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MY SAY: No Time to monkey around with R&D

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This column had highlighted before how crucial research on genomics, using rubber as an example, is helping the country's economy to grow. By developing superior scientific and technical expertise to discover novel knowledge, related industries can move up the value chain with relative ease.

As demonstrated by the newly established Centre for Chemical Biology at Universiti Sains Malaysia (www.ccbusm.com), much can be gained by pushing Malaysia as an internationally reputable, cutting-edge R&D centre. In the case of rubber, the race was with a number of countries that had the same desire to be the first because this will position the winner to be the leader in the field, with a host of intellectual property rights (IPR) and consultancy options at its disposal, thus creating new sources of wealth. Speed is of the essence.

However, there is much more to it than meets the eye. The downside is often painful, though it can offer very useful lessons, especially in building new and critical talent pools for the future. In the USM experience, we wasted precious time in getting the process started when the partners who had initially agreed to work with us backed out for some unknown reason.

More puzzling is that one of them later announced a similar collaboration with another research agency abroad. Not only was time lost, but it also bred suspicion and mistrust among those who rightly should be working together for the national interest. All this smacked of some ego trip that derailed the entire project and its good intentions.

Unfortunately, it did not stop there. When it came to the actual implementation, some researchers and bureaucrats felt uneasy while others felt threatened and made it difficult for the research to take off. Thus, more time was wasted, many more relationships went sour and more egos got busted!

Though many do not even understand the significance of the science, few cared to find out what it was all about and clear the way ahead. In fact, even when the work was completed and the outcome delivered, there were still attempts to snoop around quite unethically.

In other words, without the passion to drive the research and the perseverance to fight for the sake of science, one would have easily given up or chosen not to attempt it at all.

That means Malaysia would remain stagnant while our neighbours pass us by sooner or later, taking with them our resources and leaving us vulnerable. Ultimately, our future would be squandered.

The intense focus on R&D will not stop. For example, one country is currently embarking on a 1,000-plant genome project to secure heritage and expand its sources of new wealth. With state-of-the-art sequencing platforms and the know-how, its researchers are able to innovate sequence analysis and bioinformatics, targeting not just 1,000 but 100,000 genomes in the years to come! When that day arrives, what will happen to our biodiversity, let alone our future heritage and survival as a sovereign nation?

This kind of challenge must be an early warning to those who are concerned about the nation's destiny and its capacity to do science as carved out in Challenge 6 of Vision 2020 (I wonder if one can still recite it). We have what it takes to accomplish this but only if we keep our individual egos at bay and focus on the work as a collaborative team, come what may.

The most recent opportunity lost is the case of the orang utan genome, uncovered by a group of foreign scientists at the Washington University Genome Centre. Two species of orang utan from the forests of Indonesia and Malaysia have had their genomes sequenced — these are endangered species whose population is in rapid decline.

While Malaysians should have been the first to do this and take the lead — after all, the orang utan are in our backyard — this was not the case. Worse still, not a single one of the more than 50 authors of the published paper, entitled *Comparative and demographic analysis of orang utan genomes*, is a Malaysian. Yet the first line in the preamble clearly mentions that "orang utan" is derived from a Malay term meaning "man of the forest". How embarrassing! More so when we consider what USM had to go through to put Malaysia on the map and

stand tall in genomic R&D, on a par with others globally.

Clearly, the days to monkey around with R&D are over. It is time for serious business.

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