Leadership Transitions

The fall of 2004 has been a period of leadership transitions for both the Department and the Colleges of Engineering and Agriculture. In August, Dr. Vince Bralts accepted an appointment with the Dean of Engineering’s office as the Associate Dean for Resource Planning and Management. In this new role Dr. Bralts has responsibility for the budgets and space issues for the College of Engineering. Dr. Bralts follows in the footsteps of Dr. Larry Huggins who will be transitioning to partial retirement and Special Project Advisor to the Dean beginning later this year.

Dr. Bernie Engel was named as the Interim Department Head for the coming year. Dr. Engel has been a faculty member in ABE in the Environmental and Natural Resources area for more than 16 years. A national search is underway for the permanent department head. The search for a permanent head began in the fall, and it is hoped that we will have a new department head by the fall of 2005. The announcement is on our Web site, so if you are interested or know someone who might be, please direct them there.

At the School and College level, there have been some transitions as well. During the fall term, the School of Agriculture became the College of Agriculture. This change was in keeping with other schools in the university that recently changed their names to colleges such as the College of Engineering. Also in the summer, Dr. Victor Lechtenberg accepted an appointment as the Vice Provost for Engagement. This left the dean’s position open, and after a national search for a new dean, Dr. Randy Woodson was selected as the Dean of the College of Agriculture.

ABE Completes Strategic Plan

The ABE Strategic Plan was completed in the summer of 2004 and was titled “Toward Preeminence . A Strategic Plan 2003-2008.” The theme was taken from the University Strategic Plan and is the goal to which we all aspire. The quote on the title page, “the future has a history,” was taken from a lecture given by one of our Distinguished Agricultural Alumni, Jan Doorenbos, in 1997. Our interpretation of the quote was that our actions today define what our future will be. Thus, just as the actions of Agricultural Engineers contributed to the history of the 20th Century through agricultural mechanization, we are currently defining the future of the 21st Century through learning, discovery and engagement in emerging technologies in the machine systems, environmental and biological arenas.
Dear Alumni & Friends:

It is my pleasure to welcome you to the fall 2004-05 edition of the ABE Newsletter. As you will see by the content of this edition, Purdue University and the Department of Agricultural & Biological Engineering are in an unprecedented period of positive change. As you can see from our cover article, the leadership in the newly named College of Agriculture has transitioned from Dr. Victor Lechtenberg to Dr. Randy Woodson. Randy was the Director of Agriculture Research Programs before assuming his new role as Dean of Agriculture. He is a horticulturist by background and has been very supportive of the ABE move to include Biological Engineering in our programs.

In addition to the new Dean, Dr. Vincent Bralts, who led the ABE Department for the past nine years, accepted an appointment with the Dean of Engineering’s office as the Associate Dean for Resource Planning and Management. During the transition period, I have agreed to serve as Interim Head of the ABE Department.

The ABE Department is extremely pleased to welcome four new faculty members this fall. The new faculty will contribute to our existing strengths in the areas of Fluid Power and Controls, Biomass and Energy, and Nanotechnology and Biosensors. Additional information about these new ABE faculty and their programs can be found on pages 3-4 and on the ABE Web site. Support for these new positions has come from both the College of Engineering and the College of Agriculture as a result of strategic plan implementation. These new positions along with future positions should strengthen our core areas as well as support the new area of Biological Engineering.

Our graduate student population reached an all-time high with 80 graduate students enrolled this fall. Our graduate students are vital to the success and growth of our research programs. Undergraduate student numbers have remained about the same this fall. Growth of our undergraduate programs will remain a priority.

With our growth in faculty and graduate student numbers have come challenges -- one of the greatest being a need for quality space. In response to space constraints, we have modernized graduate offices and other space within the ABE building as well as establishing the nearly 8,000-square-foot Maha Fluid Power Laboratory at an off-campus location (additional information on this facility is contained on page 5).

Other recent highlights include upgrades of computing facilities, completion of the ABE Strategic Plan during the summer, and the ABE Advisory Board meeting in early December. The strategic plan is an excellent template for the future of the department and can be found on the ABE Web site.

As always, the department would like to hear from you regarding your current activities. If you have jobs, internships or co-op opportunities for our students, please call us. If you know of prospective students, undergraduate or graduate, please direct them our way. Also, if you are traveling though our area, please feel free to drop in to say “hi” to our faculty and staff and see all of the new buildings on campus and renovations occurring in the ABE Department.

Go Boilers,

Bernie Engel, Interim Head
Agricultural & Biological Engineering

Our Mission:

“Prepare students, citizens, and industry for the future through innovative education and extension/outreach programs, and the discovery of knowledge.”
New Faculty

Klein Ileleji

Although the path leading Dr. Klein Ileleji to Purdue might seem unlikely, it couldn’t have better prepared him to be a perfect fit in the Agricultural & Biological Engineering Department.

