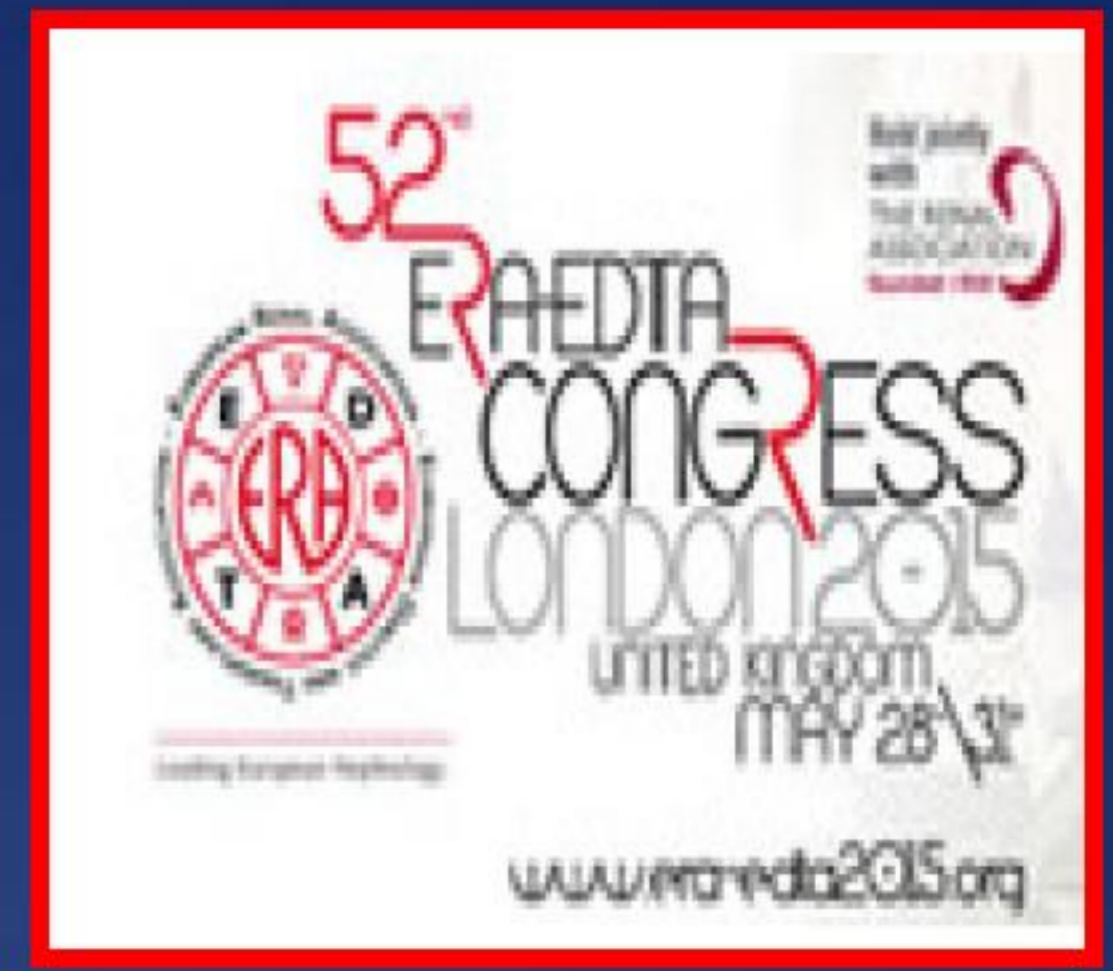




## NEPHROLOGICAL CONSIDERATIONS ABOUT MALPIGHI'S "OPERA POSTHUMA 1698"

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### Introduction and Aim

The scientific world of of XVII<sup>th</sup> century, period in which Malpighi worked, was enough confused, bringing with itself the theories of Aristotle and Galen, remaining fairly impermeable to new concepts in both anatomical and physiological fields.

The results was a good production of articles, letters, pamphlets, apologetics and works of contrasting conceptual, many of them laughing with the eyes of to day.

The purpose of the study is to evaluate the new considerations of Malpighi's discoveries on kidney, respect the " Ancient Medicine" before him.

### Methods

The "Opera Posthuma" printed after the death of Malpighi, composed by 387 pages, was written in old italian of XVII<sup>th</sup> century and Latin; it contains numerous papers and tablets.

The analysis followed three steps:

1)The translation from Latin and from the old Italian to the current language, 2) the study in order to understand the context of the new discoveries,3)The systematic research and assessment of information linked to kidney discovery from Marcello Malpighi, respect the old medicine.

### Results:

The age in which Malpighi worked, was later renamed "Scientific Renaissance"(1) and was characterized by the assert of the experimental method of Borelli and Malpighi, appointed like "Neotericos", who went against the method of "Traditionalists". In this book are collected long apologetic Malpighi's speeches under the pseudonym of "Placido Papadopoli Messanense Medicinae Doctore" that Malpighi generally used when he contended with his opponents. Whit this method Malpighi, towards other authors, did do significant progresses in Medicine and in particular for knowledge of the kidneys. In Opera Posthuma, Kidney "Secundum Neotericos", were so described "Renes sunt aggregatum ex miliaribus glandulis, a quibus exorta excretoria vasa corpus integrant glandulosum", in which the "blood proceeds from the artery to the gland losing through the internal vessels water saturated with salts , after returning via venous to the heart (concept absolutely correct and valid, but then so innovative to generate controversies and disbeliefs). Instead the old Medicine had a very peculiar conception , indeed "Secundum Antiquos", "Renes sunt viscera carne compacta quae propria sympathia attrahunt serositatem a vena cava mediis emulgentibus pro propria nutritione" limited concept that does not come close tounderstand the mechanism of functioning of the Kidney. In another part is possible to find a very modern considerations, for the time, regarding the renal pathophysiology: "That the kidney are glands that receive in their "meati" the water and the blood pushed from the arteries, in which the part of the blood that cannot enter, follows its way trough the strength of the heart, and because in the components of the water are spaces in which some bodies, dissolved, can enter or be restrained and after be received into kidney glands". Another concept that come out from Neotericos was that Kidney don't attract the Urine but filter it. In this book are collected long apologetic Malpighi's speeches under the pseudonym of "Placido Papadopoli Messanense Medicinae Doctore" that Malpighi generally used when he contended with his opponents. Malpighi had the first Chair of Medicine in University of Messina in fair april of 1665(fig.3).

