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News from the



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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.nodak.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.

Lazy Days of Summer.

I wish! Summer is here, and things have not slowed at all in the GPIFS. Although this is the first summer we have not taught our core food safety courses, there seems to be plenty to keep us all busy, from new international courses to active research and outreach projects to good old report writing.

Today in the institute. In our last newsletter, I briefly summarized the history of the GPIFS. In this issue I would like to tell you a little bit about where we are now with the institute and where we hope to be going by the next year or so.

In the last year we tackled the questions of who we are and what we do as an institute. I'm not sure that we reached definitive answers to these questions, but the concept of what this institute is certainly became much clearer. I think the participants would agree that the GPIFS at NDSU is an institute for facilitating food safety learning, research and outreach. Participation is completely voluntary, with incentives of new and exciting collaborations, along with the potential for funding from local to federal to international sources.

As the acting director, I help carry the responsibility of keeping the GPIFS in a viable state. However, I have essentially no authority to yield to motivate participation, so things can get frustrating at times. What keeps me going is the excitement of this ever-changing field of food safety and the benefit of constantly

Director's Note

meeting new people and making new connections. The appeal of being somewhat autonomous is also there. I do get bored easily; I am an X generation member, after all, and this job has definitely not bored me yet.

In February we held a retreat to gather GPIFS participants together to set the goals and future direction for the institute. Opinions were that the GPIFS is on a roll, but needs to develop clear goals to lead us into the future. The retreat was a very productive one, and we will follow up with another in August.

We hope to come up with a fairly clear five-year plan before the publication of our next newsletter in January.

Goodbye old friend. In this edition we highlight some of the activities of our friend and fellow faculty member Tim Sellnow. Since these stories were drafted, Tim and his wife, Deanna Sellnow, have accepted exciting new positions at the University of Kentucky. We wish them well, and hope Tim can remain involved with the GPIFS.

Tim was one of the GPIFS founding faculty members and has served as an adviser, teacher, researcher, leader and comedian. We will very much miss having him around.

The good news for the GPIFS is Dr. Robert Littlefield, Professor of Communication and a Co-PI with Dr. Sellnow on the National Center for Food Protection and Defense Project will be replacing Dr. Sellnow on the GPIFS Executive

Committee and will be continuing the risk and crisis communication connection with the National Center for Food Protection and Defense.

GPIFS goes global. In this issue we also highlight some of the international activities going on in the institute. As the world's food supply becomes globalized, so must the GPIFS. An active international research project is featured under our graduate student highlights and Dr. Margaret Khaita's new study abroad course is described.

The GPIFS is actively pursuing funding to expand our academic programs to reach out across the global village. Stay tuned to see what new adventures this will take us on.

Work to do. We are restructuring our core curriculum and hope to have the entire 9 credits offered every semester, including summers, starting with spring 2008.

We still are working on our institute's Web site at www.ndsu.nodak.edu/foodsafety/. If you have any questions or suggestions regarding the GPIFS, I would love to hear them.



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Graduate Student Highlights



"I was interested in food safety, a master's student and I wanted to stay in North Dakota."
Tracy Solseng



"I can apply two different areas. My bachelor's degree in food science and my master's degree in plant pathology."
Javier Delgado

Congratulations to:

- ☺ Chantel Nde for successfully defending her Food Safety Ph.D. dissertation
- ☺ Huimin Zhang for successfully defending her Food Safety Ph.D. dissertation, completion of her second teaching internship at the Tribal College in Bismarck, and good luck in her new position at South Dakota State University as a research associate in Dairy Science

GPIFS names National Needs Fellowship award winner

The GPIFS recently awarded a National Needs Fellowship to Tracy Solseng.

The GPIFS has received funding from the USDA to provide fellowship awards to individuals pursuing a master's degree in food safety. 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. Fellows are awarded a \$36,000 stipend (\$18,000 per year for two years).

"The objective is to get more American students into graduate school in areas of need, such as food safety," stated Dr. Charlene Wolf-Hall, GPIFS Interim Director.

