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Donors - We Thank You!

Another exciting academic year has come to an end. We had an exceptional senior class and I was pleased to participate in the various commencement ceremonies on May 12. Along with two new faculty scheduled to arrive this summer, we are now planning for our new crop of freshmen students. The scary part of this continuing transition is that most of the incoming students were born in 1983. Some of us look back at this time frame as current rather than past history.

Two faculty members left the Department during the past year. Shufeng Han accepted a position as an Engineering Scientist at John Deere. Paul Benson will retire on July 21, 2002 to a new life after 22 years teaching TSM courses and working with the Ag Mech Club. Paul's personal relationship with the students will be missed. Paul also served as Executive Director of the Illinois Electric Council (IEC). During Paul's tenure in this position, the IEC has restructured itself into a viable organization of the electric industry that promotes the efficient and safe use of electricity. We

wish Paul the very best in his more leisurely years and the opportunity to do the things he just dreamt about in the past.

Our students have once again designed and built two vehicles for national competition. The Mini-Baja competition was held in Milwaukee the last week in May and the ASAE 1/4 Scale Tractor pull was held in Moline on June 1-2. They are great ambassadors for our programs and represent the department very well at these events.

We are looking forward to a great ASAE meeting in Chicago this summer. I hope to see you there. Be sure to attend our alumni reception on Monday evening, July 29 from 8:00-10:00 p.m. It is always a great chance to renew acquaintances and meet new members of our faculty.

As always, please accept our open invitation to visit the Department at any time. We would love to share a cup of coffee with you.

Loren E. Bode
Head of Department

New Faculty Position for Industry Sponsored Capstone Projects



John Deere provided a generous gift to support a position in the Agricultural Engineering Department for an instructor with industry experience to teach one of our student capstone design courses. The senior design class, AG E 336 – Engineering Design Projects for Agricultural Industries, utilizes actual projects submitted by industry sponsors to provide a realistic experience of the engineering design process.

On April 2, 2002, a special recognition was held to thank John Deere for the gift. A plaque was unveiled acknowledging the contribution in support of our students.

Following the unveiling, Mr. Douglas L. Bosworth was installed as the first John Deere Capstone Design Instructor for Product Development in Agricultural Engineering. Doug had a distinguished career with John Deere and is ideally suited for this position. Doug is actively participating in the ABET accreditation process and served as the President of the American Society of Agricultural Engineers (ASAE) in 1992-1993.

Doug was presented with a crystal globe in recognition and honor of his appointment to this position in Agricultural Engineering. The Department is proud to have Doug as a member of our faculty.



George Kalenkarian, Helmut Welke, Doug Bosworth, Loren Bode, David Purvis with the plaque that will be permanently placed outside Room 242 in the Agricultural Engineering Sciences Building.



Doug Bosworth serving his role in connecting student to industry. Doug is introducing Helmut Welke from John Deere to undergraduate student, Katie Yagow.

EOH/ACES Open House

The EOH/ACES Open House on Friday and Saturday, March 8-9 was another great success. I do not have estimates of attendance but we had good crowds both days. Based on the number of solar powered calculators and “magic” pencils distributed, attendance may have been down slightly from the past few years. Both the calculators and pencils with our name and contact information were a hit. We were able to distribute awareness of our department widely with these attention getters.

We had over thirty exhibits this year, 12 of which were undergraduates. This was the greatest undergraduate participation in several years and added significantly to the quality of our open house. Following is a listing of the exhibits that were presented. Several received special recognition and awards from the College of Engineering and/or ACES. We received six of the ten first or second place ribbons in ACES and we received six awards from the various categories in EOH. All exhibitors were winners in my book but a special congratulations to those receiving awards.

The Kiddie Tractor Pull was a major success again this year and there was a waiting line for most of the two days. The Ag Mech Club was challenged with cooking in the gale winds on Saturday but was able to provide food service to the attendees. They sold out of all their food resulting in some profit for their club.



We had a new addition to our building exhibits this year. Agricultural Education invited about sixty science project exhibits to campus from junior and senior high schools throughout the state. They were judged on Friday morning with awards presented in six categories after lunch. We were able to let these top students know about our programs in agricultural engineering.

I received many positive comments about the quality of our exhibits and students. I am always proud of our students when they perform at these events. In fact, the entire building was a great showcase for people from both on and off campus. ... *Loren Bode*

Exhibits – Congratulations!

