmann received the Hope E. Hopps Award from the Society for In Vitro Biology and the LAS James Scholar Research Award, UIUC. She presented a poster at the In Vitro Biology meetings in June 2005 entitled "Quantitation of *in vitro* red clover isoflavones".

Susan Evans is completing a RD internship in FSHN, UIUC. She published the following: Francis MM, Evans SP, Jensen M, Madsen DM, Mancuso J, Norman KR, Maricq AV. (2005) The Ror receptor tyrosine kinase CAM-1 is required for ACR-16-mediated synaptic transmission at the *C. elegans* neuromuscular junction. *Neuron* 46(4):581-594.

Kristin Harris and husband Mark welcomed their first child, Owen, on January 31, 2005.

Jessica Hartke presented an abstract entitled "Small intestinal IGF-I binding protein (IGFBP)-2 and -5 and IGF-I receptors in piglets suckling IGF-I transgenic sows" at the 2005 National American Society of Animal Science meetings in Cincinnati, OH. She also published the following: Hartke JL, Monaco MH, Wheeler MB, McCusker RH, Donovan SM. (2005) Effect of a short-term fast on intestinal disaccharidase activity and villus morphology of piglets suckling IGF-I transgenic sows. *J Anim Sci* 83:2404-2413.

Tristan Kraft received a Summer Research Fellowship from the UIUC College of Medicine and a Thomas Buetow Memorial Fund and Carle Development Foundation Travel Award. He had the following publication: Kraft TFB, Schmidt BM, Knight CTG, Cuendet M, Gills JJ, Kang YH, Pezzuto JM, Seigler DS, Lila MA. (2005) Chemopreventive potential of wild blueberry fruits in multiple stages of carcinogenesis. *J Food Sci* 70:S159-166.

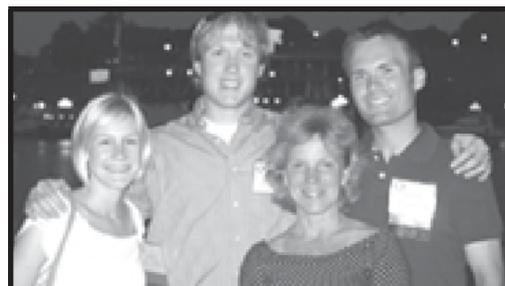
Karen Ochonicky was the recipient of the Abbott Veterinary Medical Scholars Fellowship for 2004-2005. She presented a talk entitled "Inhibitory effects of human and porcine milk oligosaccharides on sialic acid dependent and sialic acid independent strains of rotavirus" at the 2005 National American Society of Animal Science meetings in Cincinnati, OH.

Tory Parker and his wife Andrea welcomed their son, Judson Tory, on September 7, 2005. He weighed 6 lb15 oz and was 19.75 inches long. Congratulations!

Karen Plawecki received the 2005 ACES Outstanding Instructor Award from Alpha Zeta. Alpha Zeta is a professional organization of men and women in agriculture and natural resources. It is the oldest fraternal society in agriculture and is dedicated to the highest levels of scholarship, leadership, integrity and service. Congratulations Karen!

Adam Reppert served as Treasurer for the NSGSA in 2004-2005. He received a Society of In Vitro Biology Travel Award to attend the 2005 conference where he presented "Novel isoflavone C- glycosides elicited in *pueraria lobata* (*kudzu*) cell and root cultures". Adam completed a Black Rhinoceros Internship at Fossil Rim Wildlife Center, Glen Rose, TX in summer 2005.

Trina Sprengelmeyer is a member of the American Dietetic Association and is a teaching assistant for FSHN 120 for fall 2005. She developed outreach materials for non-traditional diabetes education, which are posted at <http://www.urbanext.uiuc.edu/diabetes/index.html>.



M.S. candidate Nancy Engelmann, M.D./Ph.D. candidate Tristan Kraft, Faculty Member Mary Ann Lila, and M.S. candidate Adam Reppert

About the Nutritional Sciences Symposium

Each year the NSGSA organizes a day for students to present their research in the area of nutritional sciences that includes a student competition for both poster and oral presentations. The symposium provides a valuable opportunity for students to present their research to peers and faculty while practicing for presentations at national meetings. Winners of the poster and oral competitions win cash prizes. The symposium featured keynote speaker **Dr. Simin Meydani**, D.V.M., Ph.D., Associate Director of the USDA Human Nutrition Research Center on Aging at Tufts University, Boston, MA, who presented "Nutritional Modulation of Immune Response in the Aged: Molecular Mechanisms and Clinical Implications".



Kirstie Canene-Adams, NSGSA Co-chair
and Dr. Simin Meydani, keynote speaker

ORAL PRESENTATIONS



"Total polyphenol content, antioxidant capacity and human DNA topoisomerase inhibition of herbal teas" **Amanda Bergschneider-Newell**, at left (Advisor: **Elvira deMejia**)



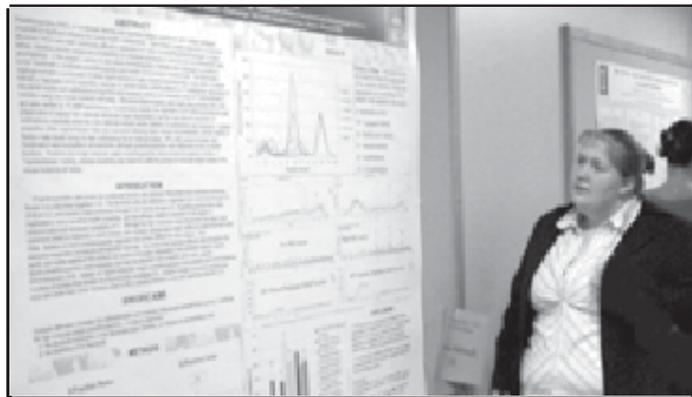
"A peptide-based diet with a low amount of free amino acids enhances gastrointestinal structure and function in young pigs with a compromised gastrointestinal tract" **Bianca Maples**, at right (Advisor: **Kelly Tappenden**)



"Metabolic fate of broccoli-derived glucoraphanin in Fisher 344 rats" **Radha Bheemreddy** (Dept FSHN), at left (Advisor: **Elizabeth Jeffery**)



"Influence of age on caspases and Bcl-2 protein in chicken skeletal muscle" **Xiangfeng Zhang**, at right (Advisor: **Jan Novakofski**)



“The influence of liquid chromatography methods on proanthocyanidin structural integrity and bioactivity ” **Jessica Alwerdt**, at left (**Advisor: Mary Ann Lila**)

“Isoflavones at concentrations present in soy-based infant formula inhibit rotavirus infectivity in vitro ” **Aline Andres**, at right (**Advisor: Sharon Donovan**)



“Rate of decline in blood glucose affects noradrenergic activity in the ventromedial hypothalamus ” **Meredith Barnes** (**Advisor: Lee Beverly**)

“Relative bioavailability of phytoene and phytofluene in male Fisher 344 rats” **Jessica Campbell** (**Advisor: John Erdman**)