Dr. Ileleji joined the ABE faculty in August as an assistant professor in biomass utilization and new equipment technology. From 2001 through July 2004 he worked as a post-doctoral research associate with Dr. Dirk Maier, researching grain quality. His research attention will now focus on biomass utilization for alternative fuels, new technology development and biomass characterization for fuels. Dr. Ileleji also will teach ABE 485 – Ag Engineering Design, as well as a future graduate-level course in biomass production and handling.

Dr. Ileleji’s fascination with optimizing the agricultural industry began when he was a child in Nigeria. Born to a country divided by Civil War and struggling with severely lacking technologies, Dr. Ileleji said it pained him to see such untapped potential. Though Nigeria’s climate is perfect for growing various crops, the means to grasp opportunities were not there. Dr. Ileleji knew that by raising the level of food production, the entire nation would be brought up.

So to better equip himself to help his native country, and possibly even the world, Dr. Ileleji earned his bachelor’s degree in agricultural engineering and his master’s degree in applied economics and business management from Ilorin University in Nigeria. Dr. Ileleji then earned a Ph.D. in agricultural engineering at the Slovak Agricultural University in Nitra, Slovakia.

“I feel fortunate that my past taught me how to bring innovativeness in the midst of limited resources,” he said. “But I am grateful that my dreams of being able to someday change the world can finally be realized here at Purdue.”

On a personal note, Dr. Ileleji and his wife, Reiko, are proud to announce an addition to their family – their daughter born August 20, named Aiko, which means “beloved child.” In his free time, Dr. Ileleji enjoys biking, traveling, gardening, team sports and community development work.

Monika Ivantysynova

“If my father could see what I am doing now, he wouldn’t believe it.” In fact, Dr. Monika Ivantysynova barely believes it herself.

Born in 1955 on a small farm in Polenz, Germany, Dr. Ivantysynova grew up in a world where few men pursued a college education, dramatically fewer women did, and the women brave enough to venture into the world of academia faced daunting gender barriers.

Refusing to yield to the challenges she might encounter, Dr. Ivantysynova fought her way to the top of her class and eventually found herself headed to college – in the male-dominated field of mechanical engineering no less.

“My father would tell everyone in the village of my accomplishments,” she said of the list of successes that ensued.

Dr. Ivantysynova completed her Ph.D. at the Slovak Technical University of Bratislava in 1983, worked in the fluid power industry for seven years, and then returned to university life at the Technical University of Hamburg-Harburg, where she taught for eight years. She has written a book on hydrostatic pumps and motors, has been published in more than 75 technical journals, and is the editor-in-chief of the International Journal of Fluid Power.

But the culmination of her work, she said, came in Aug. 2004 when she joined the Purdue ABE faculty as the Maha named professor in Fluid Power Systems.

“I still can’t believe I’m here,” she said. “This is a dream.”

At Purdue, Dr. Ivantysynova has founded the Maha Fluid Power Teaching and Research Center, where she will focus on the optimization of hydraulic component design, advanced system solutions, and energy-saving hydraulic technology. She will begin teaching in the fall, and she plans to introduce a beginning course in fluid power as well as advanced courses in pump and motor design.

“Most of all, I love guiding students,” she said. “Purdue has a goal of being the best, and I am glad to become a part of that. I feel at home here.”

(continued)
In the move from Germany to Purdue, Dr. Ivantysynova was joined by her husband and son. Her daughter also plans to come to Purdue in August to earn a Ph.D. in computer science.

When she is not working, Dr. Ivantysynova is passionate about gardening, tennis, and skiing. While her family used to look forward to ski trips in Austria, "the Rocky Mountains will probably do!" she said with a chuckle.

Dr. Chang Lu views his job in the Agricultural & Biological Engineering Department like a business.

"You have to consider how to best acquire the resources, equipment and students," he said. "Organizing it all is even more important than having brilliant ideas!"

Dr. Lu joined the ABE faculty in August as an assistant professor with a courtesy appointment in the School of Chemical Engineering. After obtaining his Bachelor’s degree in Chemistry from Peking University in 1998, he came to the United States to continue his education at the University of Illinois at Urbana-Champaign. He earned his M.S. and Ph.D. in Chemical Engineering in 2001 and 2002, respectively. After leaving Illinois, he was a postdoctoral research associate for two years in the School of Applied and Engineering Physics and the Nanobiotechnology Center (NBTC) at Cornell University, where he investigated the use of nanofabrication and fluorescence spectroscopy in the design of micro/nano devices for biological applications.

Now at Purdue, Dr. Lu will focus his research on the use of micro/nano scale devices and materials in the study of biological systems and for harnessing biological energy. He is particularly interested in designing novel schemes to manipulate single cells and single biomolecules on microchips. Such tools can fundamentally change the face of biosensing and bioanalysis research. His research group will also work in the area of how to effectively interface functional biosystems with inorganic electrode materials.

"I’d known about Purdue for a long time when I lived in China; it’s known worldwide," Dr. Lu said. “You can’t get a feel for how great it is, though, unless you actually come here. The expertise and resources in the department certainly complement my skills and goals for the future.”

