

Giroux plays role in discovery of emissions from miniature galaxy

An ETSU astronomer is part of a team of scientists who recently discovered that a miniature galaxy less than one-hundredth the size of the Milky Way is ejecting large quantities of gas and energy into huge regions of intergalactic space.

Dr. Mark Giroux, an assistant professor in the Department of Physics and Astronomy, along with astronomers from the University of Colorado (CU) at Boulder and the Carnegie Institution in Washington, D.C., used the Hubble Space Telescope and ground-based telescopes to make a series of observations. Ray Weymann of the Carnegie Institution led the team, which also included Dr. John Stocke and Kevin McLin of the CU-Boulder Astrophysical and Planetary Sciences Department and CU-Boulder graduate student Brian Keeney.

This team used the electromagnetic spectrum from the brightest quasar in the sky, 3C273, to discover a dense cloud of gas in the far reaches of intergalactic space, according to a CU news release.

Subsequent observations of the cloud showed it contained elements formed in stars and ejected into space by supernova explosions, and there was no known source nearby that could have contributed the ancient elements to this gas, said Keeney.

"This discovery suggests tiny galaxies that appear very faint and dormant today were once much brighter and more active," Keeney said. "It also indicates similar galaxy systems may have been primarily responsible for the chemical evolution of the universe in the very early stages of galaxy evolution."

After several years of searching for the source of this intergalactic "pollution," the team discovered a tiny "dwarf galaxy" so small that it had been previously overlooked. Better images and a detailed spectral analysis obtained by Stocke and Keeney at the Apache

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Dr. Mark Giroux at ETSU's Harry Powell Observatory

ETSU receives TBR approval for two new graduate degree programs

Following approval by its governing body, the Tennessee Board of Regents, ETSU plans to offer two new graduate degree programs, one master's and one doctoral, with the master's program for practicing teachers scheduled to start this fall semester. Both degrees are subject to final approval of the Tennessee Higher Education Commission at its July meeting.

Effective this fall, ETSU and its sister TBR universities will offer a new Master of Education program in Advanced Studies in Teaching and Learning with a concentration in Early and Middle Childhood/Literacy: Reading—Language Arts, to be delivered through the Regents Online Degree Program

(RODP). The program requires completion of 33 credit hours.

This endeavor will provide advanced professional preparation in reading and language arts for practicing PreK-8th grade teachers. It is built on the assumption that all participants will be fully licensed teachers currently teaching in Tennessee PreK-8th grade classrooms, and all courses will base content and learning experiences on the graduate student's work as a classroom teacher. It will include assignments the teachers will then carry out in their own classrooms.

The new RODP master's program is aligned with core propositions of the Na-

tional Board for Professional Teaching Standards and is built around proficiencies consistent across most NBPTS certificates.

The Tennessee Board of Education, the Tennessee Department of Education and the TBR have established a partnership to enhance PreK-12th grade education, to assure that "No Child in Tennessee is Left Behind," to prepare teachers for the 21st century technological age, and to address the teacher shortage in Tennessee. The new master's degree program is a vital component of this partnership.

The TBR also gave approval for a new Doctor of Physical Therapy program in

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“There is no greater challenge than to have someone relying upon you; no greater satisfaction than to vindicate his expectation.”

— *Kingman Brewster*

ETSU Accent, for and about university activities and employees, is published by News and Information Services in the Office of University Relations. News items for upcoming issues should be typed and double-spaced, and forwarded to Jennifer L. Hill, Coordinator, Box 70717, 300 Burgin E. Dossett Hall, telephone 439-5693, e-mail hill@mail.etsu.edu.

Contributing writers this issue:

Renee Dyer, student writer
Kristn C. Fry, director, News and Information Services
Hillary Hester, student writer
Jennifer L. Hill, coordinator, News and Information Services
Dr. Jack Rhoton, associate professor, Curriculum and Instruction
Fred Sauceman, executive assistant to the president for University Relations
Joe Smith, coordinator, University Relations
Mike White, director, Media Relations, Intercollegiate Athletics

Photographs by ETSU Photo Lab

Larry Smith, director
Jim Sledge, photographer

East Tennessee State University is a Tennessee Board of Regents institution. The TBR is the nation's sixth largest higher education system, governing 45 post-secondary educational institutions. The TBR system includes six universities, 13 two-year colleges and 26 technology centers, providing programs to over 180,000 students in 90 of Tennessee's 95 counties.

