REPORT TO THE COMMUNITY

BUILDING COLLABORATION

Groundbreaking for Interprofessional Education and Research Center
What a year it has been for the Academic Health Sciences Center at East Tennessee State University. As always, a lot of wonderful things are happening in the five colleges that make up our AHSC — amazing research, profound classroom experiences and the furthering of our efforts to improve the quality of life of the people of this region.

A transformative year for the Academic Health Sciences Center at ETSU?

All of this culminated in November with the groundbreaking ceremony at Building 60 on our VA campus. We've talked a lot about this building, which was constructed in 1905 and served as the Quartermaster's Storehouse at the Mountain Home Veterans Affairs Medical Center and then the VA's fire station before, most recently, a storage warehouse. The historic building is now being transformed into the AHSC's Interprofessional Education and Research Center, bringing state-of-the-art technology and learning all together for the students in our health sciences colleges.

ETSU has been a national leader in interprofessional education since the early 1990s when it was awarded a W.K. Kellogg Foundation grant to develop interdisciplinary community partnerships. With the transformation of Building 60, we soon will have a physical headquarters for the extensive work we are doing to train the next generation of providers in team-based health care.

We look forward to having a building where our health sciences students, faculty and staff can come together and, through collaboration across disciplines, discover new and innovative ways to provide better health care to the people of this region and beyond.

Throughout the pages of this publication, you will find some of our work in interprofessional education and research as well as highlights of the year from each health sciences college.

For every story you read here, there are at least a handful more that could have been included. I am proud of all that our health sciences colleges do each and every day to advance health care.
Breaking ground on the new Interprofessional Education and Research Center

ETSU becomes Nexus Innovations Network incubator site

Addressing the prescription drug abuse epidemic sweeping the region, nation

College of Public Health 17-21

College of Clinical and Rehabilitative Health Sciences 22-26

College of Nursing 27-31

Bill Gatton College of Pharmacy 32-36

Quillen College of Medicine 37-41

Over 329,400 patient encounters at our ETSU AHSC health care clinics in a single year

Nearly $25 million in sponsored programs funding in the most recent academic year

AHSC health facilities provide in excess of $5 million per year in uncompensated health care to the people of our region

One of only 120 Academic Health Sciences Centers in the nation

A strong focus on interprofessional education since the early 1990s

More than 4,000 students enrolled in the five colleges that make up the AHSC

The Academic Health Sciences Center

The Academic Health Sciences Center

Dr. Wilsie Bishop, Vice President for Health Affairs

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College of Public Health

Dr. Randy Wykoff, Dean

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A transformative year for the Academic Health Sciences Center at ETSU?
The Academic Health Sciences Center at ETSU held a ceremonial groundbreaking in mid-November that officially kicked off a multi-million-dollar renovation project intended to create a headquarters for interprofessional education and research at the institution.

Through the project, Building 60 on the Quillen Veterans Affairs campus is being transformed from the VA’s former Quartermaster’s Storehouse and fire station into ETSU’s Interprofessional Education and Research Center. The state-of-the-art educational facility will include simulation labs, research space, classrooms, student study space and more.
The renovated and repurposed building will not belong to any single health sciences college, but instead represent a space where students, faculty and staff from all five such colleges at ETSU can work and learn in a team-based environment.

"With national attention being directed at affordable and effective health care delivery, the health profession programs at ETSU believe it is critical to develop practice-ready graduates who will be able to work effectively in health care teams to improve the health of the region and the world beyond," said Dr. Wilsie Bishop, vice president for Health Affairs at ETSU.

"The faculty of the ETSU Academic Health Sciences Center are dedicated to providing an experiential learning environment for innovative, interprofessional education and research experiences where students learn and work together in teams."

ETSU has been a national leader in interprofessional education since the early 1990s when it was awarded a W.K. Kellogg Foundation grant to develop interdisciplinary community partnerships.

"As Building 60 is transformed into the ETSU Interprofessional Research and Education Center, it will serve as a physical symbol of a philosophy the institution has been living for decades and will set ETSU apart from many other institutions by strongly reinforcing its dedication to interprofessional education," said ETSU President Brian Noland.

The project is expected to cost approximately $13 million, with the facility set to open by summer of 2018.
The ETSU Interprofessional Education and Research Center at Building 60 represents a unique architectural expression balancing the historical character of the Veterans Administration campus and the latest technology in interdisciplinary health care education.

The original structure, built around 1908, was first used as a commissary to store goods brought to the campus of the VA by railroad. The building has been in continuous use as a storage and support facility until 2016 when construction began to convert it into the ETSU IPER Center.

The exterior of the building will be restored to match its historic appearance with the new doors and windows while the interior will be a mix of authentic historic and new high-tech space.
The ETSU Interprofessional Education and Research Center (Building 60) represents a unique architectural expression balancing the historical character of the Veterans Administration campus and the latest technology in interdisciplinary health care education. The original structure, built around 1908, was originally used as a commissary to store goods brought to the campus of the Veterans Administration by railroad. The building has been in continuous use as a storage and support facility until 2016 when construction will begin to convert the building into an occupied part of the ETSU medical education campus. The exterior of the building will be restored to match its historic appearance with new doors and windows, while the interior will be a mix of authentic historic and new high-tech space. The existing historic center stair will be reused, but clad in new light safety at the east and west ends of the building.

**IN DETAIL**

1. The Interprofessional Education and Research Center will retain the historical character of the turn of the 20th century building.

2. The project includes just under 17,000 square feet of usable space and is expected to cost approximately $13 million.

3. The Interprofessional Research and Education Center is set to open by summer 2018.

4. The basement will feature a 90-person lecture hall, conference rooms and meeting areas, as well as support space for high fidelity simulation labs.

5. The main floor will facilitate student and faculty formal and informal interactions. In addition to faculty offices on this level, there will also be a student lounge and food service.

6. The second level will provide learning areas that support ambulatory care delivery, including individual treatment rooms for work with standardized patients, an apartment with a focus on rehabilitation interventions and teaching activities of daily living, and areas for small group teaching and planning activities.

7. The third level will include a state-of-the-art high fidelity simulation area with a flexible four-bay surgery/treatment suite and tech support space, a multipurpose room with skills bays, a compounding sterile pharmacy suite, commons spaces, conference rooms and meeting rooms.
East Tennessee State University, through the leadership of individuals within the institution’s Academic Health Sciences Center, joined a national research partnership that tests new approaches to health care delivery and health professions education.

As a member of the National Center for Interprofessional Practice and Education’s Nexus Innovations Network, ETSU is one of 71 sites in 35 states to test new models and methods of integrating health care practice and education. Each of the 97 projects in the Nexus Innovations Network focuses on the real-world testing of interprofessional strategies with the potential to improve the experience, outcomes and costs of health care.

“We are excited to have East Tennessee State University join our growing Nexus Innovations Network,” said Dr. Barbara Brandt, director of the National Center.

“The work they’ll be doing to implement and assess an IPE curriculum is going to provide important data for future training. We’re excited to partner with the faculty and staff as we work to change how people learn about and experience health care.”

Interprofessional health care is widely acknowledged as the next major advance in the improvement of health care delivery. Interprofessional care occurs when multiple health workers from different professional backgrounds blend their expertise to provide comprehensive health services to patients, families and communities.

The concept is not new, especially at ETSU, but health systems, governmental agencies and educational institutions are beginning to look at how to fully implement it in practice and measure its outcomes on patient care. Introducing and mastering interprofessionalism is a challenge that necessitates careful planning and evaluation.

“The Nexus Innovations Network includes a data repository that allows the National Center for Interprofessional Practice and Education to make generalizable determinations based on what individual member institutions are doing,” said Dr. Jodi Polaha, an associate professor in ETSU’s Quillen College of Medicine and one of the institution’s leading forces in interprofessional education and practice.

“We are one of its network incubator sites and we help to provide that data. It shows that ETSU is really trying to make a contribution to our national understanding of what works when it comes to interprofessional education and practice.”

In joining the Nexus Innovations Network, ETSU will facilitate interprofessional research throughout clinical sites and learning environments and institutions. For the initial research project as part of the network, Polaha is conducting a global study of ETSU student outcomes as a result of getting specialized training in interprofessional education.

The project executes pre- and post-testing for those students taking part in the interprofessional education cohort pilot program at ETSU and compares the results with results from those students who are not getting as concentrated of a dosage of interprofessional education.

“We suspect the cohort’s results will be better than the minimal dose students are getting,” Polaha said. “We hope it will show these students have not just improved attitudes and beliefs about interprofessional education and practice, but also improved knowledge.”

The pre-test data was collected when the cohort of beginner students came in fall 2016. Post-test data will take place as the cohort exits the pilot program in spring 2018.

The data collected will be measured against data from other Nexus Innovations Network sites and national and federal databases. Scientists at the National Center will then analyze the information and share key findings through reports and peer-reviewed publications, increasing evidence on the effectiveness, and return on the investment of interprofessional models in developing the skills necessary for effective and efficient health care.

“The data will allow ETSU to have a strong quality improvement process as it expands its interprofessional education efforts,” said Dr. Wilsie Bishop, vice president for Health Affairs at ETSU.

“If the goal is always to have our students graduate prepared for the workforce, then this is what we need to be doing.”

Learn more about the work occurring at ETSU and other Nexus Innovation Network sites at nexusipe.org/advancing.
Dr. Mary Ann Littleton
Associate professor in the Department of Community and Behavioral Health in the College of Public Health

Littleton is nationally known as a leader in community-based teaching and learning and interprofessional education. She designed “Trilogy: An Innovative Course Sequence for Training Community Health Professionals,” an award-winning series of three courses in which student teams assess community health needs, design community-based intervention programs, and then implement and evaluate those interventions. Littleton led the design and implementation of ETSU’s online Master of Public Health in Community Health degree program, which offers courses online. She has guided over 100 projects through community-based learning courses at the master’s and doctoral levels.

For 15 years, Littleton has worked tirelessly to design and deliver unparalleled educational experiences for ETSU students, while affecting change in communities across Appalachia and the nation, her nomination states.

Dr. Jonathan Moorman
Professor and vice chair for research and scholarship, chief of infectious diseases at the Quillen Veterans Affairs Medical Center

Moorman’s research focuses primarily on mechanisms of immune evasion by chronic viral infection, and his scientific interests include clinical and basic aspects of hepatitis C infection and co-infection of hepatitis C and HIV. Moorman is a natural academician and physician scientist with vision and initiative,” a colleague wrote. “He is an established, imaginative and productive researcher and scholar, and he is nationally renowned in the field of viral immunology research, particularly in viral hepatitis C.”

One of Moorman’s greatest accomplishments has been the creation of the Center of Excellence in Inflammation, Infectious Disease and Immunity, a multidisciplinary research center established in 2014 to advance research, education and clinical applications in immune and infectious-related diseases.

During his tenure at ETSU, Moorman has served as primary investigator or co-primary investigator on several National Institutes of Health and Veterans Administration (VA) grants totaling over $4 million. He has published more than 60 articles in prestigious journals.

Dr. Megan Quinn
Assistant professor the Department of Biostatistics and Epidemiology in the College of Public Health

Quinn was recognized for her exceptional service contributions to the community, public health profession, and the university, particularly her dedication to underserved communities, both locally and globally, and her commitment to public health workforce development.

From the poorest countries in the western hemisphere, to Rwanda on the African continent, Quinn has contributed her public health knowledge and skills to help improve the health of impoverished children and adults victimized by disasters and suffering the consequences of poverty and injustice on a daily basis.

“Dr. Quinn has been a tireless advocate for the public health workforce and a leader in international service and scholarship,” her nominators wrote. “Beyond the technical epidemiological skills, such service requires exceptional altruism, professionalism, communication skills and cultural competency.”

Locally, Quinn serves as a member of the board of directors of the Girl Scout Council of the Southern Appalachians and as a middle school girls’ soccer coach. She helps organize and deliver public health workforce training activities through partnerships with the Sullivan County Health Department as well as the Tennessee Department of Health. At ETSU, she is a member of the International Advisory Council, International Education Scholarship Committee, Study Abroad Committee and International Friendship Program and serves as the ETSU chapter advisor for Timmy Global Health.

AHSC Faculty Members Take Home All Three
ETSU Distinguished Faculty Awards

At the Faculty Convocation ceremony held in early fall, ETSU awarded the 2016 Distinguished Faculty Awards in the areas of teaching, research and service. The highest honors given to faculty members, all three awards went to Academic Health Sciences Center Faculty. It is the second year in a row that AHSC faculty members have taken home all three awards.
ETSU establishes Center for Prescription Drug Abuse Prevention and Treatment

This past spring, ETSU announced the establishment of a new, interprofessional research center at the institution that focuses on one of the most significant health issues plaguing both the region and much of the nation.

“Prescription drug abuse is a national epidemic and our region has been hit very hard by it,” said Dr. Robert Pack, associate dean in the ETSU College of Public Health and the executive director of the Center. “The United States consumes twice as many opioids per capita than the next closest nation. Among leading states, after Alabama, Tennessee is a close second for opioids consumed per person. And within our state, East Tennessee is easily the region with the greatest opioid consumption.”