In his spare time, Dr. Lu enjoys ice skating, hiking and traveling with his wife, Daphne (Danfeng) Yao, who is currently a Ph.D. student at Brown University.

Dr. John Lumkes was eight years old when he decided he would become an engineer.

“Once I found that was who made the cars and trucks that I’d been modeling with my Erector sets and LEGOs, I knew that’s what I wanted to do,” he said. “I’ve never had a second thought!”

And his passion for engineering never diminished.

Dr. Lumkes pursued a B.S. in Engineering from Calvin College in Grand Rapids, MI; an M.S. in Engineering from the University of Michigan; and a Ph.D. in Mechanical Engineering at the University of Wisconsin—Madison. He then spent seven years in the M.E. program at the Milwaukee School of Engineering. There, he developed and taught several continuing education seminars for practicing engineers in the areas of control systems and modeling.

In August 2004, Dr. Lumkes became an assistant professor of Agricultural & Biological Engineering at Purdue. In his first semester, he taught ABE 205, Engineering Computations for Biological Systems, and he will be helping with the ASAE Quarter-Scale Tractor Student Design Competition throughout the year. His research addresses fundamental topics in controls and system dynamics and modeling. Within these areas, he has specialized in electrohydraulics, the design and control of energy efficient vehicle systems (hybrids), and camless engine actuators and control strategies.

On a personal note, Dr. Lumkes competed nationally in the steeplechase throughout graduate school. In 1994 he was ranked tenth in the United States, and he advanced to the semi-finals in the 1996 Olympic Trials. During those years, he was sponsored by Nike and "was able to travel and meet many wonderful people and make memories that will last a lifetime."

When Dr. Lumkes is not at work, he spends most of his time with his wife, Kim, and three kids enjoying the outdoors and playing sports. One of their favorite projects is an airplane they have been building and someday hope to fly.
America witnessed the birth of modern hydraulics research in the 1940s. Spurred on by the need for new technology that could be used in war, research centers popped up throughout the United States. By the early 1970s, however, funding and interest began to dwindle. Research centers began closing in America, and instruction at universities became based on the research that continued in Europe.

This trend continued until the late 1990s, when it became apparent that although the United States led the world’s fluid power manufacturing industry, it was severely lacking in research and education.

Thanks to Monika Ivantysynova, however, the tables have begun to turn.

A world-renowned re-searcher from Germany, Dr. Ivantysynova joined the Purdue faculty in August 2004 as the Maha Fluid Power Systems Professor. In this position, she holds joint appointments in Agricultural & Biological Engineering and Mechanical Engineering.

“This is a big move forward,” she said. “I would say we are now one of the leading centers doing research and teaching in the states.”

Ivantysynova is only the second professor in the ABE Department to receive a named professorship. Her appointment is part of the $4.9 million grant from Otto Maha that was established in ABE to support fluid power teaching to undergraduate and graduate students.

“She is one of the top five researchers in the world,” said Gary Krutz, ABE professor. “She is a leader who is always doing new things, and her projects will relate well here in the United States and with our industry.”

Upon arrival at Purdue, Ivantysynova wasted no time to begin quenching the need for fluid power systems research by immediately establishing the Maha Fluid Power Teaching and Research Laboratory. There, she and the team of researchers will focus their attention in the areas of energy saving hydraulic drive systems and the development and optimization of pumps and motors. Hitting the ground running, Ivantysynova’s research was up and going at the lab within three months. The lab equipment and team of eight graduate students who accompanied her from the Technical University of Hamburg-Harburg helped make this smooth transition possible.

“It was great not to have to start from zero,” she said. Pleased by the ease with which her research has already moved forward, Krutz is eager to watch her work unfold.

“We will be the No. 1 fluid power university worldwide,” he said. “Right now, we probably have more graduate students in fluid power at Purdue than the rest of the United States. Employers will be coming here.”

Leading a winning team is nothing new to Ivantysynova, though. For more than 21 years, Ivantysynova has worked to bridge fluid power gaps throughout the world.

“Researchers worldwide need to know what has been done so we can move forward from that point,” she said. “Do we really want to invent the bicycle 10 times? The exchange of ideas is simply invaluable.”

To advance this belief, Ivantysynova established in 2000 the Fluid Power Net International. This group of scientists works together to build international research collaborations, to publish the Inter-national Journal of Fluid Power, and to organize an annual international Ph.D. symposium. The fourth worldwide symposium, which is scheduled for June 2006, will be in Florida.

“You will find great knowledge in every corner of the world,” she said. “Bringing researchers together like this is best for us all.”

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A new scholarship, titled the “Matthew and Lesa Reynolds Field of Dreams Endowment,” has been established to support Agricultural & Biological Engineering students studying alternative fuels.

This is the second scholarship Matt and Lesa have established in the ABE Department at Purdue, and they have taken advantage of the Daimler Chrysler and the Bindley Challenge matching funds programs to further their giving power.

Though many would consider the Reynolds’ gifts incredible, Matt said it is just the right thing to do.

