The Dream Lives On: ECE and Georgia Tech’s Commitment to Diversity

These words of Dr. King reflect the essence of a different kind of revolution that has been taking place at ECE over the past decade. This time, we are not talking about a technological revolution. We are talking about a subtle, continuous transformation of ECE from a predominantly white student body to one that reflects the richness and vibrancy of American diversity.

As the largest of nine units within the College of Engineering, ECE’s efforts have contributed substantially to this story of success. Targeted recruitment at the undergraduate level has included programs such as the Science, Technology, Research, and Math (STRE) program, which is designed to attract minority students into graduate science and engineering programs; and the dual degree program which provides undergraduate students from traditionally black institutions and women’s colleges opportunities to earn a degree from Tech as well as from their home institution. The programs themselves can’t do the job, said Robert Haley, founder and director of the FOCUS program. We are successful because we have support from President Clough down through the ranks. ECE has been great. Dr. Webb and Dr. Hertling have been so supportive. They don’t just talk about diversity they embrace it as a moral imperative.

This fall, ECE undergraduates include 115 African-Americans, 27 Hispanics, 6 American Indians, and 311 Asians. They collectively represent nearly half of the minority students at ECE. In comparison, Georgia Tech’s peer institutions reflect enrollment levels that are in Mr. Haley’s words, not even close to what we have achieved.

Commenting on the caliber of ECE’s students, Gary May, Motorola Foundation Professor in ECE, executive assistant to Georgia Tech President Wayne Clough, and director of the SHRE program, said, “They collectively represent nearly half of the undergraduate student body. Our graduates include 58 African-Americans, 33 Hispanics, and 449 Asians, who collectively represent more than half of the graduate student population.”

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Heriberto Godina (BEE ’99) is a senior optical engineer with Nortel Networks in Research Triangle Park, N.C.

Anthony Carl (BCompE ’00), lieutenant junior grade, reported aboard the USS George Washington home ported in Norfolk, Va. He is engaged to Sarah Burgoyne (Economics ’00).

Gregory Martin (MSEE ’03) is a senior design engineer with Tektronix in Beaverton, Ore.

Steven Downs (MSEE ’01) was recently engaged to Lakisha Tate (MSEE ’01). He is a senior electrical engineer with Motorola in Plantation, Fla.

Rahul Motwani (MSEE ’01) is currently employed as a software test engineer with the Microsoft Corporation project team in Redmond, Wash.

Jennifer Scott (Williams) (BEE ’01) joined the Mayo Clinic as a senior associate consultant in Inpatient Internal Medicine. “She received his MSEE and MD both from the University of Tennessee.” His wife Lynn, is also a Georgia Tech graduate, receiving her BEE in 1977 and her MSEE in 1978. “They live in Rochester, Minn.”

A. Scott Keller (BEE ’80) joined the Mayo Clinic as a senior associate consultant in Inpatient Internal Medicine. “He received his MSEE and MD both from the University of Tennessee.” His wife Lynn, is also a Georgia Tech graduate, receiving her BEE in 1977 and her MSEE in 1978. “They live in Rochester, Minn.”

Gary May is a PhD student, Michael Sales

Senior Design Project
Wins Foundation Award

This year’s Georgia Engineering Foundation Award for the Outstanding Design Project in the College of Engineering went to a team of ECE students for their Senior Design Project, which was performed at Georgia Tech Lorraine (GTL) in the summer of 2003. The project was entitled Automated Control of Quantum Cryptography Schemes.

The award recipients were Nathan Greer, Kay Hill, Jeremy Silver, and Catherine Thom. This team used their resources and knowledge to combine their graduation course requirements with their interest in a study abroad opportunity. They were planning on attending the GTL Undergraduate Summer Program, just prior to their graduation. When they discovered that Professor William Sayle was slated to teach at the European campus that same summer, they seized the opportunity and proposed a thesis to form a team for ECE 4006, a required Senior Design Course, requesting that Dr. Sayle serve as their advisor.

Their French connection was François-Malassarot, director of GTL. Their project was in the area of quantum cryptography, dealing with secure high-speed optical telecommunication systems. The team had a unique opportunity to work with the GTL-IHLS Telecom Laboratory and to apply their research to a different cultural context.

ECE Connection
SCHOOL OF ELECTRICAL AND COMPUTER ENGINEERING
WINTER 2003-04

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Editor: Sandra Song Hayes
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Alumni News

Ranoldolph Caball (MSEE 54) reports there is life after retirement! After working nearly 30 years for IBM, Mr. Caball recently produced a CD of the only Virginia Confederate band music to survive. It includes 16 favorites of the 19th Virginia Heavy Artillery Band, plus five songs of the South recorded by the Crestmark Military Brass Band.

R. Allain Hicks (BEE 76) is a principal engineer at MSAG Power in Lawrenceville, Ga., where he develops and supports software used in the management of power. His daughter, Melissa K. Hicks, received her BS in biology from Georgia Tech in 2003 and is entering the PhD program in biology this fall.

Carlos A. Muniez (BEE 90) joined Sony Electronics as a sales account manager for the Latin American Region for the broadcast and professional group in Miami, Fl.

Dan Boki (MSEE 98) received his MBA in October 2003 from Nova Southeastern University. While continuing to work for Motorola Labs in Tallahassee, Fla., he is a PhD student at Florida State University pursuing studies in biomedical and electrical engineering.

Laurent Legay (MSEE 96) is a program manager for Thales Avionics in France.

Muhammad Akinmal Butt (PhD 99) worked in Irvine, Calif. for two years after receiving his doctorate. In March 2002, he joined the faculty of Lahore University of Management Science (LUMS) in his native country of Pakistan, where he teaches courses in digital signal and image processing.

Larry Compton (BEE 99) is a radar engineer with J3T, LLC in Nevada.

Want to Know! Share your news with your ECE classmates and friends. Just complete this form, clip, and mail or visit our web page at www.ece.gatech.edu/alumni and tell us online.

Name:__________________________________________

Information for ECE News (recent awards, job changes, papers, patents, etc.)__________________________________________________________

Home Address:_____________________________________

Work Address (including company name):_________________________

Daytime Phone:_____________________________________

Email:_____________________________________________

Mail to Suzy Briggs at the School of Electrical and Computer Engineering, Georgia Institute of Technology, Atlanta, GA 30332-0250

Chair’s Corner

This issue of ECE Connection has a focus on diversity. As attested by recent court decisions, diversity is a compelling issue in academia, as well as in the commercial sector. Fortunately, Georgia Tech has long been out in front of this issue and is justly proud of its reputation as one of the leading producers of African American and women engineers. Due to our size, ECE is a major contributor to these metrics. However, on a percentage basis, we do less well than our sister schools at Georgia Tech, Chemical and Biomolecular Engineering, Civil and Environmental Engineering, and Industrial and Systems Engineering.