Earlier this year, Pack, along with Dr. Nick Hagemeier, an assistant professor in the Gatton College of Pharmacy at ETSU, and Angie Hagaman, program director of the Diversity-promoting Institutions Drug Abuse Research Program (DIDARP) federal grant in ETSU’s College of Public Health, submitted a proposal to the Tennessee Board of Regents (TBR) to create a center that will facilitate a multi-level approach to addressing the prescription drug abuse problem in Appalachia. In March, ETSU received word that the TBR had approved the proposal.

The establishment of the ETSU Center for Prescription Drug Abuse Prevention and Treatment expands upon prescription drug abuse prevention efforts that have been ongoing at the university for more than four years, and will be built upon a long track record of community-based substance abuse work at the university.

In 2012, a group of ETSU scholars, health professionals, elected officials and other interested parties came together to discuss the dramatic increase in prescription drug abuse and drug overdose death rates in the Appalachian region.

As a result, the Prescription Drug Abuse/Misuse (PDAM) Working Group was formed.

L-R: Angie Hagaman, Dr. Nick Hagemeier, Dr. Robert Pack

“We aim to be the hub for the region as far as prescription drug abuse research, education and outreach are concerned.”

- Dr. Nick Hagemeier, director of research for the Center for Prescription Drug Abuse Prevention and Treatment

The group collaborated to generate a National Institute of Drug Abuse proposal that culminated in the five-year, $2.2 million grant from the National Institutes of Health. That project has fostered multiple community outreach, research and educational activities over the past four years. The PDAM Working Group continues to meet monthly.

“The creation of the center allows us to leverage and organize campus research efforts for maximum impact against the prescription drug abuse epidemic,” Hagaman said. “Through the center, we plan to identify, implement and evaluate evidence-based practices for prevention and treatment of prescription drug abuse in the region.”

The trio also hopes the center will strengthen collaborative partnerships, both on and off campus, with the aim of identifying and answering research questions of regional and national importance.

“Ultimately, it is about being a resource for the community and region,” Hagemeier said. “We aim to be the hub for the region as far as prescription drug abuse research, education and outreach are concerned. We want to have a positive impact on Central Appalachia and the nation as a whole. We are uniquely positioned to do just that.”
In May, ETSU and Mountain States Health Alliance announced plans to form a joint venture in support of the newly established Center for Prescription Drug Abuse Prevention and Treatment at ETSU. The joint venture involves the implementation of one of the components of the adopted mission of the center. Comprehensive clinical treatment for people who suffer from an opioid use disorder is one element of the spectrum of services needed. The medication-assisted addiction treatment facility being created, in part, due to this joint venture, will include treatment such as methadone combined with counseling, group therapy and other social support services that are essential for success.

The approach has been crafted in accordance with the American Society for Addiction Medicine and other best practices guidelines. It will be focused on implementing, disseminating and evaluating evidence-based practices to address the prescription drug crisis in Northeast Tennessee.

“There is a desperate need in this region for the implementation of these treatment methods,” explained Dr. Rob Pack, director of the Center. “We will only see success in reducing the problem of prescription drug abuse if we provide patients with a full range of treatment options, and that, up until now, has not been available here.”

The not-for-profit medication-assisted addiction treatment facility will be operated by Mountain States Health Alliance with members of ETSU’s faculty also involved in treating patients. All revenue generated through the effort will be reinvested into the ETSU Center for Prescription Drug Abuse Prevention and Treatment to bolster the other three components of the center’s infrastructure – research, education and outreach.

“This partnership results in a collaboration to provide a component of treatment necessary to help people with addiction reclaim their lives,” said Alan Levine, Mountain States president and CEO. “What makes this partnership unique is that we couple treatment with ongoing research, prevention and education.”

ETSU and Mountain States are also partnering with Frontier Health to help implement the comprehensive continuum of care.

“We are confident that this evidence-based, community-driven service will bring new resources to bear in treating a problem that has reached epidemic proportion in our region,” said Dr. Teresa Kidd, president and CEO of Frontier Health.

The facility will be located off Highway 75 in Gray.
In 2016, members of the Junior League of Johnson City awarded $20,000 to East Tennessee State University’s Center for Prescription Drug Abuse Prevention and Treatment for the creation of a Neonatal Abstinence Syndrome (NAS) database. NAS is defined as a condition in which a baby has withdrawal symptoms after being exposed to addictive illegal or prescription drugs while in the mother’s womb. When the baby is born, it goes through withdrawal because it is no longer receiving the substances.

“There are currently no studies demonstrating long-term outcomes for NAS babies,” said Angie Hagaman, program director for the National Institute on Drug Abuse/Diversity-Promoting Institutions Drug Abuse Research Program housed in ETSU’s College of Public Health. “The creation of a NAS database will have a significant impact on NAS moms and babies here and, likely, across the country.”

Researchers at ETSU are extracting retrospective data from previous NAS cases – without any patient identifiers – and collecting data from current NAS cases moving forward.

“We’ll be looking at 80-some variables from the type of drugs used and where the mother got prenatal care to any services involved in treating the children,” Hagaman said. “By analyzing the data, we can immediately treat these babies more effectively.”

The goal is to better understand what worked in treating the infants as well as problems these children may begin to encounter in later years.

Ginny Wright, president of the Junior League of Johnson City, said organization members spent a year searching for a partnership in which they believed they could make “a true community impact.”

“For us, this was the perfect fit,” Wright said. “We want to see the start of the registry and we want to see the registry over time create best practices around what really works in solving the issue of NAS. We think this donation can create change.”

ETSU uses $20k award to create NAS database

21,732 babies in the United States were born with NAS in 2012, a five-fold increase since 2000 (National Institute on Drug Abuse)

The national incidence of NAS in 2012 was 5.8 per 1,000 live births and Tennessee’s rate during the same year was nearly twice that rate at 11 per 1,000 live births.

Currently East Tennessee is experiencing some of the highest NAS rates in the nation, with Sullivan County at 49.1 cases per 1,000 and the Northeast Region at 42.7 per 1,000.
ETSU researchers discuss results of survey

When Drs. Ivy Click and Nick Hagemeier were awarded a $50,000 grant in late 2014 to survey providers about neonatal abstinence syndrome (NAS), the ETSU faculty members were well aware of the issue’s continuing growth and wanted to address ways to reduce it.

“It has become an epidemic across the state,” said Click, an assistant professor of family medicine at ETSU’s Quillen College of Medicine. “We’re talking about a tenfold increase in Tennessee over the past decade, and here in the eastern region, the numbers are higher than anywhere else in the state.”

Through the grant from the Tennessee Department of Health, Click and Hagemeier, an assistant professor at ETSU’s Bill Gatton College of Pharmacy, set out to better understand the knowledge, beliefs and practices of licensed prescribers and pharmacists regarding NAS.

“A majority of women who deliver a baby diagnosed with NAS have legal prescriptions for opioids, either for the treatment of addiction, pain, or another condition,” Hagemeier said. “This means they are likely seeing a prescriber and a pharmacist before taking the drugs. We wanted to see if there was something at those stages that could be done to reduce instances of NAS.”

Two years ago, the state came out with chronic pain prescribing guidelines that spell out what providers should be doing in cases where women of child-bearing age are being prescribed opioids.

Among the recommendations is the administering of a pregnancy test before prescribing opioids to ensure the patient is not pregnant before she starts taking the drugs. A provider should also be recommending women of child-bearing age who are going to be on opioids for a certain amount of time use a long-acting reversible contraceptive (LARC) to prevent unintended pregnancy while taking the drugs, the guidelines state.

“The idea there is, if we’re going to be on a long-term opioid, then let’s just not get pregnant,” Click said, pointing out that a majority of NAS births are from unintended pregnancies. “Stopping women from getting pregnant to begin with while they are on opioids will dramatically reduce NAS cases.”

After conducting the survey, Click and Hagemeier now have a better picture of whether the guidelines are being followed.

“Providers who responded to the survey said NAS is a concern in their practice and they do talk about risks of addiction and dependence. But they weren’t talking with patients as often specifically about addiction and dependence of a newborn,” Click said.

“We also found many of them never administered pregnancy tests before they initiated opioids and many were not routinely recommending long-acting reversible contraceptives.”

Pharmacists’ responses indicate opportunities for additional engagement in NAS prevention.

“Pharmacists were good at asking patients if they have questions about the medication, but they inquired about pregnancy status in only three out of 10 women of childbearing age who were prescribed a long-term prescription opioid, and directed only one out of 10 such patients to where they can access LARC,” Hagemeier said.

“There’s a lot of room for improvement and it has a potential to make a big impact.”

Click and Hagemeier concluded the research with the determination that more education at the formative level as well as at the continuing education level for prescribers and pharmacists is necessary.

“Those surveyed did feel a responsibility for NAS and for preventing it, but most felt they were not adequately prepared to address it,” Click said.
The unique efforts of ETSU faculty, staff and students to provide enhanced care to patients transitioning from the hospital back home are now being studied to better measure their effectiveness at preventing hospital readmissions.

For the past two years, health care professionals at ETSU Family Physicians of Kingsport have been providing an interprofessional transitions of care (IPTC) clinic for their patients who frequently are hospitalized due to some kind of chronic condition.

“We know that transitions of care – hospital to home, home to hospital, hospital to rehabilitation, skilled nursing facility to home – are places in the continuum of care that provide a significant opportunity for error, confusion and frustration for many patients,” said Dr. McKenzie Calhoun, a member of the IPTC team and an assistant professor in the Bill Gatton College of Pharmacy at ETSU.

“Some of that money, Calhoun said, may be being spent unnecessarily. “If a while now, hospital readmissions have been an area of focus for health systems to try to reduce,” she said. “We’re looking at a shift so that the primary care physician and team are also focused on that. “We aim to prove that coming to an outpatient IPTC clinic soon after discharge can improve outcomes and decrease overall costs and health care utilization.”

Prior to being discharged from the hospital, a patient receives an appointment date and time for his or her IPTC clinic visit.

“We aim to get every single patient in within seven days of discharge,” Calhoun said. “During the two days of getting home from the hospital, our social worker on the IPTC team calls and checks on the patient and reminds them of the appointment.”

On the day before the weekly IPTC clinic, pharmacy students work up the files of those patients who will be seen the next day, assessing their most recent medication changes and other health details from their hospital stays. Then, on the morning of the clinic, the health care team, which includes a pharmacist, one to two physician residents, a social worker and both pharmacy and medical students, meets to discuss each patient coming in that day.

“That is our time as a team to get on the same page,” Calhoun said. “We identify our own little to-do lists.”

During the IPTC clinic, patients are seen in roughly 30-minute blocks, much longer than an average primary care visit. During that time, they see all members of the health care team.

By the time the visit is complete, the team has gone over medications, done a physical assessment of the patient, offered community resources, coordinated any other follow-up appointments with primary care physicians and answered patient questions.

“Our patients love it,” Calhoun said. “Now we want to prove that we are meeting our goals of preventing readmissions as well as preventing errors that can happen during transitions of care.”

Through a $10,000 Research Development Grant from ETSU, Calhoun is using data collected over the past two years to determine just how well the IPTC is working.

“I really feel strongly that what we are doing is valuable,” she said. “And if it proves to be the case, we have an obligation to share our best practices with others all over the country.”
Dozens of high school juniors and seniors considering a health-related career converged on the ETSU campus in September to take part in ETSU’s third annual BLUE Weekend. BLUE (Bucs Live University Experience) Weekend aims to introduce students to the many health degree programs offered at ETSU while also providing them with an opportunity to experience life on campus as a whole.

During the immersion weekend, students were paired with peer mentors who are current pre-health students at ETSU. They stayed in the residence halls with their mentors and took part in student activities on campus throughout the weekend, including meals at the student union and attending classes.

A peer-reviewed academic journal launched at ETSU three years ago is shining a spotlight on the university in a special issue highlighting the institution’s work in interprofessional education and training.

Available strictly online, the International Journal of Health Sciences Education (IJHSE) serves as a platform for sharing the best practices and latest technologies used in health care education around the globe. Typically, the editors seek submissions from all academic institutions and health care facilities where experts share best practices used to instruct students or patients. For the most recent issue, however, the editors featured entries only from ETSU faculty and staff.

“This university has had an emphasis on interprofessional education in health sciences since the 1990s," said Dr. Wendy Nehring, dean of the College of Nursing at ETSU and one of the original IJHSE editors. “Even without its growth on the national level, we would have continued to grow in this area because we know its impact on the care provided to patients.”

Dr. Joe Florence of the Quillen College of Medicine and Dr. Randy Byington of the College of Clinical and Rehabilitative Health Sciences, co-authored the article, “Our Roots/Our Story: Interprofessional Education at East Tennessee State University.”

ETSU Vice President for Health Affairs Dr. Wilsie Bishop wrote “Integrating IPE into an Academic Health Sciences Center: A Bottom-Up and Top-Down Approach.”

Dr. Katie Baker in the ETSU College of Public Health worked with former Gatton College of Pharmacy faculty member Dr. Michael Crouch to address interprofessional education as “more than a passing fad.”

In another article, Drs. Baker and Crouch, along with Dr. Kerry Proctor-Williams, Dr. Brian Cross, and Elizabeth Alley of ETSU, informed readers of the feasibility and efficacy of an interprofessional education pilot program.

In connection to a growing prescription drug issue in the region, an article authored by Drs. Rob Pack, Jeffrey Gray, Fred Tudviver and College of Public Health alumna Sara Warfield outlined the research component and interprofessional growth at ETSU.