“My wife and I both went to school on scholarship money, and I look back and don’t know what I’d do without an education,” he said. “We looked at what we’d been given and knew that we owed a certain debt to those who went before us who allowed us to live our dreams.”

In addition to providing for succeeding generations, Matt was interested in establishing this endowment because of his ties to the auto industry. As the Director of Interior Systems Engineering at Daimler Chrysler in Auburn Hills, MI, Matt said he is constantly trying to predict what changes will command attention.

When he learned about professor Harry Gibson’s research on alternative fuels, Matt was interested in the link it might someday have at Chrysler. Gibson, an Agricultural & Biological Engineering professor who taught Matt more than 20 years ago at Purdue, studies how soybean oil offers strategic, economic and environmental benefits. By blending a petroleum fuel mixture that is 20 percent soybean oil, Gibson found that we can reduce our dependence on fossil fuels, support Indiana soybean farmers and limit the effects of seasonal fuel price fluctuations.

“Alternative fuels seem to be really gaining a foothold,” Matt said. “I can’t help wondering what the next threshold will be.”

While the advent of biofuels will certainly impact the auto industry, the environmental benefits that will arise from alternative fuels also inspired Matt to support “those who can find the next answer to the question we all have.”

Matt, an avid fly-fisher, stressed the importance of developing new technologies that will not only be more efficient for us, as consumers, but also that will have a more positive impact on the environment.

“I don’t want the streams to be so contaminated by the time I’m ready to fish with my grandkids that we can’t even share that experience,” he said. But most of all, Matt and Lesa said they simply want to give college students the same opportunities they had during their days in college.

“I’d like to think that everybody is out there helping their neighbor,” Matt said. “It’s a cycle and just part of why we’re here on Earth.”

Two additional endowed scholarships were established by anonymous donors for ABE students. These scholarships will help recruit and retain the highest quality students in the years to come. The ABE Department wishes to thank all of these donors for their generosity and support.
The ABE Department Advisory Board met Friday, Dec. 3 at the Wright Forestry Center. The committee heard a department update from Interim Department Head Bernie Engel, and research presentations from new faculty members: Chang Lu, John Lumkes, Klein Ileleji and Keith Cherkauer. The group also discussed alumni involvement in recruiting students to the ABE program, how the ABE field is changing, and listened to a discussion of biological engineering led by Martin Okos. At the end of the day, the group traveled to the Maha Fluid Power Teaching & Research Lab for a tour and presentation by Monika Ivantysynova.

In Memory of Harold Schramm

Harold Schramm (AGEN B.S. ‘58; 1999 ABE Outstanding Alumnus) passed away June 27, 2004 at the age of 62. Harold had an outstanding career in engineering and product management with International Harvester and Case IH. In 1992, Harold retired from Case IH and began his second career in teaching and consulting. ABE will always remember Harold for his work with our students and his great enthusiasm for the department and what it could become. Harold always looked forward to the opportunity to evaluate senior design projects and talk personally to the students about their designs.

Harold served as a member of the ABE Alumni Development Board from its first meeting in December 1997 and later served on the ABE Advisory Board. He was a great friend to ABE and a strong Purdue supporter and avid Purdue football fan. His good humor, hard work and friendly competitiveness was contagious, and ABE is better because of his service and friendship.

ABE Students Choose Outstanding Faculty & Counselor

The Agricultural Systems Management and Agricultural & Biological Engineering students have cast their ballots and the results are in. The Outstanding ABE Teachers and ABE Counselor have been chosen. Don Jones was chosen as the Outstanding Agriculture Teacher in the ABE Department and Gary Krutz was voted the Outstanding ABE Engineering Teacher. Professors Jones and Krutz were chosen for their outstanding performance in the classroom.

The students’ choice for Outstanding ABE Counselor is Martin Okos. Professor Okos counsels students enrolled in traditional programs as well as students who are earning dual degrees.

Congratulations!
December 2004 Graduates

**ABE December Graduates:** (l to r) Scott Nipple, Julia Hoover, Joe Robinson, Sara Fischer, Aaron Miller, Kristen Mehling and Erin Wenger.  
**Not pictured:** Allison Craddock and Lo Niee Liew.

**ASM December Graduates:** (l to r) Zack Martin, Jennifer Stamper, Greg Swank, Lee Franklin, Keng Schrader and Brandon Shreves.  
**Not pictured:** Adam Duff, Brent Cox, Dan Lienhoop, Jeremiah Faulk and Jonathan Everhart.

Erin Wenger with family members.

Professor Okos congratulates Aaron Miller.

Allison Craddock and her family.

Scott Nipple (left) with his grandpa Robert Scott before commencement.

Kyler Laird receiving congratulations and good wishes from Bernie Engel.

**ABE December Graduates:** (l to r) Scott Nipple, Julia Hoover, Joe Robinson, Sara Fischer, Aaron Miller, Kristen Mehling and Erin Wenger.  
**Not pictured:** Allison Craddock and Lo Niee Liew.
Allison Craddock was chosen as the December 2004 Outstanding Graduating Senior in ABE. Not only was she successful in ABE, but Allison also participated in the rifle team, the equestrian and polo clubs, Alpha Phi Omega and the women in engineering program. “I’ve always been pretty excited about being an ABE, since we’re definitely something special in terms of the engineering college,” she said.

