



IN MEMORIAM

Prof. Rafael Carmena Rodríguez



Prof. Rafael Carmena Rodríguez was born in Cádiz on 04/03/1940 and died in Valencia on 05/05/2024 at the age of 84 after an unexpected illness. Those of us who knew and had the opportunity to work with him have lost a role model and friend, who consistently fought for dyslipidaemia to be recognised, not as a risk factor, but as a causal factor of arteriosclerosis and therefore of cardiovascular disease.

Following a family tradition with a clear vocation, he studied Medicine at the Faculty of Medicine of the University of Valencia (1957–1964), obtaining the Bachelor's Degree Extraordinary Award in 1964 and the runner-up prize for the National End-of-Degree Award in 1965.

He completed extensive medical training and was a Medical Intern in the Department of Medicine at the University Medical Clinic in Freiburg (Germany) with a scholarship from the Ministry of Education and Science.

He was a Fulbright Fellow (1965–1966) and a Juan March Foundation Fellow (1966–1967). He moved to the USA, to the University of Minnesota, where he worked in the Laboratory of Physiological Hygiene directed by Prof. Francisco Grande Covián, who, along with Rafael, welcomed many Spaniards who trained with him. There Rafael, under the direction of Paco, did his doctoral thesis on the modifications of plasma phospholipids with dietary modifications, which he presented at the University of Valencia where he obtained the highest qualification. It was there that he consolidated his love for metabolic diseases and especially

lipid metabolism. He always considered himself a disciple of Paco.

He was Resident in the Department of Internal Medicine at the University Hospital of the University of Minnesota in the USA (1967–1970), and was appointed Chief Resident in his last year.

On returning to Spain, his career in teaching and health-care was meteoric.

He was Associate Professor of General Pathology and Clinical Propaedeutics at the Faculty of Medicine and Head of the Internal Medicine Section at the Hospital Clínico Universitario de Valencia (1972–1974). During this initial period, he set up a lipid metabolism laboratory where a group of young people worked, whom he introduced to the world of lipids. I, among others, was fortunate enough to meet him and work on my doctoral thesis under his direction.

After this initial period, he was appointed Chair of Pathology and Medical Clinics at the Faculty of Medicine in Murcia and the Head of the Department of Medicine at the Ciudad Sanitaria Virgen de la Arrixaca in Murcia (1975–1982). With a research laboratory in the Faculty of Medicine, he began his scientific production by setting up HDL-C testing, which was novel at that time, testing for apoproteins with electrophoresis, and the separation of lipoproteins by ultracentrifugation, and special study of familial hypercholesterolaemia.

In 1982, he moved to Valencia, as Professor of Medicine at the Faculty of Medicine of the University of Valencia and Head of the Healthcare Department and Head of the Endocrinology and Nutrition Service at the Hospital Clínico Universitario de Valencia. There, again at the Hospital Clínico, he set up the laboratory for research into dyslipidaemia, a disease that had always interested him greatly. With his new group, of which I was lucky enough to be a member, a new period began with a special interest in familial hypercholesterolemia, describing as yet undescribed mutations, combined familial hyperlipidaemia and insulin resistance.

In 1987, he was appointed Chair of the 50th Congress of the European Atherosclerosis Society, held in Valencia. During the Congress he consolidated the creation of the Spanish

DOI of original article:
<https://doi.org/10.1016/j.arteri.2024.06.003>

Society of Arteriosclerosis (SEA) of which he was a founding member and first elected president. He was always an active, participative, and proud member of the Society. He was also an active member of the European Atherosclerosis Society where he had many friends. He was appointed Chair of the International Task Force for the Prevention of Coronary Heart Disease (2006–2010). In 2007 he was appointed Distinguished Fellow of the International Society of Atherosclerosis (2007), that same year (2007) he was appointed Honorary President of the SEA. He was appointed Vice-President of the Mediterranean Society for the Study of Atherosclerosis (1998–2002).