Dr. Jacek Smurzynki, a professor in the College of Clinical and Rehabilitative Health Sciences, Dr. Lisa Haddad, an assistant professor in the College of Nursing, and Dr. Ken Phillips, an associate dean for research in the College of Nursing, are co-editors of the journal. To view the journal, visit http://dc.etsu.edu/ijhse/.
A grant from the Tennessee Board of Regents (TBR) is helping an interdisciplinary research team at ETSU provide much-needed educational services to migrant workers and their families.

The $40,000 grant garnered by Dr. Ken Silver, an associate professor in the Department of Environmental Health in ETSU’s College of Public Health, is allowing Silver and his peers to expand the work they have been doing for nearly a decade with the region’s migrant workers.

“For the last eight years, we’ve had a partnership with Rural Medical Services, which is the migrant health center for mostly tomato workers. Most of our focus has been on occupational, ergonomic hazards and non-occupational chronic diseases,” Silver said. “We came up with solutions to help with issues of back pain, neck pain, shoulder and joint pain, things these individuals identified as the biggest issues they faced.”

Through the development of stackable risers and anti-fatigue mats for workers in the packing houses, some of these issues have been alleviated, Silver explained. While he and his team continue to address similar ergonomic issues for those working out in the fields, Silver said they also have decided to address another significant issue.

“There have been concerns about pesticide safety issues along the way and we’ve been looking at a longer-term approach to address pesticides,” Silver explained, noting the recent update to the Environmental Protection Agency’s standards to increase safety and protect the health of farmworkers. “We saw that as an opportunity to begin to address the pesticide concerns expressed to us.”

The team’s project, “Train the Leaders: Guided development, presentation and evaluation for a pesticide training curriculum by Latino youth,” turns to the youngest generation for assistance.

Through the grant, ETSU hosted a weeklong Environmental Health Leadership Institution in June for college-bound high school students of migrant and seasonal workers, as well as bilingual students of Hispanic heritage. Topics addressed during the event included worker protection standards, pesticide safety, how to use regulatory code for protecting employees and other workers and environmental health topics.

“If we can expose these individuals to basic concepts in environmental health, epidemiology, nursing, family medicine and law and policy, they may choose career paths in which they can contribute to finding solutions to the issues,” Silver noted.

Researchers also challenged the students to develop culturally appropriate participatory training activities — methods they would use if they were in charge of transmitting what they learned here to their families and friends still in the fields.

Worker education programs, Silver explained, are best when presented in the language and cultural settings where the audience is most comfortable.

“These students will help us build the bridge from the classroom learning to the best learning approaches,” he said. “They’ll be a part of the tradition of intergenerational learning.”

Others working on the project include Dr. Mildred Maisonet, assistant professor in the College of Public Health’s Department of Biostatistics and Epidemiology; Dr. Sharon Loury, assistant professor in the College of Nursing; and Dr. Joe Florence, professor and director of rural programs for Quillen College of Medicine’s Department of Family Medicine.
An interprofessional research team at ETSU has discovered that the prevalence of metabolic syndrome in Hispanic children is three times higher than the average rate for which it is found in the general population.

Metabolic syndrome is a clustering of several risk factors for cardiovascular disease. The factors also increase a person’s risk for diabetes and stroke. They include elevated triglycerides, abdominal obesity, systolic blood pressure and high glucose levels.

The team’s research began several years ago when Dr. JoAnn Marrs, a faculty member with the ETSU College of Nursing, was seeing patients at the Johnson City Community Health Center.

“I noticed a lot of Hispanic children with elevated triglyceride levels and I really didn’t know where that was coming from or why I was seeing it so much in this population,” Marrs said. “I began wondering if it was dietary or perhaps environmental or maybe even genetic.”

Marrs teamed up with Dr. W. Andrew Clark, the ETSU College of Clinical and Rehabilitative Health Sciences associate dean of Research, and ETSU College of Public Health faculty members Drs. Arsham Alamian and Jonathan Peterson to further study the prevalence of metabolic syndrome in Hispanic children ages 2 to 10.

Funded initially by a Tennessee Board of Regents diversity grant in 2014, the project involved gathering health data from 150 Hispanic children. Although the researchers are still analyzing that data, the preliminary results are staggering.

“The statistics show a 15 percent prevalence of metabolic syndrome in this population. In the general population, it is around 4 to 5 percent,” Alamian said. “This population has metabolic syndrome at a higher proportion than any other population that has ever been studied before.”

The researchers hope to develop enough preliminary data through the study to seek additional grant funding for the research from places such as the National Institutes for Health, Clark said.

Ultimately, the group hopes to develop some kind of intervention project to reduce the rate of metabolic syndrome present in Hispanic children.

“With the continued growth of the Hispanic population, especially in this region, that is going to have repercussions on our health care system if we don’t figure this out,” Marrs said. “We need to come up with an intervention strategy.”
East Tennessee State University’s Academic Health Sciences Center (AHSC) is one of approximately 120 such centers in the United States. ETSU is fairly unique among AHSCs because of the size and complexity of our offerings. Through the five health sciences schools, we have more than 35 degree programs, including 10 doctoral degrees. We also offer extensive graduate medical and graduate pharmacy education through our residency training programs.

5 Colleges make up the AHSC

College of Public Health
- First accredited college of public health in Tennessee
- Attracts students from across Tennessee, 46 states and 38 countries in the past few years
- Houses the Tennessee Institute of Public Health, which releases the County Health Rankings each year
- Actively involved with State Department of Health to better understand population health in the region and state

College of Clinical and Rehabilitative Health Sciences
- Offers programs that address workforce shortage issues
- Over 10,000 visits annually to dental hygiene, speech-language pathology and autism clinics
- The Department of Physical Therapy is ranked 14th in the nation by graduateprograms.com.
- Department of Audiology and Speech-Language Pathology is nationally renowned for teaching and research

College of Nursing
- Largest college of nursing in Tennessee with more than 1,100 students
- Runs 13 nurse-managed clinics, including the federally funded Johnson City Community Health Center
- Officially began in 1954, but ETSU has been training area nurses since it opened in 1911
- Leader in nursing education at bachelor, master’s and doctoral levels

College of Pharmacy
- Nation’s only privately funded pharmacy school in a state institution
- Admits 80 students per year and has a 97.5 percent graduation rate
- PGY2 residencies in ambulatory care and internal medicine
- 62 percent of students are from Southern Appalachian region

College of Medicine
- More than 1,900 graduates, 50 percent of whom practice in Tennessee
- 38,000 patient encounters per month
- Admits 72 medical students annually
- 14 residency programs and a Family Medicine Rural Fellowship

See back page for degrees
Silver serving on advisory board for U.S. Secretary of Labor

Dr. Ken Silver, an associate professor in the Department of Environmental Health, was named to serve on the Advisory Board on Toxic Substances and Worker Health, which was established by President Barack Obama pursuant to congressional legislation adopted in December 2014.

The group advises the U.S. Secretary of Labor on technical issues related to the government’s compensation program for sick nuclear workers.

The Department of Labor’s Office of Workers’ Compensation Programs provides compensation and medical benefits to nuclear weapons workers who were diagnosed with medical conditions related to exposure to toxic substances at covered nuclear facilities.

“We will be focused on finding systemic solutions to the problems that claimants with occupational illnesses face when trying to document exposures in the past. Claimants face many tough problems stemming from non-existent or classified records, lack of independent expertise on occupational health, and the passage of time. Also, bureaucracies can be especially brutal on folks who are ill or may be advancing in years,” Silver explained.

“We’ll translate concerns into advice and recommendations.”

Silver is one of 15 members named to the advisory board, which held its first meeting in October in Oak Ridge.

Maier elected president of international professional society

Dr. Kurt Maier, professor and chair of the Department of Environmental Health, was elected to serve as president of the Society of Environmental Toxicology and Chemistry (SETAC), a nonprofit, global professional society with approximately 6,000 members.

SETAC was established to provide a forum for individuals and institutions engaged in the study, analysis, management and solution of environmental problems. Its mission is to support the development of principles and practices for protection, enhancement and management of sustainable environmental quality and ecosystem integrity.

In his role as president of SETAC, Maier will strengthen the international reach of SETAC and continue the Society’s well-established history of addressing environmental issues using science-based methods and objectivity.

Maier’s expertise is in aquatic ecotoxicology, focused on the fate and effects of chemicals in freshwater ecosystems. He is a 28-year member of SETAC and has served in a variety of roles with the organization.
A research project led by Johns Hopkins University in partnership with East Tennessee State University’s College of Public Health has been funded as one of five national Centers of Excellence on Environmental Health Disparities Research. This five-year, $1.5 million federal grant will study the effect of indoor air quality on chronic obstructive pulmonary disease (COPD) morbidity in urban and rural areas.

The Centers of Excellence program is a partnership between the National Institutes of Health and the U.S. Environmental Protection Agency designed to improve health in communities overburdened by pollution and other environmental factors that contribute to health disparities.

Johns Hopkins University will work with ETSU to not only compare urban and rural effects on COPD but also the impact of improved dietary intake on preventing or exacerbating air-pollution related COPD morbidity. Researchers are aiming to determine the sources leading to poor air quality in households in the East Tennessee region and then plan to look at how that correlates to COPD symptoms.

“We have a lot of information on urban areas as far as indoor air quality. What we don’t have information on is what happens in areas like ours,” said Dr. Mildred Maisonet, assistant professor in the Department of Biostatistics and Epidemiology and the lead ETSU faculty member on the research project. “From this research, we expect we’ll get a better picture of the state of indoor air quality in our region. It will help us to better understand the influence of the household environment on COPD symptoms.”

In addition to Maisonet several other ETSU College of Public Health faculty members are a part of the research team, including Dr. Ying Li, assistant professor in the Department of Environmental Health; Dr. Phillip Scheuerman, professor in the Department of Environmental Health; Dr. Claudia Kozinetz, chair of the Department of Biostatistics and Epidemiology; and Dr. Kurt Maier, chair of the Department of Environmental Health.

Paula Masters, assistant dean for Student Services in the College of Public Health at ETSU, was awarded the Doris Spain Award for Distinguished Service at the Tennessee Public Health Association’s annual meeting.

The award is presented to a TPHA member who has made outstanding contributions to the association over a period of several years.

Masters served as TPHA president in 2014. She also has served on the board of directors and has chaired various committees during her membership. In receiving the award, Masters was also recognized for her efforts as director of the state’s Public Health Training Center, which provides educational opportunities for members of the public health workforce.

Pictured above, from left to right, Dr. John Dreyzehner, Tennessee Department of Health Commissioner; Paula Masters; and Ami Mitchell, TPHA president.

Dr. Randy Wykoff received the Cup of Kindness Award, a community service award that honors an individual for excellence in the area of public health. Dr. Mike Stoots, one of the longest-serving faculty members in the college, was given the Innovation Award for his development of new ways of teaching.

Dr. Rob Pack was recognized for his dedication to research related to prescription drug abuse.

Ginny Kidwell was honored for her work as director of the Tennessee Institute of Public Health.
Researchers to study microorganisms living in Sinking Creek

Improving Hancock County health conditions

The Tennessee Institute of Public Health (TNIPH) housed in the ETSU College of Public Health was awarded a grant from BlueCross BlueShield of Tennessee Health Foundation to build on the progress of one of its ongoing projects. The grant will allow for the expansion of TNIPH’s original Regional Roadmap for a Healthier Appalachian Tennessee project and the subsequent two phases of the effort.

Dr. Phil Scheuerman, a professor in the ETSU College of Public Health’s Department of Environmental Health, is working with Dr. Karl Joplin, in the Department of Biological Sciences in ETSU’s College of Arts and Sciences, to conduct the analysis of Sinking Creek, a body of water known to be contaminated with fecal pathogens.

The initial project strengthened community-based efforts to improve health, wellness and prevention in at-risk Tennessee counties of Appalachia by offering training, technical assistance and mini-grants to enhance multi-sector collaboration.

The second phase, Healthy WEST: Working to Energize and Strengthen Tennessee, focused on rural counties in West Tennessee while the third phase, Regional Roadmap 2: Down the Road to a Healthier Appalachia, allowed the TNIPH to continue working with community coalitions.

The new project, Healthy Middle TN, will bring the model into 21 counties in Middle Tennessee and marks the fourth phase of the Regional Roadmap program to be implemented in the state. The first three phases are near completion and have extended into 52 Appalachian counties in East and Middle Tennessee and into 20 West Tennessee counties where similar unhealthy lifestyles and other serious challenges exist.

Funding for the fourth phase means the project has expanded its outreach into all of Tennessee’s counties with the exception of Shelby and Davidson counties.

“Public health is the third critical component, along with education and economic development, for significantly improving overall quality of life in our communities, state and nation,” said Ginny Kidwell, TNIPH executive director. “Our goal with this project is to further expand and strengthen community-based efforts to improve health, wellness and prevention at the grassroots level across Tennessee. Greater involvement leads to health outcomes that effectively address locally identified issues.”

The Tennessee Institute of Public Health (TNIPH), in partnership with the Rural and Appalachian Health Collaborative, both at the ETSU College of Public Health, has been awarded a grant from the BlueCross BlueShield of Tennessee Health Foundation to develop a “Model to Interrupt Social Determinants of Rural Health” in Hancock County.

The project will focus on Hancock County, one of the least healthy counties in Tennessee. Working with local partners, the research team will evaluate the social determinants of health in Hancock County, especially how they relate to community capacity, community readiness and levels of willingness to create a culture of health. The team will attempt to better understand the beliefs, perceptions and intentions of rural Hancock County and how these can impact health.