“Effects of dietary lycopene, tomato and broccoli powders on the growth of Dunning R3327-H prostatic adenocarcinoma tumors” **Kirstie Canene-Adams** (**Advisor: John Erdman**)

“Orexin A increases glutamate and decreases GABA release in the perifornical region of the lateral hypothalamus” **Dolores Doane** (**Advisor: Lee Beverly**)

“Correlations of chemical composition, antioxidant capacity and cellular oxidative stress in extracts from broccoli cultivars” **Marian Eberhardt** (Dept FSHN) (**Advisor: Elizabeth Jeffery**)

“A tryptophan-rich diet did not increase brain tryptophan and serotonin of fasted rats” **Marlene Guillon** (**Advisor: Lee Beverly**)

“The cloning of the rat CMO II gene and the transcriptional regulation of CMO I and CMO II in tissues of rats fed lycopene for different lengths of time” **Susan Zaripheh** (**Advisor: John Erdman**)



“Chemopreventive activity of *Sambucus nigra* and *S. canadensis* berries” **Tristan Kraft**, above (Advisor: **Mary Ann Lila**)



“The effect of tomato, broccoli, lycopene, or finasteride treatment on connexin 43, Skp2, or PTEN protein levels in Dunning R-3327-H transplantable prostate tumors” **Brian Lindshield**, above (Advisor: **John Erdman**)



“Prediction equations overestimate resting metabolic rate of spinal cord injured athletes” **Mina Mojtahedi**, above (Advisor: **Ellen Evans**)



Congratulations to the following winners:

Poster 1st Place: Aline Andres, Meredith Barnes, Kirstie Canene-Adams

2nd Place: Jessica Campbell, Dolores Doane, Tristan Kraft

Oral: Bianca Maples (1st Place) and Radha Bheemreddy (2nd Place)

Graduate students, faculty and their families enjoyed a picnic in Hessel Park on September 29, 2005. The picnic serves as a welcome for new graduate students and faculty to kick off a new academic year.



*On left: Dave Baker and Larry Schook
On right: Frances Schook and Norraine Baker*



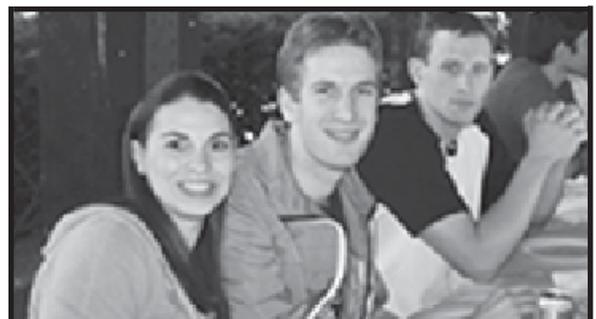
Jessica and Jon Campbell



*On left: Tristan Kraft, Barbara Yudell and Chris Guest
On right: Nancy Engelmann*



*On left: Owen and Mark Harris
On right: Kristin Harris*



Kirstie and Dave Adams
and Brian Lindshield



WINNING TEAM

Team Swanson

Kristin Harris, Xiangfeng Zhang, Dr. Kelly Swanson, Emily Tomayko and Barbara Yudell

Team Beverly

Amanda Bergschneider-Newell, Tory Parker, Dr. Lee Beverly, Jennifer King and Tristan Kraft

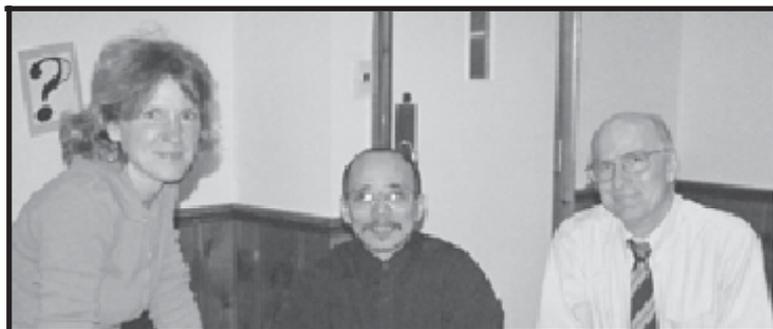


Team Wallig

Jessica Campbell, Adam Reppert, Dr. Matt Wallig, Yan Gao and Meredith Barnes

Team Wilund

Brian Lindshield, Keng-I Lin, Dr. Ken Wilund, Victoria Vieira and Marcela Cortes



**Master of Ceremonies
and Quiz Bowl Judges**

Mary Ann Lila (MC) and Judges Manabu Nakamura and Jim Robinson

HAPPY HOLIDAYS FROM THE NSGSA

Each year, NSGSA selects an organization from the Champaign area to assist during the holiday season. This year, they selected "The Center for Women in Transition"



Bill Helferich and Tim Garrow



Ted, Jessica and Phillip Hartke



Holiday Party Committee: Christina Sherry, Marcela Araya-Roldan, Barbara Yudell, Nancy Engelmann, Nikki Ford, Emily Tomayko



Linda and Jami Barenthin



Kirstie Canene-Adams,
Jon and Jessica Campbell



Mark Harris, Marcela Araya-Roldan, Owen and
Kristin Harris and Marian Eberhardt



Door prizes went to Dr. Garrow, Laura Feeney, Linda Barenthin and Mark, Kristin and Owen Harris



Jackie, John and Edie Erdman



Elvira deMejia and Amanda Bergschneider-Newell



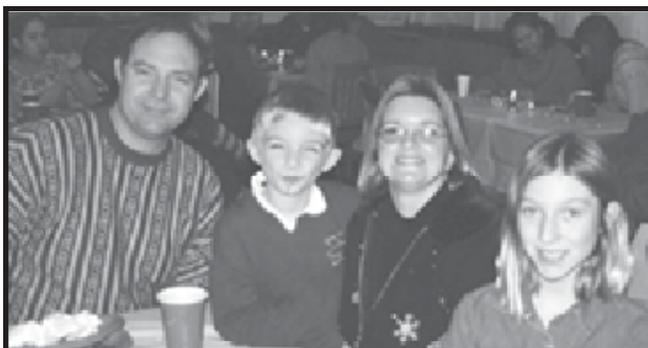
Wesley, Dayton, Jennifer and Lianna King



Adam Reppert, Meredith Barnes, Dolores Doane and Tristan Kraft



Norraine and David Baker



Don and Ian Wallace, Sharon Donovan and Tory Wallace



Theresa and Mark Kuhlenschmidt

On November 16, 2005 the Nutritional Sciences Graduate Student Association presented **Dr. Sharon Donovan** with the 2005 Faculty Award. Faculty members are nominated by students based on the degree of involvement in student affairs and the Division. Dr. Donovan stated that "it is really an honor to be recognized by the students. Being a faculty member at the University of Illinois and serving as Director of the Division of Nutritional Sciences are very rewarding. I couldn't have envisioned a better career. Receiving recognition for doing what I love is just icing on the cake."