Solseng received her undergraduate degree in microbiology in 2004 and started the NDSU food safety master's program during the 2006 fall semester, under the advisement of Dr. Penny Gibbs. After reviewing the qualifications for the fellowship award, Solseng decided to write an essay and apply for the award.

"I was interested in food safety, a master's student and I wanted to stay in North Dakota," said Solseng, when asked why she applied.

The essay discussed what Solseng would like to do within the food safety industry. Solseng's essay explained the importance of providing safe food, as well as the need to inform consumers about the current precautions that are being taken to keep food safe.

Several of the GPIFS faculty formed a committee to apply for funding from the USDA for the fellowship awards. GPIFS was awarded enough funding for four fellowship awards. A second fellowship will be awarded during the fall 2007 semester and the remainder in the subsequent semesters.

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 the spring 2008 award is Oct. 15, 2007, and the fall 2008 deadline is March 15, 2008.

More information about the food safety M.S. program is available at:
www.ndsu.edu/gradschool/bulletin/d_foodsf.html

Food science degree leads to potato research

Wet weather means better growing conditions for fungi that not only attack cereal crops, such as wheat and barley, but potatoes too. Javier Delgado is trying to dig to the bottom of the potato fungus problem.

Delgado's research focuses on two types of mycotoxins: trichothecenes and zearalenone. Mycotoxins can be produced by fungi that are especially present during wet conditions. The pre-results by Dr. Schwarz and Dr. Secor are finished, but more research is needed to know how to manage mycotoxins in potatoes. The toxins are extremely stable when heated and researchers believe only extreme temperatures could inactivate the toxins.

Delgado's research is an extension to the potato research performed by Dr. Ali, V. Rivera and Dr. Secor in 2004. Reasoning for conducting further research is high mycotoxin levels can cause sickness in humans, such as vomiting and diarrhea, but Delgado says sickness is not common.

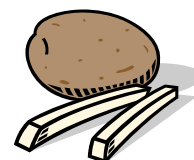
"Usually we don't find results of high mycotoxins; typically the results are low," stated Delgado.

Delgado, originally of Chile, received his bachelor's degree in food science and engineering at the University of Los Lagos. Currently, Delgado is studying to achieve his master's in plant pathology. Delgado credits his background in food science and his previous boss for reasons in deciding to come to NDSU.

Delgado enjoys performing research and would like to go back to Chile to perform research if job opportunities are available. Delgado claims the best part of his research is applying both areas of his education.

"I can apply two different areas. My bachelor's degree in food science and my master's degree in plant pathology," said Delgado.

Delgado has recently changed to a dual master's program with major areas in Plant Pathology and Food Safety. Dr. Gary Secor serves as his advisor.



Graduate Student Highlights continued from page 3

Student takes country's concerns into own hands

Rules and regulations for various food industries in countries all around the world are continually changing. As time passes, various laws need to be updated to current standards. Most countries have law-making bodies and large committees to decide what changes need to be put into place. However, for Namibia, one individual is taking the concerns of the fish and fishery industry into his own hands.

Currently, Namibia's fish and fishery products are inspected by the South African Bureau of Standards (SABS). Since 1994, SABS has been contracted by the Namibian Ministry of Trade and Industry to execute inspections of fish and fishery products on behalf of the Namibian government. The contract between Namibia and SABS will end in 2008, leaving Namibia to care for its own affairs.

Josia Halwoodi decided to take this challenge as an opportunity to do something for his country. Halwoodi worked for five years for SABS in Namibia, inspecting fish and fishery products intended for export to the European Union. After receiving notice that Namibia must develop its own food laws to continue exporting fish into Europe, Halwoodi left his job to attend NDSU to study current food laws. Halwoodi received the J. William Fullbright scholarship and enrolled at NDSU in the fall of 2006.

Halwoodi left his job to attend NDSU and study food laws because he believes that Namibia needs to prepare new food laws in order to continue exporting fish to Europe.

"It is a general practice that exporting countries must comply with the food laws of importing countries," said Halwoodi.