Ginny Kidwell, TNIPH executive director, will serve as principal investigator for the grant. Paula Masters, assistant dean for Student Services, will serve as co-principal investigator. Dr. Kate Beatty, assistant professor in the Department of Health Services Management and Policy, and Dr. Megan Quinn, assistant professor in the Department of Biostatistics and Epidemiology, will also serve on the project team.

The goal, she noted, is to create an improved model for identifying pollution sources affecting freshwater streams in order to develop strategies to remediate pollution.
Adegbemisola “Khadijat” Aregbe, a junior pre-medical undergraduate student in the Department of Health Sciences, was awarded the 2016 Boris Franzus Memorial Scholarship by the ETSU Department of Chemistry. The award, which is presented once a year, is given to an outstanding student in undergraduate organic chemistry. Originally from Nigeria, Aregbe lived in London for five years where she attended Kings College University before transferring to ETSU. Although her desire is to pursue a career in medicine, Aregbe has developed a very strong interest for public health, especially when it comes women’s health.

Their subsequent article, published in the Journal of Social, Behavioral and Health Sciences, analyzed survey findings regarding the quality of life of individuals in households affected by Ebola, both during and after the recent epidemic in West Africa. The findings were obtained through a partnership between Playing to Live! and the Liberian non-profit organization, Renewed Energy Serving Humanity.

Data were collected from Liberian women afflicted by Ebola, both survivors of the virus and non-infected individuals living in Ebola-affected homes. This research is one of the first statistical analyses examining factors diminishing quality of life: negative experiences, stigma and psychosocial symptoms among females affected by the virus after the outbreak.

The results of the research indicate women who are survivors of the Ebola virus disease demonstrate significant differences in stigma and psychosocial stress when compared to their female peers.

Researchers study impact of Ebola on women infected with the disease

Alic’es Decosimo, a doctoral candidate in the College of Public Health and founder/executive director of the non-profit Playing to Live!, and Dr. Megan Quinn, an assistant professor in the College of Public Health, recently conducted research that looks at women affected by Ebola.

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Wellness Peer Educators

Through a three-credit course taught for the first time in spring 2016 in the College of Public Health, 14 students went through a national peer educator program that aims to build a well-educated and sustainable peer education group on a campus.

The students are among the first-ever nationally certified Wellness Peer Educators on the campus. They gained critical knowledge to ultimately be able to provide information to peers and make referrals to appropriate campus resources, provide outreach activities and presentations to students and develop group action plans for health promotional activities on campus. In addition to directing students to resources available to them, the peer educators aim to engage the campus community through health education programs.
Faculty publication highlights

**Drs. Nathan Hale and Kate Beatty,** assistant professors in the Department of Health Services Management and Policy wrote, “Local Health Departments as Clinical Safety Net in Rural Communities,” which was published in the American Journal of Preventive Medicine and examines the differences in clinical services provided by rural and urban local health departments. Hale’s paper, “Rural Area Deprivation and Hospitalizations Among Children for Ambulatory Care Sensitive Conditions,” was also published in 2016 in the Journal of Community Health. Using hospitalization data from nine states spanning the country, Hale looked at hospitalizations of children that could have been prevented if timely and appropriate primary care had been given in the first place.

Three faculty members co-authored an article published in Maternal and Child Health Journal. The article, “Weight Misperception and Health-Related Quality of Life in Appalachian Adolescents in the United States,” was written by **Dr. Jodi Southerland,** lead author and clinical instructor in the Department of Community and Behavioral Health; **Dr. Deb Slawson** from the Department of Biostatistics and Epidemiology; and **Dr. Liang Wang** from the Department of Biostatistics and Epidemiology, and Dr. Megan Quinn, assistant professor in the Department of Biostatistics and Epidemiology, led an interprofessional group of students to Nicaragua as a part of Interprofessional Perspectives on Global Health course.

**Dr. Patrick Brown Selected for POGIL Project 2017 Early Achievement Award**

**Dr. Patrick Brown,** assistant professor in the Department of Health Sciences, has been named a 2017 Early Achievement Award winner by the POGIL Project.

POGIL, or Process Oriented Guided Inquiry Learning, is a student-centered, group-learning instructional strategy and philosophy developed through research on how students learn best.

The award, given to one postsecondary and one secondary winner, honors POGIL practitioners who are new to the effort, have distinguished themselves by advancing the goals of the POGIL Project and have an exceptional level of enthusiasm for active learning.

“Winning the award is very special because the winners aren’t chosen by our students or our peers, but by our mentors,” Brown said. “It is a wonderful feeling to have the acclaim of the people who taught me not just about POGIL, but about how to be a transformative educator.”

**ETSU first to be named ‘Skin Smart Campus’**

ETSU is the first higher education institution in the nation to be designated an Indoor Tan-Free Skin Smart Campus by the National Council on Skin Cancer Prevention (NCSCP). The designation was officially announced in August.

The NCSCP launched its Indoor Tan-Free Skin Smart Campus Initiative in response to the Surgeon General’s call to action to prevent skin cancer. The initiative focuses on promoting skin cancer prevention and providing related education on college campuses.

“One of the goals of the Call to Action is to reduce harms from indoor tanning, and we believe the Indoor Tan-Free Skin Smart Campus Initiative is a big step in that direction,” said Dr. Sophie J. Balk, NCSCP co-chairperson. “By educating college students about skin cancer risk and eliminating indoor tanning on college campuses, we hope to reduce melanoma incidence down the road.”

The NCSCP selected ETSU as its first Skin Smart Campus based on the university’s strong track record in research and advocacy relating to skin cancer prevention and the effects of indoor tanning. Much of that work is being done by Drs. Katie Baker and Joel Hillhouse in the College of Public Health.

**Graduate students survey mosquito-borne diseases**

In summer 2016, Dr. Megan Quinn, assistant professor in the Department of Biostatistics and Epidemiology, led an interprofessional group of students to Nicaragua as a part of Interprofessional Perspectives on Global Health course.

The major project for the course was to assist local health promoters to complete a community-wide survey on mosquito-borne illness/disease in Nicaragua. The goals of the survey were to assess community knowledge regarding mosquito-borne diseases, prevention methods, and community concerns about mosquito-borne disease.

Students from the MPH, MD and PharmD programs at ETSU participated in the course.

As a part of the survey, 81.9 percent of the homes in the Nueva Vida community of Ciudad Sandino were surveyed, representing over 5,700 individuals. This group reported over 1,500 cases of mosquito-borne disease (malaria, dengue, chikungunya) including 12 cases diagnosed as Zika. The actual prevalence of these conditions, while high, is uncertain, since self-diagnosis is common.
The Department of Physical Therapy celebrated 20 years in 2016. A dinner celebration in downtown Johnson City took place in November where the department also kicked off its ETSU PT Alumni Society. The event included a slideshow of photos dating back to the founding years of the program, a presentation by founding chair Duane Williams and faculty highlights and recognitions presented by current department chair Trish King. The College of Clinical and Rehabilitative Health Sciences is in the development and planning stages of a major remodel of the Department of Physical Therapy at ETSU. The project will include the creation of state-of-the-art classrooms, labs, meeting spaces and faculty offices.

Dr. Craig Wassinger, an associate professor in the Department of Physical Therapy, completed an eight-month training program to become one of the nation’s first certified therapeutic pain specialists.

He received the national certification through a new program by the International Spine & Pain Institute and Evidence in Motion and was among just 20 students in the inaugural cohort.

Wassinger, a physical therapist who has been conducting pain-related research since 2008, said he started to see a lot of patients with chronic pain and realized he needed to do something different to better serve those individuals.

“If we could make the pain go away altogether, of course, that’d be great,” Wassinger said. “But no one has that silver bullet and you can chase that forever.” Instead, Wassinger said it is about changing a patient’s mindset as it relates to pain.

“Once you’ve had pain for a long time, pain actually becomes the disease. The original injury is as healed as it is going to be and the pain becomes the problem,” Wassinger said. “A lot is helping them to understand what is going on with their pain. The problem is the way their nerves are acting.”

By reframing an injury, Wassinger said the patient often becomes less fearful of the pain he or she experiences and is willing to push harder in physical therapy because of the understanding that the pain is a part of the process and not furthering the injury.

“Once they have that shift in framework, they can be more active,” he said. “Then hopefully that pain can go away.”

Wassinger believes therapeutic pain services could complement the use of prescription drugs to improve a patient’s pain level, and, in some cases, may be a total substitute for pain medication.

“There is a huge prescription drug abuse problem in the United States and this is an alternative that is hugely needed and could help prevent opioid addiction,” he said.

It’s not just Wassinger’s patients who are benefitting from his certification as a therapeutic pain specialist. Students coming through ETSU’s physical therapy program are also coming out ahead as Wassinger helps lead curriculum direction as it relates to pain content.
A top-tier academic journal named an article written by Dr. Chayadevie Nanjundeswaran, a speech-language pathologist and assistant professor in the College of Clinical and Rehabilitative Health Sciences, the best speech-language pathology paper published in 2015.

In writing the article, Nanjundeswaran created a voice fatigue index (VFI) to help identify individuals with vocal fatigue and characterize their complaints.

“Vocal fatigue is experienced so commonly by professional voice users, be it teachers, singers, pastors, really anyone who uses their voice for work,” said Nanjundeswaran, who runs ETSU’s Voice Clinic. “But nobody had defined what it was. The term has just been implicitly used.”

As part of her doctoral studies, Nanjundeswaran set out to develop a way to better determine what the typical vocal fatigue patient experiences with the condition.

“When you say voice fatigue, everyone says it is tiredness of voice, but there are other symptoms, too,” she said. “We as clinicians and researchers understand what it means, but a population that experiences it may not. Laying out the symptoms may help them recognize it.”

Nanjundeswaran began her research more than five years ago, creating a questionnaire handed out to patients at the University of Pittsburgh and the Vanderbilt Voice Center.

“The results show the VFI can identify individuals with probable vocal fatigue with good reliability, validity, sensitivity and specificity,” Nanjundeswaran said. “The index also helped determine three factors that characterize vocal fatigue: tiredness of voice and voice avoidance; physical discomfort associated with using voice; and improvement of symptoms with rest.”

In July 2015, the Journal of Voice published Nanjundeswaran’s article, “Vocal Fatigue Index (VFI): Development and Validation.” Since then, Nanjundeswaran has received requests from researchers around the globe to have her work translated and culturally adapted for use in other countries.

In 2016, Nanjundeswaran accepted the Best Paper Award for the article at The Voice Foundation’s 45th annual symposium.

“I knew the VFI was gaining recognition in the voice world, which was my intent – for people to be able to use it to help patients with voice fatigue,” Nanjundeswaran said. “But I wasn’t expecting this award. Getting recognition for something I worked most of my doctoral education for is very satisfying. I am very humbled.”

The College of Clinical and Rehabilitative Health Sciences hosted what is believed to be the first “Loud Shirt Day” to take place in the country. Originating in Australia, Loud Shirt Day is an effort to bring awareness to childhood deafness by encouraging individuals to wear their most colorful, or “loud,” shirts for a day. Several students, faculty and staff members at ETSU took part in the local event in October.

Byington named to All-Southern Conference Faculty Team

At the start of 2016, the Southern Conference named the inaugural All-Southern Conference Faculty Team with representatives from all 10 member schools. ETSU selected Dr. Randy Byington for this honor.

“ETSU is home to many outstanding faculty members and I am humbled to be selected for this honor,” Byington said. “In American society there is a close relationship between a university’s academic standing and its athletic standing. It is a pleasure to work with faculty colleagues, university administrators and members of the athletic department staff as ETSU continuously strives to advance these facets of the university.”

Byington, an associate professor in the Department of Allied Health Sciences, also teaches in ETSU’s nationally recognized rural health program. He also oversaw the rapid growth of ETSU’s online program in Allied Health Leadership as the program director. A research methodologist for Allied Health Sciences, Byington has authored or co-authored more than 25 peer-reviewed publications.
The College of Clinical and Rehabilitative Health Sciences held an Honors Reception in late March to celebrate and recognize students from the college who have achieved excellence in both the classroom and clinical settings. The event also honored four members of the college’s faculty and staff.

Dr. Beatrice Owens, an assistant professor and the assistant chair in the Department of Physical Therapy, earned the Distinguished Faculty Award for Service. Also serving as the graduate admissions coordinator for the department, Owens, an ETSU alumna, works with more than 500 student applications per year.

Dr. Chayadevie Nanjundeswaran, an assistant professor and speech-language pathologist, was awarded the Distinguished Faculty Award for Teaching. Nominators lauded Nanjundeswaran for incorporating problem-based learning into the classroom as well as her use of technology to teach students.

Dr. Michelle Lee, assistant professor in the nutrition program, received the Distinguished Faculty Award for Research. Lee has been the principal investigator or co-principal investigator on more than 20 grants that have resulted in $2.5 million in external funding.

Elizabeth Musick, an executive aide for the Department of Allied Health Sciences, received the ‘Outstanding Staff’ award. Nominators referenced Musick’s “attitude of kindness” and called her “dependable, personable and dedicated.” She works in the front office of the Nave Center in Elizabethton.

PT faculty member develops national guidelines for vestibular rehabilitation

Dr. Courtney Hall, an associate professor in the Department of Physical Therapy, has helped draft the first-ever clinical guidelines relating to vestibular rehabilitation in physical therapy.

