

# Tau Beta Pi Scholars 2002-03



## **Matthew J. Buckley, Nagel Scholar No. 14**

Academic all-American and former captain of his Delaware high-school swim team, Matt continues to make a difference there. He volunteers as assistant coach for the boy's swim team and tutors high-school mathematics and science, while maintaining a perfect 4.0 at the University of Delaware. A civil engineering major, he plans to specialize in transportation engineering, particularly air-traffic flow. On campus, he is vice president of the Institute of Transportation Engineers, a member of the NSPE, and is on ASCE's concrete-canoe team. At the top of his class of more than 250 students, Matt was elected to Tau Beta Pi, Alpha Lambda Delta, and Chi Epsilon honor societies.



## **Elizabeth A. Basha, Dodson Scholar No. 12**

A leader at the University of THE PACIFIC, Elizabeth served as President of Tau Beta Pi's California Phi Chapter and of the IEEE student chapter. Number one in her engineering class, she was elected to Alpha Lambda Delta, Eta Kappa Nu, and Phi Kappa Phi honor societies. She plans to continue her work in computer engineering and may study robotics in graduate school. During the summers and on co-op assignments throughout her five-year degree program, she has contributed to the creation of several test scripts, identifying numerous chip defects for a manufacturing firm, which even provided her the necessary equipment to set up a satellite lab on campus. She is a student member of SWE and the service group, Circle K.



## **Danielle N. Drury, Peter & Elsa Soderberg Scholar No. 4**

Interested in applications of engineering, Danielle is majoring in biomedical engineering and is the top student in her class at Mercer University in Macon, GA. A campus leader, she is Vice President of Tau Beta Pi's Georgia Beta Chapter and vice president of her Phi Kappa Phi unit. She is treasurer of SWE and a member of the biomedical engineering club, the premed club, and the university flute choir and played in the orchestra for the Macon Little Theatre's production of "Mame." For the past two years, Danielle has worked in her university's learning center as a supplemental instruction leader; students credit her for their success in class and for improving their study skills.



## **Mary E. Fazio, Stable Scholar No. 3**

The top engineering student in a class of more than 130 at SUNY Binghamton University, Mary is majoring in mechanical engineering and plans to attend graduate school and work toward a master's degree in biomedical engineering. She is a founding member of a recently established unit of the professional engineering fraternity, Theta Tau, and has worked to gain national recognition and organize events for members. An athlete, she held a starting forward position on the women's varsity soccer team, which was named the "best rookie team" to compete in Division 1. Mary volunteers weekly at TOPS, helping mentally handicapped kids play soccer. On campus, she is a peer tutor and helps plan activities for SWE. She was elected to Tau Beta Pi, Pi Tau Sigma, and Phi Eta Sigma honor societies.



## **Jeremiah J. Horn, Alabama Power No. 3**

Jeremy is first in his engineering class of more than 400 students at Auburn University. After graduating next May with a degree in chemical engineering, he may work in industry or continue his education. He is a research assistant and has interned at a nearby nuclear plant. Jeremy is Cataloger for Tau Beta Pi's Alabama Alpha Chapter and was elected to Omega Chi Epsilon. He is a member of the AIChE and North American Young Generation Nuclear groups and of Sigma Alpha Epsilon fraternity.



## **Gregory R. Stone, Fluor Scholar No. 2**

At the top of his class at the University of Idaho, chemical engineering major Gregory Stone may work in industry after graduation. Greg is active in a wide range of activities. He plays guitar for the university's jazz band, is music minister for his church, continues with his piano lessons, and participates in the school's weight-training program. On the chemical engineering research team, he is Treasurer of Tau Beta Pi's Idaho Alpha Chapter and a member of Phi Eta Sigma honor society.

