Dear alumni and friends,

In the spring of 1974, the environmental health (EH) major was officially opened at Illinois State University and four students graduated. Many alumni returned during Homecoming last October to celebrate the 40th anniversary with faculty and students.

The day started with the traditional SEHA homecoming float, which featured a giant 40th birthday cake. A number of alumni joined the parade to ride on the float and distribute candy.

A luncheon in Felmley Hall brought students and faculty together with alumni to reminisce over photos from their school days and share the latest news about jobs and family. Bob Utesch ’75 won the award for earliest graduate in attendance. The luncheon was followed by a campus tour for alumni who had not yet seen the many changes to Uptown Normal and the campus.

After the football game (another exciting victory for the Redbirds), alumni gathered at Tom Bierma’s house to meet students and share stories. SEHA shirts from 40 years of creative students were also on display.

You can see more photos and a link to our Facebook page at IllinoisState.edu/~tbierma/40th. The Facebook page includes photos and stories from alumni.

Wayne Matthews ’77 hands out candy with the SEHA homecoming float.

Julie (Savio) Hanebuth ’86 and Christina Perez ’12 share stories over photos from 40 years of EH students.
**Student accomplishments**

**Students volunteer for IEHA AEC**
Eighteen students volunteered to staff the reception table and introduce speakers at the 2014 Annual Educational Conference of the Illinois Environmental Health Association October 2-3, 2014, in East Peoria.

**Detecting estrogens in wastewater**
Jennifer Stewart and Megan Petraitis presented their work with Michael Byrns on methods for detection of estrogen in wastewater. Their poster was presented at the 2014 ISU Student Research Symposium. The work is part of a larger research project examining the effects of constructed wetlands on pharmaceutical and personal care product chemicals contained in effluent from municipal wastewater treatment plants.

**Hearing loss and firearms**
Research team Brandon Jeralds, Maisie Swanson, Travis Fellers, and Heather Harrison presented a poster entitled, “Noise Exposure to Police and Military Personnel,” at the Chicago American Industrial Hygiene Association student competition last February, where it won second place. The poster was also presented at the ISU Undergraduate Research Symposium and at the American Industrial Hygiene Conference and Exposition last May in San Antonio. This poster assessed impact noise from an assortment of pistols and rifles. George Byrns was the advisor.

**Recycling education**
Campus Housing requested assistance from EH students to improve recycling participation in the campus residence halls. Jenny Kamm, Sarah Malik, and Rebekah Abangan created a 30-minute, interactive presentation featuring “behind the scenes” information about recycling, including lesser-known benefits; (remember the “toxic sludge flood” in Hungary?), and a video of how a MRF works. The presentation has proven popular and the trio repeated it many times across campus. Tom Bierma was the advisor.

**Compostable carryout**
Eleven students worked with Campus Dining Services to evaluate the feasibility of composting new carryout containers used in the dining centers. Though the containers composted well at the ISU Farm compost site, the logistics of collection as well as contamination with non-compostable items pose a significant barrier to initiating a carryout composting program. The students presented their research at the 2014 ISU Student Research Symposium. Tom Bierma was the advisor.
Welcome to our newest faculty member - “LC” Yang

LC (Liangcheng) Yang joined the EH faculty last August. He received his Ph.D. degree in agricultural and biological engineering from the University of Illinois at Urbana-Champaign and his master’s in civil and environmental engineering from the University of Tennessee, Knoxville.

He worked as an environmental engineer for two years after receiving his bachelor’s degree from Zhejiang University in China. Yang was a research associate at The Ohio State University before joining Illinois State University.

His research interest focuses on understanding the effects of air pollution on human health, and developed related mitigation methods using anaerobic digestion to manage wastes and produce bioenergy. He teaches the water and wastewater control class and the occupational health class this semester, and will teach the air quality and pollution control class next spring.

Faculty update

Tom Bierma, with Guang Jin, recently received a provisional patent on a process for using waste drywall to recover ammonia from wastewater, producing ammonium sulfate fertilizer. The patent was the culmination of over two years of research involving a number of EH students. Bierma and Jin are working with Washington State University and DVO, Inc. to develop a commercial process that could be used with anaerobic digester effluent and other ammonia-bearing wastewaters. (For additional activities, see Guang Jin, below).

George Byrns continues to be active in the American Industrial Hygiene Association at the regional and national levels. He has given presentations on the risks and benefits of chemical fumigation and ultraviolet (UV) irradiation in hospitals. In addition, he recently published a chapter on these alternative disinfection methods in a book entitled, *Use of Biocidal Surfaces for Reduction of Healthcare Acquired Infections*. Byrns is working with Beverly Barham in the Medical Laboratory Science program and George Rutherford in the Physics Department on a research project testing the efficacy of UV for surface disinfection.

Michael Byrns authored several recent articles that appeared in *The Journal of Steroid Biochemistry and Molecular Biology* and *The Journal of Medicinal Chemistry*. He was a co-principal investigator on a $400,000 grant that purchased a state-of-the-art HPLC coupled mass spectrometer that is housed in the Chemistry Department. Ongoing research projects examine the effects of artificial wetlands on estrogens being discharged from a water treatment plant, and the biochemical processes involved in the temperature dependent gender determination of turtles. He has also published articles on the biochemistry of progesterone metabolism during human pregnancy and on the development of potential drugs to prevent testosterone signaling in prostate cancer. Renovations to provide a large research lab for his work were completed in the fall semester of 2012.

Guang Jin, with Tom Bierma, recently completed work as part of a 5-year, $1 million grant from the U.S. Department of Energy to study novel bioenergy opportunities. Jin and Bierma’s work focused on anaerobic digestion of switch grass and other lignocellulosic materials such as corn stover and landscape waste, and has led to three publications in *Journal of Environmental Science and Health, Part A: Toxic/Hazardous Substances and Environmental Engineering* and Part B: Pesticides, Food Contaminants, and Agricultural Wastes. (For additional activities, see Tom Bierma, above).
We want to hear from you!

Fill out the form and mail it to Illinois State University, Department of Health Sciences, Environmental Health Program, Campus Box 5220, Normal, IL 61790-5220 or visit: HealthSciencesIllinoisState.edu.

Name __________________________ (maiden name if appropriate) ______
Graduation year(s) ______ and degree(s) ______
Mailing address __________________________________________________________
City, state, ZIP __________________________________________________________________
Phone __________________________ Email ____________________________________________
Your news
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________
____________________________________________________________________________

EH&S Job Listerv
Take advantage of this free service from the EH and Safety faculty. Faculty regularly receive notices of environmental health and safety job openings. Interested alumni are sent these job openings through the EH&S Job Listerv. It’s free, it’s easy, and, your mailbox overload won’t be overloaded. For directions on how to join, just drop an email note to Tom Bierma tbierma@IllinoisState.edu. You can unsubscribe at any time. Also, don’t forget to let us know if you hear of job openings that may be announced!