Professor Rabi Mohtar served as Allison’s academic adviser, and he proclaims that, “Allison pursues her work diligently and will do extremely well in the future!”

Allison is now employed as a civil engineer for Langan Engineering and Environmental Services in Elmwood Park, NJ. There, she works in the site/civil division, which deals with designing site plans to fit within environmental and governmental regulations.

Congratulations, Allison!

Will Smith is the Outstanding Graduating Graduate Student in ABE for December 2004 because of his exceptional academic history, his contributions to ABE, and his work with professor Bernie Tao in alternative fuel development and production. At Purdue, Will participated in ASAE, the Quarter-Scale Tractor Design competition, the Outdoor Recreation Club, the Fly Fishing and Tying Club, and won first prize with his Senior Design Capstone Engineering project.

“He is a model of the type of well-educated, aggressively focused entrepreneurial graduate that Purdue should be educating to build the new technological bio-based economies of this century,” Tao said. “He clearly understands the concept of continued learning and is able to independently seek out information and ask questions to learn a topic he needs to know.”

Congratulations, Will!

Several ABE and ASM students had successful interviews during the fall 2004 Industrial Roundtable and on campus. These interviews have resulted in summer internships and Co-op positions.

**Summer 2005 Internships**

- **Cargill Ag Horizons**
  Andy Marchese, (Junior, ASM)

- **Davey Tree Expert Company**
  Justin Daugherty, (Senior, ASM)

- **Eli Lilly**
  Chelsea Steele, (Junior, BFPE/PHRM)

- **Eaton Corporation**
  Jess Yegerlehner, (Junior, ASM),
  Phil Wetzel, (Junior, ABE)
  Keith Harmeyer, (Senior, ABE)

- **General Mills**
  Elspeth Larson, (Junior, BFPE)

- **John Deere**
  John Deere Ottumwa Works
  Curt Elpers, (Senior, ABE)

- **Kellogg's Company** - (Jan. - July)
  Anna Alsman, (Senior, BFPE)

- **Kraft Foods**
  Matt Hurm, (Senior, BFPE)

- **PepsiCo (Gatorade)**
  Louie Stephon, (Junior, BFPE)

- **Pioneer**
  Logan Vaughn, (Sophomore, ASM)

**Co-Op Students**

- **Caterpillar**
  Eric Wulf, (Sophomore, ABE)

- **John Deere Ottumwa Works**
  Curt Elpers, (Senior, ABE)
Mark Bowers, ABE, B.S. '03
Functional Test Engineer,
John Deere Harvester Works, Silvis, IL

It took Mark Bowers five years to become an Agricultural & Biological Engineer and only two to realize that he might never use much of what he learned. Differential equations, Avogadro’s Number, and laws of thermodynamics—“I can’t say that I’ve forgotten them; I just haven’t used them,” he said.

This doesn’t bother Mark, though, because he knows ABE taught him some of the most important lessons of his life.

“I feel the education I received at Purdue consisted of Engineering basics, and more importantly, the process of learning and problem solving,” he said. “I keep the theory that I learned in the back of my head as I execute and manage all my projects.”

After graduating in 2003 from Machine Systems Engineering, Mark went to work as a functional test engineer at the John Deere Harvester Works Worldwide Product Development Center in Silvis, IL. As a part of the Future Engine Applications Team at Deere, he evaluates designs for the integration of engines into combines.

“I am required to plan, research, communicate and execute with everything I do,” he said. “Very seldom do I only have one project going, and it’s easy to see how my project management skills relate back to all the work and projects I did in ABE.”

In a job that requires him to work with a variety of engineers, technicians and farmers, he is constantly reminded of how important it is to be able to adjust his communication style for different situations. Mark also attributes his effective communication skills to his education from Purdue.

“I still remember working on the Lawnmower Winterization project through the student chapter of ASAE,” he said. “It was a great example of teamwork, planning and communication, and it was always a great success.”

Though Mark has traded his success at Purdue for success in a career he loves, he has hardly forgotten his alma mater. Memories of hanging out with friends from ABE have yet to fade, and flashbacks of Cosmic Bowling with classmates are still fresh on his mind.

He returns to Purdue a few times each year to catch football games, keep in touch with friends and impart advice on those who now follow his footsteps in ABE. In the past, Mark has spoken to students about his experiences in the department and things that helped him succeed after graduation.

“Unless a student is exposed to industry and the real world from their parents or through an internship or Co-op position, they will not truly understand the field they are about to venture into,” he said. “I hope to share some of my experiences to the students so they get a better understanding of what they might be doing.”

John Deere presented Purdue University with a $100,000 check in November 2004 and will annually provide the university with the use of a new Deere 7920. The tractor is being housed in ABE and will be used by Agriculture, Engineering and Technology students.