**"For extraordinary contribution,
support and encouragement of
Nutritional Sciences Graduate Students"**



Jennifer King and
Sharon Donovan

NEW NUTRITIONAL SCIENCES FACULTY MEMBERS

May 2005

Kimberly A. Huey, Ph.D.

Assistant Professor
Department of Kinesiology
College of Applied Life Studies (ALS)

Research Interests: *Cellular adaptations occurring in skeletal muscle in response to changes in both loading and neural activation.*

We study various *in vivo* and *in vitro* models of increased loading such as muscle stretch and models of reduced muscle activation such as denervation and spinal cord injury. One line of research has utilized *in vivo* gene injection into rat skeletal muscle to study regulation of myosin heavy chain (MHC) gene expression under different loading conditions. Myosin is one of the major contractile proteins in skeletal muscle and provides the majority of functional diversity among muscles; thus, changes in MHC gene expression ultimately change the contractile properties of the muscle. Specifically, adult rat skeletal muscle expresses one slow MHC isoform (Type I) and 3 fast MHC isoforms (Types IIa, IIx, and IIb). Past work has characterized important elements in the slow type I MHC gene promoter that regulate its expression in response to chronic muscle inactivity with spinal cord injury or denervation. Future work in this area includes investigating how anabolic agents impact Type I MHC gene regulation in denervated muscle, thus, providing insight into novel therapies to prevent muscle atrophy during sustained disuse. Recent work has focused on the role of small heat shock proteins (HSP) in skeletal muscle adaptation to alterations in loading and activation. Ongoing studies are investigating changes in the expression and phosphorylation of Hsp25 and Hsp20 in response to increased or decreased muscle loading, *in vivo*. Currently, we are studying modulation of Hsp25 expression and phosphorylation in rat hindlimb muscles functionally overloaded by synergist ablation. These experiments have provided the physiological basis for experiments utilizing *in vitro* stretch (or shortening) to directly study signaling pathways involving Hsp25 and Hsp20 and their effects on muscle mass and function. Studies also are planned to investigate how the interaction between pro-inflammatory cytokines (e.g. tumor necrosis factor alpha) and HSPs may contribute to the loss of muscle mass associated with high levels of cytokines, such as occurs with aging or disease. Overall, our research has implications in several areas such as the benefits of exercise and training and the effects of aging and inactivity on our muscles.



May 2005

Kelly S. Swanson, Ph.D.

Assistant Professor
Department of Animal Sciences
College of Agricultural, Consumer and Environmental
Sciences (ACES)

Research Interests: *Comparative nutrition; companion animal nutrition; nutritional genomics; obesity and diabetes; prebiotics; intestinal microbiota and disease.*

Our research is focused on evaluating the impact of nutrients on the prevention and (or) treatment of various disease states. While companion animals are often the focus of our research, comparing responses across species also is of interest. Therefore, rodent, swine and human experiments also commonly are performed. One primary research aim of our lab is to study the effects of diet and



age on intestinal microbiota abundance and activity. In addition to microbial plating methods, denaturing gradient gel electrophoresis (DGGE) and qRT-PCR are used. By using DNA microarrays, qRT-PCR, and immunohistochemistry, another primary objective is to identify the impact of specific nutrients and subsequent changes in intestinal microbiota on gene and protein profiles of intestinal tissue. Similar molecular techniques are used to study obesity and type 2 diabetes, identifying diet and age effects on gene expression and protein abundance in liver, skeletal muscle and adipose tissue. By using these techniques, we hope to identify genes and (or) proteins that are involved in disease pathogenesis that may be used in the development of prevention and treatment strategies.

May 2005

Kenneth R. Wilund, Ph.D.

Assistant Professor
Department of Kinesiology
College of ALS

Research Interests: *The effect of exercise training and dietary modifications on diseases associated with abnormal cholesterol metabolism.*

My laboratory investigates the effect of endurance exercise training on the development of cardiovascular disease and cholesterol gallstones in mouse models of these diseases. We also assess the impact of endurance exercise training and dietary macronutrient manipulations on plasma sterol levels, and novel markers of coronary atherosclerosis, calcification, and the metabolic syndrome.



STAFF NEWS



**Introducing Armgard Haken, the new
Division Project Coordinator!**

She is located in the Division office (449 Bevier Hall) with Linda. Her e-mail address is: aehaken@uiuc.edu

David H. Baker (emeritus) is a member of the FASEB Board of Directors and is a member of the Organizing Committee, International Council of Amino Acid Science. He serves on the following committees for American Society for Nutrition (ASN): Public Policy, Dannon Institute Mentorship Award and the BioServ Award. Dr. Baker became a Fellow in ASN in April 2005 and was elected to the National Academy of Sciences in May 2005.

Karen Chapman-Novakofski is an Associate Editor of the *Journal of Nutrition Education and Behavior*, the professional journal of the Society for Nutrition Education.

Donald P. Briskin received the College of ACES Paul A. Funk Award.

Elvira deMejia was cited on the fall 2004 "Incomplete List of Teachers Ranked as Excellent by Their Students" for FSHN 416, Food Chemistry Laboratory.

Sharon M. Donovan continued to be active in the leadership of ASNS during the process of reorganization to ASN by serving on the Joint Council Advisory Group. She completed her 3-year term as Secretary of ASNS in 2005, but was appointed Secretary of the ASN Transition Executive Board for 2005-2006. She also chaired the nominating committee for BioServ Research Award, and served on the selection committees for Peter J. Reeds Young Investigator Award and the newly established Excellence in Teaching Award. She also became a member of the Steering Committee for the Energy and Macronutrient RIS, 2005-2007. She served on two review committees for the NIDDK: A Special Emphasis Panel reviewing applications for Clinical Nutrition Research Unit Core Centers in March and a Special Emphasis Panel reviewing applications for Obesity Nutrition Research Centers in November 2005.

John W. Erdman, Jr. serves on the Board of Trustees, ILSI-NA; is a member of the Scientific Advisory Board of the United Soybean Board; and serves as Chair of the Mars Nutrition Research Council. He is Chair of the Committee on Military Nutrition Research and the Committee on Optimization of Nutrient Composition of Military Rations for Short-term, High-stress Situations for the IOM/NAS.

George C. Fahey, Jr. is a member of four editorial boards: *Journal of Nutrition*, *British Journal of Nutrition*, *Archives of Animal Nutrition* and *Journal of Animal Physiology and Animal Nutrition*. He is also a committee member on four Scientific boards: Fats and Proteins Research Foundation, Milk Specialties Co., International Ingredients, Inc. and the National Corn to Ethanol Research Center.

Timothy A. Garrow was promoted to Professor in August 2005. He received the 2005 Teacher Fellow Award from the North American Colleges and Teachers of Agriculture (NACTA). Criteria included in the selection are the instructor's teaching philosophy; evaluations submitted by current students, alumni, administrative officers and peers; a self-evaluation as well as factors such as availability to students, teaching innovations and departmental/institutional activity.

