RSNA Press Release

RSNA Hosts COVID-19 3D Printing Webinar

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OAK BROOK, Ill. (April 23, 2020) – The Radiological Society of North America (RSNA) 3D Printing Special Interest Group (SIG) is hosting a webinar focusing on 3D printing of personal protective equipment (PPE) and other devices in response to critical shortages during the COVID-19 pandemic. The webinar will take place Friday, April 24th, at 1 p.m. ET.

As the COVID-19 pandemic continues to spread across the United States and throughout the world, hospitals and other medical facilities are experiencing a severe shortage of PPE and other devices needed to test and treat patients during this public health crisis.

To address this issue, some facilities have turned to 3D printing, which is the creation of a tangible object from a digital file using a 3D printer. Materials such as plastics and gypsum are used to create the final form.

This technology has traditionally played three major roles in the clinic: surgical planning, patient-specific simulations and education. In the face of the current crisis, 3D printing is being used to create needed devices that are in extremely short supply.

The webinar was developed to educate facilities using this approach by providing case studies and practical advice for 3D printing of certain devices during this emergency.

“As the RSNA 3D Printing SIG, we believe it is part of our duty to provide our community with the proper information to make informed decisions for their hospital/hospital networks for consideration in cases of extreme shortage,” said Peter Liacouras, Ph.D., RSNA 3D Printing SIG chair and director of services of the 3D Medical Applications Center at Walter Reed National Military Medical Center in Bethesda, Md.

During the webinar, a panel of experts will discuss the abundance of 3D printing COVID-19 parts and information available online and will focus on 3D printing face shields, masks and nasal swabs.

The expert panel includes Nicole Wake, Ph.D., director of the 3D Imaging Lab at Montefiore Medical Center in New York City, Beth Ripley, M.D., Ph.D., chair of the VHA 3D Printing Advisory Committee and Senior Innovation Fellow, VHA Innovation Ecosystem from the VA Puget Sound Health Care System in Washington, and Summer Decker, Ph.D., director for 3D Clinical Applications at USF Health Morsani College of Medicine in Tampa, Florida. The panelists will present their current COVID-19 initiatives and answer questions.
“These panelists have made extraordinary efforts in 3D printed PPE and non-medical devices during the pandemic,” said Frank J. Rybicki, M.D., Ph.D., founding chair of the RSNA 3D Printing SIG and vice chair of operations & quality in the Department of Radiology at UCHealth in Cincinnati. “Summer Decker has been leading the national campaign on 3D printed nasal swabs, Beth Ripley has been producing and strategizing on masks to protect healthcare workers, and Nicole Wake has been creative lead for 3D printed face shields in New York City.”

The growing specialty of 3D printing for patient care crosses all subspecialties of medicine, with radiology at the intersection. As such, radiologists play an important role in developing medical applications for this technology. RSNA’s 3D Printing SIG promotes 3D printing for medical applications via education, research and collaboration, and provides physicians and allied health scientists with optimized education and research programs. The group also assists in developing quality standards for medical 3D printing.

The one-hour webinar is free but requires registration.

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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, Illinois. (RSNA.org)