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**Mary C. Mahoney, MD, FACR**
*Benjamin Felson Endowed Chair and Professor of Radiology, University of Cincinnati*

*Chief of Imaging Services, UC Health*

**Ram Chadalavada, MD**
*Vice Chair of Informatics*

**Eric England, MD**
*Vice Chair of Education*

**Frank Rybicki, MD**
*Vice Chair of Operations and Quality*

**Achala Vagal, MD**
*Vice Chair of Research*

**ABDOMINAL IMAGING**
Jonathan Moulton, MD

**BREAST IMAGING**
Lawrence Sobel, MD

**CARDIOPULMONARY IMAGING**
Sangita Kapur, MD

**EMERGENCY RADIOLOGY**
Ergent Zhiva, MD

**INTERVENTIONAL RADIOLOGY**
Abouelmagd Makramalla, MD

**MUSCULOSKELETAL RADIOLOGY**
Eric England, MD

**NEURORADIOLOGY**
Mary Gaskill-Shipley, MD

**NUCLEAR MEDICINE**
Jennifer Scheler, MD

**PEDIATRIC RADIOLOGY**
Brian Coley, MD

## INSIDE

## From the Chair

Patient-centered care is a two-way conversation. For too long, radiologists have focused on the image, at the expense of the person. We are experts at analyzing and deciphering images of every part of a patient's body. But the whole is greater than the sum of its parts, and our patients are not just compilations of images. We need to balance the science of the image with the art of patient care.

We can improve communication and use available technologies to enhance the entire patient experience from scheduling, through imaging, to follow-up. Patients are more involved than ever in their health care, and it's important that we provide the answers they need- when, where, and how they want them. There's no question that the first place most patients turn to for health information is the Internet, which, unfortunately, is rife with misinformation. By improving our online presence through patient portals, practice websites, social media, and health information sites like RadiologyInfo.org, we can provide our patients with accurate information, any time, day or night, on their mobile devices, or at the click of a mouse.

We must also speak to patients in a language they understand in all our communications and reporting. RSNA past-president Rich Baron said we should "consider each examination as a question to be answered – for both the patient and the referring physician. Quality patient care demands we take whatever measures necessary to see that our performance of the examination and our report answer the question better than anyone else can." In other words, we are doing a disservice to our patients if we simply describe the findings in our reports. We need to add context to our reporting. We need to provide value.

To be fully patient-centered means considering the patient experience holistically. It isn't simply talking to patients or giving them results. It's how they are treated when they call for an appointment. It's the reception area. It's giving them the appropriate exam and radiation dose. It's the report. It's the bill. It's the follow-up. We must be mindful of the patient experience through every single interaction, and every touch point they have with our department or practice. Service is at the core of an exemplary patient experience. We must see patients as stakeholders in our success.

## Once Again We Have Top Docs!

Congratulations to our UC Radiologists who were ranked as some of the best doctors in America and top doctors in Cincinnati for continuously delivering outstanding care! For 2022, nearly 200 UC Health physicians were recognized as Best Doctors in America *(Cincy Magazine)* and/or Top Doctors in Cincinnati *(Cincinnati Magazine)*. There were 16 of our very own named in one or both surveys!
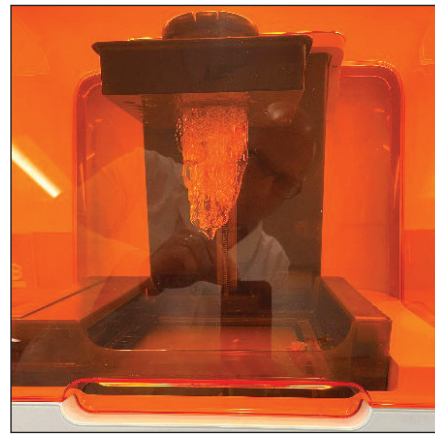
**ANN BROWN, MD** – Radiology
**SEETHARAM CHADALAVADA, MD** – Vascular & Interventional Radiology
**KYURAN ANN CHOE, MD** – Radiology
**JOHN HAZENFIELD, MD** – Radiology
**ALISA KANFI, MD** – Radiology
**BRUCE MAHONEY** – Nuclear Medicine
**ABOUELMAGD MAKRAMALLA, MD** – Vascular & Interventional Radiology
**JONATHAN MOULTON, MD** – Radiology
**ROSS L. RISTANGO, MD** – Vascular & Interventional Radiology
**JENNIFER SCHELER, MD** – Nuclear Medicine
**JULIANA TOBLER, MD** – Radiology
**ACHALA VAGAL, MD** – Radiology
**DOAN VU, MD** – Vascular & Interventional Radiology
**SHAUN A. WAHAB, MD** – Radiology
**RIFAT WAHAB, DO** – Radiology
**LULU ZHANG, MD** – Vascular & Interventional Radiology

