

# touchstone

THE MAGAZINE OF MOUNTAIN AREA HEALTH EDUCATION CENTER

FALL 2016

## Leading the Way in Innovation & Research



**The Vision for the UNC Academic Health Center, Western Campus**  
*New Residency Programs and More*

.....

**Sim Man is Waking Up**  
*Simulation Center Prepares Healthcare Professionals for the Unexpected*

.....

**Research Front and Center**  
*Bringing the Community Into Their Own Healthcare*

.....





# From our President and CEO, Dr. Jeff Heck

With the support of the Western North Carolina community, MAHEC has continued to grow over the last 42 years, and there's more on the horizon. Through it all, we remain committed to our mission: "To train the next generation of healthcare professionals for Western North Carolina through quality healthcare, innovative education, and best practice models that can be replicated nationally."

MAHEC is on the leading edge of innovation and research. Together with our many community partners, we are creating the UNC Academic Health Center, Western Campus. Working with partnering organizations, we are expanding to train even more healthcare professionals for our region. The new residency programs in psychiatry and surgery will begin July 2017 and benefit WNC for years to come. The MAHEC research team will be supporting educational and clinical outcomes research that will help guide effective programs. And, we continue to provide excellent patient care to all community members.

Our growth will continue to support the WNC community, which we are so grateful to be a part of for many more years to come.



A handwritten signature in black ink that reads "Jeffery E. Heck". The signature is written in a cursive, flowing style.

Jeffery E. Heck, MD  
President and CEO, MAHEC  
Professor, UNC Chapel Hill



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## Patient Care 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

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is to train the next generation  
of healthcare professionals  
for Western North Carolina  
through quality healthcare,  
innovative education  
and best practice models  
that can be replicated nationally.

*We value:  
Excellence,  
Innovation,  
Compassion,  
Collaboration.*

To remove your name from the mail list or  
update your address, call 828-771-4203,  
email [debbie.manley@mahec.net](mailto:debbie.manley@mahec.net), or mail the  
enclosed envelope with your request.

# Building the UNC Academic Health Center, Western Campus

*“Hopefully, we will bring national attention to the great things happening on this side of the state and some attention to rural health as well.”*

- Kathy Foley, PhD, Chair, Research, Grants, and Library Services



**The Vision Will Soon Become Reality:** The architect's rendering depicts the fourth building on the MAHEC Mary C. Nesbitt Biltmore Campus that will house the UNC School of Medicine Asheville Campus, School of Public Health, Simulation Center, and the new Psychiatry Residency.

## GROWTH IN THE WORKS:

**UNC SCHOOL OF MEDICINE ASHEVILLE CAMPUS**  
MAHEC, in partnership with UNC Chapel Hill School of Medicine and Mission Hospital, established the Asheville Campus in 2009 with four students. It has grown to 20 students per year, will expand to 24 in 2017, to 26 in 2018, and up to 44 students over time as it moves into the new building.

### **SCHOOL OF PUBLIC HEALTH**

*(A partnership between UNCA Department of Health & Wellness, UNC Gillings School of Public Health, and MAHEC)*  
Collaborative program tailored to what our community needs where participants will work professionally and apply what they are learning to their jobs.

### **SIMULATION CENTER**

High fidelity mannequins and equipment provide training for healthcare professionals in an environment where procedures can be replicated repeatedly for practice.

### **GENERAL SURGERY RESIDENCY & PSYCHIATRY RESIDENCY**

Both new residencies have received accreditation and are beginning recruitment with the first class starting in 2017 and graduating in 2021 (Psychiatry) and 2022 (General Surgery). The goal is to graduate general surgeons and psychiatrists who will practice in rural areas of WNC.

**The vision** to become a leading Academic Health Center for rural WNC is becoming a reality. This initiative has the potential to make a substantial health and economic impact in the region. Construction of a fourth building on the MAHEC Mary C. Nesbitt Biltmore Campus is expected to begin in Spring 2017.

Since we expect at least 50% of doctors who train in the new residencies to practice within a 100 mile radius at the completion of their training, WNC communities will see a benefit for years to come. MAHEC's long standing relationship with the University of North Carolina, particularly the School of Medicine, and WNC hospitals will further carry the excellence of those institutions into our communities.

In WNC, there is an estimated **shortage of 140 primary care providers and at least 20 general surgeons.**

The number of people in the region with behavioral health problems continues to grow. An estimated **16% of adults have a behavioral health diagnosis**, and the region has a **suicide rate significantly higher** than national benchmarks.



