

ISE Department Chair Appointed as Engineering Dean

In December 2004, David Wu, Iacocca Professor and chair of the Industrial and Systems Engineering (ISE) Department, was named dean of the P.C. Rossin College of Engineering and Applied Science.

In six years as chair of industrial and systems engineering, Wu has reached out to other colleges and departments at Lehigh, and also to other universities, to establish innovative academic programs. He has earned a reputation as an effective mentor of new faculty and graduate students while gaining international renown for his research in optimization, logistics, and supply chain modeling. During Wu's tenure as ISE chair, the ISE graduate programs tripled in size to 120 students.

"I believe David Wu will be an outstanding dean," said Mohamed El-Aasser, the previous engineering dean. "As chair of ISE, he has overseen a marked improvement in his department's national reputation and proven himself to be a dedicated and hard-working leader who is willing to partner with others and is capable of achieving results. I am confident that, with his team-building leadership style, David will help take the Rossin College and the university to the next level of educational excellence."

Wu said he was honored to be chosen as dean of the engineering college, which has 110 faculty members, 1,350 undergraduate majors, and 670 graduate students. "I am moved by the enthusiastic show of support and trust from my colleagues and humbled by the enormous responsibilities and challenges presented by this position," said Wu, who joined Lehigh's faculty in 1987. "I will devote my time, energy and creativity to taking the engineering college to a new level of excellence and international renown."

Wu said he would continue efforts to broaden the scope of engineering education at Lehigh. In addition to becoming well-versed in their major fields, he said, engineering students should acquire knowledge in the emerging fields of bio-, nano- and information technologies and also in business, economics, humanities, social sciences, cross-cultural studies, and communications. A more diverse curriculum, he said, would prepare students to become multi-faceted technical coordinators and global team leaders.

Excerpts from an article by Kurt Pfitzer posted on Lehigh's website on 12/15/04



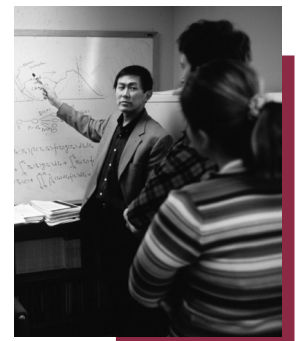
Message from Dean Wu

The past six years have been a very rewarding experience for me as the ISE department chair. Looking back, I am most proud of what the faculty and staff have accomplished during this time, and what a different department we have today.

When I took on the position as department chair in 1998, the department was at a crossroads. There were ten of us on the faculty; the focus of the department was primarily in manufacturing, with some activities in manufacturing systems. Perhaps the most memorable moment for me was the faculty retreat we had around that time, where we sat around in an old country inn trying to figure out what to do with the future of the IE department. I distinctly remember the discussion we had about the emerging role of IE as a profession, and the fact that our students are facing an industrial environment that has migrated from a manufacturing to a service-based economy, with information technology (IT) playing a central role in all aspects of the new environment. A decision

was made at that time to incorporate IT into the core of Industrial Engineering research and education. More generally, the decision was to take Lehigh Industrial Engineering from its manufacturing roots to new grounds offered by service industry applications such as logistics and finance; from its physical science roots to new opportunities offered by mathematical modeling, algorithmic development, and advanced computing.

We later sharpened this vision to focus specifically on the intersection of *Computing* and *Operations Research*, an area that is supported by rich applications in finance, logistics, telecommunications, revenue management, and



Interim Chair's Message



What a difference a year makes! At this time last year, my family and I were returning from a sabbatical in Edinburgh, Scotland and today, I am completing a semester as the interim chair. Our congratulations to David Wu for becoming Dean of the P.C. Rossin College of Engineering! This honor is more than deserved, as David has been instrumental in growing our department and starting our Information and Systems Engineering programs. You can only imagine how excited we are to

have an Industrial Engineer residing in the dean's office at Lehigh. We wish him the best of luck (and ask that he not forget us!).

As David took over his new duties around the holidays, this semester has been a bit hectic. I want to thank Kathy Rambo and Rita Frey, as well as the faculty, for making this transition smooth and (virtually) painless.

