



**Southern**  
Illinois University  
**Carbondale**

# College of *Agricultural Sciences*

Spring 2005 Newsletter

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### **Upcoming Alumni Events**

Agriculture Industry Day, April 23

Alumni Breakfast at the Illinois  
State Fair in Springfield, August 16

Backyard BBQ at the DuQuoin  
State Fair, August 30

Homecoming—SIUC vs.  
Southwest Missouri, October 1

## *Dear Alumni and Friends:*

I am thrilled to be in the College of Agricultural Sciences at Southern Illinois University Carbondale. I made the decision to move from Virginia for three compelling reasons – the people, the agriculture food and natural resource industry in Illinois, and the potential for growth and service at SIUC.

After I arrived I set three priorities all related to the reasons I came. First I met with all the faculty and staff and as many students and University administrators as possible. I traveled the state to meet with alumni and industry at fairs, events, and board meetings and continued to be impressed with all the people associated with the College. My plans are to continue to get to know more of our alumni and industry clientele.

And that brings me to my second priority – to strengthen our relations at SIUC with our industry clientele. I see this as a two-way street. It is our responsibility at SIUC to disseminate research results and attendant recommendations in scientific and popular press articles and to make presentations at professional and industry meetings. It is equally important for our industry clientele, stakeholders, and alumni to get to know our faculty and the expertise we have in the College.

To help you get to know us, the College is sponsoring a first annual “Agriculture Industry Day Program” at SIUC on April 23, 2005. We will showcase our research and teaching programs in Animal Science, Food and Nutrition, Agribusiness Economics, Plant and Soil Science, Agricultural Technology, and Forestry and Natural Resources. We anticipate a crowd of over 1,000 livestock, crop, nursery, and turf grass producers, agribusiness industry leaders, hotel and restaurant owners and managers, Vocational Agriculture Teachers and FFA members, foresters and environmental resources leaders, University students, faculty, staff and administrators, and alumni and friends of the College. We look forward to having you join us on campus.

In addition to establishing renewed and stronger connections with our industry we have set several new initiatives in motion in our teaching programs. We are expanding our efforts in student recruitment, retention, and placement with the search for a new staff person to coordinate those activities.

*Continued next page...*

We have also developed a new Coordinating Counselor system in the departments with specific faculty assigned to the recruitment, advising, and placement of our undergraduates. Our goal is to quickly increase undergraduate student enrollment to over 1,000 students. Also, we are in the final stages of a proposal for a new Ph.D. graduate degree program in Agricultural Sciences. The Ph.D. will greatly enhance our research programs and strengthen our undergraduate programs by adding more advanced graduate students to assist our professors in the classroom and laboratories.

In the research arena, the College faculty and programs are among the best and most productive in the U.S. College grant support has totaled over \$5.0 million per year with an average of over \$275,000 per research scientist. Refereed publication rates have averaged over 100 refereed articles per year with over two per research scientist. Our basic and applied research has focused on the needs of the producers and industries we serve and this will continue as a priority. Our challenge is to continue to garner grant dollars that focus on the major issues in our industry.

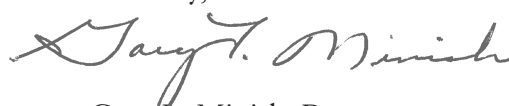
Lastly I have made it a priority to improve our infrastructure and facilities. The Agriculture Building was built in 1955 and is in dire need of renovation. Additionally, the Food and Nutrition and Hospitality and Tourism program spaces in Quigley Hall need updating. The teaching and research laboratories for Agriculture Education and Systems are in complete disrepair. The animal and plant research and teaching farm units are also in critical need of major renovation. For the College to continue to conduct cutting edge research, to attract and retain prominent professors, and to recruit, retain, and place outstanding graduates we will need

new and/or renovated classrooms, laboratories, and research farms. Renovation and renewal efforts are a priority and are underway.

Against these opportunities and challenges I see great future potential for the College of Agricultural Sciences at SIUC. We have a highly qualified and talented faculty and staff, bright students with a strong work ethic, first class teaching and research programs, outstanding alumni and industry clientele in leadership positions throughout the U.S., and unlimited potential for the food, agriculture, forestry and natural resources producers and industries in the Southern half of Illinois.