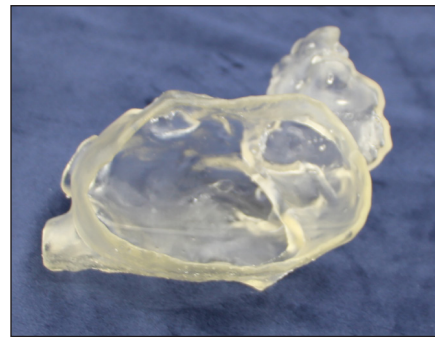# A Quick Tour of the Radiology Department 3D Printing Lab

The University of Cincinnati College of Medicine is home to a new showcase in medical technology, the 3D Printing Lab in the Department of Radiology. This lab is one of the very few dedicated labs in the country, and hosts a collection of state-of-the-art, software & equipment enabling production of 3D anatomical models in a range of materials best suited to the end application.

Central to the lab operations is a multi-seat installation of Materialise MIMICS Innovation Suite and MIMICS InPrint. This software suite is the benchmark in FDA 510K cleared DICOM data segmentation and computer aided modeling of anatomy, with over two decades of use in medical centers worldwide and over 14,000 citations in reviewed publications. The MIMICS software suite allows any tomographic DICOM images to be imported, multiple studies to be registered, and 3D digital models of anatomical structures to be segmented from the image data. Furthermore, MIMCS allows manipulation of the 3D digital models to simulate surgery or develop custom treatment aids (e.g. device fitting templates, surgical cutting guides, prostheses or other patient specific devices).

The lab's "newest addition" 3D printer is the Stratasys J5 MediJet. This device is the latest innovation in 3D printing technology from an industry leader Stratasys, coming to the market in July 2021 with an FDA 510K cleared process in conjunction with the MIMICS software suite. The J5 MediJet is capable of printing in full spectrum of color, ranging from transparent to opaque, at speeds comparable to previous generation single material 3D printing processes. University of Cincinnati College of Medicine is one of the first 10 institutions worldwide to acquire this technology. Keep watching for future articles featuring innovative, breakthrough treatment planning models developed using the J5 MediJet.


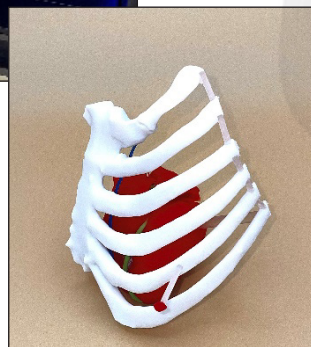**FormLabs Form3 in Radiology 3D Printing Lab**


