



Wexner
Medical
Center

Insight



How the faculty and staff of The Ohio State University Wexner Medical Center are changing the face of medicine...one person at a time.

Dr. Oz and staff tell our innovative care story

Eileen Scahill | The Ohio State University Wexner Medical Center

More than 150 staff members will receive the BRAVO! Team Values in Action Award for their collaborative efforts when *The Dr. Oz Show* came to videotape an inspirational patient story at Ohio State's Wexner Medical Center.

Lori Burkhoff, a 34-year-old mother from Long Island, NY, who came to Ohio State seeking a cure for Cushing's disease, will be featured on *The Dr. Oz Show* along with Neurosurgeon Daniel Prevedello, MD, and Otolaryngology (ENT) Surgeon Ricardo Carrau, MD.

With only four days notice, staff members at Ohio State's Wexner Medical Center and James Cancer Hospital and Solove Research Institute collaborated to make this visit a success for all — the patient and *The Dr. Oz Show* video crew. Along with Collaboration, the Ohio State team also demonstrated the values of Leadership and of Acting with Integrity and Personal Accountability, as they worked to ensure the patient's safety while accommodating the video crew.

Staff directly involved with this project spanned a broad spectrum of departments, including Admissions, Ambulatory Surgical Unit, Anesthesiology, Housekeeping, Pre-Op, Operating Room, PACU/Post-Op/Recovery, In-patient recovery on 7 East James, Marketing and Strategic Communications, Nutrition Services, Patient Experience, Security, and Media Relations.

Each year, our Media Relations team routinely handles hundreds of media

escorts and requests for interviews with our expert staff members. But there was nothing routine about this media request.

For starters, TV celebrity Dr. Oz would be on site for the entire shoot, starting at 5:30 a.m. Sept. 17, chronicling Burkhoff's efforts to be cured of a debilitating disease she has battled since she was a teenager. Media Relations staffers escorted the crew throughout the visit.

Cushing's disease is caused by the pituitary gland releasing too much adrenocorticotropic hormone (ACTH). People with Cushing's disease accumulate an excessive amount of ACTH, and this stimulates the production and release of cortisol, which is a stress hormone. If left untreated, Cushing's disease can cause severe illness and even death.

In Burkhoff's case, despite three previous surgeries to remove benign tumors on or near her pituitary gland, the disease had returned with a vengeance, causing her to gain weight and putting her at risk for diabetes, stroke, high blood pressure and heart disease, among other complications.

In an effort to raise awareness about the often-misdiagnosed Cushing's disease, Burkhoff had contacted *The Dr. Oz Show*. In the meantime, she learned about the innovative surgical procedure performed at Ohio State. Burkhoff met with Prevedello, the Ohio State neurosurgeon who works in tandem with ENT surgeon Ricardo Carrau, to perform endoscopic

endonasal surgery. This is a minimally invasive neurosurgical technique that gives surgeons access to the base of the skull, intracranial cavity and top of the spine by operating via the nose and paranasal sinuses.

Prevedello is one of only a few neurosurgeons worldwide trained in this approach that leaves no facial incisions or scarring, causes less trauma to the brain and nerves, has fewer side effects and results in quicker recovery times.

Burkhoff and the surgeons agreed to be videotaped "documentary style" — meaning that Dr. Oz wanted to capture everything that happened to Burkhoff leading up to and including her surgery. Cameras were rolling at 6 a.m. when Dr. Oz warmly greeted Burkhoff as she walked through the main lobby doors of Rhodes Hall.

Dr. Oz and his video crew remained with Burkhoff as she was admitted to the hospital and during a pre-op discussion with her surgeons in the Ambulatory Surgical Unit. They were with her during the 2.5-hour surgery in University Hospital OR 16, and they followed her into the Post Anesthesia Care Unit recovery area after surgery. By noon, Dr. Oz had departed and the video crew had called it a "wrap."

During the surgery, Prevedello



During surgery, Dr. Oz explains how an innovative surgical procedure at Ohio State benefits a patient with Cushing's disease.

removed two benign tumors near the pituitary gland. However, Burkhoff did not respond as well as doctors had hoped. Within a few days, Prevedello and Carrau decided to schedule an unprecedented fifth surgery on Sept. 22.

Even though Dr. Oz couldn't make it back for the fifth and final surgery, his video crew arrived at 6 a.m. on a football home-game Saturday. The crew interviewed Burkhoff and the surgeons before the four-hour surgery, and the surgeons again after the operation. This surgery proved successful, and Burkhoff continues to improve.

Prevedello and Carrau, members of Ohio State's Cranial Base Center, will join Burkhoff on the set of *The Dr. Oz Show* in New York City to share her inspirational story with an international audience during an episode slated to air in the near future.