Our percentages, 12% women and 9% African American undergraduate and graduate combined, indicate that we are on par with ECE programs around the nation with regard to female enrollment and somewhat better than our peer institutions in African American enrollment. We need to do better.

Engineering has long been a transition profession in the sense that engineering graduates come predominantly from public sector universities and have usually emerged from families without histories of participation in the professions. The public sector is usually related to relatively low cost of entry into engineering compared to law or medicine; this tradition of enrollment exists, is important, and should be preserved. It is in fact the major reason that we need to be better at diversity.

Students apply to our programs for a variety of complex reasons (even including intellectual curiosity). Basically, in one way or another, they have come to the perception that becoming an electrical or computer engineering professional is a good thing. So they apply, the Georgia Tech admissions office does their thing, and the School ends up with a more than adequate supply of increasingly outstanding freshmen, with flat diversity statistics. So to impact the statistics, without modulating the selection quality criteria and processes, the School must get in front of the admission process with targeted recruitment and marketing/image management.

An obvious point to begin targeted recruitment is with the Dual Degree Program, which has historically provided us with well prepared and successful students. Spelman College is a good example of this. The marketing problem is more complex. It is evident that prospective engineering students perceive the field of electrical and computer engineering to be less socially relevant and less people oriented than some other engineering disciplines and that such perceptions are influential in program choices. It has been said that if ECEs were put in charge of marketing such, they would simply advertise cold, dead fish for sale. Our own promotional literature has a bit of that characteristic. We will do that better.

In some sense, responsibility for creating a positive image of our profession rests with all of us who practice it. We invite your participation in emphasizing to prospective students and others our profession’s important contributions.

Greg Trippett is a graduate student who expects to receive his doctorate this spring. He came to Georgia Tech through the FOCUS program, and his graduate advisor is Professor Thomas K. Gaylord.

Gary S. May who directs the SURF program.

The Culture is Essential... What two students have to say about studying at ECE

Greg Trippett is a graduate student who expects to receive his doctorate this spring. He came to Georgia Tech through the FOCUS program, and his graduate advisor is Professor Thomas K. Gaylord.

The only time I notice that I am a female among mostly men is when someone asks me how it feels to be a woman in ECE. My answer is that it doesn’t feel like anything different. Everyone treats me as one of the rest. My advisor is the opposite of a sexist. He expects and demands the best from me. I believe in myself, and feel that everyone here believes in me as well.

Carole Montaros is a graduate student who expects to receive her doctorate next year. She did her undergraduate work in France before coming to Tech. Her faculty advisor is Professor K. Gaylord.

I feel that I have been supported and encouraged personally as well as educationally. When I came here, I saw many other African-American graduate students who were thriving. This gave me courage and confidence in my own potential to succeed.

Roger P. Webb, School Chair

The only time I notice that I am a female among mostly men is when someone asks me how it feels to be a woman in ECE. My answer is that it doesn’t feel like anything different. Everyone treats me as one of the rest. My advisor is the opposite of a sexist. He expects and demands the best from me. I believe in myself, and feel that everyone here believes in me as well.
ECE has been officially housed in the Van Leer Building since the 1960s. Over the years, the School has grown, its faculty has branched out and become situated in a variety of other locations. On the Atlanta campus, the ECE faculty occupies the Georgia Centers for Advanced Telecommunications Technology (GCaTT) building, the Microelectronics Research Center (MiRC), the College of Computing Building, the Manufacturing Research Center (MaRC) and the Burge-Henry Building. Outside the Atlanta campus, there are ECE faculty members at Georgia Tech, Savannah, and at Georgia Tech Lorraine.

More moves are underway. This year, some 30 faculty members have relocated to the Technology Square Research Building (TSRB), located adjacent to Technology Square. The TSRB is Georgia Techs $180 million campus expansion into Midtown, is a multi-building complex that blends education, research, business, and retail activities into a single complex. PresidentClough said about the project, We want this innovativenew complex to be the heartbeat of technology in Atlanta.

The Georgia Tech Regional Engineering Program, Georgia Tech Savannah moved to its permanent location last August. Situated in the newly formed Technol-ogy and Engineering Campus (TEC), Georgia Tech Savannah is set on 30 acres at the northwest corner of the campus, and occupies over 100,000 square feet across three buildings the Engineering Laboratory and Analysis Building, the Economic Development and Research Building, and the Program Administration and Resource Building.

Georgia Tech Savannah was established in 1999 as an innovative program to unite education, industry, and technology in southeast Georgia. The program seeks to leverage the resources of Georgia Tech and southeast Georgia to expand engineering education opportunities in the state, especially to historically under-served populations. The program collaborates with Armstrong Atlantic State Univer-sity, Savannah State University, and Georgia Southern University. Students enrolled in these partner institutions apply for transfer admission to Georgia Tech at the end of their sophomore year and complete their degree program as a Georgia Tech student while physically remaining at the campus of the partner institution. They are taught by Georgia Tech faculty located in Savannah, and through Georgia Techs distance learning resources.

On the Move...

On October 22, 2003, Georgia Governor Sonny Perdue announced that a new Nanotechnology Research Center will be constructed at Georgia Tech. This research center will be one of the most advanced nanotechnology research facilities in the nation and the first of its kind in the Southeast. Georgia Tech is to emerge as a leader in nanotechnology. We need to take advantage of the opportu-nity to build one of the nations premier centers for this cutting-edge technology and research, Gov. Perdue said. Initial funding for the Center will be provided by a $36 million contribution from an anonymous donor. This amount will be followed $45 million in state support. Georgia Tech President G. Wayne Clough said, This puts Georgia Tech on the national map for nanotechnology. I am deeply appreci-ative for this incredible display of private philanthropy and to the state for making this type of investment in a critical area of research. The new Center will dramatically expand clean room capacity at the Institute, which will enable the con-tinued development and expansion of significant re-search already underway. ECE ProfessorJames Meindl, director of the National Science Foundation-funded Microelectronics Research Center, and a world renowned expert in semiconductor materials and integrated circuit fabrication, expressed his delight at this development and said, The new Nanotechnology Research Center will provide Tech with a virtually unsur-passed potential for world leading research in what may well be the most important new science and engineering frontiers of the 21st century.

New Nanotechnology Research Center to Open at Tech

On the Move...

Faculty Spotlight: Mark G. Allen

One were to try to define the quintessential scientific mind, it would be easy to look to the likes of Joseph M. Pettit Professor Mark G. Allen to shape this definition. If one were to try to imagine the unfettered and creative use of this gift, it would be easy to watch Dr. Allen in action to craft this scenario.

Dr. Allen has been with ECE Tech since the 1980s as an assistant professor, and has since become a full professor. Dr. Allen is known for his work in the field of microelectronics and emerging nanotechnology fields. He has made several significant contributions to the field of microelectronics, including the development of novel materials and devices.

One of Dr. Allens most notable accomplishments is the development of a new material that has revolutionized the field of microelectronics. This material has applications in a wide range of industries, including electronics, telecommunications, and automotive.

