

Tau Beta Pi Scholars - 2003-04



Lindsey C. Gardner, Nagel Scholar No. 15

A University of Memphis mechanical engineering major, Lindsey chairs the ASME student chapter, is Secretary of Tau Beta Pi's Tennessee Epsilon Chapter, program chair for Omicron Delta Kappa, and is active in Pi Tau Sigma. She was named the SGA outstanding senator of 2001-02 and last year chaired the group's finance committee. She holds a leadership position in her social fraternity and serves on the search committee for the new academic affairs vice provost. Lindsey enjoys intramural sports and volunteers in the wider community, including her church and St. Jude's Hospital.



Kyle B. Guice, Nagel Scholar No. 16

At the top of his class at Louisiana Tech University, Kyle is majoring in chemical engineering and will graduate in May 2004. He has already published and presented his research on nanoengineering microcapsules and fluorescent sensors and is a member of several technical and professional societies, including the Louisiana Tech Engineers Association (president and secretary), the AIChE student chapter, and the Biomedical Engineering Society. He holds a LaSpace scholarship for undergraduate research and was elected to Tau Beta Pi and Omega Chi Epsilon.



Arwen E. Brown, Dodson Scholar No. 13

The top chemical engineering student at the University of California, Irvine, Arwen contributes much to campus life. An ambassador and peer tutor in the university's honors program, she is activities chair for Tau Beta Pi, secretary for both Omega Chi Epsilon and Eta Sigma Phi, and is active in SWE and the AIChE. She is a tutor for the center for opportunities and diversity in engineering and will be a teaching assistant during her senior year. Arwen takes dancing lessons (jazz, ballet, and folk) and has added a second major—classical civilizations.



Monica C.R. Branco, Elsa & Peter Soderberg Scholar No. 5

A major in chemical engineering with minors in chemistry and biology at Villanova University, 20-year-old Monica has already enjoyed two summer internships in the pharmaceutical field. Upon completing an M.B.A., she hopes to attain a management position in a biomedical R&D pharmaceutical company, using her background to face the challenges of the dynamic industry of drug discovery and development. On campus, she is student supervisor of the dining services, runs in varsity track and field events, and was elected to Phi Kappa Phi, Alpha Epsilon Delta, and Tau Beta Pi.



Danielle R. Thibodeau, Stable No. 4

Number one in an engineering class of 1,764 at Arizona State University, Danielle will graduate in December 2004 with two majors—bioengineering and computer systems engineering—and a minor in mathematics. She plans to pursue her Ph.D. in bioinformatics, which merges the fields of mathematics, computer science, and biology to analyze living systems. The ability of engineers to manipulate genes will revolutionize the health-care industry. Danielle is Vice President of Arizona Beta and is a member of SWE and WISE.



Michael L. Youngblood, Ala. Power 4

Michael is at the top of his engineering class of 259 students at the University of Alabama in Huntsville and is majoring in mechanical engineering. Twenty-six years old and married with two children, he plans to be involved in thermodynamics and/or fluid mechanics both in the workplace and in graduate school, ultimately designing thermal systems. He was elected to Mu Alpha Theta, Phi Theta Kappa, Phi Kappa Phi, and Tau Beta Pi honor societies. A stay-at-home dad, he finds time to tutor fellow classmates and volunteer in the community.



Matthew M. Hodge, Fluor Scholar No. 3

A civil engineering student at the University of South Carolina Honors College and the recipient of the Paul Fidler community service award for 2002, Matt is a founding member of the USC Service Council, president and fundraising chair of Habitat for Humanity, and trip leader during alternative spring breaks. He hopes to lead a service group to Latin America in 2004. This spring he studied engineering at la Universidad Catolica de Valparaiso in Chile. He hopes to pursue research in international engineering ventures.

