Preface

Thirty years is time to be ambitious and driven

This special section of Current Science celebrates the 30th year of the founding of the Department of Biotechnology (DBT) in India. The DBT started as a Board anchored by the Department of Science and Technology and then became a Department under the Ministry of Science and Technology. At the core of the DBT's efforts lie people, our present, past and future scientists. Inspired by the earlier generation of scientists, mentored and critically challenged by the present, we try hard to build a future. The past is always imperfect and the future always tense. We could have done better, only if.... And we can do even better than we have if only.... Such views, valuable as they are, and correct in parts, do not capture the extraordinary successes of Indian life-sciences and biotechnology. A hypothetical 'loss-of-function' assay, with the DBT can ask what would be the situation if the DBT did not exist and life science and biotechnology were enveloped in other departments. The essays in this volume give a glimpse what we would have missed. In this issue, we have several of our colleagues writing about their areas of experience in life sciences research in India.

Now, the challenge for the DBT is to think about the consequences of a 'gain-of function' assay, for the future. What do we do in the next decade, for example. We have had many discussions on this, leading to a strategy document (http://www.dbtindia.nic.in/wp-content/uploads/DBT_Book-29-december_2015.pdf) and, importantly constantly plan our expansion. For the future to be effec-

tive, we are acutely aware that our internal processes need to improve. This is a challenge all over the government, but we have grasped these nettles. As scientists too, as individuals, institutions and national missions, we need to change hugely. Resources and processes are important and indeed vital in many contexts. But our conversation at all the levels from individual to missions, must be more aggressively forward-looking and ambitious. A handful of our colleagues in astronomy and physics have shown courage in taking on ambitious questions that can be addressed nationally and through global collaboration. Biologists have only a few such examples of individual, institutional or globally collaborative excellence. This cannot be changed by fire in the rear, we should have more fire in the belly. In addition, we must, simply must, put in additional energies in training quality undergraduates all over the country. Here too, the national programmes we have are merely plumbing. As scientists, we need to both improve the plumbing, but importantly make sure that water flows in the pipes.

To end, crib, curse and complain about the government. We will listen and also be self-critical. But let us each reform our environments from within as well, reach out to our society and be truly ambitious and driven.

K. VijayRaghavan

Department of Biotechnology, New Delhi 110 003, India e-mail: vijay.dbt@nic.in