Dr. Allen is married to Sue Ann Bidstrup Allen, a professor in the School of Chemical and Biomolecular Engineering at Georgia Tech. They have two children, David, age 10, and Sarah, age 7.

H

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Hammy Vann, who served as ECEs director of Corporate Relations since 1994, has accepted the position of director of Corporate Development for Georgia Tech. In this new role, he will work with all units within the Institute to enable philanthropic corporate interactions. As one of the largest units within Tech, ECE will continue to be an important part of my new responsibilities, Mr. Vann said. Ill be able to use the wisdom and experience that Teddy Pigg and Roger Webb have imparted on me over the almost 10 years I was with ECE.
ECE Adds New Advisory Board Members

The School of ECE added two new advisory board members over the summer, both representing strong corporate partnerships within the School and the Institute.

Fred Kibon (MSE 75) is the director of the Mobile and Media Systems Lab with Hewlett-Packard Laboratories in Palo Alto, Calif. He received his undergraduate degree from the University of Delaware and his PhD from the University of Colorado, where he serves as a professor and Engineering Advisory Council. Mr. Kibon is a 2001 inductee into the College of Engineering of Distinguished Engineering Alumni and serves as an adjunct faculty member at Georgia Tech.

Kelly H. Hawkins, Sr. (MSE 92) is the program director for Americas Infrastructure Hardware Development for IBM in Research Park, Atlanta, Ga. He is involved in recruiting efforts on campus and is the technical leader to Tech for Mr. Hawkins. He is a 2002 inductee into the College of Engineering of Distinguished Engineering Alumni.

Carreker Distinguished Lecture A Resounding Success

The third annual James R. Carreker Distinguished Lecture Series, held on November 13, 2003, featured Henry Samueli, co-founder and chairman of Broadcom Corporation. Dr. Samueli’s lecture was entitled “Online All the Time: How Wireless Connectivity Will Be a Reality.” He discussed both the historical and future technologies and business trends related to wireless innovations.

ATDC Open House Showcases Companies Founded by ECE Faculty

Members of Georgia’s high-tech community congratulated the Advanced Technology Development Center five graduate companies at its Open House, held in May 2003. Two of the graduate companies were founded by ECE faculty members, Mark A. Demers and John A. Copeland.

Companies were individually commended for their accomplishments, measured by growth, investment, revenue, and liquidity events. Fast-Talk Communications, where Dr. Clements is a company board member, has developed a unique search software for audio that enables extremely accurate, high-speed searching of both audio and video content.

In Loving Memory of Kevin F. Brennan: Distinguished Professor and Beloved Friend

Kevin F. Brennan died on August 2, 2003 at age 46, he led a legacy that will always endure. During his 19-year career in ECE, Dr. Brennan set the bar high for academic achievement, even while battling pancreatic cancer during the last three years of his life, and retained the respect and camaraderie of his colleagues, practically all he called his friends.

Dr. Brennan is survived by his wife, Lisa McCleen, his brother, Gregory Brennan of Brick, N.J., his mother-in-law, Norma M. McCleen of Auburn, Ga., and his brother-in-law, David W. McCleen of McDonough, Ga.
ECE Academic Affairs Leadership Changing Hands in 2003-04

Williams Joins ECE Undergraduate Office

William G. Williams is the new associate chair for ECE Undergraduate Affairs, effective fall semester 2003. Dr. Williams replaces William E. Sayo, who retired August 1, 2003 after a 33-year career at Georgia Tech.

In his new position, Dr. Williams is responsible for ECE undergraduate curriculum issues, student recruitment, and student advising. He also continues as ECE coordinator for the Georgia Tech Regional Engineering Program in Savannah. Dr. Williams works with Joseph L. Hughes, associate chair for Academic Operations, Dr. Hughes handles faculty workload, course scheduling, and oversight of assessment and accreditation activities, and has served as an associate chair in ECE Academic Affairs since 1997.

An associate professor specializing in digital signal processing (DSP), Dr. Williams has been on the ECE faculty since 1989. His research interests involve the application of statistical signal processing methods to communications, radar signal processing, and the study of nonlinear dynamics. He is a member of the IEEE Signal Processing Society, Signal Processing Theory and Methods Technical Committee and has held various leadership roles with DSP-oriented conferences.

Dr. Williams received his BSEE, MSEE, and Ph.D. from Rice University in 1984, 1987, and 1989, respectively.

Professor Ronald W. Schafer Retires after 30 Years of Distinguished Service

On October 30 and 31, 2003, colleagues, friends, and family of Institute Professor and John and Marilu McCarty Chair of Electrical Engineering Ronald W. Schafer gathered to honor him on the occasion of his retirement from ECE. The celebration began with a reception and dinner at the Student Success Center, where over 100 people came to enjoy the evening and to share their special stories about, and experiences with, Dr. Schafer. The attendees represented every facet and phase of Dr. Schafer’s illustrious career, from his thesis advisor at MIT, to his former students, to his corporate friends, to his extended family. He was presented with many gifts and memorabilia, including Texas Instruments first Speak and Spell toy, and an integrated circuit, signed by Jack Kilby, its inventor.

The following day, a Colloquium in Honor of Ronald W. Schafer gathered to honor him on the occasion of his retirement from ECE. The colloquium was held at the Georgia Centers for Advanced Telecommunications Technology (GCATT). Dr. Schafer’s contributions to the digital signal processing (DSP) field through the decades, spanning the 1960s through the 1990s, were celebrated by his colleagues from Georgia Tech, MIT, Rutgers University, and Purdue University. Pitting to his legacy, the day ended with a discussion on the Future of DSP in Research, Development, and Education.

Dr. Schafer has been with Georgia Tech since 1974 and has played a major role in building ECE DSP program to its present stature of worldwide preeminence.

Seven ECE Alumni Receive College of Engineering Awards

The College of Engineering held its annual alumni awards ceremony in November 2003. Seven alumni from ECE were inducted.

Hall of Fame

M. John Willner, BEE 50

Academy of Distinguished Engineering Alumni

Leonard Haynes, BEE 72

Robert Lee Dixon, BEE 77

David L. Foote, BEE ’80

Council of Young Engineering Alumni

Thomas A. Corker, BEE ’89 MSEE ’90

H. Alan Mantooth, PhD ’90

Michael R. Truong, MSEE ’91

Georgia Tech Named to 13-Member National Nanotechnology Network

The National Science Foundation announced on December 23, 2003, that Georgia Tech will be among 13 U.S. universities participating in the new National Nanotechnology Infrastructure Network (NNIN). The network will be an integrated, nationwide system of user facilities to support research and education in nanometer-scale science, engineering, and technology.

Led by Cornell University, the NNIN will enable students and researchers from any school in the U.S. — as well as scientists from U.S. corporate and government laboratories — to have open access to resources they need for studying molecular and higher length-scale materials and processes, and for applying them in a variety of structures, devices, and systems. The $70 million network began operation in January 2004 for a five-year period.