## **John W. Presley, Beans Scholar No. 1**

Leadership, service, and scholarship only begin to describe what 22-year-old John Presley at the University of Tulsa is all about. Since 1996, he has been working in youth-based



ministries both on campus and in Central America, giving time, talent, money, and leadership. His goal is to lead a team-based engineering and manufacturing business and use the income for world-wide ministries. A mechanical engineering major, he is an officer in student chapters of ASME and SME (president) and tied for first in his class of more than 600.



**Christina R. Strunk, Benard Scholar No. 1**

The top-ranking junior in an engineering class of more than 2,700 students at Kansas State University, Christina is majoring in industrial engineering and plans to earn an advanced degree in engineering management. A participant in the engineering honors program, she is completing a research project and has been elected to Alpha Pi Mu and Tau Beta Pi-she is Corresponding Secretary of Kansas Gamma. Christina is a student member of IIE and has served as a team captain on a JETS competition, volunteered for KSU open-house and telefund, and worked with SADD and Habitat for Humanity.



**Charley R. Johnson, Campbell No. 1**

The president of his fraternity, Phi Delta Theta, Charley has taken a proactive role in the Mercer University community-organizing self-defense seminars after a friend was assaulted, serving as a justice for the student judicial system, and volunteering for the community-development center and a city fire department. An environmental engineering major, he is president of the Water Environment Federation and treasurer of the biomedical engineering club. He was elected to Tau Beta Pi, Omicron Delta Kappa, and Phi Kappa Phi honor societies.



**Arda Kutlu, Orr Scholar No. 1**

Academically a star, Arda competed with over 1.5 million students from his homeland Turkey and is at the top of the 200 offered the opportunity to study at any ranked university in the world. Now finishing at Texas A&M University, he is a 4.0 student in the industrial engineering program and the top student among 1,800 junior engineering students. His interests are in planning and optimization of production systems, mathematics, and probability. Arda enjoys student life and is active in Tau Beta Pi, IIE, Alpha Pi Mu, Aggie School Volunteers, and the Turkish Student Association.



**Natalie E. Aronson, Record Scholar No. 2**

A 4.0 student majoring in chemical engineering at the University of Kentucky, Natalie has undertaken co-op assignments and on-campus research projects, including a paper on biodegradable synthetic polymers and a project on the effect of protein concentration and hydration on the permeability properties of lung interstitium. She is treasurer of SWE, president of Omega Chi Epsilon, and a member of Tau Beta Pi, the AIChE, the Biomedical Engineering Society, and Kappa Kappa Gamma sorority.



**Ami S. Badami, Record Scholar No. 3**

A chemical engineering major at Villanova University, Ami has enriched her undergraduate education through study abroad at both the University of New South Wales in Australia and the University of Cadiz in Spain. Her goal in graduate school is to continue her work in biotechnical engineering-creating artificial arteries or tissues-prior to a career abroad. A member of Tau Beta Pi, SWE, the AIChE, ISPE, and the university's minority engineers and scientists society, Ami volunteers for the soup kitchen, the special olympics, and as a tutor.



**Charles W. Barth, Record Scholar No. 4**

The top engineering student in a class of more than 750 students at Kansas State University, 20-year-old Charles is majoring in electrical engineering. He is interested in communications, particularly signal processing and electronic circuits and devices. He plans to participate in a summer internship with a technology-based company and is considering pursuing a master's degree in business administration. He was elected to Tau Beta Pi and enjoys intramural sports.



**Bradley T. Boyer, Record Scholar No. 5**

After studying next fall in Germany at the Fachhochschule Augsburg, Brad will return to the University of Alabama to complete his undergraduate work in mechanical engineering. He plans to enter the automotive industry as a bilingual engineer. He has experience working for professional engineers in Birmingham. The top engineering student of 350, Brad was elected to Tau Beta Pi (Secretary), Phi Kappa Phi, and Pi Tau Sigma and is a member of ASME, SAE, and the UA percussion ensemble.