Ryan C. Burnley, Campbell Scholar No. 2



A mechanical engineering major minoring in music, Ryan is studying at Iowa State University and anticipates being in school for at least three more years; he will attend graduate school. A university honors scholar, Ryan has been elected to Alpha Lambda Delta, Phi Eta Sigma, Phi Kappa Phi, and Tau Beta Pi—he is project officer and event coordinator. He is a student member of the ASME and SAE and volunteers for Habitat for Humanity and the American Cancer Society. Ryan sings in the Iowa State Men's Choir and the men's acappella ensemble.



Debarati Chattopadhyay, DeFries No. 1

At Lehigh University, 20-year-old Deb is participating in a demanding dual arts/engineering program, pursuing degrees in astrophysics and computer engineering. This summer she is involved in the NSF-funded research experience for undergraduates in the physics department. After graduation, she will remain on campus to complete her astrophysics degree and perhaps an M.S. in engineering. Deb was elected to Phi Eta Sigma and TBP, which she served as Vice President. She is vice president of the Indian Students Association and a member of SWE.



Daniel J. Monnin, Honig Scholar No. 1

A mechanical engineering major at the University of Cincinnati, Dan is the top student in his department. He was elected to Alpha Lambda Delta, Pi Tau Sigma, and Tau Beta Pi. He has served as vice president of U.C. Ambassadors and Corresponding Secretary of the Ohio Beta Chapter. He tutors students in physics, volunteers at a food pantry, and is a team leader for BikeWorks as a member of the ASME. Dan is a co-op student with a power-generation firm and may enter the workforce before continuing with a master's degree.



Debanik Barua, Utt Scholar No. 1

the top student in an engineering class of more than 1,400 students at Purdue University, Debanik is majoring in aeronautics and astronautics. A member of the AIAA, he is a senator in the Student Government, a floor representative in his residence hall, and cultural secretary for the Bangladeshi Students Association. A member of Tau Beta Pi and Sigma Gamma Tau, he plans to acquire an advanced degree in orbital mechanics, focusing on trajectory optimization and mission design for interplanetary flights.



Eric M. Andris, Duke Energy Sch. No. 1

A junior at Valparaiso University, Eric will receive a B.S.E.E. in 2004. He grades for several professors, is a tutor in the learning center, and was a mentor for an introductory freshman class, "Exploring Engineering." He is a student member of the IEEE, was elected to Alpha Lambda Delta, and has served as treasurer to his fraternity, Phi Sigma Kappa. He plans either to enter graduate school or begin a career in power electronics or control systems. He will earn a P.E. license after experience in industry.



Neal D. Koenig, GM Scholar No. 1

Neal is majoring in mechanical engineering at Michigan State University in East Lansing and is Mini Baja team leader in the Society of Automotive Engineers, as well as an officer of the ASME chapter. He designs websites for organizations and plays intramural frisbee and ice hockey. He is an Eagle Scout and a member of Tau Beta Pi and Pi Tau Sigma. Neal plans to finish his B.S. degree and begin work on a master's degree and will continue studying computers and web design; he is training for certification in network and systems administration.



Noy Bassik, Record Scholar No. 30

Noy is completing two B.S. degrees at Rutgers—one last May in electrical engineering and the other next year in chemical engineering. He plans a career in medical science and will enter a joint M.D./Ph.D. program in biomedical engineering. He has had summer job experience in both pharmaceutical and engineering areas. Noy is President of the Tau Beta Pi New Jersey Beta Chapter and a former dorm president. A participant in the Rutgers engineering scholars program (NSF-funded), he is a member of Omega Chi Epsilon and Eta Kappa Nu.



Melanie R. Bernard, Record Sc. No. 31

majoring in both biomedical and electrical engineering at Vanderbilt University, Melanie is a distinguished scholar and has interned at the National Institute of Standards and Technology. She plans to pursue a Ph.D. in biomedical engineering. She hopes to be an engineering-related intern again this summer and will seek a part-time research position next year. Melanie is active in the Vanderbilt Engineering Council, the Society of American Military Engineers, and is Vice President of the Tennessee Beta Chapter.

