José Fragata

Full Professor of Surgery, NOVA Medical School Director Cardiothoracic Surgery & Transplantation Hospital de Santa Marta, Centro Hospitalar Universitário Lisboa Central

FOUNDERS

Manuel Machado Macedo

"It's not easy to be a disciple"

I am writing this biographical note on Manuel Eugénio Machado Macedo honoring the twentieth anniversary of his passing away.

More than a homage, this note represents the settling of a debt tribute to his legacy, through his personal and professional examples, while a tender evocation of our common past, full of grateful memories.

Being currently the active "inheritor" of Machado Macedo, for professing his art, for directing the service that was his service at Santa Marta's Hospital, and for holding the chair that was his chair at Universidade Nova de Lisboa, but above all for being one among many of his disciples.

As Lobo Antunes said in his preface to Celestino da Costa's autobiographical book, "It's not easy to be a disciple". My disciple recollection of Machado Macedo follows in two striking dimensions, that I have come to know from more than twenty years of daily interactions with him: The charismatic surgical leader and man of society and culture.

Machado Macedo was truly the father of Portuguese Cardiac Surgery. For the introduction of first-time procedures among us, for the creation of new services, and for the preparation of surgical teams. Teams that he didn't just train, but that he has mentored like no one else - following them, supporting them, opening them new paths. In short, tearing open their futures. The three cardiac surgery services in the public sector in Lisbon are owed to him and to him we still owe the teams that work there today...

Machado Macedo was a surgical leader! But at a time when leadership was normally autocratic, Machado Macedo knew how to impose himself by his charisma, in a style much of his own, in which affability prevailed and authority was imposed with the most fascinating naturalness. It was truly a unique style of leadership, with ample affection and total availability, but with an undeniable authority that came from the recognition and respect that everyone felt instilled in himself while in his presence.

He exercised in life, as well as professionally, a charming aristocracy accommodated in an imposing posture, that was candidly exercised. A diplomat by nature, he hated saying no and always avoided confrontation, also not always avoiding the difficult dilemmas of conflicting expectations generated in us, dilemmas that he resolved with enormous finesse. It was his professional attitude, competent, impregnated with a genuine Hippocratic spirit, and associated with his correctly aristocratic posture, which earned him, among his peers, with undeniable justice, the nickname of "Prince of Portuguese Medicine".

But Machado Macedo was also a man of culture. From music to painting, through literature ... In fact, Manuel was already a citizen of the world, when "globalization" was not even thought of... moreover, he placed the culture he vested himself at the service of the surgical man he was. I recall long conversations in his office, when we talked about heart surgery, life stories, long travels, but also about some "unforgettable sunsets in Ponte de Lima". Conversations about everything... and even more about things of life... He was one of those doctors, rare these days, that derived from a culturally cultured generation, knew not only about Medicine, but mastered other artistic arts.

Machado Macedo always had the intuition for the right gesture, in surgery and in life. He always knew when he should move in the hospital, between hospitals, from the hospital to the medical council and then to music that he loved so much, ending up directing the São Carlos Opera theatre.... Without ever losing his temper, always with enthusiasm, without taking anything for defeat, rather taking everything with the lightheartedness of a new project that just continued the previous one... He accepted with calmness and undeniable bonhomie the generational push that imposed new challenges on him, and, at each new challenge, he always responded with enthusiasm – a dignity that requires a "special nature".

Being disciple is certainly difficult, especially when the master was so successful in his profession, and so brilliant in own life! In fact, a common mistake for disciples is



trying to imitate their former teachers. Without intending to do so, it's worth reflecting on the lessons that we, cardiothoracic surgeons, can extract from Manuel Macedo's life?

Firstly, the illustration of an extreme professionalism, the entrepreneurial and incessant search for the development of our specialty.

Secondly, the demonstration of the ability to leave a surgical, competent, fruitful, and prolific diaspora, capable of ensuring continuity, while maintaining leadership.

Finally, the mastering of blending personal and political diplomacies, at the service of professional interactions and for the management of conflicts - in practice, in personal life, in hospital and alongside society life.

When, every day, at the entrance to the service, I cross my gaze with the portrait of Machado Macedo, who seems to greet me with his almost paternal affability, having the privilege of working in the same place where he

pioneered many of the techniques that we practice today, I feel that being a disciple is evermore difficult!

It is difficult because it imposes on us the challenge of honoring our master's past achievements, while venturing ourselves and our teams far beyond those same achievements into the future...As if challenging what, and whom, we have always admired.

It is hard to match Manuel Macedo's charisma, as charisma comes from the Greek word - charis (favor) and ma (offer), thus representing the offer of an attribute, (favor), which is recognizable only in personalities endowed with exceptional qualities that define them as leaders and, as such, inspiring examples for all of us.

This leadership is, indeed, Machado Macedo's best legacy, as perceived by one of his disciples today, and I believe, as should be remembered in the future by all those to whom I have tried to pass on his untouchable image of "Prince of Portuguese Medicine".

José Roquette

Former Head of Department, Cardiothoracic Surgery Department, Hospital de Santa Marta (1996-2006) Former Clinical Director, Hospital da Luz, Lisboa (2006-2019)

Manuel Eugénio de Machado Macedo was born the 10th February 1922 in Ponta Delgada, son of a renowned urologist. He studied in the Licée Français in Lisbon, at the time the high society school in Lisbon.

His father's example influenced young Manuel, and Medical School was his natural career choice. Internal Medicine was his main focus during school and in the first two professional years, but Surgery was a special interest of him.

In November 1944, 22 years of age, MMM started collaborating with Jaime Celestino da Costa. Interest by respiratory and cardiocirculatory pathology started to develop, and was precipitated by his wife's disease.

Back then, "Tisiology" was a full blown field and compelled MMM to study pathology and clinical medicine of thoracic diseases. From November 1946 to September 1947, he collaborated voluntarily in the main Hospital in Zurich, Switzerland, were, besides working in

a modern Central European Hospital, he worked with Löeffler in the study off the syndrome that has his name. His work on this clinical entity demanded a strict

collaboration with biochemists, radiologists and pathologists which influenced his later working process while in Portugal.

THE THORACIC OPTION

Back in Portugal, MMM returned to Jaime Celestino da Costa's team at Hospitais Civis de Lisboa (HCL). Keeping his place in this team, he did his general residency and then the general surgery residency, which he completed in December 1951.

Simultaneously, he grew his experience in general surgery and his interest in thoracic surgery, which was back then in a very initial stage in Portugal. MMM accompanied many cases operated by his head of Department, and developed the ideia of specialising himself in this field abroad, due to the possibilities of developing thoracic surgery. The dimension and complexity of this surgery, as well as the need for a strong hospital organization, created the necessity of a lengthy stay abroad for the would-be thoracic surgeon, due to the need of



a profound pathological knowledge, complex surgical technique, and also personal relationships, which would later facilitate future hospital residencies and further stages to improve knowledge.

After receiving a British Council grant, he started a residency at the Brompton Hospital in London, dedicated to thoracic diseases, in the Autumn of 1952. Afterwards, by indication of Price Thomas (thoracic surgeon that performed the first bronchial sleeve lobectomies), he was invited to a full time clinical assistant position at the Leicester Chest Unit until July 1953. There he accumulated ward work with outpatient appointments and regular surgical activity, including as main surgeon. He was also responsible for the routine thoracic endoscopy, cardiac catheterisations and angiocardiographs. During his stay in the United Kingdom he ended up working in Edimburgh, Liverpool and Bristol and he was invited to stay a further year as a senior resident surgeon, which allowed him to complete his formation in thoracic surgery; During that period he performed more than 100 surgeries as a main surgeon, and he assisted over 600 surgeries. He created a detailed archive concerning all these operations.

Back in Portugal in 1954, he again returned to Jaime Celestino da Costa 's team, working in Hospital do Desterro. In 1956, he was accepted as a thoracic surgery assistant at HCL. In1961 he initiated open heart surgery in Hospital de Santa Marta, offering differentiation to a small but active and extremely dedicated team. They initially performed some cases with whole body hypothermia, but after some experimental work, the first case under extra-corporeal circulation was undertaken on the 5th April 1962. These first success were indebted to Mr. John Raison, perfusionist from the Queen Elizabeth Hospital (Birmingham), who stayed with the team for two months and Alain Carpentier, back then a young surgeon, was also fundamental in helping MMM and his team tackle more complex cases. Due to that cooperation Carpentier visited Lisbon for extended periods of time, greatly possibilitating MMM's team success.

