

EANM PRESS RELEASE

New ways in health education: Funny cartoons help children through nuclear medical examinations

(Vienna, May 10, 2017) Nuclear medical examinations can be stressful for patients – particularly for children. But Sunny the Isotope, Tim the Tracer and Rob the Receptor help reduce the strain. These cartoon characters have been developed by Ronald van Rheenen, expert of the European Association of Nuclear Medicine (EANM). The Visual Education Project that gave birth to these characters provides child patients with age-appropriate information on the imaging examination. They make preparation rules easy to understand and lend a touch of fun and adventure to the procedure.

Undergoing a nuclear medical imaging examination can be quite a challenge. Some of these procedures last over an hour. During this time the patient is required to lie still on the imaging bed and avoid any motions as these might render the images being created useless for diagnostic purposes. For the same reason eating is sometimes not allowed prior to the imaging. All this is particularly demanding for children whose examinations make up an estimated 10 % of all nuclear medical examinations. They are also intimidated by the unfamiliar environment with its large nuclear medicine cameras whose detectors are placed very close to the body and sometimes directly over the patient's head. Concerns that the examination might be painful add to young patients' anxiety. The accompanying parents are not always able to cheer up their child as they themselves might be distressed not knowing what to expect and which results the examination will provide.

In search of Rob the Receptor

In order to alleviate such fears and improve diagnostic accuracy through better cooperation of doctors and their young patients Dr Ronald van Rheenen, Nuclear Medicine Physician at the University Medical Hospital in Groningen (Netherlands) initiated the nonprofit Visual Education Project. Its "heroes" are Sunny the Isotope and Tim the Tracer, cartoon characters who appear in three different stories where they stand for the radioactive and the tracer substance that together form the radiopharmaceutical the patient is injected with. Tim takes Sunny on a journey through the body and guides him to Rob the Receptor who represents the target organ where the radiopharmaceutical accumulates. There Sunny shines his "special lights" which represent the emitted radiation. This enables the "Photo Doctor" to take pictures of the diseased areas. While this refers to diagnostic procedures one of the story lines also addresses nuclear medical therapy: This time Sunny & Tim are joined by Sam the Demolisher who destroys the sick-spot. The stories are freely available as animations on YouTube and can be purchased as picture books (for links see below). Dr. van Rheenen, who pursues these educational activities in his free time, cooperates closely with the graphic designer Floris de Jonge. He brought the characters and storylines to life that Dr. van Rheenen had in mind. Meanwhile both have created three other storylines dealing with radiological imaging examinations.

Facilitating knowledge transfer

The adventurous stories, straightforwardly told and catchily illustrated, not only help dissolve anxieties but also guide the childrens' preparation before and their behaviour during examination. But the education material not only aims at very young readers. It might even help adults with low-health-literacy to understand the procedures and purposes of nuclear medicine. "Our decision to convey information in the form of visualized stories is motivated by the fact that most of the textual or verbal information which is provided prior to our examinations or therapy, is not correctly remembered – if at all," says Dr. van Rheenen. The project that started off three years ago as a local initiative based in Groningen has already spread its material considerably. The EANM and several European hospitals as well as patient platforms have the animations running on their websites or refer to it. With the support of the EANM the project is now on the verge of developing into a global initiative. Currently, versions in German, Spanish, French and Cantonese are under way and Dr. van Rheenen is dicussing possibilities of further dissemination with different National Nuclear Medicine Societies.

"It is essential to tailor explanations to the childrens' grasping ability. Introducing the Visual patient education project to pediatric nuclear medicine and explaining the procedure with cartoon characters is a very promising tool to alleviate fears and apprehension and to transform the nuclear medicine study into a fun experience. This improved patient experience leads to improved cooperation resulting in studies of higher technical quality, ultimately leading to improved diagnostic accuracy", says Dr. Zvi Bar-Sever, Chairman of the EANM pediatric committee.



Sunny & Tim belong to a large team of cartoon characters, created by nuclear medicine physician Dr Ronald van Rheenen and graphic designer Floris de Jonge

Further information can be found here:

Website: <u>www.sunnyandtim.com</u> Digital Information Flyer: <u>http://tinyurl.com/INVOLVED-EN</u> YouTube: <u>www.youtube.com/c/sunnyandtim</u> Facebook page: <u>www.facebook.com/sunnyandtim</u> Sunny & Tim app: <u>http://apps.appmachine.com/sunnytim</u>

What is nuclear medicine?

Nuclear medicine is a medical specialty using radioactive substances (radiopharmaceuticals) for diagnosis and treatment of specific diseases. Many people associate the term, nuclear medicine, with dangerous radiation. These concerns are unfounded. The exposure doses to the patient are so low according to the European Association of Nuclear Medicine (EANM) that they do not call into question the benefits of the diagnostic and therapeutic possibilities of nuclear medicine.

www.whatisnuclearmedicine.com https://www.facebook.com/officialEANM.

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