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GPIFS Mission

The Great Plains Institute of Food Safety engages in multidisciplinary action research and education to provide solutions to food safety, protection and security challenges.

The GPIFS on the Web

www.ndsu.edu/foodsafety

The GPIFS is a partner in the National Center for Food Protection and Defense
www.ncfpd.umn.edu

Thanks go to Sarah Gustin, an outstanding Ag. Communications major, for reporting for this newsletter.

GPIFS Welcomes New Director

A new, friendly face bringing years of experience from both inside and outside the classroom has been hired as the Director for both the School of Food Systems, as well as The Great Plains Institute of Food Safety. Deland Myers, Sr., Ph.D. comes with hopes of enhancing and building NDSU's newest School.

The rare occurrence of two position openings at NDSU was an offer too good to resist for Myers and his wife, Eveadean Myers who was also hired by NDSU to serve as Executive Director and Chief Diversity Operator.

The food industry is anything but new to Myers. After receiving his Master's and Ph.D. in food technology at Iowa State University, He worked for five years for Pillsbury as a food scientist in product development creating new filling flavors for the famous "Toaster Strudel" products. Myers then left Pillsbury to return to Iowa State University where he taught as a professor of food science for eighteen years prior to his arrival to NDSU.

Myers is currently working with faculty to develop educational programs that include all areas of food development. One of his goals is to enhance NDSU's current educational programs

in order to expose students to all aspects of the food industry. He feels students should be exposed to all facets of the food industry including the engineering, microbiology, food and cereal sciences and communication segments in order to communicate intelligently about the industry they will be working in.

Myers said, "I want to develop educational programs that will develop students and professionals who understand the process of the food system from the field to the table in order to create a safe, nutritional food supply."

Creation of the new classes and programs will be a dynamic, ever-changing process. The first classes will hopefully come into place within the next year. New programs will most likely bring an increase in the number of on-line and campus courses offered, as well as a possible increase in faculty.

Myers recognizes the importance of student recruitment and believes it can be achieved through the use of good communication. Attention will be focused on communicating the benefits of the program to current students, as well as placing recruitment efforts towards community colleges and high schools. He believes the

distance learning program will serve as an asset in providing interested students with more opportunities.

Myers credits the faculty of NDSU' School of Food Systems on their tremendous efforts in creating such a successful program. He doesn't want to change the program, but only hopes to help grow and enhance what has already been done.

Myers said, "I have seen few institutions in the country that has as interdisciplinary of a system as this one and I hope to build on it."

Welcome to NDSU!



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Graduate Student Highlights

How safe do you think your food is?



“We found based on personal health influence, as people get older they become more careful about how they prepare and consume vegetables.”

Elvis Ndembe

Foodborne illness outbreaks have become quite common throughout the world. Providing safe, high quality nutrition for consumers has become the ultimate goal of the agricultural industry, but if the general public has any doubt concerning the safety of a food commodity, the entire industry can suffer.

Although government standards and safety policies have been put into place within the meat sector, only guidelines have been established within the vegetable industry. How individuals perceive the safety of the current food supply relies heavily upon the information they receive from the government.

Elvis Ndembe, a NDSU Master’s student in Agribusiness and Applied Economics with an emphasis in Food Safety, spends his time at NDSU researching how the information consumers receive from the government affects their perceptions about how safe they believe the food supply truly is.

Ndembe’s research involved more than 2,500 individuals who participated in an online survey. Individuals were asked to provide their general perceptions concerning the current food supply. Later, individuals were exposed to both negative and positive information regarding the food supply and asked to comment about how safe they perceived the food supply as being, after viewing the information.

Ndembe’s research involved applying Hazard Analysis and Critical Control Point (HAACP) to the vegetable sector. Research concluded the public’s general perception regarding the food supply is that food is safe. After being exposed to the positive information individuals were not concerned as to where their vegetables came from because they believed that the government and HAACP would take care of any problems. After being exposed to the negative information, individuals commented that they would take more care in washing, preparing and cooking their vegetables.

“We found based on personal health influence, as people get older they become more careful about how they prepare and consume vegetables,” says Ndembe.

