India kicks off fellowship for top visiting scientists

First batch of five researchers get generous funding to spend 12 months doing research in the country.

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Clockwise from top left: Azim Surani, Trevor Charles Platt, Mathukumalli Vidyasagar, Sathamangalam Srinivasa Varadhan and Srinivas Kulkarni.

In an effort to initiate change in a traditionally inward-looking scientific culture, India last week rolled out the red carpet for overseas scientists of eminence. A new scheme is aimed at boosting the research base in the country by injecting top talent from abroad.

Five scientists — all of them fellows of the UK Royal Society and distinguished in their own fields — will work part time in a laboratory of their choice in India for a total of 12 months, spread over three years. They make up the first batch of 25 eminent scholars to be hired in the initial phase of the scheme, which will eventually be expanded in stages to reach a total of 100 scholars. The programme is named the Jawaharlal Nehru Science Fellowship (JNSF) after India's first prime minister.

The JNSF is open to academically distinguished overseas scientists of any nationality who are Fellows of the Royal Society or equivalent bodies. India already has programmes in place that aim to reverse the country's brain drain, but the JNSF targets big-name, globally renowned scientists and offers substantial compensation: US\$100,000 salary plus a 5.5 million rupee (\$90,000) research grant for the 12 months that they will spend in India. The programme, which has a total budget of 150 million rupees (about \$2.4 million) also provides free furnished housing and administrative support.

All awardees in the first batch are of Indian origin except for one — Trevor Charles Platt of the Bedford Institute of Oceanography in Dartmouth, Canada. "We hope that the scheme [will] eventually attract eminent scientists from [other parts] of the world," Department of Science and Technology secretary Thirumalachari Ramasami told *Nature*.

"It is an extremely good beginning," says Mathukumalli Vidyasagar, head of the Department of Bioengineering at the University of Texas in Dallas and one of the awardees. Vidyasagar, who is developing a mathematical model to improve the efficacy of cancer

drugs, hopes to create "a self-sustaining research program" at the Indian Institute of Technology in Hyderabad. "I have a deep affinity to the Indian scientific community, and this seemed like a good way to continue that engagement. This, aside [from] the grant of 5.5 million rupees, was a major incentive."

The other scientists in the list, which was announced by Prime Minister Manmohan Singh, are epigenetics pioneer Azim Surani of the Gurdon Institute of the University of Cambridge, UK; astronomer Shrinivas Kulkarni of the California Institute of Technology in Pasadena; and mathematician Sathamangalam Srinivasa Varadhan of New York University. Surani plans to do his research at the Institute for Stem Cell Biology and Regenerative Medicine in Bangalore, whereas Kulkarni hopes to help build a mini satellite to study young supernovae and plans to lecture in remote parts of India to persuade young people to study astronomy.

Mamannamana Vijayan at the Indian Institute of Science in Bangalore and former President of the Indian National Science Academy in New Delhi says that the JNSF is a "welcome move". Although it is no comparison to an existing, massive effort in China to recruit expatriates as well as foreign scientists, the Indian scheme is noteworthy in that it has set the bar extremely high to attract the very best, Vijayan says.

Biologist Subhash Lakhotia, emeritus professor at the Banaras Hindu University in Varanasi, cautions that importing talent is no substitute for nurturing brighter young people within the country by providing the right environment. "The quality of India's limping research cannot be made to stand on imported crutches," he told *Nature*.

Ramasami admits that in its present form the JNSF is too tiny to make an impact nationally, although he says that its effects will be felt locally in institutions hosting the Fellows and that the scheme is "another sincere effort to boost R&D" in India. "Impact is a long, drawn out process and calls for scaling to the right sizes."

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