We have much to celebrate this year, with our students and faculty being recognized for their tremendous scholarship and hard work. You can read about these accomplishments in the newsletter. We also want to extend our congratulations to Arleigh Waring for being nationally recognized by Alpha Pi Mu (one of eight students in the country!). Arleigh will be entering the Ph.D. program at the University of Michigan next fall.

Our students also won a number of awards locally. Menal Guzelsoy won the Graduate Student Ingenuity Award from the College of Engineering while Mustafa Kilinc won the department's Graduate Student of the Year honor. The department also recognized the following undergraduate students at its annual banquet: Industrial Engineering Students of the Year - Michael Dal Santo and Ian Douglass (sophomores), Amanda Jasinowski (junior), Travis Frick (senior); Information and Systems Engineering Students of the Year - Diane Chaleff (sophomore), Jamie Beyer (junior) and Jacqueline Griffin (senior).

We graduated a record number of Ph.D.s this spring semester – at least the most that Rita can ever recall. Jennifer Rogers took an academic position with the University of San Diego while Clara Novoa, defending this summer, has taken a position with Texas State. Tom Perry defended his dissertation last fall and continues to work with Agere Systems in Allentown, PA. Dorid Mustafa is still interviewing, as are David Schweitzer and Serkan Ozkan, both defending this summer.

We graduated 52 undergraduates this year, either with Industrial Engineering, Information and Systems Engineering, or Integrated Business and Engineering (specializing in IE or I&SE) degrees. We also graduated 37 master's students in our various programs over the past year. They are landing jobs with companies in every field imaginable, further illustrating the versatility of our degrees and strength of our programs.

Our faculty also continues to shine. Jeff Linderoth, Andrew Ross, Larry Snyder, Greg Tonkay and David Wu all won awards this year. You can get the details in the faculty update section.

Last year, David reported on a number of programs and centers that are flourishing due to the hard work of our faculty and students. These include the NSF IGERT program, I&SE undergraduate and graduate programs, the I&SE Leadership program, and the Analytical Finance program (with departments of mathematics and finance). This year, we want to spotlight two new research efforts in the department: COR@L and CELDi.

The Computational Optimization Research at Lehigh Lab (or COR@L) was started by Rosemary Berger, Jeff Linderoth, and Ted Ralphs. The lab's goal is to be a leader in the development of optimization software, methodology, and applications. The lab kicked off operations this past year by taking over Room 362 and installing new servers and software for its students. (See the accompanying article for more details.)

Emory Zimmers, Jr., has expanded his Enterprise Systems Center with CELDi, an NSF sponsored Center for Engineering Logistics and Distribution. The center, in coalition with a number of centers at other universities, focuses on solving problems in logistics both inside and outside the plant. If you have not visited the Lehigh Valley in awhile, you might be amazed to see how we have become a transportation hub in the Northeast with our proximity to both New York and Philadelphia. As companies will partner with the center, the research will be industry driven. (See the accompanying article for more details.)

One final change to note in our department is the addition of Ms. Jane Kline to our staff. Jane recently worked in marketing as an interface between engineering and the sales force at Agere Systems in Allentown and has joined us this semester to take the role of IGERT coordinator, vacated by Valerie Holt who also moved onto the dean's office. In addition to these duties, Jane will be taking on additional responsibilities as our department's Communications Coordinator. Her duties will include facilitating communication between our department (students and faculty) and our alumni. To make sure that our department and our students take advantage of all of our available resources, we need to do a better job of networking. As noted in this newsletter, Jane will lead this charge.

As for the year ahead, we look forward to more change – as it seems to be constant nowadays! With a new (although familiar) dean of engineering and soon to be new dean of the business school, we look forward to new collaborations and new programs. Building on our collaborative M.S. in Analytical Finance program, we expect the **Center for Financial Services Research** to take off next year under the guidance of Professor Nandu Nayar of the Department of Finance. I will serve as the Associate Director of this center in order to bridge its mission to our department and the college. With the number of financial institutions interested in our students and programs, we see this as an opportunity for students to gain valuable research experience in this area.