**Accreditation
Commission on Colleges of the
Southern Association of Colleges and Schools**

East Tennessee State University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools (1866 Southern Lane, Decatur, Ga., telephone number 404-679-4501) to award certificate, associate, bachelor's, master's, educational specialist, doctor of education, Ph.D. and M.D. degrees.

East Tennessee State University is fully in accord with the belief that educational and employment opportunities should be available to all eligible persons without regard to age, gender, color, race, religion, national origin, disability, veteran status or sexual orientation.

ETSU makes available to prospective students and employees the ETSU Security Information Report. This annual report includes campus crime statistics for the three most recent calendar years and various campus policies concerning law enforcement, the reporting of criminal activity, and crime prevention programs. The ETSU Security Information Report is available upon request from ETSU, Department of Public Safety, Box 70646, Johnson City, TN 37614-1702. The report can be accessed on the Internet at: http://www.etsu.edu/dps/security_report.htm.

TBR #220-001-03 50M

ETSU offering more comprehensive services to migrant children and youth

Following the success of last year's Summer Migrant Education Program, ETSU has implemented a more comprehensive program this year to provide educational and other services to migrant children and young people between the ages of 3 and 22, who live in Greene, Washington and Unicoi counties.

The program this year runs through July 31 as a four-day-per-week Summer School, then transitions into an after-school program through mid-October. The assistance provided by ETSU students and community volunteers includes intensive English-as-a-second-language (ESL) instruction, along with dental and health care services, community resource referrals and recreational activities.

In addition, teams of students and volunteers provide home visits to families with pre-school aged children to advise them of available area resources. And, ESL classes will be offered to emancipated migrant youth between the ages of 18 and 22. Still under development, the classes are planned for areas in which a large number of migrant workers are located.

The program's purpose is varied – not only does Dr. Ardis Nelson, ETSU program director, want to focus her students on developing a concentrated interest in the educational success of area migrant children, but she hopes also to broaden the wider community's understanding of the worth of

migrant workers and their labor. Her goal is to demonstrate how, through intervention techniques such as Summer School and tutoring, students and community members can positively affect the future success of migrant laborers not only in this country, but in their homeland as well.

Johnson City's First Presbyterian Church has joined with the ETSU team by providing classroom space plus chaperones to assist on Northeast Tennessee Transportation buses that carry children from Unicoi County to and from the church. The church's interest stems from a recent planning process in which a major theme was a commitment to make an impact on the local community.

The church is currently organizing additional ministry plans to provide community development opportunities downtown, and in the adjacent neighborhood to the church, as well as participating in an outreach ministry of friendship to the local Spanish-speaking community called *Amistades*.

Associate Pastor Baron Eliason says, "We were eager to begin this partnership with the Migrant Education Program at ETSU. This is exactly the kind of program we are seeking as part of our commitment to the local community. We are hopeful that members as well as nonmembers will find a place to serve through this and similar programs we are developing."

Hear 'ETSU Voices' every Monday on WJCW

Tune in to "ETSU Voices" each Monday on WJCW-AM 910. The 25-minute show, featuring university people and programs, airs at 9:35 a.m. and is hosted by Fred Sauceman, executive assistant to the president for University Relations.

Accent Pride Week Issue Deadline

The deadline for the ETSU Pride Week issue of *Accent*, which will be published online on Monday, Aug. 18, is **Friday, Aug. 8**. Please send information on your department's upcoming ETSU Pride Week events, as well as any other information you would like to be included in this back-to-school issue, to Jennifer Hill by e-mail (hill@mail.etsu.edu) by the deadline. Event information should include the name, date, time, location, cost (if any) and brief description of the event, along with the name of the sponsoring department and the name, phone number and e-mail address of the primary contact person.

ETSU has new minor in emergency/disaster response training

The tragic events of Sept. 11, 2001, have called for increased community participation by citizens with expertise in disaster relief. ETSU is responding to that need with the establishment of a new undergraduate minor in Emergency/Disaster Response Training.

The 18-credit hour program will be taught through ETSU's College of Public and Allied Health and College of Education. It features courses in the departments of Public Health, Environmental Health, and Physical Education, Exercise and Sport Sciences. The curriculum consists of two required classes in "Disaster Response Training" and

"First Aid and Emergency Care," as well as electives in "Community Health," "Accident Prevention," "Personal Health," "Radiological Health," "Environmental Safety" and "OSHA Hazardous Waste Operations."

