
RSNA Press Release

MIDRC Publishes Over 100k Imaging Studies

Released: December 5, 2022

OAK BROOK, Ill. (Dec. 5, 2022) — In just two years, the Medical Imaging and Data Research Center ([MIDRC](#)) has released over 100,000 imaging studies to the public to advance the development of machine learning/artificial intelligence applications for COVID-19 diagnosis and prediction.

MIDRC is a multi-institutional collaborative initiative driven by the medical imaging community and aimed at accelerating the transfer of knowledge and innovation in the current COVID-19 pandemic and beyond.

Funded by the National Institute of Biomedical Imaging and Bioengineering ([NIBIB](#)), MIDRC is led by a consortium of the [University of Chicago](#), the Radiological Society of North America ([RSNA](#)), the American College of Radiology ([ACR](#)), and the American Association of Physicists in Medicine ([AAPM](#)). The MIDRC data commons is hosted by the University of Chicago.

The aim of MIDRC is to foster machine learning innovation through data sharing for rapid and flexible collection, analysis and dissemination of imaging and associated clinical data by providing researchers with unparalleled resources in the fight against COVID-19.

The [MIDRC Data Commons](#) supports the management, analysis and sharing of medical imaging data for the improvement of patient outcomes. The data in MIDRC are open access to foster machine learning innovation through data sharing and include in addition to imaging files, patient demographic data, COVID-19 test results and other clinical data, harmonized study descriptions utilizing the LOINC playbook, and image DICOM tags for purposes of data filtering and selecting cohorts for analysis.

In addition to the public data portal, MIDRC has a sequestered data set to facilitate regulatory clearance and accelerate clinical usage. Methods of selecting clinical cases for the independent testing are used to appropriately evaluate a developed algorithm.

“MIDRC is a massive, curated, diverse, multi-institutional imaging dataset that enables new insights about the diagnosis and prediction of COVID-19 infection, its complications and its outcomes. We are realizing the benefits of new algorithms and the resulting innovations in machine learning,” said Curtis P. Langlotz, M.D., Ph.D., RSNA Board chair and professor of radiology and biomedical informatics, director of the Center for Artificial Intelligence in Medicine and Imaging and associate chair for information systems in the Department of Radiology at Stanford University.

The initiative has been funded for a third year. Interested institutions are encouraged to

review the necessary steps to participate.

Members of the medical community can attend MIDRC virtual seminars. The [seminar series](#) offers an opportunity to hear directly from the MIDRC team and features research presentations from MIDRC investigators on new and noteworthy advances. Sessions are held online and include live Q&A for all attendees. The next seminar will take place on January 17, 2023, at 2 p.m. CT.

For more information, visit [MIDRC.org](#).

#

RSNA is an association of radiologists, radiation oncologists, medical physicists and related scientists promoting excellence in patient care and health care delivery through education, research and technologic innovation. The Society is based in Oak Brook, Ill. ([RSNA.org](#))