Georga Tech will share its nanotechnology fabrication resources — including a new system capable of creating nanometer-scale features and leading the network’s education and outreach efforts — said James D. Meindl, director of the Microelectronics Research Center.

Academy of Distinguished Engineering Alumni

Membership in the Academy is reserved for individuals whose contributions to Georgia Tech, the engineering profession and field, or society have brought distinction to themselves and the Institute.

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Russell D. Dupuis, Steve W. Chadick Endowed Chair in Electro-Optics and Georgia Research Alliance Eminent Scholar
BSEE with Highest Honors-Bronze Tablet, 70, University of Illinois at Urbana-Champaign
MSEE 71, University of Illinois at Urbana-Champaign
PhD EE 73, University of Illinois at Urbana-Champaign

Prior to joining ECE, Dr. Dupuis held the Judson S. Sweattingen Regents Chair in Engineering in the Department of Electrical and Computer Engineering at the University of Texas at Austin. Before joining UT-Austin, he worked at AT&T Bell Laboratories, Rockwell International, and Texas Instruments.

A member of the National Academy of Engineering and a Fellow of both IEEE and the Optical Society of America, Dr. Dupuis has authored more than 250 refereed journal papers and has held many leadership positions in the IEEE Laser and Electro-optics Society and other microsystems-themed conferences and workshops. Dr. Dupuis is the past recipient of both the University of Illinois at Urbana-Champaign Alumni Loyalty Award and the Distinguished Alumnus Award from the Department of Electrical and Computer Engineering.

Gregory D. Durgin, Assistant Professor
BSEE 96, Virginia Polytechnic Institute and State University
MSEE 98, Virginia Polytechnic Institute and State University
PhD 02, Virginia Polytechnic Institute and State University
Area Electromagnetics

Before coming to Georgia Tech, Dr. Durgin was a visiting researcher and 1995 postdoctoral fellow at the Department of Communications and Information Engineering at the University of Osaka in Japan. He was also a curriculum writer for the State of Maryland community colleges and was a consultant to a-Tenna Corporation in Laurel, Md.

Dr. Durgin is a member of several societies of IEEE and the recipient of prizes recognizing the excellence of conference papers and presentations, including the Stephen O. Rice Prize for the best original paper in IEEE Transactions on Communications. He has written one book, Space-Time Wireless Channels, which was the first textbook in the area of electromagnetics channel modeling and space-time radio, and has two invited book chapters to his credit.

Bernard Kippelen, Professor
MS Solid State Physics 85, Université Louis Pasteur
DEA Solid State Physics 87, Université Louis Pasteur
PhD 90, Université Louis Pasteur
Area Optical and Photonic Materials

Prior to coming to Georgia Tech, Dr. Kippelen was employed by the Optical Sciences Center at the University of Arizona for over 12 years as both an academic faculty member and as a research scientist. While at the University of Arizona, he co-founded MP Photronics, Inc., a telecommunications company that manufactures rare-earth lasers and amplifiers.

Dr. Kippelen’s research has included the study of inorganic and organic nonlinear optical materials and photoresponsive polymers. In recent years, his research has focused on multifunctional nonlinear optical materials for devices in photonic applications. Dr. Kippelen is a member of numerous professional societies and has held leadership roles for conferences held by SPIE, the International Society for Optics Engineering, and the Material Research Society.

Faculty News

Four ECE faculty members have been named as IEEE Fellows, effective January 1, 2004:

- Miroslav M. Bogovic, for leadership in developing tools and protection techniques for electric power transmission systems and renewable generation.
- Kevin F. Brennan, for contributions to the modeling of impact ionization in heterostructures and multi-quantum well structures.
- Krishnava Palen, for contributions to embedded computing.
- Paul G. Steffes, for contributions to the understanding of planetary atmospheres.

Michael J. Bucakker, a member of ECE’s advisory board, was also named as a 2004 IEEE Fellow for contributions to optical communications technology and engineering education.

Ian F. Akyildiz received the ACM SIGMOBILE 2003 Outstanding Research Contributions Award for pioneering contributions in the area of mobility and resource management for wireless communication networks at the ACM MobiCom 2003 Conference. SIGMOBILE, a special interest group of the Association for Computing Machinery (ACM), focuses on mobility of systems, users, data, and computing.

Russell D. Dupuis and the other honorees received their medals at a White House ceremony on November 6, 2003. It is great to know that one of our faculty members has been recognized as one of the country’s leading innovators through the receipt of this prestigious award, and I offer him my hearty congratulations. Dr. Dupuis and the other honorees received their medals at a White House ceremony on November 6, 2003.

Dr. Dupuis and his award co-recipients pictured at the White House ceremony. (l-r) Russell D. Dupuis, M. George Craford, Lumileds Lighting; Nick Holonyak, Jr., University of Illinois and President George W. Bush.

National Medal of Science and Technology Awarded to Russell D. Dupuis

On October 22, 2003, President George W. Bush announced the recipients of the nation’s highest honor for science and technology, naming the laureates to receive the 2004 National Medal of Science and National Medal of Technology. Russell D. Dupuis, Steve W. Chadick Endowed Chair in Electro-Optics and Georgia Research Alliance Eminent Scholar, was named a National Medal of Technology Laureate.

The White House news release stated, The National Medal of Technology recognizes men and women who embody the spirit of American innovation and have advanced the nation’s global competitiveness. In announcing the recipients of this year’s awards, Secretary of Commerce Don Evans said, “I join the President in honoring this year’s National Medal of Technology laureates. Their revolutionary innovations and discoveries... have given American producers a leading competitive edge on a global level and set a high standard for excellence. Dr. Dupuis award was for the contributions to the development and commercialization of light-emitting diode (LED) technology, with applications to digital displays, consumer electronics, automotive lighting, traffic signals, and general illumination. ECE School Chair Roger P. Webb said, “It is great to know that one of our faculty members has been recognized as one of the country’s leading innovators through the receipt of this prestigious award, and I offer him my hearty congratulations. Dr. Dupuis and the other honorees received their medals at a White House ceremony on November 6, 2003. It is great to know that one of our faculty members has been recognized as one of the country’s leading innovators through the receipt of this prestigious award, and I offer him my hearty congratulations. Dr. Dupuis and the other honorees received their medals at a White House ceremony on November 6, 2003. It is great to know that one of our faculty members has been recognized as one of the country’s leading innovators through the receipt of this prestigious award, and I offer him my hearty congratulations. Dr. Dupuis and the other honorees received their medals at a White House ceremony on November 6, 2003.