"Colleges and universities have a pivotal role in providing emergency management training," said Dr. Joanne Walker Flowers, chair of Public Health. "The Federal Emergency Management Agency (FEMA) has publicly stated that college students and professionals need courses that introduce them to hazards and disasters, and what to do about them, in order to build disaster resistant and resilient communities.

"In a disaster, it is important for people to be as knowledgeable as possible. Students enrolled in this minor will be able to use the training in their careers or as volunteers in service to their community and to their families."

Flowers said the minor program of study is open to all interested persons, particularly students and professionals in health care, public health, law enforcement, EMS and firefighting, as well as those who work with hazardous materials.

For more information, call 439-4332.

— Joe Smith, Coordinator
University Relations

Rhoton and Bowers edit book on science teacher retention

Dr. Jack Rhoton, ETSU associate professor of Curriculum and Instruction, has co-edited a book entitled *Science Teacher Retention: Mentoring and Renewal* with Dr. Patricia Bowers, associate director of the Center for Mathematics and Science Education at the University of North Carolina-Chapel Hill.



Rhoton

The book is co-published by the National Science Teachers Associations (NSTA) and the National Science Education Leadership Association (NSELA). This is the fourth book edited by Rhoton and Bowers that addresses issues

in science teaching and learning at the precollege level.

Some 40 percent of all new teachers leave the profession within the first five years, according to Rhoton. For science teachers, the percentage of new teachers leaving the classroom is higher. For those interested in reversing this disturbing trend, this book is a "must-read." "Practical and inspiring, the book analyzes the underlying problems and explores a wealth of ideas and practices that help identify, address, and alleviate the frustration and isolation felt by too many teachers."

"The impetus for the book is that begin-

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Memorial construction under way



Photo courtesy of the ETSU Veterans Affairs Committee

Ground was broken recently for a memorial to ETSU's military veterans, which will be located in front of Memorial Hall (Brooks Gym).

The first phase of the project, which is being spearheaded by ETSU's Veterans Affairs Committee, will produce a memorial to the 10 ROTC graduates of ETSU who died in combat while serving on active duty, while the second phase will feature bricks that may be purchased in honor or memory of an ETSU student, graduate or employee who is a veteran or who is currently serving on active duty.

Bricks, which are \$30 each, will feature the veteran's name, rank, branch of service and dates of service. Donations are also being accepted for the first phase memorial.

A marker will be included on the memorial site to recognize that the area was formerly designated as the Nell Dossett Memorial Garden.

A dedication ceremony for the memorial site is being planned for this fall.

For more information or to purchase a brick or make a donation, contact the Advancement Office at 439-4242.



Tales of the UNIVERSITY

The following continues the “Tales of the University” column from June, which contained memories shared by former ETSU faculty and staff members at a dinner sponsored by the University Women’s Club:

Dr. Willene Paxton, ETSU’s former dean of women and later director of the Counseling Center, recalled that when she first came to campus, her office was on the first floor of Gilbreath Hall, which was the administration building at the time.

“I worked late often,” she said. “One day I heard a shot and then the sound of someone running down the hall on the second floor. I asked myself what I should do, real-



Dr. Willene Paxton

izing that someone might have been shot and could be dying.”

After sitting at her desk, shaking, she finally built up enough courage to find out what had happened.

“I went upstairs,” she said, “and I found that the runners on the track team were using the long hall for the 100-yard dash. There was no other indoor area on campus that had a long enough span for practice.”

Paxton has dozens of other fascinating tales from her days at ETSU, including the story of a missing organ.

“When I first came as dean of women, I had many duties,” she said. “One of them was to coordinate the activities program on campus.”

At the time, the university planned a dance for students about once a month and scheduled special entertainment each quarter for which an extra fee was charged.

“We had Ray Charles, Roger Williams, Brenda Lee, James Brown, Bob Newhart and others perform on campus,” Paxton said.

On one occasion, Paxton contracted with a Bristol piano dealer to furnish a small organ to be used by a group that was to appear in Brooks Gym. When she went to the gym to be sure everything was set up, she was told that the organ was backstage.

