

Riccardo's Early Vision for the Institute.

I may be unique among the attendees at this memorial in having never tried to observe the universe with photons much above 1 eV. This resulted in some interesting differences in perspective with Riccardo whose scientific experience, along with Ethan Schreier's, was entirely with energies higher by orders of magnitude. As it turned out, many of Hubble's most significant results have come from the infrared channel on WFC-3 providing the impetus for the JWST as the next major initiative.

I was privileged to serve under Riccardo's leadership as the first permanent Deputy Director of the Space Telescope Science Institute during the formative years of the early 1980's. Unfortunately, I don't have many records from these first years and have to rely on my memory after nearly four decades.

Space Telescope Science Institute represented a unique opportunity for Riccardo as, so long as he could win NASA's concurrence, he had a clean slate upon which to create a new type of organization. In contrast to his later efforts at ESO and NRAO, there was no established entity which had to be reshaped. From the outset, Riccardo had a strikingly clear vision of the Institute he would create. It was an organization that would utilize top rank scientists to conduct the overall science program of the Hubble Space Telescope - planning, scheduling and archiving Hubble observational data to maximize the scientific return while interacting closely with the Science Instrument Definition Teams. The end goal was the best possible science program dictated by peer-reviewed proposals with the observations archived and readily available to the broad community. This led to additional initiatives such as the Guide Star Catalog and improved Science Data Analysis Software with requirements for additional resources. This all in an era when PCs were only just emerging, mainframe computing was still often run as batch jobs and archiving GB was a major challenge.

Riccardo's vision was in distinct contrast to NASA's plans for the Institute but he doggedly and courageously persevered. I recall numerous confrontational meetings with NASA at Goddard and HQ along with the quarterlies at Marshall Space Flight Center. At these Riccardo repeatedly articulated his case; the Institute today is very much as he envisaged it in those early days. I have fond memories of driving back up the parkway with him, classical music turned way up, as he decompressed after confrontational meetings at Goddard and NASA HQ – a stark contrast to the careful preparations on the drive down.

These early years were in parallel dominated by the pressing need to hire key personnel and then to find space for them. Riccardo was only interested in scientific staff who were active researchers of the first rank, and he insisted we go to any lengths to facilitate them continuing their research after joining the Institute. For all but the most senior hires, I conducted the initial recruitment with Riccardo making the final decision. This included frequent trips to Europe to participate in the interviews of candidates for positions ESA was contributing. Riccardo was

prepared to go to great lengths to hire the staff to bring about his vision and the results speak for themselves.

Space to properly house all of these hires was an ongoing challenge. In the proposal, Johns Hopkins had committed to provide temporary space while the initial phase of the current building on San Martin Drive was constructed. However, the rapid staff up taxed this to the limit with people spread around various buildings on the Homewood Campus, constantly having to relocate. This situation was a source of frustration for Riccardo but was increasingly compensated by steady progress on the new building in which he took great pride. He fought off NASA pressure for “bookend” parking which would have limited options for further expansion and insisted on an attractive cafeteria.

Riccardo was always insistent that the Institute project his articulation of the “proper” image. This was brought home to me in my very first days on the job. No-one had given me directions and I was somewhat at a loss as to what I should work on; a prankster suggested I should take the lead to come up with an STScI coffee mug. I looked into it briefly and decided I should check with Riccardo before devoting any more time to the project. Somewhat to my surprise, Riccardo decided a tasteful STScI logo was vitally important to the Institute’s external image and insisted on taking the lead himself. The result was the logo that endures to this day to project the Institute’s image – it was also, in the end, used for a coffee mug.

I learned a great deal from Riccardo during my time at the Institute. Most of all, to value consensus over unilateral decision making and the vital importance of reaching full and frank agreement on scientific results or concepts.