All we need is your help and support to increase student enrollment, to rebuild our industry connections, and to improve our facilities, classrooms, laboratories, and research farms. Together we can make it happen.

Sincerely,



Gary L. Minish, Dean



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## COLLEGE OF AGRICULTURAL SCIENCES

GARY L. MINISH, DEAN  
JOHN RUSSIN, ASSOCIATE DEAN FOR RESEARCH  
CONNIE SHAFER, ADMINISTRATIVE ASSISTANT  
JULIA WETSTEIN, ASSISTANT DEAN FOR EXTERNAL AFFAIRS  
MICHELE RUSHING, ASSISTANT TO THE DEAN FOR FINANCIAL AFFAIRS  
CHARLOTTE GIBSON, ASSISTANT TO THE DEAN FOR ACADEMIC AFFAIRS  
STEVEN KRAFT, CHAIR, AGRIBUSINESS ECONOMICS  
JOHN PHELPS, CHAIR, FORESTRY  
PATRICIA WELCH, CHAIR, ANIMAL SCIENCE, FOOD AND NUTRITION  
BRIAN KLUBEK, INTERIM CHAIR, PLANT, SOIL AND AGRICULTURAL SYSTEMS  
PAUL PINNON, SUPERINTENDENT OF SIUC FARMS



# Research on Fescue Toxicity and Soil/Sand Mix of Golf Course Greens



**Dr. Karen Jones – Department of Animal Science, Food and Nutrition**

Cattle producers love and hate Tall Fescue grass. This common cool season perennial is extremely hardy, thriving in conditions where other grasses fail to flourish. Part of the success of Tall Fescue is due to a symbiotic relationship with a fungus. The fungus lives between the plant's cell walls and offers protection for the plant by producing toxins.

The research being conducted at SIUC focuses on circumventing the fungal toxins using a pharmacological approach. The results suggest that when domperidone, a compound that blocks the action of dopamine, is administered to heifers, symptoms of fescue toxicity are relieved. For example, heifers fed toxin laden fescue had poor weight gains compared to control heifers. When domperidone was administered in combination with "toxic" fescue, heifers gained similarly to control heifers.

These experiments were conducted by giving a daily injection of the medication. Current research is evaluating more practical routes for the delivery of domperidone. Dr. Jones explained, "We are giving the drug orally but do not know yet if domperidone will be degraded in the rumen or absorbed by the digestive system. We are also investigating a slow release injection."



**Dr. She-Kong Chong – Department of Plant, Soil and Agricultural Systems**

In 1993 the United States Golf Association (USGA) required that several soil physical properties of the sand mix should meet specific values in order to be qualified as a USGA green. Reports indicate the variation of the parameters measured in the same laboratory seemed to be within acceptable ranges. However, inter-laboratory measurements on the same parameters of the same material resulted in large variations.

A research project has been funded by the USGA to develop a permeameter for measuring hydraulic conductivity (Ksat) of sand mix for golf green construction. Dr. Chong developed a permeameter which is expected to be operated by a technician with minimum knowledge in soil physics but produce consistent laboratory results.

Data obtained from the newly developed permeameter were compared with the results measured by the methods recommended by the USGA and the ASTM Standard method (ASTM F1815-97). Preliminary results indicated that higher variation was found in both Ksat of soil columns constructed by the USGA and ASTM methods. Ksat measured by the SIUC method was very consistent. This was not only observed in results obtained by the same technician, but also found among the technicians.

# Agbassador™ Team Represents the College On and Off Campus

Dedication, knowledge, and busy schedules are a few of the many characteristics of the College Agbassadors. For 19 years Agbassador Teams have been recruiting, promoting, and traveling for the College to speak with high school students and parents about the opportunities and benefits offered by SIUC, especially the College of Agricultural Sciences.

Topics include the six major areas of study and the 21 specializations within the College, club activities, and scholarships. Agbassadors present the information in an enthusiastic manner with the assistance of a PowerPoint presentation.

Over the years the Agbassador Teams have played a notable role in making the College of Agricultural Sciences the opportune place for study for many agricultural students. The faculty and staff are very proud to have such dedicated individuals within the College.