Russell D. Dupuis, Steve W. Chadick Endowed Chair in Electro-Optics and Georgia Research Alliance Eminent Scholar

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Russell D. Dupuis, Steve W. Chaddick Endowed Chair in Electro-optics and Georgia Research Alliance Eminent Scholar 
BSEE with Highest Honors—Bronze Tablet, 70, University of Illinois at Urbana-Champaign 
MSEE 71, University of Illinois at Urbana-Champaign 
PHD 77, University of Illinois at Urbana-Champaign Area: Microsystems, Optoelectronics 

Prior to joining ECE, Dr. Dupuis held the Judson S. Sweattering Ing Chair in Engineering in the Department of Electrical and Computer Engineering at the University of Texas at Austin. Before joining UT-Austin, he worked at AT&T Bell Laboratories, Rockwell International, and Texas Instruments. A member of the National Academy of Engineering and a Fellow of both IEEE and the Optical Society of America, Dr. Dupuis has authored more than 250 refereed journal papers and has held many leadership positions in the IEEE Lasers and Electro-optics Society and other microsystems-themed conferences and workshops. Dr. Dupuis is the past recipient of both the University of Illinois at Urbana-Champaign Alumni Loyalty Award and the Distinguished Alumnus Award from the Department of Electrical and Computer Engineering.

Gregory D. Durgin, Assistant Professor 
BSEE, 96, Virginia Polytechnic Institute and State University 
MSEE, 98, Virginia Polytechnic Institute and State University 
PHD 00, Virginia Polytechnic Institute and State University Area: Optoelectronics 

Before coming to Georgia Tech, Dr. Durgin was a visiting researcher and a postdoctoral fellow at the Department of Electronics and Information Engineering at the University of Osaka in Japan. He was also a curriculum writer for the State of Maryland community colleges and was a consultant for a-Tenna Corporation in Laurel, Md. Dr. Durgin is a member of several societies of IEEE and the recipient of prizes recognizing the excellence of conference papers and presentations, including the Stephen O. Rice Prize for the best original paper in IEEE Transactions on Communications. He has written one book, Space-Time Wireless Channels, which was the first textbook in the area of electromagnetic channel modeling and space-time radio, and has two invited book chapters to his credit.

Bernard Kippelen, Professor 
MS Solid State Physics, 85, Université Louis Pasteur 
DEA Solid State Physics, 87, Université Louis Pasteur 
PHD 90, Université Louis Pasteur Area: Optoelectronics 

Prior to coming to Georgia Tech, Dr. Kippelen was employed by the Optical Sciences Center at the University of Arizona for over 12 years as both an academic faculty member and as a research scientist. While at the University of Arizona, he co-founded HP Photonics, Inc., a telecommunication company that manufactures rare-earth lasers and amplifiers.

Dr. Kippelen’s research has included the study of inorganic and organic nonlinear optical materials and photorefractive polymers. In recent years, his research has focused on multifunctional nonlinear optical materials for devices in photonic applications. Dr. Kippelen is a member of numerous professional societies and has held leadership roles for conferences held by SPIE, the International Society for Optical Engineering, and the Material Research Society.

Faculty News

Four ECE faculty members have been named as IEEE Fellows, effective January 1, 2006:

- Miroslav M. Begovic, for leadership in developing optical communication tools and protection techniques for digital power transmission systems and renewable energy.
- Kevin F. Brennan, for contributions to the modeling of impact ionization in heterostructures and multi quantum well structures.
- Krishna V. Palem, for contributions to embedded computing.
- Paul G. Steffes, for contributions to the understanding of planetary atmospheres.

Michael J. Buchler, a member of ECE’s advisory board, was also named as a 2006 IEEE Fellow for contributions to optical communications technology and engineering education.

Ian F. Akyildiz was inducted as a Fellow of the ACM for his contributions to digital filter design and interpolation, especially the Parks-McClellan algorithm.

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Russell D. Dupuis will receive the Minerals, Metals, and Materials Society (TMS) 2004 John Bardeen Award, which will be presented at the TMS Awards Dinner in March 2004. This award, the highest given by the Society, is presented to the researcher who has an established research and publications track record in electronic materials.

Dr. Dupuis was also elected Fellow of the American Physical Society for development of MOCD deposition of semiconductor and room-temperature quantum well lasers, and Fellow of the American Association for the Advancement of Science for pioneering contributions to advanced growth technologies for compound semiconduc-

tors and the first demonstration of advanced quantum well heterostructures and injection lasers operating at room temperature. The White House news release stated, The National Medal of Technology recognizes men and women who embody the spirit of American innovation and have advanced the nation’s global competitiveness. In announcing the recipients of this year’s awards, Secretary of Commerce Don Evans said, “I join the President in honoring this year’s National Medal of Technology laureates. Their revolutionary innovations and discoveries have given American producers a leading competitive edge on a global level and set a high standard for excellence. Dr. Dupuis was awarded for the contributions to the development and commercialization of light-emitting diode (LED) technology, with applications to digital displays, consumer electronics, automotive lighting, traffic signals, and general illumination. ECE School Chair Roger P. Webb said, PhD thesis advisor, Tom Parks (Cornell), for fundamental contributions to digital filter design and interpolation, especially the Parks-McClellan algorithm.”

Ramesh Jain was selected as a Fellow of the Association for Computing Machinery. The ACM Fellow designation is bestowed upon those ACM members who have distinguished themselves by outstanding technical and professional achievements in the field of information technology.

Joy Laskar was named Distinguished Microwave Lecturer by the IEEE Microwave Theory and Techniques Society for the term 2004-2005.

Larry Coffeen received the 2003 Outstanding Engineer Award from the Atlanta chapter of the IEEE Power Engineering Society.

ECE Academic Affairs Leadership Changing Hands in 2003-04
Williams Joins ECE Undergraduate

On October 30 and 31, 2003, colleagues, friends, and family of Institute Professor and John and Marilyn McCarty Chair of Electrical Engineering Ronald W. Schafer gathered to honor him on the occasion of his retirement from ECE. The celebration began with a reception and dinner at the Student Success Center, where over 100 people came to enjoy the evening and to share their special stories about, and experiences with, Dr. Schafer. The attendees represented every facet and phase of Dr. Schafer’s illustrious career, from his thesis advisor at MIT, to his former students, to his corporate friends, to his extended family. He was presented with many gifts and mementos, including Texas Instruments first Speak and Spell toy and an integrated circuit, signed by Jack Kilby, its inventor.

The following day, a Colloquium in Honor of Ron Schafer was held at the Georgia Centers for Advanced Telecommunications Technology (GCATT). Dr. Schafer’s contributions to the digital signal processing (DSP) field through the decades, spanning the 1960s through the 1990s, were celebrated by his colleagues from Georgia Tech, MIT, and the Georgia Tech Research Institute.

Professor Ronald W. Schafer Retires after 30 Years of Distinguished Service

Douglas R. Williams is the new associate chair for ECE Undergraduate Affairs, effective fall semester 2003. Dr. Williams replaces William E. Sayo, who retired August 1, 2003 after a 33-year career at Georgia Tech.

In his new position, Dr. Williams is responsible for ECE undergraduate curriculum issues, student recruitment, and student advising. He also continues as ECE coordinator for the Georgia Tech Regional Engineering Program in Savannah.

