WHAT CAN YOU MAKE POSSIBLE



24 HOURS X 365 DAYS AMAZING

MATHEC 2016 YEAR IN REVIEW



A Single Day Goes By So Quickly, But Our Champions and Partners Filled It To The Brim

Imagine how many lives you touched in an entire year...

Each new year starts off with endless possibilities. It's also a time to reflect on the one just finished to: celebrate all the good, learn from any mistakes, and make plans to grow in the coming year.

In 2016, you provided hope, education, training, and compassion (just to name a few). New mothers held their babies tight for the first time, students answered callings to healthcare careers, and the elderly found comfort in a confidant.

Each day is a chance for a whole new start, and, thanks to you, the days were full in the past year. It's amazing how lives can change in only 24 hours. Multiply that by 365 days, and that's quite a few lives you changed for the better.

We hope you'll enjoy reading about just a couple of them, and we look forward to the thousands more you'll change in the year ahead.

Thank you for another wonderful year, and please, share these amazing stories with everyone you can. They would not be possible without you.



ALEX CONTINUES ON COURSE TO HIS DREAM

And he's inspiring others to do the same

Alex did not just spend another day in class at East Carolina University School of Dental Medicine (ECU SoDM) - he took one more step towards his dream, and he's bringing others with him because of you.

What started as an interest in anesthesiology in high school was quickly traded for general dentistry after only a single day of shadowing the local dentist in his hometown of Spruce Pine. That one day led to a passion and commitment for Alex. Not only does he want to provide dental care, but he wants to go back to the rural area he's from to do it. He's on track with the Bobby E. Phillips Scholarship, which supports students from Mitchell, Avery, or Yancey Counties in attending ECU SoDM.

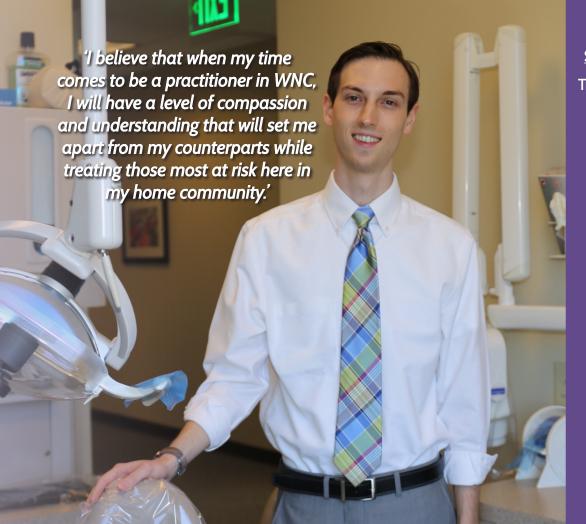
"Being a lifelong resident of Spruce Pine in Mitchell County, and hailing from a family with deep roots in WNC, I am proud to be supported by my neighbors and am in dental school to specifically benefit the people of Appalachia," he says.

Alex feels his application was stronger because of his experience and research during a MAHEC summer internship while at UNCA (he's also the first in his family to attend an undergraduate institution). That expanded into two more independent study internships and part-time employment, totaling involvement in seven different MAHEC departments. Alex is now the Chairperson of ECU's Chapter of the American Student Dental Association's Pre-Dental Committee, and he hopes to inspire high school students.

"I was able to call on my MAHEC experience to organize and lead ECU SoDM's first ever outreach program for high school students," he says.

Twenty out of 20 students strongly considered a career in dental medicine after the event. It was such a great success that there are plans to continue it annually and possibly replicate it at rural sites.

"I owe this accomplishment to the research and outreach efforts I was exposed to as an intern at MAHEC." Alex says.