MMM accumulated experience made him realise than efficient and safe cardiac surgery was only obtainable by a diverse team of dedicated cardiologists, paediatric cardiologists, anestesiologists, pneumologists, perfusionists, nurses, haematologists, pathologists and rehabilitation specialists. He kept structuring and developing such a team in Hospital de Santa Marta throughout the years.

At the same time he fostered frequent contact and friendship with the largest European cardiothoracic departments and their heads, facilitated by his extensive knowledge of the spanish, french, english and german languages, as well as his profound culture in art and history.

He also traveled frequently to Cardiothoracic units in the United States of America, to absorb innovation and knowledge steadily being created in this country.

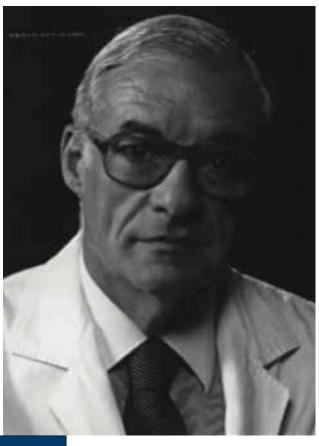


Figure 1

Professor Manuel Machado Macedo.

HEADWINDS

In 1973 the Cardiothoracic Department at Hospital de Santa Marta temporarily closed for renovations, and the reopening only happened in the beggining of 1975. In these times, cardiac surgery was considered less significant, and personal and social connections of MMM with the previous political regime were detrimental to his professional activity, Nevertheless, his unending energy and will made him keep up on his work. In December 1976 he presented his accumulated experience to the Portuguese Society of Cardiology: total cardiac surgery experience - 1572 patients; closed heart surgery 1281 patients, of which 305 congenital; open heart surgery 333 patients, of which 177 congenital. Tetralogy of Fallot was a shining example of his surgical results - 110 patients, with mortality under 3%.

His surgical team kept growing, and to the more experienced surgeons - Rui Bento, Rui de Lima, Ferrero Marques, Armando Serra, younger surgeons joined and were trained - Sena Lino, Queiroz e Melo, José Roquette, João Cravino, Vaz Velho, Gomes da Cruz, Moradas Ferreira, just to mention a few.

After one of his many voyages abroad, he brought with him new cardioplegia techniques, as well as the





Figure 2

As a young medical student.

formula for St. Thomas cardioplegia, which had been given to him by Melrose (the inventor of Melrose solution, one of the first forms of cardioplegia). He quickly

created the conditions so that St. Thomas cardioplegia could be manufactured in St^a Marta pharmacy and he started using it, with excellent results. This opened new avenues for open heart surgery in Portugal, and allowed more complex operations to be undertaken.

After creating a modern cardiological unit (with state of the art medical and surgical capabilities) in Hospital de Santa Marta, he repeated the feat in Hospital de Santa Cruz; later he took over the responsibility of Head of Department in Hospital de Santa Maria, creating the modern Cardiothoracic Surgery Department in this hospital as well. He also supported the development of Cardiac Surgery in Coimbra and Porto. Even today, in Lisbon, most active cardiac surgeons were directly formed by him or by his direct disciples.

Of his work, as all human endeavours, subjected to the time and place were they occur, MMM leaves us

the remembrance of the Departments he headed. MMM was an idealist of causes, of responsibility, of pioneering in cardiac surgery and of frank and fraternal clinical

discussion. He was elected President of the Portugueses Medical Association between 1987 and 1992, President of the Permanent Comitee of European Union Doctors, President of the World Medical Association; President of the European Society of Cardiovascular

Surgery, founder and president of the Portuguese Society for Cardiothoracic and Vascular Surgery, President and founder of the Portuguese Society of Cardiology, member of the most prestigious international scientific societies such as the American College

of Surgeons, Royal College of Surgeons, American Association of Thoracic Surgery and the Society of Thoracic Surgeons.

Throughout his life, MMM published more than 250 articles and books, and supported directly or indirectly more than 500 doctors as fellows or residents. His final work is História da Medicina Portuguesa, published in 2000, the year he passed away.