2004-2005 Agbassador Team (*back row to front*)  
Fahran Robb from Pinckneyville, Ag Information  
Craig Ratermann from Mulberry Grove, Agribusiness Economics  
Jennifer Dierkes from Greenville, Agribusiness Economics  
Craig Frankford from Carlinville, Animal Science  
Drew DeRiemacker from Atkinson, Ag Education  
Jared Considine from Dixon, Forestry  
Meghan McAllister from Charleston, Dietetics  
Alicia Garcia from Atlanta, Ag Education  
and Jamie Bartosik from Prairie du Rocher, Ag Information  
(not pictured, Kayla Power from Fairbury, Agribusiness Economics)

# Students Receive Industry Awards and Scholarships



GROWMARK funds over \$32,000 in scholarships to students majoring in agriculture or accounting at 12 universities and colleges. The winners were honored at the GROWMARK Annual Meeting held August 25-26 in Chicago. The meeting was attended by more than 1,200 people representing the GROWMARK system of cooperatives, Farm Bureau, Agribusiness leaders, and guests. The SIUC winners pictured with Dean Gary L. Minish and Associate Dean Robert Arthur are John Vaughn, Frank Dorriss III, Kayla Power, and Dwayne Alward.



The Illinois Fertilizer and Chemical Association hosted its 37<sup>th</sup> annual conference November 23 in Mr. Vernon. Dean Minish gave the welcoming address to a large group of attendees. SIUC students receiving awards are Jason Pitcher (Midwest Ag Scholarship Foundation), Jared Webb (George Kapusta Scholarship), Kark Waddington (Lloyd Burling Scholarship), and Amanda Zelasko (Edward Varsa Scholarship). Also pictured are Dean Gary L. Minish and Dr. Brian Klubek, interim chair of the Department of Plant, Soil and Agricultural Systems.



# Ag Council Reports a Full Slate of Fall Activities

from President Jennifer Dierkes

Since I entered the College as an ambitious freshman two and a half years ago, I have become involved in as many activities as I could. Last spring I was elected into not one, not two, but three new officer positions; all three being the leadership role of president. I have the privilege of serving as President of Ag Council and of Agribusiness Economics Club and as Chancellor of Alpha Zeta.

As the Ag Council President I get to see many different clubs in action, meet the other club presidents and members, and work more closely with faculty. This year I have watched and participated in many of the activities that are sponsored through different clubs.

The Ag Council is powered by a team of very dedicated individuals who work together to make events a success. This year's team is Vice President, Ryan Washburn; Secretary, Myla Munro; Finance, Joseph Bockhold; Social Chair, Jamie Bartoski; Alumni Representative and Technology Representative, Mark Irvin; Public Relations, Nathan Johanning; and Education Policy Representative, Amanda Kroeschel.

At the beginning of the Fall semester, students enjoyed the annual New Student Cookout as well as the Club Fair. This year the two were combined to enable students to meet our new Dean Gary Minish and the faculty. The combination was a success with a turnout of over 150 students.

The Block and Bridle Club was busy with the Alumni Backyard BBQ. In tradition, the B 'n' B Club provides the food and plenty of smiles! The Agribusiness Economics Club is selling sweatshirts with a design to reflect the life of a College of



Agricultural Sciences student: a combine in action. The Horticulture Club conducted their annual holiday fundraiser of handmade wreaths and swags.

Alpha Zeta held their initiation November 16 with the largest class in recent history (49) thanks to a new candidate process requiring participation in meetings, service projects, and other activities for several weeks. They are preparing for the 49<sup>th</sup> Biennial Conclave at Iowa State University in Ames, Iowa from April 7-9. Sigma Alpha and Alpha Gamma Rho have recently appointed new officers. The Noble Ruler for AGR is Joseph Bockhold and for Sigma Alpha, Myla Munro.

The Forestry Conclave Team brought home another victory. The Midwest Foresters Conclave was at Purdue University November 5-6. We are very proud of the team for bringing home the victory for the 13<sup>th</sup> consecutive time. Keep up the great work!

As the College celebrates its 50<sup>th</sup> year, the faculty, staff, and students continue to strive for excellence, making this College what it is today.