As you can see, there is a lot going on in our department. The demands for our students are coming from various fields – from production and manufacturing, to logistics and supply chain management, to pharmaceuticals and health care, to marketing and distribution, and from finance to insurance. These demands will continue to push our programs and research in new directions. Needless to say, these are exciting times!

As we continue to grow and evolve, we want to hear from you. Please send us your thoughts, comments, and suggestions as we move forward. Feel free to write me, send e-mail (jch6@lehigh.edu), or drop in for a visit. We'd love to see you.

Joseph C. Hartman
George N. Kledaras Chair and Interim Department Chair

Center for Value Chain Research

Lehigh University's Center for Value Chain Research (CVCR) was established in 2002 by S. David Wu, then ISE Department Chair, and Susan Sherer, Kenan Professor of Information Technology Management in the College of Business and Economics (CBE). Dr. Larry Snyder assumed Wu's role as co-executive director when Wu became Dean of the P.C. Rossin College of Engineering and Applied Science (RCEAS) in January 2005.

The CVCR's objective is to foster collaboration with industry on research projects that focus on planning and development of value chains. A value chain is a network that creates customer value, increases profitability, and/or reduces costs, often comprising multiple firms in complex relationships and diverse activities within a single firm. The term "value chain" has broader connotations than the more familiar term "supply chain" in that it encompasses all phases in a firm's planning hierarchy, from strategy to planning and development to execution. In today's business environment, shrinking product lifecycles, pressure to reduce product development cycle times, growing international competition, and new technology make decisions during all phases critical.

The CVCR is jointly sponsored by RCEAS and CBE, and this inter-college collaboration provides a unique, multi-disciplinary approach to value chain research, integrating analytical and quantitative engineering approaches with process-driven and field-based business research. The CVCR's member companies include Agere, Boeing, Hewlett-Packard, Air Products, BOC Gases, General Motors, and IBM. We are continually seeking new member companies, particularly in the high-value manufacturing and pharmaceutical industries, where we believe that our expertise in planning and development can add significant value to companies.

Faculty members from both colleges have performed research sponsored by our member firms on topics such as portfolio management, life-cycle forecasting, inter-firm demand integration, and collaborative forecasting. This research has generated journal articles, conference presentations, and research grants from federal agencies. The Center is proud of this research and is looking toward its next development phase, in which it will become a leading source for knowledge about value chain planning and development, targeted at both academic and industry audiences.

The Center's broad focus on the value chain as a whole, in contrast to the more narrow focus taken by academic research centers at other universities, positions it well to become such a knowledge repository. To that end, the Center will sponsor an annual industry-university workshop, conduct a series of seminars at Lehigh and on-site at our member firms, award research prizes for graduate and undergraduate research, and launch a series of publications on its web site, including research papers, technical reports, and white papers. Drs. Snyder and Sherer are currently investigating avenues for raising seed money for this initiative and hope to begin this second phase within the next year.

Dr. Snyder is very happy to serve as co-executive-director of the CVCR and is excited about the prospects for the Center's short- and long-term future. If you would like more information about the CVCR, please contact him at larry.snyder@lehigh.edu, or visit the CVCR web site at

www.lehigh.edu/~inchain



Dr. Larry Snyder

Message from Dean Wu

continued from page 1

supply chain management. This is an area that represents tremendous opportunities not only in graduate/undergraduate education, but also in research and scholarship.

What happened over the following few years is nothing short of a fundamental transformation. What had been envisioned during the retreat formed the basis of our Lehigh 2020 proposal, and with the help of the 2020 initiative, we changed the name of the department to Industrial and Systems Engineering, and we hired seven new faculty members who represent new areas of expertise in optimization, mathematical programming, stochastic processes, and high-performance computing. The quality of our new hires rivals some of the very best in the IE/OR community. The department is on the rise to compete with the top tier departments in the nation.