“I went home and got ready for the concert,” Paxton said. “When I returned about an hour before it was scheduled to start, I learned that the organ backstage was actually an old, worn-out one that had been sit-

ting there for ages.” The piano dealer hadn’t delivered the organ that was to be used.

Trying to come up with a solution to the dilemma, Paxton remembered that the old student center had an organ, but she wasn’t sure if it could be moved without causing damage. After unsuccessfully trying to reach several music experts by phone, she drove to the home of Wilbur Bond, director of the Physical Plant, to get his help.

“He said his truck was blocked in, and he made several other excuses for not being able to help move the organ,” Paxton said. “Finally, I told him, ‘Dammit, I don’t care how you do it — but you get a truck, get someone to help you, and get that organ moved! And do it right now!’”

Paxton returned to the gym and discovered that four students already had carried the organ on their shoulders to Brooks.

“Everything turned out OK,” Paxton said, “but Mr. Bond called me ‘the cussing dean’ for years.”

“Tales of the University” is a regular column provided by the ETSU Retirees Association about the university and the people associated with it through the decades. Faculty, staff, students and alumni are encouraged to share their memories of ETSU with the Retirees Association for consideration for future columns. Stories, comments and suggestions may be sent to Dr. Willene Paxton, chair of the Tales of the University Committee, at 1203 Lester Harris Road, Johnson City, TN 37601, or willenepj@charter.net.

Graduate degree programs

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ETSU’s College of Public and Allied Health. The program is currently taught at the master’s level but is being converted to the D.P.T. to meet additional competencies identified by the American Physical Therapy Association to fulfill higher standards of prac-

tice necessary to satisfy the increasing demands and responsibility of the profession.

The conversion of the M.P.T. to the D.P.T. is part of a national trend endorsed by the association that, by the year 2020, establishes the clinical doctorate in physical therapy as

the first professional degree.

New entry-level students may apply for the D.P.T. program as well as licensed physical therapists who may be eligible for advanced standing.

Storytelling Institutes feature well-known tellers . . . and a moose!

ETSU will play host to a talking moose, stories of epic proportions and homespun tales during this year's International Storytelling Institutes.

The institutes, which began in 1992, are back again, featuring three well-known storytellers – Donald Davis, Willy Claflin and Odds Bodkin – who will teach institute participants how to tell great stories and will provide the community with wonderful tales through public storytelling concerts. Program participants will learn how to bring family memories to life through story, twist a traditional tale or spin out a new one, and find the “Muse of Eloquence” within. The Institutes are sponsored by ETSU's Master's Degree Program in Storytelling.

Donald Davis will be first to perform on Monday, Aug. 4. Davis, who travels as both a performer and a workshop leader, seeing over 500 crowds every year, tells original stories, as well as traditional tales he heard as a child growing up in the North Carolina mountains. He is the author of eight books and has been a recording artist for more than a dozen audio books. Davis has also received the Circle of Excellence Award from the National Storytelling Network, formerly known as the National Storytelling Association, and notable awards from the American Library Association and *Storytelling World Magazine*, which is published through the storytelling program at ETSU.

Willy Claflin and Maynard Moose will perform on Friday, Aug. 8. The duo has been together since 1978, and was featured at the National Storytelling Festival in Jonesborough in both 2001 and 2002. Claflin, who was honored by the Hawaiian Legislature for his contributions to family

entertainment, has spent the past 25 years traveling from rural Maine to Jakarta, Indonesia, telling, teaching and collecting songs and stories.

Odds Bodkin's performance is scheduled for Tuesday, Aug. 12. Bodkin, who Billboard calls “a modern-day Orpheus,” is renowned for his epic tellings like “The Odyssey,” which is four hours long. The Duke University graduate plays all-original music on 12-string guitars, Celtic harp and other instruments; has taught for seven years at Antioch New England Graduate School; and debuted his off-Broadway series, “Art of the Tale,” at the Lincoln Center in 2002. Bodkin has performed in Great Britain, Bangkok and twice at The White House, and has been

a featured teller at the National Storytelling Festival. He has also won numerous awards, including The Parents' Choice Award, The Indie Award, The Golden Headset Award, Booklist's Editors' Choice Award and the New York Public Library's 100 Best Titles for Reading and Sharing.