Dr. Williams is a member of the board of academic operations at Georgia Tech and holds a Ph.D. in electrical engineering from the University of Illinois, Chicago.

Seven ECE Alumni Receive College of Engineering Awards

The College of Engineering held its annual alumni awards ceremony in November 2003. Seven alumni from ECE were inducted.

HALL OF FAME
M. John Willner, BEE 50

ACADEMY OF DISTINGUISHED ENGINEERING ALUMNI
Leonard Hayt, BEE 72, Robert Lee Dixon, BEE 77, David L. Foshee, BEE 80

COUNCIL OF YOUNG ENGINEERING ALUMNI
Thomas A. Corker, BEE 89, MSE 90
H. Alan Mantooth, PhD 90
Michael R. Tinsky, MSE 91

Georgia Tech Named to 13-Member National Nanotechnology Network

The National Science Foundation announced on December 23, 2003, that Georgia Tech will be among 13 U.S. universities participating in the new National Nanotechnology Infrastructure Network (NNIN). The network will be an integrated, nationwide system of user facilities to support research and education in nanometer-scale science, engineering, and technology.

Ronald W. Schafer, Georgia Tech’s first chair of electrical and computer engineering, was a leader in the field through the decades, spanning the 1960s through the 1990s, and was a key contributor to the founding of the National Science Foundation-funded National Nanotechnology Infrastructure Network (NNIN). The NNIN, which began operations in January 2003, is a $70 million network designed to provide access to leading-edge tools and instruments, as well as skilled personnel to operate them, to any qualified users in the United States.

The NNIN will provide access to leading-edge tools and instruments, as well as skilled personnel to operate them, to any qualified users in the United States. The network will include 13 universities—Georgia Tech, Stanford University, University of California at Santa Barbara, University of Michigan, University of Minnesota, University of New Mexico, University of Texas at Austin, and University of Wisconsin—each with a campus that is a world leader in nanotechnology research.

The NNIN will provide access to a wide range of state-of-the-art tools and instruments, including electron microscopes, atomic force microscopes, and other advanced imaging instruments. The network will also provide access to high-performance computing resources, as well as training and education opportunities for researchers at all levels.

The NNIN is managed by a consortium of 13 universities, led by Georgia Tech, and is funded by the National Science Foundation. The network is designed to support research and education in nanotechnology, and will provide access to leading-edge tools and instruments to any qualified users in the United States.

Engineering Hall of Fame

Membership in the Engineering Hall of Fame is reserved for individuals whose contributions to Georgia Tech are significant and who have made outstanding contributions to the field of engineering or to engineering education.

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ECE Adds New Advisory Board Members

The School of ECE added two new advisory board members over the summer, both representing strong corporate partnerships within the School and the Institute. Fred Klibanoff (MBE ’75) is the director of the Mobile and Media Systems Lab with Hewlett-Packard Laboratories in Palo Alto, Calif. He received his undergraduate degree from the University of Delaware and his PhD from the University of Colorado, where he serves on the board of the College of Engineering Advisory Council. Mr. Klibanoff is a 2001 inductee into the College of Engineering Alumni and serves as an adjunct faculty member at Georgia Tech.

Kevin C. Hawkins, Sr. (MBE ’92) is the program director for Siemens’ Industrial Software Development for IBM in Research Park, Atlanta, N.C. He is involved in recruiting efforts on campus and is the technical leader to Tech for Mr. Hawkins. He is a 2002 inductee into the College of Engineering Alumni of Young Engineering Alumni.

ATDC Open House

Showcases Companies Founded by ECE Faculty

Members of Georgia Tech’s high-tech community congratulated the Advanced Technology Development Center’s five graduate companies at its Open House, held in May 2003. Two of the graduate companies were founded by ECE Faculty members, Mark A. Clements and John A. Cope. Companies were individually commended for their accomplishments, measured by growth, investment, revenue, and liquidity in events: Fast Talk Conversations, where Dr. Clements is a company board member, has developed a unique search software for audio that enables extremely accurate, high-speed searching of both audio and video content; Lancevo, Inc., where Dr. Cope is the company chair, is the creator of advanced threat protection solutions designed to combat advanced hacking exploits and corporate network misuse on enterprise networks.

A nationally recognized technology incubator, ATDC helps Georgia entrepreneurs launch and build successful companies by providing strategic business advice. ATDC now assists 34 member companies at locations in Atlanta, Warner Robins, and Savannah.

In Loving Memory of Kevin F. Brennan: Distinguished Professor and Beloved Friend

When Kevin F. Brennan died on August 2, 2003 at age 46, he left a legacy that will always endure, during his 19-year career in ECE. Dr. Brennan set the bar high for academic achievement, even while battling pancreatic cancer during the last three years of his life, and retained the respect and camaraderie of his colleagues, practically all he called his friends.

Named in 2003 as the Evers Professor in Microelectronics, Dr. Brennan taught all students with equal ease and enthusiasm and was among ECE’s best classroom teachers. His 11 Ph.D. graduates work for the world’s top electronics companies, research organizations, and universities. Two additional Ph.D. students graduated in fall 2003, with another two likely to follow within the next year.

Dr. Brennan’s memory is fondly remembered by his graduated Ph.D. students, including Yang Wang and Nabil Mansour, who studied with Dr. Brennan in the early to mid 1990s. Kevin was an excellent teacher and a good friend to all of us. He was not only intelligent, professional, and knowledgeable, but also patient and caring with his students, said Dr. Wang. His rigorous style in scientific research and optimistic attitude in life will benefit me forever. Kevin’s interest in his students want beyond research and technical publications, Dr. Mansour said. He had unlimited support and always had words of encouragement for his students. Our success was his primary objective.

Dr. Brennan specialized in in-depth theoretical analysis of semiconductor devices and materials at the submicron level and developed sophisticated devices for electroluminescent displays, like those that glow on car dashboards, and infrared detectors, such as those used in night vision goggles. He also modeled wide band gap semiconductors for future high-power, high-frequency, and high-thermal-resistance applications such as automobile and jet engine and power amplifiers for wireless communications systems.

In 2000, Dr. Brennan was named an IEEE Distinguished Lecturer, on opportunity he used to discuss future outlooks and impacts of these technologies.

In 2003, Dr. Brennan received the highest honor that a Georgia Tech faculty member can attain—the Class of 1934 Distinguished Professor Award. Kevin was truly a talented leader and inspiration in Shirley Mewborn BEE ’56, after she died from a long battle with cancer in 1998.

Carreker Distinguished Lecture A Resounding Success

The third annual James R. Carreker Distinguished Lecture Series, held on November 13, 2003, featured Henry Samueli, co-founder and chairman of Broadcom Corporation. Dr. Samueli’s lecture was entitled Online All the Time: How Wireless Connectivity Will Be Everything. In his lecture, Mr. Samueli explained both the historical and future technological and business trends related to wireless innovations.

The James R. Carreker Distinguished Lecture Series was established in 2000 with funding from ECE alumnus James R. Carreker. This annual event brings industry leaders to Georgia Tech, where they share real-world experiences with students and faculty.