ASAE Student Branch
Katie Yagow

Solar Powered Pasture Pumping
Bill Peterson

Illini Pullers – ACES 2nd, EOH 4th
 Sean Landers, Greg Trame, Jared
 Lowe, Nick Jones, Craig Swartz
 Jay Peterson, Gino Rigitano,
 Michael Gratton, Brian Hogan

Illini Ag Mech Club
 Jeff Kraft

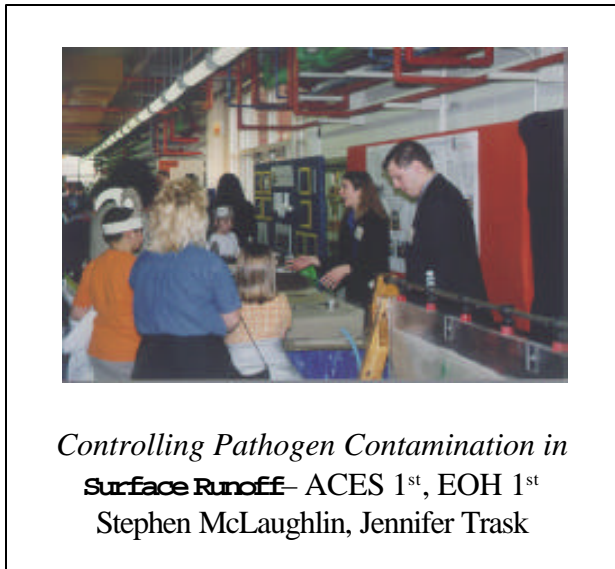
*Poland: Changing Times,
 Changing Perceptions*
 Elizabeth Bruns

*Illinois Laboratory for
 Agricultural Remote Sensing:
 Farming from Five Thousand Feet*
 Amy Kaleita

*Give Them a Break-Staring
 Swordfish
 and Other Highly Threatened Fish*
 Anne Readel, April Halama

Groundwater Monitoring
 Laura Shutte

*Pineapple Processing, Down to
 the Juice*
 Katie Yagow, Tim Curl, Anthony
 McCullough, Steve Vassos



*Controlling Pathogen Contamination in
 Surface Runoff*– ACES 1st, EOH 1st
 Stephen McLaughlin, Jennifer Trask

*Instant Coffee-
 Is It Made from
 Instant Beans?*
 – ACES 2nd
 Tony Anczer,
 Eric Newgard,
 Blake Patterson

*Drain Tile
 Mapping using
 GIS and
 Remote Sensing*
 – EOH 1st
 Brad Heilwagen

*Engine and
 Fuel System Durability with E-
 Diesel*
 Todd Manke

Off-Road Illini
 Justin Adcock, Nate Kincaid,
 Tracy Steber, Jason Snider,
 Bridget Wille, Tom Yeung, Eric
 Ross, Dylan Hayden

*Food Preservation: The History,
 The How-To, and The Hazards*
 Carolyn Szigethy

*Peanut Butter – The Vegetable
 You Can Spread*
 Adam Smith, Emily Poynter, Zach
 Waite, Brad Heilwagen, Andres
 Prieto

*The Combustion and Emission
 Modeling of Biofuels* – ACES 2nd
 Wenqiao Yuan

Pet Food: The Inside Scoop
 Brad Tadlock

Tile Flow Demo
 Chris Harbourt



Tractor Stability – EOH 2nd
 Brian Hogan

*You Don't Know
 Jack About
 Whiskey*
 Michael Rudisill,
 Jovanny Roman,
 Randy Johnson,
 Mike Brennan

ASAE Kiddie Tractor Pull
 Katie Yagow, Tom Yeung, Eric
 Ross, Dylan Hayden

Cuckoo for Cocoa
 Jay Peterson, Alex
 Haldeman, Aaren
 Stubberfield, Staci
 Huddleston

Tortilla or Not Tortilla –
 EOH 3rd
 Pete Eckstein, John Kaiweg, Scott
 Erickson, Landon Terry

*Is Vegetable Oil Made Out of
 Vegetables?* – ACES 1st,
 EOH Teamwork
 David Steffenhagen, John Lyons,
 TaAqua Campbell, Seth Wenzel

Nitrogen: Fertilizing for the Future – ACES 1st
Eric Tegeler, Jeff Wilson

Needs Assessment Survey

by Dini Reid



Thanks to all the Ag Mech/TSM graduates who responded to the needs assessment survey that was mailed out last summer. The Department wanted to determine the need, as perceived by the graduates of the undergraduate Ag Mech/TSM program, of providing a MS degree program in Technical Systems Management. There was an overwhelming response to the survey and I very much appreciate the help of all the graduates that participated in the survey. The data collected was useful in our decision to proceed with designing and obtaining approval for a MS degree program in Technical Systems Management. We will keep you updated on the progress.