### References

- 1) Antonino Ioli Marcello Malpighi stay In Messina (1662-1666)/www.cisui.unibo.it/annali/02/testi/08Ioli1\_testo.htm
- 2) Marcelli Malipighi Opera Posthuma, Amsterdam 1698.



Figure 1: Marcelli Malipighi Opera Posthuma, Amsterdam 1698



Figure 2: Marcelli Malipighi Opera Posthuma, Amsterdam 1698

### Conclusions:

It is fair to say that Malpighi not only had the courage to oppose the dominant views of the traditionalists, on the basis of the experimental method which pursued, but went beyond his duties of pure anatomist, trying to open the doors of the renal pathophysiology concepts but above defending and arguing forcefully his theories.

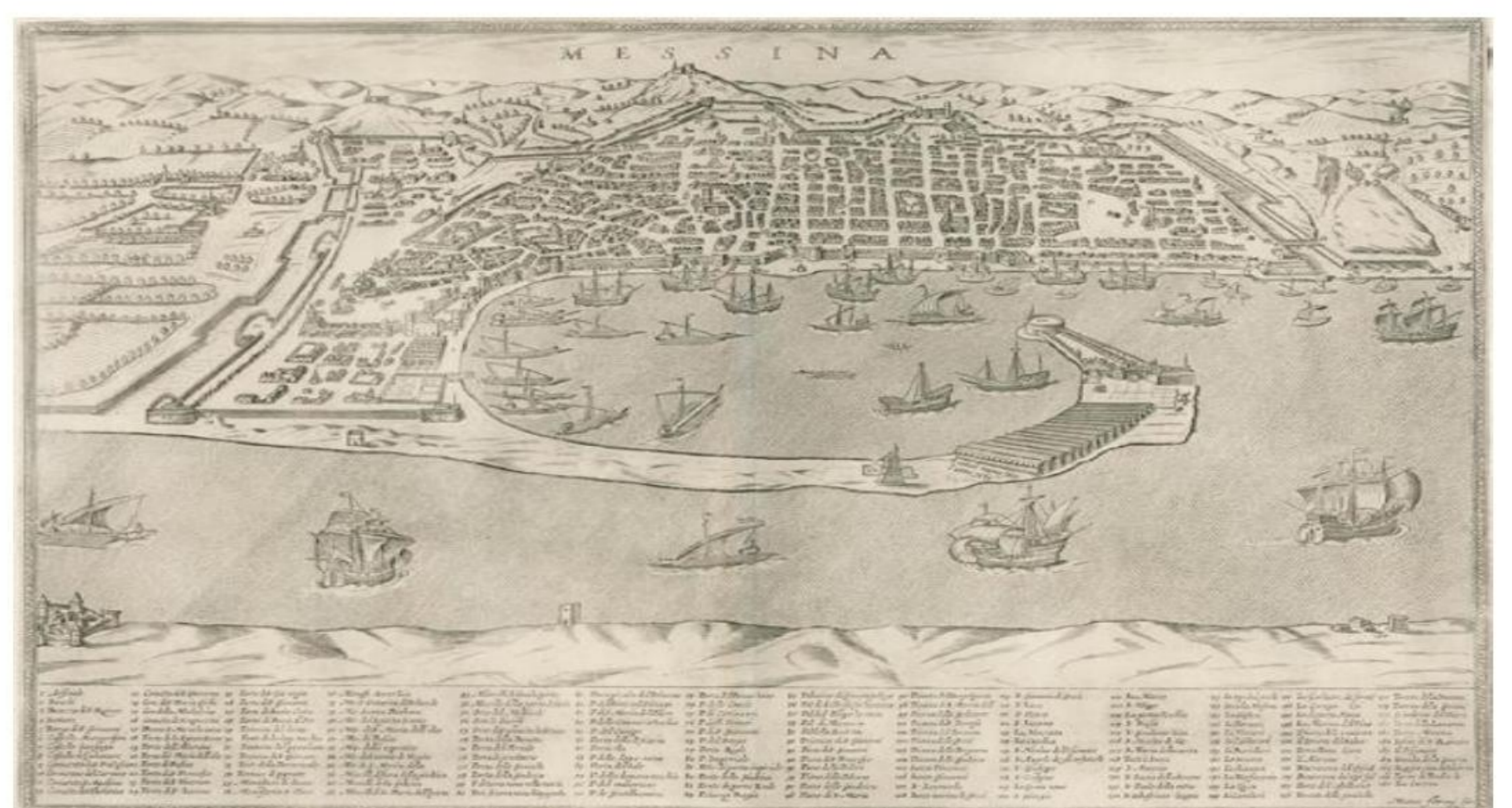


Figure 3, Matteo Florimi: Messina, 1595.  
Town in wich Marcello Malpighi received the first Chair of Medicine.