Ndembe received his undergraduate degree at the University of Buea, in Cameroon, West Africa. Ndembe graduated in December and plans to continue his graduate education at another university. Ndembe hopes this information will pave the way for future research concerning how public perception is influenced by information provided by the government.

Second National Needs Fellowship Awarded

The Great Plains Institute of Food Safety (GPIFS) recently awarded a National Needs Fellowship to Kimberly Beauchamp.

Beauchamp received a B. S. in Mass Communications from NDSU in 2006. She started the master’s program in August 2006 and is completing a double major to include Mass Communications and Food Safety. In August 2007, Beauchamp was selected as a National Needs Fellow after submitting her essay and application for the award.

Beauchamp’s essay highlighted her food-service experience and food-safety responsibilities while working more than 25 years within the McDonald’s restaurant business. “Food safety was a top priority for our very large product inventory levels.”

Beauchamp has a talent for developing forward-thinking strategies and would like to make an impact within the Food Safety industry. “I’m very interested in continued research and communicating to others the importance of food safety.” Her goal is to pursue a career in the Northern Great Plains.

Several of the GPIFS faculty formed a committee to apply for funding from the USDA for the fellowship awards. The GPIFS was awarded enough funding for four fellowship awards. The main objective of the program is to prepare individuals for supervisory roles in the food industry, regulatory agencies or public health. The goal is to increase the number of food safety experts within the Northern Plains area.

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“I’m very interested in continued research and communicating to others the importance of food safety.”

Kimberly Beauchamp

Graduate Student Highlights continued from page 2

Second National Needs Fellowship Awarded (continued from page 2)

Fellows are awarded a \$36,000 stipend (\$18,000 per year for 2 years). The committee will be applying for more fellowships.

“The objective is to get more regional students into graduate school in areas of need, such as food safety,” stated Dr. Charlene Wolf-Hall, committee chair person.

To be eligible for the award, students must be a United States citizen, admitted to the NDSU graduate program and pursuing a master's degree in food safety. The deadline for a summer/fall 2008 award application is March 15, 2008.

More detailed information about the food safety master's program is available at: http://www.ndsu.edu/gradschool/bulletin/d_foodsf.html

One studying abroad trip leads to another

For one NDSU food safety student, the opportunity to study in Norway once wasn't enough. Evan Kolstoe of Ridgecrest California decided he needed to visit Norway again, only this time to obtain his master's degree.

While studying for his undergraduate degree in Food Safety at NDSU, Kolstoe was an exchange student in Norway for six months.

Kolstoe said, “After that experience I've been very keen on the chance to study abroad again.”

Knowing he wanted to continue his education and being open to master's programs both in the United States and abroad, one day Kolstoe stumbled across the Norway School of Veterinary Medicine website and decided it was definitely worth taking a look into.

Kolstoe said, “My first study aboard trip was such an enjoyable experience that when the opportunity came up to return to Norway, I couldn't pass it up.”

Kolstoe is receiving some funding to help offset the cost of his studies. The Norwegian government pays for all higher education costs, even for international students. Kolstoe's education costs are minimal paying for only books, needed materials and the required \$70 semester fee. Although education costs are reasonable, the cost of living in Norway is quite high. In the end, Kolstoe's costs per year will be almost equal to the cost of one year's room, board and tuition at NDSU.

First year studies consist mainly of lectures and theory. A large portion of the second year curriculum focuses on conducting research and writing the thesis. Kolstoe will choose his research topic in December and begin planning and writing research methods in the spring and conducting his research the following year.

Kolstoe plans to complete the program during the spring 2009 semester. Kolstoe says nothing is for sure, but he is interested in pursuing a doctorate degree. Kolstoe says he is open to any opportunities that may arise, whether they involve working for a government agency or in private industry.

Kolstoe said, “I would like to help bring and apply new theories and methods into mainstream production systems, keeping and ensuring that the food supply is safe for consumption today and in the future.”



“I would like to help bring and apply new theories and methods into mainstream production systems, keeping and ensuring that the food supply is safe for consumption today and in the future.”
Evan Kolstoe



GPIFS Going International

Students studying overseas labeled a success

Four North Dakota State University students took advantage of the rare opportunity to study in Uganda during the summer of 2007. Brooke Jameson, Carla Sharp, Tracy Solseng, and Stella Opendi Sasanya, spent almost four weeks, June 12 through July 17, studying at Makerere University, which is located in Kampala, Uganda.