In August 2004, Eaton Corporation presented a gift to Professor Gary Krutz that will support one graduate student in engineering who is doing research in fluid power for a second year.

Students from Prof. Lumkes’ class with John Deere representatives.

(left to right) Vince Bralts; Mike Bungo, Eaton Corp.; Gary Krutz; Bill Armstrong, Eaton Truck Components; Doug Mayo, Purdue Development.

http://www.purdue.edu/udo/corporate/
ABE Connections of the Heart

Students come to ABE because of its national ranking. They come to ABE because its small class size allows individual attention that is unheard of anywhere else. They come to ABE because the opportunities it offers are endless.

Few students come to ABE looking for a date, though. While ABE never set out to establish itself as a match-making institution, love just seems to be in the air. We have watched through the years as classmates become study partners, study partners become teammates, and teammates become inseparable.

So on this Valentine’s Day, we decided to raise our glasses to a few of the couples who found their starts in ABE. *Three Cheers and Happy Valentine’s Day!* *

Brent Anderson ♥ Maria (Carlos) Anderson

Brent and Maria met in Dr. Narsimhan’s ABE591T class. *We loved studying at Purdue and felt lucky to have picked the same department and to have shared a great friendship with lots of wonderful people there.*

Brent began his career in New Jersey working for the Campbell Soup Company, and Maria went to work for General Mills in Minneapolis. The couple moved in February 2000 to northern California, where Brent started his Ph.D. in Food Process Engineering at UC Davis, and Maria worked as a quality engineer for General Mills. Shortly thereafter, Maria went back to school for her Master’s degree. Brent and Maria were married on Sept. 1, 2001, and they turned in their theses together on Aug. 22, 2004.

Maria then returned to General Mills in February 2004 as a quality manager in Los Angeles. Brent has now accepted a position with Masterfoods USA in research and design, and Maria will soon follow him to New Jersey to begin a new chapter in their lives.

Jason Brown ♥ Jennifer (Mersinger) Brown

Jason and Jenny met in ABE 460. *I think it was good because we were able to relate to each other – homework, exams, finals – we were going through it all at the same time.*

After graduation, Jason and Jenny both accepted jobs at Eli Lilly and Company in Indianapolis, IN. The couple was married Sept. 18, 2004. Jason is a Process Control Engineer at Lilly’s Indianapolis Parenteral Manufacturing site in capital projects as well as manufacturing support. Jenny is a Pharmaceutical Chemist, also at the manufacturing site, working in manufacturing, science and technology.

*It is a testament to the department that we both graduated with degrees in Agricultural & Biological Engineering and went to work for the same company, yet work in relatively dissimilar job functions,* Jason said. *This demonstrates the breadth of opportunities that can be presented with the degrees that we earned.*

* If we missed you or you have stories of your own that you would like to share, we would love to include them in future issues of the newsletter! Contact Melissa Davies at 765-494-8162, daviesm@purdue.edu, or write to Purdue University - ABE, 225 S. University St., West Lafayette, IN 47907.
Ian Radtke ♥ Maureen Beck

Ian and Maureen met in class and eventually started dating while working together on the same senior design team. “It was good because we would not have been able to spend much time together if we were in different majors,” Maureen said.

Ian and Maureen became engaged in November 2004, and they both have jobs lined up for after graduation with Caterpillar in Peoria, IL. Maureen will be working in the hydraulics testing area and Ian will be in the transmission design area.

“Our jobs at Cat will be different, but still similar enough that we can both understand what the other one does at work,” Maureen said.

David Dux ♥ Heidi Diefes-Dux

“Heidi remembers that we shared a mailbox in the main office when she first arrived, since our last names both start with 'D,'” David said. “It wasn’t until the summer of 1997, though, that we started dating.”

David and Heidi were married July 22, 2000. Heidi is now in her sixth year working with the Engineering Education department at Purdue, and David is teaching several classes, including the ASM 201 class he began teaching in 1992.

David and Heidi both enjoy teaching, and they each teach a section of ENGR 106 – Engineering Problem Solving.

“We have a lot of stories to share!”
Will Smith ♥ Amanda (Stewart) Smith

Will and Amanda met on an ASAE ski trip to Michigan during their second and third years, respectively, in ABE.

After finishing their Bachelor’s degrees in 2003, Will and Amanda remained at Purdue and received their Master’s degrees in ABE in December 2004. They were married in Hawaii on June 13, 2004 during a trip to interview with Pacific Biodiesel, a company they both now work for that uses recycled cooking oil to make biodiesel. While Will’s focus is primarily on new chemical plant construction and engineering, Amanda works with process development and quality control.

“I think ABE is unique in that we take a lot of classes outside of our department,” Will said. “This gave us both a very broad set of skills.”

Robert M. Stwalley III ♥ Carol Grace (Sallman) Stwalley

Bob and Carol met at an Alpha Epsilon (the honor society for ASAE) meeting during the 1981-1982 school year.