I have truly mixed emotions leaving my position as ISE department chair to become dean of the engineering college. On one hand, it is sad to leave in the middle of this transformation that is still unfolding in front of our eyes. On the other hand, it is exciting and rewarding to have the opportunity to observe the transformation from a different vantage point. I am certain that the ISE faculty and staff will carry on the transformation with the intensity and vigor that they have demonstrated in the past. Joe Hartman has done a tremendous job as the interim department chair, and I am sure that he will continue to provide the strong leadership necessary to take the department to new heights. Good luck and keep up the great work!!

Catching up with the Faculty...



Dr. Aurélie Thiele

John Adams: Although retired from the faculty, still active in developing and advising the program in quality engineering.

Rosemary Berger: Won an NSF/SRC grant with David Wu on demand planning and supply chain coordination in the semiconductor industry. Also completed her term as SWE faculty advisor highlighted by CHOICES, a program for introducing engineering to middle school girls.

Keith Gardiner: Continues to lead efforts in Engineering 5, a hands-on learning experience for all freshmen engineers. Also continues to direct the Center for Manufacturing Systems Engineering.

Mike Groover: Continues to work on a new textbook in the area of work systems and measurement and is revising his second edition of *Fundamentals of Modern Manufacturing: Materials, Processes, and Systems*.

Joe Hartman: Won the 2004 Young Engineer of the Year Award from the Lehigh Valley Chapter of the PA Society of Professional Engineers. Also won the Eugene L. Grant award from the ASEE Engineering Economy Division for the best paper in Volume 49 of *The Engineering Economist* with co-author Ingrid Schafrick, a former M.S. student now working with Norfolk Southern.

Jeff Linderoth: Recently delivered the plenary address at the Conference on High Performance Algorithms and Software for Nonlinear Optimization in Ischia, Italy. Also won the college's Ingenuity Award for Junior Faculty.

Nick Odrey: Continuing his research, with a recent publication in *Robotics and Computer Integrated Manufacturing*, into the application of Petri Nets to error detection and recovery in manufacturing and logistics systems.

Eugene Perevalov: Continues to perform interdisciplinary research in telecommunications, specifically wireless and ad hoc networks, with Rick Blum of the Department of Electrical and Computer Engineering.

Lou Plebani: Continues to lead our efforts in teaching courses in the Information Technology area. Also working on research in manufacturing systems (line-balancing problems) and data communications.

Ted Ralphs: Won his second National Science Foundation grant to design and implement parallel algorithms for route optimization. The grant is part of the Small Business Technology Transfer Research program which promotes the transfer of research to commercialization.

Andrew Ross: Won the department's "Teacher of the Year" award, as voted on by the students, for the second year in a row. Only Mike Groover, Bob Storer, and Emory Zimmers have won multiple times.

Larry Snyder: Won his second award for best dissertation, this time from the Institute of Industrial Engineers (Pritsker award). He previously won first place from the INFORMS section on Transportation Science and Logistics.

Bob Storer: Continues to co-direct the highly successful Integrated Business and Engineering program. Traveled to Chile this summer to work with Jaime Bustos, his former Ph.D. student.

Aurélie Thiele: Completed her first year in the department by teaching courses in operations research. Organized and chaired sessions on "Robust Revenue Management" at the recent INFORMS (Denver, Colorado) and IFORS (Honolulu, Hawaii) meetings.

Greg Tonkay: Won the Lehigh University Christian R. and Mary F. Lindback Award for Distinguished Teaching. This completes his sweep of teaching awards at the department, college, and university levels.

George Wilson: Continues his research collaboration with IBM on improving highly time-sensitive logistics support systems with respect to service parts. The effort has led to a number of internships and job opportunities for students.

David Wu: Named Dean of the P.C. Rossin College of Engineering at Lehigh. Was also named a Fellow of the Institute of Industrial Engineers.

Emory Zimmer, Jr.s: Integrated CELDi, the National Science Foundation sponsored Center for Engineering Logistics and Distribution, into his current efforts in the Enterprise Systems Center which he continues to direct.

