It was a hectic year for 34-year-old Melbourne researcher Dr. Raj Kumar Buyya who zipped ahead to become one of the world's leading grid computing researchers. Besides writing two computer science textbooks and co-authoring 120 research papers and journals on grid computing, a sunrise field dealing with the convection of disparate computers through a network for delivering increased power, Buyya is also leading his team on a path-breaking detection of breast cancer in the early stages.

Buyya, who completed his Bachelor of Engineering and Masters at the Mysore and Bangalore universities, before shifting to Melbourne, is not alone in this move.

Ganesh Reherde, who came to Australia from India's Central Institute for Cotton Research in Nagpur, is working at the Bio21 Molecular Science and Biotechnology Institute on reducing the moth population plaguing India's cotton crops. “Once we are able to track the moth population’s dynamics - that is, if they travel from vegetables to cotton, then we can build a strategy to limit their effects,” he says.

And there’s more. A clutch of researchers at Queensland’s Brain Institute is involved in investigating the neural changes essential to learning and memory formation - a hot topic that has won the institute kudos. In fact, the University of Queensland (UQ) won one-third of the national teaching awards last year.

Yes, Australian universities are not only hot destinations for undergraduate study but also popular seats for research. Eight leading Australian universities comprising the Australian National University (ANU), the University of Adelaide, the University of Melbourne, Monash University, the University of Queensland, the University of New South Wales, the University of Sydney and the University of Western Australia have come under the banner of G8 (Group of Eight).

What distinguishes these universities from the rest is the quality of research work undertaken by these universities. As Dr. Karthik C. Roy, Associate Professor, School of Economics, UQ, puts it: “These universities receive over 70 per cent of the national competitive research grants and conduct over 80 per cent of all Australian research.” They have also nurtured all of Australia’s Nobel Prize winners, educated in Australia, produced over 60 per cent of the research publications and attracted nearly 50 per cent of competitive Postgraduate Research Scholarships.

The ANU, for instance, provides 25 million dollars per year in scholarships and has eight research schools and one Institute of Advanced Studies. The University’s eight faculties combine research with research-led education programmes as well. “This unique structure of the ANU makes it the most research-intensive university in Australia,” says Prof. Malcolm Gilles, the Deputy Vice Chancellor (Education).

An interesting research project being carried out by the university is on the malarial parasite. More than one million people die of malaria every year and 10 per cent of the world’s population is infected. Dr. Kevin Saliba and Prof. Kevin Kirk, who are working to out-smart the malarial parasite, say that they are looking to block its invasion into healthy cells. The university has also become part of a global alliance called the International Alliance of Research Universities.

Similarly Monash, considered to be one of the leading research centres in nanoscience, has also been designated a research-intensive university and has entered into a tie-up with 1IT-Powell, thereby creating the first joint institution for research and research training.

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