

# BIOMEDICAL ENGINEERING

DEPARTMENT OF BIOMEDICAL, INDUSTRIAL AND  
HUMAN FACTORS ENGINEERING

**SPRING 2021**



## CHAIR'S MESSAGE

Welcome to the Biomedical Engineering Spring 2021 newsletter. I am Subhashini Ganapathy, alumna, associate professor, and chair of the department. We offer degrees at the bachelor's, master's, and doctoral level, and our program provides individuals opportunity and skills to pursue a fascinating, important, and rewarding career and become a part of exciting new advances in engineering and medicine.

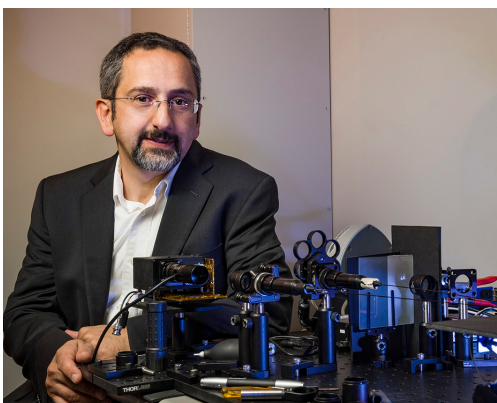
Biomedical engineers continually adapt to meet rapidly evolving requirements of the government, scientific, and medical communities. Future employment opportunities include designing and testing artificial organs, electrical muscle stimulators, drug delivery systems, artificial joints, prosthetics, and medical imaging technologies. Wright State BME pre-med students are also prepared for entrance into medical, dental, or other post-baccalaureate health professional programs. Our students are employed nationally at various organizations such as Johnson & Johnson, Akorn Pharmaceuticals, Medtronic, as well as at consulting, government, and academic institutions around the world.

I hope you find the newsletter informative. Whether you are a prospective student or parent, an alumni, industry partner, or just interested please don't hesitate to reach out to us.

Subhashini Ganapathy, Associate Professor and Chair



## ULAS SUNAR WINS \$1.7 MILLION GRANT FOR IMAGING AND TREATING OVARIAN CANCER



A Wright State researcher received grant funding to develop a novel endoscopic technique for imaging and treating ovarian cancer. Ulas Sunar, an Ohio Research Scholar and Endowed Chair in Medical Imaging, received the grant from the National Cancer Institute in the National Institutes of Health (NIH).

"Our approach is expected to significantly improve detection and destruction of small tumor nodules in ovarian cancer patients and reduce side effects in normal tissue, thereby improving patients' survival rates and quality of life," Sunar said.

### DETAILS

# BME NEWS



## DAVID KENDER AMONG RAIDERS OF POW RESCUE ATTEMPT IN VIETNAM

The most daring rescue attempt of the Vietnam War era included David Kender, a retired Wright State University engineering instructor. Nov. 21 marked the 50th anniversary of the Son Tay mission when volunteers from the Army Green Berets and Air Force Special Operations Forces launched the raid to rescue 61 U.S. military prisoners-of-war thought to be held Son Tay. Although the prisoners had been moved and the raiders found an empty camp, it was reported that the audacity of the heroic attempt dramatically improved the treatment of the prisoners. In recognition of their heroism, Kender and his fellow warriors were awarded the Silver Star, the nation's third-highest decoration for gallantry.

### DETAILS

## STUDENT HIGHLIGHTS

### SHELBY HOLZAPFEL

Shelby co-oped with Ethicon Inc, which is part of the Johnson and Johnson Medical Device Company, from January 2020-December 2020. She learned about medical device design and the importance of usability while also working in her dream industry. She returned to Wright State in January 2020 to finish her undergraduate degree and continued membership in clubs such as Society of Woman Engineers and the Biomedical Engineer Society.



### GULLZADA ANWARI

Gullzada serves the CECS as senator while maintaining co-presidency in the Dean's Student Advisory Board, volunteering chair for Compassion in Action, community liaison and volunteering officer for the Multicultural Pre-med Association, and secretary of the Biomedical Engineering Society. He is working on extending course evaluation time to ensure all students have ample time to give feedback. He is also involved in the planning process for a large event for Women in STEM that will occur in March. More details to come!

### CARMEN ASMAN

Carmen has worked with the Non-Invasive Brain Stimulation team on 6 different studies at the Air Force Research Laboratory for almost 2 years. She is currently working on MRI studies to help the team learn how non-invasive brain stimulation affects blood perfusion and human performance. Carmen along with the rest of her division (Airman Biosciences Division) strive to enable, enhance, sustain, and restore the health and performance of our Airman. Carmen also enjoys serving as the president for the Biomedical Engineering Society and community chair for Tau Beta Pi.