# New Faculty Highlights



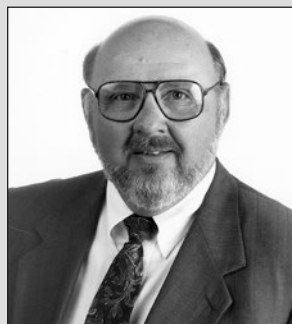
Amer AbuGhazaleh was born in Aqaba, a medium sized town by the Red Sea in Jordan. He has a M.S. and a Ph.D. in Dairy Science from South Dakota State University. After finishing his Ph.D. he went to Clemson University for a post doctorate. He joined the faculty at SIUC Fall 2004. His research focuses on factors that effect the production of healthy fatty acids in ruminant animals. He will oversee the university dairy farm. Amer is married to Maryam Rose Tholen and they have two daughters Bushrah and Noor.



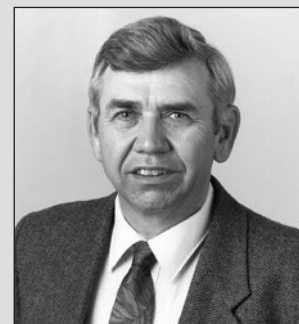
Mae Davenport grew up in Buhl, the heart of the Iron Range in northeastern Minnesota. She received her M.S. degree from the School of Forestry at the University of Nebraska and her Ph.D. in Natural Resources Science and Management from the University of Minnesota. Her research in the human dimensions of natural resources was conducted with visitors to Yellowstone National Park. After receiving her Ph.D. she continued as a Research Associate investigating natural resources management agency and local community relationships at five federally protected resource areas in the Midwest. Mae joined SIUC in Spring 2004.



Jorge David Hernandez was born in Caracas DE, Venezuela. His M.S. and Ph.D. in Soil Science are from Iowa State University. He came to SIUC Fall 2004 from Georgia-Pacific Co. where he was a Senior Soil Scientist in the Chemical division. While at Georgia Pacific he received the 2003 Technical Innovator Award and the 2004 Technology Innovator Award. At SIUC his teaching and research will be in soil fertility and environmental soil science. Jorge is married to Juliane Hernandez and they have a son, Ezekiel David.



Dr. Robert Arthur, Associate Dean for Academic Programs



Dr. Edward Varsa, Professor of Soil Science



Dr. Anthony Young, Associate Dean for Research

*Congratulations and best wishes to our new retirees. Together they have 88 years of service at SIUC.*

*Thank you for your many contributions!*



## Stephen Scates '59 is 2005 Outstanding Alumni Awardee



Throughout his life Stephen Scates has always been a leader. He grew up on the family farm in Gallatin County, was a member of the 4-H Club and President of the FFA. After receiving his B.S. in Animal Science from SIUC he joined the Illinois Producers

Commission in Chicago in cattle and sheep sales.

Mr. Scates became a farm owner and operator with his father and brother Hugh in 1962 and diversified their operation to row crops, livestock, and fruits and vegetables. He currently is senior manager of Pat Scates and Sons Farms, President of Scates Valley, Inc. irrigation dealership, and he oversees the family Scates Gardens, Inc. a vegetable production and sales operation.

In 1993 Stephen Scates was appointed by President Clinton as Illinois Executive Director USDA Farm Service Agency. During his eight years of leadership the agency went through reorganization and he played a major role in revising the 1996 Farm Bill.

Mr. Scates has served in numerous leadership positions including the Illinois Farm Bureau, Illinois Corn Growers, and Illinois Fruit and Vegetable Growers. He serves as Chair of the Illinois Soybean Checkoff Board.

Stephen Scates is married to Kappy Scates and they have four children and nine grand children. Kappy also has a knack for leadership and serves on Senator Durbin's staff and is always at Stephen Scates side supporting his business and leadership activities. The Scates live in Shawneetown. Stephen Scates portrait will be in the College of Agricultural Sciences new Hall of Fame.

## The Maschhoffs Inc. Receive 2005 Service Award

Ken Maschhoff '82, Steve Quick '83, and Dave Maschhoff '79



Dave and Ken Maschhoff, and Steve Quick all graduated from Carlyle High School, Kaskaskia College, and SIUC. Dave received his B.S. in General Agriculture, Ken and Steve in Animal Science.

While in college, Dave and Ken entered into partnership with their parents and increased the sow herd from 150 to 750. On weekends they designed and built a farrow to finish barn with friend Steve Quick. In 1985 they were among the first to adopt artificial insemination.

The Maschhoffs were the 1991 Illinois Pork Family of the Year. In 1992 farm ownership and management shifted from parents Wayne and Marlene to Dave and Ken. In 1995 they ventured into contract partnerships and in 1998 constructed a state of the art feed mill.