**Elastic Resin Model Printed on Form3**

Additional workhorses of the lab are the FormLabs Form3 3D printers. These are third generation Vat Polymerizations printers capable of printing down to 25-micron resolution, in a wide range of material properties. The Form3 printers print at superior resolution and speed, and they are cost effective. Models from the Form 3 can be rigid or pliable, transparent or opaque as necessary. For example, the Form3 can print a clear, pliable left atrium models for trial fitting prosthetic implants in the appendage. Most notably, the Form3 printers allow for printing of biocompatible materials approved for temporary contact with human tissue.
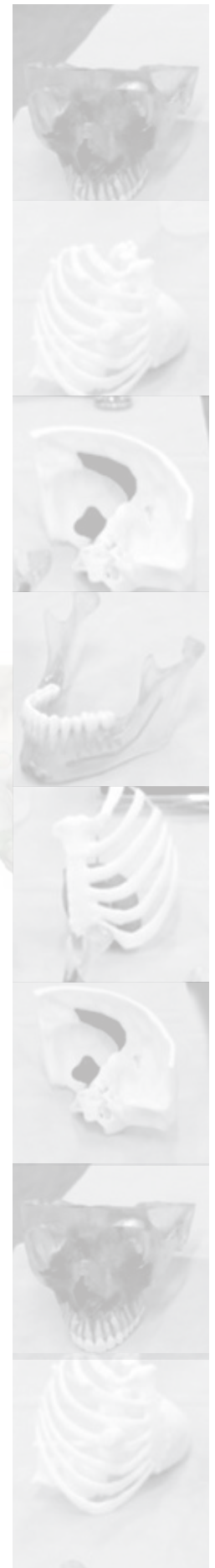

**Stratasys J5 in Radiology 3D Printing Lab**


**Color Model Printed on J5**


**Shayne Kondor, MSAE working with the J5 MediJet.**

## RSNA 2022 in Chicago, November 27 - December 1

The 2022 Radiology Conference and Annual Meeting was well supported by UC Radiology faculty, fellows, residents, and students. A cocktail reception kicked the event off, and many UC attendees showcased their education exhibits throughout the week. The theme this year was "Empowering Patients and Parteners in Care."
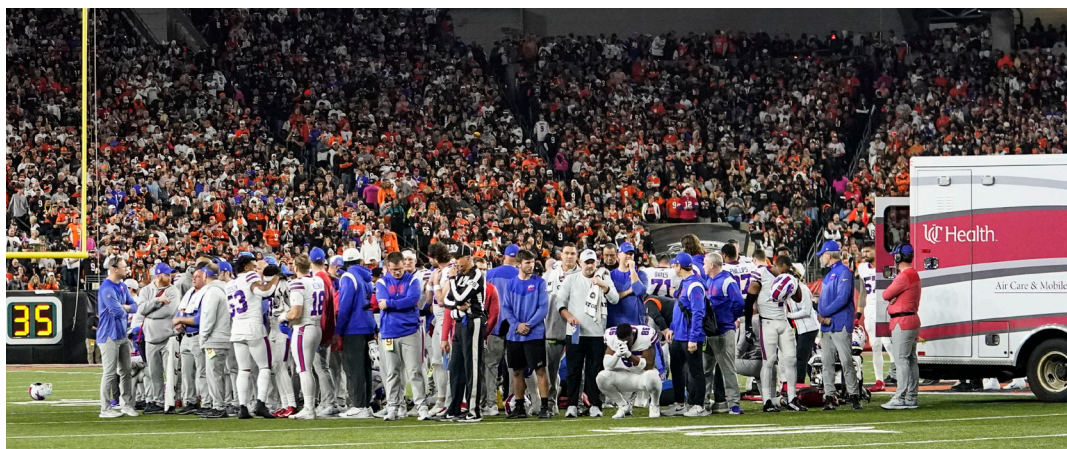
**One of our own VIPs, Dr. Albasha Heba, is ready for her meet and greet!**

## UC Health Radiology Shows Up for the NFL

Damar Hamlin of the Buffalo Bills suffered cardiac arrest in a game against the Cincinnati Bengals. Hamlin was given immediate care on the field and then transported to University of Cincinnati Medical Center where an extensive team of doctors and health care professionals went into action.