The Dr. Oz show airs weekdays 4 p.m. on WBNS/10-TV. Stay tuned to OneSource and medicalcenter.osu.edu for details about the airing of this Ohio State segment. If you have a story to share through the media, contact Media Relations at 293-3737.



Patient Lori Burkhoff poses with (from left) Neurosurgeon Daniel Prevedello, MD; Otolaryngology (ENT) Surgeon Ricardo Carrau, MD; and Dr. Oz.

"Educating the public about Ohio State's innovative research and care is an important part of our mission," says Steven G. Gabbe, MD, CEO of Ohio State's Wexner Medical Center. "Many faculty and staff work with our Media Relations team to coordinate sharing our message. Others publish in their professional or association journals. However, each of us can share the stories about our accomplishments and how we are advancing medicine and health care informally through conversations with friends and family, in person and online.

"Ohio State's Wexner Medical Center is recognized by many organizations and publications as among the best in the world. You are encouraged to let others know about the pride we all have in being part of this excellent academic medical center," adds Gabbe.

Turn the page to learn how one of our own Emergency Department physicians has used her column in *The Columbus Dispatch* for several years to teach and talk about academic medicine.

Newspaper column connects ED physician with community

Joe Meaney | *The Ohio State University Wexner Medical Center*

Providing excellent care to patients in our Emergency Department (ED) isn't enough for Diane Gorgas, MD. By writing stories about her experiences in the ED, Gorgas is able to affect more than just her patients. Gorgas writes a monthly column in the "To Your Health" section of *The Columbus Dispatch* to keep readers informed about trends in health care. Her medical knowledge coupled with her unique experiences as a physician make for an insightful and interesting read.

Gorgas, who received her medical degree from Case Western Reserve University, began writing for the *Dispatch* science section in January 2007. At the time, the *Dispatch* was seeking out a physician who would be interested in sharing health and medicine-related stories to readers. Gorgas was put on a trial period before being permanently added to the science page roster to see if she had the right tone and communication skills to write for a newspaper audience.

"At first it was very different to do. I hadn't done any writing for the lay public," says Gorgas. "Writing non-technically was new and different compared to communicating verbally, which I do with patients often."

After a few months, Gorgas was able to find her rhythm and continue to produce stories for the *Dispatch*. To her delight, Gorgas receives positive feedback from readers, much of which is from people who are touched on a personal level from Gorgas' accounts related to Ohio State's Emergency Department.

"I do get feedback, and I encourage feedback for medical questions. It's what they want to hear. I am writing for them," says Gorgas of her loyal newspaper followers. "People are moved to write when it connects to them personally. Motivation to write takes a personal connection."

Some of Gorgas' stories are more about the dynamics of an emergency department rather than health-related issues. Gorgas says that what she writes about is something new and different from what you would find in other news outlets, and people like to know what happens in the hectic world of emergency medicine.

One of Gorgas' earliest columns talks about issues that face new residents in an emergency department. In this story, Gorgas provides insight on how residents must be specially trained to give families the news that their loved one has passed away. She says it's important to show readers what ED residents often have to go through behind the scenes.

"It's something that needs to be trained. It can make or break the resident in the emergency department. It can take an emotional toll if not properly trained," explains Gorgas.

Gorgas is given a set of topics that she is expected to cover for each month ranging from diabetes to oncology to women's health. She says that having some guidelines for what she should write about is helpful. Because emergency department physicians see what they refer to as a "spectrum of illness" and a "spectrum of patients," narrowing down what cases to write about is beneficial.

"When I first started writing, it was not topic specific," says Gorgas. "Having set topics makes it easier to choose one story out of the 50 potential stories I see daily."

With the recent popularity of social media, many doctors have taken to media like Facebook and Twitter to share medical insights with the public. Gorgas chooses not to use social media in the professional realm because she believes issues as important as medical and health information should be delivered in an especially delicate and serious manner.



Through her *Columbus Dispatch* column, Diane Gorgas, MD, gives the central Ohio community a peek into the world of Ohio State's Emergency Department.

"This is a form that is controlled and prescribed," says Gorgas of her column in the *Dispatch*. "Our patients deserve a lot of respect, and above all else I want to deliver excellent patient care."

Gorgas believes that the influx of doctors being involved with newspapers, TV shows and social media is due to the craving of patients for one-on-one time with a physician. Some people are uncomfortable with interacting with their physicians, and some patients won't talk with their physician at all. This void will often be filled with medical advice through the media, whether it is on television or on the Internet. However, Gorgas believes that this may not always be a good thing.

"Physicians in the media do not direct their message to one person. There is no substitute for one-on-one patient interaction," says Gorgas. "Being educated is a luxury, but misinformation can be very dangerous. It's about weeding out the untrue and misleading information."