In 2000 they developed their transportation division and in 2003 hogs were sold under their new corporate name The Maschhoffs Inc. In 2004 The Maschhoffs Inc. sold over 1,000,000 pigs producing enough pork to feed 3.7 million consumers.

Recently The Maschhoffs Inc. purchased Land O Lakes swine division increasing their sow base from 50,000 to 110,000 making them one of the nation's largest family-owned swine production operations.

The Maschhoffs Inc. are Ken, Chief Executive Officer and wife Julie; Dave, Chief Operating Officer and wife Karen; and Steve Quick, Director of Production and wife Cheryl. Their portrait will be in the Hall of Fame.




## Heidi Lyn Rao, M.S. '98 is 2005 Young Alumnus

Heidi received her M.S. in Forestry and B.S. in Zoology from SIUC. She is a Hunter Education Specialist with the Texas Parks and Wildlife Department. Her office is in Houston, but she travels in Texas recruiting, training, and certifying new instructors to teach mandatory hunter education courses. In 1999 Heidi received the Houston Safari Club's Conservation Award. She has published articles, been a featured speaker at national conferences, and has appeared in television commercials about firearms and hunting safety.



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 <p><b>Southern</b>          Illinois University          Carbondale</p>	<p><b>Morning Program</b></p>	<p><b>Afternoon Program</b></p>
<p><b>1st Annual Agriculture Industry Day</b></p> <p><b>Saturday, April 23, 2005</b>  <b>9:00 am—3:30 pm</b>  <b>at</b>  <b>Beef Cattle Evaluation and Horticulture Research Centers</b>  <b>(599 Rowden Road)</b></p> <ul style="list-style-type: none"> <li>• <b>Keynote Speaker Senator Barack Obama</b></li> <li>• <b>Complimentary Beef and Pork BBQ Lunch</b></li> <li>• <b>18 Educational Faculty Presentations</b></li> <li>• <b>University and Industry Exhibits</b></li> <li>• <b>Equitation and Forestry Demonstrations</b></li> </ul>	<p><b>9:00 a.m. Exhibits</b></p> <p><b>10:00 a.m. Welcome</b></p> <ul style="list-style-type: none"> <li>• Dr. Gary L. Minish, Dean</li> <li>• Dr. John Russin, Associate Dean</li> </ul> <p><b>10:10 a.m. Saluki Football Update</b></p> <ul style="list-style-type: none"> <li>• Mr. Jerry Kill, Head Coach</li> </ul> <p><b>10:20 a.m. Youth in Agriculture</b></p> <ul style="list-style-type: none"> <li>• Ms. Kacy Baugher, President, Illinois FFA</li> </ul> <p><b>10:30 a.m. Keynote Address</b></p> <ul style="list-style-type: none"> <li>• Senator Barack Obama</li> </ul> <p><b>12:00 noon Lunch and Demonstrations</b></p> <ul style="list-style-type: none"> <li>• Equitation Riding</li> <li>• Forestry Conclave Team</li> </ul> <p>For additional information, please contact the College of Agricultural Sciences at 618.453.2469, or <a href="http://www.siu.edu/departments/coagr">www.siu.edu/departments/coagr</a></p>	<p><b>1:30 to 2:30 p.m. Presentations</b></p> <ul style="list-style-type: none"> <li>• Natural Horsemanship and Training</li> <li>• Home Gardening, Fruits and Vegetables</li> <li>• Selecting Herd Bulls</li> <li>• Weed Control</li> <li>• Diet and Obesity</li> <li>• Fire Restoration</li> <li>• Landscape Design and Construction</li> <li>• Farm Machine Safety</li> <li>• Food Safety Tips</li> </ul> <p><b>2:30 to 3:30 p.m. Presentations</b></p> <ul style="list-style-type: none"> <li>• Managing Fescue for Beef Cattle and Horses</li> <li>• Lawn Care</li> <li>• Soybean Rust and Early Detection</li> <li>• Illinois Premium Pork Product</li> <li>• Soy in the Diet</li> <li>• Water Quality Issues</li> <li>• Alternative Energy Sources</li> <li>• Acceptance of Genetically Modified Crops</li> <li>• Growing Grapes and Making Wine</li> <li>• Ornamental and Floral Design</li> </ul>