# Sim Man is Waking Up

*How Health Professionals Practice the Same Procedure on the Same Patient Over and Over Again*



**The Simulation Center** is currently located in 1,000 sq ft of the Education Building, but will relocate to 10,000 sq ft in the new building upon completion. Life-like mannequins and other 3-D surgical simulators provide healthcare professionals with the ability to practice procedures repeatedly.

Victoria was sweating, her skin clammy to the touch. She moaned in pain, her pregnant belly rising with her heavy breaths. The doctor took her pulse, reviewed her vitals, and examined her again. The baby was coming prematurely.

He took a deep breath and began giving orders to the healthcare team around him. He was ready for this. He had delivered Victoria's baby earlier that day, and he would do it again.

But how was that possible?

Victoria is a high-fidelity mannequin in the new Simulation Center that opened this October. She, along with "SIM Man 3G" (an adult male) and a full-term baby are just some of the high-fidelity education tools now available on the Biltmore Campus. "Fidelity" indicates the degree of realism of the simulation experience, and with heart rates, breathing, and the ability to do a C-section, it's about as real an experience as they come.

Residents, medical students, and others (including partnering organizations and community members) can practice a variety of procedures and surgeries on life-like mannequins and other 3-D surgical simulators.

## *Prepared for the Unexpected*

"The whole purpose of simulation is increasing safe practice for providers," says Simulation Center Director Elaine Alexander, MSN, RNC-OB. "It will improve patient outcomes because you can take cases that you normally would not see, or very high-risk cases, and continue to practice them over, and over, and over. That way, when you actually see them in a real patient, you know what to do and how to respond in a timely manner."

Having been an OB nurse for 30 years, Elaine knows there are some cases that nurses may never see in their entire career or may show up only once. But they still need to be prepared in case it comes. If they can practice for these unusual cases, they'll have that experience to call back on if it does present itself in a patient.

"There are different scenarios that you can mimic in simulation that you may never have the opportunity to witness," says Elaine. "But at the same time, if you do witness them, you have to be responsible enough to know what to do."

***"It's not all about MAHEC  
- it's about our community, too."  
- Elaine Alexander, MSN, RNC-OB,  
Simulation Center Director***



**Elaine Alexander, MSN, RNC-OB**  
Simulation Center Director



# Research Comes Front and Center

## Behind Every Good Doctor is Research

“Medical knowledge is constantly evolving,” says Kathy Foley, PhD, Chair, Research, Grants, and Library Services. “Three years from now we may find a more effective way to treat a condition through research.”

So how does your doctor know if, and when, to change the way your condition is treated? Through understanding medical literature and research. MAHEC’s Research Department not only teaches residents, medical students, and fellows how to use and participate in research, but also supports faculty with patient cases, training modules, and conducting their own research.

purposes – it has a real impact on patient care, how a doctor’s office is managed, or even how to retain residents in the region after graduation. Dr. Julia Oat-Judge, Family Medicine Residency Program Assistant Director, has seen it first-hand. She started out at MAHEC as a family medicine resident, and is still seeing the outcomes of her project to this day.

With a grant from the March of Dimes, Dr. Oat-Judge took part in a research project that aimed to increase the number of prenatal care patients in Family Medicine (so residents could gain experience), but how does a family health center bring in more prenatal patients?

Offer free pregnancy testing for both patients and non-patients.

Those with positive results were offered prenatal vitamins, information about prenatal care, and an opportunity to schedule a prenatal visit. Those with negative results were given multivitamins, information about pregnancy planning and contraception, and an opportunity to make an appointment to talk about preconception health. **The final results of the study revealed a 13% increase in prenatal care visits.** It was so successful that the program continues to this day, and expanded to our satellite offices, including

**“Doctors are experiential learners so we have an experiential research training program.”**

“Doctors are experiential learners so we have an experiential research training program,” says Shelley Galvin, Director of Research. “Just like they learn to deliver babies by having hands-on experience in a safe environment under the tutelage of well-trained, board-certified doctors, we do the hands-on experiential training in evidence-based medicine through our research curriculum with professional researchers.”

The research is not just for training



**Research Day:** Bre Bolivar, MD, MPH and Regan Gage, MD discuss posters on display at the annual MAHEC Research Day.

### Highlights from a few resident research projects at MAHEC

#### What We’ve Learned

Educating patients and providers on the risks of benzodiazepine and non-benzodiazepine hypnotic use in older adults reduces the number of patients using these medications and encourages patients to be more engaged in their medical care.