Along with her journalistic abilities and duties, at the end of the day Gorgas is

an Emergency Department physician, residency director and professor in Ohio State's College of Medicine. She admits that finding time to write her *Dispatch* column is often difficult, so she tends to write ahead of her deadline.

"But it is something I really enjoy doing. It's one of my 'chores' I like the most," Gorgas admits.

Did you know?

Diane Gorgas, MD, is a distant relative of William C. Gorgas, the U.S. Army surgeon best known for reducing the spread of yellow fever and malaria during the construction of the Panama Canal in 1904. "I think I should have more creative thinking in me somewhere," says Gorgas with a smile when recalling this genetic link.



BUCKEYES Go Pink

Ohio State vs. Purdue on October 20

Join The James, Kroger and the Spielman Fund and turn Ohio Stadium pink for the Oct. 20 game with Purdue.

- Wear pink Buckeye gear to the game.
- Pink out your tailgate with pink foods and decorations from Kroger.
- Arrive early at the game to receive a free pink rally towel while supplies last.

But for Ohio State... Understanding tamoxifen resistance

Darrell E. Ward | The Ohio State University Wexner Medical Center

Tamoxifen has been a powerful and beneficial force in the treatment of women whose breast cancer growth is dependent on the hormone estrogen.

Estrogen stimulates the growth of breast cancers that are estrogen-receptor positive, the most

common form of breast cancer. The drug tamoxifen blocks this estrogen effect and prolongs the lives of, and helps to cure, patients with estrogen-sensitive breast cancer. In fact, it's estimated that tamoxifen has improved the disease-free survival of people with estrogen-receptor-positive breast cancer by 50 percent.

However, 30-to-40 percent of patients taking tamoxifen become resistant to it after about five years. Tamoxifen resistance makes treatment more difficult and the patient's prognosis generally much less favorable. Currently, there are very limited treatment options for these patients. Chemotherapy is used to treat hormone-resistant breast cancers, but this is associated with significant side effects.

A recent Ohio State study has

shown how resistant tumors survive and grow. It also identifies an experimental agent that targets these breast cancers. The research is led by Sarmila Majumder, PhD, and Bhuvanewari Ramaswamy, MD, and published in the journal *Cancer Research*. Both scientists are members of Ohio State's Comprehensive Cancer Center – James Cancer Hospital and Solove Research Institute.

Here's what Majumder and Ramaswamy discovered:

Like a second door that opens after the first door is closed, a signaling pathway called hedgehog (Hhg) can promote the growth of breast-cancer cells after tamoxifen shuts down the pathway that was activated by the hormone estrogen. Another signaling pathway, called PI3K/

AKT, is also involved.

Activation of the Hhg pathway renders tamoxifen treatment ineffective and enables the tumor to resume its growth and progression. As part of the study, the researchers analyzed more than 300 human tumors and found that the tumors with an activated Hhg pathway had a worse prognosis.

The Ohio State researchers also have shown that an experimental drug called vismodegib, which blocks the Hhg pathway, inhibits the growth of tamoxifen-resistant human breast tumors in an animal model. The drug, which might offer a novel targeted therapy for these tumors, is in clinical trials testing for other types of cancer.

"Our next step is to organize a clinical trial to evaluate vismodegib in patients with tamoxifen-



Sarmila Majumder, PhD

resistant breast cancer," says Ramaswamy.

Funding from the National Cancer Institute and a Pelotonia Idea grant supported this research. Other Ohio State researchers involved in the study include Yuanzhi Lu, Kun-yu Teng, Gerard Nuovo, Xiaobai Li and Charles L. Shapiro.



Bhuvanewari Ramaswamy, MD

'Journey to Innovation'

Samantha Beasore | The Ohio State University Wexner Medical Center

Michel Torbey, a professor of Neurology and Neurosurgery and medical director of the Neurovascular Stroke Center at Ohio State's Wexner Medical Center, was drawn to the medical field at a young age while growing up in Beirut, Lebanon. He was inspired by his mother, who worked as a critical care nurse, and the memory of a particular event that occurred in the ICU at her hospital.

"A patient was coding and the doctors were resuscitating him," recounts Torbey, who was 11 years old at the time. "I was like, 'Wow, that is actually cool to be able to do that and help somebody.'"

"That's where my interests started me looking into medicine," Torbey says of this life-changing event.

Torbey describes his childhood in Beirut as interesting. He grew up during the Lebanese Civil War and became accustomed to moving from the city to the mountains during times of intense fighting.

However, Torbey says he feels nothing but appreciation for his homeland. "It was fun growing up there and having experienced that part of the world," Torbey says of Beirut. "It's a beautiful city, right on the beach. The people are welcoming."

