

Kyoto Kagaku Chest Phantom Family

Thorax contains organs crucial for our lives, and lung cancer remains to be the top cancer. Here's a family of chest phantoms that support pursuit for better diagnosis and treatment.

Pursuit of low-dose



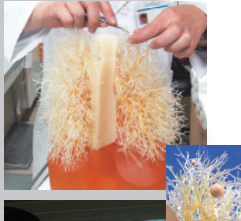
PH-8 Lung Cancer Screening CT Phantom LSCT001



PH-58 Subsolid Nodules

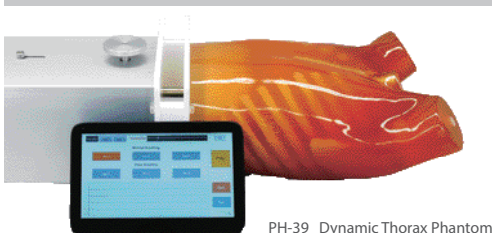
Extensive possibilities for study and training

Attach the simulated tumors & Improve interpretation skills



PH-1 Multipurpose Chest Phantom N1 "LUNGMAN"

Radiotherapy



PH-39 Dynamic Thorax Phantom

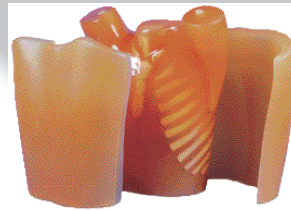


Components for Radioisotope for "LUNGMAN"

Body size variation



PH-1C Pediatric Chest Phantom



Chest plates for "LUNGMAN"



PH-65 PET/SPECT Thorax Phantom for "LUNGMAN"

Modality variation

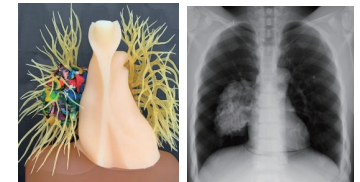
CHEST IMAGING NOW, CHEST IMAGING FOR TOMORROW

Study, Training and Standardization for Better Practices – our chest phantoms are optimal for safe chest radiology study and training.

Due to the current respiratory pandemic, chest imaging has come to be understood as a crucial element in all radiology departments, reminding us that study and experience are necessary for training the next generation of radiologists and radiographers for future scenarios which may require experience in mass casualty incident planning, effective use of limited resources, proper infection prevention, and standardized imaging and interpretation. (*Coronavirus Outbreak: Is Radiology Ready?*

Mass Casualty Incident Planning, [https://www.jacr.org/article/S1546-1440\(20\)30304-5](https://www.jacr.org/article/S1546-1440(20)30304-5))

The current uses of individual modalities are discussed, while findings are being collected and shared. (*COVID-19 patients and the radiology department – advice from the European Society of Radiology (ESR) and the European Society of Thoracic Imaging (ESTI)*, <https://link.springer.com/article/10.1007/s00330-020-06865-y>)



Pulmonary vessels with simulated pneumonia (prototype)

An extensive range of Kyoto Kagaku chest phantoms is ready for study and training toward this new era of chest imaging. The following are just a fraction of examples of how phantoms are used in pursuit of better imaging.

There are many more published studies. To learn more, contact us; ✉

KYOTO KAGAKU co.,LTD

- **NODULE DETECTION BY CHEST X-RAY AND EVALUATION OF COMPUTER-AIDED DETECTION (CAD) SOFTWARE USING AN ORIGINALLY DEVELOPED PHANTOM FOR INSTRUCTION PURPOSES;** NORIHISA NITTA ET AL, "JAPANESE JOURNAL OF CLINICAL RADIOLOGY, 2006; 51(1): 61-70"
- **A RESOURCE FOR THE ASSESSMENT OF LUNG NODULE SIZE ESTIMATION METHODS: DATABASE OF THORACIC CT SCANS OF AN ANTHROPOMORPHIC PHANTOM,** MARIOS A GAVRILIDES ET AL, U.S.FOOD AND DRUG ADMINISTRATION, 5 JULY 2010/VOL.18, NO.14/ OPTIC EXPRESS 15244
- **WHICH METHODS DO YOU USE TO REDUCE RADIATION EXPOSURE DOSE OF CHEST CT,** N.USHIO, N,NITTA ET AL, SHIGA UNIVERSITY OF MEDICAL SCIENCES, ECR2011 POSTER C-1872
- **SENSITIVITY AND ACCURACY OF VOLUMETRY OF PULMONARY NODULES ON LOW-DOSE 16- AND 64-ROW MULTI-DETECTOR CT: AN ANTHROPOMORPHIC PHANTOM STUDY,** XUEQIAN XIE ET AL, UNIVERSITY OF GRONINGEN, EUROPEAN RADIOLOGY (2013) 23 : 139-147
- **"THE INFLUENCE OF CHEST WALL TISSUE COMPOSITION IN DETERMINING IMAGE NOISE DURING CARDIAC CT,** NARINDER S. ET AL, TORONTO GENERAL HOSPITAL AJR2011; 197 : 1328-1334
- **BASIC IMAGING PROPERTIES OF AN INDIRECT FLAT-PANEL DETECTOR SYSTEM EMPLOYING IRRADIATION SIDE SAMPLING (ISS) TECHNOLOGY FOR CHEST RADIOGRAPHY: COMPARISON WITH A COMPUTED RADIOGRAPHIC SYSTEM,** NOBUKAZU TANAKA, KYUSHU UNIVERSITY, RADIOLOGICAL PHYSICS AND TECHNOLOGY VOLUME 6, ISSUE 1, PP 162-169
- **"THE IMPACT OF BEING OVERWEIGHT ON IMAGE QUALITY WHEN UNDERTAKING ADULT CHEST X-RAY EXAMINATIONS USING ROUTINE PROTOCOLS,** S. H. AL-MURSHEDI, ET AL, UNIVERSITY OF SALFORD ECR2019 C-0722
- **USEFULNESS OF RESPIRATORY-GATED 18F-FDG PET/CT SCAN PROTOCOL IN PATIENTS HAVING POSITIVE MYOCARDIAL 18F-FDG UPTAKE,** WATANABE, SHOTA ET AL, KINDAI UNIVERSITY HOSPITAL, NUCLEAR MEDICINE COMMUNICATIONS, VOLUME 40, NUMBER 3, MARCH 2019, PP. 235-241(7)