Small Science: View from Developing Nations

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IN THE EDITORIAL “THE END OF ‘SMALL science’?” (28 September, p. 1583), B. Alberts asks whether the era of “small-science” projects is coming to an end. He hopes not. I share this sentiment, from the perspective of developing countries where science budgets are small.

It seems clear, however, that big, headline-grabbing projects will likely continue to increase. Thus, the leaders of these projects should seize the opportunity to enable and inspire the next generation of scientists in developing countries. Developing countries do not have the budgets to initiate such “big-science” projects, but they do have ample talent to contribute. Unfortunately, ENCODE—just like the Human Genome Project and others—included scientists from only one developing nation (China).

An exceptional example of integrating developing countries into big-science projects is the decision to award the Square Kilometre Array radio telescope to Africa (1). The ripple effects in the media, government, and rest of society are noticeable in South Africa and promising for public support for science. Such support is critical if we are to bridge the gap between science in developed and developing countries, in order to address inequality and the interconnected sustainability problems facing the world.

The scientific community often points a finger at the failure of governments to address these issues. The scientific community, however, also needs to take care of its responsibility and opportunities to help bridge that divide. Big-science projects have the power to make a substantial difference in this regard.

Reference
1. SKA Africa: Square Kilometre Array (www.ska.ac.za).