**Speaking of Radiology's role to The New York Times, Dr. Mahoney was quoted as saying that one of the medical tools used when a patient is in a situation like Hamlin's is a whole-body CT scan, which is "like eyes looking into the body." It is invaluable to the trauma team. "It can point you in the right direction."**

Radiology is proud to be part of the team, providing life saving care in the Tri-State area!

**Mary Gaskill Shipley, MD**



**Doan Vu, MD**

## 35 Years of Service!

Congratulations to Dr. Mary Gaskill Shipley and Dr. Doan Vu for 35 years of Service to the University of Cincinnati College of Medicine!



**Lily Wang, MD**



**Achala Vagal, MD**

## 2023 Office of Research Annual Sponsored Awards Winners

Drs. Achala Vagal and Lily Wang were recognized by President Pinto's office as part of the 2023 Office of Research Annual Sponsored Awards. Dr. Vagal received both the top sponsored award and the top collaborative award. Dr. Wang received the top collaborative award for the Validation of Early Prognostic Data for Recovery Outcomes after Stroke for Future (VERIFY) study. Drs. Wang and Vagal are a prime examples of team science and a testament to our Clinician Scientist Program.



**Seetharam Chadalavada, MD**

## AΩA Honor Medical Society's Newest Member

Seetharam Chadalavada, MD was selected as a new inductee to the University of Cincinnati College of Medicine's Chapter of Alpha Omega Alpha (AΩA) Honor Medical Society. Membership in the Alpha Omega Alpha is one of the highest honors that can be awarded to Medical School Faculty and signifies a lasting commitment to professionalism, leadership, scholarship, research, and community service. Alpha Omega Alpha is committed to improving diversity, equity, and inclusion based on evidence that inclusion of talented individuals from different backgrounds benefits patient care, population health, education, research and scientific discovery. A formal induction ceremony will take place in Spring 2023.





UC HEALTH ROLLING OUT MOBILE MAMMOGRAPHY UNIT TO IMPROVE ACCESS — FOX19 NOW — 74° 5:46

## Rifat Wahab WCPO Interview

Rifat Wahab, DO discussed breast imaging disparities and the need for diligence in screening mammogram with WCPO news on November 6, 2022. "We do see a disparity between our minority women and our Caucasian women," states Dr. Wahab. Several factors contribute to the disparity including genetics, access to care, a high-quality screening mammogram and education, among other global disparities. UC Health's mobile mammography unit is helping to increase access to high quality screenings in Cincinnati. The entire interview can be viewed at wcpo.com.

![RSNA Radiological Society of North America logo]

### PRESENTATIONS:

Wessel B, Rao R, Jacobson J, Braley S, Klostermeier T, Reed C. A Step-wise approach to finally understanding arthritis RSNA 2022 Chicago, IL

Li J, Gaskill-Shipley M, Wang L. Resident's Primer on Posterior Cranial Fossa Lesions in Adults: Not Your Usual Suspects RSNA 2022 Chicago, IL

Vearrier J, Wahab R, Vijapura C, Lewis K, Mahoney M, Guarnieri B. Breast Radiofrequency Identification Marker Localization: Technique, Tips, and Troubleshooting. RSNA 2022 Chicago, IL

Rao R, Kord A. Risk Reduction Protocol for Mitigating Bleeding Complications After an Image-Guided Kidney Biopsy. RSNA 2022 Chicago, IL

Albasha H, Tobler J, Mungcal G, Choe K. From A to Z(ebras): Vascular Findings and Complications after Liver Transplant. RSNA 2022 Chicago, IL

Morgan D, Vijapura C, Lewis K, Wahab R, Mahoney M, Guarnieri B. From the Breast to the Bone: Multimodality Imaging Review of Osseous Metastasis from Breast Cancer. RSNA 2022 Chicago, IL

Gjeluci K, Zhang L, Moulton J. Illustrative Cases of Acute Pancreatitis and Commonly Encountered Complications. RSNA 2022 Chicago, IL

Shelton S, Sriwastwa A, Kord A, Makramalla A, Nahab B. Stepwise Percutaneous Approach to Treat Severe Benign Hepaticojejunostomy Strictures. RSNA 2022 Chicago, IL

Ahmed K, Flink C. Hyoid- Laryngeal Complex Fractures in the Emergency Patient. ASER 2022; Austin, TX.