Future Truck Team Shines Again, Finishing in First Place in Four Events

Competing against 14 teams at the national competition at Ford-Michigan Proving Grounds, Georgia Tech’s Future Truck team outstripped their record from last year, as they won first place in three dynamic events: acceleration, customer acceptability and emissions, and took first place in trailer towing and road-off events. The team finished in fourth place overall. The 10-day competition challenged teams from engineering schools to increase fuel economy and reduce emissions in a stock vehicle, without diminishing performance, utility, safety, or affordability.

The Future Truck team was accompanied by Jerome Meisel, advisor to the Model GT team, and Gail Palmer, co-advisor.

Shirley Mewborn: Remembering A True Leader

While June 25, 2003 marked the completion of Shirley Mewborn’s term as a board member of the Georgia Tech Foundation, the long-time supporter of Georgia Tech and the Georgia Tech Foundation continued to journey on a mission she started in 1990. Ms. Mewborn chose the path that was not the easiest, like when she enrolled as a freshman at Georgia Tech in 1952, the first year the decision was made to enroll women at the School of Engineering. She was elected as the first female president, Ms. Mewborn dedicated her life and her experiences to Georgia Tech.

To commemorate his life and the impact his contributions made, the Illinois Alumni Chapter will host Mr. Brennan Memorial Scholarship Fund. Check donations are made payable to the Georgia Tech Foundation, with the fund name indicated on the check, and sent to The Georgia Tech Foundation, 760 Spring Street NW, 4th Floor, Atlanta, GA 30332-0182.
On the Move...

ECE Expands to Technology Square Complex

The Georgia Tech Regional Engineering Program, Georgia Tech Savannah moved to its permanent location last August. Situated in the newly formed Technology and Engineering Campus (TEC), Georgia Tech Savannah is set on 30 acres at the northwest corner of the campus, and occupies over 100,000 square feet across three buildings: the Engineering Laboratory and Analysis Building, the Economic Development and Research Building, and the Program Administration and Resource Building.

Georgia Tech Savannah was established in 1999 as an innovative program to unite education, industry, and technology in southeast Georgia. The program seeks to leverage the resources of Georgia Tech and southeast Georgia to expand engineering education opportunities in the state, especially to historically under-served populations. The program collaborates with Armstrong Atlantic State University, Savannah State University, and Georgia Southern University. Students enrolled in these partner institutions apply for transfer admission to Georgia Tech at the end of their sophomore year and complete their degree program as a Georgia Tech student while physically remaining at the campus of the partner institution. They are taught by Georgia Tech faculty located in Savannah, and through Georgia Tech's distance learning resources.

Faculty Spotlight: Mark G. Allen

If one were to try to define the quintessential scientific mind, it would be easy to look to the likes of Joseph M. Pettit Professor Mark G. Allen to shape this definition. If one were to then to try and imagine his most unfettered and creative use of this gift, it would be easy to watch Dr. Allen in action to craft this scenario. Dr. Allen's story is one of a progression of interlinking events that have led him to his present stature of international prominence and leadership in the microelectronics and emerging nanotechnology fields. In his educational path lies the early seeds of the exceptional breadth and depth of his technical knowledge. As an undergraduate, Dr. Allen began studying chemistry, progressed to chemical engineering, and earned a bachelor's degree in both fields from the University of Pennsylvania. Early in his graduate education, he became fascinated with the emerging Micro-electromechanical Systems (MEMS) field and decided that he needed a degree in electrical engineering to pursue this interest. As a graduate student, he earned his third undergraduate degree in electrical engineering, and a year later earned his doctorate in microelectronics from the Massachusetts Institute of Technology.

In 1989, two significant events took place at ECE: Dr. Allen joined the faculty, and the Microelectronics Research Center (MiRC) opened its doors. I felt that at that point in time, Tech was poised at the brink of tremendous growth in the microelectronics field. There was an infusion of the brightest, young-talented faculty joining ECE and talk of eventually doubling the faculty. Dr. Allen said, The MiRC represented a huge investment of an infrastructure that would support future research in microelectronics. It was an exciting time to begin my career.

In the 12 years that Dr. Allen has been with ECE he has helped to build a research presence at Georgia Tech in the microelectronics field that has earned great international acclaim and recognition. His work in MEMS research has propelled this new area of electrical engineering to its present evolution into a crucial enabling technology intersecting many diverse fields. ECE Professor Bruno Frazier said, Mark embodies the state of the art in his field and has a tremendous range of knowledge in many different fields: chemistry, physics, biology, medicine. Florent Cros, a postdoctoral fellow who studied under Dr. Allen said, He is among an elite group of (MEMS) founders. Anyone and everyone in the field knows and respects him. His intellect and range of technical knowledge alone cannot account for Dr. Allen's tremendous accomplishments. He collaborates with faculty in many disciplines on campus, including faculty in mechanical engineering, biomedical engineering, and materials science and engineering. He has active collaborative research with faculty at MIT, ETH-Zurich, and the University of Illinois. He supervises the research of graduate students who come from diverse cultures and all academic disciplines. In all of these contexts he exhibits a unique talent at managing complexity and creative problem solving. Roger P. Webb, ECE school chair, said, He is able to cross disciplines very effectively and his unique mix of education has been brought to bear very successfully on his research. He represents the best of the best at ECE.

Dr. Allen is married to Sue Ann Bidstrup Allen, a professor in the School of Chemical and Biomolecular Engineering at Georgia Tech. They have two children, David, age 10, and Sarah, age 7.

New Nanotechnology Research Center Open to at Tech

On October 22, 2003, Georgia Governor Sonny Perdue announced that a new Nanotechnology Research Center will be constructed at Georgia Tech. This research center will be one of the most advanced nanotechnology research facilities in the nation and the first of its kind in the Southeast. If Georgia is to emerge as a leader in nanotechnology, we need to take advantage of the opportunity to build one of the nations premier centers for this cutting-edge technology and research, Gov. Perdue said. Initial funding for the Center will be provided by a $36 million contribution from an anonymous donor. This amount will be followed $45 million in state support. Georgia Tech President G. Wayne Clough said, This puts Georgia Tech on the national map for nanotechnology. I am deeply appreciative for this incredible display of private philanthropy and to the state for making this type of investment in a critical research area. The new Center will dramatically expand clean room capacity at the Institute, which will enable the continued expansion and expansion of significant research already underway. ECE Professor James Meindl, director of the National Science Foundation Funded Microelectronics Research Center, and a world renowned expert in semiconductor and integrated circuit technology, expressed his delight at this development and said, The new Nanotechnology Research Center will provide Tech with a virtually unsurpassed potential for world leading research in what may well be the most important new science and engineering frontiers of the 21st century.