**David M. Brogan, Record Scholar No. 6**



David is president of the university's engineering council at Vanderbilt, where he is majoring in biomedical engineering. Particularly interested in the application of technology to prosthetic devices, he plans to enroll in medical school in an M.D./Ph.D. program. Involved in community service, he has taught science experiments at area grammar schools and mentored/tutored at-risk children. Number one in his class, he was elected to Tau Beta Pi, Alpha Lambda Delta, and Phi Eta Sigma honor societies.



**Michael S. Cherry, Record Scholar No. 7**

Michael is majoring in mechanical engineering at Brigham Young University, where he has been a teaching assistant and elected to Tau Beta Pi. On a summer internship at Sandia National Labs, he was introduced to the world of MEMS (micro-electromechanical systems) while working on a design project. He now plans to pursue a doctorate in the field so that he can later teach. He is 24 years old and has already volunteered for two years as a missionary to Brazil. Michael lettered in three sports and is an avid mountain biker.



**Orion K. Crisafulli, Record Scholar No. 8**

A mechanical and aerospace engineering major at Princeton University, Orion was a research assistant in the advanced technology center for photonics and optoelectronics materials and is a fellow on the NASA terrestrial planet finder project. He is President of Tau Beta Pi's New Jersey Delta Chapter and a leader of the Princeton Materials Research Society. He is event coordinator for both the Society of Physics Students and the ASME chapter and technology chair of the AIAA.



**Andrew E. Honegger, Record Scholar No. 9**

The top-ranked engineering student at the University of Illinois at Urbana-Champaign in a class of nearly 1,500, Andrew will graduate next May with a degree in mechanical engineering. He will then pursue concurrent degrees, one in his major and an M.B.A., both at his alma mater. He hopes to apply his research towards the manufacture of new products. A participant in the technology and management program, he is a member of Tau Beta Pi, Alpha Gamma Rho fraternity, and the ASME.



**Joseph R. Howard, Record Scholar No. 10**

A civil engineering major at the University of Idaho, Joe may work for a design firm for two years immediately after graduation. He is a founding member of the Epsilon Kappa chapter of Theta Chi fraternity, serves on the scholarship and house committees, and is a team leader for "Up 'til Dawn," which raises money for the St. Jude Children's Hospital. He was elected to Tau Beta Pi and Phi Eta Sigma and is a student member of the ASCE and a Life Scout. He enjoys traveling and competing in fiddle contests.



**Joshua B. Kollat, Record Scholar No. 11**

The top-ranking engineering student at Youngstown State University in Ohio, 22-year-old Josh is majoring in civil/environmental engineering. He plans to pursue a Ph.D. in bioremediation and constructed wetlands. He has field experience as a research assistant and intern and has taken a study-abroad class in Costa Rica. Locally, he has been working with the consortium to clean the Mahoning River and volunteering for Habitat for Humanity, the Salvation Army, and the campus recycling program. Elected to Tau Beta Pi and Phi Kappa Phi, he has been active in the IEEE and ASCE student chapters.



**Catherine I. Kuo, Record Scholar No. 12**

Cathy is majoring in bioengineering at the University of Illinois at Chicago, where she is also completing requirements for the guaranteed professional program admissions curriculum in medicine. She is doing lab research in bone and cartilage cell growth and collecting EKG data from cardiac patients in the imaging and computation lab. At the top of her class of more than 800 students, Cathy was elected to Tau Beta Pi, is a teaching assistant, and is a member of SWE, the Society of Future Physicians, and the Biomedical Engineering Society.



**Christina M. Lupher, Record Scholar No. 13**

Christina is majoring in industrial engineering at Oklahoma State University and plans to pursue an M.S. before working in a plant facility in a human-relations or central engineering department. She will specialize in work-environment issues. For three summers, she has interned for GM. She is president of SWE, vice president of Sigma Delta Pi, president of Alpha Pi Mu, and Corresponding Secretary of Tau Beta Pi. She is a member of Phi Kappa Phi, the IIE, the Institute for Operations Research & Management, and SHPE.