Torbey received a medical degree from the American University of Beirut and a Master of Public Health in Epidemiology at the University of Massachusetts School of Public Health. He joined Ohio



State in 2011 as medical director of the Neurovascular Stroke Center.

Torbey leads Ohio State's Telestroke Program, which focuses on providing quick, lifesaving care to stroke patients in remote areas of Ohio. The Telestroke Program uses modern technology to consult with staff of smaller hospitals, sharing Ohio State's expertise in highly specialized care for the benefit of patients in those rural areas.

"We've had great successes so far," Torbey says. "Most importantly, patients understand the importance of it, and they appreciate the fact that it's available in their community."

See and hear Torbey's journey to Ohio State at go.osu.edu/Pky.

About 'Journey to Innovation'

Diversity in people and ideas is a core value and strength of The Ohio State University and its Wexner Medical Center. The video series "Journey to Innovation" shares the stories of 12 foreign-born physicians who made Ohio State's Wexner Medical Center their destination. Follow the series in *Insight* and online at YouTube.com/OSUMedicalCenter (search "Journey to Innovation").

"Journey to Innovation" was made possible by a grant from the OSU Medical Alumni Society; Ismail Nabeel, MBBS, MPH; the OSU Wexner Medical Center Diversity Council; and the Department of Marketing and Strategic Communications.

Quiz answers: Eat Right!

In the Sept. 20 *Insight*, we asked readers to take the "vending machine food quiz" and select the lower-fat food item from five vending machine choices.

Here are the answers. The lower fat item is listed first and in bold, and the percentage of fat content is in parentheses:

1. **B Fig Newton cookies (less than 20% fat)** vs. Trail mix (more than 40%)

2. **A Oreo cookies (21-39%)** vs. Hostess snack cakes (more than 40%)

3. **B Animal crackers (21-39%)** vs. Fritos corn chips (more than 40%)

4. **B Pretzels (less than 20%)** vs. Planter's peanuts (more than 40%)

5. **A Slim-Fast shakes (less than 20%)** vs. Grandma's cookies (more than 40%)

More than 150 entries were sent in. These four winners, drawn from those who submitted correct quiz answers, will receive a \$25 grocery store gift card: Connie Bolek, Heather Spellman, David Rittinger and Lori Lycans.

Thanks to all who entered. Learn more about how you can improve your nutrition and your health, and take the P4 Pledge, at osup4medicine.com/.

OSU WEXNER MEDICAL CENTER



CENTRAL OHIO'S BEST ADULT HOSPITAL

UP CLOSE AND PERSONAL^{ized}

Dr. John Campo is a nationally recognized expert in psychiatry, whose work leading personalized behavioral health care at Ohio State is changing lives throughout central Ohio. Like Dr. Campo, **THE WORLD'S BEST AND BRIGHTEST PHYSICIANS AND RESEARCHERS ARE COMING TO OHIO STATE** to create a new model for health care that is predictive, preventive, personalized and participatory. We call it P4 Medicine.

What attracted me to Ohio State? The opportunity to advance psychiatry and behavioral health care nationally by improving the quality of local behavioral health services here at Ohio State. As the chair of Ohio State's Department of Psychiatry, I am committed to expanding the quality and quantity of our faculty and staff to meet the ever-increasing need for these services in central Ohio. Our initial success has strengthened my resolve to continue developing comprehensive, state-of-the-art behavioral health services relevant to individuals across each stage of life.

How am I advancing personalized health care at Ohio State? By working to integrate behavioral health services into general medical settings, we aim to demonstrate that health cannot be split into "physical" and "mental" categories. Suicide, for example, is an especially important public health problem, warranting personalized preventive efforts and a zero-tolerance approach that can be tested and applied across our community, including in emergency departments and primary care locations.

But for Ohio State...central Ohioans struggling with emotional, behavioral and addictive disorders would need to look beyond the boundaries of their community to receive personalized care.

Ohio State's reputation for excellence is drawing world-class talent to Columbus. **WE HAVE ATTRACTED MORE THAN 215 EXPERTS IN 2 YEARS, AND 87 PERCENT OF CENTRAL OHIO'S BEST DOCTORS ARE OHIO STATE FACULTY.** Through their skill and dedication, we are delivering on our promise to improve people's lives, and giving central Ohioans access to the very best care.

Dr. John Campo

Chair of Ohio State's Department of Psychiatry

Chief of Psychiatry for Ohio State's Wexner Medical Center

Former Director of Child and Adolescent Psychiatry and Medical Director of Pediatric Behavioral Health, a joint position serving Ohio State and Nationwide Children's Hospital

Came to Columbus from The University of Pittsburgh



Wexner
Medical
Center