The survey was written and conducted throughout the summer of 2001. The data was analyzed over the fall semester and has been compiled and written in a paper to be presented at the ASAE Annual International Meeting in Chicago in July. If you would like a copy of the paper, please send me an email (dinireid@uiuc.edu) or snail mail request. Indicate if you would like a paper or electronic copy. If you desire a paper copy, be sure and include your mailing address. Thanks again for all your responses!

2002 Spring Awards Banquet

The awards banquet is one of the highlights of the year for our Department. This year's event was held during Mom's Day weekend (April 14) so many of the parents could attend. The student clubs did a marvelous job of planning and emceeding the evening festivities. Approximately 20 scholarships and special awards were presented to some very outstanding students. The value of the awards was approximately \$20,000. Following is a listing of the recipients of the major awards.

We were also pleased that representatives of the RyanTucker McGinn Memorial Award and the Matthews Company Scholar Award were able to attend and present the certificates and checks to the recipients of the scholarship they sponsor.



Continued on page 10

Department Highlights, News and Notes

The Department of Agricultural Engineering has seen several changes and happenings over the past several months. We are pleased and saddened that we make the following announcements ...

Dr. Paul W. Benson, Lecturer in the Department, has announced his intention to retire from the University of Illinois on July 20, 2002.

At the ACES Student Award Banquet held on April 28, **Dr. Steven R. Eckhoff**, Professor of Food and Bioprocess Engineering, received the UIUC Chapter of the Minorities in Agricultural, Natural Resources and Related Sciences (MANRRS) award for Outstanding Academic Advisor for the 2001-2002 academic year.

Dr. Carroll E. Goering, Professor Emeritus of the Off-Road Equipment Engineering Section, was voted into the University of Nebraska's Department of Biosystems Hall of Fame.

Dr. Shufeng Han, Assistant Professor in the Off-Road Equipment Engineering Section, accepted a position as an Engineering Scientist at John Deere. He will work with the precision agriculture (AMS) group in Des Moines, Iowa. Shufeng's last day in the department was February 25, but he will be maintaining close ties and working with us on joint projects. Shufeng has been an

important part of our department and will be missed. We wish him well in his new career.

Dr. Prasanta K. Kalita, Assistant Professor in the Soil and Water Engineering Section, and **Dr. Kent D. Rausch**, Assistant Professor in Food and Bioprocess Engineering Section, were recipients of the Engineering Council Award for Excellence in Advising. The award was presented at the Accenture Outstanding Student and Faculty Awards dinner on Tuesday, March 4. This recognition is provided to the top ten percent of advisors in the College of Engineering as selected by the students.

Dr. J. Bruce Litchfield has been named as Assistant Dean and Director of International Programs in the College of Engineering, effective May 21, 2002. In addition to serving as Director of International Programs, Bruce will continue to serve the Office of Academic Programs in undergraduate advising, the Academy for Excellence in Engineering Education, and other work related to his present position as Assistant Dean.

Dr. Marvin R. Paulsen, Professor and Leader of the Food and Bioprocess Engineering Section, received the Anderson Research Award at the NC-213 2002 Annual Meeting on Marketing and Delivery of Quality Cereals and Oilseeds in Domestic and Foreign Markets. One award is given nationally in recognition of grain quality research. The award is sponsored by The Andersons Company.

Ms. Dini M. Reid, Assistant to the Head, received her M.S. degree in Agricultural Education December, 2001. See page 5 for an article on the "Needs Assessment Survey," conducted as part of her masters program.

Student Awards ...

