

Welcome for Science: “Bucket-List Tips for Success”

An inscription attributed to Aristotle: *The search for Truth is in one way hard and in another easy. For it is evident that no one can muster it fully nor miss it wholly. But each adds a little to our knowledge of Nature, and from all the facts assembled there arises a certain grandeur.*

Nature speaks to us in many tongues. They are all alien. The task of scientists pursuing frontier research is to discover something of these languages.

First, in science what you are after, call it truth or understanding, waits patiently for you. This is an enormous advantage. I like to tell my students that becoming a scientist is something like to becoming a musician. You do need commitment and effort to nurture and develop your ability. But in effect the scientist can play nearly all the notes wrong, eventually get some right, and perhaps be wildly applauded!

Second, the world of science is so vast that there are domains well suited to people with a great range in talent and temperament. You can be confident that in time you will find the right area that suits well your special qualities. Again there is a resemblance to musicians, who need only master one instrument!

Third, science is intrinsically cooperative. Of course, there is some competition, but it is superficial in contrast to the essential collaboration with predecessors and colleagues. Every scientist depends greatly on the work of others and benefits even from the finding of those who might be regarded as competitors. This is more congenial than you find in many other professions. Related is the pleasure you can take in the general progress of your field and the whole scientific enterprise, knowing that you are contributing something to it. Even if your contribution is modest, together with that of others it is likely to lead to enduring advances.

The pursuit of science offers worthy tasks to challenge your talent, energy, and vision. Thereby you can foster in yourself in others the awareness of opportunity, the fellowship of striving, the joy of discovery, and the satisfactions of genuine service.

--Dudley Herschbach