Swy E, Flink, C, Beckett K. Emergencies Associated with Assisted Reproductive Technologies: A Multimodality Imaging Review for the Emergency Radiologist. ASER 2022 Annual Meeting; Austin, TX.

### PUBLICATIONS:

Albasha H, Wang SS, Revels JW, Beckett K, Flink CC. Imaging review of penile pathologies encountered in the emergency department. Emergency Radiology. 2022;29(1):147-159.

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England, E., Kanfi, A., & Tobler, J. (2022). In-person second look during a residency virtual interview season: An important consideration for radiology residency applicants. Academic Radiology, doi:10.1016/j.acra.2022.07.015

Lawson MB, Herschorn SD, Sprague BL, Buist DSM, Lee S-, Newell MS, Lourenco AP, Lee JM. Imaging surveillance options for individuals with a personal history of breast cancer: AJR expert panel narrative review. Am J Roentgenol [Internet]. 2022;219(6):854-68

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Bonkhoff AK, Hong S, Bretzner M, Schirmer MD, Regenhardt RW, Arsava EM, Donahue K, Nardin M, Dalca A, Giese A-, Etherton MR, Hancock BL, Mocking SJT, Mcintosh E, Attia J, Benavente O, Cole JW, Donatti A, Griessenauer C, Heitsch L, Holmegaard L, Jood K, Jimenez-Conde J, Kittner S, Lemmens R, Levi C, Mcdonough CW, Meschia J, Phuah C-, Rolfs A, Ropele S, Rosand J, Roquer J, Rundek T, Sacco RL, Schmidt R, Sharma P, Slowik A, Soederholm M, Sousa A, Stanne TM, Strbian D, Tatlisumak T, Thijs V, Vagal A, Wasselius J, Woo D, Zand R, Mcardle P, Worrall BB, Jern C, Lindgren AG, Maguire J, Golland P, Bzdok D, Wu O, Rost NS. Association of stroke lesion pattern and white matter hyperintensity burden with stroke severity and outcome. Neurology [Internet]. 2022;99(13):E1364-79.

Turner KM, Wahab SA, Delman AM, Brunner J, Smith MT, Choe KA, Patel SH, Ahmad SA, Wilson GC. Predicting endocrine function after total pancreatectomy and islet cell autotransplantation: A novel approach utilizing computed tomography texture analysis. Surgery [Internet]. 2022

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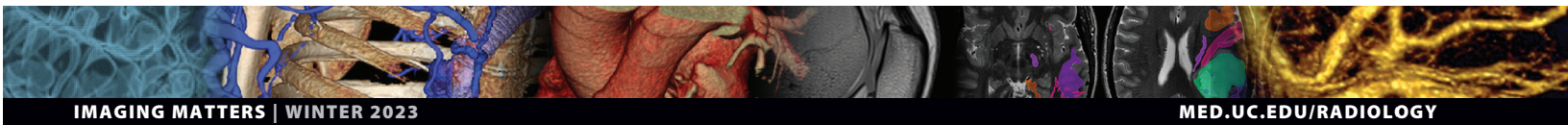
## C-STARS: Partnership Between UCMC and the Air Force

UC Radiology sponsored family members of local military veterans to attend a UC Bearcats Game on Veterans Day.

The C-STARS is a joint partnership between the University of Cincinnati Medical Center and the Air Force, with the mission to provide hands-on, realistic training for military medical personnel in trauma and critical care.

One of three C-STARS training platforms in the U.S., the Cincinnati C-STARS trains more than 250 military critical care air transport teams (CCATTs) annually, evaluating and certifying that casualty care teams are capable and ready to provide emergency treatment to seriously injured patients at point of injury so they can be transported to military treatment facilities for further care.