KOREA

Subsidy Helps New Grads Find First Science Jobs

New government program gives thousands of students with advanced degrees a temporary spot in an economy trying to rebound

SEOUL, KOREA—Kang Hae Won, with a freshly minted Ph.D. in nutrition from New York University, confronted a bleak job market when she rejoined her husband in Korea in early 1998. Along with some 2500 Korean students who received advanced degrees last year in science and engineering, she was seeking her first research job just as the country's economy took a nose dive and thousands of workers were being laid off. Unable to find a paid position, she signed on as an assistant to biochemist Park Tae Sun of Yonsei University in Seoul for a project that had not yet been funded. In spite of her tenuous status, Kang considered herself fortunate to be working in her field on a project that offered a chance for publication.

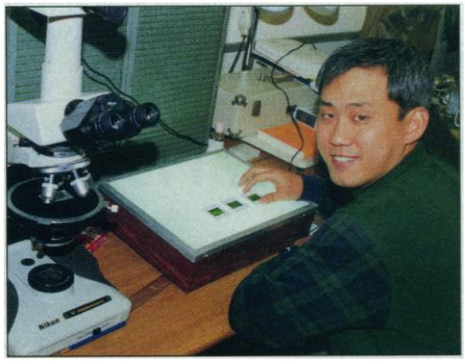
Several months later, her financial situation also improved. In September, she was accepted into the first wave of the government's new Research Intern Program, which places new graduates in scientific positions and subsidizes their pay for up to 1 year. The program is intended to carry them through tough times, keep their skills sharp, and stock universities and institutes with young talent.

The intern program, which pays $870 a month to Ph.D.s and $700 to those with master's degrees, is the largest of three recent initiatives for scientists and engineers. Unemployed but experienced scientists are being dispatched to small and medium-sized companies as part of a "Science and Technology Corps" that keeps them active, as well as tapping into their expertise. Other jobless scientists work for similar pay on displays for the National Science Museum.

The government hopes to enroll 5000 scientists and engineers over 2 years in these programs. But the demand is even greater. Last year, the number of positions for scientists at public laboratories in Korea dropped by 8.7%, and private companies trimmed their R&D payrolls by 6%. With another 2500 graduating with advanced degrees this year, the employment picture remains grim. "The programs are too small for all those people," says Chung Sung Chul at the Science and Technology Policy Institute in Seoul. "There is enormous pressure for jobs."

The intern program is run by the Korea Science and Engineering Foundation (KOSEF), which matches job seekers to vacancies. Kang and Park asked to be paired, but graduates without any institutional links can apply individually to KOSEF and wait for a match. From a pool of 1800 applicants, all with degrees received in the last 2 years, the Research Intern Program so far has placed 1300, about half of them at universities. About 40% are engineers, in line with the discipline's overall share of a typical graduating class, followed in descending order by agriculture and fisheries science, biology, chemistry, physics, geoscience, and mathematics.

Although the program is not a perfect solution—the fit isn't always right, interns must keep one eye out for their next job, and their short tenure limits the type of work that can be done—it offers a life preserver to recent graduates floundering in a suddenly troubled job market. "I never realized the real world would be so different from my ideal workplace," says Lee Sung Joon, who graduated last year with a master's in computer graphics. "When I was turned down again and again, I was quite devastated."



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Helping hand. Intern program offers geologist Lee Yong Joon temporary work at Korea University.

Lee is now working at Seoul's Gunzamorey Computer Co., a small company normally unable to hire those with advanced degrees. Gunzamorey handed Lee a project—to develop a marketable device for converting digital video signals to analog—that would normally be assigned to a well-trained team. Lee's formal education doesn't help much, but he has responded to the challenge by assigning himself lots of supplementary reading and routinely logging 12-hour days.

Being an intern isn't the same as holding a permanent job, of course. Some interns must struggle to win the respect of their peers. "People see interns as useless people—just another part-time worker rather than a colleague," complains one participant, who requested anonymity. And some senior scientists say the intern program doesn't allow enough time for substantive research that can generate publishable results. Cho Yoon Hae, a scientist conducting protein-structure research at the Korea Institute of Science and Technology, says his lab, which has three interns, spent the first 3 months integrating the new arrivals into the routine. Others wish that research expenses were included in the program.

Interns who have promised to work in Korea in exchange for government funding of their graduate education face a particularly tough future in an economy where domestic jobs are scarce. Geoscientist Lee Yong Joon, a recent graduate of Texas A&M University, has the scientific and language skills to compete for a job overseas, but he owes the government 3 years in Korea in return for his training. "Yong Joon is a good scholar and researcher," says Lee Jin Han, his project supervisor at Korea University. Unfortunately, the school's budget may be too tight to hire him after the intern subsidy is up. In the meantime, Lee Yong Joon is making a contribution by peering at hyperthin slices of rock, searching for signs of a new fault in central Korea.

Some of the biggest beneficiaries of the new programs are companies needing help with shop-floor issues or in the lab. The Science and Technology Corps dispatches experienced teams or individuals to provide technical assistance. At Kumho Life and Environmental Science Lab in Kwangju, for example, 10 of its 55 workers are paid by the program and work alongside full-time employees to crystallize proteins, breed transgenic plants, and conduct studies on environmental stress signals. The Corps employees have appropriate backgrounds and learn quickly, says Song Pil Soon, one of Kumho's principal investigators. Song would like to keep them on when the government funding expires, but Kumho, like many companies in Korea these days, is under a hiring freeze.

Despite these obstacles, a KOSEF survey found that 90% of institutions and interns are satisfied with the program, and that 75% believe the interns stand a good chance of finding a permanent job after the government subsidy ends. "I'm very happy and grateful to the government," says Kang, whose 1-year appointment runs through August. "And I'm sure that I will find a [permanent] position when the economy improves." **–MICHAEL BAKER**

Michael Baker writes from Seoul.