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A Tribute to Jean Borel: A Transplanter's Point of View

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THANK YOU, ladies and gentlemen, and especially Jean Borel. I am honored to be here, and especially by the chance to speak. More than a retirement banquet, we celebrate tonight and tomorrow the descent of a hero from Mt. Olympus. How you, Jean Borel, managed to scale such heights, and returned unscathed is a question to which I will return in a moment. But first, I want to say something about what your journey meant to me personally, and eventually to everyone else in this room, and in the world.

In the 5 years between 1962 and 1967, an empirical foundation was laid for clinical organ transplantation, using chemical immunosuppression based on azathioprine and prednisone, with or without ALG. This was at first a time of wild and frequently unwarranted enthusiasm, which was then succeeded by a dozen years of deepening despair. The 1-year survival of cadaver kidney grafts through the 1970s remained frozen at 50%, and even in successful cases, this kind of treatment was more like a disease than a cure. Although long survival after liver, lung, heart, and pancreas transplantation was first accomplished in humans during 1967, the results with these organs were even more dismal than with the kidney. Instead of burgeoning, the new field of transplantation was undergoing quiet atrophy.

The primary victims always were the disillusioned patients. Those whose desperate gamble ostensibly paid off in terms of survival all too often found themselves returning to a hopelessly eroded quality of posttransplantation life. Surgeons who were attempting to offer transplantation services with extrarenal organs—including me, Roy Calne, Norm Shumway, Dick Lillehei, and others—found ourselves under siege by our own professional colleagues. Like prisoners in the confines of a self-made dungeon, we tapped increasingly feeble messages of hope to each other, all the while wondering if ours was to be a life sentence of frustration.

At the darkest and most unexpected moment, a mounted torch-bearer appeared in the distance. The torch was cyclosporine; the bearer was Jean Borel, and the horse was the Sandoz Corporation. How the next steps were taken by Roy Calne and his English colleagues is the material of legends. Suffice it to say, both the patients and those who cared for them were liberated from a terrible bondage. There have been improvements in treatment since then,

and there will be more. None, in my opinion, will compare in magnitude to those that occurred between 1978 and 1980 as the result of Jean Borel's initiative.

How could a single person have such an impact, particularly in this modern era in which individual scientists are increasingly viewed as mere cogs in a multidisciplinary research machine? I learned the answer when I saw an advanced copy of Jean Borel's remarks, which you have heard tonight. If you listened carefully, you will have appreciated the deeply personal conflict that still haunts Jean Borel, resulting from the enforced abandonment at an early age of his first love (art). Although the decision to enter science was imposed by practical considerations, the lessons already learned by his humanities background were always just around the corner.

In protest, as a child and young man, he obliterated in his inner life the distinction between art and science. That allowed him to exercise the imagination and creativity of the artist in the pursuit of science. The result was vision. Instead of believing that scientists should be just as methodical and as plodding as accountants, his conviction was that first-rate science required the same imagination as art. In both, it was necessary to strive for authenticity and intensity of feeling, even heroism and sacrifice.

These expressions of individuality allowed him to see and create things far beyond the reach of comfortable Philistines. Rather than focusing on details, he saw the whole canvas. This was the man who went to England in 1977, not to give a research paper to a group of immunologists, but to accomplish a multifaceted mission that included human service. Completion of the mission, which he saw through, was central to the revolution that has occurred in transplantation, and as the ripple effects played out, in all of immunology.

When something like this happens, we should (in fact we must) look at the responsible individuals beyond the traditional bestowal of much deserved accolades and honors. What made such people what they came to be? If only we knew, we would have the means by which it could be made

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to happen again in generations yet to come.^{1,2} As for Jean Borel, don't count him out. There are pictures to be painted, music to be composed, and words to be written. And there is still plenty of time.

REFERENCES

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