**Timothy L. Morse, Record Scholar No. 14**



A mechanical engineering major at the Cooper Union for the Advancement of Science and Art in New York, Tim plans to attend graduate school to continue studies in either mechanical or aerospace engineering. A 4.0 student and at the top of his class, he is active in the ASME student chapter, "Kids in Engineering," and Leadership in Engineering, Advancing the Profession. He has participated in various campus groups, including the dramatic society, robotics club, Cooper Union Choir, and the roller-hockey club.



**Derrick D. Oneal, Record Scholar No. 15**

A chemical engineering major and first in his engineering class at the University of Tulsa, Derrick plans to work for a major oil company after graduation. He has already taken more than 27 hours of business courses and will pursue an M.B.A. at night school while working. Involved in the summer undergraduate research program, he took second prize in a poster presentation at the International Petroleum Environmental Conference. Derrick was elected to Tau Beta Pi, Omicron Delta Kappa, and Omega Chi Epsilon honor societies and is active in AIChE. He played intramural flag football and soccer.



**Matthew P. Overstake, Record Scholar 16**

Matt is the top engineering student at Kansas State University where he is majoring in mechanical engineering with a minor in business. He will complete his B.S. next year and then work in the oil and gas industry. He looks forward to his summer internship. He seeks P.E. licensure and hopes to improve new and existing oil-recovery techniques to protect the environment. Matt is an officer of Tau Beta Pi and Pi Tau Sigma, a math grader, and a member of the ASME and serves on the student advisory council and Engineering Student Council.



**Daniel J. Palecek, Record Scholar No. 17**

An electrical engineering major at South Dakota School of Mines and Technology, Dan is the top engineering student in his class. He will be holding a summer research position at Clemson University in wireless communications, a field he will pursue in graduate school. He is a member of Tau Beta Pi, Phi Eta Sigma, and Eta Kappa Nu honor societies and a student member of the IEEE. Dan has been on the solar-motion team and played intramural basketball.



**Cécile F.M. Parker, Record Scholar No. 18**

A chemical engineering major at Louisiana Tech University, Cécile has maintained a high GPA while participating in a co-op program with a polyethylene-manufacturing firm. She plans to pursue an M.B.A. or engineering management degree while working for a chemical company. She enjoys campus intramural sports and has held leadership positions in the women's club soccer team. Cécile is President of the Louisiana Gamma Chapter, a member of AIChE and SWE and was elected to Phi Kappa Phi and Omega Chi Epsilon.



**Lisa M. Pinsent, Record Scholar No. 19**

A chemical engineering major at the University of Cincinnati, Lisa will be applying to law school after graduation. With her engineering background, she plans to specialize in intellectual property law. Lisa is active on campus and the community in general as a member of Tau Beta Pi, and SWE, and as a volunteer for Save the Animals Foundation. A co-op student, she has had extensive practical experience in the petrochemical industry, holding various positions-from process design and optimization to environmental safety. She is able to manage several projects simultaneously and is a valued team member.



**Eric L. Pollard, Record Scholar No. 20**

Eric plans to continue his studies at South Dakota School of Mines and Technology after graduating with a B.S. degree in May 2003. He is the top engineering student there and looking forward to working as a summer scholar at the Air Force Research Lab, where he will be studying gossamer structures. Eric is vice president of the ASME chapter, on the aero design composites manufacturing and mini-Baja teams, and a member of Tau Beta Pi, Phi Eta Sigma, the ASM, and the Minerals, Metals, & Materials Society.



**Ilissa B. Schild, Record Scholar No. 21**

A mechanical engineering major at Brown University, Ilissa is focusing on aerospace applications. As a General Electric summer intern, she continues to gain experience in R&D. She will be conducting a senior thesis in the university's honors program and is at the top of her class scholastically. She plans to enter a doctoral program to explore new ways to make air travel safer and more efficient. Ilissa is a tutor, peer advisor, a research assistant, and a member of the ASME, Tau Beta Pi, and the tap-dance ensemble.

