

Professor Dr. Alfred Kratochwil

Alfred Kratochwil was born on May 25, 1928. He has graduated from the University of Vienna Medical School in 1963. He started his academic career as a junior Obstetrician and Gynecologist at the University Department of Vienna in 1956 and worked there until 1982.

In 1964, he was studying the localization of the placenta using X-ray placentography and found much dissatisfaction at the interpretation. By chance, he attended a lecture by a neurosurgeon on the diagnosis of cerebral bleeding with ultrasound at the Society of Doctors in Vienna. He soon realised that this method could be applied to placental localisation. Kratochwil learned of a local ophthalmologist (Dr. Ossoinig) who had started scanning the eye using an A-scope.

He contacted Paul Kretz, owner and founder of the company, and was soon allowed the use of an A-mode equipment. He started with examining large genital cancers and found interpretation difficult. He then used the flaw-detector on placental localization, measurement of pelvic size and looking at fetal heart pulsations. Kratochwil scanned his patients for their placental location before delivery by caesarean section. He noted that the ultrasonic findings and the actual placental location correlated 90% of the time.

In December 1965, Kratochwil presented his findings on ultrasonic placentography at a meeting of the Austrian Society for Gynecology and Obstetrics. His findings were published in



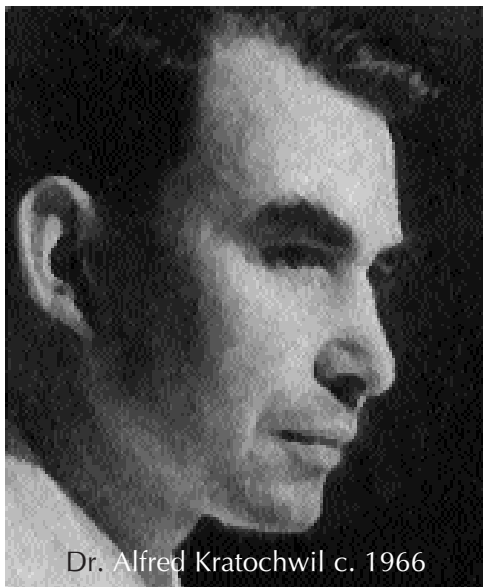
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the following year in German language. Although this was pioneering and gratifying work, Hofmann and Hollander in Munster, Germany had already had a similar presentation a month ahead of Kratochwil and they were using a B-mode realtime equipment, which had also incorporated a certain degree of gray-scale capability.

In 1968 he was appointed as University lecturer for Obstetrics & Gynecology. Kratochwil's lectures had at that time greatly influenced and encouraged European newcomers to ultrasonography such as Manfred Hansmann from Germany and Asim Kurjak from Croatia.

Using a proprietary vaginal scanner, Kratochwil's group identified fetal heart pulsations at slightly over 6 weeks menstrual age. He also developed a thimble attachment transducer to facilitate vaginal sonography with pelvic examination. His group further developed a special A-scan transducer with a central hole to enable amniocentesis to be carried out more safely.

Kratochwil soon collaborated medical industry to develop a B-mode device suitable for abdominal scanning. The articulated-arm design he found was very easy to manipulate, and he used it on a variety of obstetric conditions. As early as 1972, Kratochwil had, among other endeavours, successfully demonstrated the visualisation of ovarian follicles with static B-mode ultrasound.



Dr. Alfred Kratochwil c. 1966





Dr. Alfred Kratochwil
from A-scan to 3D

Kratochwil soon became one of the most prolific users of the instrument and worked on areas such as Internal Medicine, breast and other surgical conditions, where he also published a large number of important early papers so much so that readers at one time had thought he was a surgeon rather than an Obstetrician and Gynaecologist. Since 1968 he developed training courses in ultrasound in Vienna and his department was visited

by many hundreds of radiologists and obstetricians in the next few years.

Kratochwil became Professor of Obstetrics and Gynaecology at the University Department of Ob&Gyn, Vienna, Austria in 1972. He has published over 300 papers many of them were in the German language. His first book, published in 1968 in German language: "Ultraschall-diagnostik in Geburtshilfe und Gynkologie" represented one of the earliest textbooks on ultrasonography in this speciality. Work from Kratochwil's department touched on almost every facet of Obstetrical and Gynaecological sonography. He had also collaborated with Wilfried Feichtinger and Peter Kemeter on projects at the Institute of Sterility Treatment, Vienna.

In 1973, Professor Kratochwil founded the Austrian Ultrasound Society and he was also a Founding member of the European and World Federations of Ultrasound in Medicine and Biology. Between 1978 and 1981, he was President of the European Federation of Societies for Ultrasound in Medicine and Biology. Throughout the history of scanner development, Professor Kratochwil has played key and pivotal roles in the clinical designs of the machines, running from their A-mode scanner to their static B-scanners, mechanical sector scanners, electronic real-times and the latest 3-dimensional machines. Between the years 1982 and 1993 he was Head of the Department Obstetrics & Gynaecology at Hospital Baden/Vienna. In 1992 he published on new 3-D developments in the article "Attempt at three-dimensional imaging in obstetrics" which appeared in the Journal "Ultraschall in Medizin".

He retired on the 31st December 1993. After his retirement from clinical Obstetrics and Gynaecology he still holds the title of Professor of Obstetrics and Gynaecology at the University of Vienna and now works mainly in the teaching and

advancement of 3-dimensional Ultrasound. He presently is the Chairman of the Medison-Kretz 3-D Research Foundation and is active in many professional societies, organizations and congresses. Among many prizes and accolades, he received the first Ian Donald Gold Medal from the International Society of Ultrasound in Obstetrics and Gynaecology (ISUOG) in 1991. He received this very first Medal from Mrs. Alix Donald, widow of the late Professor Ian Donald.

He had nearly 240 scientific publication most of which is related with ultrasonografic diagnosis in different applications.

BOOKS

- Ultraschalldiagnostik in Geburtshilfe und Gynäkologie Thieme 1968 (Ultrasonic diagnosis in Obstetrics & Gynaecology Thieme 1968)
- Ultraschalldiagnostik in der Internen Medizin Chirurgie und Urologie Thieme 1972. (Ultrasonic Diagnosis in Internal medicine, Surgery and Urology)
- Endosonography in Obstetrics and Gynaecology. (Bernaschek G. Deutinger J. Springer 1990)

1996 Foundation of 3D V.I.S.U.S. (Vienna International School for 3D Ultrasound sonography) Chairman of the 3D Ultrasound Foundation Medison - Kretz

HONORARY MEMBERSHIPS

- Corresponding member of DEGUM
- Swiss Soc. Ultrasound in Medicine and Biology.
- Japanese Soc. Ultrasound in Medicine and Biology
- Yugoslavian Soc. Ultrasound in Medicine and Biology
- Romanian Soc. Ultrasound in Medicine and Biology
- Turkish Soc. Ultrasound in Medicine and Biology
- Argentinean Society. Ultrasound in Medicine and Biology
- Brazilian Soc. . Ultrasound in Medicine and Biology
- Honorary President of the Austrian society ÖGUM

AWARDS

1968 Cardinal Innitzer Prize (for best medical publication in Austria)

1972 Maternity Prize of the German Society of Prenatal Medicine

1977 Bronze award for the film on Gynaecological Laparoscopy (France) 1991 Ian Donald Gold Medal.

1999 bestowed with the honour as Pioneer of 3D Sonography in Obstetrics and Gynaecology. (2nd 3D World. Congress of 3D Sonography in Obstetrics & Gynaecology Las Vegas)