Alicia D. Boudreaux, Record Sc. No. 32

Alicia is studying mechanical engineering at Louisiana Tech University, where she has joined Tau Beta Pi, Pi Tau Sigma, and Phi Kappa Phi. A leader in her collegiate church community,



she is also active in the ASME student chapter, SWE, and the Louisiana Tech Engineers' Association. Alicia looks forward to a summer internship with Chevron-Phillips Chemical, and after graduation she may work as a member of a product-design team or continue her education. She enjoys photography and volunteers as a peer tutor.



Andrés M. Bur, Record Scholar No. 33

The top-ranking junior in an engineering class of 200 at Tufts University, Andrés majors in E.E. and is interested in optical imaging for medical applications. He has been working with a team of physicists from Tufts and Harvard and volunteers at Mass. General. After graduate school, he plans to start his own company. A member of the IEEE, Recording Secretary for the Massachusetts Delta Chapter, and elected to Eta Kappa Nu, Andrés is a teaching assistant, intra-mural soccer co-captain, and a member of the scuba club and ski team.



Benjamin W. Downey, Record No. 34

The top engineering student in a class of 855 students at Kansas State University, Ben is majoring in architectural engineering and has completed his fourth of five years in the curriculum. After completing the EIT period, he will become a licensed engineer. He is a founding student member of the campus chapter of the Architectural Engineering Institute. He is the Corresponding Secretary for the Kansas Gamma Chapter, president of Campus Crusade for Christ, and student coordinator for Helping International Students.



Melanie R. Fici, Record Scholar No. 35

During the next two years, Melanie plans to complete degrees in mechanical engineering and chemistry from Lawrence Technological University in Southfield, MI. During her accelerated five-year program, she has held an internship with a mechanical contractor, working as a team member involved in design build and design assist and construct project proposals. The fundraising chair for her sorority, she was elected to Pi Tau Sigma, is President of her Michigan Eta Chapter, is on the men's soccer team, and is a member of ACS, ASME, and SWE.



Andrew J. Fisher, Record Sch. No. 36

Selected Tau Beta Pi's outstanding sophomore at the South Dakota School of Mines and Technology, Andy stands high in his class of 261 students. An industrial engineering major, he is a licensed private pilot, holding complex and high-performance ratings. A Richardson scholar, he is treasurer of Phi Eta Sigma. President of the IIE campus chapter, he hopes to establish a similar group for the SME. Andy enjoys intramural sports and is a tutor at the tech learning center. He plans to earn an M.S. degree in technology management.



Brian J. Genduso, Record Sch. No. 37

Next year, Brian will be completing both B.S. and M.S. degrees in architectural engineering at Pennsylvania State University. He will be taking the FE exam as a first step to becoming a professional engineer and will be finishing his fifth-year thesis project. He is president of the Student Society of Architectural Engineers and co-chaired the AEI 2002 national student conference design project. He is active in religious and service organizations in the community, plays alto sax in the jazz combo, and enjoys intramurals.



Ryan A. Griffin, Record Scholar No. 38

Ryan is majoring in mechanical engineering at the University of Utah and plans to earn a master's degree, possibly in biomedical engineering. An undergraduate research assistant for two years, he might focus his career interests on robotics/mechatronics, systems control, and automation. He was on the winning team in the school's riveted joint competition. Ryan is a member of the ChemE car team, tour chair for engineering-day activities, communications chair for Mortar Board, and a member of the institute choir.



Kelley D. Haerer, Record Sch. No. 39

An engineering intern with a major contractor for the DOE in neighboring Oak Ridge, Kelley has been working to gain experience in hydrogeology and geo-technical areas. A civil engineering major at the University of Tennessee, she will continue working on an advanced degree upon graduation next May. Kelley serves as corresponding secretary for the ASCE chapter and volunteers in a community soup kitchen and Boys & Girls Club. She attended an ASCE workshop for student leaders and assisted with outreach activities on Engineers Day.