H. Rex Gaskins was cited on the fall 2004 "Incomplete List of Teachers Ranked as Excellent by Their Students" for NUTR 510, Postgenomics: Tools and Applications.

Schuyler S. Korban received the College of ACES Spitze Land-Grant Professorial Career Excellence Award.

Soo-Yeun Lee was cited on the fall 2004 "Incomplete List of Teachers Ranked as Excellent by Their Students" for FSHN 595, Advanced Sensory Evaluation (Extramural Program).

Roderick I. Mackie received the College of ACES Senior Faculty Award for Excellence in Research.

FACULTY AWARDS, ACHIEVEMENTS AND PROFESSIONAL SERVICE, CONTINUED

Kelly S. Swanson accepted an Assistant Professor position in the Department of Animal Sciences, UIUC in August 2004 and became a member of the Division in January 2005. Kelly was a 2005 Dannon Institute Nutrition Leadership Institute Recipient and was selected as a 2005-06 Faculty Fellow of the National Center for Supercomputing Applications (NCSA) UIUC.

Kelly A. Tappenden received the 2005 American Society for Parenteral and Enteral Nutrition Dudrick Research Scholar Award. A.S.P.E.N. presents this annual award to recognize and support an investigator who has shown significant achievements in nutrition support, is an A.S.P.E.N. member, and who demonstrates exceptional research productivity and the potential to continue to make contributions in the field of Specialized Nutrition Support. Dr. Stanley Dudrick, the individual credited with development of parenteral nutrition, nominated Kelly. She received the College of ACES Academy of Teaching Excellence Award. The Academy of Teaching Excellence comprises a select group of College faculty who affirm and encourage excellence in teaching and advising by providing teaching development programs, leadership and support to foster advances in instruction, and promoting excellence in undergraduate and graduate education. She also received the 2004 Faculty Award for Excellence in Research, which is awarded annually to recognize outstanding professional achievement and demonstrated excellence in the area of research.

She serves on committees for the Department of Food Science & Human Nutrition, Nutritional Sciences, Animal Sciences, the College of ACES and the University of Illinois. Kelly serves as the Director of Research, Board of Directors for the American Society for Parenteral and Enteral Nutrition and President, Board of Directors for the American Society for Parenteral and Enteral Nutrition Rhoads Research Foundation. She serves on the BioServ Award Nominating Committee and the Minority Affairs Committee for the American Society for Nutrition; Nutritional and Obesity Section Delegate for the American Gastroenterological Association; and the Governance Task Force and Intersociety Research Meeting Working Group for A.S.P.E.N. Kelly is an Associate Editor, *Gastroenterology* Intestinal Failure supplement and serves on Editorial Boards for *Current Nutrition Reviews*, *Intestine*, and *Journal of Nutrition*. She also participated on Review Panels for the Clinical and Integrative Gastrointestinal Pathobiology Study Section and the National Research Service Award Postdoctoral Fellowship, National Institute of Diabetes and Digestive and Kidney Diseases, NIH and Crohn's and Colitis Foundation of Canada Grants in Aid.

FACULTY RESEARCH STRIDES

David H. Baker studied toxicological aspects of methionine, cysteine, cystine and N-acetylcysteine; and S-methylmethionine: It's role in transmethylation.

Sharon M. Donovan received new grants from Mead Johnson Nutritionals, Wyeth Nutritionals, The Solae Company and the USDA. In addition, she continues to serve as PI on the three Division training grants and the BMS Freedom to Discover grant. She had the opportunity to visit Havana, Cuba in May and August 2005 to initiate a collaborative research project investigating the impact of soy consumption in 7-13-year-old children on growth, development and short- and long-term health outcomes. Collaborators on the project include Tony DeLio at the University of Illinois, Pam Horn-Ross at the Northern California Cancer Center and Armando Rodríguez and Ibrahim Quintana from the Institute of Nutrition and Food Hygiene in Havana, Cuba.

John W. Erdman, Jr. received a grant with **Mary Ann Lila** from NIH/NCI to support use of tomato cell culture systems to produce labelled carotenoids. He also received grants from the following: American Institute for Cancer Research to evaluate the effects of lycopene, selenium and vitamin E on prostate cancer in cell culture and animal models; and from Masterfoods, USA to evaluate the effects of consumption of cocoa products on serum lipids in mildly hypercholesterolemic individuals.

George C. Fahey, Jr. received new grants from Novus Int'l, Zinpro Corp., Lesaffre Yeast Corp., Nestle Purina Healthcare, Ross Products Division of Abbott Laboratories, USDA, and Archer Daniels Midland/Department of Energy.

Manabu T. Nakamura advised students in the James Scholar Honors Program to create a nutrition education website *Essentials for Eaters and Dieters*, <http://web.aces.uiuc.edu/efed>. The website provides concise advice for building healthy and sustainable eating habits and for effective weight loss.

Kelly S. Swanson received funding from the National Center for Supercomputing Applications (NCSA) UIUC for "Predictive data mining of complex nutrigenomic datasets".

Kelly A. Tappenden received funding from NPS Pharmaceuticals, Inc., The Beverage Institute for Health and Wellness, Nestle Nutritionals, Wyeth Ayerst Global Pharmaceuticals, and National Institutes of Health. She also received funding from NIH for an Annual Nutrition Week Research Workshop (2003-08).

FACULTY INVITED TALKS 2004-2005

David H. Baker (emeritus) presented invited talks at the following: Fourth International Conference of Amino Acid Science, Kobe, Japan "Tolerance for branched-chain amino acids in humans and other animals"; Midwest Swine Nutrition Conference, Indianapolis, IN "Amino acid nutrition of swine: What's new?"; "Utilization and toxicity of sulfur amino acids: A species comparison" Los Angeles, CA; and "Ideal Protein" Swine Production School, Champaign, IL.

Sharon M. Donovan presented "Inhibitory activity of bovine milk fat globule membrane against sialic acid-dependent and -independent strains of rotavirus" Joint ADSA-ASAS-CSAS meeting, Cincinnati, OH; "Insulin-like growth factors and intestinal development of artificially reared pigs and piglets suckling IGF-I transgenic sows" International Symposium on Swine in Biomedical Research, Chicago, IL. She visited the Department of Pediatrics at Northwestern University where she discussed her research on therapies to ameliorate TPN-induced intestinal compromise in the piglet model. She presented an evening lecture entitled "Improving infant formulas: Role in lifelong nutritional health" as part of the Boston Nutrition Seminar series. The following day she presented a seminar on "Therapies to ameliorate TPN-induced abnormalities in intestinal structure and digestive and immune function" to the Gastroenterology Division at Boston Children's Hospital. She was an invited speaker at a symposium recognizing the 25th anniversary of the Bristol-Myers Squibb Freedom to Discover Nutrition Program and the 100th anniversary of Mead Johnson, which was held at the University of Cincinnati. She spoke on the "Role of human milk components in GI development: Current knowledge and future needs". She is co-editing the proceedings of the symposium to be published as a supplement in the *Journal of Pediatrics*. She gave an invited lecture on "The effects of soy in Cuban children participating in the Government Feeding Program" at the 1-day symposium on the Effects of Soy on Growth and Development: How Much Do We Know?, Chicago, IL.

