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***Nature* Article Highlights UAMS Effort to Share COVID-19
Images on National Cancer Database**

LITTLE ROCK — Data experts with the University of Arkansas for Medical Sciences (UAMS) have uploaded clinical images of COVID-19 patients to a publically available national database that scientists can use in researching the disease and its impact in a global pandemic.

Initial findings were published [in the journal *Nature, Scientific Data*](#) that describe de-identified chest X-rays and other images of UAMS COVID-19 patients uploaded on The Cancer Imaging Archive (TCIA), a publicly available database supported by the National Cancer Institute (NCI).

UAMS was the first to contribute data to TCIA as part of an effort led by Fred Prior, Ph.D., principal investigator for TCIA and professor and chair of the UAMS College of Medicine Department of Biomedical Informatics, and Ahmad Baghal, M.D., Ph.D., director of the Arkansas Clinical Data Repository at UAMS.

“Researchers want this data,” Prior said, noting that 42% of Arkansas’ population is considered rural compared to 15% nationally. “Our state’s inclusion is essential as scientists are trying to figure out how this disease is evolving, how it is impacting different groups of people, and why there are such a wide variety of symptoms and outcomes.”

Over the summer, the NCI authorized use of TCIA as a COVID-19 image repository, Prior said. The Arkansas data gives researchers across the U.S. vital information about COVID-19’s impact on a rural population.

The UAMS biomedical informatics team reports in the journal that it provided a total 256 chest images in the initial phase of the ongoing project, including 233 radiographs (X-rays) and 23 Computed Tomography (CT) images of 105 patients. The patients ranged from ages 19 to 91, with an average age of 54.

Lung damage was common in the hospitalized patients.

“The most frequent pattern of imaging findings is ‘organizing pneumonia,’ which is essentially a pattern of lung changes as a response to inflammation,” the article states.

Many of the CT scans included the chest, abdomen and pelvis, which is important, Prior said, because COVID-19 is also affecting organs such as the kidneys and liver. UAMS’ contributions to TCIA also include genomic sequencing images of SARS-CoV-2 taken from positive test samples in COVID-19 patients.

The data is available on the TCIA website:

<https://www.cancerimagingarchive.net/collections/>

The collection and publication of the data was funded by the UAMS Translational Research Institute, which is supported by the National Institutes of Health National Center for Advancing Translational Sciences, grant UL1TR003107.

UAMS is the state’s only health sciences university, with colleges of Medicine, Nursing, Pharmacy, Health Professions and Public Health; a graduate school; hospital; a main campus in Little Rock; a Northwest Arkansas regional campus in Fayetteville; a statewide network of regional campuses; and seven institutes: the Winthrop P. Rockefeller Cancer Institute, Jackson T. Stephens Spine & Neurosciences Institute, Harvey & Bernice Jones Eye Institute, Psychiatric Research Institute, Donald W. Reynolds Institute on Aging, Translational Research Institute and Institute for Digital Health & Innovation. UAMS includes UAMS Health, a statewide health system that encompasses all of UAMS’ clinical enterprise including its hospital, regional clinics and clinics it operates or staffs in cooperation with other providers. UAMS is the only adult Level 1 trauma center in the state. *U.S. News & World Report* named UAMS Medical Center the state’s Best Hospital; ranked its ear, nose and throat program among the top 50 nationwide; and named six areas as high performing — COPD, colon cancer surgery, heart failure, hip replacement, knee replacement and lung cancer surgery. UAMS has 2,876 students, 898 medical residents and four dental residents. It is the state’s largest public employer with more than 10,000 employees, including 1,200 physicians who provide care to patients at UAMS, its regional campuses, Arkansas Children’s Hospital, the VA Medical Center and Baptist Health. Visit www.uams.edu or www.uamshealth.com. Find us on [Facebook](#), [Twitter](#), [YouTube](#) or [Instagram](#).

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