SEGAMS-80

Key members: László Csernay
János Csírik [1]
Árpád Makay
Eörs Máté [2]
Attila Kuba [3]

Founded by: Gamma Works

Partners:
SzOTE KIL (László Almási, Zoltán Nemessányi)

Gamma Works (Ádám Billing, Béla Kári)

Related projects:
- Early years [4]
- SEGAMS [5]
- SUPER-SEGAMS [6]
- MicroSEGAMS [7]

Lifetime from: 1979
Lifetime to: 1980

Short description: The improvement of the SEGAMS system that made possible to automate the image acquisition and evaluation. The system could be generated in different languages as well.

Description:
SEGAMS, as most other similar systems, has English tables and messages. Since the system is mostly used by assistant staff, we found it necessary that they could „communicate“ with the system in their own language. SEGAMS-80 was the first nuclear medicine system in the world that made it possible. In addition to English, German, Russian and Hungarian versions were also created. To create a new version, only the text-library needed to be translated and linked.

SEGAMS-80 showed improvements in other areas as well. The number of basic functions significantly increased, many of which allowed quantitative evaluation as well.

Standardized routine examinations could be built into the system in the form of predefined study modes, so their execution could be initiated by a short communication. The evaluation for each predefined study mode can be built in as a complex program. In the simplest case – when the evaluation program does not contain branches – the complex program (apart from some syntactic symbols) is identical to the character sequence typed in through a manual evaluation, therefore, doctors can create complex programs to help their evaluation work without any prior computer knowledge.

Brain perphusion
Sum image with ROIs, time/activity curves (original and fitted)

Dynamic liver study (HIDA)
Sum image with ROIs, time/activity curves

Renography
Parametric scans
ROIs and time-activity curves

Publications:
László Csernay, Árpád Makay, Eörs Mátk, János Csirik: SEGAMS-80 handbook, 1980, 1-155


Ákos Pap, Zoltán Nemessányi, László Csernay, Vince Varró: Recovery rate of duodenal juice labelled with secreted 99m-Tc HIDA during secretin-pancreozymin test Digestion, 25 (1982) 131

Attila Kuba, László Csernay: Picture processing possibilities in the experimental ECAT-software of
SEGAMS–80
Published on Informatikai Intézet (http://www.inf.u-szeged.hu)

SEGAMS NucCompact 13 (1982) 131-136


János Csirik J.: Theoretische Aspekte zur Totzeit-Problematik, Nuc Compact (1982) 21

János Mester, László Pávics, Edit Ádám, Tibor Gaál, László Csernay: Recognition of the dyscinetic regions of the left ventricle by ECG gated equilibrium methods Izotóptechnika, 25 (1982) 131


Kategória: Medical Applications

Source URL (retrieved on 2018-06-10 14:36):
http://www.inf.u-szeged.hu/ipcg/projects/segams-80

Links: