An Indian University Finds Success Recruiting in the U.S.

Returning expats say they are drawn by research opportunities on the young campus

Gurinder Osan

Young professors like Sanjib Gupta (left), Anu Vaidyanathan, and Ashish Ahuja say they were willing to return to India for a chance to form their own research agendas.

By Shailaja Neelakantan

Ropar, India

The reality of Sanjib Gupta's return to small-town India sank in while he was taking a driving lesson.

In the car with a young trainee and her mother, Mr. Gupta was fumbling with the stick shift until the instructor proudly announced that his student was a "foreign returned" professor at the new Indian Institute of Technology down the road.

There was a brief silence. "Are you married?" the girl's mother inquired.

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"I was dumbstruck," says the 36-year-old Mr. Gupta, who had spent the previous 18 years in the United States, where such Bollywood-style marriage inquiries are rare.

Despite the occasional culture shock, Mr. Gupta, who had been a research scientist at Los Alamos National Laboratory, can think of no place he'd rather be than this provincial backwater. As a new branch of the Indian Institutes of Technology, known here as IIT's, the Ropar campus offers flexibility, freedom, and a surprising chance to do cutting-edge work, he says.

New research "is taking off here," Mr. Gupta says. "So you can actually set up your own lab and make an actual contribution, which is kind of hard in the U.S."

He's not alone in his appraisal. Ropar is one of the few higher-education institutions in India that have had success in recruiting foreign faculty members, particularly expat academics like Mr. Gupta. Many are returning for what they believe are better job opportunities than they could find in the West.

Ropar has tapped alumni networks abroad and marketed its advantages as a flexible new player in a mostly hidebound system.

Thirty-three of the 44 faculty members at the institute have done some, if not all, of their university studies and postdoctoral work abroad. Their median age is 33.

In earlier days, the IIT and other Indian universities relied on the appeal of reuniting with family for their recruiting strategies abroad. But now, with research financing either declining or stagnant in many developed nations, India's growth has become a selling point.

The publish-or-perish mentality of the U.S. academic job market has also made the developing world's research institutions more appealing, particularly those like Ropar, where, for now at least, the emphasis is more on pure research than on publications.

Making a Difference

Salaries aren't a big concern for these young researchers, who earn as little as $1,100 a month despite their high-profile credentials. With housing so inexpensive, and tenure and job security nearly a given in a faculty-starved nation, they are able to focus on India's promising future—and gain a stake in creating it from the foundation up.

The country's economy is growing by more than 7 percent a year, and the government is investing heavily in research. In this frontier environment, a new idea can make an immediate difference, professors say.

"In the U.S. or Canada, you are going to have a limited impact on society," says Mr. Gupta, who received his doctorate in physics from Clemson University.

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These new returnees, some of whom have worked in industry, are not particularly interested in higher-paying private-sector jobs.

"I worked at IBM Research one summer," recalls Ashish Ahuja, 31, who got his master's degree in computer sciences from the University of Texas at Austin and worked at an e-commerce start-up for seven years before joining Ropar's computer-science department as a visiting scientist. "There was a lot of pressure to produce patents, and that can turn off a lot of people in research."

His colleague Naga Devarapalli, 30, an assistant professor in the electrical-engineering department, agrees. "The key difference between academic research and industry research is freedom," says Mr. Devarapalli, who earned his doctorate in electrical engineering from the University of New Mexico.

Ropar's leaders have worked to cultivate an atmosphere of openness and innovation. Just three years old, the institute has started a number of doctoral programs and has research projects under way in more than two dozen areas, including bioinformatics and quantum optics.

Although somewhat limited by government rules, the public institute makes an effort to offer seed grants of $25,000, money for conference travel, and laboratory space to new hires.

"I and my colleagues are making all efforts to create complete academic freedom," says M.K. Surappa, director of the Ropar campus. India "is no longer the country of the 1960s, 1970s, and 1980s. It is vastly different now, and there is ample opportunity to grow professionally."

The institute encourages its professors to forge links with industry to ensure that engineering students are learning the skills needed to secure good jobs.

Mr. Surappa says he also encourages faculty members to engage in outside consulting work, something he did successfully while working as professor in the department of materials engineering at the Indian Institute of Science in Bengaluru, the city formerly known as Bangalore. Mr. Surappa is on a leave of absence from that institute.