John W. Erdman, Jr. was an invited speaker at an NIH/NCI conference on Promises and Perils of Lycopene/Tomato Supplementation and Cancer Prevention. He served as an organizer and moderator of an ILSI conference on Flavonoids and Heart Disease; and presented several talks in Taiwan, including "Does consumption of soy foods reduce the risk of cancer?" at the International Symposium on Nutrition, Diet and Cancer in Taipei.

George C. Fahey, Jr. presented invited talks at the following meetings: IFT, ADSA/ASAS/PSA, American Chemical Society, Symposium on Dietary Fiber with Emphasis on Energy Value, and the California Animal Nutrition Conference.

FACULTY INVITED TALKS, CONTINUED

Timothy A. Garrow presented invited talks in Christchurch, New Zealand at the Department of Chemistry, University of Canterbury, the Biochemistry Unit, Canterbury Health Laboratories, and the Department of Animal and Food Sciences, Lincoln University. He also presented talks at: the Department of Chemistry and Biochemistry, Southern Illinois University, Carbondale; Department of Food Science and Human Nutrition, Iowa State University, Ames; Department of Food Science and Nutrition, California Polytechnic State University, San Luis Obispo; Department of Molecular Biosciences, University of California, Davis; and FASEB Summer Research Conference on Folic Acid, Vitamin B12 and One Carbon Metabolism, Snow Mass, CO.

Kelly S. Swanson presented "New feeding standards for pets" 38th Nottingham Feed Conference, Nottingham, UK; and "Molecular nutrition: Impact on pet food and veterinary medicine" Petfood Forum 2005, Chicago, IL.

Kelly A. Tappenden presented "Nutrition and Functional Foods" Symposium on Innocuity, Preservation and Functional Foods Ties-Enlaces/US-AID/Mexico, University of Illinois-Universidad Autonoma de Queretaro, Queretaro, Mexico; "The influence of butyrate and GLP-2 on intestinal adaptation" and "Teduglutide enhances intestinal structure and function in patients with short bowel syndrome" European Society for Parenteral and Enteral Nutrition, Lisbon, Portugal; "Butyrate and intestinal adaptation: It's not just about the colon" Department of Pediatric Surgery, University of Cincinnati, OH and Section of Digestive Diseases and Nutrition, College of Medicine, University of Illinois, Chicago; "Bowel function in hypotension and hypoxia" Guest faculty in Continuing Medical Education Course, Enhancing the Safety of Parenteral and Enteral Nutrition--Redefining Hospital Nutrition in Modern Medicine, Harvard Medical School, Cambridge, MA; "Introductory overview on gut-associated lymphoid tissue (GALT) physiology" International Life Sciences Institute Annual Meeting, New Orleans, LA; Invited Discussant - Intestinal Failure Symposium and Premier Paper Session, and Moderator - Pediatrics to Geriatrics Symposium, Clinical Nutrition Week 2005, Orlando, FL.

FACULTY PERSONAL ACHIEVEMENTS

Timothy A. Garrow completed a 5-day canoe/camping trip down the Upper Missouri River (Montana). It was great fun and he recommends it to everyone!

2005 MARS NUTRITION RESEARCH COUNCIL LECTURESHIP

by Robin Allen, M.S.P.H., R.D., L.D.

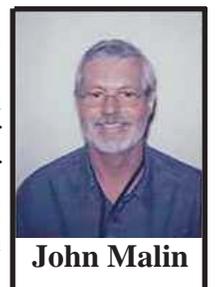


Carl Keen

Dr. Carl Keen has been a Professor of Nutrition since 1981, University of California, Davis, and Chairman of the Department of Nutrition since 1993. He has served on numerous government boards and has chaired and organized national and international conferences such as: New York Academy of Sciences Meeting on Maternal Nutrition and Pregnancy Outcome, and the Western Human Nutrition Centre/USDA on New Approaches to Define Nutrient Requirements. He presented "Potential Influence of Maternal Nutrition on Embryonic and Fetal Programming of Physiological Disorders in Adulthood", April 18, and "Nutrition in Optimizing Pregnancy Outcome: The Critical Role of Micronutrients", April 19, 2005.

John Malin, Ph.D., Vice President (retired), responsible for R&D, Engineering and Manufacturing spent

the past 18 years of his career with Mars, Incorporated. He held the role of Corporate Vice President of Technology. He obtained his Ph.D. in Food Science and Nutrition from Glasgow and is a fellow of the UK Institute of Food Science and Technology. He has many publications and patents in the area of food science, nutrition and food packaging. His career has been dedicated to the food industry, including canine and feline therapeutic diets, as well as, ice cream and chocolate. He presented "Opportunities in the Food Industry" April 18, 2005.



John Malin

Professor David H. Baker was elected to the National Academy of Sciences in May 2005. Election to membership in the Academy is considered one of the highest honors that can be accorded a U.S. scientist or engineer.

The Academy noted Baker's work in developing purified chemically defined diets for nutrition and metabolism studies in pigs, chicks, rats, mice, cats and dogs. This work has led to new information on the precursor role of amino acids and how vitamins and trace minerals interact with amino acids in the body. While Baker has made groundbreaking contributions in nutrition for pigs, poultry, dogs and cats, he also has done significant work in human nutrition. Aspects of his work have touched upon health-related conditions such as osteoporosis, cardiovascular disease and the side effects of chemotherapy.



ASNS 2005 AWARD RECIPIENT

***Bart Deplancke received The Peter Reeds
Memorial Young Investigator Award***

given for outstanding research in macronutrient metabolism accomplished within five years of receiving a Ph.D., or completing residency training



Bart Deplancke and
Teresa Davis, Baylor University



Faculty Member Rex Gaskins
and Bart Deplancke, Ph.D. 2002

Bart Deplancke received his Ph.D. degree in Nutritional Sciences in May 2002 under the advisement of Rex Gaskins. He currently is a Postdoctoral Fellow, Program of Gene Function and Expression, Department of Molecular Medicine, University of Massachusetts Medical School, Worcester. He is conducting research on how host genetic background affects disease outcome in response to bacterial-derived environmental insults.