All three concerts will be held in Rogers-Stout Hall, room 102, at 7 p.m. on the dates shown. Admission for the performances will be \$5. For more information or for special assistance for those with disabilities, call 439-4297, e-mail fjoy@preferred.com or go to www.storytellingworld.com and click on the link for “Institutes.”

— Renee Dyer
Student Writer

Scientists study effects of Olanzapine on auditory gaiting deficit in schizophrenics

The drug Olanzapine (ZYPREXA), which is manufactured by Eli Lilly and Co., is showing promise in treating overall symptoms of schizophrenia. Now, researchers at ETSU's James H. Quillen College of Medicine will take a closer look at the drug to see how effective it is in alleviating an abnormality often associated with this disease.

It is called the auditory gaiting deficit, and is very common among patients with schizophrenia, said Dr. Barney Miller, associate professor in the Department of Anatomy and Cell Biology and Department of Psychiatry and Behavioral Sciences at ETSU and principal investigator of the study. Individuals with auditory gaiting deficit are unable to filter out or process ordinary sounds, such as the clicking of a machine or the sound of an air conditioner.

Usually, these sounds are unimportant, and may be extremely faint. Most people would not pay any attention to the noise and would continue functioning normally.

But schizophrenic patients with the auditory gaiting deficit cannot dismiss it as easily. Instead, they may become intensely focused on these unimportant sounds.

“Often, their imagination begins to take over,” Miller said. “One theory is that this response leads to the belief that these sounds are actually voices speaking to them.

“As a result, these individuals become too frequently distracted and this bars them from being as productive.”

In this new study, which is funded by Eli

Lilly, Miller and his team of researchers will look specifically to determine if Olanzapine can directly improve the auditory gaiting deficit.

Doctors know that Olanzapine does reduce confusion and improves the ability to concentrate, but the specific relationship to auditory gaiting is unclear. Miller believes this knowledge will bring researchers closer to understanding the real roots of schizophrenia.

“Auditory gaiting deficit leads to confusion in thinking, which is considered to be the ‘hallmark’ of this disease,” he said. “The answers from this study may potentially bring us one step closer to understanding the possible causes of schizophrenia.”

An earlier generation of medications did offer benefits to patients with schizophrenia but showed no improvement for the auditory gaiting deficit.

Interestingly, the drug nicotine has shown to have the ability to decrease this deficit, Miller added, which may be why so many schizophrenic patients are known to smoke. But the drug has limited potency and must be repeatedly used to see any beneficial effect.

“Additionally, as most people know, the use of tobacco is associated with a variety of undesirable side effects which may outweigh the temporary benefit,” he said.

For more information, call 439-2126.

— Joe Smith, Coordinator
University Relations

“If something comes to life in others because of you, then you have made an approach to immortality.”

— Norman Cousins

GOING PLACES



Thirty faculty members at ETSU were promoted and 21 were granted tenure by the university's governing body, the Tennessee Board of Regents, through action at its regular quarterly meeting in June.

The following 13 faculty members attained the rank of full *professor*: **Dr. Weixing Chen**, Political Science; **Dr. W. Michael DeVoe**, Pediatrics; **Dr. Michael D. Everett**, Economics, Finance & Urban Studies; **Dr. Michael R. Floyd**, Family Medicine; **Dr. Susan Grover**, Family/Community Nursing; **Dr. Don Hong**, Mathematics; **Drs. Anand B. Karnad** and **Stephanie Leeper**, Internal Medicine; **Drs. Tony Katras** and **Marcus Williams**, Surgery; **Karen King**, Dental Hygiene; **Dr. Clifton W. Mitchell**, Human Development & Learning; and **Dr. Phillip E. Pfeiffer**, Computer Science.

And 17 faculty members were promoted to the rank of *associate professor*: **Dr. William Block**, Obstetrics/Gynecology; **Drs. Sharon Castellino** and **Ricky Mohon**, Pe-

diatrics; **Dr. Thomas E. Coates**, Physical Education, Exercise & Sport Sciences; **Drs. Anita Cobble** and **Mary C. Santos**, Surgery; **Don R. Davis** and **Dr. Scott M. Koterbay**, Art & Design; **Dr. Yousif A. Elhindi**, English; **Dr. Jesse W. Johnson**, Human Development & Learning; **Dr. Amber E. Kinser**, Communication; **Dr. Kurt J. Maier**, Environmental Health; **Judy McCook** and **Dr. Katherine Willock**, Family/Community Nursing; **Dr. Timothy D. McDowell**, Biological Sciences; **Dr. Charles S. "Ted" Olson**, Appalachian Studies; and **Dr. Edith Seier**, Mathematics.

