In Memoriam of

Jan van de Geijn:

A session on Knowledge-Based Planning

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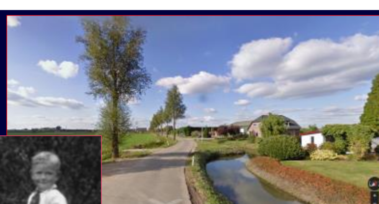
Jan van de Geijn, phys drs

3-D Planning Before You Were Born

One of the pioneers of computerized treatment planning – including 3D treatment planning in 1965!

J van de Geijn, BJR 38: 369-377, 1965: Computation of Two + Three Dimensional Dose Distributions in ^{60}Cobalt Teletherapy

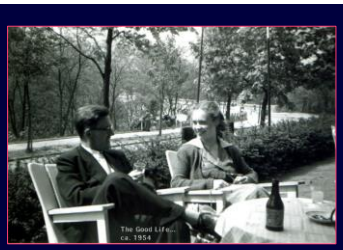


Varik, the Netherlands

Jan, born 1930, with Agatha

The extended van de Geijn family, in 1945.

Jan, his parents, and his 11 siblings, 1950.
He left the farm to study physics at the Rijksuniversiteit Utrecht



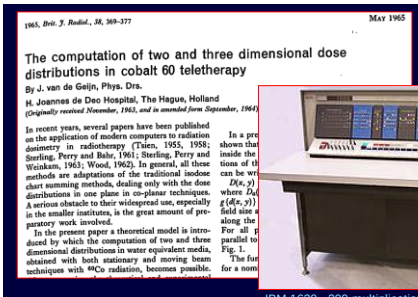
Jan and soon-to-be-wife Sophia (one of the first Dutch doctors to specialize in nuclear medicine) in 1954.

Jan got his PhD in Experimental Physics and Astronomy at the University of Utrecht in 1957

After military service as a first lieutenant in the Dutch army reserves. . .

Jan worked at Westeinde Hospital in the Hague until 1974.

Working very independently, Jan pioneered the use of computers in radiation therapy treatment planning at the hospital along with his mentor and colleague Dr. Geert Kok, radiation oncologist.



1965, *Brit. J. Radiol.*, *38*, 369–377 MAY 1965

The computation of two and three dimensional dose distributions in cobalt 60 teletherapy

By J. van de Geijn, Phys. Drs.

H. Joannes de Dec Hospital, The Hague, Holland

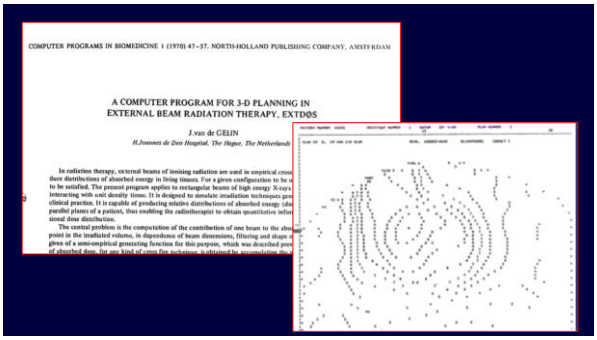
(Originally received November, 1963, and in amended form September, 1964)

In recent years, several papers have been published on the application of modern computers to radiation dosimetry in radiotherapy (Tsien, 1955, 1958; Sterling, Perry and Bahr, 1961; Sterling, Perry and Weinkam, 1963; Wood, 1962). In general, all these methods are adaptations of the traditional isodose chart summing methods, dealing only with the dose distributions in one plane in co-planar techniques. A serious obstacle to their widespread use, especially in the smaller institutes, is the great amount of preparatory work involved.

In the present paper a theoretical model is introduced by which the computation of two and three dimensional distributions in water equivalent media, obtained with both stationary and moving beam techniques with ^{60}Co radiation, becomes possible.

IBM 1620. 200 multiplications/sec, 10^6 slower than now. Memory: ~ 20K (decimal digits)

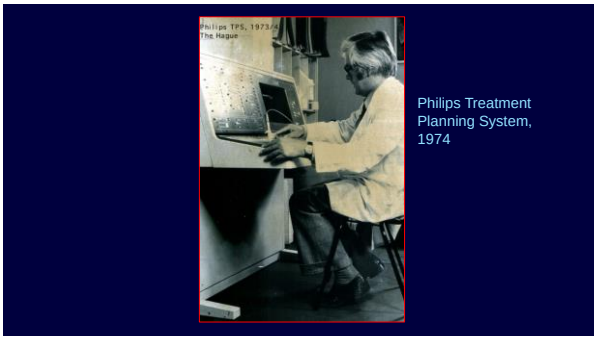
Drs. Kok and van de Geijn, showing 3-D treatment planning at the 2nd AER Congress in Amsterdam, 1971



COMPUTER PROGRAMS IN BIOMEDICINE 1 (1970) 47–57. NORTH-HOLLAND PUBLISHING COMPANY, AMSTERDAM

A COMPUTER PROGRAM FOR 3-D PLANNING IN EXTERNAL BEAM RADIATION THERAPY, EXTD0S

J. van de GEIJN
H.Joannes de Dood Hospital, The Hague, The Netherlands

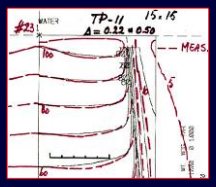


Philips TPS, 1973/4
The Hague

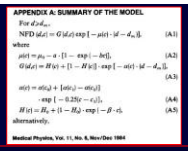
Philips Treatment Planning System, 1974

Jan and Jack Cunningham, Japan 1981, discussing beam models yet again

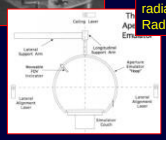
Head, Radiation Physics and Computer Automation Section, Radiation Oncology Branch, NCI, Bethesda MD 1980 - 1995



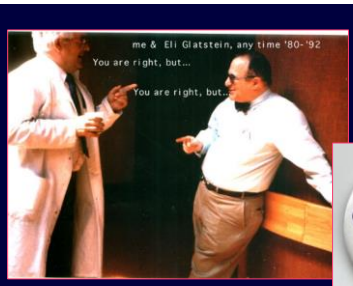
Dose Calculation Modeling and CT-Based Treatment Planning



J van de Geijn: Time-dose response of human tumors and normal tissues during and after fractionated radiation treatment. A new model. Radiother Oncol 12: 57-78, 1988



NCI Radiation Oncology Branch, 1980 - 1995



Jan and Eli Glatstein any time between 1980 and 1992

The van de Geijn family, 1984

- **Stichting Koningin Wilhelmina Fonds award, presented by Queen Juliana**
- **Roentgen Plaque (Drs. van de Geijn + Kok), 2nd A.E.R. Congress**
- **AAPM Fellow, 1997**

Jan van de Geijn was one of the pioneers of computerized treatment planning, and worked to improve it for more than 35 years.

He would definitely want us to get on with the talks so we can learn something new about treatment planning!