At the 38th College of Engineering Honors Awards Convocation held on Friday, April 19, **Christopher M. Harbourt**, graduate student in the Soil and Water Engineering Section, was presented the first Ben Jay Rosenthal Award. This award is presented to the most entrepreneurial student in the College. In addition, **Michael R. Gratton**, undergraduate student in Agricultural Engineering, was recognized as one of the 2002 Engineering Bronze Tablet recipients.

And now the news ...

ABET Review ... One of the most important activities of the past academic year was preparation for the ABET review of our engineering curriculum. Our self-study materials were submitted last year and the review team visited campus on October 28-30. The main theme of this review was to verify that we have a process in place for continuous improvement of our program. We were pleased with the visit and received many compliments from the review team. The final results will not be available until this summer but we are confident that our program will receive a favorable report.

ASAE Central Illinois Section Meeting ... The Central Illinois Section of ASAE has been revitalized into an action organization. The spring meeting was held on campus during Open House weekend (March 9). The section agreed to support student participation in the International meeting. The section has taken responsibility for obtaining hosts for the summer meeting. Volunteers were needed to fill over 104 hour time slots during the four-day meeting. A joint meeting with the Chicago Section is being planned for this fall. Officers for the current year are:

Al Hansen, Chair

Al Butler, Vice Chair

Sharyl Walker, Vice Chair

Prasanta Kalita, Secretary/Treasurer



*Michael R. Gratton, Loren Bode and Christopher M. Harbourt
College of Engineering Honors Award Convocation on April 19, 2002*

Fallow Furrow Award

One highlight of the awards banquet is anticipation of which faculty member will receive the infamous Fallow Furrow Award. It is presented annually to the faculty that has done the “dumbest” thing or made the greatest “goof up” during the past year. Last year’s winner, Richard Cooke, handed off the infamous trophy to Ted Funk. Among other things, Ted was selected for stopping for fuel in a University car and “accidentally” adding fuel (using a university credit card) in the wrong vehicle. The attractive young woman was very appreciative of his supposed generosity. Richard presented Ted’s story in a creative poem entitled “*Ode to the Lambic, Apology to Longfellow.*”

Congratulations December Graduates!

William R. Norris, Ph.D.

Haibo Hu, M.S.

Shuo Zhang, M.S.

Jeremiah M. Adams, B.S., Ag Eng

Matthew L. Brashear, B.S., TSM

Jeffrey A. Buhr, B.S., TSM

Timothy M. Burenga, B.S., Ag Eng

Timothy D. Earley, B.S., Ag Eng

Charles W. Edwards, B.S., TSM

Walter C. Figi, B.S., Ag Eng

Philip D. Gaebler, B.S., Ag Eng

Mary E. Hoffer, B.S., TSM

Kurt D. Holscher, B.S., TSM

Ngoc-Nhung Thi Le, B.S., Ag Eng

Kelly A. Panozzo, B.S., Ag Eng

Robert R. Smith, B.S., TSM

Alumni News and Notes ...

The Department enjoys hearing from our alumni. And alumni enjoy hearing about and keeping up with friends. So please, help us by completing the form at the end of the newsletter to keep us up-to-date on the happenings and events in your lives.

1960 - 1990

As part of the New Holland/CASE IH merger, **George N. Clark** (MS'72) has relocated to Burr Ridge, Illinois after seven years in London.

At the 2001 Annual Meeting of the American Society of Agricultural Engineers (ASAE) **Robert J. Gustafson** (MS'73/BS'72) was named as a Fellow of the Society. He was honored for distinguished work in the area of education, research and administration.

Nicholas J. Marinich (BS'69) retired April 1, 2002 from General Motors Truck Division in Michigan. During his years at General Motors, Nicholas worked in the physical test facilities, interior design, exhaust systems, electrical systems and integration, and proving grounds. He plans to look after his two daughters and manage his farm, which consists of 371 organically certified acres. He also plans to work with a couple of Jacobs wind-electric systems for fun and enjoyment!

Kwan-Hee Ryu (Ph.D.'79) is Dean of the College of Agriculture and Life Sciences, Seoul National University, Korea. Dr. Ryu was named to the position in July 2001.

Brett E. Soltz (BS'99) accepted an employment offer with The Aerospace Corporation in Southern California. Brett is working in the Structural Mechanics Group on projects for the Space and Missile System Division of the Air Force. He indicated that the ocean and mountains might have had something to do with his decision to relocate to Southern California.