The following 15 faculty members were granted tenure in addition to their promotions: **Block, Coates, Davis, Elhindi, Johnson, Kinser, Koterbay, Maier, McCook, McDowell, Mohon, Olson, Santos, Seier, and Willock.**

Another six faculty members were also granted tenure: **Dr. Wanda G. Barnes**, Dental Hygiene; **April Blakely** and **Timothy A. Erwin**, University School; **Mary Jo Dav-**

enport, Physical Therapy; **Deborah O'Brien**, Library; and **Dr. Hubert "Booney" Vance**, Psychiatry.

Rhodon

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ning teachers need assistance, especially as they struggle with issues related to discipline-specific content, standards-based instructional strategies, and many sociopolitical pressures," Rhodon said.

The book is written for educators, administrators and others who have a stake in science education. It is organized into three parts: the challenges novice science teachers face, retention and renewal programs in action, professional development and mentoring strategies designed to keep teachers engaged. Chapter topics include introducing new teachers to the profession, mentoring them, and discovering ways to renew and refresh novice and veteran teachers.

Education Dean Dr. Martha Collins returns to teaching

Dr. Martha D. Collins, dean of the ETSU College of Education since 1993, is relinquishing her position to become a full-time faculty member in the university's Department of Curriculum and Instruction as of Aug. 1.

Dr. Hal Knight, current chair of the Department of Educational Leadership and Policy Analysis, will become interim dean, until a search for a permanent replacement for Collins is completed in 2004.

Collins led the college to successful re-accreditation by the National Council for Accreditation of Teacher Education in 1995 and continued accreditation in 2000. In 2001-02, she initiated curriculum mapping in the university's K-12 and teacher education programs, in order to collect and organize information about each professor's curriculum content, the processes and skills emphasized in each course, and the method of student assessment used.

During Collins' tenure, external funding for the College of Education increased by more than \$1 million per year, with eight Tennessee Higher Education Council grants

funded in 2002 out of 21 across Tennessee.

All College of Education programs eligible for accreditation have achieved it, and 100 percent of the students who graduate in teacher education pass exit exams for licensure in Tennessee.

In 1996, Collins began a year-round K-12 program at University School. Six teachers there have attained National Board Certification since 1998, the most of any school in Tennessee.

"For many years I enjoyed the opportunity to teach in higher education, conduct research, and be involved in scholarly activities," Collins said. "For the last 10 years, I have enjoyed higher education administration, but when I compare my excitement for the classroom and the challenges of administration, especially teacher education, I have decided to return to my chosen career – to be a teacher. I hope that my time as dean at ETSU has assisted the faculty in reaching their goals, students to become better teachers, and the University School to model excellence in education as the laboratory for the College of Education."

Collins was elected to the Board of Directors of the Teacher Education Council of State Colleges and Universities in 2001 and president of that organization in 2003. She served on the NCATE Board of Examiners from 1982-2002 and the Tennessee Board of Education Advisory Council for Teacher Education and Certification from 1997-2001. For the past four years, she has been a member of the Tennessee Tomorrow Council.

In 2000, the fifth edition of her co-authored textbook, *Assessing and Guiding Reading Instruction*, was published by McGraw-Hill.

Collins holds a Ph.D. in elementary education/reading-language arts from Florida State University.

"Dean Collins has offered noteworthy leadership in the college's NCATE accreditation, in the initiation of a year-round University School, and in major curricular and external funding achievements," said Dr. Bert C. Bach, ETSU provost and vice president for Academic Affairs.

TBR approves naming of ETSU Golf Center

During its regular quarterly meeting on Friday, June 27, the Tennessee Board of Regents granted formal approval to the golf practice facility now under construction on the south border of the ETSU campus.

The complex will be called The Frederick B. Warren-William B. Greene Jr. Golf Center, honoring one of the most successful collegiate golf coaches in the country and one of the ETSU golf program's strongest benefactors.

Supported through private contributions, the center will provide a place for the ETSU men's and women's golf teams to polish their skills.

The exterior practice area was designed by world-renowned golf architect Tom Fazio. On a 14-acre site, it will include six target greens, two bent-grass greens (one for putting and one for short-game work), two tee areas and four bunkers.