He was appointed Visiting Professor at the University of Minnesota (USA) in 1980 and 1984, at the University of Montreal (Canada) from 1990 to 1997, the University of Corrientes (Argentina) in 1997, Fellow of the American College of Physicians (1973) and Fellow of the Royal College of Physicians Edinburgh (2001), Member of the New York Academy of Sciences, American Association for the Advancement of Sciences, American Diabetes Association, European Association for the Study of Diabetes, European Atherosclerosis Society, International Society of Atherosclerosis, International Society of Internal Medicine, *Sociedad Española de Arteriosclerosis*, *Sociedad Española de Endocrinología y Nutrición*, *Sociedad Española de Diabetes*, *Sociedad Española para el estudio de la Obesidad*, *Sociedad Española de Nutrición Básica y Aplicada*, among others.

He was the guest speaker at numerous congresses and courses in Japan, USA, Canada, Chile, Argentina, Uruguay, Germany, Poland, France, Belgium, Israel, Sweden, United Kingdom, Italy, France, Switzerland, Morocco, Portugal, Mexico, Colombia, Ecuador, Venezuela, etc.

He was a tireless researcher, as evidenced by the numerous theses he directed, many publications in high impact journals, and papers and communications at conferences, with financial support from public (CAICYT, FIS, Generalitat Valenciana) and private institutions as a result of numerous projects.

He created a healthcare service with a clinical service research laboratory, especially dedicated to his two preferred fields of research: insulin resistance and its association with obesity and type 2 diabetes, and lipid metabolism. He was Director of the Health Research Institute – INCLIVA, and scientific advisor to the “*Príncipe Felipe*” Science Museum in Valencia. Coordinator of Area 2 (Dyslipidaemia, metabolic syndrome, and microvascular complications) of the Centre for Biomedical Research Network on Diabetes and Associated Metabolic Diseases - CIBERDEM (2008-until his retirement).

An excellent teacher, clinician, and researcher, he gave an outstanding boost to his endocrinology and nutrition service, facilitating the professional development of all its members in terms of care, research, and teaching. Upon retirement, he was appointed Emeritus Professor of the University of Valencia, where he continued his teaching, training, and research activities.

Professor Carmena received numerous honorary distinctions, of which we highlight the following: Jaume I Award from the Generalitat Valenciana in 2002 in the field of Clinical Medicine, in consideration of the teaching and research merits during his professional career. Award for the Best Professional Career of the College of Doctors of Valencia in 2017. He was also awarded the *Salud y Sociedad* prize by the Generalitat Valenciana. He was named Doctor Honoris Causa by the Cayetano Heredia University of Lima (2012) and by the University of Murcia (2013). He is a full member of the Royal Academies of Medicine of Murcia and the Region of Valencia.

Until the onset of his serious and distressing illness, he tirelessly worked in his office at the University of Valencia, was an active collaborator with the University, in the Royal Academy of Medicine, and relentlessly disseminated his extensive knowledge in the area of lipid and vascular metabolism.

Prof. Carmena stood out for his love of medicine and science in general, his scientific rigour, his honesty applied to life in general and to science, virtues that he conveyed to his disciples. He was a great doctor and teacher, a very enlightened and cultivated person.

His love for his friends was outstanding, his friendship with me personally was long and loyal over more than five decades working and learning together, as of course was his love for his family, his wife Margarita, his sons Rafael and José Miguel, and his grandchildren. To the end he maintained a very good relationship with prominent members of the SEA.

The scientific community, and especially your friends and members of the SEA, are profoundly grateful for your total dedication to the understanding of lipid metabolism, and especially to the prevention of cardiovascular diseases. As your disciples, we pledge to follow your path.

Your spirit lives on among us and the SEA will never forget you.

DEP

Juan F Ascaso
Former President of the SEA
E-mail address: Juan.F.Ascaso@uv.es