Lyle E. Stephens (MS'68/BS'66) is the new President of the American Society of Agricultural Engineers (ASAE) for the year 2002-2003.

After 33 years with the Idaho Department of Water Resources, **Robert J. Sutter** (BS'68) will be retiring in July 2002. He plans to spend his time teaching martial arts in Boise, Idaho and helping with the family farm in Fairbury, Illinois. Bob sends a special hello to Bob Adams, Gary Asher, and Merrill Pinter – wherever they are!

Tiejun Yie (MS'95) and **Wei Wang** (MS'95) stopped by the department

in January to say hello. They are working for Maxtor Corporation in Longmont, Colorado.

2000 – 2002

Samuel J. Nichols (BS'01) and his wife, Sarah, will be spending the 18 months in Italy. Fiat Auto employs Sam and his first posting is in production. His main job will be to inspect the production process and find areas that need improvement. Fiat Auto is located all over the world – except North America. Sam expects his job to provide some excellent future experiences. He might have the opportunity to test drive vehicles on a formula one test track!

Kelly A. Panozzo (BS'01) accepted employment with Webster, McGrath, & Ahlbert Ltd. in Wheaton, Illinois. It is a civil engineering/surveying company and Kelly is a project engineer working in storm water and detention.

Weddings

John C. Bower (BS'00) married Melissa Joy Harriman on December 31, 2001 in Ellsworth, Maine. John is currently pursuing his master's degree in Sports Administration at Southern Illinois University in Carbondale. The couple is at home in Carbondale, Illinois.

August 4, 2001 was the wedding day of **John M. Heyen** (BS'01) and Nichole Sellergren in Des Plaines, Illinois. John is employed at Hanson as an agricultural engineer. The couple resides in Springfield, Illinois.

Bonnie Baert and **Scott D. Hogan** (BS'92) were married September 1, 2001 in Elburn, Illinois. Scott is pursuing a master's of science degree in mechanical engineering and he is employed by Baxter Healthcare in Round Lake. The couple live in Wonder Lake, Illinois.

Brian P. Peterlin and Elizabeth Hofmann were married October 6, 2001 in Danville, Illinois. Brian is employed at Fipsco Inc. in Des Plaines. After a wedding trip to Aruba, the couple are residing in Addison, Illinois.

Memorials

The Department wishes to extend its deepest sympathy to the family of **John P. Beal** (BS'75). John passed away on Friday, May 3, 2002 as a result of injuries sustained in a farm accident. He had been working on a single row corn planter and the planter fell on him. He is survived by his wife, Deborah, and three children. John graduated with Bronze Tablet honors in 1975 and was working on his master's part-time in the Department. He had farmed in Macon County, Illinois for 27 years. Memorial contributions may be made to the Forsyth United Methodist Church, Forsyth, Illinois or the Muscular Dystrophy Association.

Department Donors – We Thank You

We wish to thank each of you for your recent donations to the College of Agricultural, Consumer and Environmental Sciences (ACES). Your support of the Department of Agricultural Engineering is greatly appreciated.

Mr. Mervin G. Aden
Mr. and Mrs. Frank H. Bischoff
Mr. Paul G. Boland
Mr. Douglas L. Bosworth
Mr. and Mrs. Wendell Bowers
Mr. Michael B. Brennemann
Mr. and Mrs. Juan P. Cabrales
Central Illinois Ag. Inc.
Mr. Dana A. Christensen
Ms. Elizabeth W. Christensen
Mr. David L. Colgan
Mr. Timothy A. Deutsch
Mr. and Mrs. Carroll J.W. Drablos
GKN Walterscheid, Inc.
Dr. and Mrs. Carroll E. Goering

Mr. David A. Grube
Dr. Walter Cecil Hammond
Dr. and Mrs. Alan C. Hansen
Mr. Wayne E. Hartman
Mrs. Ruth H. Hoppin
Mr. Lynn K. Huffman
Mr. and Mrs. F. Huggins
Dr. Raymond L. Huhnke
Mr. Paul C. Johnson
Dr. and Mrs. Benjamin A. Jones, Jr.
Mr. David A. Kuhl
Mr. Clinton L. Lafferty
Mr. Fred F. Manhart
Mr. David R. Massie
Mr. and Mrs. Theodore D. Mathewson

Mr. and Mrs. Scott C. Miller
Mr. Gerald A. Nuese
Mr. Matthew E. Rademacher
John and Dini Reid
Mr. Bradley A. Smith
Mr. and Mrs. Roger M. Smith
Mr. James R. Steffen
Mr. and Mrs. John C. Tunnell
Mr. Hogan Walker

The banquet included two special Teaching Excellence Awards. Jennifer Trask received the award as the outstanding Teaching Assistant in the Department. Jennifer received the top student ratings in TSM 100 and participated in several other programs, including Open House, Environmental Horizon Conference and Agronomy Day. She also mentored two students in the summer RAP internship program.