This was the first time the course, *International Animal Production, Disease Surveillance and, Public Health* has ever been offered. The course was a three credit microbiology class taught by lectures from Uganda experts, as well as traveling on field trips. NDSU Dean of the Graduate School, David Wittrock, also joined the students in Uganda for one week.

Of course, not all the learning took place inside the classroom. Students spent large portions of their time traveling and touring the various livestock production facilities, food systems and public health systems of Uganda. NDSU students were exposed to the cattle, goat, sheep, poultry, swine, dairy, as well as wildlife production facilities of Uganda. The individuals were able to see how animals are transported to and from market, as well as how meat is sold in Uganda.

Margaret Khaita, Assistant Professor of Veterinary and Microbiological Sciences, coordinated the summer course and accompanied the students to Uganda. Khaita is a native of Uganda and provided the students with a vast amount of exposure to some of the unique cultural aspects of her country. The students visited families, attended church services and participated in field trips, in which they visited local farms.

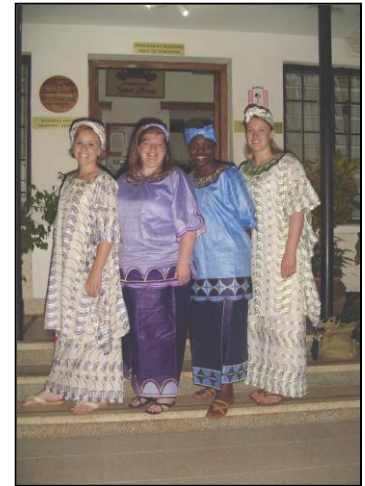
Khaita said, "What the students enjoyed most was experiencing the cultural part of it."

Khaita also said the students claimed the three and a half week trip was an experience of a lifetime. NDSU provided each student with \$2,000.

Each student's individual cost was about \$4,000. Travel expenses accounted for the largest portion of the trip totaling almost \$2,500. The cost of the trip included the students' stay at the Makerere University Guest House, as well as food and board.

Before the NDSU trip took place, a memorandum of understanding was signed between the two universities to promote future joint research and education. NDSU returned the favor by hosting five Makerere University faculty members. The faculty members toured NDSU from October 5 through October 11, 2007.

Due to the success of the first study abroad trip in Uganda, NDSU is planning on sending another group of students during the 2008 summer (June 12 – July 14). Anyone interested in learning more about the summer course is encouraged to contact Margaret Khaita by e-mail at Margaret.Khaita@ndsu.edu or by telephone 231-5946.



The NDSU students displaying regional fashion



From left to right:
Stella Opendi Sasanya, Food Safety Ph.D. student,
Brooke Jameson, Animal Science Major/Pre-Vet
Tracy Solseng, Food Safety M.S. Student
Dr. Margaret Khaita, Assistant Professor Vet & Microbiol Sci
Carla Sharp, Microbiology Major/Pre-Vet

Faculty Spotlight

Seeing a possible problem as a possible solution

Many are familiar with the phrase, "It's all in the way you choose to look at it." For one NDSU professor, applying that motto to his research makes for an interesting way to view food safety issues.

Verlin Hinsz, NDSU professor of psychology for 25 years, may not be a specialist in food safety, but as the son of a federal meat inspector, knows the importance of using proper handling practices within the food industry. Being familiar with the agricultural industry, Hinsz accepted an invitation to join an interdisciplinary team investigating food safety risk as part of their research efforts.

Hinsz's work involves the behavioral science component of the interdisciplinary team composed of experts in various fields such as agricultural economics, microbiology, food safety, veterinary medicine and communications. Hinsz's research efforts are focused on how organizations and their employees might influence the contamination of the food products consumers receive.

Hinsz, applying his psychology expertise to the problem, asked the question, "How do we keep employees motivated to keep the food safe?"

"I don't think about people being the problem, but as being the solution. I want to know how we can motivate people to be concerned about food safety in the work they do," said Hinsz.

Several of the highlights regarding his research involved investigating how work routines, employee training and how much an organization cares about their own food safety routines can affect employee's behaviors within the plant.

