The inositol lipid field was recently identified as the largest research front in the life sciences. My interest in phosphoinositides began in 1976 when I read Bob Mitchell's review that for the first time linked the hydrolysis of these lipids to the receptor mechanism for generating calcium signals. Not being a biochemist, I approached the subject of lipids with considerable apprehension and tried to overcome my "lipophobia" by studying the water-soluble products of hydrolysis rather than the lipids. This was a fortunate decision because it soon became apparent that agonists stimulated a very rapid formation of inositol trisphosphate (Ins1,4,5P3), which led me to propose that it may function to mobilize calcium as it had all the hallmarks of a second messenger.

The next problem was to find an assay to study this putative messenger. At a meeting on intestinal secretion at the Royal Netherlands Academy, I heard from Irene Schulz that she and Hanspeter Streb had set up a permeabilized pancreatic preparation that seemed ideal for studying calcium mobilization if only we had some Ins1,4,5P3. On returning to Cambridge, I discussed the problem with Robin F. Irvine, who set up his Ins1,4,5P3 factory that was soon to become the worldwide supplier of this novel messenger. The first samples off the assembly line were sent to the Max Planck Institute in Frankfurt and within a week we received an ecstatic phone call—Ins1,4,5P3 had released calcium. The paper describing our results was enthusiastically received by Nature, and we were fortunate in that it appeared just in time for having a platform to provide equal coverage of the Ins1,4,5P3/Ca2+ pathway.

After some gentle pressure, Nature agreed to publish our results. As Irvine had played such a central role in developing the evidence that Ins1,4,5P3 was a messenger, I asked him to collaborate in reviewing this exciting new development. This review has been so highly cited because it not only summarized the role of Ins1,4,5P3 in mobilizing intracellular calcium, but it also showed how this Ins1,4,5P3/Ca2+ limb of the bifurcating signal pathway acted together with the DAG/Ca2+-kinase limb to regulate so many vital cellular processes. The central role of this signalling system has captured the imagination of everyone and resulted in the publication of over 2,000 papers on this topic in 1985. For my contribution to the unveiling of the second messenger role of Ins1,4,5P3, I received the Feldberg Award in 1984, and the King Faisal International Prize in Science and the Louis Jeantet Prize in Medicine in 1986.