Bob and Carol still both work at Purdue. Carol works with middle and high school girls to help them better understand what engineers do and the wide variety of jobs available to them. Bob talks with parents and high school seniors to help them understand the cooperative education experience before they get to Purdue. The couple also has an engineering consulting firm in Lafayette that does structural inspections and waste-to-energy development.

“We enjoy working together and have enjoyed completing many projects together through the years,” Carol said.

Nick Vanlaningham ♥ Mindy (Durack) Vanlaningham

Nick and Mindy met in Dr. Stroshine’s class the first semester of their junior year. “Some of our best times in school were with our ABE group. We used to live in that building!”

Nick finished his undergraduate degree in 2002, and decided to pursue his Master’s. Mindy graduated in May 2003, and Nick finished his Master’s in December 2003. Nick and Mindy were married June 5, 2004. The couple now lives in Iowa, where Nick is a Design Engineer for Hagie Manufacturing (sprayers), and Mindy is an Engineer at General Mills.
Like many freshmen, Patrick Collins did not know which major to settle upon when he first arrived at Purdue. He did know one thing, though—he liked food.

So when Patrick learned about the Biochemical and Food Process Engineering major in the Department of Agricultural & Biological Engineering, the first thing that came to his mind was, “Hey, food—sounds pretty cool!”

“I think I chose Food Process Engineering because I was familiar with the products being made,” Patrick said. “I could relate to ketchup, molasses, and potato chips more so than with polymer plastics, quaternary ammonia, and other odd chemicals.”

As his days at Purdue progressed, Patrick’s interest in the food process industry intensified, and his senior design class with Dr. Okos helped him to become more focused. In Dr. Okos’ class, he learned about project management by theoretically designing every aspect of a one-million-barrel-per-year brewing operation.

“Coming out of that class at Purdue, I was a project engineer,” he said. “I had dealt with every level of the job except for the human aspect.”

In addition to gaining valuable management skills from the class, Patrick also developed a fascination with working in the alcoholic beverage industry. Patrick said he was looking forward to the fact that he could take part in making “entertainment foods” that would be a part of celebrations.

After graduating in 1997, Patrick did go into the entertainment foods industry, working as a project engineer at Weaver Popcorn Company and then at Raskas Foods, Inc.

When a job opportunity arose at Jim Beam Brands Co. in Cincinnati, Ohio, however, he couldn’t pass it up. Patrick is now a bottling maintenance supervisor and small projects engineer at the DeKuyper plant, where DeKuyper and Leroux cordials, After Shock liqueur and various other alcoholic beverages are made.

At Jim Beam, Patrick said he enjoys the thrills of project engineering, the job variety that keeps his mind fresh and also the ability to be part of the company’s tradition.

Though he greatly enjoys his job at a company “as American as apple pie,” Patrick said he always tries to remember what is most important in his life.

“At the end of the day, a job helps buy your house; a family is what makes it home.” Patrick and his wife, Talia, welcomed home twin girls on June 14, 2004. While they are still waiting for a full night of sleep, Patrick said he is having no problem remembering what is most important, in light of a great job.
1960s

Deane Thompson (AGEN B.S. ‘63). After graduation Deane spent 5 years designing farm machinery for Allis-Chalmers then returned to Purdue to earn his MSIA from the Krannert School of Management. He worked as a financial management consultant for Touche Rosse & Co. until the late seventies and has since served in the Treasury/Analysis Department of Kelwood Company, in St. Louis, MO.

Dave Wheatley (AGEN B.S. ’67). After 21 years with Allison Transmission Division of GM, Dave retired and is now an OEM Account Rep. for Rocore Thermal Systems providing heat exchange products primarily to the heavy truck and bus industry.

Dave Wolf (AGEN B.S. ’66, Ph.D. ‘71). Dave and wife Karen live in Lancaster PA where Dave is President/CEO of Clean Burn, Inc. and Millcreek Manufacturing Co. They have three sons and three grandchildren scattered around the country that keep them occupied whenever possible.

1970s

Robert Alverson (AGEN M.S. ‘70) has been traveling throughout North America (16,000 miles in 4 months through Canada to Alaska and returning home to Pensacola Beach, FL). After traveling 100,000 miles a year with New Holland and International Harvester during his “first career” and an exciting entrepreneurial “second career” in Silicon Valley, Robert says “he is still going and wants to say hello to all his Purdue ABE friends and thanks for all your help over the past years.”

Earl Gass (AGEN B.S. ’70) is a Test Leader at the Case New Holland Mt. Joy Design and Development Center. Earl and Deb have lived in Bettendorf, IA for the past 15 years and have three children.

Phil Fred (AgMech B.S. ‘72). Phil has fond memories of Purdue, especially of Professors Richey, Lien, Blind, Dale and McKenzie. He respected them all for their professionalism, helpfulness and friendliness. Phil and his wife Barbara have been married for 28 years and have two sons. He has owned and operated a chemical lawn care business for the last 18 years.

William G. Frederick (AgMech B.S. ‘74, AGEN M.S. ‘76) just accept a new position as Product Manager for compact tractors and loaders for CNH in Burr Ridge, IL.