Jared M. Henry, Record Scholar No. 40

Active in both Tau Beta Pi and the AIChE student chapters at the University of Tennessee, Jared is majoring in chemical engineering and will earn his B.S. next May. He was awarded two honors in 2002—the outstanding junior in chemical engineering and the C.W. Keenan general chemistry award. Jared will be interning with a major chemical company this summer, and after graduation he may obtain a doctorate in medicinal chemistry. On campus, he is



active in both organized intramural and recreational sports.



Ibrahim M. Iqbal, Record Sch. No. 41

Ibrahim is on the dean's honor roll in the department of engineering and computer science at California State University, Fresno. In recognition of his high level of academic success, he has been elected to Tau Beta Pi, Eta Kappa Nu, and Phi Kappa Phi honor societies. Nineteen years of age, Ibrahim will graduate in May 2004 with a B.S. degree in computer engineering. He plans to return to academe and earn his master's degree after working in industry for a few years.



Andrew P. Kannenberg, Record Sc. No. 42

Andy is a top engineering student at the South Dakota School of Mines and Technology in a class of 261 students. The 21-year-old computer engineering major was elected to Tau Beta Pi, Eta Kappa Nu, and Phi Eta Sigma honor societies and has been active in the Christian Challenge group on campus. He maintains the group's website and email listserv, keeping members informed of upcoming events. He participates in the campus Linux User Group and offers computer support for other students. Andy will start his career upon graduation.



Mohammad Khorasani, Record No. 43

Mohammad is number one in the bioengineering department at Syracuse University, maintaining a perfect 4.0 average. Elected to Phi Eta Sigma, Tau Beta Pi, and Phi Kappa Phi, he has served as a teaching assistant in physics and an academic excellence workshop facilitator. As a public service, he participates in the STEP program geared toward minority students in middle and high school, and he volunteers at Upstate Medical University. He has held internships in pharmacology and in projects involving engineering DNA.



James P. Kitchen, Record Sch. No. 44

A mechanical engineering major at Brigham Young University, 22-year-old Jim has served his church in missions to Italy and Malta, where he taught English and performed community service. He currently serves as music chair for a local church congregation and is a member of the campus Unix user group. Jim is an Eagle Scout and enjoys camping and canoeing. He hopes to continue to participate in internships to help provide for his family. He will seek work in a robotics-related company.



Adam S. Lyons, Record Scholar No. 45

Adam is the top engineering student at the University of Utah in an engineering class of 206. A mechanical engineering major and Spanish-language minor, 24-year-old Adam represented his church in Venezuela, where he led 24 volunteers. An Eagle Scout, Adam enjoys snowboarding, wake-boarding, and water and snow skiing. He has designed and constructed aluminum-framed snowshoes and pontoon kick boats used for fishing. After earning an M.S. degree, he would like to work in a job relating to the watercraft industry.



Yao Hua Ooi, Record Scholar No. 46

An international student from Malaysia, Yao Hua is the top engineering student at the University of Pennsylvania and is majoring in computer and telecommunications engineering. Yao Hua received the 2002 Manfred Altman memorial award for "initiative, innovation, and ingenuity in academic studies," is the TBP 2002 outstanding sophomore, and won the 2000 AT&T Asia-Pacific leadership award. He is editor-in-chief of Penn's oldest publication, the Pennsylvania Triangle, and is student coordinator on the robocup team.



Cary F. Opel, Record Scholar No. 47

Cary is a bioengineering major at UC, Berkeley, and has been working 25 hours a week for a plant-tissue-culture propagation service while pursuing his bachelor's degree. He has had summer internships at the environmental engineering and health sciences laboratory and will be working on a special project next year measuring biological responses of tissues in the finger joint to repetition and load. Cary plans to take a brief intermission from academe and to work in the biotech industry upon graduation. After saving enough money, he will enter graduate school in bioengineering.