"We are trying to provide the ambience for them to earn more money through projects and consultancies," he says.

**Mollifying Critics**

Ropar's success has flown in the face of conventional wisdom.

Critics argued that the Indian government's decision in 2008 to open eight additional branches of the Indian Institutes of Technology would exacerbate faculty-recruitment problems and hurt the reputations of the cherished older IIT campuses.
Even before the new institutes opened, the original seven IIT's had faculty shortages of 20 to 25 percent. Their engineers and computer scientists were eagerly recruited by top graduate schools in the United States.

But now some skeptics have changed their minds.

"I think Surappa has done a very good job, and we should congratulate him," says P.V. Indiresan, former head of the Indian Institute of Technology in Chennai, who was among the fiercest critics of the government's decision to expand the IIT system.

So how did Ropar do it? To get the word out, administrators relied on their established network of IIT contacts and alumni, including holding events in the United States to explain the opportunities available at the new campuses in India.

Once they found a candidate they wanted, they figured out ways to cut through India's notorious red tape.

For example, Ropar's new hires often start in a "visiting position" to avoid the lengthy selection process involved in hiring permanent faculty members.

Then the institute works on converting them into permanent faculty members.

"We have to take a bit of a risk," says B.K. Dhindaw, dean of academics and research, who spearheads the recruitment process. "We call it proactive, and we pushed that approach,"

Academic observers expect that its young faculty members and their global experience will give Ropar an edge.

"The systems abroad in good universities are much better than in India, and Ropar's students should benefit by the kind of exposure their teachers have had," says Premchand Palety, founder of the Centre for Forecasting and Research, which ranks universities in India.

Many of Ropar's foreign faculty hires say they preferred to join a new IIT rather than an older, more prestigious one.

"I can see a lot more flexibility and freedom here in terms of research and teaching," says Himanshu Tyagi, 31, a graduate of IIT Delhi, who received his doctorate in mechanical engineering from Arizona State University and has worked for Siemens AG in India and in Germany. "Here even young faculty can play a role in developing curriculum, and almost everyone has exposure from abroad, so we are very dynamic."

'It Is a Passion'
Students seem to notice the enthusiasm as well. At IIT Delhi, where some Ropar-bound students spent their first year while the new campus was being developed, teaching seemed like "more of a job" for professors, says Anmol Singh, a third-year electrical-engineering student. "Here it is a passion."

Students say their professors have also played a significant role in restructuring courses. For example, last year's freshmen in mechanical engineering were introduced to computer-aided design, while seniors who started at the Delhi campus weren't.

"The faculty here are much younger than Delhi's, and they are ready to experiment," says Ishan Chhabra, a third-year computer-science student. "They are ready with bleeding-edge research, and they take it and expose undergraduates to it. In an older institute, only Ph.D. students would be introduced to it."

Ropar's facilities are still housed at a temporary campus, the former premises of a women's polytechnic college. And being in a small town, employees lack access to not just the amenities of the West but also those of big Indian cities.

Life here is far from easy for academics used to living overseas. There are no huge supermarkets, no good restaurants or bars to socialize in, buffaloes run rampant near the canal that is next to the campus, and the nearest small city is two hours away. The narrow potholed road leading to the campus seems like a road to nowhere.

"Everybody would be lying if they say we aren't complaining every day of the week about something or the other, but to catch someplace which is absolutely new is a totally different experience," says Anu Vaidyanathan, 30, a visiting faculty member in the computer-science department. "All of us appreciate that we don't have anybody that's pulling us up every day saying, 'Do this, don't do that.'"

Ropar's culture "of actually listening to the younger faculty" members also matters a lot for Mr. Gupta, who has received approval to set up an interdisciplinary high-performance-computer laboratory for joint projects among physics, mathematics, materials-science, and mechanical-engineering professors.

While things look rosy now, the issue of faculty retention already looms large on the minds of top officials. The best way to overcome that challenge might come from the young professors themselves, who are raring to make Ropar a contender.

"I think once we establish ourselves," says Ms. Vaidyanathan, "Ropar will be a better choice than the other IITs."