- Frank Laughlin, MD and Pai Liu, MD  
*Reducing High-Risk Medication Use in Older Adults: Benzodiazepines and Non-Benzodiazepine Hypnotics (2015)*

Rural exposure during residency training encourages residents to practice rural medicine.

- Winona Houser, MD  
*Family Medicine Residents’ Perceptions of Rural Health Training Experiences (2016)*

Global health experiences via short-term medical brigades help residents develop ACGME competencies including professionalism, medical knowledge, patient care, systems-based practice, and communication skills.

- Keith Whiteman, DO  
*Inter-professional Global Health Experience: A Family Medicine Physician Perspective (2016)*

Implementation of a broad-based intake screen for diabetes in pregnancy is associated with lower rates of some complications of diabetes in pregnancy.

- Bennett Gardner, MD  
*Disease Incidence and Birth Outcomes after Implementation of Broad-based Screen for Diabetes (BIS-DM) in Pregnancy (2014)*



**The MAHEC Online Journal of Research**  
[www.mahec.net](http://www.mahec.net)

**“I would encourage people to take a look. It will tell them what’s hitting radars here, and it would be nice to know if that’s what’s in line with our population’s radar.”**

- Kathy Foley

the MAHEC Family Health Centers at Cane Creek, Enka/Candler, Newbridge and will soon start at Swannanoa.

“I think a huge benefit of having our Research Department here is that it’s introducing residents who may never have done any research in medical school to the research process and gives them exposure to see if it’s something they want to do in the future,” says Dr. Oat-Judge. “It’s also

**“It’s helping benefit our residency and our patients as well.”**

changing our practice. A lot of the projects that we've done have been directly related to patient care and education of residents. It's helping benefit our residency and our patients as well. It's giving back."

That exposure to research and the meticulous planning that goes along with it, helped Dr. Oat-Judge in other ways. She gained a skill set that influences the way she approaches questions or problems, even in small settings such as patient encounters. She also looks very carefully at any research that may change the way she practices.

"Having done research and thinking about research protocol and methods, you're better able to understand the research that you read," she says. "You can better judge the results and see if it's something you're going to make a practice change on."

After completing her residency, Dr. Oat-Judge went on to a fellowship, and then returned to MAHEC as a faculty member with

***"We may not be finding the cure for cancer, but we're improving our patient experience and our resident experience."***

a strong interest in helping mentor residents in research projects. She's currently working with a medical student on a project involving immediate contraception for women after delivering their babies at Mission Hospital.

"I'm definitely on board to get more residents and medical students involved in research," she says. "We may not be finding the cure for cancer, but we're improving our patient experience and our resident experience. That has tangible effects, and I think we can see the impact more clearly when the research is done in our local environment. That's the satisfaction for me."

## Embedded Librarians to the Rescue

### *Saving Time so Doctors Can Save Lives*

Kacey Scott, MLIS, is not a clinician. She doesn't see patients or write prescriptions, but she's helping to save their lives.

With everything becoming digital, the need for a physical library at MAHEC decreased, but the need for physical master degree librarians did not. They are now embedded within departments where they are intended to become subject experts and more intimately familiar with the department's needs.

"We've just built stronger relationships with people and they are far more familiar with what we can do, how we can help, and how we can save them time," says Joan Colburn, MLIS, Library and Knowledge Services Director. "That's the bottom line - We save people a lot of time in addition to providing information."

That's because they are expert librarians, and as they become more subject experts, they can filter through searches to give doctors the most pertinent information. Departments include Family Medicine (Asheville and Hendersonville), Ob/Gyn, Regional Services, and Administration. Kacey, who is embedded at MAHEC



**Building Relationships:** Clinical and Research Librarian David Kruidenier, MLS (right), meets with Bryan Hodge, DO (left), Director of the Hendersonville Family Medicine Residency Program.