Vann Named Georgia Tech’s New Director of Corporate Development

Amy Vann, who served as ECE’s director of Corporate Relations since 1994, has accepted the position of director of Corporate Development for Georgia Tech. In this new role, she will work with all units within the Institute to enable philanthropic corporate interactions. As one of the largest units within Tech, ECE will continue to be an important part of my new responsibilities, Ms. Vann said. I’ll be able to use the wisdom and experience that Teddy P’igg and Roger Webb have imparted on me over the last 10 years was with ECE.

ECE has been officially housed in the Ian Lee Building since the 1960s. Over the years, as the School has grown, its faculty has branched out and became situated in a variety of other locations. On the Atlanta campus, the ECE faculty occupies the Georgia Centers for Advanced Telecommunications Technology (GCaTT) building, the Microelectronics Research Center (MiRC), the College of Computing Building, the Manufacturing Research Center (MaRC), and the Buender Henry Building. Outside the Atlanta campus, there are ECE faculty members at Georgia Tech, Savannah, and at Georgia Tech Lorraine.

More moves are underway. This year, some 30 faculty members have relocated to the Technology Square Research Building (TSRB), located adjacent to Technology Square. The TSRB is the new home of the Georgia Electronic Design Center (GEDC). Formerly known as Yamacraw, the GEDC is Georgia’s strategic initiative to foster growth in the broadband telecommunications industry.

Technology Square, Georgia Tech’s $180 million campus expansion into Midtown, is a multi-building complex that blends education, research, business, and retail activities into a single, 40-acre campus. President Clough said about the project, We want this innovative new complex to be the heartbeat of technology in Atlanta.
The Culture is Essential... What two students have to say about studying at ECE

Greg Tripplet is a graduate student who expects to receive his doctorate this spring. He came to Georgia Tech through the FOCUS program, and his graduate advisor is Professor Thomas G. Kayford.

Gary S. May who directs the SURF program.

The only time I notice that I am a female among mostly men is when someone asks me how it feels to be a woman in ECE. My answer is that it doesn’t feel like anything different. Everyone treats me as one of the rest. My advisor is the opposite of a sexist. He expects and demands the best from me. I believe in myself, and feel that everyone else believes in me as well.

Carole Montaronou is a graduate student who expects to receive her doctorate next year. She did her undergraduate work in France before coming to Tech. Her faculty advisor is Professor Thomas K. Gaylord.

Carole was encouraged to apply to Tech by her faculty advisor in France. As a woman, it was important for me to support students with high scholastic and leadership potential, said Ms. DeSimone. Ms. DeSimone earned her master’s degree in electrical engineering from Tech in 1982. Upon graduation, Ms. DeSimone joined Boeing as a digital designer. Within five years, she moved into management as a system integration manager. Her story from that point on is one of progressive growth within the corporation. This year, she was named vice president for Engineering and Programs and processes, the School must get in front of the admission process with targeted recruitment and marketing/image management.

Alumni News

Randalolph Cabell (MSEE ’54) reports there is life after retirement! After working nearly 30 years for IBM, Mr. Cabell recently produced a CD of the only Virginia Confederate band music to survive. It includes 36 favorites of the 19th Virginia Heavy Artillery Band, plus five songs of the South recorded by the Crestmark Military Brass Band.

R. Allan Hicks (BE ’76) is a principal engineer at MSG Power in Lawrenceville, Ga., where he develops and supports computer systems used in the management of power. His daughter, Melissa K. Hicks, received her BS in biology from Georgia Tech in 2003 and is entering the PhD program in biology this fall.

Carlos A. Muniz (BE ’90) joined Sony Electronics as a sales account manager for the Latin American Region for the broadcast and professional group in Miami, Fla.

Dan Belk (MSEE ’98) received his MBA in October 2003 from Nova Southeastern University. While continuing to work for Motorola Labs in Tallahassee, Fla., he is a PhD student at Florida State University pursuing studies in biomedical and electrical engineering.

Laurent Legay (MSEE ’96) is a program manager with Thales Aerospace in France.

Muhammad Askil Butt (PhD ’99) worked in Irvine, Calif. for two years after receiving his doctorate. In March 2002, he joined the faculty of Lahore University of Management Science (LUMS) in his native country of Pakistan, where he teaches courses in digital signal and image processing.

Larry Compton (BE ’99) is a radar engineer with JTJ, LLC in Nevada.

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Mail to Suzy Briggs at the School of Electrical and Computer Engineering, Georgia Institute of Technology, Atlanta, GA 30332-0250
The Dream Lives On: ECE and Georgia Tech’s Commitment to Diversity

This year’s Georgia Engineering Foundation Award for the Outstanding Design Project in the College of Engineering went to a team of ECE students for their Senior Design Project, which was performed at Georgia Tech Lorraine (GTL) in the summer of 2002. The project was entitled Automated Control of Quantum Cryptography Schemes. The award recipients were Nathan Greer, Kay Hill, Jeremy Silver, and Catherine Thom. This team used their resources to combine their graduation course requirements with their interest in a study abroad opportunity. All were planning on attending the GTL Undergraduate Summer Program just prior to their graduation. When they discovered that Professor William Sayle was slated to teach at the European campus that same summer, they seized the opportunity and proposed a first: to form a team for ECE 4006, a required Senior Design Course, requesting that Dr. Sayle serve as their advisor. Their French connection was Francois Malassanet, director of GTL. Their project was in the area of quantum cryptography, dealing with secure high-speed optical telecommunication systems. The team had a unique opportunity to work with the GTL-CNRS Telecom Laboratory and to apply their research to a different cultural context.

Heriberto Godina (BEE 99) is a senior optical engineer with Telcordia Networks in Research Triangle Park, N.C.

Anthony Carl (BCompE 00), lieutenant junior grade, reported aboard the USS George Washington home ported in Norfolk, Va. He is engaged to Sarah Burgoyne (Economics 00).

Gregory Martin (MS, ECE 00) is an ASIC design engineer with Tektronix in Beaverton, Ore.

Steven Downes (MSEE 01) was recently engaged to Lakisha Pate (MSEE 01). He is a senior electrical engineer with Motorola in Plantation, Fla.

Rahul Motwani (MSEE 01) is currently employed as a software test engineer with the Microsoft Corporation project team in Redmond, Wash.

Jennifer Scott (Williams) (BEE 01) joined the Mayo Clinic as a senior associate consultant in Inpatient Internal Medicine. She received her MSEE and MD both from the University of Tennessee. Her wife Lynne is also a Georgia Tech graduate, receiving her BEE in 1977 and her MSEE in 1978. They live in Rochester, Minn.

J. Scott Rodgers (PhD 02) is an engineer with SRI/ARMS Systems Center in San Diego, Calif.

A. Scott Koller (BEE 80) joined the Mayo Clinic as a senior associate consultant in Inpatient Internal Medicine. He received his BSEE and MD both from the University of Tennessee. His wife Lynn is also a Georgia Tech graduate, receiving her BEE in 1977 and her MSEE in 1978. They live in Rochester, Minn.

Gary May hoods his PhD student, Michael Baker...