Hall specializes in vestibular rehabilitation, a form of therapy intended to alleviate primary and secondary problems caused by vestibular (inner ear balance) disorders. Vestibular rehabilitation primarily aims to reduce dizziness, vertigo and falls from imbalance.

“There are guidelines for a variety of musculoskeletal conditions such as back pain, but there have not been any established for vestibular rehabilitation,” Hall said. “About four years ago, I reached out to a colleague and said we needed to develop these clinical practice guidelines.”

Hall, along with a colleague from the University of Pittsburgh and a professor emerita from Emory University, has been working on those guidelines ever since. “We consulted with a committee of physical therapists, audiologists, neurologists, ENTs and patient advocates on this because we needed to have input from multiple disciplines,” she said. The process also involved systematic literature research, determining what the best practices are based on evidence from the field over the last several years.

The clinical practice guidelines include 10 recommendations, or “action statements,” related to the treatment of patients with vestibular disorders. “We also identify knowledge gaps – those areas where the research and evidence are still missing,” Hall said. “Hopefully, researchers will start to fill in those gaps.”

The guidelines are sanctioned by the American Physical Therapy Association and last month they were published in the Journal of Neurologic Physical Therapy.

Several students in various programs within the college took part in the JDRF One Walk, the leading fundraiser for the JDRF Diabetes Foundation. Locally, it took place at Warrior’s Path State Park in Kingsport, with more than $230,000 being raised. At the event, ETSU students distributed information they developed on the different disciplines that address diabetes. Those include nutrition, physical therapy, audiology and dental hygiene. Those taking part were clinical nutrition students Kacy Wiley and Alison Martin and physical therapy students Brianna Mullins, Megan Morton and Maven Ford. Also taking part was Dr. Lynn Williams, associate dean.
Students recognized for classroom, clinical excellence

Marshall Wagner was named the “outstanding undergraduate” student for the college. Wagner, of Gray, graduated in May with a degree in nutrition and foods. While at ETSU, Wagner conducted research in the laboratories of multiple faculty members and maintained a 3.98 GPA.

Kristi Moore, of Mount Juliet, earned the “outstanding graduate” student award. Moore graduated in May with a master’s degree in speech-language pathology after successfully defending her thesis, which was related to interprofessional patient simulation training.

Christina Lee, of Rose Hill, Virginia, earned the “outstanding thesis” award for the Master of Science in Allied Health program, which is offered 100 percent online. Lee’s thesis focused on radiography clinical instructors.

Two audiology students receive national scholarship

Two ETSU audiology students were among just six individuals across the country to be awarded the 2016 William F. Austin Scholarship from Starkey Hearing Technologies.

Paige Waddell, of Dublin, Virginia, and Aimee Johnson, of Dublin, Georgia, both received the scholarship, which recognizes outstanding audiology graduate students pursuing clinical, teaching and research careers. The scholarships are worth $10,000 each.

Waddell is completing her fourth-year externship with UNC Hospitals. Clinically, she is passionate about helping those with intellectual disabilities and those with a low income. Since beginning her externship with UNC’s Adult Cochlear Implant Program, Waddell has also become passionate about working with adult cochlear implant candidates and recipients.

Johnson is a third-year audiology student whose interests are divided between pediatric audiology, vestibular assessment and accessibility of audiologic services and amplification for individuals in rural settings. She works as a research assistant in the vestibular laboratory at the Quillen Veterans Affairs Medical Center and is involved in several research studies that investigate the effects of noise and blast-related injuries on vestibular function.

‘Shake It For Autism’

Speech-language pathology students at ETSU and occupational therapy students from Milligan College joined forces to hold the sixth annual Shake It For Autism event, a cardio dance workout that raises money for ETSU’s Nave Language Center. The Nave Center serves children with autism spectrum disorder and related communication and social pragmatic challenges. Approximately 75 people took part in the event this year, raising more than $700 to support the Nave Language Center’s summer camps for children with autism.
HALL of FAME

2016 Distinguished Alumni Awards are:

Maj. Melissa Ogle Folsom – Folsom is a three-time graduate of ETSU, receiving both her master’s degree in physical therapy as well as her doctor of physical therapy degree from ETSU in addition to her bachelor’s degree in exercise science from ETSU. A 10-year veteran of the United States Army, Folsom was deployed in 2007-2008 to Baghdad where she served as part of the 31st Combat Support Hospital. She remains an active duty and currently works as the chief of rehabilitation services at Bayne-Jones Army Community Hospital in Fort Polk, Louisiana.

Laurie Higgins – Higgins completed dual bachelor’s degrees in both speech and hearing pathology and psychology in 1980, then earned a master’s degree in audiology in 1982 from ETSU. She spent 25 years as chief clinical audiologist and managing director of Watauga Hearing Conservation. A strong supporter of the audiology program at ETSU, Higgins has funded an audiology scholarship since 2009 and served as the first president of the CCRHS Philanthropy Board.

Pamela Ditto – Ditto was in the first class of cardiopulmonary science graduates at ETSU in 1978. Throughout her 38-year career in the field of respiratory care, she has taken on many roles as well as her doctor of physical therapy degree. Currently, she serves as the regional clinical liaison for Signature Healthcare and vice president for aptHealth Solutions.

Chad Capps – Capps received his bachelor’s degree in physical therapy from ETSU in 1998. He currently serves as the director of physical therapy at Unicoi County Memorial Hospital. For the past 18 years, Capps has served as a clinical site instructor for ETSU physical therapy students and currently serves on the College of Clinical and Rehabilitative Health Sciences Philanthropy Board.

Dr. Ann Lowdermilk – Lowdermilk graduated from ETSU with a bachelor’s degree in physical therapy and has two master’s degrees. She is currently pursuing a doctorate in education from ETSU. For the past 10 years, Lowdermilk has been an associate professor and director of the Physical Therapy Assistant program at Walters State Community College. She has worked in health care for 34 years.

Louise Skalko – Skalko graduated from ETSU in 1984 and worked as an educator for nearly 30 years before entering the corporate world. Skalko suffered a mild hearing loss in early childhood. By 1995, her hearing had deteriorated to the point that she reluctantly retired. After cochlear implant surgery and a six-month process of relearning how to hear and translate sounds, she moved back to Johnson City, and went on to fund the development of the Cochlear Implant Clinic in the College of Clinical and Rehabilitative Health Sciences.

Student studies people’s ability to ‘fill in the blanks’ during conversations

A student in the audiology department completed a study evaluating whether people with hearing loss have a harder time than normal listeners at “filling in the blanks” of a conversation.

When someone is in an environment with a lot of background noise, it is not uncommon for that individual to only hear parts of words being spoken during a conversation, explained Kadie Sharrett, a doctoral student in the College of Clinical and Rehabilitative Health Sciences. It is actually the person’s cognitive ability to fill in the gaps that helps him or her fully understand what words have been spoken.

“It is about more than the sensory organ of the ear. It is cognitive,” Sharrett said. “So we wanted to see if those with hearing loss are able to fill in those blanks as adequately as normal listeners.”

Working with Dr. Richard Wilson, an ETSU alumnus and faculty member, Sharrett spent 10 months studying veterans suffering from similar degrees of hearing loss to determine their cognitive abilities to piece together conversations.

“We found there’s a lot more variability in listeners with hearing loss,” she said. “In general, they are not as good at it.” The findings could help better determine appropriate tools and training opportunities to assist individuals in improving their cognitive abilities to understand interrupted speech. “There has been research to show that the more they practice, the better they get at it,” Sharrett said.

Sharrett presented her findings at the American Auditory Society’s annual meeting in Scottsdale, Arizona. The study was funded by the James H. Quillen VA Medical Center through its Research Enhancement Award Program.
In fall 2016, East Tennessee State University and Wellmont Health System partnered to expand the university’s accelerated bachelor of science in nursing program in Kingsport and increase the number of nurses in the community.

The new ETSU-Holston Valley Medical Center Accelerated BSN Program got underway that semester, with 20 inaugural students taking classes. The program is expected to welcome 20 additional students into the fold each fall and spring semester.

Through the partnership, ETSU provides faculty for all classroom instruction, which takes place at the ETSU at Kingsport Downtown campus. Wellmont provides faculty for all clinical training and instruction, which primarily takes place at Holston Valley.

Both entities will be involved in other aspects of student training, including interprofessional education and simulation.

“We are well aware of the acute nursing shortage in the Tri-Cities area and recognize the critical need for educated nursing personnel to sustain the delivery of quality health care to the residents of the region,” said Dr. Wendy Nehring, dean of ETSU’s College of Nursing. “Through this partnership, we are able to expand the number of nursing students able to attend ETSU, which will ultimately lead to more well-educated nursing professionals in our region. We are thrilled to be partnering with Wellmont to be able to do this.”

As a result of the program, 20 additional students were able to start the nursing program this past fall who otherwise would not have been admitted due to a lack of capacity.

Before students are accepted into the accelerated BSN program they must complete prerequisite coursework. Once they have entered the program, they are on track to complete their education and training requirements in five semesters and then will be ready to take the state exam to become a registered nurse.

As a part of the partnership, Wellmont will give graduates of the program priority consideration for nursing and nurse tech jobs at its facilities.

Dr. Lisa Smithgall, Holston Valley’s vice president of patient care services and the program’s co-director, said this venture is an excellent opportunity to showcase the importance of serving patients in a hospital.

“Holston Valley and other Wellmont hospitals have been blessed with a history of outstanding nursing care that has improved patients’ lives,” said Smithgall, who earned her doctorate degree in nursing from ETSU. “Through their hard work and dedication, hospital nurses play an essential role in our care model by working with patients who are acutely ill. We are excited to collaborate with ETSU to strengthen the pipeline of nurses by creating this avenue for students to receive their clinical training at Holston Valley.”

To assist the students with their hands-on experience at Holston Valley, the hospital relies on the expertise of 10 nurses who have earned their master of science in that field, as well as about 40 other highly skilled nurses who provide patient care at the hospital. The hospital provides a four-room simulation lab and an assessment lab, both on the second floor, which enables students to further develop their skills as emerging professionals.

In addition to their training at Holston Valley, nursing students receive acute care and long-term care training at Wexford House, a 174-bed Wellmont skilled nursing facility on John B. Dennis Highway.

“As a proud community member for more than 80 years, Holston Valley is committed to advancing the nursing profession by supporting the next generation of caregivers in Kingsport,” said Tim Attebery, the hospital’s president. “ETSU, Holston Valley and Wellmont have worked together for decades to strengthen the quality of care in our region, and this initiative is an excellent way for us to give back to a community that has extensively supported our efforts. Holston Valley stands behind our innovative and compassionate nurses, and this newest partnership recognizes the remarkable work they perform every day.”

Dr. Wilsie Bishop, ETSU’s vice president for Health Affairs, recognized the importance of educating nurses to work in the region.

“As a nurse myself, I know all too well the significant role this profession plays in the health care landscape,” she said. “Through this partnership, we are taking yet another step to ensure that patients of the region continue to receive excellent care, which is one of the many things that makes Northeast Tennessee such a great place to call home.”

For more information on the new program, contact the ETSU College of Nursing, at 423-439-4578 or visit www.etsu.edu or www.wellmont.org.
The College of Nursing hired Dr. Myra Clark as its director of graduate programs. Clark comes to ETSU from the University of North Georgia, where she most recently served as the graduate programs coordinator and family nurse practitioner program coordinator.

Arriving at ETSU in the fall, Clark is focused on moving the graduate nursing programs forward at the institution and serving as an advocate for students in the programs as well as faculty and staff, she said.

Clark began as a diploma nurse in the 1980s, receiving her diploma of nursing in 1981 from Georgia Baptist Hospital School of Nursing.

“From there, it took me 20 years to get my bachelor’s degree in nursing, so I understand the sometimes crooked journey we end up taking,” said Clark, whose own schooling was delayed first by having children and then by the unexpected death of her first husband when the couple’s two sons were very young.

In 2005, Clark earned her bachelor of science degree in nursing from Georgia Baptist College of Nursing at Mercer University, and, in 2007, received her master’s degree as a family nurse practitioner as well as a post-master’s certificate in nursing education from North Georgia College and State University.

She received her Ph.D. in nursing from the University of Virginia in 2012. Her dissertation focused on the experiences of uninsured residents of Southern Appalachia who had been diagnosed with diabetes. She continues to conduct research on the topic.

Clark has served as a faculty member in both undergraduate and graduate nursing programs at the University of Virginia and the University of North Georgia, formerly North Georgia College and State University. She also has worked as a family nurse practitioner at a variety of health clinics in Virginia and Georgia. She is the co-editor of the book, “Practice-based Clinical Inquiry in Nursing for DNP and PhD Research,” which was published earlier this year.

Clark is married to Dr. Steve Clark, a physician and native of Kingsport. She has four sons – Dustin, 32; Sean, 30; Ian, 18; and Adrian, 17. Outside of work, Clark enjoys traveling and spending time with her two horses.

The College of Nursing named Melessia Webb its new director of undergraduate programs. Webb, a native of Erwin, comes to ETSU from Northeast State Community College, where she was hired in 2007 to start the college’s nursing program. She served as the dean of nursing since 2008 and, prior to that, was the director of nursing.

