

## Universities struggle to grow

**Kraków.** Founded in the fourteenth century, and proud of its history at one of Europe's oldest seats of learning, the Jagiellonian University in the ancient Polish capital of Kraków has long been used to surviving political turmoil.

When Germany invaded Poland at the outbreak of the Second World War, for example, many of its senior faculty members were herded off to concentration camps. When the communist regime took over in 1949, the university found itself severed from its ancient medical faculty, and subjected to harsh central planning.

Now the main threat facing the university lies in the difficulties facing the gov-



**The 14th century Collegium Maius (Greater College) of the Jagiellonian University.**

ernment as it seeks to recover from the communist era without the resources to operate a modern industrial economy along Western lines.

"The deterioration in higher education in Poland is incredible," says Aleksander

Koj, an eminent molecular biologist currently occupying a second term as the university's rector. "The present higher education budget is about 0.7 per cent of the gross domestic product. This is far below other European countries; even in Hungary or Czech Republic they spend between one and two per cent."

As elsewhere in Poland, a constantly heard complaint is that the government is seeking a major expansion in the number of university students but has not provided the resources for doing this. "In the past four years, the number of students has increased by 50 to 80 per cent," says Koj. "At the same time, rapid inflation means that the higher education budget has decreased by 40 per cent in real terms."

The new regime has brought its benefits. Last year, for example, the medical school was reunited with the university for the first time since the 1950s. "The best aspect of this is that we have been able to regain a scientific stamp to our medical activities," says Ryszard Gryglewski, a former rector of the medical school who is now chairman of the university's department of pharmacology. "This means that we are not only medical professionals, but can rebuild our links with basic research."

Liberalization has given the university greater autonomy in handling its affairs. While some say this has made university heads hostage to the wishes of faculty members, others welcome greater internal democracy, and the scope is provided for academic initiative.

But government economy measures have taken their toll. The most common complaint is that funds for teaching are

insufficient. A university professor often earns less than graduates entering a first job — and some academics feel obliged to use scarce research funds to subsidize the purchase of teaching equipment.

Another concern is that, keen though it is to compensate for low university salaries by allowing them to be supplemented through research grants, the State Committee for Scientific Research (KBN) has also indicated that it will not pay for equipment costs in standard grant applications.

"These signals are rather worrying," says Tadeusz Sarna, head of the university's institute of molecular biology. "Those who want money to buy equipment are now expected to apply for special equipment grants through resource centres, as in the West. The idea is sound; but the scale here is very different."

Continuing tension between university science faculties and the institutes of the Polish Academy of Sciences does not help. The suspicion that the latter continue to receive privileged funding is strong, as is the concern that the academy institutes have done little to focus their efforts on the genuine needs of Polish industry.

There is also criticism of the government's algorithms for deciding financial support for individual universities. The calculations are based on the numbers of students and staff. One anomaly, pointed out by Krystyna Dyrek, a professor of chemistry, is that the effect of firing an inefficient member of staff is that "we get a reduction in our budget, so it is not worth it".

Like its counterparts in richer industrialized countries, the Jagiellonian University is about to embark on a major fund-raising exercise which, it hopes, will allow it to meet the challenges of the twenty-first century. One priority is a new institute for molecular biology; the current building, previously a Roman Catholic seminary, is being reconverted to its former role. The molecular biology institute may occupy a 'technology park' in the city outskirts.

Where it can, the university is also making use of funds from Western organizations to help the process of modernization. The Mellon Foundation, for example, has already provided a major endowment to equip the university with a high-speed computer link.

But Koj and others accept that the future will be secure only when the economy is sufficiently robust for the government to provide adequate investment in universities from its own resources. **D.D.**



**Koj: Call for a boost to university funds.**

## Dream meets reality of Euro-funding

Warsaw. Despite political willingness on both sides of the former Iron Curtain to integrate Polish scientists into the European science community, progress has been slower than some had anticipated.

Some projects are proceeding well. Thus work on a number of infrastructure projects — for example, a high-speed data link between Warsaw and Stockholm — is already underway as part of the European Commission's PHARE programme, following a 1993 agreement between the EC and the KBN.

In addition, almost 50 Polish research teams are taking part in more than 30 research projects in field such as telecommunications, chemistry and agriculture, as a result of Poland's decision in 1991 to join both the European Science Foundation and the European Co-operation in Scientific and Technological Research (COST).

But many researchers have been disap-

pointed over the rejection of proposals submitted to other programmes funded through Brussels. "I have tried twice to apply for EC funds, each time jointly involving considerable work drawing up proposals with researchers from other countries, but both were rejected," complains one molecular biologist. "In the end, they did not even explain why our proposal was turned down."

Disillusionment is even creeping into official documents. A report prepared by KBN points out that although Polish researchers have been eligible, under a 1991 agreement, to participate in the EC's third framework programme on a case-by-case basis, "regrettably, so far no co-operation has been established on that basis". In particular, it says, Poland would be required to pay both the costs of the research and the EC's 'co-ordination costs' which "in Poland cannot be considered as trivial". □