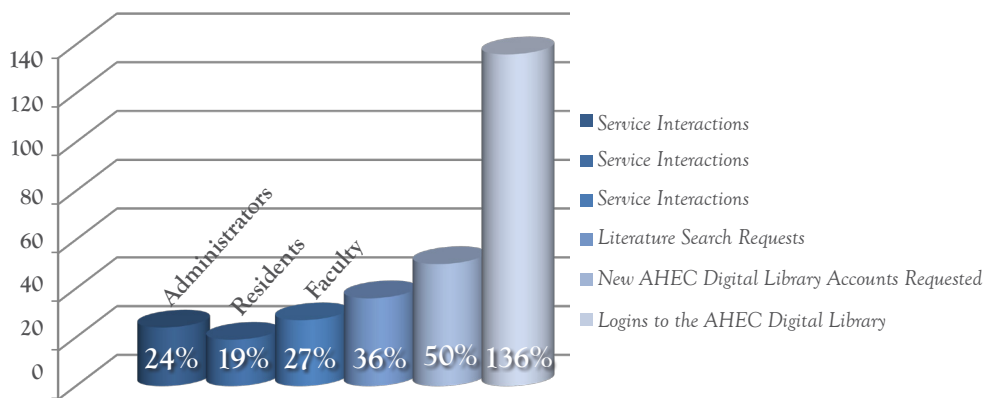
Ob/Gyn Specialists, found providers are stopping by to ask patient care questions since she's conveniently located in the patient care area.

"One of the aspects that I've found most rewarding about being the embedded librarian for OB is that I am able to contribute in a way that has direct, positive effects on patient outcomes," says Kacey. "For instance, some providers will prepare

for appointments with patients who have been referred to them with rare conditions by asking for the latest research about etiology, management and prognosis of that condition. It's a great feeling to know the information I find and pass along will help providers and patients partner together for optimal health outcomes."

***"Accurate, on-time information that I don't have to spend time searching for is invaluable to me."***  
- Library and Knowledge Services Customer

**Percent Increases Between 2014/15 and 2015/16**





# Involving the Community



**Kathy Foley, PhD**  
Chair, Research, Grants, and Library Services

*“As the new Chair of Research for MAHEC, I am so thrilled to embark on this path and to bring patients in the community into our discussions about research so we can learn from them and they can learn from us.*”

*Open dialogue and engaging our community members in our research will help us design programs and studies that better fit into our patients’ lives – not just their disease or health condition.”*

- Kathy Foley

## How YOU Are Our Missing Link

Can your doctor relate to any conditions they may be treating you for? One of the goals of expansion is to bridge this gap through community involvement in research. After all, if you have a condition, you are the best person to know what it’s like to live with it.

“At MAHEC, we have the doctors and the scientists to handle the technical aspects of healthcare research, but it’s our patients and our community members who know what it is like to live with diabetes, asthma, or other conditions, and how those conditions affect the ability to work, spend time with loved ones, care for family, or get around town,” says Kathy Foley. “Our patients’ and community’s expertise are just as important as our technical expertise for designing

good research that can help us figure out which programs work the best and for which patients.”

There is a national movement to increase patient involvement in health research, and the research team at MAHEC is very excited to be leaders in this process throughout WNC.

“We’re going to bring that here,” says Shelley Galvin. “This new Academic Health Research Center will put infrastructure and support in place so health research can happen in the western end of the state at the same level that it happens in all other areas of the state.”

## How Would You Like To Be Involved?

### Check Out Our Programs

Continuing Education programs are posted online ([www.mahec.net](http://www.mahec.net)) for registration. In addition to programs for healthcare professionals, some are open to community members.

### Share Your MAHEC Story

Spread the word on how MAHEC has affected your life, and don’t forget to tell us about it so we can share it, too!

### Become an Ambassador

Become an ambassador in your own community for a cause important to you (such as women’s health, geriatric medicine, global rural health, and student medical education). Conduct tours, lead educational gatherings, round up fellow humanitarians to share in your cause, and more!

### Sign Up for the E-Newsletter

If you don’t already receive it, sign up for our quarterly e-newsletter and stay up-to-date on the latest happenings, and read stories on what you helped accomplish.

### Make a Gift

Consider a one-time gift, gifts in honor or in memory of a loved one, a 3-year pledge, a planned gift or a gift of stock. Options are available online, or return in the enclosed envelope and help provide innovative education and quality healthcare.

*Thank you for being a part of MAHEC!*

### CONTACT THE DEVELOPMENT OFFICE

For more information on any of the above or to sign up, contact Debbie Manley: [debbie.manley@mahec.net](mailto:debbie.manley@mahec.net) or 828-771-4203

Thank you for supporting recent fundraisers for  
Geriatric Medicine and Global Rural Health at MAHEC!



The "Luau in the Mountains" raised over \$2,000 for Geriatric Medicine!



"Global Beats, Rural Rhythms" raised over \$9,000 for Global Rural Health!

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