With seafood being Namibia's second largest gross domestic product, Halwoodi believes that it is important for Namibia to maintain its exporting status in the international markets.



Halwoodi's research reviews current international fishery food laws. Halwoodi's study of current food laws will be used as a basis for developing food laws for Namibia. The new laws will ensure consumer protection and promote fair trade.

"Our country must maintain a good relationship with the European community and demonstrate that we can still meet their standards," said Halwoodi. "We need to demonstrate that the Namibian standards are equivalent to European standards."

The Great Plains Institute of Food Safety (GPIFS) helped fund a trip to Namibia and South Africa for Halwoodi to collect information about current laws and to work with Namibia's government and SABS. The trip was from May through June.

David Saxowsky, associate professor in the Department of Agribusiness and Applied Economics, is Halwoodi's adviser. Saxowsky emphasizes the importance that nations develop food laws that are in harmony with the laws of importing nations and international standards. Such consistency makes it easier for exporting businesses to sell their products to consumers in other nations. Saxowsky requested some funding assistance from GPIFS for Halwoodi's trip. GPIFS agreed to pay for most of the cost of the airline ticket.

Halwoodi believes the trip will greatly strengthen the scope of his project, as well as build trust and good working relations between him and the officials of Namibia and SABS.

"The funding allows me to contact government officials and SABS, and share my research ideas so we can all have the same point of departure," said Halwoodi. "I think it will also expand the horizons of GPIFS in the international arena. The research is not only a personal gain, but one for GPIFS and my country."

Halwoodi will present a seminar about his trip later this fall semester.



"The research is not only a personal gain, but one for GPIFS and my country."
Josia Halwoodi



David Saxowsky



SABS Inspectors



Chapman's Peak
Capetown South Africa



Sellnow shines in time of crisis



“Our research has moved from merely providing information to providing effective communication as a means of crisis mitigation.”
Tim Sellnow

Dr. Sellnow will be moving to a new position at the University of Kentucky later this summer

NDSU Communication Professor Dr. Tim Sellnow has been handling crisis situations for more than 20 years. In 2000, Sellnow started his work with the GPIFS.

Sellnow performs two types of research, message development and message testing. Message development occurs within organizations to heighten awareness about food safety issues among workers. Sellnow also performs message testing, which involves testing sample messages to discover which type of food safety messages generate the most effective responses from targeted audiences.

Research shows the most effective messages are those that are adapted to fit the population. Each message must be formatted for the specific targeted audience. Standard messages aren't effective because the

audience is given too many reasons to distrust the message.

“Our research shows 30 percent of the population won't receive the message if we communicate in the standard way,” said Sellnow.

Through studying crisis, one can prevent or diminish a crisis by publishing the right reasoning and reassurance. During a crisis, individuals are dealing with a difficult time and professional communicators need to emphasize things will get better.

“Our research has moved from merely providing information to providing effective communication as a means of crisis mitigation,” said Sellnow.

The goal is to stop a crisis before it starts. For example, stopping people from consuming contaminated food could

prevent a possible crisis.

Sellnow has been extremely successful with his crisis efforts. Sellnow was a part of the Crisis Response Project Workshop offered through Kansas State University. The workshop received the 2007 Region VIII Exceptional Conference Program Award awarded by the Association for Continuing Higher Education.

Sellnow also is affiliated with the Department of Homeland Security and developed a rapid response survey for the spinach epidemic. Sellnow presented his research to the fresh food industry in Atlanta during March 2007.



Sellnow's advisee working with crisis



“He is a great asset to the NDSU Risk and Crisis Communication project, and I appreciate the opportunity to study crisis communication with him.”
Kathleen Vidoloff

Dr. Tim Sellnow isn't the only one to excel during a time of crisis. Sellnow's advisee, Kathleen Vidoloff, is following in Sellnow's footsteps and becoming more familiar with crisis each day.

