



GRG Profiles: Professor Ignazio Marino

Ignazio R. Marino

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Ignazio Marino was born in Genoa, Italy, in 1955 as the son of a naval engineer. His interest in medicine, in particular surgery, began while attending high school as a mean to “achieve tangible results and life-changing outcomes on patients, by mastering what then appeared to [him] as an exact science and a clear scientific method.” At age 12, Ignazio heard about the first heart transplant operation, performed by Christiaan Barnard in Cape Town in 1967, which reinforced his interest.

Ignazio graduated *summa cum laude* in Medicine and Surgery from the Catholic University of Rome in 1979, writing his thesis on the first Italian trial of kidney autotransplantation. He then worked as an assistant professor at the Department of Surgery of the Policlinico Gemelli of Rome from 1980 to 1990. Although the field of organ transplantation was then developing quickly in Italy, it was clear that superior opportunities existed overseas. Dr. Marino spent 4 years training in the two most prestigious transplant centers in the world: the Transplantation Institute of the University of Cambridge (then the only liver transplant division in Europe), directed by Prof. Sir Roy Y. Calne, and the Pittsburgh Transplantation Institute, directed by Dr. Thomas E. Starzl, the pioneer who in 1963 performed the first human orthotopic liver transplantation.

When at Cambridge, Dr. Marino published a paper on the reperfusion syndrome occurring during liver

transplantation [1]. The paper is still quoted today as a thorough study of this complex clinical syndrome.

In Pittsburgh, Dr. Marino completed an American Society of Transplant Surgeons approved multi-organ transplant fellowship under the direct lead of Dr. Thomas Starzl, who hired him as an attending physician and a faculty member in 1991. Pittsburgh was then by far the most active liver transplant center in the world with >1,000 liver transplants in 1990–1991 alone.

During his career, Dr. Marino has made many important and groundbreaking discoveries, in the field of transplant biology. Among his most quoted articles are those on the treatment of hepatic epithelioid hemangioendothelioma with liver transplantation [2], intraoperative blood transfusions in highly alloimmunized patients undergoing orthotopic liver transplantation [3], baboon-to-human liver transplantation [4], effect of donor age and sex on the outcome of liver transplantation [5], interferon-alpha for prophylaxis of recurrent viral hepatitis C in liver transplant recipients: a prospective, randomized, controlled trial [6], causes of leukocytosis in liver transplant recipients: relevance in clinical practice [7], and from the laboratory bench to the patient's bedside: an update on clinical trials with mesenchymal stem cells [8]. Dr. Marino accepted a permanent faculty position at the University of Pittsburgh in 1991 and was later promoted to Professor of Surgery. In Pittsburgh, he also was attending physician at the University of Pittsburgh Medical Center and the Children's Hospital of Pittsburgh, was the Associate Director of the National Liver Transplant Center of the Veterans Affairs Medical Center of Pittsburgh, was the Director of the European Medical Division of the University of Pittsburgh Medical Center, and until 2002 was the founder, Director, and CEO of The Mediterranean Institute for Transplantation and Advanced

Based on a memoir provided by Ignazio R. Marino.

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Specialized Therapies (ISMETT), a joint venture between the University of Pittsburgh Medical Center and the Italian National Government based in Palermo, Italy. The latter institution remains the only multi-organ transplant center in Italy.

At ISMETT, Dr. Marino performed the first cadaveric and also the first live donor liver transplant ever done in Sicily. He also started the first live donor kidney and the first live and cadaveric liver transplant program in the region. Also, at ISMETT, he performed the first solid organ transplantation on an HIV+ patient ever done in Italy, which encouraged a national debate that eventuated in new regulations liberalizing the transplantation in this population.

After carrying out the first 120 solid organ transplants ever performed at ISMETT, in 2002 Dr. Marino moved to Philadelphia as Professor of Surgery at Jefferson Medical College. In June 2004, he was appointed Director of the Transplantation Division of the Thomas Jefferson University Hospital.

Dr. Marino is a member of the Editorial Boards of *Transplantation*, *Liver Transplantation*, *Clinical Transplantation*, *Experimental and Clinical Transplantation*, and the *Journal of Experimental & Clinical Cancer Research*. He has been a proud member of the Editorial Board of *Digestive Diseases & Sciences* since 2000, at the invitation of then editor Dr. Richard L. Wechsler, helping with surgical and transplantation manuscripts.

Although a long-term resident of the USA, Dr. Marino maintained strong ties with his family and friends in Italy. When not operating, he has been part of the Italian public debate regarding bioethical, scientific, and cultural issues, which has been manifest in his many editorials, in his consulting for legislative projects and government organizations, and in his writing some of the many Italian national rules and regulations in the field of transplantation and organ allocation. He was also appointed by Pope John Paul II to advise the Pontifical Academy for Life, the Ethics Committee.

In 2005, while directing the Transplant Division of Thomas Jefferson University Hospital in Philadelphia, Ignazio, he was offered by the Italian Democratic Party and his good friend, former Prime Minister Massimo D'Alema, to run for senator, which he accepted so as to give back to Italy the considerable clinical, investigative, and administrative skills he had acquired during his 20 years in the USA.

In 2006, he was elected Senator of the Republic of Italy with subsequent appointment as chair of the Standing Health Committee of the Italian Senate. In 2008, he was re-elected Senator of the Republic of Italy and was later appointed, within the Senate, chair of the Investigative Committee on the National Healthcare System, closing

many substandard psychiatric hospitals. As Senator, he also dealt with living wills, tobacco control, and a more thorough reliance on the peer review method for research funds allocation.

Italian scientists lament the lack of resources, political attention, and meritocracy in allocating taxpayers' money for scientific research. In 2007, he included in the Italian national budget USD 107 mn for projects submitted by researchers under 40, selected by an international committee of scientists under 40, appointed according to impact factor and citation index scores, a crucial turning point toward meritocracy and the adoption of international rules of peer review.

Throughout his career, Dr. Marino has trained and mentored dozens of young physicians and researchers in the field of transplantation surgery. Many of his former trainees in Italy and in the USA are now prominent surgeons or heads of departments worldwide. To all of them, he has instilled the earnest message that above all, your patients remain your lifetime responsibility.

In 2013, Dr. Marino won the primary election of the center-left coalition, becoming the center-left candidate for Rome mayor, winning the office with a landslide 64 % of the votes in a run-off election. He officially took office the 12th of June 2013, promising Romans to work toward making the Italian capital a smarter, more modern, healthier, and more international city.

Since leaving the USA and relocating to Italy, Dr. Marino understandably does not operate, although he continues to follow his patients, reads the literature, attends international transplantation conferences, and remains scientifically active, including writing editorials for noted journals. He remains Professor of Surgery at Jefferson Medical College; his staff, even today in his office on the Capitoline Hill of Rome, addresses him by his preferred title of “*Professore*” rather than “*Signor Sindaco*” (Mr. Mayor).

We, at *Digestive Diseases and Sciences*, greatly appreciate the contributions the Professor Marino has made not only toward science and his patients, but also to the careers of young investigators and to reforming and modernizing the science infrastructure of Italy, which he has detailed in his accompanying *GRG Perspective*.

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