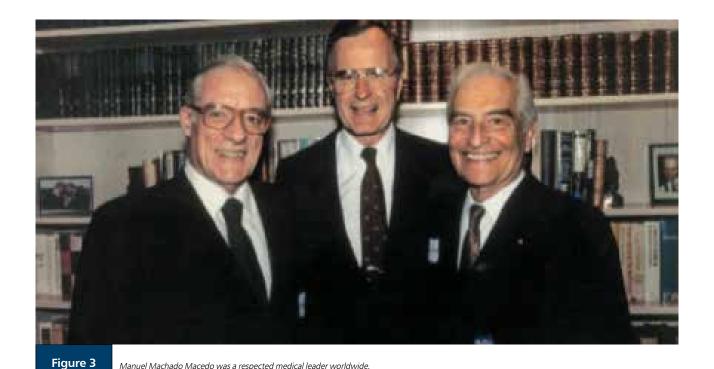
"MY BOSS"

I was in the third year of Medical school the first time I heard Professor Manuel Machado Macedo, while attending a lesson on diafragmatic hernia surgery on the Hospital de Santa Maria amphitheater. Immediately aware of his superb teaching and speaking abilities, this first contact was undoubtedly determinant for my own future. A little while alter, I solicited an appointment with him which he kindly conceded me; in his bureau in Hospital de Santa Marta, we exchanged some opinions about the present and future of cardiac surgery and my interest about this specialty. By his invitation, I started attending clinical activities at his Department whenever possible. I had by then taken my decision — I wanted to be a cardiac surgeon and I wanted to have Professor Machado Macedo as my mentor.

After graduating from medical school, I again manifested my interest in Cardiac Surgery. Following the end of my General Residency, I started Cardiothoracic Surgery residency in 1973, shortly thereafter interrupted by the obligatory military service. I only returned to the Department of Cardiac Surgery in 1976, and after this, contact with Professor Machado Macedo was daily. A complex post-revolutionary period was ongoing, and only Professor MMM's demanding attitude, firmness and ideals were able to soften the sometimes tense and unstable professional environment. A profound dedication to the Department he had created, and total availability to his team, to his patients and their families always shone through. Those were difficult but very rewarding times, which daily contact with this great man naturally turned easier.

Always mindful of his disciples' future, he



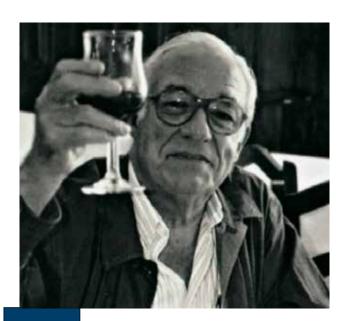


opened up the way to increased surgical activity, surgical knowledge and innovation, and offered us contact with the greatest names of international cardiac surgery, such as Francis Fontan, Henry Cachera, Jean Paul Binet,

Alain Carpentier, Charlie Hahn, Dwight Mc-Goon, John Kirklin, Sir Brian Barrat-Boyes, Zerbini, Adib Jatene, Ramiro Rivera, Denton Cooley, Michael deBakey, among others, names that, back then, we only knew from books and surgical publications.

He kept supporting my professional development, and following a particularly demanding exam to obtain an appointment as a senior surgeon, where I obtained the best classification, he thanked me for not letting him down; afterwards he proposed me a fellowship at Clinique Genolier dedicated to coronary surgery, to be followed by a return to Portugal as a surgeon at Hospital de Santa Cruz. I told him of my preference to remain in Hospital de Santa Marta, to which he replied "Let me think about it and I will call you tomorrow". Next day he called me and told me he agreed with me. In this moment I again confirmed his humility and excellence as a human being. He had concluded this path I preferred would be more beneficial both to me, the patients and to Santa Marta's Department. He kept, throughout my career, to support and advise me in every moment. When I obtained my doctoral degree, he asked me to treat him without titles or deference, which I was never able to do, because for me he always was "my boss".

My relation with Professor Manuel Machado Macedo endured and grew throughout the years. We always kept contact, we had dinner regularly, we planned trips (some of them never happened). I visited him often after he got sick. He left me one of his portraits, which I keep as memory of an exceptional man. I know he would be proud of my professional path, and I know that I will always keep "my boss" 's teachings with me.



Always available for his friends

Figure 4