A three-time graduate of ETSU, Webb also worked at the university from 2001 through 2007 as an assistant professor in the College of Nursing and the coordinator of its RN to BSN program as well as coordinator for the Clinical Nurse Leader Track of the Master of Science in Nursing. She also spent several years working at the James H. Quillen VA Medical Center and Holston Valley Medical Center.

Webb, a licensed registered nurse, joined ETSU in the fall, serving as an assistant professor as well as the director of undergraduate programs.

“Coming back to ETSU was really like coming home,” she said. “It is exciting and I couldn’t be more appreciative of this opportunity to be back here.”

As the director of undergraduate programs, Webb manages all undergraduate nursing curricula and professional development of the faculty.

“My No. 1 goal right now is to provide stability to the undergraduate program,” she said. “My priorities are successful program outcomes and student satisfaction.”

Webb received her bachelor of science degree in nursing from ETSU in 1996. She earned a master of science degree in nursing education from ETSU in 2000 and her Ed.D. in education from ETSU in 2004. Her dissertation focused on analyzing the factors affecting student enrollment, outcomes and continued participation after completing a Basics of Patient Care course at ETSU.

Webb lives with her husband, Shane Gouge, and their two dogs in Elizabethton. Outside of the office Webb likes to spend time with family and travel.
Nearly $669,000 grant from Health Resources and Services Administration (HRSA) is helping ETSU College of Nursing undergraduate students get a better understanding of employment opportunities outside of hospitals, particularly jobs in community-based primary care settings.

“The majority of nurses work in a hospital setting where you see an acute condition – the patient comes in when they are already sick,” said Flo Weierbach, an associate professor in the College of Nursing and manager of the grant project. “In the community, the focus is more on preventative health and meeting people where they are at, helping them be as healthy as possible within the confines of their communities.”

Recognizing that the nation is shifting to a more community-focused health care approach, Weierbach said it became increasingly important to provide the opportunity for undergraduate nursing students to have immersion experiences in community health care settings.

The Appalachia Senior-level Community-based Experiences in Northeast Tennessee (ASCENT) project invites final-semester seniors seeking a bachelor of science in nursing degree to take part in a three-month experiential training in community-based primary care settings.

Seven nursing students completed their experience in December as part of the inaugural cohort while another 16 began their rotations at the start of 2017. The students train within seven of the College of Nursing’s clinics located in the region, working one-on-one with a registered nurse in providing community-based primary care.

In addition to enhancing their skills related to general nursing roles and responsibilities, the students develop knowledge and skills related to primary care work in nursing and case management roles as well as the unique needs of primary care patients, particularly those with multiple chronic conditions.

“I would like these students to understand the challenges their patients face and how nurses use their knowledge to help the patient problem-solve and meet their needs,” Weierbach said. “They see how people really struggle to afford their medications and appropriate food, or how difficult it can be to get transportation to go to the doctor.”

A long-term goal, Weierbach added, is to generate more interest among these nursing students in pursuing careers in community health.

The HRSA grant is a two-year grant; however the College of Nursing will be looking at potential ways to sustain the effort after the grant expires, Weierbach said.
ETSU College of Nursing Dean Dr. Wendy Nehring helped expand and strengthen schools of nursing across the south by serving as vice president for the Southern Regional Education Board (SREB) through November 2016.

The SREB Council aims to reduce the critical shortage of nurse educators needed to train the nation's registered nurses.

"The Council works to strengthen college-based nursing programs at all levels – associate, bachelor's, master's and doctoral – that prepare registered nurses for entry-level and advanced practice positions," Nehring explained. "We are focused on four key areas – the SREB Nurse Educator Consortium, which is a collaborative of web-based courses for nurse educators; an annual survey of nursing education programs to document important trends; an annual meeting each fall; and leadership development to prepare aspiring nurse educators for leadership roles in academic and practice settings."

The SREB represents 16 states as well as Washington, D.C. It is the only regional organization for nurse educators in the nation affiliated with an interstate compact for education.

Garrett hired as CMO of health clinics

The College of Nursing hired Dr. W. Allan Garrett to serve as the chief medical officer for its 14 nurse-led health clinics throughout the region. Garrett also sees patients at the Johnson City Community Health Center (JCCHC).

Born in Virginia, Garrett received his undergraduate degree at ETSU. He spent several years as an English teacher and was pursuing a graduate degree in English when he decided to instead obtain a medical degree.

"I couldn't stand the sight of blood so I never thought I could go to medical school. Then my brother got hurt and I had no choice but to see blood," Garrett said. "Once I figured out I could handle that, I decided to do what I wanted to do for a career."

Garrett attended medical school at the Medical University of South Carolina in Charleston and returned to ETSU to complete his surgery residency. He worked as a surgeon in the region for a few years before deciding to complete a second residency, this time in family medicine.

Garrett has been practicing family medicine for over 10 years, most recently working at ETSU Family Medicine.

As chief medical officer with the College of Nursing, Garrett holds administrative roles in the development and improvement of all College of Nursing clinics and supervises nurse practitioners. He also sees patients at the JCCHC, where he is currently accepting new patients.

"I'm excited about this new role," he said. "I get to incorporate my two loves – medicine and teaching – in one setting. In that sense, it's kind of like I've died and gone to heaven."

Outside of the office, Garrett enjoys collecting antiques and listening to jazz music. He and his wife, Linda, a nurse practitioner who serves as the chair of graduate nursing at Tusculum College, live in Johnson City with their eight rescue pets.

ETSU takes pledge on opioid education

As part of academic nursing's ongoing efforts to combat prescription drug and opioid abuse across the United States, ETSU proudly announced last spring that it has committed to educating its advanced practice registered nursing (APRN) students on the Centers for Disease Control and Prevention's Guideline for Prescribing Opioids for Chronic Pain.

The commitment was featured in a White House fact sheet as part of the White House Champions of Change event on Advancing Prevention, Treatment and Recovery.

In April, the Administration asked the American Association of Colleges of Nursing's (AACN) member schools with APRN programs to partner on this initiative.

"The College of Nursing recognizes that opioid abuse is a pressing public health crisis, and it is critical that APRN students receive education on current standards. The providers in our clinics also are aware of the serious issue of prescription drug abuse and are trained to address it," said Dr. Wendy Nehring, dean of the College of Nursing. "Our university has been working for years to combat the problem of prescription drug abuse in the Appalachian region and recently established a Center for Prescription Drug Abuse Prevention and Treatment to continue and expand those efforts."

College hosts first ‘Nurses Strong’ 5K

The College of Nursing and its affiliated community health centers hosted their first-ever “Nurses Strong: Walk, Jog, Run 5K” in August. Proceeds from the event were used to further the mission of the College of Nursing’s community health centers, which include the Johnson City Community Health Center, Johnson City Downtown Day Center and the JCCHC/JCHA Partners for Health Clinic.
Dr. Tese Stephens, an assistant professor in the College of Nursing, has spent the better part of a decade researching the importance of resilience in individuals who work in a health care environment.

In looking at how health care professionals can increase their own resilience so they are able to better cope and adapt to stressful work environments, Stephens began her research by studying individuals and populations considered to be resilient.

“I wanted to try to determine characteristics they might have in common,” Stephens said. “Based on my work, in 2013, I developed a resilience model and, ever since, I’ve been testing the model to see how it applies to different groups and situations.”

Holocaust survivors became a natural fit for her research as she aimed to learn more about resilience and also look at health care’s role in social justice, Stephens said. In working closely with the Tennessee Holocaust Commission, she was introduced to a book by Timothy Boyce called “From Day to Day: One Man’s Diary of Survival in Nazi Concentration Camps.”

“It is the diary of Holocaust survivor Odd Nansen, who was an avid writer and artist and a political prisoner from Norway,” Stephens explained. “He was somehow able to keep a diary despite threats of death and, even more, was able to smuggle it out.”

Nansen’s daily musings featured in Boyce’s book have provided great material for Stephens and her resilience research. Working with four College of Nursing doctoral students – Sharon Bigger, Linda Cabage, Jessica Craine and Robyn Tobias – Stephens has been using Nansen’s accounts to see if they match up with her theory of resilience.

Through their work, the team reaffirmed that resilient individuals all seem to have certain “protective factors,” or characteristics. These characteristics include hope, faith, perseverance, flexibility and tenacity.

“Whether it’s a cancer patient, an amputee, someone who has been bullied or the victim of a shooting, there are these things people who are considered resilient draw on to cope,” Stephens said. “So the question becomes, ‘Can we learn them and can we teach them?’ Yes, we can.”

Stephens said there are many things that help individuals learn or enhance resilience.

“A lot of our tendencies are inborn traits, but through practice and repetition, you can learn to change some of them. It has to be an intentional process, though,” she said.

“It is, more or less, forcing the behaviors and practicing them every day.”

Stephens and her team are still analyzing all of their findings from their work related to Boyce’s book. However, she believes Nansen’s “wicked sense of humor” and his constant thoughts about his wife and children were key factors in his own story of resilience.

In early 2017, Boyce visited ETSU to speak about how he came upon Nansen’s diary and the process he went through to get it published. He discussed Nansen and his experiences in the Nazi concentration camps. Nansen died in the 1970s. Following Boyce’s lecture, Stephens and her students gave a brief presentation on the use of the book and their findings thus far.

Two members of the College of Nursing were among those honored as “Healthcare Heroes” by The Business Journal of the Tri-Cities, TN/VA. Each year, the publication recognizes individuals and organizations that have “helped make provision of health care the largest single industry in the region.”

Patti Vanhook, associate dean for Practice and Community Partnerships at ETSU, leads the operations of 14 nurse-led clinics located from Mountain City to Sneedville. Since 2007, Vanhook has been responsible for attaining and administering more than $22 million in federal and state support for the clinics.

Jennifer Whitehead is coordinator of the Johnson City Downtown Day Center, a facility that serves the homeless population of the region with health care and other services. Through a $1 million grant, the center is expanding to be able to increase its patient resources by 400 percent.
Dr. Debbie Byrd was named the new dean of the Gatton College of Pharmacy, succeeding founding dean Dr. Larry Calhoun as of July 1, 2016.

Byrd came to ETSU from the University of Tennessee College of Pharmacy in Knoxville where she served as associate dean of Professional Affairs since 2010. She worked there since 2006, holding various other roles including professor and assistant dean. She also held a position as a clinical professor at the University of Tennessee Graduate School of Medicine's Department of Family Medicine.

Prior to her time at UT, Byrd spent 10 years working at Auburn University's Harrison School of Pharmacy where she served as director of the Office of Experiential Learning.

“Everything I knew about the Gatton College of Pharmacy from the outside was that it was a very well-established, high-quality program. Once I had an opportunity to visit, I also found that the environment and culture that have been built here are very much in keeping with my own values and priorities,” Byrd said. “So many things I value are here at Gatton College of Pharmacy – the smaller number of students, the open-door policy. It’s a family.”

A native of Bradley County, Byrd earned her bachelor’s degree in chemistry from Middle Tennessee State University. She earned her doctor of pharmacy degree from the University of Tennessee College of Pharmacy in Memphis and more recently received a master’s of business administration from Tennessee Technological University.

A licensed pharmacist in both Tennessee and Alabama, Byrd is a member of the American Association of Colleges of Pharmacy, the American College of Clinical Pharmacy and the American Society of Health-System Pharmacists. She also is a member of the Tennessee Pharmacists Association.

Byrd has been invited to give presentations on pharmacy leadership and management in various locations across the country as well as in Saudi Arabia, and holds editorial appointments at a handful of academic journals. She has conducted externally funded research on a variety of topics, including diabetes care as well as strategies to optimize health care for patients at high risk for medication-related adverse events.

Outside of work, Byrd enjoys running and loves to read. She and her husband, Robert, have two sons – Noah, 15, and Nathan, 11.
National champions, 2nd time

For the second time in school history, the Gatton College of Pharmacy at East Tennessee State University was named the national champion of the American College of Clinical Pharmacy (ACCP)’s Clinical Pharmacy Challenge.

The Clinical Pharmacy Challenge is a unique pharmacy student team competition that draws participation from institutions across the country. The online competition gave 112 teams the opportunity to compete in up to four rounds of competition in Hollywood, Florida, where they answered questions about everything from cardiovascular disorders and critical care to immunology and palliative care.

After successfully making its way to Hollywood and defeating opponents in the first three rounds of competition there, ETSU’s three-man team moved to the championship round against Oregon State University’s College of Pharmacy, winning the match and championship title.

Members of the winning team are fourth-year pharmacy students Brad Dedic, of Downs, Illinois; Dan Schroedl, of Syracuse, New York; and Wade Tugman, of Mountain City. Gatton College of Pharmacy assistant professor Dr. David Cluck serves as the team’s coach.

The victory marks the second time the Gatton team has come out on top in the competition, with its first championship coming in 2013.

“It’s pretty impressive, really. Our students have only competed in the ACCP Clinical Pharmacy Challenge for five years, and during that time, we have earned the championship twice,” said Dr. Debbie Byrd, dean of the college. “I am so proud of these three gentlemen. The teamwork and level of knowledge they displayed was astounding.”

Parkey earns internship at Johns Hopkins

Shannon Parkey, a member of the GCOP Class of 2018, was awarded a prestigious summer internship at Johns Hopkins University.

She spent the summer taking part in the Johns Hopkins Pharmacy Internship Program through which she worked at the Johns Hopkins Weinberg Outpatient Pharmacy in Baltimore. The pharmacy, located in The Sidney Kimmel Comprehensive Cancer Center, services approximately 140 acute care beds and two high-volume outpatient oncology infusion centers.

