

## The Explorer of the Heart. Francisco Torrent Guasp Biography

by Jorge Carlos Trainini and Jesús Herreros 2019 - Editorial Biblos - ISBN 978-987-691-723-0

When we finish reading the moving book by Jorge Trainini "The explorer of the heart", on the life and passion of Francisco Torrent Guasp, it is difficult not to associate his figure with that of other lonely heroes of the history of science. Born in 1931 in the south of Spain, Torrent Guasp, an orphan from both parents at the early age of 14, followed the career of Medicine because failure in a mathematics test prevented him from studying Agronomy. On very few occasions a failure has so deserved to be celebrated. An outstanding student at Complutense University of Madrid, he followed the professor of Anatomy to the University of Salamanca. And it was in that place, on a night in which he was dissecting a heart to give a class on the following day, that he began an adventure that would only end with his death 50 years later. There, where everybody saw an anatomical preparation, and where Harvey's theory on vis a tergo circulation was not discussed, a young Spaniard found sufficient reason to doubt. Was the universally accepted knowledge of blood circulation a satisfactory explanation? How could valve dynamics be adequately understood, and what was the anatomical and physiological basis of the ventricular contractionrelaxation cycle? In 1954, when he was still an undergraduate, he published, encouraged by his professor, a monography on the cardiac cycle, in which he presented his main doubt: is ventricular filling the cause of its expansion, or the expansion the one that generates filling? It was the beginning of a febrile and fertile activity, with successive discoveries and an enormous amount of dissections (in the manner of Vesalius) that led him to support the idea of the heart as a single band, which "by defining a helix with two spiral turns limits in its course from the root of the pulmonary artery to the root of the aorta, two chambers, the right and left ventricles". This and other revolutionary ideas on blood and electric flow were developed by Torrent Guasp throughout his lifetime, brilliantly described by Trainini in a series of chapters pointing its most relevant moments. And beyond the confirmation of his findings (Trainini himself has been able to reproduce Torrrent Guasp's technique and demonstrate the helical band structure, Jorge Lowenstein has shown in echocardiographic studies the dynamics postulated by Torrent Guasp, and many of the most prominent cardiovascular surgeons, as Ross and Buckberg among others, have warmly adhered to his proposals) and even though others persist in denying them an entity, it is not for me the success of his assertions that makes this beautiful book stand out.-

Throughout his career the Spanish anatomist faced all types of iniquities, bestowed by his colleagues, even the closest ones. From those who presumed protecting him so that he could pursue his research but were really trying to grasp the fruits of this activity, to those who mocked him, who closed the pathway for publication in the most important journals dedicated to his specialty, who denied him the first and deserved authorship when the publication finally arrived, who prevented him from developing his medical practice to live and who deprived him of the awards that other physicians that history has forgotten, received. Torrent Guasp developed his activity in solitude and austerity, without fabulous grants or the economic protection of the industry; he defended and never surrendered the intellectual paternity of his findings, even though it would have smoothed his pathway. He investigated in his house turned into a laboratory with the help in minor tasks of his wife and children, and financed with his own money the publication of books that allowed him to disseminate his discoveries. He remained unfalteringly firm in the defense of his ideas and concepts, with humility but also pride, as one does not invalidate the other. And nothing he did was guided by economic craving. He never compromised with power, either economic or academic. A passionate researcher with a monastic life. Even if he had been wrong, how not to admire him? And also painter, writer and thinker. As

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Trainini well expresses in the book and Lowenstein in the prologue, a Renaissance man.

That said, on few occasions as in this book, does the figure of the protagonist of this biography keep such close affinity with the author. Jorge Trainini is a cardiovascular surgeon whose fame has extended beyond our frontiers; a pioneer in our country in cardiomyoplasty and aortomyoplasty techniques and a committed researcher in the study of cardiac stem cell implant, author of novels and essays, several times honored, with deep knowledge of philosophy and painting and Associate Director of the Argentine Journal of Cardiol-

ogy. To read Trainini speaking about Torrent Guasp is knowing Torresnt Guasp but also Trainini. His thoughts about knowledge, life and art are a reward in themselves, beyond the figure of the Explorer of the heart. Trainini is not only a biographer. He is at the same time the protagonist of other voyages; aboard the adventure started by Torrest Guasp, he pursues it and seeks to complete it, as Elcano confirmed Magallanes' intuition. In brief, a book that must be read, because it enriches and improves us.

Jorge Thierer