Mike Youngblood (AGEN B.S. ’76) just celebrated his 25th year at the John Deere Product Engineering Center in Waterloo, IA. Mike is Manager of New Operation Stations for the 7000, 8000 and 9000 series tractors. His career with Deere has given him the opportunity to witness technology growth and view agriculture through a global perspective through his travels to several countries outside the U.S.

Mark Purschwitz (AGEN B.S. ‘77, M.S. ‘81, Ph.D. ‘89). Mark took a new position with the Marshfield Clinic in September 2003. He is a Research Engineer at the Agricultural Safety National Farm Medicine Center in Marshfield WI.

1980s

Tim Williams (AGEN B.S. ‘81) has spent the last 20 years of his professional life with Halliburton and most recently as a lead cost engineer on the EPIC Deepwater Offshore Construction project in Rio de Janeiro, Brazil. He moved to Brazil in 2000, bringing his total years overseas to 14. He has lived in Norway, Australia, Indonesia, Negara Brunei Darrusalam, Columbia, Ecuador, and Canada. Tim enjoys the chance to pick up different languages and is looking forward to his next assignment in Milan or Paris.

Levon Mathews (AgMech B.S. ‘81) was just appointed to the Memphis, TN branch of the board of directors of the Federal Reserve Bank of St. Louis.

Ed Gerken (AGEN B.S. ‘83) is a Project Manager for SSOE, Inc. in Toledo, OH. Prior to working for SSOE, Ed spent 15 years with Campbell Soup Company. He has a daughter and twin boys that keep him busy. Ed says his best memories of Purdue include the way Professor Hinkle treated everyone, “we were more like his kids than his students - he wanted us all to do well in life, not just in his classroom.” Ed also enjoyed the 1978 and 1980 bowl trips he attended with the band and the first rate Co-Op program.

Jim Marietta (AGEN B.S. ‘83). Since graduation Jim has worked in the off-highway/construction machine industry as an engineer for JI Case, Caterpillar and Carlisle. He spent the last 15 years with Carlisle, currently as plant manager for Carlisle Industrial Brake’s at the Bloomington, IN facility. Jim, his wife Debbie and two children, live in southern Monroe County near Lake Monroe and enjoy boating, attending the kid’s athletic events and following Purdue sports.

Daniel Guyer (AGEN M.S. ‘84, Ph.D. ‘88) is an associate professor in the Biosystems Engineering Department at Michigan State University. He is conducting research in the areas of Fruit Cooling, and Pre- and Post-Harvest Pest Control Strategies in Cherries.

Brad Marks (AGEN M.S. ’92, Ph.D. ’93) received the Teacher-Scholar Award from Michigan State Univ. The honor is awarded to faculty who early in their careers have earned the respect of students and colleagues for their devotion to and skill in, teaching and who have shown scholarly promise.

Becky (McKinney) Thompson (FPE/BCBM B.S. ’93). Becky and husband Scott live in Battle Creek, MI with their two children. Becky is a Director for Kellogg. Becky says she misses her Purdue friends but has enjoyed coming back to connect with ABE alumni as part of the advisory group and looks forward to making the trip more frequently.
Class Notes (Cont.)

1990s

Jake Benett (AGEN B.S. ‘95) has been an Area Manager for Maintenance & Automation for Chrysler for the past four years and earned his MBA last year from the Univ. of Akron. Jake also keeps busy with a consulting business, and his family.

Eric Yegerlehner (FPE B.S. ‘95) lives in Dublin, OH - unfortunately, just a few short miles from the OSU campus and surrounded by Buckeyes. Eric works for Dean Foods Company and is Director of Operations for the northeast dairy region. Eric and his wife Jill just celebrated their daughter’s 1st birthday.

Kevin Keener (AGEN Ph.D. ‘96) received the IAFIS Foundation “Distinguished Food Engineering Award” at the 2004 ASAE/CSEA-SCGR Annual International Meeting. Kevin was recognized for his contributions to the academic and industrial communities. He is an associate professor in Food Science at North Carolina State University.

Jennifer (Smith) Trunk (FPE B.S. ‘97) married Joacim Trunk September 10, 2004 and lives in Greenwood, IN. Jennifer is an Automation Engineer in Diabetes Care at Eli Lilly in Indianapolis.

Danielle Bellmer (AGEN Ph.D. ‘96) received tenure at Oklahoma State Univ. She was honored with the Halliburton Outstanding Young Faculty Member award.

2000s

Nancy (Franke) Bailey (ABE B.S. ‘00) recently began working as a Quality Engineer for Howmet Castings in LaPorte, IN. Howmet is owned by Alcoa and produce superalloy castings for companies such as Rolls Royce, Honeywell, Boeing, and Pratt Whitney. Nancy married her husband John in May 2000 and they welcomed their daughter Alexandria on June 17, 2003.

Leon Levine (ABE Ph.D. ‘03) received his Ph.D. in 2003 and is still operating his consulting business in Albuquerque, NM and is looking for a teaching position.

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