Research was performed by analyzing a food plant, as well as Fargo-Moorhead homes. Contamination levels at both the plant and homes were extremely low. Three surveys were distributed within the plant and results showed that both plant officials and employees took food safety issues very serious. Officials actively promoted proper food safety operations and correct training to their employees. Officials felt using proper procedures were extremely important, which then lead food safety to be considered important by employees as well.

Another survey was distributed among area consumers. Research focused on the handling and preparing procedures consumers used within their homes. After surveying 283 participants, results showed that area residents were very cautious and took a care when preparing food. Follow-up visits were also conducted at some of the homes that participated in the survey to perform swab tests on refrigerator appliances and counter tops. Results showed almost no contamination occurring within the home.

The interdisciplinary team has used this and other research to develop a risk analysis model that can be applied to many food safety settings, such as food production and processing. In addition, Hinsz has developed a model in motivating food safety behavior.

"The model being developed will hopefully be applicable to motivating security behaviors in a variety of settings," said Hinsz.

Results from this research have been presented and published.



"I don't think about people being the problem, but as being the solution."
Verlin Hinsz





"You get to have a lot of fun together and it is nice to get contacts with people in the food industry."

Rachel Brudvik

The Food Science and Food Safety Club says all are welcome

The Food Science and Food Safety Club is seeking new members. The club wants to encourage any interested individuals to get involved.

The Food Science and Food Safety Club merged in 2004 and since then has given active members many opportunities and experiences within the fields of both food safety and food science.

The 2007-2008 officers are excited for the upcoming year and have a number of activities planned. One of their main goals is to invite food companies to attend their meetings to discuss possible internships and jobs. This year some possible companies attending include Schwan's Fine Frozen Foods, Cargill and Hormel. This year's president Rachel Brudvik said, "You get to have a lot of fun together and it is nice to get contacts with people in the food industry."

The club has roughly 15 members and is open to both undergraduate and graduate students. The 2007-2008 officers include president Rachel Brudvik, vice president Olivia Breker, secretary Laura Houglum, treasurer Amanda Merrill, and advisor Clifford Hall. This is Hall's fourth year serving as the club's advisor. The club meets on the first and third Wednesday of each month at 6:00 p.m. Hall encourages anyone interested to please contact him at 701-231-6359 or Clifford.Hall@ndsu.edu

Congratulations to:

- ☺ Dr. Cathy Logue for receiving the NDAES Larson/Yaggie early career excellence in research award
- ☺ Kalpesh Parmar for finishing his Food Safety M.S. degree
- ☺ Stephenie Laubach for finishing her Food Safety M.S. degree
- ☺ Bala Kottapalli, Food Safety Ph.D. alum, for the birth of his first child Shanmukh Saurish
- ☺ Jayd Kittleson, M.S. student, for getting married

National Needs Fellowships Available – We're Looking for Some Good Students

The NDSU Great Plains Institute of Food Safety, in collaboration with the USDA, will provide fellowships to qualified individuals to earn a Master of Science (M.S.) degree in Food Safety. The goal of the program is to address the need for food safety experts in the northern Plains region, and to advance economic development in rural communities by preparing individuals for supervisory roles in the food industry, regulatory agencies or public health. This goal addresses both regional and national needs in the field of food safety. The National Needs Fellowships are an honor to receive and come with a **\$36,000 stipend** (\$18,000/year for two years) with tuition waiver.

To be considered for a fellowship, individuals must be United States citizens and admitted to graduate studies at NDSU to pursue an M.S. degree in Food Safety. Due to the interdisciplinary nature of Food Safety, people with a baccalaureate degree in any one of a variety of areas of study may find themselves prepared to pursue graduate studies in Food Safety. The deadline for application for summer or fall 2008 admission is March 15, 2008.

Information on the Food Safety M.S. program is available at www.ndsu.edu/gradschool/bulletin/d_foodsf.html. There are additional items to highlight in the graduate program application materials to be considered for a fellowship. Interested people may contact Dr. Charlene Wolf-Hall by phone at (701) 231-6387 or e-mail at charlene.hall@ndsu.edu for more information about the fellowships and the Food Safety graduate programs.

NDSU is an equal opportunity institution.

If you have suggestions for GPIFS newsletter features or notes,

please contact:

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