STUDENT MEDICAL EDUCATION

Training of K-12, undergraduate, and graduate students

Internships to recruit rural and minority students

Comprehensive family medicine, Ob/Gyn, and dental residency training by top faculty

Over 375 K-12 students

22 undergraduate interns

51 UNC School of Medicine Asheville Campus students

Over 300 graduate health science students

27 medical and dental resident and fellow graduates

GERIATRIC MEDICINE

Geriatric education for medical and nurse practioner students, as well as medical residents, who will practice in community and nursing facilities

Improved healthcare access for vulnerable and frail elderly

Research efforts that contribute to the knowledge and practice of clinical geriatrics



867 Geriatric patients

Integrated behavioral medicine and pharmacotherapy experts on site

Certified Geriatric Doctor of Pharmacology

Geriatric Consultation Clinic





THE BEST CARE THEY'VE HAD IN
61 YEARS OF MARRIAGE

They Found More Than A Doctor - They Found A Friend

When it's time for rehab with a physical therapist, have blood work done, medications reviewed for drug interactions, or a regular appointment with their doctor, Bob and Janice hop on the elevator and go down a few floors.

Having always been in fairly good health, they never frequented any doctors unless something was wrong, and their healthcare varied with all the moves they made while Bob was a minister and Janice a public school librarian. Now at Givens Estates Retirement Community, they tell everyone it's the best healthcare they've had in their 61 years of marriage. Part of it is convenience, part of it seamless care, and a good part of it is Dr. Tim Plaut.

"I have some specialists I have to go see, and they're in and out," says Bob. "You don't get any bedside manner with them, but you do with Dr. Plaut."

That bedside manner goes a long way in making them feel comfortable. They never feel rushed through any appointment, and they know Dr. Plaut is taking the same time and care with every other patient he sees.

When Bob began having trouble with his mobility earlier this year, he was immediately booked to see a physical therapist for rehab. Because it's on-site, they never had to worry about getting to an appointment or even having to explain the problem. Their doctor communicated all that the therapist needed to know to take care of Bob.

"It's a 'hand-in-glove' thing, the way that MAHEC works with the care you get here," says Bob.

That seamless care is also a big relief to Bob and Janice's own children. Janice says that they hear about the health issues faced by their children's friends and the worry that causes them.

"It's been comforting to our children to know that we're being looked after," says Janice. "We tell all of the residents we meet about the convenience and excellent medical care they can get right here. When your mobility starts to decline it's nice to get on the elevator and go down only a few floors."



You Answered Gale's Prayer For A Healthy Mouth

"Hopeful" is what Gale felt when she first became a patient at MAHEC Dental Health Center & Center for Advanced Training. Thanks to you, she walked out of her most recent appointment feeling like a prayer had been answered. She finally received a new set of partial dentures, but more importantly to her, she now has a healthy mouth to match her healthy body and mind.

"It's just been a God-send," she says. "It's what I prayed for."

She could feel that things were not going well with her mouth for quite some time, but could never afford to have all the work done that she needed to really make it better. But when she found MAHEC, things turned around.

"I've been to enough dentists to know when I get good care and when I don't," she says. "When I first came, I told them that my mouth needed a lot of work. They've done all the care that I should have had before."

But for Gale, it was not just the dental care that made the difference for her – it was the people. She says she found a place where she felt treated well and that everyone genuinely cared about her. It also helps that her dentist, Dr. Joseph Filippini, can handle a bit of good-natured teasing from her. Gale feels at ease with him, which makes her appointments all the more enjoyable.

Although it will take a little while to get used to her new dentures, she already feels a sense of relief and gratitude.

"It's just taken a load off my mind," she says. "The whole thing has been a lovely experience. I'm just so pleased to get a chance to say how grateful I am. It means a lot to me."



