

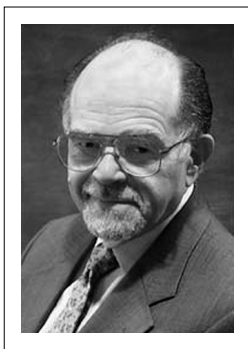
*Dear Colleagues,*

*Recently, we lost Dr. Seymour Furman — a giant of cardiology, and also a friend and member of Editorial Board of Folia Cardiologica. We are grateful to Dr. Serge Barold for writing special obituary note on Dr. Furman.*

*Wojciech Zareba*

## Seymour Furman, MD (1931–2006)

Seymour Furman, an internationally recognized pioneer and expert on pacemakers and cardiac electrophysiology, died on February 20 2006. Furman attended the State University of New York (SUNY) Downstate College of Medicine and was an intern and a resident in general surgery at Montefiore Hospital in the Bronx, New York. During 1962–1963 he was a thoracic surgical resident at the Baylor University affiliated hospitals in Houston, Texas. He then returned to Montefiore Hospital as a staff cardiac surgeon and thereafter spent his entire academic career there, and at Albert Einstein College of Medicine, where he eventually became Professor of Medicine and Surgery.



On July 16 1958 at Montefiore Hospital, Furman created history by successfully pacing the right ventricle in man with a transvenous electrode catheter [1]. The lead was introduced with fluoroscopy, via the median basilic vein in a patient with complete atrioventricular block who required colon resection because of a malignancy. The pacemaker was powered by ordinary line alternating current and the electrode system consisted of a solid copper wire with a bare terminal tip and a skin wire to complete the circuit. Pacing was performed for two hours during the operative procedure, and ended with the return of the previous idioventricular rhythm upon removal of the catheter. The second patient was paced successfully from the right ventricle for three months during his hospital stay (via the basilic vein despite lead instability) and remarkably, became ambulatory by pushing a cart with a large pacemaker that had to be repeatedly

connected by long electric cords to electrical outlets in the various corridors of the hospital. The 1959 published report of transvenous ventricular pacing in the first three patients [1], is generally considered the beginning of clinical cardiac electrophysiology.

Dr Furman remained a world leader in pacing and electrophysiology for almost 50 years. He trained many physicians who went on to establish their own centers of excellence all over the world. His numerous contributions include the development of portable pacemakers, establishment of factors controlling electrode efficiency by utilizing the strength-duration curve, increasing battery longevity by reducing current drain, and the importance of recording endocardial electrograms. Furman also developed the concept of organized device follow-up in a pacemaker clinic and transtelephonic monitoring.

In 1970 Furman and Escher coauthored the first American book on cardiac pacing, "Principles and Techniques of Cardiac Pacing" and in 1989 he was the principal author of "A Practice of Cardiac Pacing" a book that dominated the field for many years with three successive editions. Over his prolific career, Dr. Furman published over 400 manuscripts and book chapters, 100 editorials in Pacing and Cardiac Electrophysiology (PACE), 800 abstracts, and gave more than 1,000 oral presentations all over the world.

Dr Furman co-founded the North American Society of Pacing and Electrophysiology (NASPE) now called the Heart Rhythm Society (HRS) and remained an active member of the Society until his

death. He founded the journal Pacing and Clinical Electrophysiology (PACE) in 1977 and remained its editor for over 25 years. Furman also established an examination process (NASPEeXAM) to maintain high intellectual standards in cardiac pacing and defibrillation.

Furman was a legend of his time with many friends and admirers and was the recipient of many awards from prestigious learned societies. Every-

body involved in pacing and electrophysiology will miss Seymour Furman for his leadership, wisdom, honesty, friendship, and humanity.

### Reference

1. Furman S, Schwedel JB. An intracardiac pacemaker for Stokes-Adams seizures. *N Engl J Med*, 1959; 261: 943-948.

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