

QUOTATION

I. P. PAVLOV'S ADVICE FOR YOUNG SCIENTISTS

What would I wish for the young people of my motherland who dedicated themselves to science?

First of all—consistency. Of this very important condition for fruitful scientific work I cannot speak without emotion. Consistency, consistency and again consistency. Right from the very beginning inculcate in yourself the habit of strict consistency in acquiring knowledge.

Learn the ABC of science before you attempt to scale its peaks. Never embark on what comes after without having mastered what goes before. Never try to cover up the gaps in your knowledge, even by the boldest guesses and hypotheses. No matter how this bubble may delight the eye by its profusion of colours, it is bound to burst, and you will be left with nothing but confusion.

Develop in yourself restraint and patience. Never funk the hard jobs in science. Study, compare, accumulate facts.

No matter how perfect a bird's wing may be it could never make the bird airborne without the support of the air. Facts are the air of the scientist. Without them you will never be able to take off, without them your "theories" will be barren.

But when studying, experimenting and observing, do your best to get beneath the skin of the facts. Do not become hoarders of the facts. Try to penetrate into the secrets of their origin. Search persistently for the laws governing them.

The second thing is modesty. Never think that you know everything. No matter in what high esteem you are held always have the courage to say to yourself: "I am ignorant."

Do not let pride take possession of you. It will result in you being obstinate when you should be conciliatory. It will lead you to reject useful advice and friendly help. It will deprive you of the ability to be objective.

In the team of which I am leader, everything depends on the atmosphere. All of us are harnessed to a common cause and each pulls his weight. With us it is often impossible to discern what is "mine" and what is "yours," but our common cause only gains thereby.

The third thing is—passion. Remember, science requires your whole life. And even if you had two lives to give they would not be enough. Science demands of man the utmost effort and supreme passion. Be passionate in your work and in your quests.

Our country is opening wide vistas before scientists, and—it must be owned—science in our country is being fostered with a generous hand.

What is there to say about the status of our young scientist? Here, it would seem, everything is quite clear. Much is given to him, much is expected from him. For him, as for us, it is a matter of honour to justify the great trust that our country puts in science.

From: I. P. Pavlov: Selected works. Moscow: Foreign Languages Publishing House, 1955, pp. 54–55. This year marks the author's 150th birthday; he was born on September 26, 1849, and died on February 27, 1936.

Contributed by Edward K. Morris, Department of Human Development, Dole Human Development Center, University of Kansas, Lawrence, Kansas 66045-2133.