FALL 2004 SEMINARS
THEME: ONE-CARBON METABOLISM
(TIM GARROW, COORDINATOR)

Kelly Swanson, PhD, Assistant Professor, Dept Animal Sciences, UIUC. **“Comparative nutrition research in the ‘Omics’ era”**

Mona Calvo, PhD, Food & Drug Administration, Washington, DC. **“Dietary vitamin D insufficiency : A significant risk factor for chronic disease”**

Brian Berg, Nutritional Sciences Graduate Student. **“Antioxidant modulation of cytokines and sickness behavior”**

Rowena Matthews, PhD, G. Robert Greenberg Professor of Biological Chemistry, Senior Research Scientist, University of Michigan, Ann Arbor. **“Riboflavin and hyperhomocysteinemia: Studies on methylenetetrahydrofolate reductase and methionine synthase reductase”**

Matias Avila, PhD, Professor, Dept Medicina Interna, University of Navarra, Pamplona, Spain. **“New insights into the role of S-adenosylmethionine in the regulation of liver function”**

Kevin Schalinske, PhD, Associate Professor, Dept of Food Science & Human Nutrition, Iowa State University, Ames. **“Perturbation of methyl group and homocysteine metabolism by diabetes and retinoid compounds”**

Barry Shane, PhD, Professor, Dept of Nutritional Sciences, University of California, Berkeley. **“Molecular-genetic models for studying the regulation of folate-mediated one carbon metabolism”**

Neil Shay, PhD, Associate Professor, Dept of Biological Sciences, Notre Dame University, Notre Dame. **“Soy isoflavones: molecular actions and interactions”**

Kenneth Poirier, PhD, Poirier & Associates, West Chester, OH. **“Confessions of a peripatetic mind or how to teach an old dog new tricks”**

Willard Visek, MD, PhD, Professor Emeritus, Dept of Internal Medicine, College of Medicine, UIUC. **“Urea hydrolysis and its consequences”**

Kenneth Wilund, PhD, Assistant Professor, Dept of Kinesiology, UIUC. **“Sterol metabolism, chronic disease, and exercise”**

Kimberly Huey, PhD, Assistant Professor, Dept of Kinesiology, UIUC. **“Modulation of muscle gene expression by reduced activity”**

**THEME: REGULATION OF MACRONUTRIENT METABOLISM
(MANABU NAKAMURA, COORDINATOR)**

Sharon M. Donovan, Director, Division of Nutritional Sciences, UIUC. **“Overview of the Bristol-Myers Squibb Freedom to Discover Grant”**

Keith Kelley, PhD, Professor, Dept of Animal Sciences, UIUC. **“What happens when growth-promoting and cytokine receptors collide?”**

Gabrielle Ronnett, MD, PhD, Professor, Department of Neuroscience, Johns Hopkins University School of Medicine, Baltimore, MD. **“Energy wars: Fatty acid synthase as a metabolic energy sensor and its role in the treatment of obesity”**

Allison Ellington, FSHN Graduate Student. **“B-group soyasaponins: Putative chemoprotective agents in the colon”**

James M. Ntambi, PhD, Professor, Depts Biochemistry and Nutritional Sciences, University of Wisconsin, Madison, WI. **“Role of stearoyl-CoA desaturase in metabolism: Implications for human diseases”**

Debbie Thurmond, PhD, Assistant Professor, Dept Biochemistry and Molecular Biology, Stark Neurosciences Research Institute, Indianapolis, IN. **“Regulation of glucose homeostasis by SNARE proteins”**

Norman Salem, Jr., PhD, Laboratory Chief, NIH/NIAAA, Rockville, MD. **“Docosahexaenoic acid: Composition, metabolism and function in the nervous system”**

Arthur A. Spector, MD, University of Iowa Foundation Distinguished Professor, Biochemistry Department, University of Iowa, Iowa City, IA. **“Arachidonic acid cytochrome P450 products: A new class of lipid mediators”**

Jennifer M. Quirk, PhD, Associate Director, Institute for Genomic Biology, UIUC. **“Overview of the Institute for Genomic Biology”**

Alejandra Gratson, Nutritional Sciences Graduate Student. **“Cloning overexpression and characterization of human choline dehydrogenase as a flavin-dependent dehydrogenase”**

John Sheridan, PhD, George C. Paffenbarger Endowed Chair in Research and Professor, The Ohio State University Health Sciences Center, Columbus, OH. **“Social interactions, stress and immunoregulation”**

Nancy Correa-Matos, Nutritional Sciences Graduate Student. **“Effect of fermentable fiber on neonatal intestinal structure, function and resistance to Salmonella typhimurium infection”**

Susan Zaripheh, Nutritional Sciences Graduate Student. **“Insight into the metabolism of lycopene, particularly in androgen dependent tissues”**

Cheryl Dikeman, Nutritional Sciences Graduate Student. **“Factors affecting viscosity of select dietary fibers, complete food matrices, and canine ileal digesta”**

1969

Mary Jacob Ph.D. retired in May 2004, but continues to teach part-time. She resides in Seal Beach, CA (marjacob@csulb.edu).

1972

George Klatt M.S. is owner of Klatt Properties in Chicago, IL (Gmmk1797@aol.com).

1973

Deborah Engelman M.S. is retired and resides in Kalamazoo, MI (jengelma@hotmail.com).

1974

Richard Taubold M.S. works for Xerox Corporation in Rochester, NY. His first novel, a science fantasy titled "More Than Magick" was published in September 2004, Website: www.ricktaubold.com (rtaubold@rochester.rr.com).

1975

Frank Morris M.S. resides in Philadelphia, PA .

1976

Guy Johnson Ph.D. is President of Johnson Nutrition Solutions, LLC, a nutrition consulting business in Kalamazoo, MI. He was appointed Adjunct Professor in the Dept of Food Science & Human Nutrition, UIUC and is a member of the scientific advisory board for the Mushroom Council and the California Strawberry Commission. He is a member of the editorial board of The Soy Connection and is a member of the Nutrition Subcommittee of the FDA Food Advisory Committee (guy@nutritionsolutions.net).

1982

Thomas Edes M.D. is Chief, Home & Community-Based Care, Geriatrics, Dept of Veterans Affairs, Washington, DC.

1983

Kenneth Poirier Ph.D. is President of Poirier & Associates, West Chester, OH. (kpoirier@cinci.rr.com).

Edward Basgall Ph.D. is a Research Associate, Graduate Faculty, Dept Engineering Science and Mechanics, Penn State University, University Park, PA. He survived rotator-cuff surgery to repair torn tendons in his right shoulder. Daughter, Lilly, is now 5 years old and his Harley Davidson is 2 years old (ejb11@psu.edu).

1984

Mary Grummer Ph.D. is a Researcher, Dept of Obstetrics & Gynecology, University of Wisconsin, Madison (mgrummer@wisc.edu).

1986

Laura Rosch M.S. is a Physician, Dept Internal Medicine, Central Dupage Hospital, Chicago, IL. She is a delegate, American Osteopathic Association. Her daughter Siena has a new brother and sister, twins Valerie and Michael, born May 30, 2004 (Laura.Rosch@ssa.gov).

Anne Smith Ph.D. is an Associate Professor, Department of Human Nutrition, The Ohio State University, Columbus (smith.23@osu.edu).

1987

Alexandra Adams Ph.D./M.D. is an Associate Professor, Dept Family Medicine, University of Wisconsin, Madison. She was appointed to the Governor's Council on Physical Activity and Health in 2004. She is chair-elect of the Wisconsin Cardiovascular Health Alliance. Alex published "Low Recognition of Childhood Overweight and Disease Risk Among Native American Caregivers" (2005) *Obesity Research* 13:146-152. Her son, William Christopher, was born on June 27, 2004 (alex.adams@fammed.wisc.edu).