Dr. Gregory Tonkay and student



Computational Optimization Research @ Lehigh



Dr. Ted Ralphs and Dr. Rosemary Berger

During the summer of 2004, a new research laboratory called COR@L (Computational Optimization Research @ Lehigh) was founded by ISE faculty members Rosemary Berger, Jeff Linderoth, and Ted Ralphs. Building on the growing interest and expertise in computational optimization within the ISE department and across the university, COR@L was created to support continued growth in research and educational activities and to encourage synergy among faculty and students working in computational optimization. More than a dozen graduate students are currently working on COR@L projects, developing new software and methodology for solving important problems in application areas such as supply chain optimization, telecommunications network design, transportation and logistics, homeland security, financial engineering, and computational biology. COR@L currently distributes more than half a dozen software packages developed by its members at Lehigh and provides numerous other resources to the research community, including research papers, tutorials, course materials, and data sets. Since its web site went live at the beginning of February, hundreds of researchers and practitioners across the country and around the world have downloaded software developed at COR@L to help them solve their optimization problems.

COR@L's hardware infrastructure is housed primarily in Room 362 on the third floor of Mohler Lab and currently consists of a network of more than two dozen Linux-based PCs linked to campus high-performance computing resources using the Condor software system, which allows computational jobs submitted from COR@L to run on resources campus-wide. Among the resources available to COR@L users through the campus network are several high-performance computing clusters housed at Lehigh's computing center. COR@L's software resources include advanced optimization tools, such as CPLEX, MINTO, SYMPHONY and XPRESS-MP, as well as modeling packages such as AMPL and Mosel. The hardware and software resources are used by Lehigh students enrolled in optimization courses and by students and faculty for research projects.

Encouraging synergy among faculty and students from ISE and across campus is an important strategic goal of COR@L. A weekly COR@L seminar attracts a wide range of participants for informal presentations, discussions and software demonstrations related to computational optimization. In October, students and faculty attended the Columbia University Optimization Day in New York City to hear lectures about the latest developments in optimization theory and practice. COR@L plans to host its own "Optimization Day" at Lehigh in the near future to showcase faculty and student research to the Lehigh community and local companies. COR@L is currently funded through grants from the National Science Foundation, the Pennsylvania Infrastructure Technology Alliance, and other industrial partners, such as IBM and Air Products and Chemicals.

To learn more, visit the COR@L web site at

<http://coral.ie.lehigh.edu>.

Jane Kline joins ISE Department

Jane Kline has recently joined the ISE team in the position of Communications Coordinator. In addition to taking over coordination of the IGERT program (a doctoral program sponsored by the NSF), Jane will be assisting Dr. Joseph Hartman with various special projects in efforts to raise the department's visibility and help build a network so that students and alumni can reach out and communicate with each other more easily.



Jane was previously employed at Agere Systems, where she managed strategic and tactical marketing activities for one of their semiconductor product lines. Jane has alumni roots here at Lehigh, for she obtained her MBA here in 1998. She completed her undergraduate studies in Operations Management at Penn State University in 1984.

Jane is married and has two children: Katie, age 10 and Trey, age 3. She also has two stepsons: Kyle, who attends college, and Devin, who is currently in high school. Jane looks forward to working with faculty, staff, and students here in ISE!

Undergraduate Student News



On May 15, 2005, Laura Haldis, Adam Stockar, and James Glynn were finalists in the 11th Annual Student Simulation Contest. The contest was held during the International Industrial Engineering Conference in Atlanta, Georgia. The group of three I&SE juniors was chosen out of 64 entries internationally. Seven of these submissions were from Lehigh groups.

This is the seventh time in the last eight years that Lehigh has sent a simulation team to the finals. Excited to be selected for the competition, Adam Stockar said, "It is a great opportunity for us to be able to represent Lehigh's ISE Department at the national level."

Eight students from the ISE department were named Rossin Junior Fellows in a ceremony this spring. They will mentor the freshman engineering class and serve as ambassadors to high school students interested in enrolling in Lehigh's engineering program. They are: Lauren Chrencik '07, Ian Douglass '07, Sara Ellis '07, Drew Garrabrant '07, Emily Jarina '06, Matthew Lenza '06, Ipek Ozkanoglu '07, and Pelin Seyhan '07.