The acute care patient areas include surgery, medical oncology, benign hematology, hematologic malignancies and bone marrow transplantation.

The primary outpatient infusion center cares for approximately 150-200 patients per day with a variety of malignancies. And the inpatient/outpatient infusion center cares for 50 patients undergoing bone marrow transplants. Additionally, the Oncology Investigational Drug Service supports 400-500 trials within the various practice settings.

“The internship gave me access to what it’s really like to be immersed in health system pharmacy. I had the opportunity to work on many projects that I feel impacted the department but also helped me develop and sharpen my leadership skills,” Parkey said. “I worked closely on projects with other students from across the country, which allowed us all to challenge each other to look at issues from different perspectives.”

Parkey worked on a variety of projects during her internship, including the development of new inpatient technician workflow, working with the department when Hopkins went live with EPIC (new electronic health record) and development of EPIC training tools for inpatient technicians.

On average, only 20 students are hired each year for the internship program.

Gatton College of Pharmacy receives continued full accreditation

The Doctor of Pharmacy degree program at Gatton College of Pharmacy earned continued full accreditation from the Accreditation Council for Pharmacy Education (ACPE). The accreditation is valid through 2024.

“This accreditation confirms that we continue to meet all standards required for a quality-assured professional education,” said Dr. Adam Welch, associate dean for Assessment and Academic Affairs at the Gatton College of Pharmacy. “It confirms that our 319 student pharmacists, including the 17 enrolled in dual degrees and 25 in our research concentration, are in a position to make a lasting impact on patient care.”

As a leader of pharmacy education in the southeast since its creation in 2005, the Gatton College of Pharmacy has graduated more than 500 pharmacists who are trained to provide care to patients across the country, especially those in areas of rural and underserved Appalachia.
Students at the Gatton College of Pharmacy garnered national recognition for holding a Legislative Advocacy Week on campus in early 2016.

During the special week, members of the American Pharmacists Association – Academy of Student Pharmacists (APhA-ASP) chapter at ETSU, in collaboration with the National Community Pharmacy Association student chapter, hosted events to encourage other students in health-related fields to become knowledgeable about the legislative process and support a measure that would give pharmacists health care provider status. Currently, pharmacists are not recognized as health care providers.

Events during Legislative Advocacy Week at ETSU included a health care policy debate featuring video clips of U.S. presidential candidates discussing health care topics, a voter registration drive and letter writing effort.

The Legislative Advocacy Week at ETSU was featured in a February 2016 campaign update from APhA CEO Tom Menighan and emailed out to all APhA members. In the email, Menighan dubs the ETSU APhA-ASP chapter as this month’s student pharmacist champions for their efforts.

“Student pharmacists at ETSU are supporting provider status by educating themselves and the community on services pharmacists can provide, making connections with local and state leaders in policy, developing resolutions within our Academy to reshape pharmacy robbery preparedness and raising money to continue our campaign for the (APhA’s) Back the PAC Campaign,” said Scott Brewster, a member of the Class of 2017 and APhA-ASP chapter president.

Ngoentra Leelachantachot (’17) and Katrice Lampley (’19) were named scholarship recipients at the 2016 Student National Pharmaceutical Association 43rd National Conference. Lampley was awarded by the National Pharmaceutical Association Foundation with the Willie Davis Book Award. Leelachantachot was nominated for chapter president of the year and received the Sybil R. Green Book Award from the Student National Pharmaceutical Association sponsored by Walgreens.
Hagemeier honored for efforts in prescription drug abuse prevention

Dr. Nick Hagemeier was working as a pharmacist at an independent community pharmacy in Lebanon, Indiana, in 2007 when he spotted a masked man coming through the door one morning.

“He walked up and said, ‘I want all of your OxyContin,’” recalls Hagemeier, now an assistant professor at Gatton College of Pharmacy. “He wasn’t joking around. He had a gun and he gave us 20 seconds to get him the drugs.”

Hagemeier later received a letter from the man who robbed him. “He told me that at the time he did it, he was hurting and needing help,” Hagemeier says.

The whole experience helped lead Hagemeier to focus much of his career on prescription drug abuse prevention and treatment. He serves as the research director for ETSU Center for Prescription Drug Abuse Prevention and Treatment and has conducted research on a variety of related topics.

As the robber counted down from 20, Hagemeier quickly grabbed a few bottles of OxyContin off a shelf, shoved them into a bag and handed over the package before time was up. The robber fled but was caught by police less than a mile from the pharmacy.

The robbery took less than a minute, but it forever changed the pharmacist on the other side of the counter that day. “You never look at patients the same. It’s just different after that,” Hagemeier says. “Just talking about it makes my heart rate go up.”

The most concerning part about the whole incident, Hagemeier says, is that the robber “just didn’t care about consequences of his actions.”

“I don’t want to know what would have happened if we ran out of our 20 seconds,” he says. “Many people don’t think rationally when they have an addiction.”

Hagemeier is the co-investigator of a $2.2 million National Institutes of Health grant that funds ETSU’s Diversity-promoting Institutions Drug Abuse Research Program and is principal investigator on one of the core projects focused on prescription drug abuse interprofessional communication. He also serves as director of the pharmacy school’s Community Pharmacy Practice Research Fellowship.

“Equipping community pharmacists to help patients with abuse and addiction is a passion of mine,” he says. “I’m convinced that pharmacists can champion prescription drug abuse prevention and treatment.”

During the Tennessee Pharmacists Association’s annual summer meeting, Hagemeier received the 2016 Cardinal Health Generation Rx Champions Award, which recognizes a pharmacist in the state who demonstrates excellence in community-based prescription drug abuse prevention.

Melton serves as chair of AACP special interest group

Sarah Melton, a professor of Pharmacy Practice at the GCOP, served as the chair of an American Association of Colleges of Pharmacy special interest group (SIG).

The Substance Abuse Education and Assistance SIG works to promote and enhance professional and public education concerning substance abuse. The group also promotes and fosters the provision of appropriate substance abuse assistance and recovery support for professionals and the public as well as promotes scholarly inquiry concerning substance abuse as it impacts the profession of pharmacy.

Melton has dedicated much of her career to work related to substance abuse assistance. She is a huge proponent of and educator on naloxone, a therapeutic intervention used to treat heroin and other opioid overdoses.

Through Melton’s efforts and the work of others, the GCOP most recently has teamed up with the ETSU College of Public Health and the Tennessee Department of Health to launch “Volunteer to Save a Life: Naloxone Education and Distribution for the Layperson.”

The effort aims to get as many people in the community educated about naloxone rescue for opioid overdose emergencies.
D r. Zac Walls arrived at ETSU in 2011 and has been working ever since to improve drugs used to treat certain cancers.

An assistant professor in the Gatton College of Pharmacy, Walls currently is focusing much of his research on doxorubicin, one of the most successful drugs used in the treatment of ovarian cancer.

“I’m trying to reformulate the drug to make it even better,” Walls said.

Due to the way the chemotherapy drug enters a cancer cell, much of it gets trapped inside an endosome, which is the compartment inside the cell that is the drug’s first stop on the way to its destination in the nucleus, Walls explained.

“My idea was to co-encapsulate the drug with a protein called Listeriolysin O,” Walls said, explaining that the pore-forming protein provides an exit for more of the chemotherapy drug to escape from the endosome and reach its intended target.

Through a grant from the American Association of Colleges of Pharmacy, Walls has been able to pursue his hypothesis and an article on his findings was published earlier this year in the journal, Molecular Pharmaceutics.

“Encapsulating the protein with the doxorubicin has greatly enhanced the effect of the drug on both drug-susceptible cells and drug-resistant cells,” Walls said. “This formulation enables the drug to get to the part of the cell where it needs to be and overcome the resistance mechanisms that those cells express.”

That’s good news for women suffering with ovarian cancer.

“If this works in further testing, it could have a pretty big impact,” Walls said. “There are going to be more manageable cases of ovarian cancer. There is also the possibility that this will reduce the dose these patients have to have, so it could save them from suffering the terrible side effects that are normally associated with chemotherapeutics.”

It’s also good news for Walls.

“Science is kind of like baseball in that even the best players in the world go up to the plate and are only going to get a hit three times out of 10,” he said. “You deal with a lot of failure, so to have something you worked on for so long and thought so much about be right and come true, that is very rewarding.”
Quillen College of Medicine

SSCI awards Quillen dean with ‘Founders Medal,’
Quillen professor named Mentor of the Year

Quillen College of Medicine Dean Dr. Robert T. Means Jr. received the prestigious Founders Medal from the Southern Society of Clinical Investigation (SSCI) while Dr. Stephen Geraci, a professor in the Department of Internal Medicine, was awarded the Mentor of the Year Award in the Junior Faculty Mentorship category from the same organization.

Since 1973, the SSCI has awarded the Founders Medal to a member of the organization who has both played an important role in the organization by providing leadership for growth in the SSCI and is a nationally recognized leader in medicine.

Means is a past-president and councilor of the SSCI and currently serves on the Executive Advisory Committee and is convener of the annual Southern Blood Club session. He is the first Quillen faculty member to receive the award.

“Dr. Means is a very worthy recipient of this award,” said Dr. James Oates of the Medical University of South Carolina and former president of the SSCI. “Not only is he a recognized leader at his institution, but he is also a nationally recognized leader in medicine. His efforts over the years with SSCI are commendable and we congratulate him on receiving this prestigious honor.”

Geraci was awarded the Mentor of the Year Award in the Junior Faculty Mentorship category from the SSCI, recognizing his work in mentoring junior faculty at Quillen.

Quillen ranked 8th in nation for rural medicine

Quillen College of Medicine has been ranked eighth in the nation for rural medicine training by U.S. News & World Report. The 2017 U.S. News & World Report’s “Best Graduate Schools” rankings were released earlier this year. In recent years, ETSU consistently has ranked in the top 10 for rural medicine.

Quillen ranked 20th in nation for producing family medicine doctors

The Quillen College of Medicine has been ranked 20th in the nation for producing medical doctors who go into family medicine. A study published in the journal Family Medicine illuminates the need for U.S. medical schools to train a physician workforce that meets the health care needs of every American. The article highlights medical schools that are making the largest impact on the issue, with the Quillen College of Medicine landing among the top 20 on the list.

“This is a significant ranking for us at Quillen because our mission since the medical school began at ETSU in the 1970s has been to produce primary care physicians who can serve rural and underserved populations,” said Dr. Robert Means, dean of the Quillen College of Medicine. “Our success in producing graduates who go into family medicine is a direct result of our efforts to support that mission.”

The Quillen College of Medicine was the only medical school in the state to be listed in the top 20 schools graduating family medicine residents.
Fourth-year medical student Daniel Gouger has been selected for a prestigious fellowship with a national organization. Following graduation from medical school next spring and prior to seeking medical residency, Gouger will relocate to Washington, D.C., to serve as the American Medical Student Association (AMSA) Education and Advocacy Fellow (EAF).

The position is a unique opportunity afforded annually to one physician-in-training to spend a year augmenting his or her formal medical training with the opportunity to delve deeply into critical issues affecting access to affordable and quality health care, global health equity, diversity in the health care workforce, and medical professionalism.

The EAF serves multiple roles at AMSA while working closely with staff and national leaders to enhance educational programming and advocacy initiatives throughout the organization. The objectives of the fellowship include learning and refining the fellow's skills in grassroots organizing, leadership development, strategic planning and advocacy.

Gouger is the national chair of AMSA's medical education team, focusing on the largest issues in both undergraduate and graduate medical education. Last year, he served as the cultural sensitivity coordinator within the Race, Ethnicity and Culture Division of AMSA.

Awards, Honors & Recognitions

- Dr. James Shine, a clinical associate professor of family medicine at ETSU, was recognized for his efforts in the area of rural health. Shine, who has been a family medicine physician in Mountain City for 20 years and serves as the lead physician working with ETSU Rural Primary Care Track medical students at Quillen, received the Rural Health Practitioner of the Year award last month from the Rural Health Association of Tennessee (RHAT). http://photolab.etsu.edu/images/RuralHealthPractitionerOfYear-ShineJames

- The Southeastern Library Association (SELA) awarded the Quillen College of Medicine Library with the 2016 Outstanding Library Program Award, recognizing the “Program to Provide Consumer Health Information at Remote Area Medical Clinics.” The program began at Quillen in 2009. Each year, librarians staff booths at the Remote Area Medical (RAM) clinics held in the region to provide on-site consumer health information to hundreds of uninsured attendees.

- The Southern Chapter of the Medical Library Association (SC/MLA) recently named Nakia Woodward, senior clinical reference librarian at East Tennessee State University’s Quillen College of Medicine Library, its Academic Librarian of the Year. The award recognizes an academic medical librarian within the SC/MLA region who is at mid-career level and demonstrates significant achievement, the potential for leadership and continuing excellence.