MAHEC DENTAL HEALTH CENTER & CENTER FOR ADVANCED TRAINING

Oral health is an essential component of total wellness

Emphasis on preventive oral healthcare and dental hygiene

State of the art facility featuring modern technology

Cleanings & Xrays

Fillings, crowns and veneers

Implants and root canals

Reconstructive full mouth

dentistry

Precision partial & custom dentures

Treatment for periodontal (gum) disease

*®***>>>>>>>>>>>>>>>>**

WOMEN'S HEALTH

Expert and compassionate medical care for women in WNC

Providing safety net in gynecologic care and high-risk pregnancy

Empowering Centering Pregnancy™ model for prenatal care

2.468 babies delivered

Experts in: Vulvar Gynecology

Pediatric Adolescent Gynecology

Maternal Fetal Medicine

Contraception



You Saved More Than A Life - You Saved A Family



India arrived for her scheduled cesarean section feeling some normal pre-surgery jitters, but took comfort from her mother by her side and a care team in place. She experienced a minor hemorrhage with her previous child, but could never imagine the severity in store for her this time around. Thanks to your support, MAHEC does not imagine it – we plan and prepare for it. India never even realized anything was ever seriously wrong until it was all over.

"I didn't hear worry in anyone's voice," she says. "They were so calm. They took care of everything."

India lost 6.5 liters of blood - her entire blood volume - and still left the hospital three days later, which is the average stay after delivery.

MAHEC cares for the highest risk OB patients and helped initiate and put in place an OB hemorrhage protocol at Mission Hospital to care for patients just like India. Dr. Bre Bolivar, Ob/Gyn Hospitalist on faculty at MAHEC Ob/Gyn Specialists, is on the OB Hemorrhage Team and was well-prepared for India when she arrived.

"When there's a severe hemorrhage like this, you really need a team-based approach," says Dr. Bolivar. "Everybody needs to be on the same page on how to take care of these patients. I was really happy that it all went the way it was planned and the protocol worked the way it should have."

This was not the first time Dr. Bolivar experienced a hemorrhage this severe, and it won't be the last. Her training during residency at MAHEC, her experience on the OB Hemorrhage Team, and her calm demeanor in the face of emergencies have prepared her to handle whatever comes, and she wouldn't have it any other way.

"For a while, I considered doing emergency medicine until I saw my first birth and decided there was nothing else I'd rather wake up in the middle of the night for than that," says Dr. Bolivar. "So for me, being able to take care of somebody appropriately and in a calm manner, being a calm presence for them during something that's supposed to be a really happy and routine experience. I guess it was just a calling."

And no one is happier that Dr. Bolivar heard the calling than India and her family. She had her two-year-old daughter and 11-year-old twin boys outside of Asheville and is so glad she decided to have Aiyah here. She feels like she found a family in the team that kept her alive and will never forget it.

'I think about it every day," she says. "I thank God every day that I'm alive and can see these kids. Every day."



JEANNETTE IS INSPIRED TO TAKE ACTION



She's Fired Up About Making a Change in Her Community

"Helpless" is not what Jeannette and other members of the LARC (Long Acting Reversible Contraceptives) Boot Camp Translation Team feel when facing teen pregnancy and opioid addiction in Yancey and Mitchell Counties. This community college counselor has seen the devastating effects on students. Half of all pregnancies are unintended, and half of those unintended pregnancies are from failed birth control. Add in 12% of babies born at Mission Hospital having Neonatal Abstinence Syndrome (going through opioid withdrawal at birth). Top it off with Yancey County's ranking as 11th highest in the state for teen pregnancy, and things can start to look pretty grim.

But once a month during lunch, Jeannette joins what she considers "one of the most important task forces I've ever been involved with." There are no red capes, no superpowers, and no secret handshakes, but because of your help there is a whole lot of excitement, energy, and passion about making a change in the community.

"Boot Camp is not a solution for every single situation, but it is a very effective process for engaging a community to help design educational messages about medical best practices and encourage the community to work with their doctor on a given issue," says Sarah Thach, MPH, director of Clinical and Community Outreach for MAHEC.

The Team is composed of 15 community members ranging in age and occupation, including nurses, a retired principal, teenagers, and a minister. What Jeannette especially likes is that each meeting has an objective and something gets accomplished, as opposed to simply talking about an issue.