The accompanying 3,000-square-foot, two-story building, designed by Ken Ross Architects of Johnson City, will contain coaches' offices, meeting rooms, a hall of fame, players' lounge, two indoor hitting bays and an observation deck. The estimated cost of the center is \$1.4 million.

A formal dedication ceremony will be planned for the fall.

Warren's Buccaneer golf teams have played in the NCAA Tournament 10 times and have captured 11 Southern Conference championships. Since his arrival in Johnson City in 1986, his teams have consistently performed among the nation's elite, including a third place finish in the 1996 NCAA championships and a ninth place finish in 2001. The Bucs have finished in the top 13 six times and in the top 25 10 times since 1986. His 1995-96 team won six events, tying national champion Arizona State and Florida for the most tournament wins during the year. It became the first team in the history of ETSU athletics to achieve a number one national ranking.

Warren is a seven-time winner of Southern Conference Coach of the Year honors and has twice been named NCAA District Coach of the Year. He was a runner-up for National Coach of the Year following the historic 1995-96 season.



A view of The Frederick B. Warren-William B. Greene Jr. Golf Center

At age 24, William B. Greene Jr., a second-generation banker, became the youngest bank president and chief executive officer in the United States. While at flight school in Texas in 1964, he became the primary stockholder and president of Carter County Bank.

Five years later, he formed the first statewide banking organization in Tennessee history, the United Tennessee Bancshares Corp., which initially included Carter County Bank in Elizabethton and First People's Bank in Johnson City. Greene also co-founded Paragon Bank in Raleigh, N.C., in 1999, and he was the driving force behind the founding of Bank of Tennessee, serving as a co-founder and long-time chairman of the board of both the bank and BancTenn Corp. In 1998, he was selected president of the World Presidents' Organization, composed of over 4,000 CEOs of the world's largest corporations.

Greene was an Associated Press All-State athlete at Kingsport's Dobyns-Bennett High School and received a dual scholarship in basketball and golf to Wake Forest University, where he earned varsity letters in both sports. He remains an avid golfer today, with numerous amateur titles, and serves as chairman of the Tennessee Golf Foundation.

Greene has been a longtime and loyal friend and contributor to ETSU. The Buccaneer golf program benefits from his corporate support through the Bank of Tennessee Intercollegiate at The Ridges Invitational Golf Tournament, which, in only three years, has become one of America's best college golf events. His devotion to golf at ETSU has been recognized by the creation of the William B. Greene Jr. Men's Golf Award for the team's most valuable player.

Watson chosen as Smith Fellow

Dr. Elwood Watson, associate professor and assistant chair of the ETSU Department of History, has been selected as a Maxine Smith Fellow for the 2003-04 academic year.

The Maxine Smith Fellows Program is an administrative internship sponsored by ETSU's governing body, the Tennessee Board



Watson

of Regents. Its purpose is to increase the number of African-Americans in the system who will be qualified for senior-level administrative positions.

Smith is a member of the TBR and an educator and civil rights leader in Memphis. She has been a board member of the Memphis branch of the National Association for the Advancement of Colored People since 1957. The former college French instructor served on the Memphis Board of Education for 24 years, including a term as its president in 1991-92.

Watson is one of nine fellows chosen from 44 applicants statewide. Through the fellowship, he will be working with Dr. Bob Bell, the president of Tennessee Technological University in Cookeville, along with other senior-level administrators, on university policy-making decisions through April of 2004.

A faculty member at ETSU since 1997, Watson received a bachelor of arts in 1990 and a master of arts in 1992 from the University of Delaware and his Ph.D. in history in 1999 from the University of Maine.

Enjoy a sunset!

Miniature galaxy

Continued from page 1

Point 3.5-meter Telescope in New Mexico showed strong evidence that this tiny galaxy was responsible for forming the gas cloud.

Some of the strongest evidence is the abundance of elements in the gas cloud and of the stars in the galaxy match, Keeney said.

In addition, an unusual “overabundance” of the element silicon in the gas cloud suggests that thousands of supernovas – the type created when massive stars die – were the source of the gas cloud. A spectral analysis of the dwarf galaxy by Stocke and Keeney showed the dwarf galaxy probably experienced a massive “burst” of star formation some 2 billion to 3 billion years ago, and the ejected gas cloud has since traveled 250,000 light-years to the location where it is today. The event may have created thousands of supernovas of the type that create the overabundance of silicon, said Keeney.

