Carmine Melino and his love for the history of hygiene
A. Finazzi-Agrò

I had the good fortune and pleasure to meet and become close friends with Carmine Melino during our academic lives, both inside and outside the University. Carmine, as others will know better than I, was for many years a university professor at the Sapienza University of Rome, Institute of Hygiene. There were many close relationships between that Institute and our Biochemistry Institute for scientific as well as academic reasons. This allowed an exchange of knowledge and mutual appreciation due to the affinity between our respective scientific approaches and methods. Therefore, at first as a medical student and later as assistant professor of Biochemistry, I had many opportunities to visit the Hygiene laboratories and to realize that many instruments were common to both labs. At that time each instrument had a “physiognomy” of its own, that would “speak” about its role, in contrast to today instruments which are certainly more powerful but lack the personality and have a neutral appearance rather like “black boxes”. It is the fate of scientific instruments to undergo unavoidable obsolescence, which is nowadays even more rapid due to the unwillingness of the instrument makers to repair and/or update their products. Thus a major problem for the laboratories is disposing of redundant instruments. These are often classified as “dangerous waste” and therefore require a special and expensive method of disposal, in addition to the often burdensome associated bureaucratic paperwork.

Indeed, Carmine would have looked with anguish at this kind of “slaughter”. In the seventies of the past century, both of us we were teaching at L’Aquila in the Science Faculty of Free University (Carmine) or in the Free Institute of Medicine and Surgery (myself), both to become later part of the State University of L’Aquila. How many times, mainly during the long cold winter nights did we share thoughts about our respective disciplines. Being both originally from Southern Italy, we were not acquainted with the snow and ice so frequent in winter L’Aquila, and wrapped in several layers of clothes, we sheltered in some of the cosy restaurants in the town centre (now unfortunately destroyed by the 2009 earthquake). There we argued about the opportunity/necessity of including in the teaching of our disciplines ways to make the students aware of the beauty and difficulties of the scientific method and how, in particular, the scientific instruments worked. Was science technology - or concept-led? Sometimes our colleague Nurzia, professor and chemist, owner of the homonymous pharmacy, joined us over dinner in discussing these issues particularly in relation to contemporary instrumentation. I was always struck by Carmine’s enthusiasm describing which kind of results one could

1) Past Rector Tor Vergata University of Rome, Italy
e-mail: finazzi@uniroma2.it
have obtained by improving the controls needed in hygiene, and the mutual respect and agreement between him and Nurzia, both of whom were much more involved in the discussion than me, even though I was spending more time on research.

When we returned to teach in Rome, our contacts became less frequent, particularly because I had opted for the new University Tor Vergata, where my academic duties were increasing exponentially. Nevertheless our conversations continued, although less frequently, and were now more devoted to different issues like the academic career of friends and acquaintances and more and more about his greatest poetic passion: the island of Capri.

Once, after Carmine had retired, during one of his much appreciated visits over Christmas or other festivities to exchange greetings, he told me about his willingness to create, at his own expense, a Museum of Scientific Instrumentation inside the Institute of Hygiene. I was immediately fascinated by the idea, particularly because in the illustrious Institute of Biochemistry, which I had left for my new University, very important instruments, common to biochemistry and physiology whence the former was born, were lying neglected and from time to time even disappeared (dump or second-hand market?) You can imagine my emotion when I first visited the "Laboratorio d’Epoca" (Vintage Laboratory) created by Carmine Melino inside his Institute (now by law renamed the Department of Public Health Sciences). I was amazed to see again after decades some mythical instruments like the Pulfrich refractometer, the Lippich polarimeter, the Kirchnoff-Bunsen spectroscope and particularly the once famous Beckman spectrophotometer. When I was an intern I used to spend hours on this machine to determine the concentration and the absorption spectra of proteins by determining their optical density point by point from 250 to 700 nanometers!

I heartily congratulated Carmine for this exceptional achievement and for his inexhaustible love for experimental methods, even though our mutual understanding was becoming more and more difficult due to the progression of our hearing and speaking problems, but the enthusiastic light burning from his eyes remains unforgettable.

Now he is no more among us, but his books and scientific papers continue to serve his memory, as though he were still...
alive. And from time to time, some objects among those collected by Carmine stimulate the recollection of a past of research and scientific fervour which I considered lost. One of these surprising objects came out on a day I was visiting the office of Gerry Melino, Carmine’s worthy son and my valuable collaborator at the Faculty of Medicine of the University Tor Vergata of Rome. His office is often crowded with PhD students and co-workers, and stuffed with piles of scientific magazines of which Gerry is Editor-in-Chief. Among the mess I immediately saw the familiar shape of a huge Warburg apparatus (Figure 1), most certainly rescued from the “cultural revolution” carried out at the Institute of Biochemistry of La Sapienza nowadays rightly named “Department of Biochemical Sciences A. Rossi Fanelli”. With that instrument, then managed in its complexity of manometers and vessels by the technician Mario Sanchioni (the only person who knew all the secrets to calibrate their volumes), for long years - together with Joe Rotilio, Roberto Strom and many younger collaborators – we were studying the activity of oxidative enzymes and the respiration of normal and cancerous cells.

Let this unexpected memory jolt serve as Carmine’s final gift.