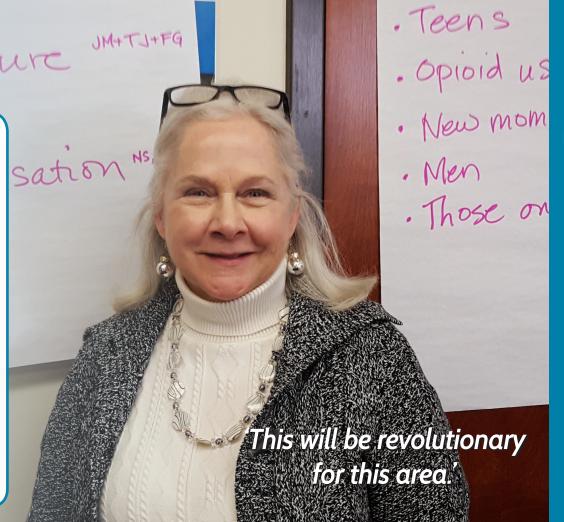
"It feels like we're doing something," she says.

And they are. Not only do they learn about LARC and the role it can play in preventing unwanted pregnancies, but they're helping craft a message that will appeal to their individual communities. They are the experts in what people will listen to and where they will find the messages for their area.

Sarah used this same process, based upon a successful program in Colorado, regarding heart disease last year in Enka/Candler. The team there indicated that local sports were popular so the final messages featured sports themes with local coaches and community members who made life changes concerning smoking, exercise, diet, etc. There have already been positive outcomes from patients noticing the messages and taking action themselves.

The LARC Translation Boot Camp will finish up their 8-month long process in May, but they're not slowing down now. The process has sparked something in the group. There's so much excitement about the possibilities that members are talking about it outside of the meeting. Jeannette even went so far as to mock up posters that spurred further discussion. She can't wait to see the outcome.

"This will be revolutionary for this area," she says.



INNOVATION & RESEARCH

On the cutting edge of quality measurement and improvement

Evidence-based research to improve healthcare in WNC and beyond

Projects in clinical and educational research

7 Project PROMISE Students (high school students in Mitchell, Yancey, & McDowell Counties)

Manage 34 primary care, ob/gyn, pediatric and urgent care practices in WNC

Librarians embedded across divisions as subject experts

GLOBAL RURAL HEALTH

Experience providing treatment in resource-limited environments

Training in public health needs shared by the US and the developing world

Inspiring healthcare providers to work in underserved areas

Honduras Trip 2016:

Over 1,300 patients treated

Executed more than 250 large joint injections

12 communities served



YOU CIVE TO RURAL COMMUNITIES,

and we gain even more

11 12 1 10 2 19 3 8 4

Practicing in Rural Areas Prepares Doctors for Similar Situations in WNC

Holding on in the bed of a pickup truck as it bumped along the steep, dirt roads in Honduras was not a normal day for the group of MAHEC pharmacists, medical students, and doctors. As part of a medical health brigade, the group had just finished a busy morning at a rural clinic when a worried father showed up with his two sons who were stung by a swarm of bees.

Although the younger was screaming and crying, it was the more stoic, older brother that the team recognized as in real danger. His audible wheezing and struggle for breath were indications of anaphylactic shock. They loaded him in the cab of the truck and began the half-hour trek to the central clinic for epinephrine.

His face was swollen and he was gasping for air when they arrived. Although the local nurses had the medication, they were not familiar with recognizing the symptoms of anaphylaxis or the pharmacy knowledge to treat this types of problem. They were trained more for labor and birth and treating minor injuries, while MAHEC doctors receive a broad spectrum of training in both ER and inpatient settings. Dr. Margarette Shegog, Behavioral Medicine Fellow, assisted them with the proper dosage of epinephrine, which probably saved his life.