Alpha Pi Mu, the Industrial Engineering Honors Society, inducted the following students this year: Seniors – Katherine Drewes, Christopher Gerlach and Maureen Wink; Juniors – Kate Arico, AJ Dinker, Joseph Dunn, Emily Jarina, Amanda Jasinowski, Nicole Jung, Charles Williams and Daniel Zilinski.

This year's graduates are working at companies such as Navigant Consulting, Deutsche Bank, Victaulic, Accenture, American Appraisal Associates, FedEx, Goldman, Sachs & Co., IBM, and Johnson & Johnson. Also, some students have been accepted to attend graduate school at Lehigh University and the University of Michigan.

Graduate Student News

This May, 22 graduate students completed their degrees. Some of the companies that those graduates will be joining are IBM, Praxair, Inc., GlaxoSmithKline Pharmaceutical, the Institute for Defense Analyses, UPS, Mack Trucks, Standard and Poor's, Accenture, Applied Predictive Technologies, and McKinsey & Company. Other students will pursue further degrees; three students that graduated with Master's degrees are continuing at Lehigh to pursue PhDs.

Alumni Update

John W. Langhaar '33 worked for 17 years in various engineering and supervisory positions at DuPont Co. followed by 26 years of nuclear engineering in their Atomic Energy Division. This division operated the Savannah River Plant for the US Government producing tritium, plutonium, and other radioactive materials. He retired as a research staff engineer and now resides in Florida.

N.H. Gowing '38 retired in 1977 from DuPont Co. where his highest rank was Area Supervisor at the Savannah River plant.

William F. Hahn '49 retired in 1988 as the Senior VP of Penn VA Corp. He was responsible for 3 subdivisions: crushing, weighing, and conveying. He holds several patents and is now a major volunteer. He has two sons; one is an IE and the other is an MD. He also served in WWII as a naval air pilot.

Jason Brent '56 is now retired with homes in Las Vegas, NV, Thachap, CA, and Campbell River, British Columbia, Canada.



Jim Kurian '68 spent over half of his career with Material Management and has spent the last seven years in Lean Manufacturing. He hopes to continue focusing on Lean Manufacturing in another company or through consulting.

Warapong Nandabihawat '80 worked for three companies in production, inter-trade, and management. He then spent seven years in the banking business, after which he became a major shareholder of Universal Food PLC. Also at UFC he was involved in operation improvement including listing the company on the Stock Exchange of Thailand. He is married and

continued on page 7

The Center for Engineering Logistics and Distribution at Lehigh

The National Science Foundation's Center for Engineering Logistics and Distribution (CELDi) recently formed an academic partnership with Lehigh University. The Center is hosted by the Department of Industrial and Systems Engineering in Mohler Lab. A driving force for this partnership is to increase cooperation between industry and academia, as well as the public and private sectors. This partnership strives to increase the U.S. competitive edge in the global marketplace. CELDi states its formal mission as: "Providing integrated solutions to the complex global logistics challenges facing U.S. industry." The focus of the Pennsylvania Center at Lehigh University is on agility applications in manufacturing logistics and distribution centers. Emphasis is on manufacturing plant logistics such as material handling, scheduling, lead-time reduction, and applications of information systems for operations management. In addition to Lehigh in the northeast, there are several other geographically dispersed academic partners and over twenty-four industry partners involved nationally.

Lehigh's role in this partnership is to provide focused university research with an emphasis on the creation of new knowledge needed to solve logistics and distribution problems. Lehigh has experience with the multi-company and multi-disciplinary collaboration that is essential to the success of this new Center. Lehigh also has over a century of experience with engineering-business collaboration. Our University is a natural fit for a program such as CELDi, not only because of Lehigh's longstanding history of collaborative partnerships, but also considering the success of the Department of Industrial and Systems Engineering and the Enterprise Systems Center (ESC). The mission of the ESC is to "enable experience-based learning, help implement agile manufacturing systems, and conduct research driven by industry needs." Since the goal of CELDi is to integrate education and industry, it meshes well with the industry-focused ESC. Dr. Emory W. Zimmers, professor of Industrial and Systems Engineering, is the director of the Enterprise Systems Center and was chosen as the director for Lehigh's CELDi program because of his extensive

Dr. Emory Zimmers, Jr. and students



experience in leading research and developmental programs that involve collaboration between academic and industrial sectors.