Scott A. Roberts, Record Scholar No. 48

A chemical engineering major at the University of Kansas, Scott is president of the AIChE student chapter and is regional conference vice chair responsible for raising funds for the \$20,000 budget. Other activities include participating on the Chem-E car team, designing and maintaining the AIChE website, and volunteering in the community. He is Vice President of the Kansas Alpha Chapter, an engineering ambassador, and a mentor for international students. Scott is an Eagle Scout and assistant scoutmaster. He plans to do computational



research in graduate school.



Cole J. Shaw, Record Scholar No. 49

An electrical engineering major at the University of Michigan, Cole will graduate in just three years because of numerous AP credits. Next year he will participate in the concurrent undergraduate/graduate master's program, taking EE systems in the fourth year. After working for several years, Cole will re-enter UM to pursue an M.B.A. He has participated in a summer internship working as a team member engaged in control-systems development for a tire company. He is an electrical-power coordinator on the solar-car team.



Jacob B. Spence, Record Scholar No. 50

The number-one chemical engineering student at the University of Kansas, 21-year-old Jacob is an All-American collegiate scholar nominee and member of the varsity football team. After a summer internship with an area chemical company, he plans to return to school to continue researching CO2-expanded solvents. A member of both TBP and Phi Kappa Phi, he is active in the AIChE student chapter. After graduation, and depending on his internship experience, he will either work in industry or attend law school.



Harold S. Thompson III, Record No. 51

Tommy attends Mississippi State University and is majoring in mechanical engineering. He will complete his undergraduate studies with minors in mathematics and business and certification in the campus engineering entrepreneurship program in December 2004. Tommy is active in the American Foundry Society, president of Pi Tau Sigma, treasurer of ASME, and was elected to Alpha Lambda Delta, Phi Eta Sigma, Lambda Sigma, and Phi Kappa Phi honor societies. He is an engineering ambassador and a co-op student, having studied in England and France.



Kristen A. Voigt, Record Scholar No. 52

Kristen is majoring in civil engineering at the Pennsylvania State University with a focus on transportation. She has begun her research project for a senior honors thesis. Kristen is vice president of the campus chapter of the Institute of Transportation Engineers and is active in ASCE. A member of the Schreyer Honors College, she was elected to Tau Beta Pi and Chi Epsilon. Kristen will work as a professional engineer in transportation and traffic planning and design with a private firm before pursuing a graduate degree.



Chad M. Wolfe, Record Scholar No. 53

A senior in mechanical aerospace engineering at Oklahoma State University, Chad has held leadership positions in his fraternity, Phi Gamma Delta, volunteering many hours of community service. For his high academic standing, he was elected to Phi Eta Sigma, Phi Kappa Phi, and Tau Beta Pi honor societies, and the Order of Omega. Currently undecided about attending graduate school, Chad may enter the workforce. He is interested in specializing in heating, ventilating, air-conditioning, and refrigeration, subjects he may study further.



Marisa Wong, Record Scholar No. 54

A peer tutor in physics and engineering science, Marisa is majoring in mechanical engineering at SUNY Binghamton and is the top student in her engineering class. Ever helpful to others, she chairs academic-success seminars for SWE, assists students in Dickinson Residence, is a personal mentor/student advisor, assists minorities in the educational opportunity program, and volunteers for food and clothing drives. She enjoys building houses for Habitat for Humanity. Marisa was elected to Pi Tau Sigma and is Recording Secretary for TBP's New York Tau Chapter.



Sarah A. Woodard, Record Sch. No. 55

Sarah is pursuing a five-year program in architectural engineering at Kansas State University and will receive her undergraduate degree in May 2005. She has already participated in several internships and will be able to complete a master's degree in December of that year. On campus, she is Vice President of her Tau Beta Pi chapter, group leader for a student-orientation seminar, and co-committee head for her department's open house. She is a member of the student chapters of ASCE, AEI, and ASHRAE and enjoys intramural sports.