Vidoloff earned her bachelor's degree in English at Northern State University in Aberdeen, South Dakota. Vidoloff has been working with crisis communication for two years. Vidoloff is currently employed by the Fargo Cass Public Health department as the public information officer and volunteer coordinator.

Vidoloff's thesis examines what communication strategies were used during New Zealand's Ministry of Agriculture and Forestry

response to the release of foot and mouth disease. The story turned out to be a hoax, rather than an actual terrorist attack. Exploring hoax communication strategies in depth provides an opportunity for other organizations to learn more about risk and crisis communication and incorporate these principles into their own response plans.

Vidoloff enjoys working with crisis communication and would like to continue to teach others about this field. Vidoloff claims a crisis communicator knows he or she has excelled when nobody knows about the case he or she is studying; this implies the organization did an excellent job of

communicating to the public.

Last fall Vidoloff was given the opportunity to assist Dr. Matthew Seeger, Wayne State University, Dr. Robert Ulmer, University of Arkansas, and Sellnow with presenting several CDC pandemic influenza tabletop exercises in Atlanta, Boston and New York.

“Dr. Sellnow is extremely intelligent, but also a down-to-earth person and doesn't take himself too seriously. He is a great asset to the NDSU Risk and Crisis Communication project, and I appreciate the opportunity to study crisis communication with him,” said Vidoloff.

NDSU expands curriculum overseas

Summer school isn't always about books and pencils. For some adventurous students, summer school will be spent experiencing unique, intercultural happenings on the beautiful soil of Uganda.

The Department of Veterinary and Microbiological Sciences at North Dakota State University, along with the Department of Veterinary Public Health and Preventive Medicine, Makerere University, Kampala, Uganda, have teamed up to promote the globalization of education, research and career opportunities available to interested graduate and undergraduate students.

Dr. Margaret Khaita, NDSU assistant professor, along with Dr. Robert Barigye, NDSU assistant professor; Dr. James Oloya, NDSU postdoctoral

research fellow; and Dr. Douglas Freeman, NDSU professor and Chair of the Department of Veterinary and Microbiological Sciences at NDSU, developed a course, International Animal Production, Disease Surveillance and Public Health, to increase diversity in student training and exposure to international opportunities.

The international course will provide students with a chance to learn about animal production systems, animal health challenges, disease surveillance systems, control programs for important zoonoses and epidemics, as well as Uganda's public health and food safety practices. Students will spend their time visiting commercial and

pastoral systems, national wildlife parks, animal slaughter facilities and industrial food processing facilities.

"We wanted to give students the experience to see things from a developing country's perspective," said Khaita.

Khaita hopes that the students who take advantage of this opportunity will become more open to the opportunities that are currently not available in the United States.

A pre-proposal grant has been submitted to the Integrated Graduate Education and Research Traineeship Program (IGERT) in hopes that adequate funding will be provided to assist students in paying for travel costs, as well as to develop more courses for studying abroad.

"The purpose of this grant is to fund students to study abroad and to produce a broadly inclusive, open-minded, world-class, and globally engaged science work force," said Khaita.

The international course is open to all graduate and undergraduate students and will last three weeks, June 17 through July 7. Costs for the trip are estimated at \$3,500. For more information contact Dr. Khaita at Margaret.Khaita@ndsu.edu, (701)-231-7667. See also www.ndsu.edu/International/studyabroad/Summer2007-Uganda.shtml



Food Science and Food Safety Club

Food Science and Food Safety Club elects new officers

The Food Science and Food Safety Club elected new officers for the 2007-2008 school year during its April meeting. The new officers are Rachel Brudvik serving as president, Olivia Breker serving as vice president, Laura Houglum as secretary and Amanda Merrill as treasurer.

Congratulations to the new officer team. Clifford Hall will continue to serve as the club adviser. The GPIFS would like to thank these individuals for their leadership and active involvement in the club.



"We wanted to give students the experience to see things from a developing country's perspective."

Margaret Khaita

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 health care. 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 spring 2008 admission is Oct. 15, 2007.

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 Charlene Wolf-Hall (charlene.hall@ndsu.edu)