CELDi benefits the academic institutions, students, and industries. The universities receive focused research funding from the industry partners and program support from the National Science Foundation. Benefits to the students who are involved in the academic partnerships include coursework enhancement through collaboration with industry and familiarization with cutting-edge techniques. Additionally, students have the opportunity for research assistantships, possible employment with the industry partners, and potential publications. Industry partners in CELDi reap the benefits of information compiled by the academic partners. In turn, this will lead to more effective, efficient logistics for their companies. Industry partners also have access to the top professionals in their fields, as well as being a member of an elite group of world leaders. Many faculty in the Department of Industrial and Systems Engineering are anticipated to collaborate in preparing proposals and carrying out further research for CELDi projects.

Alumni Update continued from page 6

has four children, two boys and two girls. He is currently traveling and looking for new projects.

Dr. Mehdi Hoojat '88 was the CFO/Budget Director for Infonxx in 2000 and was promoted to Associate Professor at Neumann College in 2004.

Suleyman Pektas '91 is currently the CEO of Istanbul Transportation Company in Turkey, an operator company which runs the urban rail transportation system of Istanbul as the sole concessionaire of the municipality.

Glen Miske '94 is now a physician specializing in EP/Cardiology. He is married to Heather, who is also a physician specializing in Hematology/Oncology. They have three children: Jacob, Nathaniel, and Madeline.

Stacy Behrens '97 was the lead engineer for manufacturing simulation and virtual reality for Dana Corporation at their Advanced Technology Resource Group in Ottawa Lake, Michigan. There he worked with and trained other engineers on discrete event and 3D simulation. He was also an internal Malcolm Baldrige examiner

for Dana's Spicer Driveshaft division the year they won the award. He received his MBA and Master of Engineering Management from Washington University in St. Louis and currently is a Senior Consultant at a small supply chain and IT strategy consulting firm, Sumpura. He is now married to his longtime sweetheart, Dr. Kimberley Crone.

Sandra Bonner '98 worked as a production planner for four years and has been a sales and distribution manager for the last two years at Armstrong World Industries in Lancaster, PA and Chicago, IL.

Brian Kelley '03 is a Production Engineer at Honeywell Inc.'s Defense Space & Electronics Systems, based out of Clearwater, FL. He works on a sustainment team for the guidance system of one of the Air Force's Intercontinental Ballistic Missiles. He will begin studies towards his MBA this fall.

In Memoriam

Ted Kirch '48, August 16th 2004



Industrial and Systems Engineering

Harold Mohler Laboratory
200 West Packer Avenue
Bethlehem, PA 18015-1582

NonProfit Org.
U.S. Postage
PAID
Permit No. 230
Bethlehem, PA 18015

ISE Connections

The Industrial & Systems Engineering team is initiating an effort to help build an ISE “people network” to help both current students and alumni alike. We would like to know where our alumni are and make that information available in a database for our students so they have contacts for intern and job searches as well as career advice. This database will also be available to ISE graduates so it can help bring our alumni together as well. We have very talented graduates who are going everywhere, and we want this network to help give all ISE students and alumni every advantage possible. The contact information will solely be used for this purpose, and will only reside within the ISE department.

If you would like to be a part of this effort and are willing to be included in our database, please email Jane Kline at jlk205@lehigh.edu or fill out the form below and return via U.S. mail. Please include your name, a brief description of your professional work, where you are currently employed, and any other points of interest you may want to include. Also, if you know of anyone who might be interested in any of ISE’s graduate programs either locally or through distance learning, please indicate that as well.

Name _____

Professional Work/Position _____

Place of Employment _____

Other Info You’d Like to Share _____

For U.S. Mail, send to : Jane Kline, Lehigh University
Mohler Lab, 200 W. Packer Ave.
Bethlehem, PA 18015-1582

For email:
jlk205@lehigh.edu