

SHORT ARTICLE BY G. S. STAMATAKOS ON THE FIRST DIGITAL TWIN IN ONCOLOGY AND BEYOND, INCLUDING KEY MILESTONES OF THE BIRTH AND DEVELOPMENT OF IN SILICO (COMPUTATIONAL) MEDICINE. POSTED ON LINKEDIN AT

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In Silico Oncology
Oncosimulator
In Silico Trials
In Silico Medicine





Artificial Intelligence



Cancer Hypermodelling

Georgios S. Stamatakos

Research Professor, ICCS, School of Electrical and Computer Engineering, National Technical University of Athens (EMΠ). Father of in silico medicine.

History of Science: In Silico Medicine - Presentation of the first digital twin in oncology and beyond at the US [National Cancer Institute \(NCI\)](#) - Integrative Cancer Biology Program (ICBP) meeting, held at [Massachusetts General Hospital](#) (MGH) on 10th April 2007 by Georgios S. Stamatakos, [National Technical University of Athens](#) (NTUA), Athens, Greece.

On 10th April 2007 a Boston (Athens of America) meeting of the NCI- ICBP took place at MGH, Dept. of Radiology, Athinoula A. Martinos Center for Biomedical Imaging, Bldg. 149, 13th Street, Charlestown, MA 02129, USA. The meeting was organized by Daniel Gallahan, then Program Officer, NCI - [The National Institutes of Health](#) (NIH) and Dr Thomas Deisboeck, MD, then Assist. Professor, [Harvard Medical School](#) (HMS), MGH

and coordinator of the research project "Center for the Development of a Virtual Tumor (CViT)" (Project # 5U56CA113004-03, NIH-NCI).

Dr G. S. Stamatakos, Research Professor, [ICCS - NTUA](#), School of Electrical and Computer Engineering (ECE), NTUA and member of CViT, which was scientifically sponsored by NCI, MGH, HMS and [IBM](#), delivered the invited lecture entitled "The Clinical Oncosimulator: a multilevel, "top-down", clinically oriented simulation system of tumor growth and organism response to therapeutic schemes." The slides of Georgios S. Stamatakos 's presentation have been attached on this post in pdf format. The Clinical Oncosimulator, of which crucial evolutionary steps followed afterwards and are still carried out, has proved the first digital twin in oncology and beyond, marking a key milestone in the evolution of in silico (computational) medicine. The papers cited in the presentation provide key details of this pioneering digital twin.

It is worth noting that in silico medicine was formally introduced through the concrete paradigm of in silico radiation oncology by G. Stamatakos in the international peer-reviewed journal "[Proceedings of the IEEE](#)" (Impact Factor= 14.91) in 2002 (<https://lnkd.in/eayJg-RA>).

A recent update on the fascinating and ground-breaking trajectory of in silico medicine, aspiring i.a. to metamorphose medicine into a mathematical and computational science, is available through the Chinese and global AI tech community platform and magazine [The Yuan](#), based in Shanghai, China. A recent interview given by Georgios S. Stamatakos to [The Yuan](#) on the birth of in silico medicine in Greece and its universal evolution, primarily through the networks of the [VPH Institute](#) and the [Avicenna Alliance](#), both based in Brussels, Belgium, EU, is freely accessible at <https://lnkd.in/dMDK9SWu> .

G.Stamatakos is the founder and director of [In Silico Oncology and In Silico Medicine Group ICCS-ECE-NTUA](#), Athens, Greece (<https://lnkd.in/ejrd-zc>).

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[The embedded presentation can be accessed through the original LinkedIn post at https://www.linkedin.com/posts/georgios-s-stamatakos-52748564_gstamatakos1st-digitaltwin-in-onconci-icbpmeet-activity-6976517066333802497-4PI?utm_source=share&utm_medium=member_desktop]