Paul Benson received the J. Kent Mitchell Teaching Excellence Award as the top instructor in the Department. He has been one of our long time quality instructors for the TSM program. Paul has taught TSM courses for 22 years

and has a very close personal relation with most of the TSM students. He has always been involved with the Ag Mech Club and participated in their activities. Jennifer and Paul are well deserving of these awards.

Loren Bode and Jennifer Trask, recipient of the Karl M. Snyder Teaching Excellence Award



Award Recipients at the 2002 Spring Awards Banquet

John Deere Foundation Award
Bernard C. Matthews/Matthews Company Scholar
Sandra and Richard Carlson Scholar
Sandra and Richard Carlson Scholar
Frank W. Bauling Memorial Award
E.W. Lehmann Award
K.J.T. Ekblaw Scholarship
Bateman Congeniality Award
Frank B. Lanham Award
Outstanding Senior Award (Technical Systems Management)
Ryan Tucker McGinn Memorial Award
Bateman Congeniality Award
ESPY Prize for Exemplary Services
C.E. Goering Award for Excellence
Freshman Advisor Award
Sophomore Advisor Award
Sophomore Advisor Award
Alpha Epsilon Award
J. Kent Mitchell Teaching Excellence Award
Karl M. Snyder Teaching Excellence Award

Michael R. Gratton
Adam C. Viall
Emily E. Poynter
Laura E. Schutte
Bryan C. Cherry
Katheryn E. Yagow
Zachary R. Waite
Jared J. Lowe
Kevin F. Knapp
Elizabeth M. Bruns
Christopher G. Williams
John C. Fitzgerald
Jeffrey T. Kraft
John L. Finnigan
Jared T. Nobbe
John C. Fitzgerald
Christopher G. Williams
Landon C. Terry
Paul W. Benson
Jennifer R. Trask

External Advisory Committee Meetings ... Members of the Department External Advisory Committee met twice during the year. The fall meeting was held November 12, 2001 in the Department. Many topics were discussed including a summary of the ABET review and changes that had been made during the past year. We began discussion of the new cycle of outcomes assessment and what areas to work on. The committee felt the discussions were beneficial and requested to meet again in the spring. March 25 was selected as the meeting date but a snow/ice storm made the trip difficult for several of the members. Very helpful discussions were held about our future in Bio-Based teaching and research. We also spent significant time generating ideas about how to best develop student leadership skills throughout their time on campus. The faculty listen very carefully to committee suggestions and value the time members donate from their busy schedules to come and share their thoughts on the educational experiences of our students. Members of the external advisory committee are:

- Christopher A. Behme, Accenture (BS'94, TSM)
- James L. Evans, NRCS/USDA
- Terry L. Feldmann, Feldmann & Associates (BS'92, AGE)
- William C. Hughes, Innoquest L.L.C. (BS'91, AGE)
- T. Eric Kraft, Grainger Industrial Supply (BS'90, TSM)
- Marcia A. McCutchan, RHMG Engineers (BS'86, AGE)
- David F. Nicholson, The Quarter Oats Company
- Lyle E. Stephens, Deere & Company (MS'68/BS'66, AGE)
- Duane Tiede, Retired from Deere & Company



**Moving, changing jobs, new happenings ...
Let us know**

Name: _____

Company Name: _____

Home Address: _____

Home Phone (w/area code): _____

Comments: _____

√us out!

The 2002 ASAE Annual International meeting will be held in Chicago, Illinois July 29-31. The Department of Agricultural Engineering will host a **University of Illinois Alumni Reception on Monday, July 29 – 8:00 - 10:00 p.m. Location: Check the web site at the meeting.** Come join us! This is a great chance to meet new faculty and staff and visit colleagues and friends.