L. Mark David M.S. is a Manager-Clinical Services, Inpatient Pharmacy, Carle Foundation Hospital, Urbana, IL. He is a board-certified Nutritional Support Pharmacist and is a member of the American Society of Health System Pharmacist, American Society of Parenteral and Enteral Nutrition and American College of Clinical Pharmacist. He is an Adjunct Professor of Pharmacy Practice at the University of Illinois, Chicago and St. Louis College of Pharmacy, St. Louis, MO.

1988

Melissa (Hendrix) Olken Ph.D./M.D. is a Physician, Dept of Internal Medicine, Portage Physicians, P.C., Kalamazoo, MI. She is a clinical investigator for several phase 3 and 4 industry-sponsored trials; she initiated a physician-led educational series "Healthy Me" through Eating Disorders Education Network (EDEN) for obese patients; and is President, Portage Physicians, P.C. Melissa is celebrating 18 years of marriage to Norman M. Olken, M.D./Ph.D. (COM-1987). They have 2 sons, Alexander age 15 1/2 and Charles age 13 (dietfood@aol.com).

Melanie Shuran Ph.D. is a Professor, Department of Nutrition, Rosalind Franklin University of Medicine and Science, North Chicago. In March 2005, she was promoted to Chief Information Officer, Information Technology Department (threedogz@ameritech.net).

1990

Samuel Ejadi M.S. is a Medical Oncologist, Department of Medicine, Memorial Sloan-Kettering Cancer Center, New York (ejadis@mskcc.org).

1991

Jana (Bryant) Horner M.S. is a Fellow in Breast Imaging, MD Anderson Cancer Center, Houston, TX. She completed radiology residency at the Cleveland Clinic Foundation in June 2005. She completed her board certification examination in June 2005 making her a board-certified radiologist. She married Doug Horner on May 29, 2004 (janaborner@hotmail.com).

1992

Connie Krashoc M.S. is a Clinical Dietitian/Certified Diabetes Educator, Department of Nutritional Services, O'Connor Hospital, San Jose, CA. She has been a National Board Certified Diabetes Educator (NBCDE) since 2001. She works in the Outpatient Nutrition Clinic providing consultation and education to patients with diabetes who have been referred by their physicians. Connie lectures on nutrition, exercise and diabetes to the St. Frances nursing students, O'Connor Cardiac Rehab patients, and to the San Jose community as part of the Community Living Series offered through O'Connor Hospital (ckrashoc@att.net).

Stacy Scardefield M.S. continues to work for Roche Pharmaceuticals, Monroe, CT (stacy.scardefield@roche.com).

1994

Sean Adams Ph.D. began a new position in August 2005 as a Research Physiologist, USDA Western Human Nutrition Research Center (WHNRC), University of California, Davis. He serves on the Editorial Board of the *Journal of Nutrition* (2005-07) and is a Steering Committee member, Energy & Macronutrient Metabolism RIS (sadams@whnrc.usda.gov).

1995

Marcia Monaco Siegel Ph.D. continues as a Research Specialist, Dept of Food Science and Human Nutrition, University of Illinois, Urbana (monaco@uiuc.edu).

Heather (Muir) Spanbauer M.S. is a Realtor, Star One Realtors, Cincinnati, OH. Heather and her husband Jeffery, have 3 children, Stewart (8), Calvin (6), and Jocelyn (3) (spanbauer@fuse.net).

1996

Mark Dicklin M.S. is a Physician Assistant, Medical Associates Clinic, Aledo, IL (mark_dicklin@hotmail.com).

Kavita Patel M.S. resides in Spartanburg, SC and is raising two daughters: Ruhi (7) and Sonia (5) (kpp93prp@charter.net).

1997

Jason Emmert Ph.D. is an Associate Professor, Department of Poultry Science, University of Arkansas, Fayetteville, AR. He currently serves as the Co-Superintendent for the National FFA Poultry Career Development Event and will assume Superintendent duties in 2006. In January 2005, he was appointed Poultry Federation Endowed Chair, Dept Poultry Science, University of Arkansas. This position rotates among poultry science faculty every three to five years. Jason received a USDA Southern Region Award for Excellence in College and University Teaching in the Food and Agricultural Sciences (j Emmert@uark.edu).

1998

Vicki Houle Ph.D. began a new position in June 2005 as a Senior Medical Writer, Complete Healthcare Communications, Inc., Chadds Ford, PA (vicki.houle@chcinc.com).

Joshua Anthony M.S. was promoted to Associate Director, Global Discovery, Mead Johnson Nutritionals, Evansville, IN (joshua.anthony@bms.com).

Tracy (Gautsch) Anthony Ph.D. is an Assistant Professor (promoted to tenure-track in July 2005), Dept Biochemistry and Molecular Biology, Indiana University School of Medicine, Evansville, IN. She is Chair of the Energy and Macronutrient Metabolism RIS, ASN; and received a 2-year grant from the American Institute for Cancer Research. She published: Hao S, Ross CM, Rudell JB, McDaniel BJ, Anthony TG, Wek RC, Cavener DR, McGrath BC, Koehnle TJ, Sharp JW, Gietzen DW. (2005) Uncharged tRNA and sensing of amino acid deficiency in mammalian piriform cortex. *Science* 307:1776-1778. Tracy and her husband Josh, have 2 daughters, Alexandra (5) and Amalia (2) (tganthon@iupui.edu).

1999

Sean Barnes Ph.D./M.D. is a Postdoctoral Fellow, Division of Digestive Health, University of Virginia Health System, Charlottesville, VA. He was awarded a UNCF-Merck Fellowship, which includes 2 years of funding. He also was awarded an NIH postdoctoral minority supplement to his mentor's RO1 grant (sb7af@virginia.edu).

Joshua Bomser Ph.D. is an Assistant Professor, Department of Human Nutrition, Ohio State University, Columbus, OH. Josh and his wife Libby, welcomed their second daughter, Toby Lara, in August 2005 (bomser.2@osu.edu).

Yoo Kyoung Park Ph.D. is an Assistant Professor, Department Foods and Nutrition, Kyung-Hee University, South Korea. She visited Champaign in July 2005 with her husband and 5-year old triplets, June, Jeanne and Jason (triplets@hitel.net).



Sharon Donovan, Director DNS,
Marcia Monaco Siegel, Ph.D. 1995,
and Yoo Kyoung Park

2000

Beth (Reason) Flickinger Ph.D. is a Nutritionist, Research and Development, The Iams Company, Lewisburg, OH (flickinger.ea@pg.com).

Deshanie (Ganessunker) Rai Ph.D. is a Senior Discovery Scientist, Mead Johnson Nutritionals, Evansville, IN. In 2005, she received the Mead Johnson President's Award which recognizes and rewards very significant achievements that impact high priority objectives for the Company. It is the highest award presented at Mead Johnson and is given on an annual basis (deshanie.rai@bms.com).