- Quillen ETSU Pediatrics has been recognized for the participation and completion of the first year of the Pediatric Healthcare Improvement Initiative for Tennessee (PHiiI), a statewide quality improvement program of the Tennessee Chapter of the American Academy of Pediatrics (TNAAP). Quillen ETSU Pediatrics has focused on improving patient and family care by engaging in quality improvement around well-child check-ups, tobacco exposure, breastfeeding, and other early childhood indicators. http://photolab.etsu.edu/images/QuillenPediatrics_PHiiIT_Presentation

- Matthew Workman, a member of the Quillen College of Medicine Class of 2017, was honored by the National Rural Health Association with the 2016 Student Achievement Award. The award recognizes Workman’s involvement in promoting rural clinical and educational experiences. While at ETSU, Workman has served as the student outreach coordinator for the NRHA’s Student Constituency Group, promoting rural clinical and educational experiences. In honoring Workman, the NRHA called him “an exemplar in the Rural Primary Care Track program” at ETSU. Workman elected to complete his medical school experiences with rural faculty in rural communities whenever possible. He took a leave to complete his Master of Public Health degree and returned in the fall to complete his fourth year of medical school. http://photolab.etsu.edu/images/NRHA2016-WorkmanMatt

- Two student members of ETSU’s Center of Excellence in Inflammation, Infectious Disease and Immunity were honored by the American Heart Association (AHA). Xia Zhang, a doctoral candidate in the Department of Surgery, was awarded third prize by the AHA for her poster presentation dealing with the body’s inflammatory response to infection, or sepsis, and heart problems associated with the condition that can lead to prolonged sickness or death.

- Xiaohui Wang, also a doctoral candidate in the Department of Surgery, received third place for his oral presentation related to neonatal heart repair. In his research, Wang observed that a certain receptor in the body is required for the regeneration and repair of a damaged heart. http://photolab.etsu.edu/images/AHA-Research-COM

- Class of 2016 medical students Caryn Brehm and Rebekah Rollston received special recognition at the 2016 Society of Teachers of Family Medicine Meeting for Medical Student Education for their work in examining physicians’ knowledge of and comfort with patients’ sexual health concerns. Dr. Ivy Click, in the Department of Family Medicine, co-authored the research, which aimed to assess the comfort level of family physicians in addressing sexual health concerns as well as their knowledge and management of sexual health.
Quillen College of Medicine serving as national model for career advisement program

Several years ago, leaders at East Tennessee State University’s Quillen College of Medicine recognized a need to offer better career advisement opportunities for medical students. Now, their solution is serving as a national model.

“We had been experiencing student dissatisfaction with career planning,” said Dr. Ken Olive, executive associate dean for Academic and Faculty Affairs. “We assigned advisors from Day One, but the students weren’t going to see them. We started looking at what motivates medical students, and in the first two years, it is grades.”

With that in mind, Olive and Dr. Tom Kwasigroch, associate dean for Student Affairs at the medical school, proposed a curriculum change that made career exploration mandatory for all Quillen students via a three-year course called the Career Explorations Program. The course involves self-assessments that help individuals determine what type of doctors they might be best suited to become. It also includes a variety of requirements to better prepare students to make these significant career decisions.

The Class of 2012 was the first class to complete the revamped career advising at Quillen, and students in each class thereafter have taken part. “It has had markedly positive outcomes and we plan on continuing it for the foreseeable future,” Olive said.

Academic Medicine Innovation Reports published an article by Olive, Kwasigroch and their colleagues, Dr. Daniel Wooten, professor; Cynthia Lybrand, medical education coordinator; and Catherine Peeples, clinical medical education coordinator. The article, “A Career Exploration Program: An Effective Alternative to the Traditional Use of Faculty Advisors,” details the approach taken by Quillen to improve career exploration among its students and the outcomes of the Career Exploration Program.

Emerging Leaders’

Several first-year medical students participated in a leadership seminar led by Dr. Deborah Harley-McClaskey, author of the book “Developing Human Service Leaders,” and an associate professor in the ETSU Clemmer College of Education’s Department of Teaching and Learning, where she directs the Interdisciplinary Minor in Leadership. The seminar was the inaugural capstone event of a four-year leadership development program called Emerging Leaders in Medicine (ELM), which specifically focuses on medical students. The program is funded through a grant awarded in 2015 from the national chapter of the Alpha Omega Alpha (AOA) Medical Honor Society. As part of the curriculum, ELM students also participated in journal clubs, inter-professional activities, leadership luncheons, simulation experiences and community service.

ETSU Family Physicians of Kingsport moves

ETSU Family Physicians of Kingsport moved to a new location, returning to its first-ever office space to continue providing health care services to the people of the region. The family medicine clinic is now located at 102 E. Ravine Road. The building was completely renovated and includes 20 exam rooms, two procedure rooms and a training area on the clinical floor. Another level provides teaching, meeting and office space for the Kingsport Family Medicine Residency Program. A ribbon-cutting ceremony was held in March 2016.

Quillen implements online assessment tool for selecting applicants

Quillen leaders are stepping into new territory with the implementation of a unique tool for selecting the right applicants to attend the medical school. The online assessment tool known as Computer-based Assessment for Sampling Personal Characteristics, or CASPer, will now be used during the pre-interview screening phase for students who have applied to the medical school.

The tool allows the admissions committee to better identify personal attributes, such as ethics, empathy, cultural sensitivity, ability to collaborate, resiliency and adaptability. Developed by the team at Altus Assessments Inc. and McMaster University, CASPer is an online situational judgment test, primarily consisting of a series of hypothetical everyday situations presented through a live-action video. Each situation relates to one or more personal characteristics. Examinees are asked to provide short written responses on how they would react or behave in the situation portrayed.

On average, ETSU’s medical school receives in excess of 2,100 applications per year. During the interview season, which runs from September to March, approximately 265 applicants take part in on-campus interviews.

medical genetics program

Quillen College of Medicine, with support from Mountain States Health Alliance, has expanded its work in pediatric, prenatal and adult genetics. The new Division of Medical Genetics is being overseen by Dr. MJ Hajianpour, a board-certified clinical geneticist and clinical cytogeneticist with extensive experience in the field.

Through the clinical offices at Quillen ETSU Physicians, the Division of Medical Genetics provides services to pediatric and adult patients with genetic conditions, multiple congenital anomalies, dysmorphic features, developmental delays and intellectual disabilities.
ETSU, Vanderbilt partner for $2.4M grant

Researchers from East Tennessee State University and Vanderbilt University recently garnered a $2.4 million federal grant to jointly study a cutting-edge concept in the world of immunology. The four-year grant from the National Institutes of Health will allow principal investigators Dr. David Williams, a professor of surgery at the Quillen College of Medicine, and Dr. Ed Sherwood, a professor of anesthesiology at the Vanderbilt School of Medicine, to collaboratively research whether it is possible to “train” the innate immune system of critically ill patients so that they have increased resistance to existing and future infections. The research team at ETSU will be focused on critically ill patients with sepsis while Vanderbilt’s team will study burn patients. This is the first collaborative grant between the two institutions in recent history.

Chronic inflammation, aging

Dr. Jonathan Moorman, professor of medicine at Quillen and section chief for infectious diseases at the Quillen Veterans Affairs Medical Center, was awarded a grant from the National Institute for Aging to investigate strategies to better understand how chronic inflammation affects aging in HIV patients. Antiretroviral therapy (ART) is the combination of several drugs that slow the rate that HIV can copy itself and spread through the body. While the treatment lowers the amount of the virus in the body, it does not eliminate it entirely so inflammation caused by the immune system’s response to the virus persists and becomes chronic. Chronic inflammation speeds aspects of aging in the body and can lead to a number of other diseases. Moorman believes that by limiting the disruption to a specific microRNA molecule, he can keep patients on ART healthier over the long term.

Vitamin D beneficial for more than strong bones

Drs. Theo Hagg and Matt Keasey in the Department of Biomedical Sciences led an international research team that has discovered vitamin D may be able to reduce soft tissue calcification, which is relatively common in the elderly, with arteries being particularly vulnerable and the brain also being vulnerable as individuals age. They found that, once the gene was inactivated, the vitamin D was no longer able to prevent calcification. The gene is related to a specific brain disease, Fahr’s disease, which results in a major decline in neurological function and mental abilities. “The finding is unexpected because it shows that vitamin D has the opposite effect than in bones,” Keasey explained. “On one hand, vitamin D stimulates good calcification in bone. On the other hand, it reduces bad calcification in soft tissues.”
Hall gets NIH funding for Chlamydia research

Dr. Jennifer Hall, an assistant professor in the Department of Biomedical Sciences at ETSU’s Quillen College of Medicine and member of ETSU’s Center of Excellence in Inflammation, Infectious Disease and Immunity, has been studying chlamydial infections for several years. In 2016, she received funding from the National Institutes of Health to continue and expand her research into the ways certain hormones communicate with cells in the body. Hall has spent a great deal of time looking at the effect of estrogen on chlamydia as well as the role progesterone plays in chlamydial infections. She is looking at a specific signaling pathway in the body – the Wnt signaling pathway – that plays a critical role both in a woman’s menstrual cycle as well as in chlamydial development in cells. “We are looking at whether estrogen enhances chlamydial infections by activating Wnt signaling and whether progesterone negatively affects chlamydial development by inhibiting Wnt,” she said. “Knowing what the hormones do could help us down the road.”

Reliability of diabetes dogs

Dr. Evan Los, an assistant professor in Quillen’s Department of Pediatrics as well as a practicing physician with Mountain States Health Alliance, designed and conducted a study that looked into the reliability of diabetes alert dogs. In studying eight patients with diabetes alert dogs, Los found the dogs do have success in detecting low blood sugar, but missed a low blood sugar event more than half the time and also alerted owners when their blood sugar was not low. Additionally, when the dogs did alert, they were typically slower than continuous glucose monitors (CGMs), which are devices approved by the Food and Drug Administration (FDA) and used to alert individuals with diabetes of high and low blood sugar. “This study shows we shouldn’t be putting all of our faith in (the dogs). There is already an FDA-approved technological device that is doing a better job, so if you have to choose between the device and the dog, I would recommend choosing the device.”

Team working to find cure for heart failure

Dr. Eric Beaumont, an electrophysiologist and an associate professor in the Quillen College of Medicine, is leading a research project that is looking at how a current treatment for heart failure may be benefiting patients in multiple ways. Vagus nerve stimulation (VNS) is a treatment in which electric impulses stimulate the large nerve in the neck that runs from the brain to all major organs. Through that stimulation, a person’s heart rate is slowed, thus protecting the heart. “It is thought that VNS is beneficial because of its ability to do that, which is probably true,” Beaumont said. “But we think VNS is also protecting the intestine.” Beaumont and his fellow researchers are exploring the effects of VNS on the intestine and aim to better understand the relationship between gut bacteria, VNS and heart health in an effort to optimize treatment for greater patient success.
Colleges make up the AHSC

College of Public Health
- Doctor of Public Health (DrPH) – Community Health, Epidemiology, Health Management and Policy
- Doctor of Philosophy (PhD) – Environmental Health Sciences
- Master of Science in Environmental Health
- Master of Public Health – Biostatistics (on ground and online), Community Health (on ground and online), Environmental Health, Epidemiology (on ground and online), Health Services Administration (on ground and online)
- MD/MPH joint degree programs
- PharmD/MPH joint degree programs
- Bachelor of Science in Public Health – Community Health
- Bachelor of Science in Public Health – Health Administration
- Bachelor of Science in Health Sciences – Human Health
- Bachelor of Science in Health Sciences – Microbiology
- Bachelor of Science in Environmental Health

College of Clinical and Rehabilitative Health Sciences
- Bachelor of Science in Allied Health Leadership
- Bachelor of Science in Cardiopulmonary Science
- Bachelor of Science in Nutrition
- Bachelor of Science in Dental Hygiene
- Bachelor of Science in Radiologic Science
- Master of Science in Allied Health
- Master of Science in Clinical Nutrition
- Master of Science in Speech Language Pathology
- Doctor of Audiology
- Doctor of Physical Therapy

College of Nursing
- Bachelor of Science in Nursing (BSN)
- Accelerated BSN (bachelor’s degree in another field)
- ETSU-Holston Valley Medical Center Accelerated BSN (Kingsport cohort)
- LPN to BSN (for licensed practical nurses)
- RN to BSN (for diploma or associate degree nurses)
- AAS/BSN Dual Degree
- Master of Science in Nursing (MSN) - concentrations in Family Nurse Practitioner, Nursing Administration, Nursing Education, and Psychiatric Mental Health Nursing.
- Post-Master’s Certificate Program in Family Nurse Practitioner, Nursing Administration, and Nursing Education.
- RN-MSN (bachelor’s degree in another field and RN license)
- Doctor of Nursing Practice (DNP) – concentrations in Adult Gerontological Primary Care Nurse Practitioner, Executive Leadership, Family Nurse Practitioner, and Psychiatric Mental Health Nurse Practitioner
- Post-Doctoral Certificate Program in Adult Gerontological Primary Care Nurse Practitioner, Executive Leadership, Family Nurse Practitioner, and Psychiatric Mental Health Nurse Practitioner
- ETSU-Tennessee Technological University (TTU) DNP Program – concentrations in Adult Gerontological Acute Care Nurse Practitioner, Executive Leadership, Family Nurse Practitioner, Pediatric Nurse Practitioner-Primary Care, Psychiatric Mental Health Nurse Practitioner, and Women’s Health Care Nurse Practitioner
- PhD
- BSN-PhD

Bill Gatton College of Pharmacy
- PharmD
- PharmD/MPH joint degree program
- PharmD/MBA joint degree program
- Bachelor of Science in Pharmacy Studies

Quillen College of Medicine
- MD Program
- PhD Program
- MD/MPH joint degree program