During the evening shift, staffed by Second-Year Resident Alexandra Werner, MD and two medical students, the boy again presented with audible wheezing. The nurses had given him Benadryl but no other medications and were unfamiliar with giving epinephrine, which the boy desperately needed. He was given another dose, and Dr. Shegog was called back in as the boy's condition declined. He was again stabilized and later transported to the hospital for further care.

Although the locals gained medical training, Dr. Werner knew she and members of her team gained a whole lot more. They came in with the medical knowledge and experience to treat whatever problem came their way, but they had to learn to do it in a resource-limited setting. While they may have saved the little boy's life because of their medical training, Dr. Werner found that the most meaningful medicine needed for many of the patients she saw was simply being there to listen.

"On a basic level, a lot of times people just want to know someone is there for them if they need it," she says.

It's a medicine she feels privileged to use with so many of her own patients back home.



Alzheimer's Weighs Down on Aline's Shoulders,

But She's No Longer Bearing It Alone

Aline walked in to MemoryCare's "Caregiver Conference" at MAHEC feeling terrified, confused, and alone. She and her family are no strangers to the devastating effects of Alzheimer's. Her mother died of early onset Alzheimer's 15 years ago, and her father, Bruce, cared for her until he was no longer able. Now, Aline, the only one of six children to live in the area, is Bruce's caregiver as he slowly continues to decline from the same disease.

"I was involved just enough in my mother's illness to have a sense of where all this was headed and being very aware that it was all falling on my shoulders this time around," she says. "It's been very scary and very lonely."

Because of your support, Aline no longer feels alone in her struggle to provide the best care she can for her father.

When it became obvious to the family years ago that Bruce was beginning to do things out of the ordinary, they first tried to talk to him about no longer driving. The conversation didn't end well, but he eventually had to give it up as his abilities decreased. Things became even worse as basic tasks, like cooking for himself, problem solving, and taking medications, became too difficult for him.

"My role as caregiver has become more and more complex as his capabilities have continued to decline," she says.

But things changed for Aline when surrounded by more than 180 community members and caregivers at the day-long program. That afternoon, she walked back out with both concrete scientific information about the disease as well as the relief of now having a network of others experiencing the same things.

"Even though every case is different, it just helped to know that other people were out there trying to sort through the same kinds of issues," she says. "I'm still terrified. That hasn't changed, but I do feel like I have a lot more resources in town now than I had six months ago. That's comforting."



CONTINUING EDUCATION

Regional programs designed to meet the education and training needs of health and human service professionals in:

Dentistry
Nursing
Pharmacy
Mental Health
Medicine
Public Health
Allied Health

8,683 unique program participants

875 Continuing Education programs offered

WUMBERS: 2016 Total Number of Employees 556 Positions Added **Employees Hired** ☐ 75 ☐ 125 ☑ 153

EMIPLOYEE YEARS OF SERVICE













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Who We Are

Established in 1974 as an independent non-profit, MAHEC (The Mountain Area Health Education Center, Inc.) provides quality, compassionate healthcare as a foundation for training top physicians, dentists and health professionals.

Our medical and dental residency and fellowship programs recruit and train the best and the brightest from across the country to become future doctors and dentists for Western North Carolina.

Patient care is provided at:

MAHEC Dental Health Center and Center for Advanced Training
MAHEC Family Health Center at Biltmore
MAHEC Family Health Center at Cane Creek
MAHEC Family Health Center at Enka/Candler
MAHEC Family Health Center at Lake Lure
MAHEC Family Health Center at Newbridge
MAHEC Family Health Center at Swannanoa
MAHEC Ob/Gyn Specialists
Hendersonville Family Health Center
Deerfield Retirement Community
Givens Estates

The MAHEC Development Office connects the generosity of the community with opportunities to improve healthcare in WNC.

Should you have any questions, want more information, or tour our campus, please contact our Development Office:

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www.mahec.net