“Because the large numbers of supernovas made by the dwarf’s starburst blew all of the gas into the surrounding intergalactic space, there likely will be no further star formation in the galaxy,” he said.

Theoretical models predict the dwarf galaxy will continue to fade to only about 10 percent of its current brightness. After another few billion years, the dwarf is expected to be so faint that it will be comparable to the smallest and faintest galaxies, known as “dwarf spheroidals.”

Not only are these small objects the most numerous of all galaxy types today, but there also may have been a much larger number of them in the past, said Stocke. Current theories of galaxy formation suggest in the early history of the universe, all stars were formed in tiny galaxies like this one, most of which then merged together and became incorporated into larger galaxies.

“So our own Milky Way probably was created by mergers of smaller galaxies like this one,” said Keeney. “If this is correct, and if all dwarf spheroidals went through an active starburst phase, a large portion of intergalactic space could have been enriched with gas without any help from more massive galaxies like the Milky Way.

“They may be tiny, but they are so numerous that their collective effects may be more important in the chemical evolution of the universe than much larger galaxies like

our own.”

Primary funding for this research came through a Hubble Space Telescope grant that was awarded to Stocke. Additional observations were made with the Carnegie Institution’s Las Campanas 2.6-meter telescope in Chile and the Liyna 3.5-meter telescope at Kitt Peak, Ariz.

Giroux was a postdoctoral researcher at CU-Boulder before coming to ETSU, primarily providing theoretical interpretation of the observations of gas in between galaxies like the Milky Way.

“I became involved with Dr. Stocke’s scientific program to try to explain the observations of gas between galaxies,” he said. “We formulated a simple picture where many stars exploding as supernovas at almost the same time would literally push out all of the gas in small galaxies, and this gas would spread out into the space between the galaxies.

“An important feature of this picture is that almost all of the elements heavier than hydrogen and helium are created in stars, so this was a way of seeding the volume between the galaxies with gas containing these heavier elements. These elements have been observed in these intergalactic clouds.

Giroux said his role in the study was to help construct the theoretical picture of the gas exploding into space and to construct models for the physical properties of the gas, answering such questions as “How hot is it?”, “Which elements are present?” and “How many electrons do they have?”

Giroux believes that this discovery is important in that it could help to explain the movement of elements.

“Ninety-eight percent of the universe consists of the two lightest elements – hydrogen and helium,” he said. “The remaining elements could well be an afterthought, were it not for the fact that they make up a crucial fraction of our earth, and of us. Scientists have a good idea of where the hydrogen and helium came from, and are aware that the heavier elements are produced in the interiors of stars. What is not well understood is how the heavier elements produced by these stars spread throughout the universe. Our picture, and the evidence we have for the picture, represent one attempt at explaining this process.

“As always, it’s exciting to see where a theoretical picture seems to be supported by observation,” Giroux continued. “I want to insert a note of caution, however. Our observations represent a single case. We are a long way from proving conclusively that our scenario is the one responsible for seeding intergalactic gas with heavier elements in all, or even most, cases. We need to make more observations which sample many parts of the nearby universe to see whether our picture can be applied in general.

“The fun thing is that we will be making these observations, seeing how well our initial picture holds up. If it doesn’t, we’ll have to make up a new model that explains things better. But that will be okay. Like the students I teach, I’m still learning.”

Giroux says that the team is currently analyzing observations made toward another target in space, where they are looking for faint galaxies associated with the gas they see in that direction.

History Society activities

The ETSU History Society is planning a number of educational and outreach activities for the 2003-04 school year.

They include:

- ♦ A booth at the Bristol Motor Speedway in August
- ♦ A September social to welcome incoming graduate students at Tipton-Haynes Historic Site
- ♦ A series of roundtable discussions with topics to be announced later
- ♦ Two bake sales in the fall
- ♦ A symposium in October, conducted by Dr. Elwood Watson, on how to apply to graduate and professional schools
- ♦ A trip to the annual American Historical Association Conference in Washington, D.C., in January
- ♦ National History Day competitions among middle and high school students in Washington and Sullivan counties
- ♦ A research project this fall in conjunction with the Tipton-Haynes Historic Site