**Swatee Singh, Record Scholar No. 22**

A top-ranking engineering student at the New Jersey Institute of Technology with a 4.0



average, Swatee is a student in the honors college. She is majoring in electrical engineering and last summer participated in research on metal oxide semiconductor field effect transistors (MOSFETs). She measured transistor characteristics, recorded results, gave frequent presentations, and wrote a final report. Swatee is a facilitator for several courses and is a member of Tau Beta Pi and Eta Kappa Nu honor societies.



### **Steven G. Smith, Record Scholar No. 23**

Number one in an engineering class of more than 260 students at the South Dakota School of Mines and Technology, Steven is majoring in computer science and intends to pursue a career in software development. On campus, he has been active in the soccer club, serving as team captain and club president while a lower-division student. He continues to volunteer as a soccer coach during the summers. Steven was elected to Tau Beta Pi and Phi Eta Sigma honor societies and is a student member of the Association for Computing Machinery.



### **Kari D. Stevens, Record Scholar No. 24**

A mechanical engineering major at the University of Massachusetts-Lowell, 27-year-old Kari is the top student in her department. On a five-year program, she will earn her M.S. in May 2004. She works in the advanced composite material and textile lab, where she hopes to complete her graduate thesis research in composites and nano-technology. Kari is President of Tau Beta Pi's Massachusetts Theta Chapter and treasurer of Pi Tau Sigma. She is a member of ASME, SAMPE, and Women in Science and Engineering.



### **Yukie Tanino, Record Scholar No. 25**

Yuki is majoring in civil and environmental engineering at MIT, with minors in public policy and toxicology and environmental health. She plans to complete this program next June. A member of Tau Beta Pi, she is researching the historical development of an aspect of water-quality modeling and preparing an article for publication. For her Ph.D. in a different academic culture, Yuki will focus on contaminant transport in water and groundwater quality. She has held summer internships at the EPA and in Japan for a pharmaceutical firm.



### **Janna J. Thomas, Record Scholar No. 26**

After completing her undergraduate degree in electrical engineering at the University of Wyoming next May, Janna Jo will begin a doctoral program and specialize in power systems. The top engineering student in a class of nearly 400, she has participated in the honors program and was elected to Tau Beta Pi. She volunteers for muscular dystrophy, Big Brothers Big Sisters, the Institute of Women's Association, and her church's student association. She placed second in a racquetball intramural tournament and is a Peewee soccer coach.



### **Zachary M. Thomas, Record Scholar 27**

President of Tau Beta Pi's New York Beta Chapter at Syracuse University, Zach takes an active leadership role there. He is president of the IEEE student branch, president of Phi Kappa Psi fraternity, and vice president of the Alibrandi Catholic Center Newman Association. He has found time to "coach" physics courses in mechanics and electricity and magnetism, play in the marching band, and be an event coordinator for the IEEE chapter. He plans to attend graduate school.



### **Vernella V.V. Vickerman, Record Scholar 28**

A research assistant in the chemistry department at Howard University, 20-year-old Vernella is at the top of her engineering class and within the next three years plans to complete her master's degree in biochemical engineering. For her undergraduate research, she has investigated ion optics for a cross-beam apparatus, worked on a NASA solar sail propulsion project, and explored biocompatibility of polymers surfaces and surface energy. She is a member of Tau Beta Pi, the AIChE, and the National Society of Black Engineers.



### **Pamela S. Willenberg, Record Scholar 29**

Pam is at the top of her engineering class of 225 students at the University of Nevada, Las Vegas. The mother of two children, she has worked part-time and interned with an area consulting firm, while earning a 4.0 GPA. After graduating, she plans to pursue a master's degree on a part-time basis, specializing in either hydrologic or geotechnical engineering. Pam is a member of the Society of American Military Engineers and a student member of SWE and the ASCE. She was elected to Tau Beta Pi and worked on its canned-food drive.