

## Profiles in Cardiology

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### Christodoulos Stefanadis

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Christodoulos Stefanadis (Fig. 1) was born in 1947 in the small remote Aegean island Icaria. The island, named after Icarus, has been inhabited since 750 B.C. by the Milecians and perhaps earlier by the Phoenicians. Stefanadis, born on the island to a naval family, developed a sustained passion for sailing, often in treacherous Aegean waters.

Contrary to Icarus, whose ambitious flight had an unfortunate end when he got too close to the sun, and the wax that fastened the wings to his body melted, Stefanadis' flight from his place of birth landed him safely in Athens where his ambition to become a physician became reality.

After graduation from the Athenian Medical School in 1971, he was trained in internal medicine (1972–1977) and cardiology (1977–1981) and received a Ph.D. degree in experimental cardiology in 1981 at that institution. An additional fellowship in cardiology research (coronary artery disease and arterial function) was accomplished at Ohio State University (1985–1986).

Stefanadis' academic career started in 1983 as consultant in the Department of Cardiology at the Hippokration Hospital in Athens (1983–1986). From 1989 to 1991, he was lecturer in the department, Assistant Professor from 1991 to 1996, Associate Professor from 1996 to

2000, and full Professor in 2002 in the Athenian Medical School. In 2003, he became Chairman of the Department of Cardiology and Director of the Cardiology Services at the Hippokration Hospital in Athens. In the same year, he was also elected Vice President of the Athenian Medical School.

Stefanadis has always been fascinated by technological achievements in all sciences, and he has demonstrated over the years that he himself is a successful inventor. However, he is a pragmatic man and has recognized that while Icarus symbolized the triumph of technology, disaster may occur by its misuse.

With Stefanadis' unique skills for innovative interventional techniques, his group, under his inspiring leadership at the Hippokration Hospital, has pursued several lines of investigation, including the elastic properties of the aorta by noninvasive and invasive methods. In addition, they have studied the effects of several cardiovascular drugs and smoking on the elastic properties of the aorta.<sup>1</sup> In 1991, he introduced a new steerable cardiac catheter for crossing stenotic aortic valves.<sup>2</sup> Stefanadis was the first to report on retrograde nontransseptal mitral balloon valvuloplasty, a unique new method that eliminates the need for transseptal catheterization of the left atrium;<sup>3</sup> as of today, this method has been applied in over 500 patients. In 1995, he reported on pressure-diameter relation of the human aorta and introduced a new method of determination by the application of a special ultrasonic diameter catheter.<sup>4</sup> Furthermore, he was the first to describe the role of vasa-vasorum on the function and structure of the aorta.<sup>5</sup> Stefanadis designed and applied a biological stent in which the metallic surface was covered by an autologous venous or arterial graft.<sup>6</sup> This method was tested successfully in animal models and in patients with coronary artery disease.

Stefanadis introduced a new technique for evaluation of the pacing effect, ischemia, and pharmacologic treatment on the function of the left atrium.<sup>7</sup> In 1999, he designed a thermography catheter for *in vivo* measurements of the atherosclerotic plaque temperature in

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FIG. 1 Christodoulos Stefanadis, M.D.

patients with different manifestations of acute coronary syndromes.<sup>8,9</sup>

These studies made critical observations about the effect of inflammation on the pathophysiology of the vulnerable plaque. At present, Stefanadis and associates are studying a new design of a thermography catheter for coronary sinus temperature measurement. In the first application of the catheter in patients with coronary artery disease, the blood temperature difference between coronary sinus and right atrium was found to be increased compared with patients without coronary artery disease.

With over 400 publications in peer-reviewed journals, in the great majority of which he is the first author, eleven chapters in multiauthor books, and over one hundred invited lectures all over the world, Stefanadis has been recognized as the renaissance man of Greek cardiology with an international reputation.

In the last two decades, Stefanadis has been instrumental in organizing over two dozen international congresses in Athens. However, Stefanadis' commitment to research has not been at the expense of his clinical in-hospital cardiology practice. As he is an excellent clinical cardiologist and a superb interventionist, he is in high demand and he receives an ever-increasing number of referrals.

Although it has been only three years since Stefanadis was appointed Chairman of Cardiology, he has shown exceptional administrative skills, strong leadership, and commitment to excellence. In the last three years (2002–2005), the number of accepted abstracts submitted from his department for presentation at the European Society of Cardiology meetings has surpassed all other cardiology centers worldwide. Furthermore, the number of abstracts accepted to either AHA or ACC was ranked third.

Stefanadis is a member of many international societies. He is a fellow of the American Society of Cardiology and he has served as member of the Board of the European Society of Cardiology and Chairman of the Research and Training Committee. He is also a member of several Greek cardiologic associations and past President of the Hellenic Cardiologic Society. He has been the recipient of several awards, both domestic and international.

He is a member of the editorial board of several medical journals such as the *Journal of the American College of Cardiology*, *European Heart Journal*, *Clinical Cardiology*, *Herz*, *Heart*, *Acta Cardiologica*, *Indian Heart Journal*, *Stent*, and *Seminars in Interventional Cardiology*. He is also Editor of the *Hellenic Journal of Cardiology*.

Stefanadis was recently appointed Vice President of the National Greek Advisory Board for Research and Technology, a rare distinction for a physician.

He is married to Christina, also a native of the island of Icaria, and they have two children, Elli and Isidoros; Elli is pursuing a medical career.

Stefanadis' impact on Greek and international cardiology, particularly interventional cardiology, has been undisputed. He, however, will admit that while cardiology and cardiology research have been his mistresses for many years, his love for the sea has never been diminished. After all, his seafaring ancestors fought the most decisive naval battle for the western world in Salamis.

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