

SWEDEN

Drug Research Endures the Pains of Globalization

Sweden's drug companies have joined the transnational drug industry, but their researchers are finding the global job market tough going

STOCKHOLM—It used to be easy to find work as a biomedical researcher in Sweden. The only tricky decision was whether to apply to Astra or Pharmacia, the country's two world-class drug companies. No longer. In 1995, Pharmacia merged with U.S.-based drug giant Upjohn, and since then the new company has cut its R&D personnel in Sweden by one-third, from 1500 to 1000. Last spring, Astra followed suit, merging with Britain's Zeneca to form the world's third largest drug company. And last week, the seemingly inevitable job cuts were announced: AstraZeneca plans to cut 450 positions from its research staff of 4000 in Sweden.

The future of research at the two drug companies is not just a matter of national pride. Pharmaceutical research accounts for 14% of all privately funded R&D in Sweden, and AstraZeneca and Pharmacia & Upjohn (P&U) provide the lion's share. Both companies are cutting staff to eliminate duplication and concentrate R&D efforts in fewer labs. AstraZeneca, which currently employs about 10,000 people in R&D worldwide, is cutting back research in Sweden that overlaps with efforts in Alderley Park and Charnwood in the U.K. and in Wilmington, Delaware. The affected areas include research in inflammatory and respiratory diseases and cancer. Remaining in Sweden will be research on pain, gastrointestinal disorders, and heart diseases and a small part of the company's asthma research. Responsibility for diseases of the central nervous system will be split between Sweden and the United States. Research and development will be directed from Sweden, even though the company's headquarters are in London. In all, 1000 jobs will disappear in Sweden, Britain, and the United States.

Reaction in Sweden to the announce-

ment has been mixed. Union representatives accept the realities of consolidation in the world pharmaceutical industry and are currently negotiating how the reductions should be handled. Some people may get jobs in the company's expanding drug production in Sweden. Researchers, on the other hand, are expressing concern. "It's

DRUG RESEARCH MOVING OUT OF SWEDEN			
AstraZeneca International		Pharmacia & Upjohn	
Cancer research	➤ Alderley Park, U.K.	Cancer research	➤ Nerviano, Italy
Central nervous system	➤ Wilmington, U.S.	Central nervous system	➤ Kalamazoo, U.S.
Asthma	➤ Charnwood, U.K.	Infectious diseases	➤ Kalamazoo, U.S.
Remaining in Sweden: Södertälje—heart and vascular diseases, gastrointestinal diseases, pain research Lund—some asthma research		Remaining in Sweden: Stockholm and Uppsala—metabolic diseases	
R&D job losses in Sweden: 450 out of 4000		R&D job losses in Sweden (since 1997): 500 out of 1500	

not good that whole competence areas move out of Sweden, leaving no natural recruitment need among young researchers," says Ulf Lundkvist, former research director of Pharmacia, who is now working as a consultant on technology transfer. Hans Wigzell, head of the Karolinska Institute and a science adviser to the government, worries that students thinking about a research career in the pharmaceutical industry may feel less optimistic about their prospects in Sweden, and that, in turn, will affect recruitment to medical research. Olle Stendahl, general director of the Medical Research Council, expresses similar concerns. But he adds that companies may be moving research elsewhere because Swedish researchers are not up to scratch. "It's a warning signal to the government and research financing bodies that we have to flex our muscles. If we want to be attractive, we have to put real efforts into basic research," he says.

Adding to the nervousness among researchers is the fact that the companies'

plans are in flux and some early promises have not been kept. Last year, for example, P&U announced plans to build a \$140 million facility in Stockholm devoted to metabolic research, which is currently carried out by some 300 scientists in the company's labs in Uppsala and Stockholm. P&U's head of research hailed the decision as an important signal to researchers in both Sweden and other countries. The plans were abandoned this summer, however. Company spokesperson Stefan Densjö says P&U is now reviewing all major investments and is looking at alternatives, which could entail investment at a different level or a different structure. It's difficult to find any credibility in the company's planning when it can shift from month to month, said union representative Anders Mähl when he commented on the cancellation earlier this fall. "The

management is only focused on earning money and flirting with shareholders and financial journalists," he said.

Some see a possible silver lining in these reversals, however. Lundkvist notes that many of those who lost their jobs in the Pharmacia-Upjohn merger went on to form small biomedical companies, leading to an explosion in small company growth in and around Uppsala.

Entire research teams have been snapped up by other smaller Swedish companies. For example, the whole Pharmacia cancer research unit in Lund, which P&U planned to close down, was bought by the biomedical company Active Biotech. "A positive consequence of the new development is that the job market has become more flexible. Previously, Astra and Pharmacia recruited everyone," Lundkvist says. Wigzell also hopes that "small new companies may emerge with new creative ideas," but he believes that there has to be enough companies to create a critical mass. "The Chinese symbol for crisis conveys both threat and promise," he says.

Stendahl points out, however, that small companies often do contract work for the large corporations. "If the core disappears, the incentive to start small, growth-intensive companies will decrease." The key, he says, will be to preserve enough cutting-edge research in Sweden.

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