International Day of Radiology 2017
Interview on Emergency Radiology
Israel/Dr. Jacob Sosna

Israeli emergency radiologists must be prepared to work efficiently during disasters, when normal procedures and protocols are impossible, according to Prof. Jacob Sosna

**European Society of Radiology:** Could you please describe the role of the radiologist in a typical emergency department in your country?

**Jacob Sosna:** Radiologists take part in patient evaluation in the emergency department, including interpretation of CT scans, plain films, as well as performing ultrasound. If needed, they also perform fluoroscopy studies and interventional procedures.

We are involved in single- or mass-casualty events. I recall one disaster when the floor of a wedding hall collapsed, and 260 injured patients were brought to my hospital at midnight. Within less than one hour, six radiologists took care of the patients using verbal communication to communicate image results. Normal protocols could not be used. A radiologist gave direct and immediate CT interpretations at the console, and I performed 80 focused assessment with sonography for trauma (FAST) examinations within a few hours.

**ESR:** What does a typical day in the emergency department look like for a radiologist?

**JS:** In most institutions, we have daytime coverage from attending radiologists and residents. After hours, one or two residents cover emergency-department activities with supervision by an attending radiologist.

**ESR:** Teamwork is crucial in an emergency department. How is this accomplished in your department and who is involved?

**JS:** All emergency department specialties are involved and communicate with our team in traumatic and nontraumatic emergencies. We are an integral part of the decision-making.

**ESR:** How satisfied are you with the workflow and your role in your department? How do you think it could be improved?

**JS:** We are looking into having dedicated emergency radiologists. In Israel, the coverage is based on organs (e.g. neuroradiologists read head CTs and body imagers read abdominal CTs).

**ESR:** Which modalities are used for different emergencies? Could you please give an overview sorted by modalities?

**JS:** The modalities include: plain films, ultrasound, CT, angiography, non-vascular interventional radiology, interventional neuroradiology, MRI for stroke and spine imaging and in pregnant women for appendicitis evaluation.

**ESR:** Is teleradiology an issue in emergency radiology? If yes, how so, and how often is it used?

We don’t use teleradiology in emergency radiology.

**ESR:** Are emergency radiologists active anywhere other than emergency departments? Do they have other non-emergency roles, or other emergency roles in other departments?
JS: As I mentioned, we don't have radiologists who are fully trained and assigned exclusively to emergency radiology; instead we have organ-based coverage.

ESR: Do you have direct contact with patients and if yes, what does it entail?
JS: Patient contact usually occurs during ultrasound examinations and in the trauma unit.

ESR: How are radiologists in your country trained in emergency radiology? Is emergency radiology a recognised specialty in your country?
JS: The radiology residency curriculum includes all aspects of emergency-radiology training, ranging from paediatrics, to motor-vehicle accidents, to mass-casualty events. So far it is not a recognised subspecialty.

Prof. Jacob Sosna earned his medical degree from the Sackler Faculty of Medicine at Tel Aviv University in Tel Aviv, Israel. He graduated with distinction in 1989. He completed his radiology residency at Hadassah Medical Centre in Jerusalem, Israel, in 2001. He travelled to the Beth Israel Deaconess Medical Center, a teaching hospital at Harvard Medical School, in Boston, Massachusetts, United States, for research and clinical fellowships in abdominal imaging and advanced cross-sectional imaging. Prof. Sosna returned to Hadassah as a senior radiologist, head of CT, and director of the 3D imaging laboratory in 2003. He has served as radiology research coordinator since 2004, and he established and heads the experimental CT programme and acts as a co-director of the applied radiology laboratory. In 2011, Prof. Sosna became chairman of radiology at Hadassah Medical Center and head of the imaging faculty at the Hebrew University in Jerusalem, Israel. In 2016, he became the director of the imaging and nuclear medicine division. He is co-director of the Wohl Institute for Translational Medical Research for preclinical imaging in Hadassah. He serves as vice dean of the Hebrew University, Hadassah Faculty of Medicine. Prof. Sosna has published more than 140 articles in peer-reviewed journals and is an active speaker at international conferences on radiology and diagnostic imaging. He was selected by the Board of Directors of the Radiological Society of North America (RSNA) as the Eyler Editorial Fellow for 2006, and was an associate editor for RSNA's journal, Radiology. In 2017, Prof. Sosna was awarded an honorary fellowship by the American College of Radiology (ACR). He is currently president of the Israel Radiological Association (ISRA). Prof. Sosna's research focuses on advancing clinical applications in cutting-edge CT technology in collaboration with other experts in image-based diagnosis and therapy in the United States and Europe.