2001

Laura (Milo) Czerkies M.S. is a Consultant, Nutrition Division, Nestle USA, Willowbrook, IL. Laura and her husband Scott welcomed their daughter Elena Carolyn on October 25, 2004. She weighed 7 pounds and was 20.5 inches long (laczerkies@yahoo.com).

2002

Weisong He M.S. is a Research Associate, Columbus Children's Research Institute, OH (HeW@ccri.net).

Bart Deplancke Ph.D. is a Postdoctoral Fellow, Program of Gene Function and Expression, Dept Molecular Medicine, University of Massachusetts Medical School, Worcester (Bart.Deplancke@umassmed.edu).

2002

Sara Painter M.S. is a Dietitian, Division of Clinical Quality, Crusader Clinic, Rockford, IL. She is a member of the Rock River Valley Food Pantry, the Northern Illinois Diabetes Coalition-Education Committee, and the local dietetic association. Her daughter Megan will be 2 in December and she is expecting another child in April 2006 (spainter_ccca@yahoo.com).

Harn Shiue M.S. is a P-1 student, College of Pharmacy, University of Illinois, Chicago. He published the following: Shiue H, Wang Y, Musch MW, Chang EB, Turner JR. (2005) Akt2 phosphorylates exrin to trigger NHE3 translocation and activation. *J Biol Chem* 280:1688-95; and Zhao H, Shiue H, Palkon S, Wang Y, Cullinan P, Burkhardt JK, Musch MW, Chang EB, Turner JR. (2004) Ezrn regulates NHE3 translocation and activation after Na⁺-glucose cotransport. *Proc Natl Acad Sci* 101:9485-9490. He received the 2005 University of Illinois College of Pharmacy Merck Award (nutrition76@yahoo.com).

Lisa Tussing M.S. is a Research Assistant, Dept Human Nutrition, University of Illinois, Chicago (ltussing@uic.edu).

2003

Coryn Commare M.S. is a Pediatric Clinical Dietitian, Dept Nutritional Services, Children's Hospital and Health Systems, Milwaukee, WI. She is a member of A.S.P.E.N., ASN, ADA, Milwaukee Dietetic Association, Pediatric Practice Group, Dietitians in Nutrition Support Practice Group Work Committee, Clinical Practice Council, Nutrition Support Committee, and Anthropometrics Committee (ccommare@chw.org).

Cassandra Delgado-Reyes Ph.D. is a Postdoctoral Fellow, Dept Physiology, Emory University School of Medicine, Atlanta, GA. She is conducting research on lipid transporters in yeast (cvdelga@emory.edu).

Jill (Gorski) Drum M.S. is a Research & Development Supervisor, R&D/Product Development, Haemoscope Corp., Niles, IL (jillmdrum@yahoo.com).

Jennifer Seyler M.S. is a Dietitian, Nutrition and Weight Loss, Bally Total Fitness, Chicago, IL (jseylernutrition@hotmail.com).

Chris Wharton M.S. is a doctoral candidate, Dept of Exercise & Wellness, Arizona State University, Mesa, AZ. He is a contributing editor of the *American Journal of Health Promotion* and is a member of the American Dietetic Association Student Council Advisory Committee Chair (chris.wharton@asu.edu).

2004

David Albin Ph.D. is a Postdoctoral Molecular Biologist, Dept of Microbial Biophysics, USDA-ARS, Wyndmoor, PA. He received a 2004 Outstanding Performance Award, USDA-ARS. Dave is conducting research on pathogenic microbe detection in foods (david_m_albin@yahoo.com).

An-Chian Chen Ph.D. works in the Dept Health and Human Services, Public Health Laboratory, Long Beach, CA. She teaches a nutrition class at the Norco campus of Riverside Community College (acchen7@yahoo.com).

Lauren Petr M.S. is completing a Dietetic Internship, Vanderbilt University Medical Center, Nashville, TN. She received an American Dietetic Association National Scholarship. Lauren completed 2 half-marathons since graduating (elpetr77@yahoo.com).

Victoria Wade Ph.D. is a Research Analyst, Grants and Special Projects, Black Hills State University, Spearfish, SD. She oversees projects involving 26 different American Indian reservations in Montana, Wyoming and South Dakota, which are conducting research in the areas of health disparities, diabetes, breast and cervical cancer, fetal alcohol syndrome, and SIDS (VictoriaGreyOwl@bhsu.edu).

Each year the Division hosts a reception at the Experimental Biology Meeting. It is a wonderful opportunity for our alumni to network with each other, the faculty and current graduate students in the program.

If you will be attending the EB 2006 meeting in San Francisco, CA, please plan to join us at our reception on

**Monday, April 3, 2006
from 7 - 9 PM
at the Argenta Hotel
(ASN Headquarters)**

THANK YOU!

The faculty and students of the Division would like to recognize *Ed Ulman (Ph.D. 1980)* and the Department of Nutrition, UIC, for their generous contribution in support of the Nutritional Sciences Mixer at EB 2005. Their support has allowed us to host the reception at the same quality despite the reduced support received by the Division from the University. Thank you!

PHOTO GALLERY FROM EB 2005



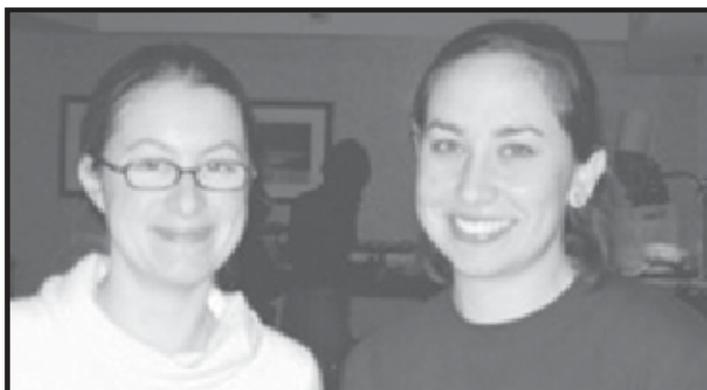
Left to right: Faculty Members Kelly Swanson, Kelly Tappenden, H. Rex Gaskins, Stephanie Block, ADM Animal Health, Bart Deplancke, Ph.D. 2002, Animal Sciences Ph.D. candidate John Conour, Faculty Member George Fahey, Former Faculty Member Jack Odle, FSHN Graduate Sandra Bartholomey, and Sharon Donovan, Division Director



Marian Eberhardt and Radha Bheemreddy,
FSHN doctoral candidates



Michelle (Brown) McGuire, M.S. 1988
and Deborah O'Connor, Ph.D. 1989



Marlene Guillon and Dolores
Doane, M.S. candidates



Faculty Members Elvira deMejia
and Karen Chapman-Novakofski



Animal Sciences Ph.D. candidate John Conour, Former Faculty
Member Jack Odle, Faculty Member H. Rex Gaskins
and Bart Deplancke, Ph.D. 2002

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